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SANITAS SANITATUM

ET OMNIA

SANITAS.

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ET OMNIA

SANITAS.

BY

RICHARD METCALFE, F.S.S.

"Pure air, pure water, the inspection of unhealthy habitations, the adulteration of food—these and many kindred matters may be legitimately dealt with by the Legislature. The first consideration of a Minister should be the health of the people."—EARL OF BEACONSFIELD.

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PREFACE.

During the last thirty years, social and sanitary science has made great strides with considerable benefit to the community at large.

Parliament has passed various enactments for enforcing the better sanitary condition of drains and houses, providing hospitals for epidemics, enlarging asylums and unions, or, as Dr. Guy calls it, "Hotels for cadging casuals." Signal efforts have been made to prevent the pollution of rivers and the spread of contagious diseases.

An Act for the establishment of baths and washhouses has been in existence thirty years, but not compulsory, its adoption and operation resting with local authorities. The want of greater bath and washhouse accommodation, to promote personal cleanliness, has baffled efficient action in Sanitary Reform, inasmuch as a considerable portion of the population of large towns are compelled to live in crowded districts, with very meagre house accommodation, quite inadequate to admit of washing and drying clothes.

The author has had considerable experience in the management of parochial affairs, and has often been an eye witness to the discomfort and inconveniences to which the poor are subjected in washing and drying their clothing in the apartment in which they live and sleep, and he knows that the evils resulting from the want of bath and washhouse accommodation are often far greater than the consequences of sanitary defects whose removal the law peremptorily enjoins.

These circumstances have induced him to invite public

attention to this important question, and he hopes by showing what has been done in providing baths and washhouses from the rates, Government may be induced to make the Bath Act compulsory.

The task of collating the statistical returns and information has been very laborious and difficult to obtain from the authorities, consequently any imperfections will, he trusts, be overlooked.

The work will be comprised in two volumes. The first contains an account of the baths and washhouses, suggesting the addition of hot-air baths. A large number of letters are appended, from statesmen, medical men, and other authorities in support of the hot-air bath as a sanitary agent for the working classes.

I have deemed it prudent to introduce chapters on Small-pox and Dipsomania, these derangements occupying much public attention just now, and having given some consideration to these painful maladies, some observation might not be out of place.

The second volume will treat on the rise and progress of sanitary reform and the dwellings of the poor, with plans and suggestions for purchasing houses for what is now paid in the shape of rent in ten years, together with some remarks on the use and abuses of our sanitary Acts.

Every intelligent man has a duty of some kind to discharge, and when it is done to the best of his abilities, his mission is fulfilled, and it is always an inward satisfaction to any person holding certain views upon questions which affect the interest and comfort of his fellow men, when he has faithfully placed them before his fellow creatures.

This is just the author's ca e, and he will feel amply compensated for his trouble if the publication of these volumes is attended with any benefit to his fellow countrymen.

GRÄFENBERG HOUSE, NEW BARNET, HERTS,
March, 1877.

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PRELIMINARY DISSERTATION.

On the Functions of the Skin in Relation to Life, Health, and Disease.

"A great part of Sanitary Science can be comprised in that one word —cleanliness." Dr. Lyon Playfair.

IT may appear somewhat superfluous in the present state of civilization to seek to impress the public mind with the advantages of bathing. But while admitting the improvements in cleanliness that have taken place during the last twenty-five or thirty years, particularly amongst the middle classes, it will not be denied there is still room for further enlightenment, especially when we consider that there exists a large amount of absolutely forced uncleanliness amongst the working classes, not only in the metropolis, but in many of the towns and cities of the United Kingdom.

Whatever obstacles there may be in the way of improving the condition of the lower orders who form an important part of the community, and (assuredly no permanent good can be effected without acting

upon their physical surroundings) we must admit that there exists little real difficulty in supplying them with adequate Baths and Washhouses, and even were the difficulties as formidable as they are insignificant they ought not to be allowed to stand in the way of the important end in view, viz., the physical and moral elevation of the people.

Notwithstanding their social position, the great majority of the artizan and labouring classes have their tastes and distastes, their sympathies and antipathies, which are guided by their natural instincts, just as much as those occupying a higher social position; and it is fortunate for them that it is so, or their moral and physical condition would be even lower than it is. Had their education received earlier attention from the Legislature, in all probability their social status would have been improved long ago, and the terrible strife existing between Labour and Capital might have been mitigated if not avoided. We look to the educated and intelligent having time at their disposal, and on whom devolves the discharge of public duties, to disseminate such knowledge amongst their fellows who occupy a less favoured position in society, as will enable them to arrive at a sound judgment on any theory or principle, which affects their interest and comfort.

In the 19th century it ought to be unnecessary to introduce remarks on the skin, but the want of public knowledge on the importance of keeping it clean in order to maintain the bodily health, has urged me to do so. I am sorry to say there are but few, even of the educated public, who have that practical knowledge of the physiological action of the skin, which is necessary to an appreciation of the value of bathing, for the maintenance of a healthy condition of the animal economy.

III.

The skin is a delicate integument, which envelops and protects the wonderful and complex organism of our physical frame, and in an adult it has an extent equivalent to about fifteen square feet, or 2160 square inches. Though to the eye it appears to be a single and somewhat simple tissue, it really consists of three layers, differing very materially in structure.

The internal layer is the *cutis* or skin proper, which is plentifully supplied with blood-vessels, nerves, and absorbents, and is consequently very sensitive. The external layer is the *epidermis* or cuticle, or the scarf-skin, as it is commonly called. It is a thin elastic, albuminous membrane, and, being destitute of blood-vessels and nerves, is comparatively devoid of sensibility. Between the skin proper and the cuticle is the *rete mucosum*, an indistinct layer, unless, as in the negro, it becomes the seat of the pigment from which his colour is obtained.

The surface of the skin is studded over with an amazing number of minute pores, forming the mouths or openings of the canals or ducts of the *sudoriparous* glands and sebaceous follicles, situated in or below the skin. These little glandular organs are continually secreting and excreting, the one a watery, and the other an oily fluid, which lubricate the surface and impart pliancy and softness to the skin. The openings of the canals may be readily seen, and their number estimated by a simple microscope on the points of the fingers. By means of a powerful lens, Erasmus Wilson was enabled to count the number of pores in a square inch of bodily surface, and hence to estimate, with a close approach to accuracy, the total number of pores in the whole body of an average-sized person. He found these to be not less than seven millions, and as each pore represents a little tube a quarter of an inch long, it follows that the length of

excretory tubes in the skin is little short of twenty-eight miles.

Now the greater portion of the blood flows through the vascular network of the true skin; and it is important to bear in mind this extreme vascularity, as we generally find organs supplied with blood in proportion to their importance in the animal economy.

The function of the skin is threefold—absorptive, secretive, and excretive; it is also the seat of the sense of touch. The absorptive function of the skin is illustrated by the rapidity with which water is frequently absorbed when the body, under certain conditions, is entirely or partially immersed. Experimenters have often found that if the body, after long fasting, or exhaustion by severe or protracted labour, is plunged into a warm bath and kept there for half an hour, a marked increase of weight ensues. This function of the skin is, perhaps, more clearly shown by the endermatic method of administering medicines.

Medical men are well aware that many medicaments, when applied to, and especially when rubbed into, the skin, produce their known effects as rapidly and completely as when introduced into the stomach or directly into the blood.

As an excreting organ the skin is of great importance. It is estimated that about one-fifth of the whole excrementitious matter of our bodies is exuded through the skin. Its primary office is to separate from the blood the effete hydrogen in the form of its superabundant watery particles. It has, however, many important secondary offices. The chief cutaneous excretion—the perspiration—is of two kinds: sensible perspiration, which is a fluid occasionally excreted, as after severe exercise; and insensible perspiration,

or transpiration, an invisible vapour which is contiuually being given off by the skin. The sweat, or sensible perspiration, is essentially an aqueous fluid, but it holds in solution a very great variety of substances. Its taste is saltish, and its reaction acid. Chloride of sodium (common salt); salts of ammonia; the salts of the organic acids; butyric, formic, acetic, lactic, and carbonic acids; earthy phosphates; peroxide of iron; pigmentary, fatty, and proteine matter, and nitrogen, are always found in it.

Various estimates have been made of the quantity of matter exhaled, in the form of perspiration, from the surface of the skin of the adult human body in twenty-four hours. These have ranged from 20 to 40 ounces, and, perhaps, 30 might safely be taken as a fair average. Seguen found from experiments the amount to be 15,840 grains, or about 33 ounces. According to the carefully-conducted experiments of Anselmino, the sweat contains, on an average, ·088 per cent. of solid matter, 100 grains of which gave 22·9 grains of saline matter: these calculations give for the twenty-four hours, 107·47 grains of *organic matter*, and 81·92 grains of *saline matter*.

These are the principal substances thrown off by the skin when in a healthy condition. In various diseased conditions of the organism, however, the skin becomes the medium of discharge from the body of poisonous substances, either producing or resulting from disease. For instance, carbonate of ammonia and uric acid have been discovered in the perspiration in a variety of diseases, especially mental complaints. In such cases the skin usually assumes, in addition to its own proper offices, a compensatory function, in consequence of the diminished activity of, and secretion from, internal

organs. Excretion is an all-important depurating or purifying process; if the worn-out tissues of the body are not duly removed from the blood and discharged from the system, they rapidly accumulate and act as the deadliest poisons; and the worst consequences to health and life often result. There is no greater and more just cause of alarm to the physician than the cessation or suspension of customary discharges from the various excretory glands and canals. Should the renal secretions be suppressed, urœmic poisoning and death from the accumulation of urea in the blood is the result. Should the biliary function be suspended, bile accumulates in the blood, and insensibility and death as inevitably follow as in the former case.

Again, should respiration be interfered with, the effete carbon is retained in the system, arterial blood becomes venous, the brain is poisoned, and then the action of the heart stops. But it often happens that a function is temporarily suspended, the functional activity of an organ diminished or arrested, while its duties are undertaken by another organ until it has recovered tone and energy. This increased activity, this augmentation of duties, on the one hand, is imperatively necessary to neutralize the lessened energy of the suspended function, on the other; otherwise the balance of the different functions, on whose integrity health depends, would be lost, and permanent disease, speedily terminating in death, would result.

Now the skin often partially or wholly relieves the lungs, kidneys, intestines, and other internal excreting organs, of their important duties.

In disease of the kidneys, for instance, the skin sometimes eliminates in the form of carbonate of ammonia, the urea which accumulates in the blood and would

otherwise act as a deadly poison. The functions of the skin and the kidneys stand in so close a relationship, that they often assume the place, to a great extent, of each other, so that when the skin is impaired, the kidneys increase in activity, and *vice versa.* It is in this way that the balance necessary to life is maintained; but this compensatory action is limited, so that the one organ cannot wholly, or permanently, or, indeed, for any length of time, supply the place of the other. The most casual observer will have noticed that, in hot weather, when the skin is active, the quantity of perspiratory matter thrown from the system is increased, and the quantity of urine passed is diminished, while in cold weather this is reversed.

It is a too common occurrence, when scarlatina is treated without a proper attention to, and the regulation of, the functions of the skin, as is the case with "old physic," that a sequel sometimes extremely difficult to deal with supervenes, namely, dropsy. Scarlatina, being an eruptive disease of the skin, obstructs the escape of the perspiration, and causes the fluid to accumulate in the system. The kidneys will for a time succeed in relieving the patient. But if the skin is not speedily restored to its normal action, dropsy is inevitable. In case of disease of the renal functions the skin relieves the kidneys of their duties, which is witnessed by the fact that the fluid eliminated contains some of the substances common to urine. A marked functional sympathy also exists between the skin and the intestines, which is best illustrated by the effects of unhealthy or diseased state of the one upon the other; hence the tendency to diarrhœa from cold feet on the one hand, and the connection between cutaneous eruptions and intestinal irregularities on the other. These brief illustrations might be almost indefinitely extended;

but they are sufficient to show the important relation existing between skin and the internal organs.

When the removal of effete watery matter from the blood is stopped, the labour of elimination is added to the ordinary duties of the internal organs. Were this vicarious action of but short duration, no permanent mischief would probably accrue. But all the organs of the body are liable to become exhausted by over-exertion, if long continued; and this exhaustion if not remedied, will sow the seeds of, if not terminate in, disease. If the functions of the skin are long suspended, either partially or entirely, not only are the lungs likely to become diseased, but almost all the internal viscera will suffer sooner or later. That protean disorder dyspepsia, intestinal ailments, lesions of the liver and kidneys, primarily, and cutaneous diseases, secondarily or sympathetically, are one and all, frequent results of irregularities in the depurating action of the skin.

It is of the greatest importance that the integrity of the skin should be preserved in order to resist cold, and however paradoxical it may appear, it is also capable of generating cold. The human body has a fixed temperature, beyond which it cannot be raised by external heat; when therefore the external heat exceeds that of the body, this is compensated by increased perspiration which is converted into invisible aqueous vapour, and is essentially a cooling process. This is the reason why the human body has been found capable of resisting artificial temperatures greatly higher than boiling water;* hence

* Erasmus Wilson, in his work on the skin, instances the fact that Sir Charles Blagden supported a temperature of 260° for nearly ten minutes. The furnace in which Sir Francis Chantry was in the habit of drying his moulds was heated to a temperature of 350°, and into this his men occasionally entered without inconvenience. The oven used by Chabert during his exhibitions in London was heated to between 400° and 600°.

in summer, in tropical climates, or artificial high temperatures, perspiration ought to be encouraged and not checked.

Such, then, is the wonderful system of cutaneous drainage which nature has provided to eliminate from the body impurities that otherwise would not only derange health but destroy life. The skin is also a medium for the reception of impressions on the nerves, its whole surface being one vast network of those mysterious organs; which explains the intimate relationship and dependence existing between healthy skin action and mental equilibrium.

From these considerations it must be patent to everyone how supremely important it is that the skin should be kept clean, in order to preserve its normal action.

The human frame is admirably adapted by the laws of its being for the realization of happiness, yet we find daily it is an unfailing source of pain and discontent to multitudes, a state antagonistic to the benign intentions of our Creator, and the result of transgressing those laws by virtue of which "we live and move and have our being." Health essentially depends upon obeying certain conditions which experience teaches us it is impossible to violate, or even modify, without incurring suffering. We may conclude also that according to the extent of our transgressions so will be the intensity of our sufferings. Physically, we live under a stern mandate—Obey and live! disobey and die! Disease and consequent suffering everywhere presented to our view are but the reflex of our own actions.

Our acquaintance with life and its conditions, even today, is so imperfect that we can do little more than say with the Psalmist, "We are fearfully and wonderfully

made;" yet our knowledge is sufficient to guard us from blasphemously attributing the sufferings of mankind to the will of God.

The sentence pronounced upon Adam: "In the sweat of thy face shalt thou eat bread,"* misrepresented as a curse, is but the assertion of a law which we can only neglect or disregard under penalty of bringing upon ourselves painful consequences. Did we but follow this primæval teaching, and live and work in the open air, with our bodies so clothed as to allow the skin literally "to breathe," a healthy balance of the functions would be maintained, and disease would become, comparatively speaking, rare. But our so-called civilization imposes such restraints upon us, obliges us to follow such unnatural callings, and withal environs us with surroundings so opposed to health, that our existence must be taken as the strongest possible evidence of the aboriginal strength of the race. Upon no organ do the present unnatural modes of living produce more certain effect than the skin.

The man who follows an employment entailing great physical exertion in the open air is rarely a diseased man. His labour excites the skin, and what would otherwise become poisonous and productive of disease is eliminated from the system. As an evidence of this—his shirt, worn, as is the usual custom, for a week, smells abominably; but if the man's shirt is dirtier than that of his employer, who performs no physical labour, his body is so much the cleaner—his health immeasurably better, and, all other things being equal, his life will be longer.

Cowper, with the fineness of observation which

* Genesis iii. 19.

marks the true poet, in directing attention to a man healthfully employed, asks us to—

> ——"See him *sweating* over his bread
> Before he eats:—'Tis the primal curse,
> But softened into mercy: made the pledge
> Of cheerful days, and nights without a groan;"

a condition to be envied above all others by the dyspeptic, who never enjoys an hour's ease, but whose life is a burden ever increasing as it "drags its slow length along."

With the evils incident to our civilization clinging to us, and with no immediate prospect of their being removed by a general return to a strict observance of nature's laws, it remains for us to do the best with the materials at our command. The art of preserving and restoring health by artificially inducing a natural action of the skin, has, at various periods, received a large amount of attention; but of all the means that have been resorted to, there are none which have equalled in point of efficacy the application of water in the various forms of bathing practised throughout the world.

As a custom, bathing is as old as humanity. In fact, the desire to bathe for the purpose of refreshing and strengthening the body is as ingrained in man as almost any other animal instinct. The babe crows with delight when put into the bath; the youth takes to the water like a young duck; the adult bathes his limbs after the toils of the day with the most unfeigned pleasure. The savage or semi-civilized man seeks the pellucid brook, the river, or the sea, as instinctively as he provides for any other natural want. Thus, in a natural state of society, sensation, in lieu of knowledge, serves as a guide to health. When, however, in consequence of the increase of

population, large and densely crowded cities have, by inducing vitiated habits and artificial tastes, perverted the natural instincts, the invariable result has been disease and physical deterioration, until knowledge has taken the place of ignorance. Thus it arose, doubtless, that amongst nearly all early peoples, the lawgivers, seeing the inseparable connection of personal cleanliness with health, and perceiving also that the very circumstances which tended to augment the power and prosperity of the state militated against the physical well-being of the people, saw fit to make periodical lustration a religious observance. Be that, however, as it may, certain it is that in nearly all ancient nations we find the bath occupying a prominent place amongst their other institutions, it being regarded not only as a luxury, but as a means for the maintenance of health and the prolongation of life.

Amongst no people was this so marked as with the Greeks, who, above all others excelled in the art of corporeal development. Physical culture (or gymnastic) was their first and foremost branch of education, and, as might be expected, the bath was one of the principal means employed for attaining their end. We can scarcely turn over the pages of any of the writers on Greece without being struck with the importance which was there attached to bathing. In Homer we find frequent mention of it, both as a luxury and as a method of refreshing the mind and strengthening the body. When Ulysses and Diomed return from their night expeditions

> "They cleanse their bodies in the neighbouring main:
> Then in the polish'd bath, refresh'd from toil,
> Their joints they supple with dissolving oil."
>
> *Iliad, Book* x.

In the "Odyssey," we read of Ulysses bathing in Arie's palace:—

> "An ample vase receives the smoking wave;
> And in the bath prepared, my limbs I lave:
> Reviving sweets repair the mind's decay,
> And take the painful sense of toil away."

We are told, also, that Vulcan, or, according to another version, Minerva, discovered certain *hot baths* to Hercules, that he might renew his strength after undergoing severe exertion and fatigue. According to Homer, the Phœdrians laid great stress upon the importance to the health and happiness of man of frequent changes of apparel, comfortable beds, and *hot baths.* And it has been hinted by Lord Bacon, that the tradition of Jason being restored to youth by means of the medicated caldron of Medea, was, in fact, an allegorical representation of the effects of the warm bath in retarding the approach of old age.

What the bath was to the Greeks, it became also to the Romans. Amongst the latter people it attained proportions never reached before, nor since, in any country; so that there is probably considerable truth in Mr. Urquhart's observation, that "Rome was indebted to her strigil* as well as her sword for the conquest of the world." In later times, when their habits in other respects were not such as to be conducive to health, the bath served as an antidote to their manner of life. By keeping the skin free and active, they provided the means of relieving the system from any evil consequences that might result from

* An instrument like a blunt knife, used by the Romans to scrape off the perspiration induced by the hot bath, much as ostlers scrape the sweat from horses with an iron hook. Specimens may be seen in the British Museum.

the excesses in which they indulged. Without any great or exact knowledge of the physiology of man, both the Romans and the Greeks, as well as other early nations, thoroughly understood the philosophy and appreciated the advantages of bathing. By its regular and sedulous use they unquestionably aided the development of the physical frame, secured it against the ravages of disease, and so added to the comfort and duration of life.

With the decay of ancient civilization the bath relapsed, more or less, into disuetude; consequently, during the middle ages, dreadful plagues frequently occurred, and decimated entire populations,* a result attributable, to

* I am content to state this fact broadly and in general terms. Dr. Lyon Playfair—no mean authority on the subject—boldly asserted in his famous Glasgow speech (October 5th, 1874), that, "*For a thousand years there was not a man or woman in Europe that ever took a bath.* No wonder that there came the wondrous epidemics of the middle ages, which cut off one-fourth of the population of Europe—the spotted plague, the black death, sweating sickness, and the terrible mental epidemics which followed in their train—the dancing mania, the mewing mania, and the biting mania."

Any one who is curious in such controversies will find this wholesale charge of uncleanliness against mediæval Europe met by a spirited reply by a certain Father Bridgett, in the February number of last year's *Contemporary Review*, under the title of "The Sanctity of Dirt." This reverend gentleman denies the existence, as an historical fact, of the "dirty millennium" described by Dr. Playfair, and, secondly, defends the Roman Catholic Church from the charge of having forbidden or discouraged baths. He certainly succeeds in showing that Dr. Playfair had been guilty of hyperbole, but he admits the substantial accuracy of the indictment when he distinguishes between the ascetics and the seculars, and remarks that the church commended the former for *not being too delicate and fastidious.* With regard to "St. Thomas of Canterbury," at the thought of whose underclothing Dr. Playfair shudders, Father Bridgett naively tells us that when those who lived with him found at his martyrdom that his body was covered with a hair shirt, which had remained long unchanged, they were "filled with admiration

a large extent, to the lack of that appreciation of the advantages of the bath which had led the enlightened nations we have mentioned to dedicate it to the divinities of medicine, strength, and wisdom.

This neglect is the more wonderful when we consider that immersion in water was used for centuries in one of the ordinances of Christianity. In modern times, considerable attention has been paid to the subject; but, in the care we bestow upon our bodies, we still fall far short of both the Greeks and the Romans, which is all the more surprising when we consider our extended acquaintance with the bodily organism and its various and complicated functions.

In the evidence given before the Sanitary Commission for Inquiring into the State of Large Towns and Populous Districts, the appointment of which was the first step in the way of sanitary improvement in this country, great stress was laid on the necessity of personal and domestic cleanliness. Dr. Southwood Smith, who was one of the principal medical men examined, thus ex-

---

at the circumstance." No wonder! The key-note having been struck by Dr. Lyon Playfair, at Glasgow, in October, we find the *Echo* newspaper a month later (November 3rd, 1874), chiming in with the Professor, in an article on the "Management of Hospitals," from which I quote the following:—"The monks and hermits and nuns, who presented to mankind in the dark ages the ideal of sanctity combined with dirt, have to answer for the hideous plagues and black deaths which destroyed half the human race in the eleventh and twelfth centuries and for immeasurable woes and sufferings ever since. When St. Parian solemnly exhorted the early Christians to decline, as unholy and abominable, the heathen proposition of taking a bath, and St. Bernard, of Clairvaux, excited the frantic devotion of his followers, by displaying under his robe his scraggy and filthy chest, the fanatics laid the foundation of habits, the fertile parents of diseases destined to torment mankind for centuries—even after Protestantism had once more taught the nations to respect the wondrous structure which composes the human organism."

pressed himself: "I have already, more than once, expressed my conviction that the humanizing influence of habits of cleanliness, and of those decent observances which imply self-respect, the best, indeed the only real foundation of respect for others, has never been sufficiently acted upon. A clean, fresh, and well-ordered house exercises over its inmates a moral, no less than a physical, influence, and has a direct tendency to make the members of a family sober, peaceful, and considerate of the feelings and happiness of each other; nor is it difficult to trace a connection between habitual feelings of this sort and the formation of habits of respect for property, for the laws in general, and even for those higher duties and obligations, the observance of which no laws can enforce; whereas, a filthy, squalid, unwholesome dwelling, in which none of the decencies common to society, even in the lowest stage of civilization, are, *or can be*, observed, tends directly to make every dweller in such a hovel regardless of the feelings and happiness of each other, selfish, and sensual. And the connection is obvious between the constant indulgences of appetites and passions of this class, and the formation of habits of idleness, dishonesty, debauchery, and violence."

The importance of cleanliness in this respect cannot be too highly estimated; nor is it giving expression to a new or doubtful truth to say that physical and moral conditions stand in an unvarying relation to each other, and that to act upon the one you must act upon the other. As I have said before, disease is not a visitation of God, but the direct result of a violation of physical laws. The natural conclusion, therefore, is, that to be free from disease we must become enlightened with reference to those laws, and render implicit obedience to them. Now there is no one thing more emphatically impressed upon

our minds by the facts of physiology than the necessity of corporal cleanliness. Without this it is impossible to enjoy perfect health. Among nearly all ancient peoples,* who had a knowledge of this great fact, ablution was a religious duty. Our Western civilization, however, amidst its many other anomalies, has until late years almost ignored the bath. We English flatter ourselves we are a clean people, but, judged by the Eastern standard, we are exceedingly dirty. "Cleanliness is a matter of self-examination, not of external seeming. You must acquire the ideal standard of cleanliness before you can acquire the habits of that refined people from whom you are endeavouring to adopt this practice."

It is generally admitted that dirt, disease, and demoralization are natural and ever-recurrent concomitants, therefore I maintain that the use of the bath would prove to the body, what the moral influences of the Bible are to the soul, and their combined action would be attended with the greatest possible happiness; degradation would be materially arrested. In a city or neighbourhood where there is a deficiency of baths and other means of personal or domestic cleanliness, and consequently a predominance of dirt and filth, you will be sure to find disease and degradation there rampant.

"A large class of crimes," say the Commissioners in their second report, "arising from intemperance and the indulgence of vicious propensities, is fostered

* In the capital of the Roman Empire, according to Fabricuis, there were not fewer than 856 public baths, some of which were sufficiently large to contain at once 1800 persons. These establishments were regulated by the Legislature. Here, according to the historian of the "Decline and Fall" "the meanest Roman could purchase with a small copper coin (half-farthing) the daily enjoyment of a scene of pomp and luxury which might excite the envy of the Kings of *Asia*."

by the low state of physical comforts, which leads to the use of stimulating drinks, and to other methods of imparting false strength to the reduced system. These act with the greatest intensity on the inhabitants of those places where filth and absence of facilities for its removal depress the energies and engender disease and death."

I have found that when an intelligent artizan has once become acquainted with the advantages of any of the appliances of civilization, he is not slow to avail himself of their aid; and habits of cleanliness, once formed, quickly effect a transformation in a man's mode of living; his sensibilities become improved to such an extent that he will not live in a room which is unhealthy, or in a house that has bad drains, &c. The first step towards making a people healthy, is to make them cleanly in their person, or to quote once more from Dr. Playfair, "The sum and substance of all our sanitary science, accumulated by ages, may be summed up in the pregnant advice of the prophet—'wash and be clean.' It is the simpleness of a remedy, as a cure for the public ills which so grievously affect us, that prevents its public recognition."

Simple as it is, however, the remedy cannot be applied unless adequate and comfortable baths and washhouses are supplied within an easy distance and in convenient situations. The general habits of the poor, their daily occupations, and the nature of their employments, are such as render frequent bathing necessary to the maintenance of health; and unless every possible facility is afforded to this end, they are very liable to become insensible to its importance. Any obstacles in the way of personal or domestic cleanliness give

rise to habits of carelessness and drunkenness, which rapidly lower both the moral and physical condition.

At present, to the great mass of the poor the bath, as a means of comfort, luxury and health, is hardly known even in name, and to this ignorance is due the prevalence of so much disease. No sane person will dispute the imperative necessity of keeping the cutaneous surface in a perfectly clean condition, as a means of preserving health. It will be my endeavour to point out the best method of effecting this object, and to impress upon public authorities the desirability of providing adequate and appropriate means for promoting the cleanliness of the people.

Cleanliness is said to be next to godliness; but, like other near neighbours, they are not always found to agree. The Church Congress has been endeavouring to prove that there is a necessary *nexus* between religion and sanitary regulations, one clergyman, indeed, affirming that "health of body seemed almost a prerequisite to health of soul," and that "religion and soundness of body were united, as it were, by a marriage bond." Now this is a beautiful theory, and we would rather overlook historical and existing objections to it. People say, of course, that if pilgrims had been as cleanly as they were pious, there would have been less cholera in the world; and some folks, looking at the condition of our own cities, hint that certain sections of the population there outrival their neighbours in faith much more than in the purity of their linen. Perhaps it would be better to admit that cleanliness and godliness are very good things in their own way, without seeking to prove their interdependence.

I cannot conclude this present chapter better than by directing the attention of my readers to the forcible language of that eminent thinker and writer, Professor

hand basin in the sleeping apartment, or some equally inefficient appliance which ingenuity might have devised for the purpose.

With such accommodation for corporal sanitary ablution, one need not be surprised at the fact that the operation of washing the body thirty or forty years ago had almost become *extinct*. The dirt of the human body of course corresponds with that of the dwelling, and the state in which the homes of the poor were found in those days was even far more deplorable than it is at present. Medical men, clergymen, city missionaries, parochial officers, and all who were led by professional duty or benevolence to enter the dwellings of the very poor, the degraded, and the outcast, however their opinions differed in other respects, were at least unanimous in declaring that those dwellings exhibited a degree of dirt and squalor with which health and morality were alike incompatible. The official reports of surgeons and registrars urged the absolute necessity of immediate attention to the matter, in order to ward off or mitigate the attacks of fever and pestilence. That the evil was not confined to large centres of population was shown by the sickening details published in the various local reports of the Superintending Inspectors of the Board of Health, and in the reports of the Registrar-General. J. R. Martin, Esq., one of the commissioners appointed by Her Majesty for inquiring into the "State of Large Towns and Populous Districts in England and Wales," says: "It may savour of caricature were it asserted that, in respect to the labouring poor, it is only when the infant enters upon breathing existence, and when the man has ceased to breathe—at the moment of birth and the hour of death—that he is really well washed; yet such a statement would not be so far removed from truth as may at first appear. To the

great mass of the people, and from the dawn to the term of life, the bath, as an article of comfort, luxury, and health, is hardly known, even in name." To remove this evil and others, many remedies were suggested, several of which were carried into execution.

Liverpool Baths.

It is to the Corporation of Liverpool that the honour belongs of having taken the first step in this branch of sanitary reform. The first Public Baths and Washhouses set on foot in this country were those of Liverpool, the original cost being defrayed by money raised upon rates, and that borough now possesses several of these bathing establishments, including washhouses.

St. George's Pier Head baths were opened as long ago as 1828, but only supplied with salt-water. This was the first indication of a desire on the part of parochial authorities to supply, and on the part of the public to use, a popular means of ablution. The original cost of the building was £24,772. No doubt it was partly owing to the appreciation shown by the people that the same Corporation were induced, some twenty-one years later, to erect another bathing establishment in Frederick Street provided with fresh water. This was in the year 1842, and owes its origin chiefly to that friend of the poor, the late William Rathbone, whose son is now one of the members for the borough. It may be said that the Baths and Washhouses Movement, so far as the provision of warm baths are concerned, dates from the opening of the establishment in Frederick Street, as in the former place there were no baths for cleansing purposes.

In 1849 the Corporation of Liverpool again increased their bathing and washing accommodation by the erection of two new establishments—one in Paul Street and the other in Cornwallis Street. The latter is undoubtedly the finest of its kind in Liverpool. These were designed on a

much larger scale than those in Frederick Street and contained all the more modern improvements which practical experience had suggested; in fact, so perfect were they considered that, I believe, there have been but few additional improvements in those of more recent erection.

The success of the Baths and Washhouses Movement in Liverpool first directed the attention of the Commissioners for "Inquiring into the Sanitary Condition of Large Towns and Populous Districts" to the advisability of recommending in their second report "that every facility should be afforded to furnish ample supplies of water, and Baths and Washhouses for the poorer classes," in which report (published in 1845) they state that public attention had of late been very generally attracted to the importance of this subject, and that the success of the baths and laundries erected at Liverpool had stimulated private individuals in other towns to pursue a similar course.

Glasshouse Yard public Baths

In September, 1844, the Lord Mayor presided at a meeting at the Mansion House convened for the formation of an "Association for Promoting Cleanliness among the People." As the result of this meeting, one of the first public Baths and Washhouses in London was established in a large building in Glasshouse Yard, in the midst of a dense and poor population near the London Docks, and it was not a little surprising and gratifying to the promoters of the movement to find that the advantages offered were so thoroughly appreciated by the working classes.

It will be seen from the following statement of one year's business, ending June, 1847, that the number of bathers, washers and ironers, amounted to 84,584. The articles washed and dried numbered nearly a quarter of a million. There were, in round numbers, 35,000 bathers, 38,000 washers and dryers of clothes, and 11,000 ironers. The

bathers and washers cost the Association about one penny each, and the ironers about one farthing each; the whole year's expenditure by the Association being over and above the receipts about £300, which included the items of fuel, soap, soda and whitewash, with pails, brushes, &c., which were lent to the people for use in their own homes.

Goulston Square Baths.

The effect of the unexpected success of their benevolent scheme was evidently to over-stimulate the hopes of its promoters, who were induced to build a large model establishment in Goulston Square, Whitechapel, near to Glasshouse Yard. The great success of their first attempt, coupled with that of the Liverpool Baths, naturally led them to believe that they would meet with still greater success had they at their command a more imposing and commodious establishment like the one then just opened in Cornwallis Street, Liverpool; they accordingly erected a model institution, hoping that it might have the effect of stimulating philanthropy in the south of England to carry the work on more victoriously. These baths were built by voluntary contributions. The first stone was laid by the late Prince Consort, and they were opened in the year 1851 or 1852. They occupied an area (exclusive of washhouses) of 63 by 40 feet, or 2520 square feet. The idea of adding a swimming bath was not carried out, although a piece of the adjoining land was allotted for that purpose. There were 95 private baths, viz., 47 first-class men's, 36 second-class men's; 6 first-class women's, 5 second-class women's, and 84 washing compartments. The Glasshouse Yard Baths were merely several large rooms fitted up with the simplest possible arrangements, and consequently worked at a comparatively small cost. No doubt, however, the novelty of cheapbaths had something to do

with their first two years' success, and when this had somewhat wore off, as a natural consequence, there was a proportionate falling off in the receipts. The business was transferred from Glasshouse Yard to the Goulston Square Baths, yet notwithstanding this they were worked at a considerable loss for a number of years. They gradually fell into a dilapidated condition, and were eventually closed. The Vestry of Whitechapel at last purchased the establishment, and in so doing discharged a duty which they should have undertaken twenty years ago.

On the 11th of December last I sent a gentleman to make inquiries respecting these baths, and he reports that they present the most dilapidated condition, being surrounded with hoarding, and all the windows demolished. He inquired of a poor woman, living directly opposite, how long the baths had been closed? She replied, "Some years, *worse luck*, I wish they would open them for I have no place to wash and dry my children's clothes." No doubt the same reply would be made by thousands who reside in the immediate neighbourhood. On inquiring at the Vestry Offices, Great Prescott Street, he was informed that it would be at least *two years* before the baths would be opened to the public. This is another instance of the tardiness of the Vestrymen of Whitchapel in supplying their poor with an essential sanitary agent.

It ought to be unnecessary to remark, but I feel it is my duty to emphasize the obvious fact, that, wherever personal cleanliness is impossible, physical, mental and moral deterioration of the people is inevitable. We may have sad but unmistakable evidence of this, if any were needed, in a tour through the slums of the East End. While there may be parishes within the metropolitan area where the demand for baths and washhouses is less

urgent, they are absolutely indispensable to sanitary efficiency in such a poor and densely populated parish as Whitechapel.

It is indeed surprising that, when the Goulston Square Baths were rapidly deteriorating, the parochial authorities did not then come forward and volunteer their assistance which would have come with a better grace than their tardy acceptance of a duty forced upon them by strong expressions of public opinion. One would have supposed it to be quite impossible for sanitary authorities to delay the construction of Public Baths and Washhouses until delay was no longer open to them. That such, however, was the fact, will be gathered from the following extract from the *Daily News*, of August, 1873:—

Daily News on Goulston Square Baths.

This now dismantled and dingy establishment started in the world with mighty *éclat*. It was the original model, and the first erected of London's Public Baths and Washhouses, and we were highly pleased with ourselves because of the introduction of this new lever for humanizing the East end, and for increasing the general healthiness of London. Leading articles were written about the place, its purposes, and their advantages; these themes were the burdens of sermons, in which, no doubt, occurred with great frequency the aphorism, that "cleanliness is next to godliness." It is just twenty years ago that its foundation stone was laid; laid, not by an obscure vestryman or unknown churchwarden, but by the now dead Prince who was the consort of our gracious Queen. On the platform in the shabby square there stood round the Prince Consort, as he laid the stone and wished the enterprise God-speed, such men as the then Bishop of London, Lord Shaftesbury, the late Lord Overstone, and Sir Anthony Rothschild. On the committee there was a list of the best-known public men of the day, and among the subscribers were the Queen and her husband. Men will tell you that we have advanced many stages since then. Two streets off there rises a great pile of building which, under the auspices of the London School Board, is to be devoted to educational purposes. Which takes precedence in the road to civilization—education or cleanliness? Look round such a neighbourhood as this, and the problem will smite you shrewdly, whether education bestowed on a being doomed to live amid such surroundings is not rather a curse than a blessing.

It seems to the writer that, to the impartial sense of a critical foreigner the present condition of Goulston Square Baths and Washhouses would go far to prove that we have retrograded since 1852, alike in enlightenment, in a realization of the value of sanitary reform, in common sense, and in zeal for the moral and social amelioration of our population.

If the stigma galls, it is not difficult to wipe it out; and there are others whom the abatement of temptation to a dirt-fed epidemic will touch nearer the quick. The establishment cost £16,000 to erect, part of which money was borrowed. The place having been shut up through neglect and mismanagement, the dilapidated carcase is now in pawn, so to speak, for this borrowed money. To extinguish the debt £2500 is required. For £3000 more, as estimated by professional gentlemen of eminence, the establishment can be restored to perfect repair, and swimming baths added. The debt once wiped out, the place rehabilitated, there is no fear that its present fate will again befal it, for the Vestry of Whitechapel are prepared to undertake its future management and maintenance. Already £2000 have been subscribed, and it seems hardly conceivable that such a work should stand over indefinitely for lack of £3500 more. We have pleasure in adding that subscriptions may be paid into the Temple Bar branch of the London and Westminster Bank to Baths and Washhouses Account.

H. M. Clifford's Letter to *The Times*.

This laudable attempt to obtain subscriptions from the public was not fully realized, although the responses were exceedingly creditable. Mr. H. M. Clifford, in a letter which appeared in the *Times* recently, states that:—

The Committee for re-opening the Baths and Washhouses in Goulston Square, Whitechapel, have the gratification of announcing that the premises were duly conveyed to the Vestry of Whitechapel on the 4th inst., together with the sum of £1500 towards the necessary repairs, as agreed. The Vestry will now at once proceed to render the Baths and Washhouses fit for use, which will be re-opened with as little delay as possible, to the great satisfaction and benefit of the large and poor population of the district. The whole amount raised was £4671 12s. 6d., including a very gratifying collection of over £100, raised by a committee formed among the Jewish working classes of the neighbourhood. Having now come to the end of their labours, the Committee beg to tender to the various contributors their best thanks for their liberality, without which the beneficial purpose the Committee had in view could never have been effected.

In August, 1846, another bathing establishment was

thrown open to the public by a private association, in George Street, Euston Square, in St. Pancras parish. The principal mover in this scheme was Sir C. Scudamore, who contributed largely to the cost. The ground upon which the baths were built belonged to the New River Company, and adjoined one of their reservoirs. The undertaking was greatly aided by the liberality of this company, the water for the baths being supplied gratuitously. George Street, Euston Square Baths.

This establishment, founded upon benevolent principles, was open for two or three years, and was closed in consequence of the New River Company abolishing their reservoir. The success of the undertaking is testified to by Mr. Erasmus Wilson, who in his work on a "Healthy Skin" (1849), quotes from a report of the working of this establishment, from the day of its opening (August 3, 1846) to November 12, 1848, showing that the number of visitors who have enjoyed its benefits, that is to say, have obtained the incalculable blessing of clean skins or clean linen, to which may be added also another feature of the institution, clean and wholesome dwellings, amounted to no less than 674,866. Of this surprising number 284,994 were bathers, and 96,468 washers, while a separate report from the department for "Cleansing, Purifying, and Disinfecting the Dwellings of the Poor," showed that during those last ten months upwards of one thousand purifications had been effected.

The ground where the reservoir was is at present known as Tolmers Square, and the site of the baths is now occupied by the Rev. Arthur Hall's chapel, in the centre of the square.

In the year 1835, Mr. James Silk Buckingham, a distinguished pioneer of many moral, social and political reforms—whose numerous works upon the questions J. Silk Buckingham's Bill.

affecting the interests of humanity are too much neglected by the present generation—foreseeing the necessity for some legislative enactment enabling local authorities to provide baths and other social and sanitary institutions, introduced into the House of Commons a Bill of a very comprehensive character to effect these purposes; but he failed to carry his proposed measure, owing, as he states, to the persistent opposition of a distinguished Whig statesman.

Mr. Buckingham had travelled extensively in Eastern countries, indeed, no other man of his time was so well acquainted with the manners, customs, and habits of the Orientals. His mind being essentially cosmopolitan, we find him prepared to learn even of those whom we still regard as being uncivilized, but the ample facilities afforded for bathing in these countries, and the general use and appreciation of them by the inhabitants, must have impressed him with the value of bathing for promoting health and preventing those diseases which are so prevalent in this country, and led him to make the attempt to supply his own countrymen with such a desirable sanitary agency.

A few years after, public opinion had considerably advanced upon the question, and the friends of the movement became more and more impressed with the belief that if any permanent and extensive good was to be effected it must be the result of legislative enactment. Hence arose the question, how could such an object be made part of a general and legalized system?

Bishop of London's Petition to House of Lords.

One of the circumstances that tended to bring the subject again under the notice of the Legislature was the presentation of five petitions by the Bishop of London to the House of Lords on the 8th June, 1846. These

petitions, praying that the Legislature would adopt some means to increase the facilities for cleanliness available for the mass of the people, were signed by many of the parochial clergy of the metropolis, by statesmen, by bankers and merchants, and many other persons of influence. His lordship, after alluding to the importance of personal purity, not only as a physical, but as a moral agency, referred to the efforts which had, up to that time, been made towards the establishment of Baths and Washhouses for the poor.

Sir G. Grey's Bill.

On the 19th of the same month, Sir G. Grey obtained permission to introduce a Bill for promoting the voluntary establishment in boroughs and parishes in England and Wales of Public Baths and Washhouses. The object was to enable parishes desirous of having an institution of this kind to defray the cost of the building out of the poor rates, and for this purpose to borrow money, which was to be repayable over a given number of years. The Bill passed through the House of Commons by the end of July, and on the second reading in the House of Lords, he Marquis of Lansdowne called attention to the fact hat such establishments as those to which the Bill had reference need not be unprofitable even in a pecuniary sense, in Liverpool they paid 3½ per cent. on the capital expended. "All therefore," said he, "that was meant by the present Bill was to give a stimulus to private enterprise; not to crush enterprise where it had already taken place; not to extinguish those establishments which were now working beneficially for the advantage of the public."

Passing of the Bath Act.

The Bill received the Royal assent on the 26th of August, 1846. By this Act (9 and 10 Vic., c. 74) the council of any borough are empowered to adopt its provisions if they are so disposed, and to defray the expenses

out of the borough fund. In parishes, on the requisition of ten or more ratepayers, a vestry meeting must be called at which the adoption of Baths and Washhouses may be determined on; and if this resolution is carried, information thereof is to be sent to the Secretary of State, and a commission of ratepayers is to be chosen to carry it into effect. The commissioners account to the Vestry for their proceedings, and the expenses are defrayed out of the poor rate. Two or more parishes may unite in their operations, if desirable.

Operation of the Act.

Although the Act is put into operation by the Vestry, and the commissioners have to go to the Vestry for power to borrow money, yet when once this power is conceded the Vestry have no control whatever over either the expenditure of the money or the actions of the commissioners.

The council (in a borough) or the commissioners (in a parish) are to regulate, not only the construction, but the management of these institutions.

Amendment of the Act.

This Act, like many other measures hurriedly passed into law, was found to be defective when put into operation, and consequently it was referred back to Parliament for amendment.* In the following session Sir George Grey introduced a Bill to amend the Act, and obtained larger powers.

In the first Act the maximum charge for a bath was 4d., but in the second this was increased to 6d. It is obvious that this alteration met the requirements of a large class of persons above the status of labourers, who were glad to avail themselves of the more select class of baths secured by the extra payments. These have been much resorted to, and have

* The amendment was construed into the original Act.

contributed a large item towards making the baths remunerative.

The framers of the Act evidently endeavoured to guard against the possibility of these institutions becoming rather commercial speculations than sanitary agencies, by enacting that two-thirds of the bath accommodation provided in every establishment should be apportioned to the third-class bathers.

In the Act 9 & 10 Vic., chap. 74, the charges are restricted, but it is remarkable that Baths erected under Towns Improvement Acts, although no doubt compelled to comply with the Bath and Washhouse Act, so far as the provisions for the poorer classes is concerned, yet there is no restriction against the managers charging what they please for the higher class baths; for instance, the Liverpool Corporation's Baths were built under the powers conferred by a local Act of their own, and they charge as high as 2s. 6d. for some baths, and may if they choose charge £1, whereas by the Act 9 & 10 Vic., chap. 74, they are restricted in their charges for the first-class baths, a fact that must hitherto have escaped the notice of the Legislature, or it would certainly have imposed the same restrictions in all cases. We have the right to assume that in legislative enactments one of the objects of the Government is to guard against any tendency to interfere with the commercial bearings of the subject dealt with, and consequently they insert certain adequate clauses. But if these restrictions are removed, a very different construction might be put upon the Act; and when the mental calibre of the men who almost invariably have the working of these Acts is taken into account—men like those whom the *Times* recently characterized (speaking of Local Boards of Health) as "petty tradesmen, who cannot be expected to take wide views of their responsi-

The Times and *Echo* on Local Boards of Health.

bilities, or to have any higher aim than to effect a present saving of money," and the *Echo* says, "The average town councillor, or member of the Local Board, is a person whom it is very difficult to teach the way he should go in sanitary matters. The average ratepayer does not care greatly how much the death-rate may go up, provided the other rates, which have to be paid in coin, are low. We wish we could convince minds of this type that disease and death are exceedingly costly." It is not difficult to arrive at the conclusion that the end they have in view in the administration of these Acts is not so much efficiency as profit, and that they consider not so much whether a thing is really needed, as whether it is possible to get on without it, and so avoid the expenditure of money.

It will be seen in reference to the statistical and financial information in the following chapter, to what extent the Act 9 & 10 Vic., chap. 74, has been exercised. The majority of the Baths in the provinces having been built under their Local Towns Improvement Acts, which include clauses for that purpose, and in many instances they have borrowed money for the improvement made from the Works Loan Commissioners.

Charges sanctioned by the Act.

The scale of charges prescribed by the Amended Act 10 & 11 Vic., chap. 61, is as follows:—

1.—BATHS FOR THE LABOURING CLASSES.

Every bath to be supplied with clean water for every person bathing alone, or for several children bathing together, and in either case with one clean towel for every bather.

For one person above eight years old:—

Cold Bath, or cold shower bath, any sum not exceeding	One Penny
Warm Bath, or warm shower bath, or vapour bath, any sum not exceeding	Twopence

For several children, not above eight years old, nor exceeding four, bathing together:—

Cold Bath, or cold shower bath, any sum not exceeding ... ... Twopence

Warm Bath, or warm shower bath, or vapour bath, any sum not exceeding ... ... Fourpence

2.—BATHS OF ANY HIGHER CLASS.

Such charges as the council and the commissioners respectively think fit, not exceeding in any case three times the charges above-mentioned for the several kinds of baths for the labouring classes.

3.—WASHHOUSES FOR THE LABOURING CLASSES.

Every washhouse to be supplied with convenience for washing and drying clothes and other articles.

For the use by one person of one washing tub or trough, and of a copper or boiler (if any), or, where one of the washing tubs or troughs shall be used as a copper or boiler, for the use of one pair of washing tubs, or troughs, and for the use of the conveniences for drying:—

For one hour only in any one day, any sum not exceeding ... ... One Penny

For two hours together in any one day, any sum not exceeding ... ... Threepence

Any time over the hour, or two hours respectively, if not exceeding five minutes, not to be reckoned.

For two hours not together, or for more than two hours in any one day, such charges as the council and the commissioners respectively think fit.

For the use of the washing conveniences alone, or of the drying conveniences alone, such charges as the council and the commissioners respectively think fit, but not exceeding in either case the charges for the use for the same time of both the washing and the drying conveniences.

4.—WASHHOUSES OF ANY HIGHER CLASS.

Such charges as the council and the commissioners respectively think fit.

5.—OPEN BATHING PLACES.

Where several persons bathe in the same water, for one person, One Halfpenny.

Vapour & Russian Baths.

By this time public attention had been directed to the efficacy of the Vapour and Russian Baths in the

treatment of disease; but from the expense of these baths they were beyond the means of the poorer classes to whom they were quite as indispensable as to their richer brethren. It is creditable to Sir G. Grey and his coadjutors that he brought this bath within the reach of the most humble classes, by making provision in the second Act for its use in baths and washhouses, and making the minimum charge 4d. and the maximum 6d.

In concluding what I have to say on this subject, let me observe that whilst the baths and washhouses movement originated in the domain of philanthropy, legislation removed it into a wider and more permanent sphere, by enabling (I wish I could say compelling) parochial authorities, where necessary, to erect such establishments at the cost of the ratepayers. The Act of 1846 has now been in operation thirty years; and while it is gratifying to know that some ten of the eighty-seven metropolitan parishes have availed themselves of its powers; yet on the other hand it is to be deplored that its provisions have not been more generally adopted.

Late Canon Kingsley on the want of Baths.

The late Canon Kingsley, in an able article on a pure water supply, which appeared in *Good Words*, March, 1874, in discoursing on the benefit of towns having a constant supply of water provided by civic authorities, thus wisely speaks on the necessity of baths:—

"In each district of each city, and the centre of each town, we may build public baths and lavatories, where the poor men and women may get their warm baths when they will; for now they usually never bathe at all, because they will not, and ought not, if they be hard-worked folk, to bathe in cold water during nine months of the year. And there they shall wash their clothes, and dry them by steam, instead of washing them as now, at home, either under back sheds, where they catch cold and rheumatism, or too often, alas! in their own living rooms, in an atmosphere of foul steam, which drives the father to the public-house and the children into the streets; and which not only prevents the clothes from being thor-

oughly dried again, but is, my dear boy, as you will know when you are older, a very hot-bed of disease. And they shall have other comforts, and even luxuries—these public lavatories; and be made in time graceful and refining, as well as merely useful. Nay, we will even, I think, have in front of each of them a real fountain; not like the drinking fountains though they are great and needful boons, which you see here and there about the streets with a tiny dribble of water to a great deal of expensive stone; but real fountains, which shall leap, and sparkle, and plash; and gurgle, and fill the place with life, and light, and coolness, and sing in the people's ears the sweetest of all earthly songs—save the song of a mother over her child—the song of 'The Laughing Water.'"

"But will not that be a waste?"

"Yes, my boy. And for that very reason, I think we, the people, will have our fountain; if it be but to make our governments, and corporations, and all public bodies and officers, remember that they all—save her Majesty the Queen—are our servants, and not we theirs; and that we choose to have water, not only to wash with, but to play with, if we like. And I believe—for the world, as you will find, is full not only of just but of generous souls—that if the water supply were set really right, there would be found in many a city many a generous man who, over and above his compulsory water rate, would give his poor fellow-townsmen such a real fountain as those which ennoble the great square at Carcasonne and the great square at Nismes, to be 'a thing of beauty, and a joy for ever.'

"And now, if you want to go back to your Latin and Greek, you shall translate for me into Latin—I do not expect you to do it into Greek, though it would turn very well into Greek, for the Greeks knew all about the matter long before the Romans—what follows here; and you shall verify the facts and the names, &c., in it from your dictionaries of antiquity and biography, that you may remember all the better what it says. And by that time, I think, you will have learnt something more useful to yourself, and, I hope, to your country hereafter, than if you had learnt to patch together the neatest Greek and Latin verses which have appeared since the days of Mr. Canning.

"I have often amused myself by fancying one question which an old Roman emperor would ask, were he to rise from his grave and visit the sights of London under the guidance of some minister of state. The august shade would, doubtless, admire our railroads and bridges, our cathedrals and our public parks, and much more of which we need not be ashamed. But after awhile, I think, he would look round, whether in London or in most of our great cities, inquiringly and in vain, for one class of buildings, which in his empire were wont to be almost as conspicuous and as splendid, because, in public opinion, almost as necessary

as the basilicas and temples; 'And where,' he would ask, 'are your public baths?' And if the minister of state who was his guide should answer—'O, great Cæsar, I really do not know. I believe there are some somewhere at the back of that ugly building which we call the National Gallery; and I think there have been some meetings lately in the East End, and an Amateur Concert at the Albert Hall, for restoring, by private subscriptions, some Baths and Washhouses in Bethnal Green, which had fallen to decay. And there may be two or three more about the metropolis; for parish vestries have powers by Act of Parliament to establish such places if they think fit, and choose to pay for them out of the rates,'—then, I think, the august shade might well make answer—'We used to call you in old Rome northern barbarians. It seems that you have not yet lost all your barbarian habits. Are you aware that in every city in the Roman empire there were, as a matter of course, public baths open, not only to the poorest freeman, but to the slave, usually for the payment of the smallest current coin, and often gratuitously? Are you aware that in Rome itself, millionaire after millionaire, emperor after emperor, from Menenius Agrippa and Nero down to Diocletian and Constantine, built baths, and yet more baths; and connected them with gymnasia for exercise, with lecture rooms, libraries, and porticoes wherein the people might have shade and shelter and rest? I remark, by the bye, that I have not seen in all your London a single covered place in which the people may take shelter during a shower. Are you aware that these baths were of the most magnificent architecture, decorated with marbles, paintings, sculptures, fountains—what not? And yet I had heard in Hades down below that you prided yourselves here on the study of the learned languages; and, indeed, taught little but Greek and Latin at your public schools?'

"Then, if the minister should make reply—'Oh, yes, we know all this. Even since the revival of letters in the end of the fifteenth century a whole literature has been written—a great deal of it, I fear, by old pedants who seldom washed even their hands and faces—about your Greek and Roman baths. We visit their colossal ruins in Italy and elsewhere with awe and admiration; and the discovery of a new Roman bath in any old city in our isles sets our antiquaries buzzing with interest.'

"'Then why,' the shade might ask, 'do you not copy an example which you so much admire? Surely England must be much in want either of water, or of fuel to heat it with?'

"'On the contrary, our rainfall is almost too great; our soil so damp that we have had to invent a whole art of subsoil drainage unknown to you; while, as for fuel, our coal-mines make us the great fuel-exporting people of the world.'

"What a quiet sneer might curl the lip of a Constantine as he replied —'Not in vain, as I said, did we call you, some fifteen hundred years ago, the barbarians of the north. But tell me, good barbarian, whom I know to be both brave and wise—for the fame of your young British empire has reached us even in the realms below, and we recognize in you, with all respect, a people more like us Romans than any which has appeared on earth for many centuries—how is it you have forgotten that sacred duty of keeping the people clean, which you surely at one time learnt from us? When your ancestors entered our armies, and rose, some of them, to be great generals, and even emperors, like those two Teuton peasants, Justin and Justinian, who long after my days reigned in my own Constantinople; then, at least, you saw baths, and used them, and felt, after the bath, that you were civilized men, and not '*sordidi ac fœtentes*,' as we used to call you when you were fresh out of your bullock-waggons and cattle-pens. How is it that you have forgotten that lesson?'

"The minister, I fear, would have to answer that our ancestors were barbarous enough, not only to destroy the Roman cities and temples, and basilicas and statues, but the Roman baths likewise, and then retired, each man to his own freehold in the country, to live a life not much more cleanly or more graceful than that of the swine which were his favourite food. But he would have a right to plead as an excuse, that not only in England, but throughout the whole of the conquered Latin empire, the Latin priesthood, who in other respects were, to their honour, the representatives of Roman civilization and the protectors of its remnants, were the determined enemies of its cleanliness; that they looked on personal dirt—like the old hermits of the Thebaid—as a sign of sanctity, and discouraged—as they are said to do still in some of the Romance countries of Europe—the use of the bath, as not only luxurious, but also indecent.

"At which answer, it seem to me, another sneer might curl the lip of the august shade, as he said to himself, 'This, at least, I did expect, when I made Christianity the State religion of my empire. But you, my barbarian, look clean enough. You do not look on dirt as a sign of sanctity?'

"'On the contrary, sire, the upper classes of our empire boast of being the cleanliest—perhaps the only perfectly cleanly—people in the world—except, of course, the savages of the South Seas. And so far from dirt being a thing which we admire, our scientific men—than whom the world has never seen wiser—have proved to us for a whole generation past, that dirt is the fertile cause of disease and drunkenness, misery and recklessness.'

"'And, therefore,' replied the shade, ere he disappeared 'of discontent

and revolution, followed by a tyranny endured, as in Rome and many another place, by men once free, because it will at least do for them what they were too lazy, and cowardly, and greedy to do for themselves. Farewell, and prosper, as you seem likely to prosper, on the whole. But if you wish me to consider you a civilized nation, let me hear that you have brought a great river from the depths of the earth, be they a thousand fathoms deep, or from your nearest mountains, be they five hundred miles away, and washed out London's dirt—and your own shame. And till then, abstain from judging too harshly a Constantine, or even a Caracalla; for they, whatever were their sins, built baths and kept their people clean. But do your gymnasia, your schools and universities, teach your youth nought about all this?'"

One of my chief objects in preparing this work is to show how far the Act has been utilized. In prosecuting inquiries for this purpose, it was found that Government possessed but little information on the subject, and, with the exception of a return obtained at the instance of Mr P. Taylor, by the House of Commons in 1865, there were no other statistics available, and these, on examination, were found to be incorrect; therefore, the information, given in the following chapter, has been procured direct from the respective parochial authorities, and will show to every reader that the question has not received that general attention which it eminently deserves, and which has been bestowed upon all other sanitary matters. The statistics will exhibit the progress and position of the Baths and Washhouses movement since its commencement. When the pioneers of the movement unfolded their scheme it was undoubtedly regarded as purely philanthropic; such, indeed, it was, and like every effort for the moral or physical elevation of a people, such it must remain; but philanthropy does not necessarily imply charity. Though not, perhaps, constituting the most lucrative and desirable investment for capital from a commercial point of view, thirty years' experience of the advantages of the Baths and Washhouses

reform shows that they can be made to produce results (pecuniary and otherwise) not altogether inappreciable in annual balance sheets. But of this I shall have more to say further on; as also to show that the direct profits might be materially increased by the adoption of the Turkish Bath and the warm lavatory as a substitute for, or in addition to, the warm bath.

Proposal to add Hot-air Baths to Baths and Wash-houses.

It was from a consideration of these facts that, when it was proposed to erect Public Baths and Washhouses for the parish of Paddington, I argued that a very beneficial deviation might be made from the usual plan of such establishments by the addition of hot-air baths. I therefore submitted to the Paddington Vestry, March 19th, 1872, the following resolution, which was referred to the Commissioners:—*

That, inasmuch as sanitary matters are at present occupying the serious attention of the Legislature, with a view to the better protection of public health, and it being generally admitted that the use of hot-air baths has materially conduced to the health of the people, it be referred to a special committee to furnish a report upon the desirability of this Vestry recommending the Commissioners for Baths and Washhouses making arrangements for the erection on the site about to be purchased by them of a suitable Turkish Bath for the use of the working classes.

Letter from Local Government Board.

To obviate any doubt as to the legality of adopting these Baths, I obtained the following letter from the Local Government Board:—

Local Government Board, Whitehall,
12th February, 1873.

SIR,—I am directed by the Local Government Board to acknowledge the receipt of your letter of the 22nd ultimo, with reference to the pro-

* No exertion on my part was omitted to make my colleagues understand the benefits to be derived from the addition of Hot-air Baths, both in a sanitary and financial point of view, but they, acting upon the ancient aphorism, "Where ignorance is bliss 'tis folly to be wise," determined not to acquaint themselves with the subject or entertain its adoption.

posal of the Commissioners of Baths and Washhouses for the parish of Paddington to erect a Turkish Bath.

In reply to your inquiry, I am directed to state that, in the opinion of the board, for large populations, such as that of Paddington, the Turkish Bath may reasonably be regarded as a sanitary agent—that is to say, that for certain portions of the population, such a bath might conduce to the preservation of health.

Looking at the proposal from a legal point of view, the Board direct me to state that, although the statutes to which you refer contain no definition of baths, the schedule to the statutes 10 and 11 Vict, cap. 61 recognizes a vapour bath, and the Board therefore apprehend that there would be no legal objection to the establishment of a Turkish Bath.

The schedule referred to, however, limits the rate of charge for the admission to the bath provided by the commissioners, fixing twopence as the maximum charge for labouring classes, and sixpence for higher classes of persons, so that, apparently, the bath must be supplied at a loss.

I am, Sir, your obedient servant,

H. FLEMMING, *Secretary.*

But, though the proposition to establish baths and washhouses was finally adopted, my resolution to render them more efficient was rejected.

CHAPTER II.

BATHS AND WASHHOUSES ERECTED ON THE RATES UNDER THE PROVISIONS OF THE BATH ACT, 9 AND 10 VIC., CAP. 74, WITH A COMPLETE FINANCIAL RETURN OF THEIR ORIGINAL COST AND WORKING EXPENSES SINCE THE DATE OF OPENING EACH ESTABLISHMENT.

(METROPOLITAN.)

"Only in a strong and clean body can the soul do its message fitly. The praises of cold water seem to me an excellent sign of the age. They denote a tendency to the true life. We are now to have, as a remedy for ills, not orvictan, or opium, or any quack medicine, but plenty of air and water, with due attention to warmth and freedom in dress and simplicity of diet. Every day we observe signs that the natural feelings on these subjects are about to be reinstated, and the body to claim care as the abode and organ of the soul, not as the tool of servile labour or the object of voluptuous indulgence."—MARGARET FULLER, *American Authoress.*

Introductory remarks.

THE information in this and the following chapter has been collected and arranged with great care; it presents a concise view of the whole question, and will enable the reader to see almost at a glance what has been done in the direction of providing baths and washhouses for the people, the original cost of the various metropolitan and provincial establishments, the relative receipts and expenditure in working them, and the measure of support they have received.

No pains and perseverance have been spared on the part of the author to obtain correct returns, while the names of those from whom the information has been obtained are

published with a view to making them responsible for its accuracy. The difficulty experienced in obtaining these returns has been very great indeed, in fact it has taken me four years to get them in their present complete form. My inquiries were met with all kinds of objections, which I can only understand by supposing that the Bath accounts have been mixed up in almost inextricable confusion with the general parochial accounts. While I could, as a rule, readily get a portion of the required information, it was only by repeated applications made by myself, or individuals employed by me for the purpose, that I succeeded in bringing the information to its present completeness. In some cases local friends of influence succeeded where I had altogether failed; for example: Mr. William Hoyle, the philanthropic statistician, obtained the desired information relating to the Bury baths after I had been flatly refused it. Seeing that the Act provides that a separate set of books should be kept for the accounts, it is obvious that the intention was that the accounts should be so kept as to show, at a glance, the financial condition at any period during which the baths had been in operation, and it is somewhat surprising that the Auditor appointed by Government should not have insisted upon this plan being adhered to, and a uniform system adopted throughout the country. Were this the case, not only would the information be available to the public, but it would be most valuable to the Commissioners or to any other authority which might be working the Act.

The Government spares no labour or expense in procuring and publishing information, often of the most minute and elaborate kind, respecting the condition and occupation of the various peoples of the earth, civilized and uncivilized, wherever our consular system extends.

In these directions we get "tons of Blue Books," and the information may possibly be of some remote interest or even use, but I would suggest that home matters are of the greatest importance to us.

It seems strange, indeed, that the accounts to which I have been referring, together with the accounts of all other sanitary departments, are not regularly and periodically deposited at some central office where the information might be tabulated for public inspection, if not published annually. I would suggest that in each county the information should be collected and deposited with the county authorities for use and reference by the respective inhabitants, and that in the metropolitan district the Registrar-General should be the depository and custodian of these annual statements.

I have every reason to believe that the metropolitan returns are in the main correct, but in some of the provincial I am afraid that neither the appeal made nor the interest of the subject was sufficient to induce the authorities to take much trouble with the accounts; consequently I am disposed to think that some of the returns are not so correct as they might be. Of course, this is only a surmise on my part, as I have had no other means of drawing this inference except from communications obtained piece-meal, but whatever the shortcomings may be, it is but just to say that this is the first attempt, officially or otherwise, to collect a correct financial statement of the question, and I do not despair of being able to effect my object before I issue a second edition. I must say considerable credit attaches to the various authorities for the trouble they have taken in the matter, and I hope I am not ungrateful for such information as they have supplied.

The population is given from the last census, with a

view of showing the ridiculous inadequacy of the Bath and Washhouse accommodation provided for the masses.

METROPOLITAN BATHS.

ST. MARYLEBONE.

Baths opened December 18th, 1849. (Site Freehold.)

Original cost of building baths	£23,671
Total amount raised from rates	21,450
Receipts since date of opening	80,987
Expenditure (working expenses) since date of opening ...	70,049

Accounts made up to March, 1875.

E. S. FOOT, *Superintendent.*

Maryle bone.

The parish of Marylebone has a population of 159,254, and the rateable value is £1,304,898.

The baths are situated in the Marylebone Road, at the extreme border of the parish, in close proximity in the north to Lisson Grove, Bell Street, &c., a thickly populated neighbourhood, and on the west (in the adjoining parish of Paddington), Hall Park, Edgware Road—a large block of middle-class houses, with an artizan population of about 3000.

The baths have an area of 21,672 square feet, and comprise 4 swimming baths, viz.:—a first-class, 24 by 45 feet, which holds 31,464 gallons; a second-class, 21 by 67 feet, holds 37,887 gallons; a third-class, 21 by 67 feet, holds 37,887 gallons; and a new bath, 72 by 26 feet, holds 56,000 gallons. 24 first-class and 57 second-class men's baths, 12 first-class and 14 second-class women's baths, ironing and drying rooms, 240 washers can be accommodated daily.

The receipts have exceeded the working expenditure by £10,938, which has been applied in paying interest, and in making improvements and additions to the baths.

This was the first bath opened in London erected under the Act, and it may be regarded as the parent or model institution, as but little deviation has been made from its plans and arrangements by the projectors of other baths and washhouses in the metropolis. Being the first, it had necessarily many difficulties to pass through; nevertheless, it has been very successful in a pecuniary point of view, which may in measure be attributed to the excellent management of the superintendent, who has been connected with it since its commencement.

There are no less than four excellent swimming baths provided, one of which has only lately been opened, and is one of the most artistic in London.

After the Stingo Lane improvements were completed, the Commissioners purchased from the Metropolitan Board of Works, at an extravagant outlay, the site for this swimming bath, which, including the ground, cost upwards of £7000. It may be observed that this additional bath accommodation was quite unnecessary for the neighbourhood, the more especially as Paddington had already erected an establishment not more than a mile west of it, and, consequently, the number of bathers was more likely to diminish than increase.

It would have been more prudent on the part of the Commissioners if they had added £5000 to the £8000 expended uselessly on the fourth swimming bath, and erected a second establishment in the neighbourhood of Marylebone Lane, nearly in the centre of the parish, provided with washhouses and warm water baths only. They would have supplied a want much needed by the people, and at the same time obtained fresh support from those who would never use the present establishment on account of the distance; and in a pecuniary view they would have proved equally as successful, but now they have sunk an

additional £7000 or £8000 without the prospect of increasing their returns one penny, in fact, with every probability of their returns being reduced.

ST. MARGARET AND ST. JOHN, WESTMINSTER.

Baths opened May, 1851. (Site Freehold.)

Original cost of building	£15,000
Total amount raised from rates	20,460
Receipts since date of opening	50,900
Expenditure (working expenses) since date of opening ...	50,378

Accounts made up to March, 1876.

W. ROGERS, *Clerk.*

St. Margaret and St. John, Westminster.

The parishes of St. Margaret and St. John, Westminster, have a population of 66,050 and the rateable value is £521,811. The baths are situated in Great Smith Street, which is a very low and crowded neighbourhood—a more suitable spot could not be found—and it is encouraging to find that the people have appreciated the baths to such a large extent. The returns show that this establishment has been conducted and maintained with great efficiency and economy. The authorities have not been tempted into extravagant expenditure in alterations and so called improvements, as is the case in some other parishes, thus violating the spirit of the Act. The baths have an area of 152 by 122 feet, they are all on the ground floor, and comprise 28 first and 40 second-class baths, a first-class swimming bath 24 by 32 feet, and a second-class 24 by 42 feet. There are 65 washing tubs. The original cost of the building has been repaid. The receipts exceed the expenditure by £522, and, considering the cash has been chiefly derived from the poorer classes using the baths, the financial result is very good indeed, and shows that the poor, huddled together more like pigs than Christians, only require a good institution placed before them and they will avail themselves of the advantages it offers.

ST. JAMES, WESTMINSTER.

Baths opened June, 1852. (Site Freehold.

Original cost of building baths	£21,000
Total amount raised from rates	26,476
Amount of Loan remaining unpaid	6,133
Receipts since date of opening	67,473
Expenditure (working expenses) since date of opening ...	66,602

Accounts made up to December, 1875.

ROBERT KERR, *Clerk.*

St. James, Westminster.

This parish has a rateable value of £567,771, and a population of 15,619.

The baths are situated in Marshall Street, Golden Square, one of the most desirable localities of any in the metropolis, amidst a densely populated and unhealthy neighbourhood.

The baths comprise 25 first and 46 second-class men's baths, 15 first and 18 second-class women's baths, and a swimming bath 42 by 38 feet, 84 washing tubs, drying and ironing rooms. The returns do not depend upon the patronage of the first-class bathers, but the second-class, a class the Act was intended to benefit. The financial results here again point to the fact that if baths are brought to the homes of the poor they will use them. The receipts exceed the expenditure £871. The costs of alterations and additions to the baths have been considerable, and are included in the working expenditure. Up to this date £26,476 has been raised from the rates for principal and interest, and £6133 remains to be paid off the original loan for building.

POPLAR.

Baths opened July 15th, 1852. (Site Freehold.)

Original cost of building baths	£11,500
Total amount raised from rates	14,740
Receipts since date of opening	25,383
Expenditure (working expenses) since date of opening... ...	29,728

Accounts made up to March, 1876.

E. COLEMAN.

Poplar. The parish of Poplar has a population of 48,611, and the rateable value is £294,193.

The baths are admirably situated in the East India Dock Road, in the midst of a population comprised of sailors, ship-carpenters and smiths, dock-porters and labourers, sugar-refiners and others of a similar character. With such a population it is difficult to understand the want of appreciation as shown by the receipts unless it arises from mismanagement, or a want of greater accommodation in the summer. In the winter months these establishments are worked at a loss, while in summer, during the hot weather, they are crowded to suffocation; hence it is desirable that there should be very large accommodation to meet the requirements in summer so as to compensate for the losses in the winter; therefore I am inclined to believe that one of the reasons why these baths show such a bad financial return is that they are too small. Had they been one-third larger, which in the first instance would not have cost more than £5000, it would have made a favourable difference in the returns, while the actual working expenses would not have been perceptibly increased.

The baths have an area of 120 by 120 feet, and contain 12 first and 24 second-class men's baths, 6 first and 6 second-class women's baths; a first-class swimming bath, 42 by 26 feet; a second-class swimming bath, 42 by 26 feet; 48 washing tubs; ironing and drying rooms.

The original cost has been paid, but the expenditure has exceeded the receipts £4345, which has to be made up from the rates, so that this establishment has hitherto proved a failure in a financial point of view, although the expenditure has been distributed over a period of a quarter of a century.

ST. GILES-IN-THE-FIELDS AND ST. GEORGE BLOOMSBURY.

Baths opened in 1854. (Site Freehold.)

Original cost of building baths	£20,857
Total amount raised from rates since date of opening	14,000
Receipts since date of opening	79,230
Expenditure (working expenses) since date of opening... ...	70,579

Accounts made up to March, 1876.

J. ROBINSON, *Hon. Sec.*

St. Giles-in-the-Fields and St. George Bloomsbury.

These parishes have a population of 47,536 and the rateable value is £332,602. The baths are situated in Endell Street, in the immediate neighbourhood of Holborn, Drury Lane, Seven Dials, and other very crowded districts; a large proportion of the inhabitants are very poor, with many small middle-class tradesmen. The building contains 18 first and 39 second-class men's baths, 8 first and 8 second-class women's baths; A first-class swimming bath, 36 by 24 feet, holding 25,000 gallons; a second-class swimming bath, 40 by 24 feet, holding 30,000 gallons; 54 washing tubs; drying and ironing rooms.

The original loan has been repaid, £8651 having been contributed from the profits towards it. The financial result of this establishment is another evidence of the appreciation of baths by the lower classes.

BERMONDSEY.

Baths opened June 24th, 1854. (Site Freehold.)

Original cost of building baths	£16,500
Total amount raised from rates	20,650
Receipts since date of opening	49,664
Expenditure (working expenses) since date of opening ...	42,768

Accounts made up to March 25th, 1876.

W. CORNWELL.

Bermondsey.

This parish has a population of 80,429, and the rateable value is £357,042. The baths are situated in Spa Road, in the midst of tanners, curriers, leather dressers, skinners,

and other extensive and obnoxious trades. They comprise 20 first, 31 second-class men's baths, 6 first and 8 second-class women's baths, and 2 swimming baths, 30 by 29 feet. The financial results show that this establishment has been well patronised. The bathers number, since date of opening, 2,229,447, and washers, 673,335. The original loan has been repaid and the receipts exceed the expenditure £6896. It will be seen that the accommodation is less than any other, except Poplar, yet it has yielded more than any other bath with the same capital expended, which is mainly due to its economical and excellent management. The Commissioners have given the people all they require in regard to bath and washhouse accommodation; and have avoided useless expenditure upon ornamentation, always holding in view that the object of these institutions is mainly to meet the wants of those of their poorer brethren who have no accommodation at home for washing and drying their clothes, and cannot afford to pay more than 2d. for a warm bath; thus rigidly keeping within the meaning of the Act of Parliament.

ST. GEORGE, HANOVER SQUARE.

Baths opened 1855. (Site Leasehold to the Vestry.)

Original cost of building baths	£33,861
Raised from rates	57,608
Loans borrowed	35,000
Received for rents...	2,056
Repayments to Vestry and rents	19,798
Repayment on account of loan	47,448
Receipts from baths since date of opening	95,036
Expenditure (working expenses) since date of opening ...	88,591

Accounts made up to March, 1875.

J. H. DOGGETT.

St. George, Hanover Square.

The parish of St. George, Hanover Square, has a population of 89,677, and the rateable value is £1,499,954.

This is a very rich parish and the poor-rates are merely nominal. No other metropolitan parish contains so small a relative proportion of working classes, hence it had less necessity for baths than any other parish. There are two establishments in this parish one for the outward and one for the inward wards. Davies Street Baths, in the inward, comprise 14 first and 18 second-class men's baths, 7 first and 8 second-class women's baths, and 36 washing tubs. It is situated at the border of the parish, and so far as the support given by the poor is concerned, much of it must come from the Marylebone parish in the neighbourhood of Marylebone Lane district, &c. The baths in Buckingham Palace Road in the outward ward have 16 first and 17 second-class men's baths, 6 first and 8 second-class women's baths, and 44 washing tubs; they are much resorted to by the residents in Pimlico and Chelsea immediately contiguous.

It is difficult to understand the accounts as presented to us. We find £57,608 has been raised from the rates in addition to loans amounting to £35,000, and yet the repayments on account of loan are only £47,448. It is therefore impossible to determine the amount of loan remaining unpaid. It is, moreover, a curious fact that the lease of the premises in Davies Street will expire Lady Day, 1881, and that of Buckingham Palace Road, Lady Day, 1886, in both instances before the last instalments of original loan are due. The only way we can account for the this is that the baths are leased from the Vestry, as an item of £19,798 has been repaid to that body. I believe both establishments must be worked at a loss, but unless the cost of building and repayment of loans are included in the receipts and expenditure, the returns show a profit.

It is always pleasing to see public bodies give the people,

both rich and poor, all requisite sanitary institutions, but of all the metropolitan parishes, St. George's is the one that least required baths and washhouses, and yet it has spent more upon them than any other *excepting Paddington;* however, being a very rich parish the ratepayers can afford to pay for it. I am sorry to say we have had many painful instances where local authorities have put in motion Acts of Parliament relating to other sanitary departments thereby involving the ratepayers in enormous debts when not actually required. I do think it is wrong of the Government to allow any petty authority to adopt an Act, and create enormous debts upon the people, without appointing an inspector to regulate the expenditure to the ratepaying capabilities of the parish, especially in new neighbourhoods.

ST. MARTINS-IN-THE-FIELDS.

Baths opened 1856. (Site Leasehold from the Crown.)

Original cost of building baths	£21,000
Total amount raised from rates	25,155
Amount of loan remaining unpaid	5,700
Receipts since date of opening	44,388
Expenditure (working expenses) since date of opening ...	46,022

Accounts made up to December 31st, 1875.

J. DANGERFIELD, *Clerk.*

St. Martins-in-the-Fields

This parish has a population of 21,238 and the rateable value is £350,710. The baths are situated in Hemming's Row, St. Martin's Lane, a very appropriate site, having Leicester Square on the north, and the Strand district to the east, a very densely populated neighbourhood. The baths have an area of 100 by 40 feet and comprise 18 men's first and 34 second-class, 5 women's first and 7 second-class baths, and 61 washing tubs; ironing and drying

rooms. This establishment has always been worked under disadvantages, with a heavy ground rent of £80 per annum. So far as concerns washing the clothing and bodies of the people, these baths have, notwithstanding all the drawbacks, succeeded better than any other institution of the kind, both in a sanitary and pecuniary point of view.

Swimming baths are generally considered the most lucrative of all, and St. Martin's having none sustains this loss, hence the receipts represent the return upon the cleansing baths and washing clothing, *a wholesome fact worthy the notice of sanitary reformers and to be remembered when advocating the adoption of this branch of science.* There can be no question that the first outlay was relatively too large for the accommodation afforded, the commissioners commenced crippled for room, with a heavy ground rent, minus one of the most lucrative branches of the business, viz., the swimming bath, and have been but meagrely supported by first-class bathers. The expenditure exceeds the receipts £1634, the loss is, however, relatively small when we consider the *number of years it extends over*, and the great boon conferred upon thousands of human beings of all nationalities living in the neighbourhood.

ST. PANCRAS.

Baths opened May 19th, 1868. (Site Freehold.)

Original cost of building baths	£23,000
Total amount raised from rates	10,085
Amount of loan remaining unpaid	13,525
Receipts since date of opening	25,266
Expenditure (working expenses) since date of opening ...	18,292

W. REID.

The parish of St. Pancras has a population of 221,465 and the rateable value is £1,299,913. The baths are St. Pancras.

situated in King Street in the very centre of a densely populated neighbourhood. This parish has attained some little notoriety in its parochial management, but it is more than probable that it has been much villified by the public press, when we consider that it is one of the largest and poorest parishes in London; and it requires no little dexterity to manage the affairs of such great magnitude with efficiency, with a board necessarily composed of such infinitely varied opinions. It is, however, pleasing to observe in the management of the baths as shown by the financial statements, that the functionaries of St. Pancras are not such bad business men as they have been represented.

The loan was borrowed from the Public Works Loan Commissioners at 5 per cent. repayable in 20 years. The baths have an area of 9550 feet, have only been opened 8 years, and the receipts exceed the expenditure £7080, which is by far the largest profit made by any establishment erected under the Act. There are 26 men's first-class and 57 second-class baths, 8 first and 10 second-class women's baths, swimming baths, and 63 washing tubs. The bathers number 1,407,759, and washers 199,118.

The Commissioners have purchased a site for a second establishment in Fitzroy Market, Tottenham Court Road. Tenders for plans were sent out, and the one by Mr. Grundy accepted. The cost will be about the same as their other baths, also designed by the same architect. Judging from the dense population in this neighbourhood, there is every reason to believe that this second establishment will be equally successful. This is the course that ought to have been followed by the St. Marylebone Commissioners, instead of adding another swimming bath as they have done.

This second venture is, no doubt, in a measure owing to the great success of their first establishment.

PADDINGTON.

Baths opened June, 1874. (Site Freehold.)

Original cost of building baths	£48,000
Raised from rates	2,579
Amount of loan remaining unpaid	48,000
Receipts since date of opening	7,036
Expenditure (working expenses) since date of opening ...	6,093

Accounts made up to December, 1875.

J. TAYLOR.

Padding-ton.

The parish of Paddington has a population of 96,813, and the rateable value is £1,078,700. The baths are situated in the Queen's Road, Westbourne Grove, surrounded by very respectable inhabitants, and quite away from any poor population. The establishment of these baths was energetically supported by F. Powell, Esq., late M.P. for the N.W. Riding of Yorkshire, and E. G. Davenport, Esq., now deceased, who was M.P. for St. Ives. Both were members of the Vestry at the time. The baths have an area of 280 by 137 feet, and comprise:—a first-class swimming bath, 90 by 40 feet; a second-class, 57 by 30 feet; a third-class, 55 by 30 feet, and a women's swimming bath, 68 by 30 feet; 28 first-class and 46 second-class men's warm baths, 10 first and 12 second-class women's warm baths, and 36 washing tubs. The receipts in eighteen months were £7036, and expenditure (working expenses) £6093; showing a nett profit of £943, a result which must necessarily have proceeded from the patronage of first-class bathers in the swimming baths, and not from the warm water baths.

The building and plant cost the ratepayers the enormous round sum of £48,000, a sum more than treble that expended in some other metropolitan parishes.

When the Commissioners went before the Vestry for the money to purchase the site there were a great many objections urged against the large amount asked for, and it was only granted through the plausible statement that they could recoup themselves at least one half by letting or selling a portion of the frontage for shops, still leaving sufficient room for the erection of baths behind. Curiously enough, however, after the Commissioners obtained the concession, they made no efforts to fulfil their promises, and the Vestry had no power to compel them to do so.

Tenders were sent out for building the baths, and out of some nine competitors, the lowest, £23,500, was accepted, which provided for the present baths with the exception of the ladies' swimming bath. The amount was not considered excessive; but what is most extraordinary nearly £20,000 more was spent for extras, which is a circumstance, I think, unprecedented not only in bath establishments, but in any undertaking built under contract.

Extravagances of this kind reflect great discredit upon any public body, and frighten ratepayers in other parishes from incurring even necessary expenses, so that sanitary and other improvements are often retarded in consequence.

The commissioners might have provided all the accommodation necessary for a sum not exceeding £30,000, including site and swimming baths, and recouped themselves at least £5000 by re-selling a portion of the ground as at first contemplated, and the financial issue, so far as the receipts are concerned, would have proved as much as it is on the £48,000.

If the commissioners had been so disposed they might have expended the extra money very judiciously in providing a second establishment with warm water baths and

washhouses in the neighbourhood of Lock Bridge, Harrow Road, the very centre of the artizan and poor population of the parish, which would not only have conferred a benefit upon the people, but have greatly aided the sanitary authorities in improving the condition of the neighbourhood, which is much required.

After all, £943 over and above the working expenses for eighteen months does not show a very healthy return with a capital of £50,000 sunk, even with all the pushing the establishment has had since it has been opened. It is self-evident to every intelligent mind who knows anything of the wants of the poor of Paddington, that such an outlay was not needed, especially in the neighbourhood of Westbourne Grove; in fact, every principle of economy has been violated, as well as the Act of Parliament perverted. The institution is just as much a trading speculation as their next door neighbour's, Mr. Whiteley, the "universal provider."

As a ratepayer of the parish of Paddington my advice is, seeing that Mr. Whiteley has a mania for buying up everybody's business in Westbourne Grove, the most wise and best course to adopt would be to get that gentleman to buy them out, and commence *de novo*, in a more suitable neighbourhood and not invest all the money in one concern.

At the very outside, Paddington only comprises about 19,000 of the labouring classes whose wants are required to be met; the major portion of this class reside from three-quarters to two miles distant from the baths, hence this establishment must always depend for its chief support from persons whose social position does not need the local authorities to provide them with baths and places to wash their clothing at the expense of the ratepayers, any more than with providing them with clothing or food.

The original debt and interest of these baths will no doubt have to be paid by the ratepayers, and if baths and washhouses are to be erected by the Artizans' Dwellings Company, on the Queen's Park Estate, Harrow Road, which is intended to accommodate 10,000 souls, I am inclined to think that the Paddington Baths will be less likely to pay their working expenses.

STATISTICAL AND FINANCIAL

Summary of Metropolitan Baths and Washhouses.

Date of Opening.	Parish.	Original Cost.	Receipts.	Expenditure.	Assessment.	Population.	Number of Warm-water Baths.
		£	£	£	£		
1849	Marylebone	23,671	80,987	70,049	1,304,898	159,254	107
1851	St. Margaret and St. John, Westminster	15,005	50,900	50,378	521,811	66,050	68
1852	St. James', Westminster	21,000	67,473	66,602	567,771	15,619	104
1852	Poplar	11,500	25,383	29,728	294,193	48,011	48
1854	St. Giles and St. George, Bloomsbury	20,857	79,230	70,579	332,602	47,556	73
1854	Bermondsey	16,500	49,664	42,768	357,042	80,429	65
1855	St. George, Hanover Square	33,861	95,036	88,591	1,499,954	89,677	94
1856	St. Martin's-in-the-Fields	21,000	44,388	46,972	350,710	21,238	66
1868	St. Pancras	23,000	25,266	18,292	1,299,913	21,465	101
1874	Paddington	48,000	7,036	6,093	1,078,700	96,813	114
		234,389	525,363	490,002	8,332,594	846,712	840

Remarks on Metropolitan Baths.

It is admitted by both Conservative and Liberal politicians that there is no branch of sanitary science of greater importance, or calculated to be productive of more real good, than providing the people with ample baths and washing tubs, especially when such institutions can be made lucrative, a result not to be effected in other branches. The foregoing financial statement shows that a capital of £234,000 expended piecemeal over a period of thirty years, has yielded a profit of £35,000 over and above the working expenses, notwithstanding the extravagance in the original cost, while the plant and premises, by additions, &c., have increased in value at least 10 per cent., making, in round numbers, the profits £50,000. This must be gratifying to every ardent supporter of a movement set in motion for the better purification of the bodies and clothing of a section of the community who cannot individually help themselves.

Millions of pounds have been spent in sanitary improvements, from which no pecuniary return can be expected except what might be gained through the reduction of the Poor Rate by the improved health of the people. Yet the Bath and Washhouse Movement has scarcely been recognized, although quite as important in the promotion of the people's health, and capable of yielding a direct profit to the ratepayers on the money invested, as is shown by the financial returns. Surely then it is an institution which commends itself to every social reformer, and should have received greater attention and if necessary the Act made compulsory.

It is marvellous what great boons may be conferred upon the people by a system of co-operation, which has been shown by the gigantic sanitary improvements the Metropolitan Board of Works have effected, and are still effecting, at a comparative small cost to individual ratepayers of the metropolitan area.

A rate of 6d. in the pound upon an assessment of £8,000,000, the rateability of the parishes which have adopted the Act, has been sufficient to put into operation ten large bathing establishments. It must be admitted that this is a very meagre sum to be expended for washing a population of 846,712, compared with expenses incurred in other sanitary improvements; yet these parish authorities have done more than their neighbours, and, in many instances, were less justified in incurring extra expenses upon their fellow ratepayers.

Although the gross outlay has been borne by the ten parishes, the support the establishments have met with is as much due to adjacent parishes as their own. There are a great number of persons residing in other parts of the parish, whose wants the establishments ought to have met, who are precluded from the benefits in consequence of the distance. It appears to me one of the great hindrances to the adoption of the Act, is the expense falling upon individual parishes, and, after careful examination of the question, I have come to the conclusion that the cost of erecting baths should be met from a rate levied upon the whole of the metropolitan area—a rate so insignificantly small that it would never be felt. Baths are sanitary necessities for the people, and should be placed in suitable localities, regardless of the boundaries of any parish. This arrangement would remove local burdens and every obstacle out of the way of the adoption of the Act.

In erecting these sanitary institutions the wealthier portion of the community often escape the tax by living in a neighbourhood or parish where the Bath Act is never likely to be enforced, and it must be evident to every sound politician, that to effect any great good, the rich should bear part of the burden. About twenty more establishments, in addition to the ten already existin

would reach the requirements of the artizan population of London. Eighteen-pence in the pound would cover the whole cost, supposing the debt to be discharged at once, but if the money was borrowed by the Metropolitan Board of Works over a long period at a small interest, the present financial results of the existing establishments show, (notwithstanding many have been erected without regard to expense or economy) that the profits over and above the working expenses would pay principal and interest in sixty years, this may be illustrated by taking the returns of 4 baths, viz., St. Margaret's and St. John's Westminster, St. James's Westminster, St. Giles' Bloomsbury, and Bermondsey, where the major portion of the money has been received from 2d. baths, their original cost amounts to £73,357, receipts £247,267, and expenditure £230,327, leaving a profit of 16,940 towards the original cost over and above working expenses, cost of additions, &c., which may be computed at 10 per cent. upon the whole receipts, making the profit at least £25,000 in twenty-five years, and there is no disputing the fact that the swimming baths at these establishments are very small; if they had greater accommodation in this department, the receipts would be sufficiently augmented to cover the original debt in sixty years.

It is a disgraceful fact, unworthy of the 19th century, considering the march science has made in every other direction, that the wisdom that governs parochial affairs of the metropolis has only seen fit to provide 840 warm baths, and about as many washing tubs, for the poor amongst 3,500,000 people, located within an area of 75,000 acres or 122 square miles. This is, to say the least of it, a neglect of the essential creature comforts of a section of the community who were born with abilities that will only command such a remuneration as

enables them to provide their daily bread, and whose habitations must necessarily be restricted in healthful accommodation.

The working of the Baths and Washhouses Act is vested in a Commission of "not less than three or more than seven persons being ratepayers of the parish," they are appointed by the Vestry, though not necessarily from among its members. This Commission duly constituted is independent of the Vestry, acting solely and entirely on its own responsibility, except that it has to apply to and receive from the Vestry all such moneys as are necessary to the carrying out of the Act; but once having obtained those moneys it is as regards its disbursement in no way subject to the control of the Vestry, beyond being bound to submit its accounts annually to the inspection and examination of two persons (not being commissioners) appointed by the Vestry for that purpose.

It may be urged that the Commissioners for Public Baths and Washhouses are open to criticism, and if not approved others would be appointed in their place, but only one-third of the members go out of office annually, so that the Board cannot be entirely renewed under three years, during this time great and irreparable mischief may be done, and is done, especially at the commencement of a new enterprise.

It is useless to expect that baths and washhouses can be erected economically so long as they are under the control and supervision of such an anomalous governing body as that which has the direction of them at present. They ought to be placed under the jurisdiction of parishes, in the same way as lighting, paving, sanitary matters, and other parish affairs are, or some other more competent authorities, such as the Metropolitan Board of Works, and until this is done we may

look for other such exhibitions of incapacity as have been presented in the case of Paddington Baths and Washhouses. The ratepayers' money will be squandered in the most lavish and reckless manner on gilding and stucco, while plans and suggestions for economy are entirely disregarded.

I may observe, in conclusion, that of the ten parishes where the Act has been exercised, the population is about 1,000,000, hence it will be found that there is but one bath provided for each 1000 persons; and assuming the Act was not intended to benefit more than one half of these, it would take at least a month before each bather's turn would come round again, supposing the baths to be open from 8 a.m. to 10 p.m. This is a state of things discreditable to the Government of a civilized Christian country.

Dr. Tidy, Medical Officer of Health for Islington, who must be regarded as an authority, remarks in his last report:—

"It is an instructive fact, and it is no use for us to shut our eyes to it, or to try and blind other people's eyes. The two points I am desirous of making clear to you are these: 1. That, so far as mortality is concerned, the records of the past twenty years show little or no marked improvement, and that therefore your chances of living and dying in 1876 are pretty nearly the same as they were in 1856. 2. That, although we have in a measure stopped the ravages of some diseases, still, in order to bring up the death rate to what I may call its normal per-centage, other diseases must have, and have increased in a like ratio. . . . . If at every church and chapel (for here we ought to find the true spirit of work and progress) Sanitary Organization Societies (not Charity Organization Societies) were started, what an immense work they might effect. Ignorance is the parent of filth, and filth is the parent of disease; knowledge is the parent of cleanliness, and of the love of the beautiful, and these bring forth health. We may be certain of this, that in sanitary measures, even so simple a thing as cleanliness requires to be learnt just as much as the Latin grammar; and similarly, too, its use is not always appreciated at the time it is being learnt. Where else can we look for it to be taught, but to recognized teachers?

The editor of the *Globe*, of 19th October, sensibly remarks on Metropolitan Lethargy.

"Next in importance to providing the working classes in towns with more decent dwellings, comes the need of public baths. A little has already been done in London to supply this want, but nothing, as we have repeatedly poin ted out, in comparison with public requirements. Until every unit of the metropolitan population has within easy reach such means of ablution, it cannot be said that London even approaches the ideal of hygienic perfection. Nor does there seem any valid reason why the good work should not be made to return a reasonable rate of interest on the capital expended. The baths at Manchester, which the corporation of that town are now thinking of purchasing for the public, have so far showed a fair balance-sheet. After deducting expenses, the balance of profit suffices to pay about 3 per cent. on the amount sunk in construction. It is true this moderate interest would not tempt private capital into the venture. But the obligations of the Metropolitan Board of Works are growing into greater favour with the public year after year, the present price of their 3½ per cent. stock being over par. Assuming that they will soon be able to borrow at ¼ per cent. less, and that a system of public baths could be so arranged as to return a steady 3 per cent. per annum, the loss on the operation would be very trifling in comparison with the benefits resulting to the community. Moreover, it is said that the Manchester baths were built in a very extravagant fashion, involving a large expenditure of capital more than was really necessary. One authority goes so far as to assert that equal accommodation might have been provided for a quarter of the sum expended. If this be true, London could, perhaps, be supplied throughout without involving any increased charge on ratepayers. Be that as it may, the work is one that ought to be taken in hand on a comprehensive scale without delay. In matters of this sort, it is the province of the metropolis to set a good example to other centres of population. London, unfortunately, seems generally disposed to lag behind in the race, as is seen in the sluggishness of its movements in connection with the Artizans' and Labourers' Dwellings Act."

CHAPTER III.

PROVINCIAL BATHS AND WASHHOUSES.

BEDFORDSHIRE.

Area of the County, 305,293 acres; population in 1871, 151,539.

LUTON.

Baths opened June 3rd, 1872. (Site Freehold.)

Original cost of building baths	£1,250
Amount of loan remaining unpaid	1,125
Receipts since date of opening	541
Expenditure (working expenses) since date of opening ...	1,160
Required from rates to make up deficiency in working expenses	619

Accounts made up to May, 1876.

Luton.

THE borough of Luton is situated 18 miles S.E. of Bedford. It has a population of 22,000, and the assessment is £75,070. Manufactures, straw hats and bonnets. The baths were erected by the Local Government Board, and comprise a first and second-class swimming bath, each 50 feet in length; 3 first and 3 second-class warm baths, and 2 shower baths.

The expenditure has exceeded the receipts £619 during the four years the baths have been opened. They have either been worked at a very great loss, or a considerable sum expended in alterations and additions must be included in the working expenses. Luton is a very healthy town, and although baths for the people at large are essential for sanitary purposes, they are not so much required here as in towns where the occupations of the inhabitants are of a less cleanly nature.

BERKSHIRE.

Area of the county, 563,968 acres; population in 1871, 226,268.

NEWBURY.

Newbury.

The borough is situated on the Kennett, 15 miles S.W. of Reading. It was formerly famous for woollen manufactures, but now little is done besides corn grinding and malting. It is in the midst of a rich agricultural district, and is one of the smallest towns which has adopted the Bath Act; the assessment is £20,822, and the population is 6602. There are two baths, which cost £300, and the site is held on lease for ninety-nine years from the Charity Trustees, at £1 per annum. The baths were opened in 1870; their cost has been entirely repaid from the receipts and other sources, although no charge is made at one bath, it being free. The receipts since date of opening exceed the expenditure by £160, and after paying expenses the excess is applied in aid of the rates. This presents a striking and gratifying contrast in the financial result to Luton. Although both are healthy towns, and their labouring classes healthfully occupied, it also indicates that baths are appreciated by agricultural communities, a class hitherto almost totally unprovided with such accommodaton.

S. JOHNSON.

CHESHIRE.

Area of the county, 691,752 acres; population in 1871, 539,785.

CHESTER.

Baths opened January 11th, 1850. (Site Freehold.)

Original cost of building baths	£1,135
Amount of loan remaining unpaid	900
Receipts since date of opening	1,120
Expenditure (working expenses) since date of opening	1,468
Required from rates to make up deficiency in working expenses	348

Accounts made up to August, 1875.

J. WALKER.

Chester. This ancient city is situated 16 miles S.W. from Liverpool. It has a population of 35,000, and the assessment is £124,129. Shipbuilding is carried on to a large extent, and it has a considerable export trade in cheese, cast iron, coal, and copper plates.

The baths cover an area of 342 yards, and comprise 3 first-class, 2 second-class, and 1 third-class baths, with a room for shower baths.

The buildings were erected by public subscription, and, on the adoption of the Bath Act in 1850, the council purchased them from the subscribers for £700, and expended £200 more, but the total cost appears to be £1135. The expenditure exceeds the receipts £348, and the original debt on the establishment is unpaid. Seeing the baths have been in the hands of the Corporation nearly sixteen years, it is difficult to believe that the financial return for the whole period has been rendered correctly. Mr. Walker, who sends the information, is responsible for the accuracy of the figures. The baths have been very meagrely patronized, consequently the people of Chester must be very dirty. The establishment is small for the size of the town, but large enough considering the support it has received.

MACCLESFIELD.

Baths opened by the Corporation in 1870. (Site Freehold.)

Original cost of building baths	£350
Receipts since date of opening	819
Expenditure (working expenses) since date of opening	1,003
Required from rates to make up deficiency in working expenses	184

Accounts made up to August 1875.

J. MAY.

The borough of Macclesfield is situated on the river Bollen, 18 miles S.E. from Manchester. It has a population of 35,570, and the assessment is £75,960. The manufactures are chiefly cotton and silk fabrics. The area of the baths is 755 superficial yards, they comprise 8 first-class 13 second-class baths, and 2 vapour baths. Macclesfield.

The buildings were erected seventeen years ago by public subscription, but five years ago were handed over to the Corporation; the purchase money, £350, was paid by the Duke of Westminster. The expenditure has exceeded the receipts £184 during the five years the baths have been worked by the Corporation. No pains have been spared here by philanthropists to make the poor inhabitants "wash and be clean," but the financial result shows that this kindness has not been properly appreciated.

STOCKPORT.

Baths opened June, 1859. (Site Freehold.)

Original cost of building baths	£1,500
Receipts since date of opening	2,368
Expenditure (working expenses) since date of opening	5,057
Required from rates to make up deficiency...	2,689

Accounts made up to August, 1875.

W. HYDE.

The borough of Stockport, the largest town in Cheshire, is situated on the Mersey, 6 miles S.E. of Manchester. It has a population of 53,000, and the assessment is £170,000. Manufactures: woollen, cotton, and silk fabrics, machinery, brass and iron goods, brushes, spindles, and shuttles. The baths are small, only covering an area of 519 square yards, and comprise 4 first-class, 4 second-class, a family bath, and a swimming bath 50 by 33 feet. This establishment has been worked at a loss; the accounts show that the original cost has Stockport.

been paid, but the expenditure exceeds the receipts £2689. It is quite possible it includes payment on account of the loan, which should have been kept distinct from the working expenses. The occupations and dwellings of the labouring classes of Stockport are such as ought to make baths and washhouses very desirable; but seeing the small establishment has been poorly patronized, corporal cleanliness is not so much appreciated as it might be, consistent with the laws of health, and a favourable reduction of the rate of mortality, which is generally high.

DERBYSHIRE.

Area of the county, 561,702 acres; population in 1871, 324,900.

DERBY.

Baths opened in 1858. (Site Freehold of the Corporation.)

Original cost of baths...	£6,000
Raised from rates for payment of loan and interest	2,400
Amount of loan remaining unpaid	3,800
Receipts since date of opening	6,633
Expenditure (working expenses) since date of opening	7,381
Required from the rates to make up deficiency in working expenses	748

Accounts made up to end of financial year, 1875.

JOS. JONES.

Derby.

Derby, the chief town in the county, is situated on the Derwent, 35 miles N.E. of Birmingham. It has a population of 62,333, and the assessment is £184,759. Manufactures: silk and cotton fabrics, hosiery, ribbons, lace, iron, porcelain, lead pipes, shot, white and red lead, soap, &c.

The buildings occupy an area of 1025 square yards, and comprise 30 baths and 2 shower baths. The accommo-

dation provided is described as being very complete; the premises were formerly an old town house, but converted into baths and offices by the Corporation. The Urban sanitary authority pay an annual rental of £50 for the offices, and there is a residence for the manager. The baths are all on the ground floor. They have not paid financially, there being a deficit of £748 in seventeen years. M. T. Bass, Esq., M.P., presented his constituents with free swimming baths, he no doubt saw the defect in not having them provided by the Corporation, and conferred this boon upon the people.

DEVONSHIRE.

Area of county, 1,643,343 acres; population in 1871, 606,102.

PLYMOUTH.

Baths opened in 1856. (Site Freehold).

Original cost of building baths	£4,000
Total amount raised from rates for principal and interest ...	2,400
Amount of loan remaining unpaid	1,600
Receipts since date of opening	3,087
Expenditure (working expenses) since date of opening	4,076
Required from rates to make up deficiency of working expenses	989

Accounts made up to March 25th, 1876.

A. MARTIN.

Plymouth. This borough, on account of its docks and harbour, is one of the most important maritime places in the kingdom. It is situated at the head of Plymouth Sound, and has a population of 70,000, and assessment of £175,120. Manufactures: sailcloth, ropes, glass, soap, starch, &c. There are foundries for forging anchors, and the victualling establishments of the dockyard, are on a very large scale.

The baths were established in 1853 by private enterprise but transferred in 1856 to the Local Board of Health to whom they now belong. There are 23 baths provided, which have at no time proved remunerative, and for fifteen months previous to October, 1874, were let rent free; since that time they have been relet at £40 per annum, the sanitary authority spending a considerable sum in repairs, I suppose to make them worth £40 a year. The expenditure exceeds the receipts £989. It is presumed the returns are made up to the date the baths were let, and although established twenty years ago, nearly one-third of the original loan remains to be paid. It is melancholy to see this result, and difficult to understand how it arises if the baths are efficient and conveniently situated. It may be the Corporation do not take sufficient interest in corporal cleanliness, as judging from other towns with a similar population these baths ought to be highly appreciated.

DURHAM.

Area of the county, 784,401 acres; population in 1871, 742,205.

DURHAM.

Baths opened August, 1855. (Site Freehold.)

Original cost of building baths	£6,287
Total amount raised from rates for principal and interest ...	5,675
Amount of loan remaining unpaid	4,454
Receipts since date of opening	4,441
Expenditure (working expenses) since date of opening	11,207
Required from rates to make up deficiency in working expenses	6,766

Accounts made up to September, 1875.

FREDERICK S. BRUNTON.

Durham. This episcopal city is situated on the river Wear, 15 miles S. from Newcastle-on-Tyne; it has a population of 14,406, and the assessment is £38,560. Manufactures: woollens, hats, paper, leather, iron and brass goods. The

area of the buildings is 1530 square yards. There are 6 first-class and 10 second-class men's warm baths, 4 women's second-class baths, 2 swimming baths, 5 shower baths and 1 vapour bath; and 19 washing tubs.

The money for the erection of the baths was borrowed from Loan Commissioners, George Hudson, Esq., of Sunderland and the executors of the late R. Davison, Esq.* Only £1833 appears to have been paid off. The expenditure exceeds receipts £6766 during the twenty years the baths have been in existence; this is a large amount upon such a small assessment, and shows a great want of management or appreciation of the benefits of the baths by the population.

GATESHEAD.

Baths opened February, 1855. (Site Freehold.)

Original cost of building baths	£5,685
Total amounts raised from rates for principal and interest ...	4,970
Receipts since date of opening	7,142
Expenditure (working expenses) since date of opening	7,647
Raised from rates to make up deficiency in working expenses ...	505

Accounts made up to December 31st, 1875.

J. W. SWINBURNE.

Gateshead

The borough of Gateshead is a suburb of Newcastle-on-Tyne, with which it is connected by a bridge over the Tyne. It has a population of 48,627, and assessment of £90,537. Manufactures: glass, soap, paper, and cordage, and there are extensive iron and coal works and docks for shipbuilding. Many skilled mechanics and others reside here whose occupation is on the other side of the river; nevertheless it is a grim, smoky, and dirty neighbourhood, rendering washing appliances very desirable and necessary for health and cleanliness. The baths have an area of 803 square yards, and comprise 6 first and 12 second-class

* I presume a portion of the loan was borrowed from the Loan Commissioners and part from private individuals.

men's baths, 2 first-class and 3 second-class women's baths, and extensive laundries. The original cost has been entirely repaid; £2185 was raised from a direct assessment on the rates, and the remainder borrowed from the Public Loan Commissioners for twenty years at 4 per cent. The baths and laundries were let by the Corporation from May 23rd, 1868, to September 9th, 1871: during these years no accounts are furnished. Considering the time the Corporation have worked the baths the small deficit of expenditure over the receipts is a very trifling matter when compared with the great boon the establishment has been to the community.

It is difficult to understand why the authorities of this borough let the baths for three years, as the financial results show that they have been appreciated.

STOCKTON-ON-TEES.

Baths opened June, 1859. (Site Freehold.)

Original cost of building baths	£3,000
Total amount raised from rates for principal and interest ...	3,960
Amount of loan remaining unpaid	450
Receipts since date of opening	4,536
Expenditure (working expenses) since date of opening	4,550
Required from rates to make up deficiency in working expenses	14

Accounts made up to April, 1876.

GEORGE HARRISON.

Stockton-on-Tees.

This borough is situated on the Tees, 18 miles S.E. from Durham. It has a population of 36,000, and assessment of £98,796. Manufactures: sail cloth, earthenware, damask, Diaper and Huckaback linens, and there are boiler factories, iron works, rope walks, large dry docks and yards for shipbuilding. An extensive foreign and coast trade is also carried on.

The baths have an area of 1120 yards and comprise 2 first and 2 second-class men's baths, 1 first-class and 2 second-class women's baths, and a swimming bath,

48 by 26 feet. The loan was borrowed from Public Works Loan Commissioners, at 5 per cent., repayable by twenty instalments of £150 each, and only three remain unpaid. These baths have been opened seventeen years, and, having paid their way, the financial results are satisfactory.

SUNDERLAND.

Baths opened, Hendon Road, 1851. Halgarth Square, 1855. High Street, 1860. (Sites Freehold.)

Original cost of building baths	£13,800
Total amount raised from rates for principal and interest ...	7,180
Amount of loans remaining unpaid	6,620
Receipts since date of opening	42,009
Expenditure (working expenses) since date of opening ...	43,215
Required from rates to make up deficiency in working expenses	1,206

Accounts made up to August, 1875.

JOHN H. BROWN.

Sunderland.

This borough and seaport is situated near the mouth of the Wear, on the North Sea, 13 miles N.E. from Durham, it is connected with the town of Monkwearmouth on the opposite side of the river by an iron bridge of one arch. Manufactures: flint and bottle glass, earthenware, copperas, coal tar, cordage, chain cables, sail-cloth and chemicals. Shipbuilding is carried on to a great extent. Coal is the chief export. It is much frequented by visitors during the summer months for the sake of sea-bathing. The population of the borough is 104,400, and the assessment £300,000. It has three bath establishments—Hendon Road, covering an area of 975 square yards, and containing 6 first, and 8 second-class baths; Halgarth Square, covering an area of 794 square yards, and containing 4 first and 8 second-class baths; High Street, covering an area of 1360 yards, and containing 6 first and 15 second-class baths, and a spacious swimming bath; the largest part of the area is occupied by washing stalls, 184 in number. The bathers average 45,160 yearly. The

expenditure exceeds the receipts £1206 in twenty-four years. The management must have been good and economical, considering the borough has three small bathing establishments, situated in different parts of the town, that necessarily augment the working expenses at least 25 per cent., which would more than absorb the excess of expenditure over the receipts, if there was only one establishment; therefore the financial results show that the baths are appreciated in this seaport, which presents a striking contrast to some other towns where the occupations of the inhabitants are similar.

GLAMORGANSHIRE.

Area of the county, 606,356 acres; population in 1871, 405,698.

CARDIFF.

Baths opened May, 1873. (Site Freehold.)

Original cost of baths	£3,305
Receipts since date of opening	1,400
Expenditure (working expenses) since date of opening	1,469
Required from rates to make up deficiency in working expenses...	64

Accounts made up to August 31, 1876.

F. R. GREENHILL.

Cardiff. Cardiff is a parliamentary borough and seaport in Wales, situated on the Taff, 11 miles S.W. from Newport. It possesses most magnificent docks, and is the principal shipping town on the western coast. The exports are chiefly coal and iron. It has a population of 60,000, and the assessment is £150,000.

The baths cover an area of 1705 square yards, and comprise 5 first and 5 second-class warm baths, a Turkish Bath, used on certain days as a second-class bath, a first and second-class swimming bath.

The baths originated in a private speculation, but did not succeed financially, as shown by the accounts, from

May 1, 1866, to November, 1871. The total receipts from the Turkish Bath were £1207 18s., while the expenses, including interest on mortgage, law expenses, and every item of outlay, were £1219 6s. 7d.; the loss during the 5½ years being £11 8s. 7d. During the same term, £778 3s. 1d. was received for warm baths, and £862 14s. 10d. was expended in the same, the loss being £84 11s. 9d., which is much greater in proportion than that on the Turkish Bath.

Since these baths have been purchased by the Corporation, they are in a better financial condition, being free from rates and taxes, and the cost of water is less than one-half. During 1873 they were attended by 23,694 persons, the income was £506 6s. 7d., and expenditure £374 6s. 9d. The interest of the purchase money, repairs, painting, and furniture make the expenditure equal to £512, showing that the loss had been only £6 on the year. Thus, it will be seen, there is a prospect not only of the Cardiff baths paying for themselves, but allowing of a fair dividend.

GLOUCESTERSHIRE.*

Area of the county, 715,776 acres; population in 1871, 488,700.

BRISTOL.

Baths opened on the Weir, in 1850. Mayor's Paddock, 1873. (Sites Freehold.)

Original cost of building baths	£21,600
Total amount raised from rates for principal and interest ...	10,138
Amount of loan remaining unpaid...	11,945
Receipts since date of opening	16,781
Expenditure (working expenses) since date of opening... ...	21,511
Required from rates to make up deficiency in working expenses...	4,730

Accounts made up to August 1875. JOHN HARFORD.

Bristol a city, borough and seaport, 112 miles W. from London situated on the river Avon which is here joined by Bristol.

the Frome. It is one of the most ancient and opulent cities in England and has long been engaged in a very extensive foreign trade, chiefly with the West Indies, Ireland, and the United States. About a mile west of the city is Clifton hot wells, a suburb with about 21,000 inhabitants, a place much resorted to. Bristol has a population of 182,000 and the assessment is £625,256. There are two very large bath establishments covering an area of 2080 square yards. The baths situated on "The Weir" contain 16 first and 32 second-class men's baths, 6 first and 10 second-class women's baths, and 35 washing compartments. The second establishment situated at Mayor's Paddock, opened in 1873, contains 15 first and 34 second-class men's baths, 5 first and 10 second-class women's baths; 2 swimming baths, each 37 by 22 feet, containing 25,000 gallons, 64 washing compartments, and 2 galleries for ironing.

The expenditure exceeds the receipts £4730, so that in a financial view they have not paid, but there were no swimming baths before 1873; these increase the receipts very much, and will no doubt in time cover all expenses.

HAMPSHIRE.

Area of the county, 105,291 acres; population in 1871, 526,142.

WINCHESTER.

Winchester. Is a city and borough situated on a hill gradually sloping to the river Itchin, 60 miles S.W. from London. It has very little trade, but the Cathedral and college ensure to it the residence of a large number of clergy and their families. The population is 14,705, and the assessment £63,156.

The Bath Act was adopted in 1873, and the authorities are not yet in a position to furnish a financial statement of accounts. The only information received is given in the following letter:—

24th January, 1876.

SIR. — The information I can give you with reference to the Warm Baths here would, I am afraid, be of little use to you so far as the cost is concerned. The Baths themselves were supplied by Jennings, of Lambeth, and cost £9 10s. each. There are nine of them, and the pipes, furnace, and tanks cost me something like £200. The building, the divisions of the Bath rooms, the fittings of the Baths, all the woodwork, floors, gas fittings, W.C., were all done partly by builders and partly by my own workmen, that I really do not know at the present moment what they did cost.

I handed the Baths over, when completed, to a Working Committee, and know nothing myself of the Working Expenses, but will hand over your letter to the Committee,* who will no doubt answer your inquiry.

Yours faithfully,

RICHARD MOSS.

Northgate, Winchester.

KENT.

Area of the county (extra metropolitan), 978,988 acres; population in 1871, 629,126.

CANTERBURY

Is a borough and city, and the county town, situated on the Stour, 50 miles S.E. from London. The dignity of being the metropolitan archiepiscopal see of all England belongs to it. The Archbishop of Canterbury is the first peer of the realm and takes precedence next the royal

Canterbury.

* The Committee were never polite enough to reply to my communication. I hope their silence has been owing to pressure in the direction of advancing the machinery Mr. Moss so generously put in motion for the comfort and well-being of his poorer brethren.

family and crowns the sovereign in Westminster Abbey.

It has a population of 20,691, and an assessment of £54,206. Considering the importance of this city, it being the seat of the Archbishop, and its having a large number of highly cultivated resident gentry and clergy, and seeing that "cleanliness is next to godliness," it would have reflected more credit upon the authorities had they given the poor people an opportunity of washing themselves.

Mr. R. W. Flint officially informs us that "the Bath Act was adopted some years ago, and some schemes have been attempted, but none have come to maturity." It will be seen that the authorities have recognized the necessity of baths, or they never would have adopted the Act; if the same lethargy exists in other sanitary matters as it does in providing baths, the ratepayers of Canterbury will remain in the mire a long time.

MAIDSTONE.

Baths opened May 19th, 1852. (Site Freehold.)

Original cost of building baths	£5,000
Total amount raised from rates for principal and interest of original	7,094
Receipts since date of opening	5,999
Expenditure (working expenses) since date of opening	11,428
Required from rates to make up deficiency in working expenses	5,429

Accounts made up to August, 1875.

G. HOAR.

Maidstone. Is a borough and market town 29 miles S.E. from London on the Medway, which is navigable here for vessels of 50 or 60 tons. The principal productions of the neighbourhood are fruit and hops, it is indeed the first hop market in the kingdom. Its manufactures are felt, paper, and coarse woollen goods, and there are extensive artillery barracks in the town.

It has a population of 27,000 and the assessment is

£106,237. The baths comprise 3 first and 6 second-class and 12 third-class men's baths; 3 first-class and 6 second-class women's baths, 2 shower baths, 1 vapour bath and a swimming bath 33 by 20 feet. The original cost of building has been repaid, but the expenditure exceeds the receipts £5429; it may be a part of this has been applied to pay the loan and interest, as the sum is excessive considering the total receipts during twenty-three years have only reached £570 more.

LANCASHIRE.

Area of the county, 1,307,162 acres; population in 1871, 2,849,259.

ASHTON-UNDER-LYNE.

Baths opened September 6th, 1870. (Site Freehold.)

Original cost of building baths	£17,505
Total amount raised from rates for principal and interest ...	858
Amount of loan remaining unpaid	16,647
Receipts since date of opening	3,562
Expenditure (working expenses) since date of opening	8,744
Required from rates to make up deficiency in working expenses	5,182

Accounts made up to August 31st, 1875.

HENRY GARTSIDE.

Ashton-under-Lyne.

Ashton-under-Lyne is a borough and flourishing market town, situated on the river Tame, 6 miles east from Manchester, the population is 37,389 and the assessment £109,305. Manufactures, principally cotton, but there are woollen, silk, and hat factories; besides iron and brass founding, brick making, machine making, bleaching, dyeing, and basket making which are carried on to a considerable extent. It is immediately connected with and surrounded by Stalybridge, Mossley, Hyde, Dukinfield, and other places, which have a united population of over

55,000, all of which are principally occupied in the cotton manufacture and machine making. The manor of Ashton-under-Lyne alone contains upwards of 170 factories and 80 coal pits. The occupations of the inhabitants being necessarily of a dirty character, and the running water of the vicinity polluted by the refuse from factories and other works, they had no other means of cleanliness but the domestic basin previous to the establishment of the Baths.

The baths are erected under the Ashton Improvement Act, of 1849, but were not opened until 1870; they cover an area of 1800 square yards, and comprise 6 first-class, and 9 second-class baths; a large swimming bath for men, 100 by 40 feet, and one for women, 27 by 15 feet; and a range of Turkish or Hot-air Baths, judiciously arranged and cheaply administered, thus promoting this most efficient and agreeable mode of bathing.

The expenditure exceeded the receipts £5182 in about five years, which appears excessive; but it is possible a portion of this sum has been placed to the working expenses instead of the loan account.

BLACKBURN.

Baths opened July 11th, 1868. (Site Freehold.)

Original cost of building baths	£5,174
Receipts since date of opening	2,472
Expenditure (working expenses) since date of opening	4,448
Required from rates to make up deficiency in working expenses	1,976

Accounts made up to June 30th, 1875.

W. E. L. GAINE.

Black-burn.

Blackburn is a large and important manufacturing town and borough, 20 miles N.W. from Manchester, and 25 S.E. from Lancaster. The manufactures are muslins and cotton goods, and there is a considerable quantity of coal and lime in the neighbourhood. The population is 82,920, and the assessment amounts to £229,492. The

baths have an area of 973 square yards, and contain 12 men's first-class and 10 second-class baths, 7 women's first-class baths, and a plunge bath 60 by 33 feet. The cost of the buildings was borrowed from the Public Works Loan Commissioners at 3½ per cent. repayable in thirty years. The expenditure has exceeded the receipts £1976 in a period of eight years—a result not very encouraging.

BURY.

Baths opened May, 1864. (Site Leasehold.)

Cost of building	£2,937
Receipts since date of opening	3,884
Expenditure (working expenses) since date of opening	5,365
Required from rates to make up deficiency in working expenses	1,481

Accounts made up to March, 1876.

H. GRUNDY.

Bury. Bury is a Parliamentary Borough situated on the river Irwell, 8½ miles N. from Manchester. Its manufactures consist of cotton and woollen goods, and machinery. There are bleaching and calico-printing establishments, and some extensive iron works and coal mines in the neighbourhood.

The population is 43,000, and the assessment £160,408.

The baths were commenced by a company, but only one-third of the necessary funds were raised when they were handed over to the local authorities. The cost of the buildings was paid from the profits arising on gas, and has not to be repaid, but they are subject to a ground-rent of £30 per annum. They occupy an area of 2500 square yards, and contain 10 first-class and 10 second-class warm baths, 2 private baths, a first and second-class swimming bath, a vapour bath, and a Turkish Bath.

The expenditure exceeded the receipts £1481 in twelve years, a result difficult to account for, as the number of bathers for one year ending March 31, 1876, was 18,248.

LIVERPOOL.

PIER HEAD (SALT WATER.)

Baths opened in 1828. (Freehold.)

Original cost of building baths	£27,722
Receipts since date of opening	73,938
Expenditure (working expenses) since date of opening	64,645

Accounts made up to August 31st, 1875.

CORNWALLIS STREET.

Baths opened May, 1851. (Freehold.)

Original cost of building baths	£18,553
Receipts since date of opening	60,923
Expenditure (working expenses) since date of opening	61,113
Required from rates to make up deficiency in working expenses	190

Accounts made up to August 31st, 1875.

MARGARET STREET.

Baths opened June 13, 1863, and the extension in 1868. (Freehold.)

Original cost of building baths	£11,191
Receipts since date of opening	15,428
Expenditure (working expenses) since date of opening	12,225

Accounts made up to August 31st, 1875.

PAUL STREET.

Baths opened November, 1846. (Freehold.)

Original cost of builidng baths	£8,470
Receipts since date of opening	23,572
Expenditure (working expenses) since date of opening... ...	31,832
Required from rates to make up deficiency in working expenses	8,260

Accounts made up to August 31st, 1875.

STEBLE STREET.

Baths opened April 1874. (Freehold.)

Original cost of building baths	£14,500
Receipts since date of opening	1,779
Expenditure (working expenses) since date of opening	1,949
Required from rates to make up deficiency in working expenses	170

Accounts made up to August 31st, 1876.

FREDERICK STREET.

Baths opened in 1842. Rebuilt in 1854. (Freehold.)

Original cost of building baths	£4,350
Receipts since date of opening	12,058
Expenditure (working expenses) since date of opening	23,987
Required from rates to make up deficiency in working expenses	11,929

Accounts made up to August 31st, 1875.

J. RAYNER.

Liverpool. Liverpool is a borough and one of the principal trading and seaport towns in the kingdom, situated on the Mersey about 4 miles from the Irish Sea. It is about 5 miles in length and 2½ miles in breadth, its docks and basins have an aggregate area of more than 300 acres. The trade is most extensive, and it is to this rather than to manufactures that it owes its importance; it has, however, sugar refineries, rope walks, glass works, brass and iron foundries, soda works, manufactories for watches and jewellery, and shipbuilding is carried on to a large extent. Nearly all the raw cotton imported into this country is landed here. It has a population of over 500,000, and the assessment reaches £2,248,277. It was the first town which established public baths from money raised from the rates.

The baths at the Pier Head were opened nearly half a century ago, as Salt Water Baths, long before the Act of Parliament came into force; the situation is well-chosen, as vast numbers of workmen are employed in the neighbourhood. The area is 3825 square yards. It contains 13 warm baths, including 2 vapour baths; a first-class swimming bath, 46 by 27 feet; and a second-class, 39 by 27 feet. Charges vary from 3d. to 2s. 6d. The cost of building was £27,772.

The second establishment was opened in 1842, and rebuilt in 1854. It is situated in Frederick Street; the

outlay for building was £4350, but it is not stated in the information supplied whether this includes the cost of rebuilding. The area is 240 square yards. It is now only used as washhouses, and contains 60 washing stalls and 180 tubs. The charge on Mondays is 1d. per hour, other days 1½d. per hour, and closed on Saturdays. The expenditure has exceeded the receipts by £11,929, a result attributable no doubt to its exclusive use as a washhouse.

Paul Street Baths were opened in 1846, and occupy 1028 square yards. There are 45 warm (including 4 vapour) baths, 2 swimming baths, 27 ft. 6 in. by 16 ft. 9 in., and 21 ft. 3 in. by 17 ft. 8 in. Charges 1d. cold to 1s. vapour. It has also 88 washing tubs; charges, 6d. per day, including tub, dolly, and maiden. The building cost £8470. The expenditure exceeds the receipts £8260.

Cornwallis Street Baths were opened in 1851 and cost £18,553. The area is 1692 square yards; it has 63 warm (including 3 vapour) baths; 3 swimming baths; a first-class, 57 by 40 feet 9 inches; a second-class, 42 by 27 feet; and a third 40 by 27 feet. Charges, 1d. cold to 2s. vapour. The expenditure exceeds the receipts £190.

Margaret Street Baths were opened in 1863 and extended in 1868; they cost £11,181. The area is 1849 square yards. It has 25 warm (including 4 vapour) baths; 2 swimming baths, 67 ft. 6 in. by 34 ft. each. The receipts have exceeded the expenditure £3203.

Steble Street Baths are more recent, having been opened in 1874, showing that the authorities are not weary of their work. The area is 2477 square yards, and the buildings cost £14,500; it contains 40 warm baths and 3 swimming baths, one 50 ft. by 35 ft. 9 in., one 52 ft. by 37 ft. 9 in., and one 40 ft. by 28 ft. 9 in. Charges, 1d. cold to 1s. warm. It has also 54 washing tubs—charge,

1d. per hour, and if more than one hour, ½d. is charged including the first 1d. The expenditure exceeds the receipts £170.

The total cost of building the six baths was £84,836, and the expenditure has exceeded the receipts by £8053.

OLDHAM.

Baths opened July, 1854. (Freehold.)

Original cost of building baths	£4,900
Total amount raised from rates (principal and interest)	4,000
Receipts since date of opening	7,041
Expenditure (working expenses) since date of opening	14,392
Required from rates to make up deficiency in working expenses	7,351

Accounts made up to September, 1875.

H. BOOTH.

Oldham.

The borough of Oldham is situated on the Medlock, near its source, 7 miles N.E. from Manchester. The manufactures are fustians, cotton goods, iron and brass ware, machinery, hats and silks. The population is 100,000, and the assessment £309,250; there is also a large population immediately surrounding the town, which might be expected to use the baths, as well as those within its limits. The area of the buildings is 1015 square yards, but, including the yard, is 2600 square yards. It contains 3 first, 8 second, and 7 third-class men's baths; 2 first, 2 second, and 3 third-class women's baths, a vapour bath, and a swimming bath. The original cost has been paid, £4000 from the rates and £900 from "The Peel Testimonial Fund." The expenditure exceeded the receipts £7351 during the twenty-one years the baths have been established. The operatives in this district evidently do not appreciate the sanitary value of a bath.

PRESTON.

Baths opened September 1, 1851. (Site Freehold.)

Original cost of building baths	£11,217
Amount of loan remaining unpaid	11,217
Receipts since date of opening	8,808
Expenditure (working expenses) since date of opening	11,947
Required from rates to make up deficiency in working expenses	3,139

Accounts made up to August 31st, 1875.

R. NEWALL.

Preston. The borough of Preston is situated about 15 miles from the sea, on the river Ribble, and 22 miles S. of Lancaster. Manufactures, linen and cotton fabrics, and brass and iron goods. It has a population of 85,427, and the assessment is £231,445. The baths cover an area of 2186½ superficial yards, and contain 16 first and 31 second-class men's baths; 8 first and 8 second-class women's baths; a large first-class swimming bath, and a small second-class swimming bath. The building was originally fitted up as baths and washhouses, but the latter were discontinued in 1870. None of the original cost has been repaid, and the expenditure exceeded the receipts £3139 in twenty-four years.

ROCHDALE.

Baths opened June, 1868.

Original cost of building baths	£8,500
Total amount raised from rates for principal and interest ...	3,950
Amount of loan remaining unpaid	7,292
Receipts since date of opening	3,948
Expenditure (working expenses) since date of opening	4,761
Required from rates to make up deficiency in working expenses	813

Accounts made up to March, 1876.

Z. MELLOR.

Rochdale. The parliamentary borough of Rochdale is situated on the river Roche, 11 miles N.E. from Manchester. Manufactures flannels, kerseys, coarse calicoes, baizes, fustians,

hats and machinery. It has a population of 44,556, and the assessment is £287,815. The baths comprise a first and second-class swimming bath, each 57 by 27 feet, a third-class swimming bath, 30 by 15 feet; 7 first and 7 second-class men's baths; 3 first and 4 second-class women's baths; 2 first-class Turkish Baths for men, and a first class Turkish Bath for women. The swimming baths are highly appreciated, as the water in the river is polluted with the refuse from dye works.

Only £1208 has been paid off the loan, and the expenditure exceeded the receipts £813 during the eight years they have been in existence.

STALYBRIDGE.

Baths opened May 7th, 1870. (Site Freehold.)

Receipts since date of opening	£2,958
Expenditure (working expenses) since date of opening	4,039
Required from rates to make up deficiency in working expenses	1,081

Accounts made up to March, 1876.

H. BUCKLEY.

Staly-bridge.

This borough is in the parish of Ashton-under-Lyne, and situated on the borders of Lancashire and Cheshire, 7 miles E. from Manchester. Manufactures are principally cotton fabrics, but woollen goods, articles in brass and iron, and machinery, are also made. It has a population of 21,043 and assessment £80,691.

The baths were presented to the borough by R. Platt, Esq., of Stalybridge, and the Corporation spent about £1000 in making additions. The buildings have an area of 900 yards, and contain 5 first and 6 second-class baths, 2 swimming baths and a Turkish bath.

The expenditure exceeded the receipts £1081 in about six years, a deficit which is rather excessive.

LINCOLNSHIRE.

Area of county, 1,731,801 acres. Population in 1871, 428,075.

GRANTHAM.

Baths opened May, 1854.

Original cost of building baths	£1,000
Amount of loan remaining unpaid	950
Receipts since date of opening	1,672
Expenditure (working expenses) since date of opening	2,875
Required from rates to make up deficiency in working expenses	1,203

Accounts made up to June, 1874.

HENRY BEAUMONT.

Grantham. Grantham is a parliamentary borough, situated on the river Witham, 23 miles S.W. from Lincoln. The population is 5028, and the assessment, £44,684.

The bathing establishment comprises 4 first, 4 second, and 2 third-class baths, and a swimming bath. Up to the time the accounts were furnished, it appears that only £50 has been paid off the original loan, and the expenditure exceeds the receipts £1203 in twenty years.

Mr. Beaumont readily supplied me with the information in 1874, but on July 20th, 1876, he refused, and stated that "The information you ask" (which was that he should merely correct the information previously given, which appears above, by bringing it down to the date of the last audit of the borough accounts) "not being required by any Government order, I am not disposed to give it. There is no objection to your publishing your paper, omitting this town from it," and on August the 10th, in reply to a note remonstrating with him, he says, "You must really consider my letter of July 20th final. There

is no desire to have the information you ask for published, and you must excuse my answering any further letters upon the subject." Now it may be true that "there is no objection to omitting this town," and "no desire to have the information published" on the part of the *Town Clerk*, but perhaps there may be burgesses of Grantham who possess a sufficient amount of public spirit to take a different view of the matter. These will be annoyed to find that in consequence of the conduct of their servant, the general public are precluded from getting complete information on this question, and I trust some resident ratepayer will exercise his undoubted right, and obtain the information for me to embody in a subsequent edition. I may mention, however, that an application to the Mayor fared no better, as that functionary informed me on the 4th of September, that he had "no communication to make respecting the Grantham Baths."

NOTTINGHAMSHIRE.

Area of the county, 600,421 acres. Population in 1871, 355,404.

MANSFIELD.

Act adopted 1852. (Site Leasehold.)

Original cost of building baths	£1,300
Receipts since date of opening	284
Expenditure (working expenses) since date of opening	975
Required from rates to make up deficiency	691

R. PARSONS.

Mansfield. This town is situated 14 miles N. from Nottingham on the borders of Sherwood Forest. Manufactures, cotton

fabrics, hosiery and lace, and it has a large trade in malt. It has a population of 11,000 and the assessment is £33,419.

The site for the baths was granted by His Grace the Duke of Portland, at the nominal rental of 10s. per annum. The original cost of building with interest has been paid off at the rate of £50 per annum, which, with the necessary expenses for maintenance, was raised from the rates.

The receipts being exceedingly small, we presume the parish authorities could only have retained the management of the baths for short time, as they are let rent free, a circumstance which shows that they are not sufficiently interested in them to make them popular, and will account for the present unsatisfactory state of things.

Although repeated applications have been made, we have been unable to obtain more complete returns, not even the number or quality of the baths and the date they were opened.

NOTTINGHAM.

Baths opened 1850. (Site Freehold.)

Original cost of building baths	£4,700
Total amount raised from rates for principal and interest ...	4,905
Amount of loan remaining unpaid	4,700
Receipts since date of opening	1,436
Expenditure (working expenses) since date of opening	1,585
Required from rates to make up deficiency in working expenses	149

Accounts made up to December 31st, 1855.

S. G. JOHNSON.

Notting ham.

The borough of Nottingham, the chief town of the county, is situated on a rocky eminence in a line with the course of the Trent, 13 miles N.E. from Derby. Manufactures, silk and cotton stockings, lace for veils and shawls.

It has also several silk mills, dye-works, wire-works, &c., but lace is its great staple, being the chief centre of this manufacture. The population is 86,000 and assessment £280,023. The baths occupy an area of 2 acres 8 poles, and contain 8 first-class, 13 second-class, and 15 third-class baths; 2 first-class, 1 second-class, and 2 third-class swimming baths. The cost of the building has been entirely repaid; financially the results are satisfactory. Since 1855 the baths have been leased to a tenant at £100 per annum.

Nottingham, without doubt, has greater bathing facilities provided than any other town in the kingdom of its size. There are open-air baths free of charge, and the charges for swimming baths are from one halfpenny.

NORTHUMBERLAND.

Area of the county, 1,290,312 acres; population in 1871, 386,646.

NEWCASTLE-ON-TYNE.

Baths opened 1862. (Site Freehold.)

Original cost of building baths	£7,000
Total amount raised from rates for principal and interest ...	10,466
Amount of loan remaining unpaid	1,775
Receipts since date of opening	16,767
Expenditure since date of opening	23,585

Accounts made up to July 31st, 1876.

R. S. PHILIPSON.

Newcastle is a borough and river port, and the chief town in the county. It is situated on the Tyne, 14 miles N. of Durham. It has a population of 128,443 and assessment, £367,442. The manufacture of locomotives, tools, and all sorts of railway appliances, first introduced

Newcastle-on-Tyne.

by George Stephenson, Mr. Pease of Darlington, Mr. Backhouse, and other railway celebrities, have continued to flourish here, and it has become a great mechanical centre. The whole neighbourhood both on the Northumbrian and Durham side of the river is studded with iron works and coal pits—the latter supplying the vast consumption of London.

There are two baths establishments—one situated in Gallowgate has an area of 652 square yards, and contains 6 first, 8 second-class baths, 2 first and 2 second-class shower baths; the second establishment is much larger, and is situated in the New Road, it covers an area of 1033 square yards; it contains 12 first-class and 10 second-class baths. The expenditure exceeds the receipts £6818, but I am informed that this includes payment of principal and interest of loan, so that, financially, these baths are very successful.

TYNEMOUTH.

Baths opened August, 1854. (Site Freehold.)

Original cost of building baths	£4,000
Total amount raised from rates for principal and interest ...	6,336
Amount of loan remaining unpaid	2,000
Receipts since date of opening	7,355
Expenditure (working expenses) since date of opening	9,697
Required from rates to make up deficiency in working expenses	2,342

Accounts made up to August 31st, 1875.

T. G. CLARKE.

Tynemouth.

The borough of Tynemouth is situated at the mouth of the Tyne, about 1 mile W. from North Shields, with which it is united, and included within the limits of the borough. It is much resorted to during the summer months, by all classes from Newcastle and Gateshead, for pleasure and bathing. The population of the town *proper* is inconsiderable, but, including North Shields, is 41,000,

and the assessment is £85,965. The baths are conveniently situated in Churchway, and cover an area of 4,699 square feet, they contain 5 first and 12 second-class baths; 20 washing stalls and 29 drying closets, the latter are much used by the residents of the dark, dingy, and dirty streets in the lower part of the town.

The expenditure exceeded the receipts in twenty-one years £2342, so that financially these baths have not paid.

STAFFORDSHIRE.

Area of the county, 752,995 acres; population in 1871, 877,425.

BILSTON.

Baths opened August 6th, 1870.

Original cost of building baths	£1,100
Total amount raised from rates for principal and interest ...	379
Amount of loan remaining unpaid	917
Receipts since date of opening	489
Expenditure (working expenses) since date of opening	551
Required from rates to make up deficiency in working expenses	62

Accounts made up to May, 1875.

S. D. WASSELL.

Bilston is a large market town and borough 3 miles S.E. from Wolverhampton. It has large iron works and numerous manufactories for japanned and enamelled goods, coarse earthenware, and ironware. The population is 24,000, and assessment £60,888. The inhabitants are principally firemen, puddlers, colliers, nailmakers, and others, whose employment must necessarily be of a dirty kind, indeed the whole line of country to Wolverhampton, in one direction, and West Bromwich and Birmingham in the other, is inhabited by similar classes, rendering the use of the bath a necessity for cleanliness and health. Bilston.

The baths here originated with a company at a time when the town was most prosperous, and the working-classes earning fabulous wages, but they did not succeed, and were sold to the Township Commissioners for £700, who expended a further sum of £400 for repairs.

The accommodation provided is 6 women's baths and 17 men's baths, and a swimming bath 53 by 27 feet.

The expenditure exceeded the receipts £62 in five years —a financial result very encouraging under the new management.

HANLEY.

Baths opened April 16th, 1874. (Freehold.)

Original cost of building baths	£10,000
Total amount raised from rates for principal and interest ...	654
Amount of loan remaining unpaid	9,797
Receipts since date of opening	1,117
Expenditure (working expenses) since date of opening	996

Accounts made up to August 31st, 1875.

A. CHALLINOR.

Hanley. The borough of Hanley is situated 2 miles from Newcastle-under-Lyne, and the chief manufactures are earthenware and paper. The population is 41,000, and the assessment £96,790. Adjacent, are other populous towns, so that probably 100,000 persons might be expected to resort to these baths. Their pursuits are laborious, and frequent ablutions are necessary for cleanliness and health. The men's portion of the bath was opened in April, 1874, and the women's section, which includes a swimming bath, was opened in April, 1875. The area is 1400 square yards. There is a first-class swimming bath, 60 by 29 feet; a second-class, 56 by 27 feet, 4 men's first-class, 1 second-class, and 6 third-class baths, 3 vapour baths, a Turkish Bath used as first, second, and third-class at

different times of the day; 2 first, 2 second, and 2 third-class women's warm baths, and a women's swimming bath, 20 by 16 feet. During the year there has been upwards of 40,000 bathers. The receipts exceeded the expenditure £121 in little more than a year. These baths are very promising and bid fair to be a great success.

SURREY.

Area of county (extra metropolitan), 451,027 acres. Population in 1871, 365,279.

CROYDON.

Baths opened June, 1866. (Site Leasehold.)

Original cost of building baths	£5,612
Receipts since date of opening	4,204
Expenditure (working expenses) since date of opening	5,078
Required from rates to make up deficiency in working expenses	874

Accounts made up to March 25th, 1876.

R. J. CHEESWRIGHT.

Croydon. Croydon is a market town 11 miles S. of London; it has a reputation for being healthy, owing to a good water supply, excellent drainage, and its salubrious situation. The population is computed to be 55,662 and the assessment, £350,526.

The baths are erected on a site held on lease for 999 years, at an annual rent of £35. The area is 432 square yards. There are 13 private baths, a swimming and a shower bath.

The original loan is to be repaid in 30 years, and bears interest at 5 per cent. The expenditure exceeded the receipts £874 in 10 years.

SUSSEX.

Area of the county, 948,257 acres. Population in 1871, 420,910.

BRIGHTON.

Baths opened October 29th, 1869.

Original cost of building baths	£5,500
Total amount raised from rates for principal and interest ...	586
Amount of loan remaining unpaid	5,395
Receipts since date of opening	2,636
Expenditure (working expenses) since date of opening	2,657
Required from rates to make up deficiency in working expenses	21

Accounts made up to August 31st, 1875.

J. A. FREEMAN.

Brighton.

Brighton is a parliamentary borough, and the fashionable watering place of England; and is 47 miles South of London.

The establishment contains 39 baths, which are now undergoing enlargement at a cost of £4000. A series of loans were raised at the commencement amounting, in the aggregate, to £5,500, of which a very small amount has been repaid. They were opened in October, 1869, since which time only £586 has been raised from the rates. The receipts and expenditure nearly balance. The population exceeds 100,000, and the assessment amounts to £459,331. There are 8 men's first-class, and 15 second-class baths; 1 women's first-class, and 8 second-class baths; 2 shower and 2 vapour baths, and a private bath.

It must be borne in mind that Brighton is an exceptional town, there being great facilities for bathing in the the sea, *free of charge;* it has, besides, numerous and extensive private baths of every description.

WARWICKSHIRE.

Area of county, 610,587 acres. Population in 1871, 630,472.

BIRMINGHAM.

KENT STREET.

Baths opened in 1849. (Site Freehold.)

Original cost of building baths	£23,000
Amount of loan remaining unpaid	6,050
Receipts since date of opening	89,156
Expenditure (working expenses) since date of opening	40,816
Required from rates to make up deficiency in working expenses	1,660

WOODSTOCK STREET.

Baths opened in 1860. (Site Freehold.)

Original cost of building baths	£12,000
Amount of loan remaining unpaid	5,000
Receipts since date of opening	9,636
Expenditure (working expenses) since date of opening	11,617
Required from rates to make up deficiency in working expenses	1,981

NORTHWOOD STREET.

Baths opened in 1862. (Site Freehold.)

Original cost of building baths	£11,500
Amount of loan remaining unpaid	10,500
Receipts since date of opening	16,978
Expenditure (working expenses) since date of opening	14,669

Accounts made up to December 31st, 1875.

E. J. HAYES.

Birmingham. Birmingham is a parliamentary borough, returning three members to Parliament, and is one of the principal manufacturing towns in England, about 99 miles N.W. from London. It has a population of 343,787, and its assessment is £1,284,167.

Hutton, in his history of the town, gives some curious descriptions of the way in which workmen were sullied by the numerous trades they followed, in his time; he is especially graphic in describing how the operations of the brass founders told upon them, and it is well known that every trade leaves its peculiar mark upon the craftsmen. This great centre of industry is not unhealthy, the suburbs are salubrious, especially the neighbourhood of Edgbaston; which is attributed to its being built on the sandstone rock, and it is in consequence naturally dry.

The first bath establishment was opened in Kent Street, and covers an area of 3366 yards. It contains 29 first and 24 second-class men's baths, 6 first and 7 second-class women's baths, 2 Jewish baths, a women's plunging bath, and a first and second-class men's swimming bath, and washhouses for thirty-two persons.

The Bath in Woodstock Street has an area of 2200 square yards, and contains 16 first and 16 second-class men's baths, 6 first and 8 second-class women's baths, a plunge bath for women, and first and second-class swimming baths for men.

The Bath in Northwood Street has an area of 2300 square yards, and contains 12 first and 13 second-class men's baths, 6 first and 6 second-class women's baths, a plunge bath for women, and a first and second-class swimming bath for men.

The Corporation, in 1872, purchased a site for another suite of baths in Shepcote Street at a cost of £2500.

There has been great judgment exercised in selecting the sites of the several baths—the neighbourhoods are not the very lowest, yet they are convenient even for the humbler class of operatives. The higher-priced baths are much used by both sexes.

COVENTRY.

Baths opened 1852. (Site Freehold.)

Original cost of building baths	£5,000
Amount of loan remaining unpaid	5,000
Receipts since date of opening	4,815
Expenditure (working expenses) since date of opening	8,016
Required from rates to make up deficiency in working expenses	3,201

Accounts made up to August, 1875.

J. BROWETT.

Coventry. Coventry is a borough 18 miles S.E. from Birmingham, long famous for the manufacture of watches, but still more so for that of ribbons, and it is an important military depot and thoroughfare. The population is 41,000, and the assessment £141,182.

The baths have an area of 1,500 square yards, and contain 4 first and 9 second-class men's baths; 2 first and 4 second-class women's baths; a first-class swimming bath 60 by 30 feet, and a second-class swimming bath 60 by 60 feet.

None of the original loan has been repaid, and the expenditure exceeded the receipts £3201 in seventeen years.

The institution was opened in 1852, but the authorities report that the borough accounts are not in a condition to enable them to supply the information previous to 1858; no reason is given, but the accounts must have been audited by the Government Accountant, it is therefore presumed the books have been destroyed.

WORCESTERSHIRE.

Area of the county, 434,825 acres. Population in 1871, 836,276.

KIDDERMINSTER.

Baths opened 1851. (Site Freehold.)

Original cost of building baths	£3,325
Total amount raised from rates for principal and interest ...	4,575
Receipts since date of opening	1,790
Expenditure since date of opening...	3,272
Required from rates to make up deficiency in working expenses	1,482

Accounts made up to September 1, 1875.

JAMES MORTON.

Kidderminster. The borough of Kidderminster is situated on the river Stour, by which it is divided into two unequal parts, 15 miles N. from Worcester. It was long famous for the manufacture of broadcloth, linsey-wolsey, woollen and worsted draperies, and flowered stuffs. But carpet manufacture has proved of the greatest importance to the town, and has greatly assisted in raising it to its present wealth and prosperity. It has a population of 19,416, and the assessment is £53,028.

The baths contain 4 first and 8 second-class men's baths, 2 first and 2 second-class women's baths; a swimming bath, a plunge bath, and a Turkish Bath.

The authorities of this borough were among the first to avail themselves of this aid to civilization. The original loan has been entirely repaid, but the expenditure exceeded the receipts £1482 in twenty-four years.

WORCESTER.

The "Act" was adopted in 1843. Baths and Washhouses are not provided, but there is a public bathing place on the river with a bathing bar, and attendant, which costs about £53 per annum.

THOS. SUNHALL.

Worcester The ancient city of Worcester is a parliamentary borough and county town, beautifully situated on the E. bank of the Severn, 25 miles S.W. from Birmingham.

Manufactures gloves, lace, porcelain, leather, spirits, British wines, vinegar, horsehair, cloth, boots and shoes, nails, artificial manures, cast-iron goods, and turned wares, and has a large trade in hops and corn. The population is 33,221, and the assessment, £143,243.

YORKSHIRE.

Area of the county 3,702,834 acres. Population in 1871, 2,395,569.

BARNSLEY.

Baths opened June 15th, 1874. (Site Freehold.)

Original cost of building baths	£4,000
Amount of loan remaining unpaid	4,000
Receipts since date of opening	722
Expenditure (working expenses) since date of opening	1,137
Required from rates to make up deficiency of working expenses	415

Accounts made up to December 31st, 1875.

S. W. ATKINSON.

Barnsley. Barnsley is a market town in the West Riding, 14 miles N. from Sheffield. The population is 23,021, and assessment £77,512. It is one of those industrial centres where means for cleanliness to both person and apparel are especially requisite. The town employs a considerable number of workpeople in the woollen, coarse linen, and iron manufactures, and is surrounded by a dispersed population whose employments are similar, and also by colliery employés. The site was bestowed by J. E. Taylor, Esq., J.P., constituting an area of 817 yards freehold. There are 23 private or slipper baths, of which 7 are "ladies baths," where the charges are 9d. and 6d.; 16 are "gentlemen's baths," and one swimming bath; the gentlemen's baths are charged 6d. and 4d., and the swimming bath 6d., 4d. and 2d. No part of the original loan has been

repaid, and the expenditure exceeded the receipts £415 in eighteen months.

BRADFORD.

Baths opened July 22, 1865. (Site Freehold.)

Original cost of building baths	£7,700
Total amount raised from rates for principal and interest ...	2,533
Amount of loan remaining unpaid	5,167
Receipts since date of opening	15,615
Expenditure (working expenses) since date of opening	18,496
Required from rates to make up deficiency in working expenses	2,881

Accounts made up to December 31, 1875.

W. T. McGOWEN.

Bradford.

Bradford is a parliamentary borough in the West Riding of the county, 8 miles W. of Leeds. It is the principal seat of the stuff and woollen yarn manufacturers of England. The population is 145,000 and the assessment £451,293.

The building was originally used as Waterworks offices, and was transferred to the Baths Committee free of charge. The loan to defray the cost of plant and alterations was borrowed from various persons under the General Baths and Washhouses Act. The baths have an area of 1100 square yards, and contain 15 first and 26 second-class baths, 3 swimming baths, and a Turkish bath.

The expenditure exceeded the receipts £2881 in twenty years.

DEWSBURY.

Baths opened July 17, 1871. (Site Freehold.)

Original cost of building baths	£1,700
Amount remaining unpaid	1,700
Receipts since date of opening	629
Expenditure (working expenses) since date of opening	1,180
Required from rates to make up deficiency in working expenses	541

Accounts made up to September 30, 1875.

JESSE SMITH.

The borough of Dewsbury is in the West Riding of the county, 31 miles S.W. from York; manufactures, blankets and woollen stuffs generally. The population is 28,000, and the assessment £85,158. The baths have an area of only 39 yards, and comprise 14 warm baths, a swimming bath, and 2 shower baths. Dewsbury

The institution originated with a company, but was afterwards transferred to the corporation, and has been worked at a loss. The expenditure during the four years has exceeded the receipts by £551. No part of the original loan has been repaid.

HULL.

Baths opened April, 1850. (Site Freehold.)

Original cost of building baths	£13,531
Total amount raised on rates for principal and interest	8,124
Amount of loan remaining unpaid	2,400
Receipts since date of opening	4,511
Expenditure (working expenses) since date of opening	11,182
Required from rates to make up deficiency in working expenses	6,671

Accounts made up to September 29th, 1875.

C. S. TODD.

Hull, or Kingston-on-Hull, is a seaport and borough in the East Riding of the county, situated on the great inlet of the Humber, at the point where it is entered by the river Hull, 34 miles S.E. of York. It is the outport for Sheffield, Leeds, Bradford, &c., the great manufacturing centres of the county; and an immense trade is carried on in Foreign and Colonial produce. The population about 40 years ago was 50,000, during the following decade it reached 60,000, and is now 123,400; the assessment is £376,672. Hull.

The baths are on an important scale, and suited to the requirements of such a large population. The area is

1,127 square yards, and comprise 17 first, and 30 second-class men's baths; 9 first, and 8 second-class women's baths; 3 vapour baths, and a swimming bath.

The expenditure exceeded the receipts £6671 in 25 years, which shows that the baths have not been largely patronized.

SHEFFIELD.

Baths opened September 7th, 1869. (Site Freehold.)

Total amount raised from rates for building baths	£2,414
Receipts since date of opening	3,691
Expenditure (working expenses) since date of opening	3,644

Accounts made up to August, 1875.

J. YEOMANS.

Sheffield.

Sheffield is a large parliamentary borough and manufacturing town in the West Riding of the county, situated at the confluence of the rivers Sheaf and Don, both of which are crossed by several bridges, 43 miles S.W. from York. It is famous for its cutlery and all kinds of iron and steel goods, plated wares, metallic instruments and files. Coal is abundant in the neighbourhood.

The population is 239,946, and the assessment £794,206. The baths occupy an area of 366 square yards, and contain 8 first-class and 12 second-class baths, and a swimming bath, 55 by 35 feet.

The cost of building was charged on the borough rate, and transferred to the credit of the baths account, consequently there is no debt. The baths have been well supported, and, under good management, have paid their way.

SCOTLAND.

GLASGOW.

Public baths were opened in this city on July 1st, 1876. Glasgow. The Baths are erected under the provisions of a section of the Glasgow Police Act, and the city is mainly indebted for this boon to the exertions of Bailie Wilson, and Mr. William Wilson, of the Victoria Hot-air Baths Company.

The Easterie Baths, London Road, were purchased, and have been entirely remodelled at a cost of £2000. They are provided with a neat clean swimming pond, 50 by 25 feet, and 25 porcelain warm baths, the whole interior is tastefully painted and varnished; the place is largely patronized.

The Board are erecting, another bathing establishment in the Green Park, at a cost of £14,000; the site has been granted by the Corporation. The accommodation will comprise a swimming bath for ladies, 45 by 25 feet, and a swimming bath for gentlemen, 80 by 40 feet, 100 dressing boxes, 6 private hot baths, a washhouse of 34 compartments, each provided with three tubs having hot and cold water attached, and a drying stove. All the latest improvements are being adopted for washing, drying, mangling, dressing, &c.

The Bath Committee purpose building similar establishments in various districts of the city, so that shortly Glasgow will be exceedingly well supplied with baths and washhouses.

COUNTIES IN WHICH THE BATHS AND WASHHOUSES ACTS HAVE NOT BEEN ADOPTED.

	Area. Acres.	Population.
Buckinghamshire	404,040	155,007
Cambridgeshire	573,095	192,033
Cornwall	885,541	358,356
Cumberland	970,161	220,253
Dorsetshire	610,582	189,000
Essex	975,038	440,830
Herefordshire	507,647	120,723
Hertfordshire	428,143	194,612
Huntingdonshire...	204,632	56,046
Leicestershire	534,149	275,171
Monmouthshire	432,906	219,708
Norfolk	1,306,544	430,638
Northamptonshire	632,002	248,234
Oxfordshire	475,542	178,329
Rutlandshire	107,352	23,385
Shropshire	924,130	267,003
Somersetshire	1,066,290	482,652
Suffolk	929,859	347,210
Westmoreland	503,073	65,130
Wiltshire	775,414	244,607
North and South Wales (excepting Glamorgan, the only county in which the Act has been adopted)	4,086,080	796,264

STATISTICAL AND FINANCIAL

Summary of Provincial Baths and Washhouses.

Date of Opening	Name of County and Town.	Original Cost.	Receipts.	Expenditure.	Assessment.	Population	No. of Baths.
		£	£	£	£		
	BEDFORDSHIRE:						
1872	Luton	1,250	541	1,160	75,070	22,000	6
	BERKSHIRE:						
1870	Newbury	300	...	...	20,882	6,602	...
	CHESHIRE:						
1850	Chester	1,135	1,120	1,468	124,129	35,000	6
1870	Macclesfield	350	819	1,003	75,960	35,570	21
	Total for County	1,485	1,939	2,471	200,089	70,570	27
	DERBYSHIRE:						
1858	Derby	6,000	6,333	7,381	184,759	62,333	30
	DEVONSHIRE:						
1856	Plymouth	4,000	3,087	4,076	175,120	70,000	23
	DURHAM:						
1858	Durham	6,287	4,441	11,207	38,560	14,406	20
1855	Gateshead	5,685	7,142	7,647	90,537	48,627	21
1859	Stockton-on-Tees	3,000	4,536	4,550	98,796	36,000	3
1851	Sunderland	13,800	42,009	43,215	300,000	104,400	47
	Total for County	28,772	58,128	66,619	527,893	203,433	91

STATISTICAL AND FINANCIAL SUMMARY OF PROVINCIAL BATHS AND WASHHOUSES

(Continued).

Date of Opening	Name of County and Town.	Original Cost.	Receipts.	Expenditure.	Assessment.	Population.	No. of Baths.
		£		£	£	£	
	GLAMORGANSHIRE:						
1873	Cardiff...	3,300	1,405	469	150,000	60,000	10
	GLOUCESTERSHIRE:						
1850	Bristol...	21,600	16,781	21,511	625,256	182,000	128
	HAMPSHIRE:						
...	Winchester	...	...	...	...	...	...
	KENT:						
...	Canterbury	...	...	...	...	...	...
1852	Maidstone	5,000	5,999	11,428	106,237	27,000	30
	LANCASHIRE:						
1870	Ashton-under-Lyne	17,505	3,562	8,744	109,305	37,389	15
1868	Blackburn	5,174	2,472	4,448	229,492	82,920	29
1864	Bury	2,937	3,884	5,365	160,408	43,000	22
1828	Liverpool (6 establishments)	84,786	187,691	195,751	2,248,277	500,000	186
1854	Oldham	4,900	7,041	14,392	309,250	100,000	25
1851	Preston	11,217	8,808	11,947	231,445	85,427	63
1868	Rochdale	8,500	3,948	4,761	287,815	44,556	21
1870	Stalybridge	1,000	2,958	4,039	80,961	21,043	11
	Total for County	136,019	220,364	249,447	3,656.953	914,335	372
	LINCOLNSHIRE:						
1854	Grantham	1,000	1,672	2,875	44,684	5,028	10

STATISTICAL AND FINANCIAL SUMMARY OF PROVINCIAL BATHS AND WASHHOUSES

(Continued).

Date of Opening.	Name of County and Town	Original Cost.	Receipts.	Expenditure.	Assessment.	Population.	No. of Baths.
		£	£	£	£		
	NOTTINGHAMSHIRE:						
1852	Mansfield	1,300	284	975	33,419	11,000	...
1850	Nottingham	4,700	1,436	1,585	280,023	36,000	36
	Total for County	6,000	1,720	2,560	313,442	47,000	36
	NORTHUMBERLAND:						
1862	Newcastle-on-Tyne	7,000	16,767	23,585	367,442	128,443	14
1854	Tynemouth	4,000	7,355	9,697	85,965	41,000	17
	Total for County	11,000	24,122	33,282	453,407	169,443	31
	STAFFORDSHIRE:						
1870	Bilston...	1,100	489	551	60,888	24,000	23
1874	Hanley	10,000	1,117	996	96,790	41,000	17
	Total for County	11,100	1,606	1,547	157,678	65,000	40
	SURREY:						
1866	Croydon	5,612	4,204	5,078	350,526	55,662	13
	SUSSEX:						
1869	Brighton	5,500	2,636	2,657	459,336	100,000	33

STATISTICAL AND FINANCIAL SUMMARY OF PROVINCIAL BATHS AND WASHHOUSES

(Continued).

Date of Opening.	Name of County and Town.	Original Cost.	Receipts.	Expenditure.	Assessment.	Population.	No. of Baths.
		£	£	£	£		
	WARWICKSHIRE:						
...	Birmingham (3 baths)	46,500	65,770	67,102	1,284,167	344,000	151
1852	Coventry	5,000	4,815	8,016	141,182	4,100	19
	Total for County	51,500	70,585	75,118	1,425,349	348,100	170
	WORCESTERSHIRE:						
1851	Kidderminster	3,325	1,790	3,272	53,028	19,416	16
	Worcester	...	...	...	...	...	...
	YORKSHIRE:						
1874	Barnsley	4,000	722	1,137	77,512	28,021	23
1865	Bradford	7,700	15,615	18,496	451,293	14,500	41
1871	Dewsbury	1,700	629	1,180	85,158	28,000	14
1850	Hull	13,531	4,511	11,182	376,672	123,400	64
	Total for County	26,931	21,477	31,995	990,635	188,921	142

THE GRAND TOTALS OF THE STATISTICAL AND FINANCIAL SUMMARY OF PROVINCIAL BATHS AND WASHHOUSES ARE AS FOLLOWS:—

Population, 2,741,843. Number of warm water baths, 1,206.

Original cost of building baths	£329,694
Receipts	444,389
Expenditure	533,946
Assessment	9,970,339

The gross financial results of the provincial baths and washhouses present a striking difference to those of the metropolitan, from causes that will not be difficult to explain.

In the metropolitan district there are nearly 4,000,000 people, with only ten bathing establishments, situated in densely populated neighbourhoods; while in the provinces there are forty establishments scattered over an immense acreage, with only about one-half the population, the working expenses must therefore be relatively much greater.

The expenditure represents £100,000 in excess of the receipts, yet I am inclined to think, in many instances, the repayment of the original loan has been included in the working expenses; so that it may be fairly assumed that the gross working expenditure has not exceeded the receipts more than £50,000, which is a small item when

we take into consideration the many difficulties under which the provincial bath establishments labour.

In a number of small establishments in the outlying districts the aggregate outlay has been out of proportion to the accommodation afforded, with no washing appliances, making it almost impossible the baths could become self-supporting, but in such towns as Liverpool, Birmingham, Bristol, and other large centres of population, the baths have been supported very nearly, if not to the same extent, as those in the metropolis, and will favourably compare in the financial results.

Although baths are essential everywhere, in many country places the people have the privilege of bathing in rivers, and more home conveniences, consequently public baths are less required. Also indiscretion in selecting sites, as well as the inappropriateness of the capital expended, has all told against their financial success, when compared with the large towns.

Bathing in winter is very unpopular, owing to the discomforts attending it, which I have discussed in Chapters V. and VI. In the metropolis, the swimming baths are resorted to by thousands in summer, and forms a large source of their income, which, in a measure, compensates for the loss sustained in winter, while many of the provincial establishments are not provided with swimming baths, consequently their receipts are not in the same way augmented in summer to compensate them for the loss in winter.

In looking over the returns, many will wonder how it is the baths have not been better patronized in the iron and coal districts, but to those who know the habits of the people the circumstance is easily explained. Nearly every artisan has a house to himself and is provided with ample washing accommodation. Coals being about one-

half the price they are in the South of England, the poor are able to effect their ablutions and washing at home without inconvenience at a comparatively small cost.

The occupations of the men are essentially dirty, and they require daily ablutions and change of clothing. It would be inconvenient and fatiguing after a hard day's work for a man to take a change of clothing to the bath, besides the occupation of many is very enervating, and an immersion in a hot bath would tend to further enervate them; at home, with a few gallons of water before a fire, they are able to perform their ablutions in comfort, without any extra trouble or fatigue, hence the people wash more in the North than the South.

It is to be regretted the Act has not been more generally adopted in the provinces. Out of the metropolitan area it has only been exercised in 40 towns, the capital expended amounts to £329,694, the total inadequacy of the present bath accommodation in the provinces is shown from the fact that there are only 1,200 warm baths provided for the poor of a population of upwards of 14,000,000.

The expense of the forty bath establishments has been charged on 2,740,000 people. If the money had been levied on the counties it would have been divided amongst 14,000,000 people, and over an acreage of area, including property upon it, of 19,000,000. A rate of 1d. in the pound would have met the expenses if it had been levied on the counties, but having been raised on the parishes where the Act is adopted, it cost them 8d. in the pound.

It will be observed the Bath Act has been adopted in twenty out of the forty counties in England. I have suggested that the money required to establish baths in

the metropolis should be raised on the whole metropolitan area. The same principle should be applied to the provinces, and the money raised on the counties, so that the oppulent should contribute their moiety towards this essential sanitary agent, and not, as at present, leave the expense to be borne by the parish in which the bath is situated. If baths were established in all suitable localities, and the money levied upon the counties, it would be only just, as the residents in rural districts are dependent upon the large towns for a market for their productions, and the inhabitants of towns being compelled to live in less healthy situations, it is but right the rural population should contribute towards their means of health; the well-being of one depends upon the other, consequently their interests are identical.

Each county should ascertain the bathing necessities of the poor people, just in the same way it does other sanitary matters, and then borrow the money required from the Loan Commissioners on the security of the county rates, repayable in sixty years, which would be giving the people what is necessary, at the same time oppressing none.

At Plymouth and Mansfield the authorities let their baths and washhouses, which they are impowered to do under their local Acts. This I venture to say is very objectionable, for immediately the baths are let the authorities have no further control over them, and the tenant charges what he pleases, they become trading concerns, established at the cost of the ratepayers, and the Act becomes a dead letter. Charges are another objection. In Liverpool and other towns their local Acts allow them to charge what they please; this is unjust, because public money should never be used to compete with private enterprise. Luxurious and elaborate baths can always be obtained

by those in a position to pay for them; besides, the same terms should be enforced as in the Act 9 & 10 Vic. cap. 74.

The Act has not been adopted in Manchester, nevertheless it is pleasing to find that when the candidates for municipal honours were seeking election, they advocated the desirability of erecting public baths and washhouses, and it is quite evident those gentlemen who sought to be elected would not discuss a topic if the parishioners were not pleased with it; hence it is fair to assume the Bath and Washhouse movement is occupying the attention of the people of Manchester. The town is exceedingly well supplied with numerous bathing establishments, and the charges are such as to come within the reach of the artizan classes. My experience has led me to the conclusion that as long as baths are doing well and maintained in efficiency it is not wise to adopt the Act.

The Bath Act has not been adopted in Ireland, for what reason I cannot say, except it is that the Turkish Bath has been generally extended throughout the country; and although these are private institutions, yet in every instance provision is made for the poor by small charges, but none are refused a bath who cannot pay. Some particulars of a working-man's Turkish Bath in Cork is given in the chapter on "Economics," and if establishments in other districts are as well patronized as this, the people of Ireland do not require the Bath Act.

In Scotland the Act has only recently been adopted, or rather a clause in their Police Act enables them to raise money for the purpose on the poors' rate. The baths will be managed by Police Boards, and the efficient manner in which they are being administered in Glasgow

indicates that their adoption will soon become general throughout the country.

In taking up the question I trust the authorities in other towns will endeavour to secure all the appliances which experience points to as being likely to add to the popularity, efficiency, and success of these establishments. In the following chapters I have demonstrated that hot-air bathing is by far the most efficient mode, and that its administration is less costly than that commonly in vogue, while, for reasons which appear to me to be conclusive, the system I advocate would rapidly become popular, and, by rendering bathing equally practicable all the year round, a uniform and profitable income would be secured. I trust, therefore, that Scotland, especially, will benefit by the experience of English establishments, together with the suggested improvements and additions which I have thrown out, and which are the result of much thought and inquiry and not a little experience.

CHAPTER IV.

RE-INTRODUCTION OF THE TURKISH BATH, WITH OBSERVATIONS ON THE VAPOUR BATH.

THERE can be no doubt that the Bath and Washhouse Movement received a great stimulus through the introduction of Hydropathy into this country, and the consequent dissemination of the curative virtues of water appliances, and sanitary reformers saw the necessity of personal cleanliness in order to ensure perfect health. Hydropathy a Stimulus to Baths & Washhouses

A year or two previous to the establishment of the first public bath in England, Captain Claridge, followed by others, published his experience in regard to the principles and practice of Vincent Priessnitz, the father of "the water cure;" and it was to the attention thus drawn to the subject, that gave a further stimulus to the movement which resulted in the passing of the Baths and Washhouses Act of Sir George Grey, in 1846, himself a zealous advocate of hydropathy.

In like manner, to one of the followers of Priessnitz must be accorded the chief honour in connection with the re-introduction of the Turkish Bath into the United Kingdom. As a fact Mr. David Urquhart was the first to call attention to the subject by a work in which he published an account of the Bath, in 1848, entitled "The Pillars of Hercules," being a description of his travels in the Mr. Urquhart.

Dr. Barter.

East. But some eight years afterwards, the late Dr. Barter, Hydropathic Practitioner of St. Ann's Hill, Cork, having seen Mr. Urquhart's account of the hot-air bath, with his usual keenness of perception observed the importance of its introduction as a therapeutic agent. Dr. Barter had for years previously adopted the Vapour and Lamp Bath, as an improvement upon the blanket-sweating process of Priessnitz, for inducing perspiration and heating purposes, a method which was still open to further improvement when an opportunity presented itself. He accordingly wrote to Mr. Urquhart, offering to place men, money, and material at his disposal, if he would superintend the erection of baths on the improved principles. Mr. Urquhart consented, and after very numerous alterations and additions, the first Turkish Bath in the United Kingdom was completed and opened in 1856, at St. Ann's Hill, Cork.

Improved Turkish Bath.

It is as well to state here that one feature of the bath, as used in Turkey, and introduced by Mr. Urquhart, was the presence in it of steam. Dr. Barter soon observed, however, that an atmosphere loaded with moisture was oppressive, and that his bathers were not able to endure a temperature higher than 125°. He accordingly, with his usual acuteness, tried the bath *without moisture*, and found that they could bear a temperature of 160° with perfect ease. Hence we are indebted to him for what is called the "improved Turkish Bath," *i.e.*, a hot-air bath without any sensible vapour beyond that which is naturally introduced by the process of ventilation. In pursuing his improvement he derived considerable aid from the examination of the remains of Roman hot-air baths in various parts of Britain; and the bath, as improved by Dr. Barter and now established among us, although called the Turkish Bath, is in reality the Roman Bath.

No sooner was the bath in operation at St. Ann's Hill, than it called forth the most violent opposition. Dr. Barter, however, was not a man to be turned from his course when he found he was supported by important facts. He possessed a spirit that was proof against ridicule and calumny, and although at first his patients rapidly decreased in number, he persevered until his efforts were crowned with more than ordinary success. Opposition

Having thus practically demonstrated the utility of the bath as a medical and sanitary agent, he spared neither time, labour, nor money, in making known its virtues. He gave public lectures in various parts of Ireland and England, inviting medical men, sanitary reformers, and philanthropists to investigate the subject themselves. As a matter of course his efforts were opposed with the utmost virulence. A few, however, who were above the petty motives of supposed professional interest, did investigate and acknowledge the hot-air bath to be of the greatest importance as a therapeutic agent.

Eventually the bath made its way into public estimation, and in the year 1862 the first institution of the kind, after that at St. Ann's Hill, was erected in the city of Cork for the use of the poor. That city was mainly indebted, for the establishment and successful carrying out of the system, to Mrs. Donovan, aided by other benevolent persons, and no one has done more than she has for the sanitary condition of that large and important city. She was liberal in her expenditure of means and time in promulgating knowledge as to the means of preserving health, and especially the usefulness of the Turkish Bath. Her works entitled, "Simple questions and Sanitary Facts," and "Illness, its Cause and Cure," should be read by all persons who have not given the fullest attention to this subject. In "Recollections of Dr. First Turkish Bath for the poor.

Barter," the same author gives an interesting sketch of a remarkable life.

Turkish Baths popular in Ireland.

Notwithstanding severe but ignorant opposition and prejudice, the bath rapidly commended itself to the public mind. In the year 1868 there were not less than fourteen public Turkish Baths in full operation in the county of Cork alone. Dublin possessed three and Bray two, chiefly through the liberality and zeal of the late William Dargan. Those erected at Bray (county of Wicklow) were especially commodious, convenient, and architecturally well designed and elegant. Waterford Limerick, and Sligo, have each two baths. Belfast and other large centres of population are also well provided with accommodation for hot-air bathing. The nobility and gentry throughout the country, more particularly in Leinster and Munster, erected Turkish Bath rooms in connection with their mansions; and many manufacturers in Dublin, its neighbourhood, and in Ulster, provided them in or adjacent to their factories, for the exclusive benefit of their workpeople.

Turkish Baths introduced into England.

From Ireland the movement extended to England, where the first bath was established at Bradford; and now there is scarcely a town of any importance or hydropathic establishment without its Turkish Bath. London alone possesses twenty, and many private persons have hot-air baths attached to their residences. Bradford possesses two; Manchester, four; Leeds and Oxford, three. Liverpool, Birmingham, and Bolton two. There is one in each of the following places: Blackburn, Bury, Bristol, Brighton, Bath, Clifton, Cambridge, Cheltenham, Derby, Droitwich, Guildford, Luton, Leamington, Margate, Newcastle-upon-Tyne, Peterborough, Plymouth, Southampton, Scarborough, Stroud, Hull, Skipton, Southport, Sheffield, Windsor, Wakefield, Windermere, and Worcester. The

following hydropathic establishments have Turkish Baths attached: Ilkley - Wells, Ben Rhydding, Llangollen Limpley, Stoke, Malvern, Barnet, Paddington Green, Sudbrook Park, Beulah Spa, and Thrale Hall.

Turkish Baths in Scotland.

That the Turkish Bath has received the same appreciation in Scotland will be apparent from the following quotation from a letter from Dr. Munro, Melrose Hydropathic Establishment: "There are," he says, "six Turkish Baths under my care here. I know of two in Edinburgh, one in Leith, and three or four in Glasgow. These are all I know open to the public in our towns. A number of private families have now got them into their houses, using Scriven's Patent Stove for heating purposes. It is undoubtedly the best means of heating that I have ever met with. The various hydropathic establishments in Scotland have, I think, all Turkish Baths. There is one at Rothesay, one at Bridge of Allan, one at Crieff, and one at Cluny Hill, Forres. I suppose there must also be one at Skelmorlie on the Clyde." There is also a Turkish Bath in a hydropathic establishment near Aberdeen.

It is very gratifying to be able to state that although the system has been introduced scarcely twenty years, there are over 100 Turkish Baths open to the public in the United Kingdom, and over 1,000,000 persons recognize the efficacy of the Bath as a medical and sanitary agent, superior to any other in hygienic science.

Baths known to the Ancients.

Such is a brief sketch of the re-introduction of the so-called Turkish Bath; for we have abundant evidence to prove that this form of bathing was known to the early inhabitants of Britain, it having been brought hither by the Romans. In fact wherever Roman remains are found, there we find traces of the Bath. After the departure of the Roman legions, its use appears to have rapidly

declined, until at last it was forgotten. It is however remarkable that during the reign of Charles II., it was partially revived. Three or four Bagnios, as they were then called, were established in London, the chief of which was in Long Acre. They are described as being after the Turkish model, and only intended for the wealthier classes. They were used in the first instance for curative purposes, for sweating, hot bathing, and cupping; but they soon became the resort of disreputable persons, and fell into discredit, so that the very name was for a long time a *synonym* for a house of ill fame. They do not seem to have survived the dissolute Prince in whose reign they were introduced.

Vapour Baths introduced into England.

About the middle of last century, the Vapour Bath was introduced into England by an Italian physician named Dominicelli, who gained considerable repute for his cures, and was patronized by Sir John Fielding; and at the beginning of the present century, Vapour Baths were also introduced by two persons, the one Mr. Basil Cochrane, and the other Sake Deen Mahomed, a native of India, who styled himself Shampooing Surgeon. Mahomed established baths at Brighton, and was patronized by George IV., as well as by the chief of the nobility. His system included shampooing and the use of medicinal herbs.* Mr. Cochrane, whose method was more after the Russian—Vapour Baths pure and simple — devised apparatus for the application of the bath to all classes, from the private house to the Army and Navy. He thought it especially

* In 1838, Mahomed, then in his 89th year, published a third edition of his interesting little book on the baths, in which he gives a number of cures, and the names of some hundreds of subscribers to his baths. His longevity is itself a testimonial to the value of the baths.

valuable to our merchant service, and dedicated his work on the subject to the then First Lord of the Admiralty, Viscount Melville. He constructed baths on his improved system in his house in Portman Square, where he treated many poor people *gratis*, with great success. These baths and models were tested and examined by some of the foremost physicians of the day, who, in the work above mentioned, append their names to the statement that "There are few diseases in which they may not, at one stage or another, be useful; and in the prevention of disease, as well as during the periods of convalescence, they will also produce effects highly beneficial."

Dr. Wm. Forbes on Steam Baths.

Dr. William Forbes contributed a paper to the *Edinburgh Medical and Surgical Journal* in 1810 (page 313) upon the Steam Bath, with an account of its effects in a case of Gastritis. He gives clear instructions for the construction of the bath, and a diagram exhibits a very ingenious adaptation of a common slipper bath to the purpose. He concludes his paper thus:—"The advantages of the vapour bath consists in the readiness with which it may at all times be used; the ease with which the temperature can be regulated; and the patient's running no risk of catching cold."

Dr. Chas. Whitlaw on Vapour Baths.

In 1838 Dr. Charles Whitlaw published "*Code of Health*," in which he states that "twenty years experience has convinced me of the beneficial results arising from the use of the Vapour Bath," and he gives a formidable list of diseases he had successfuly treated by it. A committee was formed on the 24th of April, 1837, for the purpose of establishing a Vapour Bath Institution, *for the benefit of the poor*, on the medical principles of Mr. Whitlaw, and an address, calling attention to the question, and inviting co-operation and pecuniary support, was issued by the

Hon. Sec., the eminent nonconformist preacher, the Rev. Alexander Fletcher, M.A.

New York Vapour Bath Co.

Mr. Whitlaw informs us "That in America, the institution of Vapour Baths has been attended with amazing success. To the Committee of the New York Vapour Bath Company, the physicians who superintended the baths, among whom was Dr. William Ireland, reported the successful treatment of two hundred and twenty-seven cases, in the quarter ending October 1825, with a list of the various diseases with which they were afflicted. Out of a number of cases submitted to the bath, it was proved, that in acute and chronic inflammation, more benefit had been derived from its use in twenty-four hours, than had ever been witnessed in a month's most successful practice —amounting to

Cured	468
Relieved	186
Not relieved	27
	681."

Vapour Baths not popular.

But though these efforts gave the Vapour Bath a temporary prominence, they failed to establish it as a national, or even a popular institution. Perhaps in a land which is naturally subject to so much moisture and vapour, there may be a native instinct against the Vapour Bath, and as strong a predilection in favour of the hot-air system. Be that as it may, the revival of the Roman Bath in the United Kingdom has met with a support which, considering the natural slowness of the English mind to adopt innovations, is highly gratifying.

The Turkish Bath is the most effective, if not the most ancient of sudorific processes, and, although its origin is veiled in obscurity, doubtless the idea of warm water and vapour baths may be traced to natural hot springs,

and so may that of hot-air baths to the effects of solar heat on objects, animate or inanimate, exposed to it.

Antiquity of the Bath.

Going as far back as existing records will carry us, Homer, the father of Greek poetry, describes his heroes as refreshing themselves with the warm bath during the Trojan War (B.C. 1194); and we know that the hot-air bath was systematically employed in the renowned Greek Gymnasia, as part of the admirable system of physical training there practised. Greece probably derived her hot-air bath from Asia, but of that there is no certainty. She caused it to form part of her unrivalled national institutions, yet, strange to say, never thought of it as a household convenience, for we find the father of physic, Hippocrates, was prevented from prescribing it in some cases because of the difficulty of obtaining it. The Romans who borrowed it with its concomitants, rubbing, anointing, &c., from the Greeks, not only adopted its public use, but made it subservient to private convenience. In the days of the Empire, the baths, public and private, presented marvellous specimens of architectural magnificence; especially such were those of Nero, Titus, Caracalla, and Diocletian. They were not only of prodigious extent and august grandeur, but were decorated with the most precious marbles, statues, paintings, jewels, and the most varied works of art.

G. Worthington.

G. Worthington, Esq., in his work on "Bathing; its Uses and Advantages," has the following:

"As the wealth of the Roman Empire increased, the edifices erected for the purpose of bathing became most luxurious and costly. At the time of Augustus, and subsequent to his reign, the Baths were finished and decorated in a style of magnificence almost incredible. The pipes that conveyed the water were made of silver, the walls elaborately stuccoed in imitation of painting, basins made of rare stone, and marble in profusion; and to such an extent did their extravagant tastes lead them, that the ladies had their private baths even paved with silver."

Roman Baths.

The Romans called their baths Thermæ, from the Greek Thermos (heat), and set the highest value upon them as means of health and pleasure. No doubt the Thermæ were abused in the degenerate days of the Empire, especially when deprived of the patronage of the emperor and the nobility upon the removal of the seat of empire to Constantinople. They then became the lounging resort of an idle and dissolute rabble. In Constantinople, and throughout the Eastern Empire, the change in the seat of power, led to a period in which the Thermæ flourished exceedingly; and when these fair regions were overrun by the Turks, they not only spared such establishments, but adopted and patronized them, and have preserved them until now, much to their own benefit, and haply to ours also. Of late, many travellers in the East have experienced their advantages, and have pressed the consideration of them upon the attention of western Europe.

Origin of Baths.

Some are disposed to regard the Phœnician cities of Tyre and Sidon as the original home of the hot-air bath, at all events so far as the civilized world may claim the origin. From those Phœnician cities a knowledge of the Bath would find its way along the southern shores of the Mediterranean to Egypt and North Africa, as far as the Pillars of Hercules; and on the northern side of of the "Great Sea," to Greece, Italy, and Spain. On the landward side the line of caravan communication would transmit it to Asia Minor, Persia, Central Asia, and Hindostan. Thence to China, the art may have been conveyed, if not previously known. Diverse as have been the forms and details of the bath processes in these regions severally, the principle has throughout been one. Indeed, so likely is this principle to commend itself to the human mind, that if the foregoing theory of the spread of the institution be rejected, it is no great

stretch of imagination to conceive as the alternative that the idea arose independently, in various nations, and in different ages, and took the form which convenience or opportunity dictated. It is quite certain, that with slight modifications, it was known to cities and nations not far removed from savage life, and by nearly all the historically known peoples of antiquity. Musa, in his account of the Scythians, has the following passage, which we quote from Rawlinson's translation of Herodotus :—

"They make a booth by fixing in the ground three sticks, inclined towards one another, and stretching around them woollen felts, which they arrange so as to fit as close as possible. Inside the booth a dish is placed upon the ground, into which they put a number of red-hot stones. Taking some hemp-seed, and creeping under the felt coverings, they throw it upon the red-hot stones; immediately it smokes, and gives out such a vapour as no Grecian vapour-bath can exceed. The Scyths, delighted, shout for joy."

Eastern Hammam.

The form of bath employed in countries bordering the shores of the Mediterranean—Turkey, Egypt, Morocco, &c.—is that which has become familiar to us as the Eastern Hammam. A light and elegant cooling room for undressing first receives the bather. From thence, duly robed, he proceeds to the hot room, which is often so filled with vapour that he can scarcely breathe. Perspiration is here evoked, and the bather is forthwith soap-lathered with a rough glove of camel's hair, soused with hot water, shampooed, and scraped. Conducted to the cooling room, he is offered coffee and sherbet, and reclines in a state of comfort described as truly elysian. The Easterns regard the bath as their greatest comfort and luxury, and their one welcome resource in illness, fatigue, or mental distress. Its beneficial action is enhanced

by the pleasures of social intercourse, for which the bath gives most welcome facilities, and the oriental taste for architectural magnificence and grandeur is frequently gratified by the style and decorations of the building.

The Bath in Ireland.

Going westward to Ireland and America, we find a form of bath more primitive, but constructed on the same principle. The *Irish* bath was generally built of basalt stones, plastered with mud or mortar, and shaped like a bee-hive, having a hole at the top, and another near the ground, by which the bather gained entrance. The interior was large enough for one person to seat himself, and the place was heated after the manner of a baker's oven, with a large turf fire. The fire was left until burnt quite down, when its remains were removed, and the floor strewn with rushes. The bather then crept in and seated himself, and the sod which had been placed over the hole at the top to keep in the heat was removed to allow him to breathe. Here he remained until the beads of perspiration rolled off in abundance, he was then taken out, bathed, wrapped in blankets, and conveyed home. These erections were called, in the Keltic tongue, *Tig Allin*, or sweating houses. They were for the most part placed on the banks of rivers, lakes, or ponds, for facility of after bathing.

These "Sweating Houses" are used in Ireland to this day, especially in the province of Connaught, the most primitive part of the island. More particularly this mode of cure is used in the northern counties of the province, Leitrim, Sligo, and Roscommon. The peasantry of the baronies of Liney, Geevah, and Tirrerah, consider them an infallible cure for colds, fevers, agues, pulmonary complaints and dropsies.

Primitive Baths.

By whatever means the aborigines of America became acquainted with thermal bathing, it is certain that in

their own primitive way they employed it for the cure of their distempers. In North America the native sweating house resembled a large oven, with a small door on either side, one for the bather to creep in by, and the other for introducing red-hot stones. On these stones water was sprinkled to raise a steam, there the bather sat, until, having undergone a thorough perspiration, he was taken out, reeking hot, and plunged into the stream hard by. The following is an extract from a letter by William Penn, the founder of Pensylvania, to Dr. Baynard, the author of a work on cold bathing, describing the bath of the North American Indians:—

William Penn, founder of Pensylvania, on the American Indians.

"As I find the Indians on this continent more incident to fevers than any other distempers, so they rarely fail to cure themselves by great sweating, and immediately plunging themselves into cold water, which they say is the only way not to catch cold. I once saw an instance of it, with divers more in company. For being upon a discovery of the back part of the country, I called upon an Indian of note, whose name was Tenoughan, the captain-general of the clans of Indians in those parts. I found him all of a fever, his head and limbs much affected with pain, and at the same time his wife preparing a bagnio for him. The bagnio resembled a large oven, into which he crept by a door on one side, while she put several red-hot stones in at a small door on the other side thereof, and then fastened the door as closely from the air as she could. Now, while he was sweating in this bagnio, his wife (for they disdain no service) was cutting with an axe a passage into the river (being the winter of 1683, the frost great, and the ice very thick), in order to the immersing himself after he should come out of the bath. In less than half-an-hour he was in so great a sweat that when he came out he was as wet as if he had come out of a river, and the reeking steam of his body so thick that it was hard to discover anybody's face that stood near him. In this condition he ran to the river, which was about twenty paces, and ducked himself twice or thrice therein, and so returned (passing only through the bagnio to mitigate the stroke of the cold) to his own house, perhaps twenty paces further, and, wrapping himself in his woollen mantle, lay down at his length near the long (but gentle) fire in the middle of his wigwam or house, turning himself several times till he was dry, and then he rose and fell to getting us our dinner, seeming to be as easy and well in health as at any other time."

Sometimes this oven-bath was constructed of poles covered with skins, so as to be perfectly air-tight, and sometimes a hollow square of six or eight feet deep was formed in the river bank, by damming up the other three sides with mud, and covering the whole over, except an aperture of about two feet in diameter at the top for the bather to enter. The use of these sweating-houses was common among all the Indian tribes, from the Atlantic to the Pacific coast of what may now be called Anglo-Saxon America.

Form of Bath in Mexico.

In Mexico a similar form of structure was used, but built of bricks and provided with a furnace, having "a mouth" to receive the fuel, and a hole at the top for the smoke to be emitted. Within was placed a mattress upon which the bather reclined, a pitcher of water and some sweet smelling herbs. When the bath (or Termazcalle, as it was called,) was duly heated, the bather entered, accompanied by an attendant, the entrance was closed, and the attendant sprinkled water upon the hot stones around the furnace until the whole place was filled with vapour, while the bather reclined on the mattress, beat the ailing part with herbs dipped in the water which by that time had become slightly warmed. The Mexican found this a remedy in various diseases, especially in cases of bites by poisonous reptiles.

Baths in Russia, Japan, &c.

Tracing the bath eastward from its supposed source on the Syrian shores of the Mediterranean, we find it flourishing in Russia, Tartary, China, and Japan. The Russian Bath has been so often described that many of my readers will be familiar with the description. In St. Petersburg, Moscow, and other large towns, both in European and Asiatic Russia, the public baths are numerous, and are frequented by all classes, especially by the poor, who are influenced by the observance of religious rites as well as

by considerations of health and personal enjoyment. On Sunday evenings in St. Petersburgh may be seen crowds of mechanics, labourers, soldiers, women, and children with birch twigs in their hands and towels under their arms, their direction being a door over which is written, "Entrance to the Baths:" here they take their tickets, males and females proceeding to separate compartments where they undress. Beyond the undressing rooms are air-hot chambers, which are filled with vapour, caused by throwing hot water from pipes over heated stones or bricks. Around the apartments extends a range of steps reaching from floor to ceiling, and the heat is in proportion to the ascent. Into this vapour-filled chamber as many bathers crowd as can find accommodation, and arrange themselves in tiers upon the ascending gradation of steps. Each is furnished with a small pailful of hot water with which to souse his body now and then as he switches it with the birch twigs. After working themselves up to a high heat and profuse perspiration, the bathers finish in summer by ablutions of soap and cold water; and in winter, by rushing out and rolling themselves in the snow. The Russians take great delight in this bath, believing it to be a sovereign remedy for many diseases, while its effect in strengthening their constitutions is too evident to admit of doubt. "The eyes of a Russian gentleman gladden with rapture when he speaks of the bagnio, it is his *ne plus ultra* of mortal bliss."

Dr. Clarke's description of a Russian Bath.

Dr. Clarke, in the account of his travels in Russia at the beginning of the present century, makes mention of the Russian Bath, and describes a visit he paid to one with the view of being relieved from a rheumatic pain, brought on by a sudden change of weather which took place in Moscow. After describing the general appearance of the interior, he notices that in the middle of the

room was a step to a platform elevated above the floor, and on each side of the platform a stove, the upper surfaces of which were covered by reeds, the bed of reeds being in turn covered by a sheet. He then proceeds :—

"I was directed to mount upon one of these stoves, and to place myself at full length on the sheet; having done which, I found myself nearly elevated to the roof of the bath, and the heat of ascending vapour threw me immediately into a most profuse perspiration. According to Storch, the heat varies from 104 to 122 degrees of Fahrenheit; and sometimes, upon the upper stages near the roof, it is twenty degrees above fever heat. Thus situated, a man began to rub me all over with a woollen cloth, made into a bag, covering one of his hands, till the exterior surface of the skin peeled off. As soon as he had finished the operation with the woollen cloth, he bade me descend, and poured several vessels of warm water on my head, whence it fell all over my body. He then placed me on the floor, and washed my hair with his hands, scratching my head in all parts with his nails—a great luxury to the Russians, and for reasons it is not necessary to explain. After this, he again made me ascend the stove, where once more stretching me at length, he prepared a copious lather of soap, with which, and a woollen cloth, he again rubbed my body, when I descended a second time, and was again soused with vessels of water. I was next desired to extend myself on the stove for the third time, and informed that the greatest degree of heat would be given. To prepare for this, they cautioned me to lie on my face, and keep my head down. Birch boughs were then brought, with their leaves on, and dipped in soap and hot water, with which they began to scrub me afresh; at the same time, some hot water being cast upon red-hot cannon balls, and upon the principal stove, such a vapour passed all over me, that it came like a current of fire upon my skin. If I ventured to raise my head an instant, it seemed as though I was breathing flames. It was impossible to endure this process for any length of time; therefore, finding myself unable to cry out, I forced my way down from the stove, and was conducted to the lower part of the room, where I seated myself on the floor, and the doors being opened, soon recovered sufficiently to walk out of the bath.

"Eminent physicians have endeavoured to draw the attention of the English government to the importance of public baths, and of countenancing their use by every aid of example and encouragement. While we wonder at their prevalence among all the Eastern and Northern nations, may we not lament that they are so little used in our own country? We might, perhaps, find reason to allow that erysipelas,

surfeit, rheumatism, colds, and a hundred other evils, particularly all sorts of cutaneous and nervous disorders, might be alleviated, if not prevented, by a proper attention to bathing. The inhabitants of countries in which the bath is constantly used, anxiously seek it, in full confidence of getting rid of all such complaints, and they are rarely disappointed. I may add my testimony to theirs, having, not only upon the occasion which gave rise to these remarks, but in cases of obstructed perspiration much more alarming, during my travels, experienced their good effect. I hardly know any act of benevolence more essential to the comfort of the community, than that of establishing, by public benefaction, the use of baths for the poor, in all our cities and manufacturing towns. The lives of many might be saved by them. In England they are considered only as articles of luxury; yet throughout the vast empire of Russia, through all Finland, Lapland, Sweden, and Norway, there is no cottage so poor, no hut so destitute, but it possesses its vapour bath, in which all its inhabitants, every Saturday at least, and every day in cases of sickness, experience comfort and salubrity."

Speaking then of the benefit that would accrue to this country from the establishment of warm and vapour baths, he continues:— Benefits from Baths.

"Perhaps at some future period they may become general; and statues may perpetuate the memory of the patriot, the statesman, or the sovereign to whom society will be indebted for their institution When we are told that the illustrious Bacon lamented in vain the disuse of baths among the Europeans, we have little reason to indulge the expectation. At the same time, an additional testimony to their salutary effects, in affording longevity and vigorous health to a people otherwise liable to mortal diseases from a rigorous climate and an unwholesome diet, may contribute to their establishment. Among the ancients, baths were public edifices under the immediate inspection of the government. They were considered as institutions which owed their origin to absolute necessity, as well as to decency and cleanliness. Under her emperors, Rome had near a thousand such buildings, which, besides their utility, were regarded as masterpieces of architectural skill and sumptuous decoration. In Russia, they have only vapour-baths, and these are, for the most part, in wretched wooden hovels. If wood is wanting, they are formed of mud, or scooped in the banks of rivers and lakes; but in the palaces of the nobles, however they may vary in convenience or splendour of materials, the plan of construction is always the same."

In Finland the bath is generally attached to the houses

of the peasantry, and consists of one small chamber, with a kind of oven filled with round stones, which are heated until they become red. There are two rows of seats, one near the ground, and one in the hotter region near the roof. While in the bath the Finlanders rub themselves, and switch their bodies with the twigs of the birch tree. Having done this to their satisfaction, they finish with cold water or a roll in the snow in the true northern style. The great objection to these Russian and Finnish baths is their oppressive amount of vapour and their defective ventilation. But though far from perfect, they are vastly better than no bath at all, and as constructed and managed, for example, by Dr. M. Roth in London, they are in certain states of body eminently serviceable.

Baths in Tartary.

In far east Tartary, whither the victorious arms of Russia have now penetrated, the soldiers of the Czar have an opportunity of bathing on the *hot-air* principle, which they find more agreeable, it is to be presumed, than their own stifling vapour. The baths of Bokhara, the Tartar capital, and there are sixteen of them, consist of four compartments, of which two are for dressing and sipping tea, and two for the perspiring, shampooing, and bathing processes. The two latter are heated from below, after the Greek and Roman method. In the first chamber, the bather doffs his outer garments; in the second, which has a slightly higher temperature, he completes his disrobing. Girding himself with his bathing costume, he enters the third and hottest room, where he reclines until he has sufficiently perspired. Proceeding then to the fourth room he gives himself up to the shampooer, who manipulates with such skill as he has, rubs him with a coarse hair cloth, and finishes by pouring cold or cool water over him. He then returns to recline and sip his tea in the first or second apartment. These

Tartar baths, although not so good as the Turkish, are a great improvement upon the Russian.

Chinese Baths.

The Chinese baths approach nearer to the Russian type, being *vapour*, not *hot-air* baths. As a fair specimen of them, those of Shanghai may be taken, which have been described as follows:—Each bathing establishment has two outer or cooling rooms for toilet purposes, one large public room for the poorer classes, and one smaller and private room for the respectable. Down the middle and along the sides of these rooms are ranged rows of small boxes, or lockers furnished with lock and key, into which the bathers put their clothes. At the further end of the building is a small door by which they enter into the bathing room, which is about thirty feet by twenty, and is filled with hot steam or vapour. The entire floor, except a narrow space round the sides, is occupied by a hot-water bath from one to eighteen inches deep. The furnace is outside, and the flues are carried under the centre of the bath. In the hazy light of this room may be seen the perspiring Chinamen disporting themselves in the shallow water, until, when cleansed to their satisfaction, they return to the cooling room, there to regale themselves with cups of tea and pipes of tobacco. All classes of Chinese frequent these bathing establishments. Mr. Ellis, in his "Journal of the Embassy to China (1816)," says of this Chinese cleansing apparatus, that it is "disgusting," and "worthy of this nasty nation;" but says Mr. Erasmus Wilson, "What would Mr. Ellis say of a country in which there existed no *cleansing apparatus* whatever? For example, his own." Thanks, however, to Mr. Urquhart and Dr. Barter, this home question has now lost something of its point and unpleasantness.

Mr. Ellis on Chinese Baths.

Japanese Baths.

In Japan the bathing place is usually built at the back of the gardens of private dwellings, and is got ready

every evening, as the Japanese regard it as a necessary refreshment after the fatigues of the day. Their bath is either a vapour or warm water one, sometimes both. The sweating house is nearly nine feet square and about six feet in height, besides having the floor raised three feet from the ground. The floor is of planed laths, set a few inches apart to let the vapour in, and the water out. Two shutters, one on each side, are provided to let out the superfluous vapour, and there is a small door by which the bather creeps in. The empty space between the floor and the ground is walled in to prevent the escape of vapour by the sides. The furnace stands out towards the yard, but under the sweating house is the boiler with the necessary water, to which is added odoriferous plants. There are placed near him two tubs, one of warm and one of cold water, that he may wash himself after the sweating process.

Baths in New Zealand.

The sweating house of the New Zealander is a round hole dug in the ground, into which hot stones are thrown, and the patient being let down and covered up, remains in the hole until he has perspired enough for his purpose, when he is taken out and plunged into a stream of water.

Bathing, a human instinct.

In all these different constructions and modes of operation, however primitive, the same great principle predominates, to flush out the pores of the skin to an extent which would be impossible in a mere warm-water bath. None of the other forms of bath described here come up in magnificence or efficency to those of Greece and Rome. Nevertheless, rude and imperfect as some of them are, they are a benefit, and indicate a natural instinct in the human race, under whatever savage or civilized condition it may exist, to bathe and be clean. Erasmus Wilson has some remarks so *apropos* on this point, in his work entitled the "Eastern, or Turkish Bath," that I cannot refrain from citing them.

"The bath," he says, "is an animal instinct, and, *par excellence*, a human instinct; it is as much a necessity of our nature as drink. We drink because we thirst—*an interior sense.* We bathe because water, the material of drink, is a desire of the outward man—*an exterior sense.* An animal, whether beast or bird, pasturing or straying near a limpid stream, first satisfies the inward sense, and then delights the outward sense. A man, be he savage or civilized, can no more resist the gratification of bathing his wearied limbs in a warm transparent pool than he can resist the cup of water when athirst. Instinct bids him bathe and be clean. To inquire—Who invented the act of drinking? would be as reasonable as to ask—Who invented the bath?"

Revival of Turkish Baths on the Continent.

On the continent of Europe the revival of the Turkish Bath was hailed with enthusiasm, and is known in some parts of Germany as the Irish Bath—doubtless arising from its introduction to that country from Ireland. It has been introduced with uniform, if not with equal success, into all parts of the world. Wherever the Anglo-Saxon race is established, the hot-air bath is a necessity. In the United States and Canada there are few important cities that do not possess these Thermæ. They have likewise been erected in the large towns of Australia, New Zealand, and other English colonies.

Improved Turkish Bath.

That which is now offered to the attention of the English people is superior to the others already described. "It is the Roman Bath without the anointing, and the Turkish Bath without its undue moisture." Anointing is no longer required for the purposes for which the Romans used it, and the moisture of the Turkish and other baths has been found to be an injurious imperfection. The "improved Turkish Bath" is one of pure atmospheric air properly heated, having its due proportion of oxygen,

making respiration pleasant, oxydation of the blood perfect, evaporation and depuration complete, and exalting the tonic influence of the subsequent cold appliances. "Under the influence of pure heated air," says Dr. Barter, "free from visible steam, and continuously renewed by a perfect system of ventilation, no one feels the distress which so frequently accompanies other heating appliances, for while perspiration is more fully obtained, the pulse is seldom found to rise much above its normal standard." This is the great feature of the Improved Turkish Bath, and one on which its perfect safety and curative property will be found mainly to depend.

The saturation of the atmosphere with moisture interferes with the free transpiration from the lungs and skin, and thus impedes the process which nature provides for cooling the body. Steam fills the space which vital air should occupy, and thus from both causes nature is placed in a difficulty in regard to the heat. Nature did not intend man to live in an atmosphere of vapour or water. Pure air is man's proper medium; and if it be pure and dry it can never do harm.

It is a matter of experience that when a feeling of discomfort occurs in a season of heat, it is always in proportion to the amount of moisture present in the atmosphere. When the thermometer stands at 60 the atmosphere, if dry, is agreeable, but if saturated with moisture, it will be raw and cold. If the atmosphere be at 80 and dry it will not be oppressive, whereas if moisture be present it will be very disagreeable. In tropical countries the greatest discomfort from heat is experienced when the atmosphere is loaded with moisture. Thus higher temperatures can be borne with less oppression in dry inland regions than on the sea coast or along the courses of large rivers.

If, then, a person wants to command perspiration without distress or discomfort; if he desire to produce an impression of temperature on the surface without injury to the system; if it be his object to prepare the body for atmospheric changes with impunity—use the improved Turkish Bath.

When a cold bath ought not to be taken.

The extensive use of the hot-air bath has served to explode the nonsense entertained about the danger of bathing while the body is hot and perspiring. There are, indeed, conditions of body in which a cold bath ought not to be taken:—

1st. When the body is chilly.

2nd. When it is exhausted.

3rd. When the stomach is full of undigested food.

4th. When the respiration is unduly disturbed by over-exhaustion.

Warmth.

But in respect of mere heat of body there cannot be too much; if not glowing or perspiring, it ought always to be comfortably warm, prior to cold douching, or immersion. Warmth, preparatory to the cold morning ablution, is secured by the heat of the bed. At other times different means may be adopted; the most natural method is exercise—a smart walk, the gymnasium, or an athletic game will serve the purpose very well. But for the lame, the delicate, and all persons who from any cause are prevented from raising the temperature of the body by the expenditure of nervous force, recourse must be had to passive means.

Necessity for improved Turkish Baths.

That there was a necessity for a more perfect method of bathing than existed before the introduction of the Turkish system, is patent from the rapid progress the latter has made, for it is the only mode capable of supplying this necessity, and were it brought within the reach of the working classes, we should soon see gratifying results in

the cleanliness, and health superinduced. The Legislature accomplished a most beneficial work in passing the Baths and Washhouses Act, resulting as it did in a great advancement of personal purity.

Swimming Baths.

Swimming baths are popular, and have proved a great sanitary advantage, and the most lucrative department of such institutions. No one who witnesses the fine athletic forms of the men who frequent these plunge or swimming baths can doubt the benefit which accrue from their use to the youth of the working classes, with whom it is the only exercise obtainable apart from that which belongs to their daily labour, which too often strengthens one part of the body at the expense of the other members of it. The warm baths have proved a failure, financially, so that as far as a bath for cleansing purposes is concerned, there is decided need for reform, especially when they can be made profitable. This can in no way be so effectually applied as by the introduction of the Turkish Bath, or such a modified form of it as I shall describe in an ensuing chapter. All agree who have investigated and given the subject impartial consideration, that neither legislation nor public nor private enterprise could be employed to better advantage than in supplying the poor with a cheap Hot-air Bath, one of the greatest sanitary wants of the age.

Dr. Sheppard's opinion.

It may not be out of place here to introduce a letter which I recently received from Dr. E. Sheppard, medical superintendent of the Middlesex County Lunatic Asylum, Colney Hatch, who has given much attention to the subject.

"DEAR SIR,—Knowing you are one of the Local Sanitary Board for Paddington, and that it is in contemplation to erect baths and washhouses for the district, I venture to suggest to you the importance of combining therein the hot-air or vapour bath. With your experience of these great adjuncts to health, it is not necessary to point out the

immense advantage to the community of such a combination. But I may mention a fact which may have some influence upon your colleagues. A large number of my patients quitting the asylum, restored both in body and mind, have only one regret in doing so, and that is that they are relinquishing one of those luxurious means which has largely helped to their recovery. 'We cannot afford,' they say, 'to pay 1s. 6d. a week for a Turkish Bath.' Could not some means be devised for bringing this great eliminator of blood-poison within the range of the lower orders? The matter is well worthy of consideration, and you would confer an inestimable boon upon the public if your board would initiate the same in your district."

CHAPTER V.

Hot Air, versus Warm-Water Baths.

Turkish Baths for the working classes.

ALTHOUGH the Hot-air or Turkish Bath has, as I have shown in the previous chapter, rapidly grown into public favour, it has hitherto been mainly confined to the middle and upper ranks of society. Few efforts have as yet been made to bring it within the reach of the lower classes, and the only Towns which have adopted the Turkish Bath under the Act are Ashton-under-Lyne, Bradford, Bury, Cardiff, Hanley, Kidderminster, and Stalybridge, notwithstanding that the poor, who are ill-clad, worse fed, and, as is too often the case, compelled to live in badly ventilated and densely crowded houses, with scarcely any accommodation for washing their clothing or cleansing their bodies, are more in want of the boon than the other ranks of society. Surely there can be no valid reason why a blessing so real, so urgently required, and of such proved utility should not be made available for the working man and his family.

Turkish Bath and warm lavatory v. ordinary warm baths.

In this chapter I propose to discuss the comparative merits of the Turkish Bath the warm lavatory system, and the warm-water bathing provided in the baths and washhouses for cleansing the bodies of the labouring classes. I shall base my arguments upon physiological grounds, trusting that I may be fortunate enough to convince my readers that those adduced are sound.

There is among the crowded populations of towns and cities, a constant tendency to physical deterioration—a perpetual gravitation of the standard of vitality to a lower level—a depressing influence continually at work to impair physical organization and stunt mental growth; hence the necessity for a counteracting power to arrest this downward course, by operating on the causes whence it proceeds. Now, one of the most valuable results of sound sanitary knowledge, is a thorough conviction of the preventibility in a large degree of the vast mass of diseased condition which physically and mentally depresses the working population; in short, a conviction that the health of a community is in proportion to its cleanliness. Physical deterioration.

In deciding therefore the character of the bath best adapted to promote the comfort, health, and welfare of the people, we must be guided solely by the qualities it may inherently possess as a prophylactic agent. That the merits of the Hot-air Baths in this respect are such as to admit of no rivalry, I think I can submit sufficient evidence to prove. Merits of the hot-air bath.

The more enlightened portion of the public is fully alive to the value of the Turkish Bath, and pretty nearly everything that private speculation can do to place it at the service of the people is being done. It only remains for parochial enterprise to finish the good work, by adding it to their Baths and Washhouses where they exist, and establishing them conjointly where they do not.

Let us look for a moment at the condition, occupation, and circumstances of the working man. He is subject to many disadvantages. Although, living as he does from hand to mouth, can least afford to be laid up, his position is such that he is the most exposed to the attacks of disease. His calling, residence, and mode of

Effects of moist and dry air.

Drs. Todd and Bowman, and Dr. Carpenter. The former tell us that all the effects of excessive temperature on the body are much more apparent with a *moist* than with a *dry* atmosphere; because, in the case of a dry atmosphere, a greater amount of evaporation takes place, and hence a greater quantity of heat is removed from the skin. It would be impossible without inconvenience to sustain a vapour bath at a temperature of 110° to 120° for more than ten minutes, whereas, it has been proved, the body may be without danger exposed for the same time to a *dry* temperature twice as high, or more.* Erasmus Wilson, in his work "On the Management of the Skin," speaks of the influence of a moist atmosphere, at an elevated temperature, on the human system. I may adduce the effects occasioned to a gentleman who recently visited the Baths of Nero, near Pozzuoli, the ancient Posidianæ. To reach the bath, he had to pass along a narrow winding passage of about 120 yards in length, and seven feet high, by about three in breadth. A little within the mouth of the passage, the temperature was 104° in the upper stratum of the atmosphere, and 91° near the ground; further on, the air was filled with a dense vapour, of a temperature of 118° above,

* The experiments related by Drs. Watson and Carpenter are truly wonderful. One girl remained in an oven for ten minutes, with the thermometer at 280 deg.; another for five minutes, while it rose to 325 deg., or 113 deg. above the boiling point of water. Others remained in while eggs were roasted quite hard in twenty minutes, and beefsteaks were dressed in thirty-three minutes, and when air was blown upon the meat by means of bellows it was sufficiently cooked in thirteen minutes. In all these experiments it was found that the animal heat, as ascertained by thermometers placed under the tongue, was scarcely increased at all, and none of the experimenters were in the smallest way injured. We are told also by Dr. Carpenter, that Chabert, called "the Fire King," was in the habit of entering an oven, the temperature of which was from 400 to 600 deg.

and 111° below; and over the bath it was 122°, the heat of the spring being 185°. After proceeding for about one-third the length of the passage, he began to feel a sense of oppression and discomfort, his pulse rising from 70 to 90 beats in the minute. A short distance further, the oppression increased, his breathing became rapid and panting, and he was under the necessity of stooping his head frequently to the earth, in order to obtain a chestful of air of a less suffocating temperature. His skin at this time was bathed in a profuse perspiration, his head throbbing, and his pulse beating 120 in a minute. Continuing his progress, the sensation of suffocation became insupportable; his head felt as though it would burst; his pulse was so rapid as to defy calculation; he was exhausted, and nearly unconscious, and it required all his remaining power to enable him to hurry back to the open air. On reaching the mouth of the passage, he staggered, and nearly fainted, and was very uncomfortable until relieved by a bleeding from the nose. During the rest of the day his pulse remained at 100; he had uneasy sensations over the surface of the body, and did not recover until after a night's repose. The same gentleman bore a temperature of 176° in dry air without inconvenience. Dr. Carpenter says that a heated atmosphere, loaded with moisture, interferes with the cooling influence of perspiration, and by the heat of the body pulsation becomes injuriously augmented; and, again, that a moist-heated atmosphere obstructs the elimination of excrementitious matters from the blood through the lungs and skin.

Dr. Carpenter on heated atmosphere.

With the hot-air bath, the immediate action on the skin is at once felt. Slight perspiration is induced without bodily fatigue or relaxation, whilst a genial, exhilarating influence is diffused over the whole system. In this way the skin is assisted, and not obstructed, in the perform-

ance of its vital functions, while the whole of the bodily organism is benefited, both from a medical and sanitary point of view.

Advantages of hot-air bath.

Besides, properly administered, the hot-air bath has the singular advantage of combining with its own peculiar merits all that is valuable in water bathing, because practically it is a hot-air, a warm-water, and a cold-water bath—the virtues of all three combined in one—hot air being the medium for all forms of water applications. It is also equally applicable to the healthy and the infirm; neither youth nor age circumscribes its utility; and there are few individuals whose constitutional peculiarities or idiosyncrasies would render its action in their case at all dubious. The temperature for all its applications can be modified so as not to be injurious to the most delicate and susceptible constitution. It is this singularly happy characteristic which renders the hot-air bath so suited to become, as regards the additional requirements of society, an institution for all classes.

There is, however, a very prevalent opinion that the hot-air bath is not so applicable to the working classes as to those above them, on account of its supposed weakening effects; an expenditure which the former, subjected as they are to the daily waste of bodily tissues, can ill afford. Now, there can be no stronger counter proof to this than the fact that the sick become strong and healthy from its use, and that those who indulge in it after a hard and fatiguing day's labour feel refreshed and invigorated on coming out of it.

Mrs. Donovan's opinion.

Mrs. Donovan, in her little work, "Illness: its Cause and Cure," says: "We confidently promise our readers they will lose nothing in the bath that it would be beneficial to retain, and that, whatever may be their state of health, its certain tendency is to make them stronger,

more vigorous, and less liable to disease." Dr. Andrew Combe says: "The Turkish Bath increases, instead of exhausting, the strength, and by exciting the vital action of the skin gives rise to a power of reaction which enables the body to resist the cold much better than before." Mr. Urquhart is of the same opinion. He asks, "Is extreme perspiration weakening? Is very profuse perspiration weakening? because these objections are raised by people who are ignorant. Assuredly not. No substance goes out from you by perspiration except the noxious matter that you ought to get rid of." Dr. A. Combe's opinion.

"If you go into the bath heavy and jaded," says Dr. Brereton (proprietor of a magnificent Turkish Bath in Sydney, Australia), "even though you have been up and working all night, you come out refreshed; if from grief or care you are desponding when you enter, your heart is lightened before you leave, for it is impossible to resist the exhilarating effects of oxygen: if, on the other hand, from the reaction of over-excitement, you are restless and unable to sleep, the bath becomes a narcotic. It is only the experienced physician who knows how many forms of disease originate in these so common, but now so easily obviated causes." "Thus the bath," as Dr. Thudichum, one of the physicians of St. Thomas's Hospital, observes, "is an engine for the production and maintenance of health." I think, therefore, from the evidence on this point, that we may rely with some confidence on the conclusion indicated by common sense, namely, that which tends with such potency to restore and maintain health, cannot possibly have, at the very same time, a directly contrary effect. Dr. Brereton's opinion.

If the admitted action of the bath, properly employed, indubitably is to preserve health—as all competent authorities unanimously testify; surely it is needless to occupy Bath preserves health.

time in proving so self-evident a proposition that such action is wholly incompatible with another diametrically the reverse, with imputed tendencies to weaken and impair vital functions! The two actions or tendencies could not co-exist. It would be absurd beyond expression to suppose, that at the same time the bath could weaken and strengthen, preserve health and impair it, operate as a debilitating drain on vitality, and prove a source of recuperative energy and enjoyment. Yet this preposterous conclusion would be imposed on us by those who, unacquainted with the subject, allow prejudice to override reason, and without judgment affirm that the bath process has a debilitating effect.

Value of Turkish Baths to Farm Labourers.

In confirmation of this view, and in further proof of the value of the bath to the working classes, I may here refer to the experience of a gentleman who is an extensive agriculturist in Ireland, and whose knowledge of its merits induced him to construct one on his farm for the benefit of his stock, and ultimately it was made use of for his farm labourers. His remarks are:—"At first my labourers declined to go in, on the ground that they had lost enough by work, and could not stand any more perspiration. One of them broke down on a hot day when mowing. I said to him, 'Now you are done for a week or so, you may as well try the bath.' He went in and had a vigorous shampooing. *The next day he took the lead in the meadow.* That night the space could not accommodate the applicants. The preservation of health among farm labourers is no small matter. My farm servants often work willingly through wet, windy days, well knowing that an hour in the hot room will send them home in dry clothes. This habit gives them also the power of enduring cold. Many have dispensed with flannel, even some at advanced ages. All find themselves

in better health, freer from rheumatic pains, and firmer in muscle."

Turkish Baths in connection with baths and wash-houses.

But even suppose the hot-air bath was as weakening as it is erroneously imagined to be, the objection has no force, it forms no part of my proposition to be always giving a working man a sweating bath. What I advocate is the addition of the Turkish Bath to the baths and washhouses which exist or may exist under the Act of Parliament which sanctions their establishment, as an invaluable sanitary agent, to which the working classes would soon learn to resort in incipient disorders, instead of having recourse to nostrums and quack remedies, which, if they do no actual harm, allow a malady to become so inveterate as to throw the sufferer into the hospital, and perhaps his family upon the parish. For all ordinary purposes of ablution, a modification of the Turkish Bath in the form of a warm lavatory, at a temperature of from 110° to 115° is suggested, in which the bather is supplied with plenty of hot and cold water, so that, if desirous, he can graduate his bath to suit himself, and finish off with a tepid or cold spray bath. By this means he obtains a thorough wash, in absolute comfort, and free from any risk of taking cold. No doubt the first sensation of warmth imparted by the heated water is very agreeable, but this soon subsides with the falling temperature of the bath, and is followed by an acute sense of discomfort which can only be relieved by a renewed supply of water at a higher temperature, which process must be continued so long as the bather remains in the water; and such repeated changes of temperature are frequently attended with unpleasant consequences. Besides, a bath of this kind has a decided tendency to induce relaxation and lassitude, rendering the system highly susceptible to the influence of cold, a state of

Bathers can regulate the temperature.

things which working men, less than any others, can support.

Disadvantages of the Warm Water Bath.

Let us for a moment glance at some of the disadvantages of taking a warm bath. It can be had for two pence, which is of course a great boon in a pecuniary point of view; but a person goes to take a warm bath say, on a cold, wet, disagreeable night in winter; he is shown into a room scarcely large enough for him to turn round in, at a temperature perhaps of 50°; here he undresses himself, and gets into a bath containing about fifty gallons of water at a temperature of from 98° to 100°. This is very grateful to the poorly fed body, and he feels inclined to prolong his enjoyment; but the time arrives for him to get out, when, during the operation of drying and dressing himself he is again exposed to a temperature of 50°! His system being considerably relaxed by being twenty minutes in warm water, he is really less able to endure the cold than before he bathed. The consequence is that he shivers and shakes while dressing, and goes into the wet chilly air trembling with cold. Returning home thoroughly uncomfortable, and with a rooted antipathy to the bath, if nothing worse occur. Every reasonable person must admit that no bath is preferable to one under such conditions; therefore, the cheap warm bath, eight months in the year, practically becomes a dead letter.

The disadvantages attending the warm bath for men, are still more marked in the case of women, from their more delicate organization, their sedentary habits, and their readier susceptibility to climatic influences. This may account in a measure for the difficulty experienced by Mrs. Donovan and other benevolent ladies in prevailing upon them to submit to periodical ablutions; in fact, the sudden alternations of temperature to which the hot water bath exposes them are extremely

dangerous, and have been known to prove fatal. There is another reason no less potent with the female sex for not taking advantage of the bath, viz., the supposition that, from the nature of their occupations, and from not perspiring so freely as men, skin cleansing is not so necessary—an opinion as prejudicial as it is fallacious. If there could be any degree of comparison in a matter of such necessity, I would say that women require the purification obtained by the bath even more than men, both on account of their sedentary habits and occupations, and the natural peculiarity of their organizations. Nor is a proper bath less beneficial than grateful to women; and when their prejudices against bathing are removed, they become its ardent admirers. Not only have the fair sex found it advantageous with reference to those ailments and idiosyncrasies to which they are subject, but a great enhancer and perpetuator of their good looks, and we know of no means so effectual for rendering the complexion more delicate and brilliant. In countries where the Turkish Bath is a national institution, the hair of the women is peculiarly beautiful and luxuriant.

Comforts of the hot-air bath for the working man.

We have pourtrayed the working man presenting himself for a warm bath; now let us compare the warm lavatory process. The same individual, under the same conditions, presents himself at the lavatory. After undressing, he is introduced to a room having a temperature of 110° to 115°, and is provided with soap, towels, hair-brush, &c. The warm and genial atmosphere is grateful to him, so that he can give himself a thorough good scrubbing with an ease and comfort which none can understand but those who have experienced them. While in this room his system is prepared for the application of colder water, say at 75° or 80°,

or as his inclination suggests. This causes a reaction, and produces a contraction of the pores of the skin. He now takes his towels, returns to the room in which he left his clothes, and, having dressed, walks forth into the open air with a perfect feeling of comfort, reaches home warm, invigorated, clean, and enchanted with the bath, saying, in his own mind, "I will repeat the operation once or twice a week."

Hot-air baths can be used at all seasons.

This bath can be used all the year round with comfort and benefit, and presents a striking contrast to the warm water process. In fact, there are virtually but four months in the year when a warm bath can be taken with comfort; so that in this respect alone the system of the warm lavatory possesses an advantage which, from a pecuniary point of view, would warrant its introduction into all baths and washhouses. During the winter months, in consequence of the low temperature, the skin is lethargic, and deleterious substances are retained within the system; or, if thrown on to the surface of the skin, they are re-absorbed, hence, at that season of the year, more than at any other, frequent and thorough bathing is necessary; and, to be effective, it must be of a kind to meet the requirements of the case. The cuticle must be softened, and the whole skin gently stimulated into action by hot air, before the impurities can be removed by washing. In summer, the skin is much more active, and the deleterious substances retained are less in quantity; consequently, bathing can be dispensed with less danger and inconvenience than in winter; and yet, because the baths provided are so unsuitable, the working man is precluded from bathing at the very season of the year when it is most required! Within my own experience, the upper and middle classes use the Turkish Bath much more in the winter season than

in the summer; and it is only reasonable to suppose that, if equal facilities were offered to the working classes, who, from the nature of their employment, need the bath more than any other class, the same result would be obtained.

Fallacy of bathing when the body is hot.

It is urged in many quarters that cold bathing while the body is hot is injurious; indeed it is very commonly supposed, even by medical men, that such a practice, when the body is considerably heated either by exercise or other exertion, is highly dangerous; and accordingly it is a general custom with bathers who find themselves overheated to wait until they become cool before they plunge or bathe in cold or even cool water.

Years ago Sir Arthur Clarke, in his essay on bathing, examined the objection and showed its fallacy; instancing, in support of his opinion, the fact "that in Dublin it was common, in his time, for workmen in glass-houses and other manufactories near the Liffey, exposed to extraordinary degrees of temperature, and enduring for some time the consuming heat of the furnaces, to plunge into the river—a practice which they found in no way injurious, but preserved their health." Edgar Sheppard, M.D., referring to the same notion, says "Now, wishing in sober seriousness to point out to English men and women of the upper and middle classes what they are really doing to lay the foundations of disease in their young families, let us accompany them to one of our fashionable seaside watering places. Hither come the young and delicate to drink in health from the breezes, and new life from the waters of the sea. Down to the bathing machines day by day, in all weathers alike, under care of father and mother, or governess, or nurse, troop these poor creatures, to be soused by some remorseless old mermaid draped in blue serge. The cruel and ignorant, but well-meant

Dr. Sheppard on Sea bathing.

injunctions of parents are complied with, each little bather being thoroughly cooled before he is subjected to that which will make him shiver for hours afterwards. In other words, instead of acquiring caloric, wherewith to meet the depressing shock of cold water, he is made to part with as much caloric as possible, because tradition has written with her iron fingers upon the nursery tablets, *Thou shalt not bathe when thou art hot.* What is the result? See it immediately in the chattering teeth, the blanched cheeks and fingers, the numbed feet of the young bathers, as they walk for hours afterwards upon the beach or esplanade—the strongest, perhaps, successfully, the weakest unsuccessfully—to restore the power of vigorous circulation. Every internal organ has been congested for varying periods, and the skin, which, by a well-regulated bath should be brought into the highest play, has been shrivelled up into dry and functionless parchment. See the result afterwards on the return home, in chlorotic looks, in constipated bowels, in susceptibility of cold, in general langour, in vitiated appetite, in scurfy and unsecreting skin." This is no exaggerated picture. This is actually and absolutely the bath of the great majority of the upper and middle classes during a few months every summer. Where the means and opportunities of getting to the seaside do not present themselves, the boys of each family resort to rivers and ponds and observe the same rules under the strictest parental injunction. And when some unlucky youth returns home shivering and complaining of pain and langour — when the seeds of his deadly sowing are beginning to crop up in pleurisy, or pneumonia, or peritonitis—he is reproached with not having followed the advice given him, *to cool himself thoroughly before getting into the water.* Poor boy! he followed it too

Bathing in rivers and ponds.

closely, and thereby perilled his young life. Had he plunged into the stream when hot, he would have treasured up for himself boundless health and vigour. We have witnessed this over and over again in our younger days. It is only where the use of the Turkish Bath is known that there is a chance of society being rescued from the perilous tradition to which we have first directed the attention of our readers.

Time, an objection to Turkish Baths for labouring classes.

There is another objection urged against the availability of the Turkish Bath for the labouring classes, viz., that it takes too much time—that the working man cannot afford to spend from an hour and a half to two hours in the bath. This objection had in the onset presented itself very strongly to my mind, but considering that, in the case of the artizan, the time may be reduced to the same period as in taking a warm bath, all those accessories and accompaniments which mainly consume the time in taking the bath can be dispensed with, without in the least affecting its efficacy. In Turkey and other Eastern countries where the use of the bath is both a habit and a religious duty among all grades, but especially so with the working classes, the latter do not occupy more time in bathing than our London working men could well spare for that purpose once or twice a week, were they so disposed. Dr. Millingen, Physician to the Sultan, informs us that "the working classes among the Turks—for such classes (though in England you appear to ignore it) do exist, and are as numerous and fully more hard-working than elsewhere—know of no other means of prevention, on feeling indisposed, but the bath. . . . . After over-exertion, again, the bath is had recourse to. . . . . If a Moslem enters the bath for the object of ablution, half an hour is amply sufficient. . . . . Have, forsooth, the English no

holidays? Do they never find time for coffee-houses, taverns, and gin-palaces?"

Without insisting on the fact that the working classes do spend much time in taverns and public-houses, I doubt if it is the question of time which deters them from the bath, but the discomfort attending it. If warm lavatories or Turkish Baths were added to the Baths and Wash-houses, this superior method of bathing would induce the labouring poor to take a sweating bath occasionally, thus procuring free perspiration counteracting the influence of their unhealthy occupations, and preventing an incredible amount of disease and consequent destitution. The whole process need not occupy more than an hour.*

Shampooing not a necessary process.

It is often asserted that the shampooing process is a necessary accompaniment of the Turkish Bath, and to leave it out would be to do away with an essential part of the system; such, however, is not the case. That it is an operation of great sanitary value, and, under certain conditions, highly beneficial, cannot be denied. For instance, where from infirmity or other cause there is an indisposition or inability to take exercise, judicious, scientific shampooing may in a measure supply the deficiency. It also tends to fortify the system where there is enervation induced by indolence or luxurious living. Mr. Urquhart accounts for the fine *physique* of the chiefs of the Sandwich Islands by the fact that, although sunk in sloth and immorality, they are in the constant habit of being shampooed after every regular meal, and oftener if desirable or expedient. In the case of English workmen there is little if any need for such fortification. The artizan is generally subject to far different influences than those arising from too little work and too much food; his daily labour necessitates bodily exer-

* See Medical Chapter.

tion sufficient without having resort to artificial means to keep up the tone of the system. It would only be necessary to resort to the shampooing process in case of sickness. The beneficial effects of warm lavatories or the Turkish Bath can be secured at a small cost if divested of the luxuries and superfluities.

It is from a consideration of these facts, based as they are on medical science and extensive experience, that I have come to the conclusion, that for all purposes, either of a sanitary or recreative nature, this form of bath is superior to the ordinary warm water one. Hence, I consider that the former is peculiarly adapted to meet the requirements of the working population and ought in consequence to become a national institution, the people's bath *par excellence.*

Turkish Bath will elevate the working classes.

We have thus seen that, not only is the Turkish Bath the most perfect means of ablution, and, consequently, of cleanliness, but also one of the most powerful hygienic and prophylactic agencies that we know of; and that, as a natural result, it affords a most potent means of acting upon the unfavourable conditions by which the artizan and labouring classes are surrounded, and so of elevating them physically and morally. Mrs. Donovan, one of the most active and disinterested pioneers of this movement in Ireland, thus speaks in reference to the Turkish Bath for the poor of Cork: "It is our pleasing duty to record the success of an experiment, the adoption of which throughout the land would act as a mighty lever to elevate the masses, and a grand educational agency to enlighten their minds as to the nature and necessities of their bodies. Filthy habits and ignorance, the grand and inseparable correlates of disease and immorality, have at last found an antagonist fit to grapple with their giant power. Legislation and Philanthrophy have hitherto trained and

cultivated the effect, while no scheme of sufficient thoroughness has been propounded to deal with the cause. We believe this desideratum is supplied by the experience of our indomitable friends in Cork. If it is desired to improve the individual, operate upon his circumstances, especially his physical organism—that nearest relation to the soul immortal, the intellectual faculties and moral feeling—cleanse his body without and within, and the purposes of life will at once wear a new aspect to him. . . . . No person has a right to live in filth, engender disease, and endanger the health of the neighbourhood. Nor has society any right to allow it. They are the worst enemies of the public weal who would obstruct or stand aloof from such a work as this."

H.M's Inspector of Schools. testimony.

Her Majesty's Inspector, in his report of St. Patrick's Reformatory School, Upton, Cork, says: "The Turkish Bath also is a valuable adjunct, in a sanitary point of view; and considering the class from which the inmates are derived, and the condition in which they are admitted, often covered with skin-disease, I would wish to see such an appliance in every similar establishment." Dr. Cummins, of Cork, author of a pamphlet on the Turkish Bath, thus writes: "The bath is largely made available by the lower orders in Cork. . . . . I can also speak in favour of its effect upon their general habits and constitutions; although it is now twelve years since my pamphlet was published, increased experience has confirmed almost everything it contains, and has made me value it more and more."

Recommendations.

Such then, is the general testimony in favour of the Turkish Bath, of the sanative properties it possesses, and its adaptability to meet the ablutionary wants of the people at large. That it offers advantages attainable by no other

means is admitted by those who, having tested its merits, are best acquainted with their value; assuredly the most direct, effective, and economical way to promote the health, comfort, and welfare of our industrial population would be to construct warm lavatories and hot-air chambers in connection with the public baths that are already established. This would involve little cost, be a good commencement towards having proper baths erected in every dispensary district, and prove an invaluable boon to the people. In an address to the London Medical Society, Dr. Thudichum said respecting the bath: "A boon to mankind, your nation, and every individual in this room, hot air, combined with cold affusions, with shampooing, with exposure of the body to light and air, await your approval as medical agents, and your application to those who are under your care. I hope you will seize the opportunity, and secure for this society a share in the merit, similar to that of which Hippocrates was proud, of having introduced the bath in the treatment of disease."

Dr. Thudichum's testimony.

When we consider that these observations, so justly eulogistic of the therapeutic virtues of the bath, are equally true of its invaluable merits as a powerful prophylactic agent in repelling the approaches of disease, surely it cannot be held consistent with the practical intelligence and philanthropic aims of our day, that so potent, so genial, so economical, and so salutary an agent for good should be overlooked or neglected by those who are charged with the responsibility of attending to the sanitary condition of the people. Health is the working man's capital, in the preservation of which society at large is deeply interested; and by what better means can health be protected than by the prevention of disease? There is little wisdom in "locking the stable door when the steed

The Bath as a curative agent

has been stolen." Yet something akin to this guides our municipal and parochial affairs.

Turkish Bath for the people at Notting Hill.

I have endeavoured to set forth in as brief a manner as possible the advantages which would result from the addition of warm lavatories, and hot-air baths in connection with public baths and washhouses. The arguments here maintained are not the issue of mere theorizing and idle speculation, but the result of the study and experience of years. I am thoroughly convinced of the necessity of this form of bath as a means of improving the sanitary condition of the labouring population, and have been for years endeavouring to impress the public mind with its importance. It was with this aim that I, at considerable inconvenience, opened a Turkish Bath at "The Ragged Castle and Workman's Hall," Notting Hill, in connection with an Hydropathic Dispensary, twelve years ago. Although this bath was discontinued at the end of eighteen months, on account of fear being entertained that the flue would set fire to the building, and the usual prejudice and opposition to a new thing, nevertheless, the results were such as to convince me more than ever of the incalculable benefits that would accrue from the establishment of commodious Turkish Baths adapted to the wants and means of artizans and labourers. The facts of this case are open to investigation, and I am sure that any one who will take the trouble to inquire into them will come to the conclusion that we could not confer a greater boon on the working population, and the community at large, than by establishing such baths, both for sanitary and medical purposes.

Summary and Reason.

To sum up briefly, I advocate the use of the hot-air bath, or the lavatory, a modification of it, as admirably fitted to be a bath for the people, principally for the following reasons :—

Because, as a general rule, it is congenial to the constitutional peculiarities of all mankind, and therefore capable of beneficial uses, without any fear of such injurious consequences as too frequently follow from water bathing.

Because it does not debilitate or weaken in any way, but exercises a restorative, strengthening, invigorating influence over the wearied body, soothes nervous irritability, and imparts a buoyant, healthful influence to the whole system, with great pleasurable feeling, promptitude, and certainty.

And, finally, because, independent of its acknowledged therapeutic and prophylactic merits in the treatment of disease, it is the very best agent that has yet been discovered for the preservation of health. Its habitual use fortifies the system to repel deleterious influences that are always more or less active in propagating disease—such as the baneful influences arising from malaria, generated by defective drainage or sewerage, from contagious poisons and atmospheric impurity, as well as from more ordinary effects. A knowledge of these facts will account for the confidence here expressed in the hot-air bath nor will any regard it as other than the expression of a genuine feeling.

Roman Thermæ.

This thermo-electrical influence, combined with the gymnastics of the Roman Thermæ, made the Roman soldiers great in strength and endurance, whether on the march or in the battle-field. Nothing can tend more to develop muscle, expand the frame, and promote the general strength, so as to put the man in the best condition for running, fighting, wrestling, or any other form of physical exertion. "Wind, limb" and general condition depend on the quality of the blood, and that upon the rapidity with which it is decarbonized, oxygenized, and the watery portions of it changed, all which processes are

Turkish Baths promotes strength.

facilitated by the bath in a remarkable degree, owing to its action upon the blood through the skin. The entrance of the air through the millions of opened pores, signally aids the action of the heart and lungs, increasing the "wind" power, so valuable to the athlete.

These facts are fully understood by the horse trainer, who now directs much of his attention to keeping the animal's skin and wind in good order by means of the bath, the use of which supersedes the necessity for excessive exercise, so sparing the vitality of both horse and jockey.

Pugilists also, however objectionable their calling, show their sagacity by employing the bath in their training, as likewise do pedestrians, all bearing testimony to the fact that the thermo-electrical and gymnastic powers of the bath are appreciated by those most interested, and from their experience, most competent to judge.

Effects of the Turkish Bath on the Army.

The health and muscular development of our soldiers are of such importance to the nation, that it is agreeable to find that a beginning has been made to bring the army under the influence of the Thermæ as part of their training. It will promote the psycho-physical health and athletic energy of the men, and so make them better fit for the fatigues and energies of war, as well as elevate their morals, by preserving them from certain enervating and ruinous habits, the result of *ennui* and idleness. It would prevent the necessity of Acts of Parliament, authorizing the inspection of certain classes, whose contact with soldiers leads to the decimation of the army by preventible diseases.

Condition.

In truth, for the promotion of personal cleanliness, imparting buoyant sensations, and keeping the bodies of men and animals in that state known as *condition*—a state wherein there is a healthy balance of the nutritive functions, an exact equipoise of the solids and fluids, and

of the fatty and muscular tissues, together with a just equilibrium of the supply and waste—the Turkish Bath is unrivalled. As a means of preserving health amongst the pent-up inhabitants of towns, who, generally speaking, do not have air and exercise sufficient, either in quantity or quality, to properly decarbonize or oxygenize the blood, its value is beyond calculation. It does much to compensate for deficiency of air and exercise, giving appetite strengthening digestion, and imparting elasticity to mind and body. It affects the system more powerfully than any kind of manual exercise, or gymnastic or sport, even as to the points wherein the excellence of these consists, and can be frequently enjoyed when these cannot.

Health is preserved.

Disease is prevented by hardening the body against the effects of variations and vicissitudes of temperature, which is of incalculable advantage in a climate so variable as ours; also, by imparting power to resist miasmatic and zymotic influences, and by strengthening the system against the aberrations of nutrition, and the prolific train of evils that follow the disturbance and derangement of the nutritive functions; and, furthermore, by correcting, eradicating, or keeping in subjection, inherited predispositions to disease.

Disease prevented.

The *Malaise*, brought about by over excitement of the brain, combined with underworked limbs, lungs, and skin, by indolence and luxury, and by the demons of hypochondriasis, biliousness and dyspepsia, would disappear were Turkish Baths to become thoroughly national, and ordinary water baths would be superseded to a great extent in our public bathing establishments. The cadaverous look of the overwrought and anxious citizen would be exchanged for the ruddy hue of health. The poor would find a solace which would deprive the gin palace of its attractions. Skin diseases would be entirely

Malaise would disappear.

prevented, consumption and gout would be as rare in England as in Turkey, medical men's services would be as seldom called for in London as, for many centuries, they were in ancient Rome. Fewer hospitals would suffice for the public wants, and lunatic asylums would be deprived of half their inmates. The Thermæ would prove to the body what the Bible is to the soul, and the influence of both combined would make, nearly universal amongst all classes of the commonwealth, the greatest of all the sources of happiness, *mens sana in corpere sano.*

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CHAPTER VI.

ECONOMICS OF THE HOT-AIR BATH.

"Economy is half the battle of life; it is not so hard to earn money as to spend it well."—SPURGEON.

Financial advantages of the Hot-air Bath.

HAVING glanced at the history, philosophy, and prophylactic virtues of the Turkish Bath, with a view of showing its superiority over every other system of bathing, I now propose to discuss the financial advantages to be derived by the addition of the hot-air or Turkish Bath to the people's baths and washhouses, making them more lucrative concerns than they have been hitherto, or can become under their present arrangement.

My scheme for the adaptation of the hot-air bath to the needs and circumstances of the working classes comprehends, as already stated, two separate features, namely, first, to give an ordinary Turkish Bath for sixpence—a sum quite within the reach of the working classes; and, secondly, to provide the facility for a perfectly cleansing ablution in a lavatory, heated to from 100° to 115°, for twopence. The plan appended to this chapter will give the reader a better idea of the improved bath for the working classes than any explanation, unaccompanied by it, could possibly do. It will be seen on reference to the plan, that the washing rooms of the lavatory and Turkish Bath are each divided into

fourteen compartments or stalls, which are provided with a basin and supplied with hot and cold water. The bather is thus enabled to take his soap washing apart and to adjust the temperature of it exactly to suit his taste or requirements; he can then finish off with a spray or shower-bath, which may either form a part of the appurtenances of each stall, or be fitted up in a compartment to itself, available for all bathers.

Cost of building a Turkish Bath and Warm Lavatories

The Turkish Bath, as erected and administered in this country, has always been considered costly, and associated with a large expenditure of time, a luxury the poor cannot possibly indulge in; and this has always been broached as one of the chief obstacles to the success of this scheme for working classes. The first outlay, it is argued, would preclude any parochial authority from providing Turkish Baths upon the poor rates, because the Act limits them to the maximum charge of sixpence for each person: a price which, it is thought, would never recoup them for the original cost. If, however, I can show that a bath, in every way efficient, can be built and maintained at a much less cost than those erected on the present system, then, I think, all such arguments must fall to the ground.

Estimate for building a Turkish Bath and Warm Lavatories

The following estimate for building a Turkish Bath in accordance with the plan has been carefully prepared by a builder of considerable practical experience and judgment:—

ESTIMATE.

To excavate the entire area to the depth of one foot, and the foundation three feet, put in nine inch glazed stoneware drain-pipes and all the necessary branch pipes throughout.

The foundations to be laid on concrete one foot thick and twice the width of the wall, concrete the floors of warm lavatory, hot room, tepid room, and washing room, with six inches of good concrete on sound bottom.

Estimate for building Turkish Bath.

To build all the walls with proper footings, and the damp course in slate and cement, cutting all arches, mitres, &c., as specified on the plan, and supplying the necessary scaffolding.

To excavate the stoke-hole, and build furnace and flue with best fire bricks, tiles, and fire clay.

To construct roof over the building as may be required to cover in the cisterns.

The girders and zone to be of sufficient strength to carry the large tanks, and all floors under the cisterns to be lined with stout zinc.

To pave the hot room, tepid room, washing room, and warm lavatory, with red and black lozenge-shaped tiles neatly jointed, and line the walls to the height of 6 feet with Rafford's white glazed bricks, neatly pointed in cement.

The dressing-rooms to have 1½ inch yellow batten lining laid upon 4 by 2½ inch joists, and 4 by 3 inch oak sleepers, upon 4½ inch sleeper walls. The walls to be battened and lined with 3½ inch yellow matchboard, and the divisions between the compartments to be 2 inch framed partitions, double panels with narrow boards tongued and champered, champered framing with circular headed front. Mahogany curtain poles and rings, and deal seat to each compartment.

The divisions between the washing compartments to be of slate 1 inch thick, properly fixed to rails at the top; each compartment to be provided with marble or other basin for washing, and supplied with hot and cold water, and a spray or shower bath.

The whole of the inside wood work to be carefully stained and twice varnished, the outside wood work to have four coats of paint, oak grained and twice varnished.

The windows to be sashed and glazed with ground or matted glass.

SIR,

I have carefully considered the plans and specifications for building a Turkish Bath and Warm Lavatories, and I am aware of the necessity of solidity of workmanship, good drainage and water supply, as well as the costly nature of the materials required, having had twenty years practical experience in the working of your Baths.

The Bath can be built, and be satisfactory in every detail, for the sum of £2500, or with a second story added to be used as washing and drying rooms for £500 extra, exclusive of fittings, making £3000. The two story building completely fitted with necessary pipes, trays, &c. £3500.

CHARLES FRENCH.

58, Lisson Grove, Marylebone.

In the builder's estimate of £3500 provision is made for an upper story which would accommodate about twenty washing tubs, and corresponding rooms for ironing and drying.

While I have every reason to believe that the figures named by Mr. French are fairly accurate, yet experience has proved that it is best to leave a large margin for extras. I have, therefore, allowed £1500, making the cost £5000, but if Turkish Baths were erected in connection with Warm Baths I have no doubt the building would be completed for the price named in the builder's estimate.

Capabilities of the Bath.

Baths erected upon the plan would be capable of bathing from 1500 to 2000 per week with ease, whereas, warm water Baths erected at the same cost, would not bathe more than one-fourth of the number I have named.

Bath decorations.

In the first place I would observe that generally when public bodies commence an undertaking of this kind, too much attention is paid to collateral advantages—site, external appearance, decoration, &c., and too little to the actual and immediate uses of the building as such. Experience has taught me—and I don't think I am peculiar in this respect—that, whether in building or in clothing, it is the adornment that costs so much. A woman may dress very neatly and becomingly for a very modest sum, but add all the gimp, lace, and furbelows necessary to make her a lady of the period, and you soon double or treble the amount, yet the inherent value of the *humanity* under either adornment is the same. So it is in building: a plain, substantial edifice may be built for one-half the amount that might be expended—to sum the matter up in one word—on stucco.

You might expend either £1500 or £3000 in the erection of an institution of a given size; or, in other words,

it is possible to spend on decorations, &c., a sum equivalent to the cost of the building itself. In doing this you might add greatly to its external beauty, but not one whit to its internal utility. As a Turkish Bath, the one costing £1500 would be equal in efficiency to that costing £3000. It is all very well, if a parish can afford,* to double the expenditure for the sake of securing a beautiful edifice; but it must not be expected that a bathing establishment will pay for the superfluous ornamentation, in addition to the necessary outlay for a substantial building. It is generally admitted that thousands of pounds are annually squandered away on our public buildings, that might be saved and still give all the internal comfort and accommodation they were designed for; and in my opinion Baths and Washhouses are no exception to this rule. In discussing the desirability of making Baths and Washhouses self-supporting and remunerative institutions, it must be borne in mind that regardless of any financial consideration they are essentially sanitary institutions, exercising a powerful influence upon the public health, tending to make hospitals, asylums, and workhouses in less demand, and should be classed with other sanitary agencies.

Testimony in favour of Turkish Baths.

There are no baths that have cleared off the first cost of erection from their profits; but if they have not paid in one way they have in another. Mr. W. H. Green, of the Town Council, Kidderminster, writing on Turkish Baths, says—"Financially our baths have not paid, though they have done much better than the most sanguine expected, and we consider we have received a high per-centage in the good done to the poor." To the same effect is the evidence of the manager of the Cardiff Baths Company. He says, "I could give dozens of instances in which men and women have been kept off the rates

* As is the case in Paddington and St. George's, Hanover Square.

through the means of the Turkish Bath: people who could not afford to pay a doctor, but who could, and did, manage to come to the Turkish Bath, and got cured of various forms of disease, principally rheumatism. Now, if parish authorities wish to keep the poor from applying to the parish doctor for common ailments, let them build and encourage the use of Turkish Baths; if there should be a small loss in the working expenses, they will find that to be more than balanced by the increased health of the inhabitants, and the consequent decrease in the number of *bona-fide* working men applying for parish relief."

Rate-payers should advocate erection of Turkish Baths.

Thus, in calculating the returns of a bath, it is necessary to take into account not only the direct but also the indirect gains accruing. The experience of the managers of the Cardiff and Kidderminster Baths is not by any means unique; it is but the counterpart of that of all concerned in the management of such establishments. If, therefore, the annual balance-sheet of a bath does not show a large actual nett profit to be placed against the original outlay on the building, it will result in such an increase of health as to considerably lighten the rates, by keeping the poor from falling sick and so becoming dependent upon the parish. In this way, if not by direct profits, such baths as proposed would soon pay for themselves, besides adding considerably to the comfort and happiness of the working classes. Looked at in this light the ratepayer should advocate their erection, not merely on the ground of a benevolent desire to benefit his fellow-townsmen, but on the ground that by paying a little more for the prevention of sickness and ill-health he would be going the right way to reduce the claim upon him for the support of pauperism. The Paddington Commissioners were asked to erect a plain Turkish Bath and lavatory; and the plan before alluded to

was submitted to them, that they might form an idea of what might be done at a small cost. In their wisdom this was rejected, and, as a consequence, when the Turkish Bath comes to be added to their baths (as I feel sure it will be at no distant period to all baths and washhouses), the expense will be very great, while the internal arrangements of the building as a whole can never be so uniform and complete as it might have been made in the first instance. My desire was not to injure the baths and washhouse movement, but to secure its popularity, by increased success, both financially and sanitarily.

Estimate of the cost of Bathing 1000 persons.

In order to show the advantage possessed by the Turkish Bath over the ordinary mode of bathing from an economical point of view, I have carefully prepared an estimate for bathing 1000 persons by the two methods, assuming the amount of capital required in each case to be £5000.

Estimate for bathing 1000 persons in warm-water baths:—

RECEIPTS.	£	s.	d.
250 bathers at 6d. each ...	6	5	0
750 bathers at 2d. each ...	6	5	0
Discount on soap	0	5	0
	£12	15	0

EXPENDITURE.	£.	s.	d
60,000 gallons of water at 6d. per 1000, equal to 60 gallons for each bather	1	10	0
Heating water, 10 chaldrons of coke at 14s.	7	0	0
Attendance and linen	2	10	0
Wear and tear	1	0	0
Soap	2	1	8
Interest on capital	2	17	8
	£16	19	4

Estimate for bathing 1000 persons in the hot-air baths and warm lavatories:—

RECEIPTS.	£.	s.	d.
250 hot-air baths at 6d. each ...	6	5	0
750 warm lavatory baths at 2d. each	6	5	0
Discount on soap	0	2	0
	£12	12	0

EXPENDITURE.	£	s.	d
20,000 gallons of water at 6d. per 1000	0	10	0
Heating bath and water, 2¼ chaldrons of coke at 14s.	1	15	0
Attendance and linen	5	0	0
Soap	0	15	0
Wear and tear	0	15	0
Interest on capital	2	17	8
	£11	12	8

Pecuniary advantages of the Turkish Bath or Hot-air system.

It will be perceived, from the estimates, that while the warm water system of bathing is worked at a loss of £4 4s. 4d., the Turkish, or hot-air system would leave a profit of 19s. 4d. But all the pecuniary advantages which would result do not appear in the above estimate. The surplus heat from the flues and hot rooms might be exhausted into a drying room to dry all the linen and towels, and sufficient water heated to supply at least thirty warm baths of sixty gallons each per day, in addition to that required for use in the Turkish Bath and lavatories. At the lowest computation this would be worth at least £2; now supposing that a week is occupied in bathing 1000 persons in each case the one would give a clear profit of £2 19s. 4d. or £154 5s. 4d. yearly, which is equal to 3 per cent. on the capital, while on the other hand the warm water system entails a loss of £219 5s. 4d. per annum. This, it must be admitted, is a very serious consideration for the ratepayers of any parish, besides, there would be a considerable saving of time in bathing a large number of persons by the warm lavatory system as compared with warm water bathing. Any one who has visited a bathing establishment for the working classes, say on a Saturday night, must have been struck by the slowness of the process, and the consequent discomfort and loss of time to those who are waiting their turn. When a bath room is vacant the attendant has to run off the dirty water, clean out the bath, probably wipe up the floor, and then wait till some sixty gallons of water at a suitable temperature has accumulated before he leaves. The bather in addition to the time taken up in the process of ablution, occupies from ten to twenty minutes in undressing and reclothing himself; meanwhile perhaps twenty persons are waiting. In the warm lavatory system the bather would undress in a room for the purpose, and the time occupied

Time saved by the Warm Lavatory system.

in the mere process of bathing would not be more than ten minutes at the most. Nor would there be any time lost in cleaning and arranging the bath; no sooner would one finish washing and leave the lavatory, than another would be undressed and ready to take his place; so that it would not be stretching a point to say that treble the number of persons could be bathed in an hour by the one process than by the other.

If the number of undressing compartments adjoining the lavatories were doubled, namely, twenty-eight instead of fourteen, there would be practically scarcely any limit to the number of bathers who could be accommodated, and the waste of time consequent upon waiting for their turns would be very little even at the busiest seasons.

Hot-air Baths more used in Winter than Summer.

These considerations point to the fact that if bathing establishments with warm lavatories and Turkish Baths attached, were made as attractive as our gin palaces, without the intoxicating liquors, they could be made financially successful. Some one may say that this is a mere matter of opinion, or random statement of an enthusiast, who allows his zeal to obscure his common sense. I must confess that all persons who are advocating any particular hobby lay themselves open to such criticism, especially from pedantic individuals who have neither inclination nor brains enough to investigate any subject out of their ordinary course, and the invariable policy of such cold-hearted people is to "pooh pooh!" everything they do not understand. I beg to remind such critics that the statements I have adduced have been so carefully thought over, anticipating severe criticisms, that I am prepared to stake my reputation upon their accuracy, and what is more, I defy successful contradiction. I believe that were the lavatories in use at the baths and washhouses there would be as many bathers in the winter as in summer, which would further increase the revenues; in

fact, judging from the experience of over twelve years of the habits of the upper classes, more hot-air baths are taken in winter than in summer, and I have no doubt the result would be the same amongst the working classes had they the opportunity.

Number of Warm Water bathers decrease in Winter.

The falling off in the number of water bathers during the winter months will be seen from the following returns, obtained from several Metropolitan Baths and Washhouses:—

Name of Bath.	No. of Baths in Summer.	No. of Baths in Winter.
Bermondsey	39,544	16,918
St. Pancras	23,585	7,930
All Saints, Poplar	17,700	6,050
St. Marylebone	72,842	39,869
St. Margaret's and St. John's, Westminster	66,502	23,981
St. George's	34,862	18,487
Total	255,035	113,235

The statistics of the Liverpool public baths and washhouses tell the same tale. At Cornwallis Street Baths, the *daily receipts range from* 4*s.* 6*d. to* £53 6*s.* 5*d.* This wide difference represents pretty accurately the proportion of bathers in winter and summer respectively. In a work entitled "Baths and Washhouses," by Messrs. Ashpitel & Whichcord, which contains some very valuable statistics, we read that at the Birmingham baths and washhouses, during some of the summer weeks, there has been 11,000 bathers, and the receipts £150 weekly; while for the week ending December of the same year, the receipts from bathers amounted to £13 4s. 6d.

This great diminution in the number of bathers during the winter season must, of course, drain away the whole of the profit made in the summer months; but if the warm lavatory system was adopted, it would equalize the number of bathers, and consequently the receipts, all the

year round. The unpopularity of bathing during the winter need hardly cause surprise, when we consider the discomfort attending the system of bathing now in vogue. The risk of "catching a chill" is too great for the working classes generally to run; whereas if bathing were made more comfortable and attractive, as it would be in a warm room, the body would be brought into an atmosphere congenial to the senses, and where all the effete matter is easily removed from the skin. The unpopularity and the scarcity of bathers in winter would be done away with; bathing would become a luxury as well as a highly sanative agent; the one great difficulty in the way of the universal establishment of such institutions throughout the land would be overcome, as well as the fear that they could hardly be made to cover their working expenses, to say nothing of recouping the ratepayers for the original outlay on their construction. By making habits of cleanliness more general among the working classes, as well as by rendering the bath agreeable and inviting winter and summer, the direct profits would be augmented to such an extent as both to clear the expenses of management and to leave such a balance as would in a few years' time pay off their first cost.

Discomfort of the present bathing system.

Having argued upon philosophical principles the advisability of adding hot-air baths to the baths and washhouses, both as regards comfort and their financial success, I should have been better satisfied to have practically illustrated their working in detail. But there are so few towns where the hot-air bath has been erected on the rates, that I have failed to obtain much reliable information, although such as I have obtained tends to show that when hot-air baths are brought within the means of the working classes, they use them freely, and that warm-water bathing greatly diminishes. I have thought

Working of the Turkish Baths attached to Baths and Washhouses.

it desirable to adduce some information from the Cork working-man's bath, set in motion by Mrs. Donovan and the late Dr. Barter. A glance at the tabular statement will show that the working classes take as many Turkish Baths in the dead of winter as they do in summer.

PEOPLE'S BATH, CORK.

From November 13th, 1871, to November 2nd, 1872.

WORKING EXPENSES, &c.

Dates.	No. of Baths.	Receipts.	Payments.
		£ s. d.	£ s. d.
Week ending November 13, 1871	292	4 2 10	2 15 6
,, ,, 20 ,,	188	2 4 9	2 17 6
,, December 3 ,,	289	3 17 9	2 8 2
,, ,, 9 ,,	320	4 9 5	2 15 2
,, ,, 16 ,,	292	4 2 4	2 7 6
,, ,, 23 ,,	307	3 19 6	2 17 10
,, ,, 30 ,,	206	2 19 0	2 12 10
For the six months ending June 30, 1872. From half-yearly balance sheet	7,690	101 14 11	86 19 7
Week ending July 6, 1872	321	4 3 5	3 2 6
,, ,, 13 ,,	302	3 16 8	3 4 6
,, ,, 20 ,,	280	3 13 0	3 4 6
,, ,, 27 ,,	289	3 16 3	2 18 6
,, August 3 ,,	284	3 14 6	2 19 3
,, ,, 10 ,,	266	3 9 8	3 11 9
,, ,, 17 ,,	279	3 12 11	3 10 6
,, ,, 24 ,,	275	3 12 11	4 0 6
,, ,, 31 ,,	317	4 5 8	4 0 6
,, September 7 ,,	252	3 8 11	4 0 6
,, ,, 14 ,,	280	3 17 4	3 5 10
,, ,, 21 ,,	229	3 2 4	3 5 10
,, ,, 28 ,,	278	3 16 0	3 5 6
,, October 5 ,,	245	3 6 7	3 13 6
,, ,, 12 ,,	258	3 8 5	3 15 6
,, ,, 19 ,,	278	3 15 2	3 15 6
,, ,, 26 ,,	287	3 15 10	4 14 6
,, November 2 ,,	263	3 11 0	3 19 6
	14,567	193 16 11	170 0 9
	Soap and towels ...		5 12 6
			175 13 3
	Profit		18 3 8
			£193 16 11

It is a remarkable fact that in this small establishment, over 2000 baths were given in the months of November and December; this is a very gratifying result, and a practical illustration of my argument, viz., that by making bathing attractive, the people will appreciate the advantages all the year round. The support during the winter months the people's baths at Cork have received is a striking contrast to that of the metropolitan baths, and if further weight of evidence was required to persuade the functionaries who have the management of parochial affairs to adopt the institution, I would lose no time in supplying an overwhelming amount in favour of hot-air over warm-water as a bathing medium for the masses. Success of the People's Turkish Bath, Cork.

When advocating People's Turkish Baths, it is always necessary to remember the amount of prejudice to be overcome, so that the success of the Bath in question must be attributable to the benefit derived, as well as to the superior comforts provided, as there is nothing in the people of Cork to make them more cleanly than the population of manufacturing towns in England.

The Cork bath shows what can be done with a comparatively small capital, the first cost of the building did not exceed £500, which is remarkable when compared with the enormous sums expended on gigantic establishments in this country.

On physiological grounds, bathing in winter is more essential. The heat and warmth of the sun will promote the action of the skin sufficiently in summer when cold bathing is found more invigorating and refreshing than warm water bathing;—whereas during the inclement, wet, and cold weather of our English climate, the skin is chilled, and insensible perspiration checked; to counteract this condition of the skin, it requires to be exposed Bathing more essential in Winter than Summer.

to hot air at least once a week, to open the pores again and give free action to the circulation, which will prevent the development of disease. This is just what warm lavatories and hot-air baths are intended to accomplish, and I shall ever continue to advocate this plan of bathing for the labouring classes until public authorities recognize the system and its salutary results.

Opening of People's Turkish Baths, Cork.

The People's Turkish Bath at Cork was opened on the 23rd of February, 1863, for men and women. Its existence is due to the energy and enterprise of Mrs. C. G. Donovan, who, with the assistance of the late Dr. Barter, aided by a gift of £50 from the late Mr. J. F. Maguire, M.P., and £100 from the Corporation of Cork, succeeded, after nearly two years' labour, in collecting sufficient funds for the building. *The charges for admission have been reduced, and are now uniform:*—3d. for men and women, and 2d. for children.

Mrs. Donovan says:—"In a city which boasts of its Sanitary Association, surely such an agent of cleanliness cannot be over-looked without ignoring all physiological law. It is vain to wash the outside of the platter—which street and house cleaning may be said to represent—and leave the many ignorant of the dangers which lurk under a dirty skin."

Turkish Baths gradually gaining popularity

Fortunately for society, the question is gradually taking its proper place in cultivated minds, as we may judge from the words of a distinguished English philanthropist, who, after supposing the ghost of a Roman emperor to visit our cities, describes him as saying:—"No doubt we, the barbarians, had no hospitals or reformatories in our time, but still I cannot help asking why you are spending so much money in locking the stable door when the steed is stolen. Instead of spending money in endeavouring to cure people of disease after they have got it, and to

restore people's self-respect after they have lost it, don't you think it would be better to spend money in an endeavour to prevent disease and a loss of self-respect, by means of public cleanliness?"

If the august ghost who speaks so wisely would condescend a visit to Cork, surely his indignation at seeing the struggling existence of one of the most honoured of Roman institutions would at least win for us the small boon of *free water*. But it is not the dead alone who speak, we have also the indirect evidence of medical men who still remain unconscious of the blessing they overlook. Contrast not only the relief from suffering, but all the other benefits derived from the hot-air bath, with the following picture, drawn by an eminent lecturer in a London hospital:—"At this moment there are hundreds of patients waiting the arrival of the medical attendant to inject a grain or two of morphia beneath the skin. Only four hours ago they had a similar dose; four hours hence they will have another. They declare they cannot endure a rheumatic neuralgia, and they implore of you to give them frequent and increasing doses of morphia, which carry them still further from real help, and eventually add to their misery and degradation." . . . . The intelligent Hygiest, with his stupe, his wet bandage, and his bath, may well thank God he is not such an one; no helpless sufferer, vainly seeking help from dangerous palliatives, for his better sense, and that calm confidence which experience gives, have taught him how to relieve pain without resorting to the miserable subterfuge of *deadening sensibility*.

Too many think that to found a charity is the highest form of Christian benevolence; but there are other acts, so wide spread in their benefit, that individual effort—though not forgotten of God—is lost in the greatness of

the result. Surely among such may be classed those that work and those institutions which save society from the burthen of the widow and the orphan, lessen physical and moral evils, and help to teach that knowledge of the necessary conditions for insuring health and happiness, which will eventually efface even the memory of that abject poverty which now shocks every feeling of self-respect.

Mrs. Donovan on Turkish Baths.

Mrs. Donovan fully corroborates my assertion with regard to winter bathing. She says that both rich and poor in Cork frequent the bath oftener in winter than in summer, and adds that it is only the ignorant who could compare warm water with hot-air baths, either for safety, enjoyment, or capacity for meeting the requirements of the many. She calculates that 100 a day could be easily accommodated in the Cork bath, provided they came in parties of about twenty or thirty;—a fact which, if realized, would, with its other benefits, soon solve the vexed question of expenditure.

202,919 have used the baths, and it is believed that the numbers might be doubled if employers, looking to their own interest, as well as that of their workmen, took advantage of the tickets printed for their special use, at 2s. the book of 12, thus enabling them to give a full Turkish Bath for the small sum of 2d.

First People's Turkish Bath in Europe.

The People's Bath at Cork represents the first attempt that was made in Europe to supply the working classes with a Turkish Bath. Much prejudice and opposition had to be overcome in its establishment. But its success —as a sanitary medium, if not financially—soon became so transparent a fact that it was useless to cavil. Several other towns, therefore, soon followed the example of Cork. None of them have, however, brought this bath so thoroughly within reach of the working man as the

directors of the Cork Bath. Bradford, it will be seen, has come the nearest, the prices there being 6d. and 1s. This is sufficiently low for a complete Turkish Bath; but a great improvement would be made by the addition of the warm lavatory, at 2d. This would be sufficient for all ordinary cleansing purposes,—especially with the addition of an occasional free perspiration in the hot-air bath,—and would soon be highly appreciated by the poorer portion of the population.

The following statements of the results of the working of the Turkish Bath for the artizan classes have been received from Bradford, Cardiff, Hanley, Kidderminster, and Stalybridge, which, in addition to the arguments I have adduced will, I hope, bring conviction home to every unprejudiced mind.

THE BRADFORD CORPORATION BATHS.

Bradford Corporation Baths

In 1867 the Bradford Corporation added the Turkish Bath to their excellent system. Mr. John Howarth, the very efficient superintendent of the baths, has favoured me with the following statistics, which show that the Turkish Bath is increasingly popular with the working classes of that important manufacturing town:—

NUMBER OF TURKISH BATHERS.

Year.	1s. Baths.	6d. Baths.	Receipts.		
			£	s.	d.
1867 ...	1812	3350	174	7	0
1868 ...	1962	3055	174	9	6
1869 ...	2228	2968	185	12	0
1870 ...	3096	3178	234	5	0
1871 ...	3707	3448	271	11	0
1872 ...	4297	3835	310	14	6
1873 ...	4681	3822	329	12	0
	21,783	23,658	£1680	11	0

The cost for attendance and washing, &c., is estimated at £525, which shows a profit of £514 14s. 6d. The item of fuel is not accounted for, it being difficult to arrive at its actual cost, as it is capable of being used in heating water for the warm baths and in maintaining the temperature of drying rooms. This saving of heat applies also in all cases where the Turkish Bath is in use in conjunction with other systems of baths. But at Bradford, even when the fuel is wholly charged against the Turkish Bath, a handsome profit remains.

Mr. Howarth writes: "As a cleansing agent, pure and simple, there is no comparison between the Turkish and the ordinary warm bath; because a person may take a warm bath and still not be clean, as may be proved by his taking a Turkish Bath immediately afterwards. There is no more danger in the Turkish than in the warm bath, if the person taking it is in good health; *but, the conditions under which it can be properly used are much more limited in the former than in the latter case.* It is by far the most powerful, comprehensive, and efficient agent, if applied under intelligent supervision."

HANLEY.

Hanley Turkish Baths.

In this town Turkish Baths have been added to the baths and washhouses at a cost of £1000; they are increasing in popularity with the artizan and labouring classes, and will continue to do so in proportion as their prejudices are overcome. The prices are 6d., 1s., and 1s. 6d.

The number of Turkish Baths taken from April, 1874, to April, 1875, is 5117, and from April, 1875, to April, 1876, 5767, showing an increase on the year, 650.

The number of Turkish Baths taken	1874	1875	1876
from April to September ...	2,605	3,060	5,159
„ September, 1874, to April, 1875 ...			2,512
„ „ 1875, to „ 1876 ...			2,707

These results contrast most favourably with those of the warm water baths, as shown in the tabular statement in page 160.

There has been a very fair attendance at the warm water baths during the periods mentioned above, but it decreases now the Turkish Baths are becoming more appreciated.

EDWIN MOORHOUSE,
Superintendent.

KIDDERMINSTER.

Kidderminster Turkish Baths.

The prices charged for Turkish Baths in this town are too high for the majority of the artizan classes, the lowest price being *one shilling*. They are more appreciated by the poor than the warm water baths, and would be extensively used if brought within their means. We are informed that if the Corporation could be induced to give the baths at 6d., they would become very popular; as it is, the Turkish Baths are much more patronized in winter than in summer.

STAYLYBRIDGE.

Staly-bridge Turkish Baths.

The Turkish Baths in connection with the Corporation Baths are much resorted to; the number of bathers for the year ending October, 1876, reached 5314, and in addition to these there are forty season ticket holders, some

of them bathing two and three times a week. We have been unable to obtain statistics of previous years, but the superintendent informs us the difference in the number of bathers in summer and winter vary so little as "not to be worth mentioning."

In closing this Chapter I must just observe that although the hot-air baths and warm lavatories are advocated as the best bathing mediums, they are regarded as powerful curative agents, and if they were attached to the bathing establishments the medical profession would have no excuse for not recommending them to their poor patients which would cause them to be largely resorted to, and prove a lucrative source of income the present bath establishments are deprived of.

CHAPTER VII.

ON THE RECIPIENTS OF MEDICAL CHARITIES AND THE VALUE OF THE HOT-AIR BATH AS A MEDICINAL AGENT FOR THE POOR.

"I beseech all persons not to degrade themselves to a level with the brutes or the rabble, by gratifying their sloth, or by eating and drinking promiscuously whatever pleases their palates, or by indulging their appetites of every kind. But whether they understand physic or not, let them consult their reason, and observe what agrees and what does not agree with them, that, like wise men, they may adhere to the use of such things as conduce to their health, and forbear everything which, by their own experience, they find to do them hurt; and let them be assured that, by diligent observation and practice of this rule, they may enjoy a good share of health and seldom stand in need of Physic or Physicians."—DR. GALEN.

Turkish Bath as a remedial agent.

IN the previous chapter I endeavoured to confine my observations as much as possible to the use of warm lavatories and the Turkish Bath as sanitary and prophylactic remedies, as well as the best known bathing mediums for the working classes. I will now draw attention to the value of the hot-air bath as a remedial agent, and I hope my readers will pardon me for reiterating at times what I have already insisted on, namely, the necessity of paying more attention to the prevention of disease, and less to its cure, and the advisability of providing all large centres of population with the means, as far as practicable, of maintaining health and avoiding disease, instead of allow-

ing the poor blindly and recklessly to destroy health, and then patch up the evil by resorting to hospitals and dispensaries. It must not be understood that I altogether ignore the desirability of such institutions, under existing circumstances they are a necessity of the age. But it is surely time to protest against the continually increasing expenditure of public money in such a manner, when it must be patent to every one that public health is not thereby augmented or improved, nor can it ever be improved by a system of merely treating results: one might as well attempt to divert the course of the Thames at London Bridge by the use of a bucket. What can it avail to be continually building larger and grander hospitals, so long as we allow "fever nests" and "cholera gardens" to exist in our midst? or What does it profit to have a large and wealthy class of medical men in our midst if the great masses of the people are allowed to live on, ignorantly and blindly, violating the laws of health, and thereby engendering disease and multiplying infirmity?

Evils attending hospitals.

I may be pardoned for introducing here some remarks on our hospitals and dispensaries, I do so with a view of drawing attention to some of the evil consequences attending them, and to show that some of the recipients of medical charity avail themselves of such institutions when they have no right to do so. The increase of disease is an evidence of the incompetency of the remedial measures now administered to meet poor people's ailments.

While charitable medical, and other relief, may be necessary in a good many instances, and cannot very well be dispensed with, it trenches upon the independence of the recipients; and its influence upon society at large is very pernicious, requiring to be checked rather than encouraged.

At present the charters of the hospitals will not

admit of patients paying for advice. To be poor is fortunately no crime nor a proof of improvidence, neither is being rich a proof of provident habits or honesty. These conditions and positions are generally governed by circumstances over which the individual has little or no control. (Excepting of course such as are caused by intemperance, idleness, &c., and these exist in all classes of society), but to be poor is no reason for being subjected to the degradation of accepting charity when medical advice is necessary because it is impossible to afford the usual fees.

A shilling to a poor man is as much in value to him as a guinea is to another in better circumstances, and I would suggest that a small charge should be made at our hospitals to the out-patients, which many would be willing to pay rather than incur obligations, and risk their manly principles and pride by accepting *gratuitous advice, &c.* I am happy to learn from the Rev. Dawson Burns, Hon. Sec., London Temperance Hospital, Gower Street, that a fee of 1s. is charged the patients at each visit; this appears to be a step in the right direction, and, I hope will be followed by other institutions. In Turkey and what we call barbarous countries they have no Charitable Institutions, the poor pay what they can afford, there being no *fixed charge*. We pride ourselves on our civilization and prosperity, yet there is no country on the face of the globe where there are so many pauper institutions as in England.

Increase of out-patients in Hospitals.

In the year 1830, when there were but eight hospitals in the metropolis which supplied advice and medicines to out-patients, the total number of such patients was 46,435; but in 1869 the number had risen to 277,891. This more than *five-fold* increase had taken place during a period in which the population had only a

little more than doubled. This fact is fully borne out by the statistics of the different hospitals. St. Thomas's and St. George's may be taken as instances. Until 1834, St. Thomas's Hospital was without an out-door department; at that date, however, the practice of prescribing for, and supplying medicine to out-patients was began; and the number of patients increased so rapidly that, in 1842, it was found necessary to add to the professional staff a second assistant surgeon and two assistant physicians. In 1858 the total number of out-patients at this hospital was 38,268; in 1861 the number was nearly 42,000; and in 1869 it had reached nearly 66,000. During the seven years between 1863 and 1870, the number of out-patients at St. George's Hospital rose from 14,853 to nearly 20,000, being an increase of 30 per cent.

Increased demand for medical relief.

Such is the enormous extent to which medical relief has increased, in London alone costing many thousand pounds a year, exclusive of the value of the lands and buildings occupied in working it; and it still goes on augmenting in the same or nearly the same ratio. The fact we have to look in the face is, that despite our continually enlarged expenditure on medical charities, disease and the number of medical paupers are steadily on the increase; as though the evil grew by what it fed on, the increased supply of charitable medical institutions are augmenting, and the money demand for their maintenance must increase. It is difficult to comprehend this demand for medical relief considering the enormous sanitary improvements that have taken place within the last ten years.

Evils and abuses grow up out of charities: it is found, when the social position of some of the applicants for medical aid is inquired into, that relief is administered to persons occupying positions in the

social scale which become gradually higher as time advances; so high indeed, that were it not for the repeated observations of those whose judgment and veracity are indubitable, we should be slow to believe that persons whose incomes enable them to command many luxuries, are in the habit of obtaining all the medical aid they require from a hospital or dispensary. That such abuse does prevail in the Metropolis and in other large towns of Great Britain to a disgraceful extent is unfortunately beyond doubt; and the question naturally arises: Does this special kind of medical charity tend to induce pauperism on a scale sufficiently large to cause any appreciable rise in the poor-rates? It might perhaps be impossible to adduce absolute proofs that it does, but facts and considerations bearing on the subject cannot, I think, but compel every one who gives due attention to it, to conclude that the habit of receiving gratuitous medical and parish relief stand to each other, in a vast number of instances, in the relation of cause and effect. I am perfectly convinced, from personal observation, that many patients visit dispensaries and the out-door departments of hospitals chiefly for the purpose of persuading, if possible, the physicians who prescribe for them to give certificates that they are not in a fit state to work, and that they are in urgent need of specially nourishing food, wine, etc., which they afterwards solicit from the benevolent.

Medical charity leads to dependence.

It is readily conceivable that those who have become habitual recipients of medical charity, and who have thus deadened their feelings of independence, are easily tempted to take the further step of applying for pecuniary relief, which is the stepping-stone to dishonesty. "The workman," it has been very justly said, "has often learned at the hospital his first lesson of dependence. He begins by taking physic, and then food,

from charity." In the report of one of the hospitals occurs the following passage:—"For some years there has been a growing conviction amongst philanthropists that indiscriminate medical charity tends to pauperize classes who would not think of receiving any other form of benevolent assistance, and that, by gradually undermining their independence, it leads them afterwards to solicit pecuniary aid, which career too often ends in the workhouse or the gaol."

Hospitals a weakness and disgrace.

Can any one, calmly reflecting on this state of things, do other than conclude that our charitable medical institutions, of which we are so proud, are, in reality, a weakness and a disgrace? But the probable effect of this system of thoroughly pauperizing all ranks of the community, is not its worst attendant evil. There is another; and it is one which demands our most earnest attention, both as politicians and Christians. It is involved in the answer to the question: In how far do these institutions tend to foster and extend disease instead of checking and eradicating it? We need only, I think, look at the system which is carried on in most of our large hospitals, to arrive at the conclusion that the present practice of administering out-door relief is a mockery and a delusion. A writer in the *Pall Mall Gazette* says: "The out-patients' waiting-rooms of the different institutions, unless exceptionally large and exceedingly well ventilated, are, as a rule, crowded to excess, and during the summer months almost to suffocation. The so-called 'casualty' (or cadging) patients who attend St. Bartholomew's Hospital are now attended in a new building, consisting of a large, well-ventilated room, capable of seating 600 patients, but even this large room is often so overcrowded in summer that the heat and unpleasant atmosphere are much complained of. . . . The crowding at the

Out-patients' waiting rooms in London Hospitals.

Children's Hospital at Great Ormond Street, is reported to be such that it has been necessary to prohibit the patients from sitting on the steps of the adjoining houses."

A correspondent recently writing in the *Echo*, says :—

"During the last few weeks I have made it my business to inquire into the manner in which out-patients are received and treated at some of our Metropolitan hospitals. My examination discloses a state of things at once unsatisfactory and unjustifiable. I do not intend to mention here the names of the institutions I have visited, for the simple reason that their authorities will easily see to which I allude, and that I am not desirous of injuring them. Were I to distinguish any one of the hospitals I have visited by giving their names, I am positive that the public would cease to support it; and, however badly certain dispensaries are managed, far be it from my intention to damage their interests, and indirectly in this manner deprive the poor of medical treatment. I will not enter here into the functions of the Charity Organization Society, but I do think that the scope of its labours might be extended so as to include the visitation and examination of those charities which profess to succour the distressed poor. Benevolence, in my humble opinion, loses half—nay, nearly all—its charms when dispensed in a cold and nerveless manner, and it is a great pity that this fact is not borne in mind by those who are empowered by the wealthy to distribute their alms. It is unfortunate that philanthropists cannot always personally supervise the appropriation of their *largesse;* if this were done, and it is not impossible, there might be some little chance of reforming our charity system, and especially the method of hospital treatment of out-patients.

"Hospitals have certainly no particular profit in encouraging sickness, yet it appears to me that the managers of one particular institution are desirous of so aggravating the disorders of out-patients so as to qualify them for admission as in-patients. Poor sickly persons, many moaning with pain, are compelled to be at the hospital doors some time before they open, and, whether it rain or no, the porter or beadle, who is, no doubt, enjoying a comfortable breakfast, will not admit them to shelter. Some weeks ago, at the institution of which I am at present writing, a physician performed an important operation upon an infant three months old, which deprived it of one of its limbs, without the permission of its parents. I do not know, of course, whether it was necessary in this particular case to go to extremes, but I think that the consent of the mother, who brought the child to the hospital, might have been obtained previous to the performance of the operation. Your readers will appreciate my delicacy in refraining from

giving them insight into the nature of this case, as such would certainly lead them to identify the institution; and, as this dispenses its benefits far and wide, I should be sorry to detract from its fair fame.

"At a hospital not many million miles from the *Echo* Offices a young woman attended on Monday last, suffering from bad breasts. She had just arisen from childbed, and was in a weak and emaciated condition. The surgeon under whose attention she came examined the wounds, and suggested lancing. This the young woman, human-nature like, declined, whereupon the doctor observed, 'Then take yourself off to a hospital where they don't lance!' At the same hospital, and before the same medical attendant, there proceeded an elderly female, who suffered from a chronic illness, but having been well the last two months, and not feeling the want of medicine, had not put in an appearance at the hospital. 'Why haven't you been here for some time?' quoth the doctor, with rising indignation. 'Because, sir,' replied the poor old thing, nervously, 'I've been so well and comfortable-like.' 'Don't be impertinent,' cried the charitable Æsculapius, 'and go about your business'—as if the old woman had no business to be well for two whole months. In this institution, also, another old woman was badly treated. The crowd was great, and in her attempt to gain egress she dropped her medicine bottle, and its contents were soon meandering over the cold stone floor upon which the patients are compelled to stand. Well, the ailing old soul made known her loss to the official who dispensed the medicine, but he absolutely refused to supply her with another bottle. In one of the largest hospitals of which this Metropolis can boast, sufferers of all sorts, without regard to age or the nature of their ailments, are compelled to await in dark, cold, damp corridors the examination of the doctor. The crowd is generally great and the air foul, and the evil effects upon the patients may be imagined. Having at last escaped from the miserable corridor into the surgery, the sufferers are greeted with coarse indifference, and meet with none of that kind consideration so essential to the sick. Persons are examined like so many bales of goods, and in the hurry the wrong medicine is frequently given. But, of course, it does not matter much, as the patients are poor, perhaps very poor, and the surgeon, mayhap, inspired by the benevolent thought of putting a miserable fellow-creature out of the world. It is, sir, a most pitiable spectacle to behold a few hundred human beings huddled together in a gloomy cold passage, groaning with the pains of complicated ills, and the sight is the more sickening when the observer pictures to himself the callous and brutal manner adopted by the medical officers. Were I so inclined I could adduce many cases of actual cruelty, but I think I have written enough to show the necessity for some effectual reform in the hospital system. Institutions supported by public money should be under the supervision and control of public officers, and

it is to be hoped that these lines may be the means of directing the attention of Parliament to the subject.

"There is one special point to which I wish to refer in conclusion, and that is that there should be no necessity to obtain a subscriber's letter for admission to a hospital. Surely being sick and ill is a sufficient recommendation! To one hospital, contributed to by thousands of Englishmen, foreigners are admitted without 'a letter,' while Britons must be provided with one in order to gain treatment!"

Hospital relief a sham and a farce.

The same state of things exists in nearly all the other large hospitals, and invalids often receive hygienically more harm than good in their visit from having to wait so long, often hours, in discomfort. There are, unfortunately, other evils to which the recipients of our medical charities are subject to. It is necessary, in order to get through the work, for the physicians to see and prescribe for scores of patients in the course of an hour. Who shall say what mistakes are made, and what mischief done? It seems little better than grim mockery to proffer this sort of help to destitute sufferers; nor do I think there will be any one who, calmly weighing the facts, will venture to uphold the system on the grounds of any supposed merit it may possess. Mr. Holmes, whose long experience at St. George's Hospital adds great weight to this opinion, may well say as he does, "Very much of the assistance given is merely nominal, and is both a deception on the public and a fraud on the poor."

It is unnecessary, I think, for me in this place to go further into the subject. The whole thing is a palpable sham and a farce, and the sooner the benevolently disposed public are brought to a knowledge of the miserable system they are supporting with their contributions, the better it will be for the country and for humanity at large. Enormous sums are yearly spent in trifling with suffering, if not in actually propagating disease, and the ignorant and sloth-

ful public, always ready to fly to that which is the least trouble, though it may cost them the most in the end, is led to place confidence in a system which, in numerous cases can only leave them worse than it found them. How much greater, hygienically, would be the result if but one half of the vast sums thus expended were devoted to carrying out measures which would prevent a large percentage of the present sickness that afflicts the poor.

George Wyld, M.D., remarks:—"In the British Isles there are about 20,000 medical men, and with so noble an army of educated philanthropists, what an incalculable amount of good might we not achieve.

"Were Chairs of hygienic and preventive medicine established in all our medical schools, and one-tenth of that labour bestowed on those great subjects which is now given to minute and pathological anatomy, the entire aspect of our social condition would be changed."

Chinese system of paying for advice.

It has often occurred to me that in this, as in many other things, the Chinese exhibit far more practical wisdom than we do, inasmuch as they pay the physician for keeping them well instead of for curing them when diseased. They are thus, as it were, the teachers of the people in respect to the preservation of health. How much better would it be for the nation at large if, instead of a medical profession profiting by the sickness and misery of the community, we had a class of hygienic teachers devoting their time to, and receiving remuneration for, instructing the people in the physiological and natural laws affecting life and health, and so keeping the community well! We should then, I am convinced, have fewer hospitals and infirmaries, more baths and gymnasiums, as in the days of ancient Greece and Rome; fewer impure courts and alleys, more open green spaces

and squares; fewer gutter children * reared amidst dirt and disease, and more cleanly and respectable homes —the best nurseries of honesty, sobriety, independence and intelligence.

Rev. Lord Sidney Osborne on Gutter children.

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* The Rev. Lord Sidney G. Osborne, S.G.O., of the *Times*, whose letters to that journal upon social and sanitary subjects are marked with so much good judgment, gave the following—alas, too truthful portrait of this little waif:—

"There are not many of us who have not seen the Gutter child; it is the name which is the novelty, not the animal. What a being it is, what a wonderful downward development of our common humanity! Take a dozen of them straight from the gutter-side, walk them or herd them in Hyde Park, in any place or park where ordinary humanity takes its pleasure; compare them with any dozen nursery children, schoolroom children; try to elicit child talk first from the one breed, then from the other; try to elicit their modes of life, of thought, the manner of their rearing, their tastes, however childish. Test them as to the things which give them most pleasure—the things they would most desire to possess. Draw out what they—the two breeds—have been taught, and who taught them; what they know of the world about them. Let them talk with each other, and then mark whether they have any subject in common. You will soon discover that the difference of the two breeds is in all this so great that it is hardly to be reconciled with the fact that they are alike human offspring. When first born into the world had they been shuffled together, no science could have detected which was a Belgravian, which a Gutter child.

"In language, in life, in habits by day or night, the Gutter child differs as much from all other children as it does in its dress and outward appearance. The child of the Fiji can scarcely be more heathen, more barbarian. It may possibly have been baptized—I fear many thousands have not been so. It may have owners, or one owner; have known two parents, or only one, just such parents as "home" by gutter-side. It has been nursed and fed, but too often very grudgingly. From the day of long clothes to that of corduroy and fustian its every sense has been adapted to take in pollution. It could neither breathe nor listen but to receive foul air to the lungs, foul language—blasphemy by the ear. The Lord's Prayer, the simplest form of creed, simple hymns, Christian child's song, are matters all to it most strange, representing ideas for which it has no perception. The gutter school soon gives the language of imprecation, but affords no belief in the God by whom it swears."

Prevention is better than cure in disease.

Persons living under these unfortunate conditions, which too many of the poor in London and other large towns are subjected, cannot be otherwise than degraded; and the first step towards improving their melancholy position is to induce them to become cleanly, both in their persons and dwellings, thus raising them out of the mire, as it were, and enabling them to appreciate, and to strive to secure, health of both body and mind.

There is much wisdom in the proverbial saying that "prevention is better than cure," and especially so with respect to disease. Now, as a general rule, all maladies are manifested in their incipient stage by slight functional derangements, often so slight indeed as neither to excite alarm nor suggest the adoption of precautionary measures, yet certain, if neglected, to grow apace, and assuredly develop and establish disease. It is in this incubating stage, so to speak, of disease, that the hot-air bath is so valuable in arresting those maladies that are prevalent among the poorer classes, namely, such as are caused by exposure to wet and cold, and by contagious poisons, respecting which that eminent authority, Erasmus Wilson, says: "The faculty of preventing disease, as exercised by the skin, besides being direct and operative on the general health of the body, is also indirect. The skin repels the depressing effects of cold, of alternations of temperature, of extreme dryness or moisture, by virtue of its own healthy structure—by its intrinsic power of generating heat; and it also repels other causes of disease, such as animal and miasmatic poisons, by its eliminatory power, which enables it to carry them directly out of the body." Thus, by stimulating the healthful functions of the skin, the bath exercises great power in preventing disease, more especially those forms of ailment to which, as already stated, the working classes are more particularly subject.

It fortifies the body to resist climatic changes, and to escape the evils that generally follow from exposure to the morbid influences of malaria.

Personal motive for improving condition of the poor.

If, then, we can bring to bear upon the dense masses of poor, who are so often beyond all agencies for the improvement of their position, so powerful a means for affecting their physical condition, not only do we add to their comfort and general well-being, but also to their health, and the health of the community at large; for we are all aware of the contagious nature of most maladies arising from dirt and filth; and none can be assured of being exempted from their ravages, thus warning us, as it were, of our common brotherhood, and our oneness of interest. Here, then, we have a selfish, personal motive —one that intimately concerns us all—for desiring to see every effort made to diminish the causes of disease that exist amongst us.

Medical men do not use the Bath in Hospitals.

I should think scarcely a medical man of ordinary intelligence can be found to question the utility of the bath as a sudorific process, yet, strange to say, there is not a hospital or dispensary in London with a Turkish Bath attached, except St. Thomas's, and it is now seldom used. Medical men either from ignorance, inability, or prejudice, do not use the bath when it is provided. The other day I was one of a Committee, who had occasion to visit the Fever Hospital at Islington, and in passing through a large ward I saw patients suffering from all stages of fever, which the wet sheet pack and other ablutions would not only have saved them from immense suffering but preserved at least 50 per cent. of the lives.

When I asked the question, Have you no baths attached to the hospital? to my astonishment the reply was—There is but one, and it is used as a receptacle for dirty linen!

I merely quote this as a fair example of the appreciation of watery appliances by the medical superintendents of these charitable institutions.

Hot air Bath gradually receiving the attention of medical men.

Hitherto, I am sorry to say, medical men generally have been anything but forward to take advantage of the bath, as, indeed, they are of any other improvement or innovation, either medical or sanitary; partly, no doubt, because they did not become acquainted with it in the ordinary routine of their professional studies, and partly also because the means of applying it are not always at hand. In the first instance, indeed, its introduction was met with a storm of opposition from the sons of Æsculapius, who are proverbially averse to all innovations. The hot-air bath is, however, gradually forcing itself upon the attention of practitioners, through the medium of their patients, by its own inherent merits, and I am fully persuaded that the day is not far distant when hot air will not only supersede warm-water and vapour baths, but be looked upon as one of our most valuable agencies for the cure of disease. The only wonder is that we should have remained without the bath so long, when, as we have seen, people, on whom we look down as far inferior in point of civilization, have largely used it, and enjoyed its blessings from time immemorial.

Dr. Bristowe on the Turkish Bath.

But I am glad to observe that a very markworthy change is taking place. Medical men are gradually becoming alive to the advantages accruing from a judicious use of the hot-air bath. When such a man as Dr. Bristowe, Physician and Lecturer on Pathology at St. Thomas's Hospital, advocates its use, there is some hope of its finally gaining that ascendency as a curative method, which its merits undoubtedly demand. This gentleman, in a lecture recently delivered at the Royal College of Physicians, made the following observations in regard to the bath: "I confess

I have as little confidence in medicinal diaphoretics as I have in medicinal diuretics; but I have great confidence in hot-air, hot-vapour, and hot-water baths. During the period to which reference has just been made, and owing to the fact that special opportunities were afforded to us at the temporary St. Thomas's Hospital, I treated my anasarcous patients largely by the Turkish bath; and I was soon surprised to find how well those even who were seriously ill bore it, and how much they were, for the most part, benefited by it. Indeed, I began by degrees to employ it in the treatment of such cases almost indiscriminately, and both for cases of heart-disease and cases of renal disease, whether acute or chronic. Under the influence of the Turkish Bath, employed, as a rule, three times a week, and the copious perspirations which it produced, I have certainly seen over and over again general dropsy diminish rapidly and in a very high degree, with a corresponding improvement in the general health of the patient. I hope I have spoken with becoming diffidence of my own power of removing general dropsical accumulations by attempting to promote their discharge from the kidneys, bowels, and skin. I have intended to speak thus, because it is comparatively rarely that I (and I think I am not alone in this respect) have had the opportunity of watching the uncomplicated effects of either of these procedures. We know how much the supervention of dropsy in heart disease is hastened by whatever excites the heart to undue action, and by whatever deteriorates the general health; and how, under favourable hygienic conditions and appropriate medical treatment, the action of the heart becomes quieted, the health improves, and, under the influence of these changes, the dropsy disappears. Similar observations are applicable in an equal degree to chronic renal disease, and to the dropsy which follows upon it.

Now, in almost all cases of anasarca that come under treatment, the patient is at once, in a greater or less degree, put under the influence of all those health-promoting conditions; and these co-operate with the special dropsy-removing remedies which we then, or subsequently, determine to employ, and give them often an appearance of efficacy which does not belong to them."

Dr. Mapother on Turkish Baths.

Dr. Mapother, Royal College of Surgeons, Dublin, in his "Lectures on Public Health," observes:—"I would advocate the use of the bath as a social custom and preventive of disease, for I believe it is *the most perfect means of ablution* we possess, and therefore keeps up a cleanly and vigorous constitution of the body, and braces the person against the vicissitudes of temperature and the liability to catch contagious diseases. There is no doubt that *large evacuations* can be accomplished through the skin *more safely* than by *any other* excreting organ. *Nothing escapes* through *the skin* save what is *noxious if retained.* . . . . I think its influence is directly curative in rheumatic, gouty, and scrofulous affections, skin diseases, and the earlier stages of feverish colds and ague. By the freer action of the skin, especially of its curative function, I feel sure it is preventive of consumption, and curative, perhaps, in the earlier states of that malady. It is a substitute, to a certain extent, for active exercise, which the circumstances of some prevent them from enjoying."

Dr. Howard on Turkish Baths.

And Dr. Howard, late of the Medical Staff of the British Army in Turkey, records as follows:—"During my residence in Turkey I had many opportunities of ascertaining the value of the Turkish Bath in numerous diseases. I tried it myself on several occasions, and can speak confidently of its utility from my own experience. In so changeable a climate as that of England—producing

such a variety of diseases—its applicability to the cure of so many diseases will render the Turkish hot-air bath one of the most important remedies ever introduced into our therapeutics."

Dr. Royston on Turkish Baths.

Charles Royston, M.D., M.R.C.S., Eng., &c., remarks: "In June, 1875, I was confined to the house for ten days with subacute synovical inflammation of the metatarso-phalangeal joint of the right great toe. In the following month (July) the same thing occurred in the right knee-joint, confining me to the house for three weeks, after which I went to the seaside for three weeks. On my return home, I was advised by an eminent medical friend to have a Turkish Bath once a week, which I did for three months, and subsequently once a fortnight.

"I fully believe it has been the means of preventing a repetition of the affection, and from various conversations I have had with patients using the Turkish Bath, I believe it to be a very valuable auxiliary in the treatment and cure of many disorders."

Dr. Urquhart on the Baths in Turkey.

Mr. David Urquhart, who, from his long residence in Turkey, had ample opportunity of testing its efficacy, says:—"Where the bath is the practice of the people, there are no diseases of the skin. All cases of inflammation, local and general, are subdued; gout, rheumatism, sciatica, or stone, cannot exist where it is consecutively and sedulously employed as a curative means. I am inclined to say the same thing in reference to the plague. I am certain of it with reference to cholera. As to consumption—that scourge of England—that pallid spectre, which sits by every tenth domestic hearth among the higher orders—it is not only unknown where the bath is practised, but is curable by its means."

Remedial value of Turkish Baths cannot be disputed.

If evidence were wanting of the remedial and prophylactic value of the Turkish Bath, there might be some excuse for its not being generally recognized by the medical profession, but as the testimony in its favour is so overwhelming we are forced to the conclusion that it is either due to culpable neglect, or stupid prejudice, that each hospital and dispensary has not at this moment every kind of hygienical appliances.

But the action of the hot-air bath is generally admitted to exercise a direct and powerful influence, not only in preserving health and guarding against the approaches of disease, but also in curing some of the most painful maladies to which humanity is subject, more especially in the case of persons whose constitutional debility, sedentary occupations, or over indulgence indisposes them for active physical exertion.

Objections to the Turkish Bath refuted.

There is a prevailing opinion, not only amongst the uninitiated, but even medical men, that the bath is not so applicable to the working classes as to the upper classes, because the daily expenditure of bodily strength is a necessity of daily life with a vast majority of them. This objection to the use of the Turkish Bath amongst the poorer portion of the community, I have already treated at some length elsewhere. It has its origin in a total misconception of the effects of heat on the animal economy; because it produces perspiration, it is ignorantly supposed that the action of the bath is exhaustive and debilitating, and therefore the very reverse of what is required by the condition and necessities of the working man.

Let us see how the idea originated which attributes to the hot-air bath an exhaustive debilitating effect. In the popular mind profuse perspiration is associated with bodily fatigue; hence as the bath excites copious sweating—which is the visible result of its action—it

is illogically assumed that such sweating is similar as regards cause and effect to the perspiration produced by an expenditure of physical vitality; but such an assumption altogether ignores the essential difference that exists between the two modes by which the sweating is excited. In the case of bodily labour there is necessarily an active expenditure of vital energy, and the perspiration that oozes from the pores of the skin is evidence of so much physical vitality expended, the natural effect of which is to induce bodily fatigue that may be carried to any endurable amount of bodily exhaustion.

On the other hand, the perspiration excited by the bath of pure hot-air is, in all respects, the exact reverse as to cause and effect. In producing it no bodily labour takes place, no vital energy is put in motion; thus, as there is no physical action, consequently there is no exhaustive wear and tear—no waste whatever of physical vitality. The bather remains in a state of quiescence, and the pleasurable repose he enjoys is heightened by the action of the bath, which necessarily relieves the system by the exudation of burdensome impurities. In this state, with profuse perspiration teeming from every pore, cold water—to drink which when in such a condition produced by bodily exertion would be almost certain injury — can be imbibed freely, not only without any danger, but with actual benefit.

Dr. Carpenter on perspiration.

Dr. Carpenter, an eminent authority, observes: "That perspiration has no weakening effect in itself, except by the diminution of the water in the blood, which may be re-supplied from the stomach, appears from the fact that if persons exposed to high heat make no bodily exertion, they experience no loss of vigour if copiously supplied with cold water—such exposure may conduce very much to invigorate the system."

Dr. Balbirnie on perspiration.

The testimony of Dr. Balbirnie, who has had considerable experience on the subject, is to the same effect. He says: "The allegation that perspiration is a weakening process is a fallacy that hardly needs demolition. Sweating, as accomplished by drugs (sudorifics), we admit, is a debilitating drain. So is the vapour-bath as used in the bungling way common in our old bath establishments. But perspiration produced in a hot-air bath, followed by tepid or cold ablutions, is highly tonic and invigorating. Nothing of the normal constituents of the body is abstracted save the saline and watery portions of the blood. The water is replaced by absorption from the stomach as rapidly as it is given out: for when the drain becomes excessive the supply is proportionate."

Dr. Gosse on perspiration.

Another high authority, Dr. Gosse, of Geneva, says to the same point: "Perspiration is composed of water and various excrementitious substances. The elimination of the latter, far from weakening the body, tends rather to strengthen it, by enabling the nervous system to put forth all its powers; and as for the water, it is easily replaced by appropriate beverages. All the nutritive elements contained in the blood are preserved intact, and it is only a salutary purification it undergoes by perspiration. Hence, all persons who have taken Turkish Baths, even daily, far from complaining of weakness, state that they are in better health, stronger and more lithesome."

In support of this opinion Dr. Gosse cites the following facts: "M. Jules Rochette, of Geneva, had to superintend certain establishments in the department of Vaucluse, in France, for preparing madder roots for dyeing. To dry the roots before reducing them to powder, they were put in large stove-rooms arranged in rows. The air

in the rooms was almost dry, and, in spite of the evaporation from the roots, remained perfectly transparent. More than a hundred men worked night and day by turns in these rooms, completely naked, with the exception of a handkerchief round the waist, and were constantly bathed in perspiration. While in this state they had to go into the yard to fetch the bales of roots, even while very cold north winds were blowing, the work was fatiguing, for the bales were heavy, weighing as much as 80 kilogrammes, and attending to them in the hot rooms was not less laborious. The men often fell asleep in the outer passages, exposed to a cold air with nothing on them but a cloth. Nevertheless M. Rochette never saw them inconvenienced or ill through this exposure, but found them, on the contrary, always strong and lithesome."

Dr. Barter on Turkish Bath in cases of lunacy.

Thus the supposition that the bath debilitates by exciting copious sweating is alike inconsistent with the experience and repugnant to the conclusions of sound physiology. It is, indeed, to the very copious sweating the bath induces that a large portion of its incomparable medical merit is attributable, freeing the body as it does of all poisonous waste matter. One of the first cases of lunacy which Dr. Barter treated with the hot-air bath was that of a man who had been nine years in the Lunatic Asylum of Cork, and who, on taking his first bath, said he considered the bath good for everybody. On being asked his reason for so thinking, he replied in these words: "When I was working in the fields my sweat rolled down from me like water. It had no nasty smell, nor disagreeable taste. Now, sir," said he, "my perspiration is thick and nasty, like oil. It has a bad smell and worse taste. When the cook puts a pot on the fire with a piece of meat or vegetable to boil, doesn't the fire throw the impurities to the

top, and doesn't she take a spoon and skim them off?" In that answer is contained the whole philosophy of the Turkish Bath. It is a well-known fact that if a plaster be placed over the mouth and nostrils a person would die, in like manner, if the body be coated over with any adhesive substance, death will result; thus showing that the skin is a breathing organ, as well as an excretory; so that not only is the body freed by the profuse perspiration induced by the bath from all matter inimical to its well-being, but the system is at the same time prepared to receive a good supply of oxygen from the atmosphere.

Importance of abundance of pure air.

In fact, it may be said that *cæteris paribus*, the strength of each person's constitution is in direct proportion to the quantity of oxygen which his system is capable of imbibing; for on this the purity of his blood, the vitality of his system, and, as a necessary consequence, his health depends. Hence arises the importance of supplying the system with an abundance of pure air, and the absolute necessity, when the lungs are by nature small and deficient, of increasing that supply of air through the only other medium open to us, namely, the skin—the great supplementary organ to the lungs, as it has been called—the necessity for improving and developing the absorptive powers of which is in exact proportion to the lungs' diminished capacity. In this lies the great therapeutic value of the hot-air bath, namely, in opening the pores of the skin, and improving that medium for the supply of oxygen to the blood.

Dr. Sheppard's opinion.

As Dr. Sheppard, Medical Superintendent of Colney Hatch Lunatic Asylum, expresses it, an invigoration takes place "arising from the contact of the unscurfed skin with particles of caloric and from *the newly-acquired power of drinking in oxygen through channels previously closed up*," that is, through the pores of the skin.

Dr. C. Lockhart Robertson on Turkish Baths for Insanity.

Dr. C. Lockhart Robertson, Metropolitan Inspector of Lunacy, and formerly Medical Superintendent of Hayward's Heath Lunatic Asylum, in treating insanity, says:— "In one instance of acute mania, depending apparently on recent small-pox, I found immediate relief of the maniacal symptoms follow the administration of the bath. My great success has been with cases of melancholia, with refusal of food, and loss of strength and flesh. In several cases of melancholia, complicated with phthisis in its earlier stage, a great improvement both of the mental and physical symptoms has followed the treatment."

"In a case of apparently confirmed dementia—the patient was unable even to tell his name, restless and destructive, was much reduced in health, and there was dropsy in the lower limbs, with albuminous urine of a marked character; he gradually got worse, and after he had been a month in the asylum, I sent him to the bath almost as a forlorn hope. The result of a month's treatment of the bath twice a week was, that dropsy disappeared, that no trace of albumen was found in the urine, and the man is apparently convalescent: he is working at his trade as carpenter. The bath, as a remedial agent, is grateful to the feelings of the insane, and which they do not, like other means of washing, associate with the idea of punishment.

"I must not omit to notice a specific power to remove noxious secretions of the skin so frequent with the insane, and which, in asylums of twenty years ago, one could recognize as distinctly as the smell of a dog kennel, and which still sometimes refuses to yield to ordinary ablution. The Turkish bath entirely removes this unpleasant complication."

Dr. Balbirnie's opinion on Turkish Baths.

Dr. Balbirnie says: "The practical views now suggested in connection with the Turkish Bath, when pushed to their legitimate consequences, will effect, we believe, a great revolution one day in medical treatment, and will influence

for good the destinies of thousands of unborn generations. I challenge my respected medical brethren to refute the distinct proposition I lay down on this head: viz., deficient oxydation of the waste of the body lies at the foundation of most diseases—an evil aggravated in chronic disease by the attempts of the system to compensate this defect by abstracting oxygen from the food. Disprove this allegation who can! Beyond all question, this infra-oxydation is the starting point of gout, of rheumatism, of diabetes, of granular kidneys, of fatty degeneration, of many forms of fever, and of some others of our gravest diseases. If so, what is pointed out as the cure of this state of matters? Less trust to mere drugs, unquestionably; and more attention to open, and keep open, the body's safety-valves. This can always be done by the simplest natural agency. . . . . If I were asked to give a brief and distinctive definition of the Turkish Bath, I would say: It is that which claims the exclusive or pre-eminent power of physiologically opening the safety-valves of the living mechanism; or, in other words, developing a high activity of the depurating economy of the animal body; and so fulfilling the first grand indication for the cure of all diseases."

It is this double function of the skin—its breathing capacity, so to speak—at once an excretory and an absorbent organ, that enables the bath to act so generally, so powerfully, and so successfully as a therapeutic or curative agent. "It will balance the circulation sooner than any other means I know," said Dr. John Armstrong. "*The patient is raised*, as by the touch of a magic wand, from weakness to strength."

Turkish Baths cannot give colds.

It would carry me much beyond the limits assigned to this chapter to further treat of the therapeutic value of the hot-air bath, but I may mention a favourite objection that is urged against it by the uninitiated, namely, that

it renders the body susceptible to cold. Speaking on this point, Erasmus Wilson says: "The bath, properly conducted, cannot give cold. In truth, it is one of the great recommendations of this form of bathing, as peculiarly suitable to that class of people who are poorly fed, badly housed, and worse clad, that by no other means can the human body be so well fortified against the injurious effects of cold." With reference to the same objection, Dr. Sheppard says: "The bath is the best preservative against the vicissitudes of temperature. It imparts a vigour and a power to resist cold, which are as remarkable as they are undoubted." Again: "It is a common experience," says Dr. Thudicum, "that persons liable every winter to attacks of catarrh, bronchitis, or neuralgia, acquire a perfect immunity from these complaints."

Turkish Bath creates an appetite.

Another objection, which has been repeatedly raised by medical men as militating against the adoption of my proposal, is one which has more truth in it. It is that the bath, by stimulating the skin, and consequently the general animal economy, increases the appetite. This the bath certainly does do, and it is surely but a very shallow argument to make one of the best signs of its medical merits an objection against its use; money is better spent in bread than physic.

Dr. Millingen on the Turkish Bath amongst the poor in Turkey.

No doubt, like every other good thing, the bath may be injudiciously employed; but assuming, as we have a right to do, its proper administration under competent superintendence, then, indeed, so far from having a tendency to impair vitality, or in any other way to act injuriously on the system, its effect is highly beneficial and salutary. Dr. Millingen, whose testimony is entitled to consideration, as he resided at Constantinople for some years in the capacity of physician to the Sultan, and en-

joyed an extensive personal experience of the bath in the East, adverting to its use by the labouring population, says: "The working classes among the Turks know of no other means of prevention on feeling indisposed but the bath. It is looked upon so much in the light of a panacea by the lower orders, that they hardly ever dream of consulting a physician when taken unwell. If the bath fail to cure them, nothing else will succeed. This prevailing conviction accounts in a great measure for the total absence of dispensaries and civil hospitals, not only in this large city (Constantinople), but throughout the whole empire. Yet I apprehend from the tables of mortality monthly published that the mortality is not greater than it is in countries blessed with those institutions. The higher classes, and women especially, do not, as with us, know much about regular exercise, so that, were it not for the ample compensation afforded by the bath, they would not enjoy the excellent health they possess."

Absence of Turkish Baths in Hospitals.

Yet, notwithstanding the undoubted advantages possessed by the Turkish Bath as a therapeutic agent, there is not, as I have already stated, in the whole of London a single dispensary, and only one hospital, where a patient can have a sweating-bath. More than this, there is not a single Turkish Bath in the metropolis—within the means of the poor—to which an hospital or dispensary practitioner can send his patient.

This want of free bathing is the greatest, and by no means the most creditable, anomaly in the administration of our medical charities. The neglect in the treatment of the poor by an agent so simple and safe, economical and salutary, as the bath incontestably is, becomes the more striking and reprehensible when we consider to what an alarming extent gratuitous drugging prevails.

No matter how desirable a dispensary practitioner might

consider a hot-air bath to be, either as an active therapeutic agent in the treatment of disease, or as an efficient auxiliary, he is powerless to employ it. He may be thoroughly persuaded that, in many cases, bathing would be far preferable to drugging; yet, by the consummate wisdom that regulates the administration of our medical affairs, he is absolutely precluded from availing himself of the remedial agency of hot air, while deleterious drugs and pernicious stimulants, without stint, are placed at his disposal.

Difficulties of Medical men in ordering Turkish Baths.

Now, were my proposal adopted of having hot-air baths attached to baths and washhouses as well as to hospitals and dispensaries, the hospital physician would be enabled to prescribe a sweating-bath to his poorest patients with the certainty of their being able to carry out his instructions. He would thus, in addition to giving relief to the patient, be conferring an indirect benefit upon the poorer and more ignorant portion of the community, by inculcating in the popular mind the necessity of *absolute* cleanliness, and the constant correlativeness of uncleanliness with disease. Nor would the generality of the medical world be slow to take advantage of the means thus placed at their disposal. Indeed, many deplore the present state of things, which prevents them making use of so invaluable a remedy. A gentleman who has had extensive experience as a dispensary and hospital practitioner, and whose high opinion of the bath is based on its medical virtues, says: "I am an ardent advocate, from medical principles, of the practice of Turkish Baths, and quite concur in the sentiment of the British Medical Association, that there ought to be baths of hot air in every city, town, and village; no medical institution can be worthy of the name without them, for disease is not to be cured by mere drugs alone." And Dr. Richardson, at the late meeting of the Social Science Association, when

describing his model city of health, Hygeia, said he would have all his hospitals "supplied on each side with ordinary baths, hot-air baths, vapour baths, and saline baths."

Baths would lessen the poor rates.

Were it, indeed, with no other end in view than the reduction of the poor rates, the dispensaries and hospitals ought to be provided with means of prescribing such a bath. In parishes where sickness and disease most abound, there, as a natural consequence, the burden of supporting the indigent poor is the most onerous; for where the heads of families are stricken down with illness, the maintenance of their helpless children necessarily devolves upon the Poor-law Guardians. Referring to this matter in their Second Report on the state of large towns and populous districts, the Commission of Inquiry have the following remarks: "The loss of life which occurs annually from a neglect of the measures necessary for rendering wholesome the dwellings of the poor and the streets adjacent, must be accompanied by serious pecuniary charges both upon the sufferers themselves and upon the community. The prolonged attacks of sickness which precede this excessive mortality, render the victims of it incapable of following their daily occupations, and reduce them and their families to the necessity of seeking relief from the parish and other funds, which are eventually burdened with the maintenance of the surviving members of the family."

Turkish Baths save the poor from misery and expense.

Now colds and other maladies, from which the poor are such heavy sufferers, are, as we have seen, if treated in their early stages, easily cured by the use of the Turkish Bath. It is, therefore, both less costly as well as more benevolent to place at the disposal of the labouring classes such means as will enable them to ward off or cure sickness in its incipient stage, than to allow them to fall into ill-health, and thus to bring misery into their families and expense upon

the parish. Yet such is the system now in existence. Surely it is time that so irrational and expensive a state of affairs was put an end to; and it is to the interest of ratepayers to see that it is. Let them ever bear this truth in mind—and no principle in political economy is more sure—that the more baths there are, the less disease; and the less disease, the fewer demands on the poor rates.

It must be admitted, however, that a great deal of the apathy hitherto exhibited on this subject has arisen, not so much from an indifference to the interests of the sick poor as from a want of knowledge concerning the great inherent virtues of the bath which has so generally prevailed amongst all classes up to within a very recent period. But now that public opinion is being enlightened in this respect, and that medical men connected with our hospitals, lunatic asylums, workhouses, and other public institutions for the treatment of disease, have successfully tested and favourably recognized its high sanitive and therapeutic merits, it is to be hoped that a brighter period in the annals of the bath is about to dawn.

Prospects of Turkish Baths increasing in popularity.

Indeed, when we consider how exceedingly difficult it is to contend against the pride of professional dogma, which clings with a superstitious reverence to old habits of thought and practice, and how hard it is to surmount opposition that arises from popular ignorance and prejudice, as well as to overcome official inertia, instead of wondering at the tardy progress the bath has made towards becoming a national institution both for the prevention and cure of disease among the poor, it is surprising that without any adventitious aids, and in defiance of all impediments, it has made its way so successfully. Such indeed is the vitality of a good thing that it is sure in the long-run to overcome all opposition; knowing this, and knowing also that there is now an intelligent desire on the part of the

public to give an unprejudiced trial to all reasonable improvements, I can confidently predict that in twenty years' time no hospital will be without its hot-air bath, and that the town which has not its public baths—the hot-air bath included—will be considered in as bad a state as a town is now that has no system for the disposal of its sewage.

HEALTH.

"Health is that which makes your meat and drink both savoury and pleasant; else nature's injunction of eating and drinking were a hard task and a slavish custom. Health is that which makes your bed easy and your sleep refreshing; that revives your strength with the rising sun and makes you cheerful at the light of another day; 'tis that which fills up the hollow and uneven places of your carcase and makes your body plump and comely; 'tis that which dresseth you up in Nature's richest attire, and adorns your face with her choicest colours. 'Tis that which makes exercise a sport and walking abroad the enjoyment of your liberty. 'Tis that which makes fertile and increaseth the natural endowments of your mind and preserves them long from decay; makes your wit acute and your memory retentive. 'Tis that which supports the fragility of corruptible body, and preserves the verdure, vigour, and beauty of youth. 'Tis that which makes the soul take delight in her mansion, sporting herself at the casements of your eyes. 'Tis that which makes pleasure to be pleasure and delights delightful, without which you can solace yourself in nothing of terrene felicity or enjoyments."

CHAPTER VIII.

SMALL-POX.

THE small-pox epidemic being very great at this time, I have deemed this a fitting opportunity for making some observations on inoculation and vaccination as prophylactics, and to offer some remarks on the treatment of the disease by physical means.

Origin of Small-pox.

The origin of disease, and especially of great and wide spread epidemic and endemic diseases, has been always, in the history of science and medicine, a subject of eager, anxious, and often angry discussion; and when specifics were supposed to be found, or general modes of treatment became popular, these were as much disputed as the maladies themselves. Small-pox and its alleged cures or mitigations are no exceptions. It is almost certain, although not universally entertained that small-pox broke out in some original centre favourable to its development, and passed by contagion, or infection from nation to nation, community to community, and individual to individual; until at last it became an hereditary taint, or as the Chinese express it, "imbibed with mother's milk."

In looking for the place of its origin those who attribute its birth to some one centre favourable to its existence have greatly differed in opinion; the majority

maintain that it was generated among the Arabs, and that it spread into Europe as an accompanying attendant upon the Mohamedan conquests.

No mention is made of small-pox in the works of Greek and Roman authors, although many other irruptive diseases are described, such as erysipelas, scrofula, lepra, &c. From this it is reasonably assumed that those enlightened nations were free from this distemper.

According to an ancient Arabic MS. the small-pox originated or was introduced into Arabia in the year A.D. 572 which is historically remarkable as the year which gave birth to Mohamed. From other authentic Arabic MSS. it would appear that it was at the siege of Mecca that the Arabians were first stricken by this pestilence, and it is observable that after great sieges and campaigns it has frequently appeared and been signally destructive.

Progress of Small-pox.

Dr. Rimbe an able writer traces the progress of small-pox from Arabia in the following terms, "The conquests of the false prophet, and his fanatic followers soon extended far and wide; and as may easily be conceived the ravages of the new disease followed everywhere the track of the conquerors, who in less than half a century had established their dominion not only over Egypt and Syria, but a great part of Persia also."

In the eighth century, however, the disease certainly appeared in Europe, when the whole Southern Coasts of the Mediterranean were subdued by the impetuous Arabs, so that it entered by the gates of Hercules through the medium of the Mohamedan Moors. But it is remarkable that although Spain first felt the breath of the pestilence, it has been, from some unknown cause, less afflicted by it for some centuries than other nations of Europe.

Small-pox brought into Spain.

Mr. James Moore, a Member of the Royal College of Surgeons, in describing the landing of an army of Moors in Gibraltar and Spain, says:—"By this invasion the small-pox must have been brought into Spain, and the victorious Saracens soon reached the Pyrenees. In the year A.D. 731, Abderame crossed these mountains, and inundated the South of France with a host of Saracens. They were opposed under the walls of Tours by Charles Martel, when Christians and Mahomedans fought six days indecisively for victory, but in a closer combat on the seventh day the impetuous but slender Arabs gave way. The Saracens and *Koran* were repelled into Spain, but the small-pox remained in France.

The Saracen fleets were triumphant in the Mediterranean; Sicily, Italy and many cities of the coast were frequently invaded. It cannot be doubted that this intercourse with Africa and Asia introduced this disease, although no direct proof can be adduced. The circumstantial evidence is conclusive."

Small-pox in America

America received the malady from Spain, where it spread rapidly among the Indian Tribes. It was introduced into British America from England in the same way as alcoholic drink was brought to the natives by the British settlers, England having received the infection from the European Continent.

Whether the disease was brought into Europe by the Saracens, or not, it is reported to have existed in India anterior to its prevalence among that people. From India, small-pox was landed upon the coasts of Arabia, and thence entered Persia. If this is correct it would appear that Arabia itself derived the infection from India.

Antiquities of Chinese Records of Small-pox.

Whenever the nations of Western and Central Asia, of Africa, and of Europe may have received the disease, Chinese records are of far greater antiquity

than any we have of its visitation to those regions. "China, the puzzle of antiquity," anticipated Europe in various useful arts, criminal acts, and dire diseases, and there seems not much room for doubt that this most terrbile of inflictions, was known to the Chinese many ages before authentic history ascribes it to Arabia. The Jesuit missionaries gained access to the archives of the empire, and amongst a vast amount of information which they have given to Europe we find specific accounts of small-pox disease. The appearance of the malady is assigned to a very early period, 1122 years B.C. The Hindoo mythology and worship also indicate in their respective modes the existence of some such disease.

From these facts it is not surprising that the idea should prevail that the calamity should have had many, or at all events, several spontaneous centres. China, India, Arabia, Egypt, Ethiopia, &c., but whether from one, or several, or many, it spread with alarming facility and fatality, until the whole world was cursed with its appalling effects as by the cholera or plague.

Development of Small-pox.

For many ages the development of small-pox was accounted for by contact with the diseased, by inhaling the effluvia from their bodies, garments, or apartments; sometimes from the conditions of the atmosphere, from humid or fetid exhalations, or from water poisoned by invisible fungi or other indeterminate agencies. The presence of gases that were not analyzed, or which were beyond analyzation was also made to account for the malady. A modern writer of eminence denies that the disease is caused by any epidemic atmospherical influence, he says, "If there exists anything in the atmosphere capable of injuring any one person's health it must injure all, as they would be by the effects of a strong wind, or heat, or cold,

or as they would be by the effects of arsenic, or carbolic acid inhaled, or an electrical shock, fire, water, &c. Hence, if we observe that only a portion, perhaps a third, or even much less, of a given population becomes seriously affected, while all the rest are entirely free, then we must logically conclude that there was something different in the organism of the affected from those who were exempt; that the reason, or cause of their being affected, is *in themselves*, and not in the atmosphere alone."

Dr. Both on Predisposition to Small-pox.

Doctor Both, of Boston, United States, energetically urges this upon the consideration of all medical men, possible patients, statesmen and citizens of Christendom. He observes—"In all epidemics, such as cholera, small-pox, yellow fever, typhus, &c., we find it generally admitted that the affected persons have shown a predisposition, while those who continued in health were so constituted as to escape uninjured; therefore it is of no consequence to learn whether minute spores float in the atmosphere, carrying the germ of those diseases, or whether gases escape from the earth or from diseased persons, or whether electrical currents, or uneven pressure of the atmosphere, or whatever may be thought to be the infecting agent, we have only to do with the susceptibility of the persons interested. If we can avoid the predisposition we need have no fear about the atmosphere or other supposed agencies—we are invulnerable."

Salt an antiseptic to Small-pox.

According to Dr. Both, a German physician, the predisposition to small-pox consists in the elimination or absence of the natural salts from the blood, which may be caused by food, if that does not contain them, such as stall-fed meat, and the disuse of table-salt either from taste, habit, or necessity, or from the excessive use of alcohol, by

which he maintains they are destroyed; and hence, he argues that in the case of communities, cities, districts, or individuals, small-pox may be spontaneously developed.

After all the long wars in Europe, when from the pressure of other important business the salt mines were neglected, it has invariably made its appearance. He thinks that the disease is identical with typhus, typhoid, and other fevers. In fact, the learned doctor appears to be of opinion that there is but one disease, named differently according to the locality in which it is developed, and that small-pox may be indicated in the intestines as in typhus, or elsewhere, as well as on the skin, according to the constitution, or peculiar condition of the sufferer's health immediately before falling sick.

What is Small-pox?

Dr. Both thus answers the question What is small-pox? "It must be admitted by all that small-pox consists in an escape or exudation of something into the skin which causes it to swell, and by a process of putrefaction destroys it, and not unfrequently carries off the patient. This mass, which is thus exuded, or thrown off into the skin, must necessarily come from the blood, therefore it must be something which is abnormal, or there must be something which has deranged the whole system to such a degree that the blood, as a consequent, is disturbed in an exceedingly peculiar way." Upon this basis he reasons that the "offending something" must be found in the albuminous combinations or the blood salts; he, by *petitis principée*, assumes that the *serum* cannot be the offender, as it is a solvent only. The disturbance of the necessary proportions of water, albumen, and salts, his doctrine, constitutes disease, and and developes small-pox. He sums up his theory thus:—"The predisposition to small-pox consists in an undue proportion of albuminous matter to the blood-salts,

and that, as the result, an otherwise inoffensive nervous irritation becomes sufficient to cause the blood to part with this superfluous albumen, which, in this case, is thrown into the skin, and constitutes that condition which is commonly called small-pox. And we further maintain that a person who does not exhibit this superabundance of albuminous matter in his blood is not liable to small-pox under any circumstances of exposure, or contact with patients suffering under this disorder."

Conditions favourable to Small-pox.

Although Dr. Both admits that there are concomitant conditions favourable to the production of the disease, he maintains that the disease will, or is likely, to be spontaneously produced in any climate or soil, in any community, and in any individual, when an adequate quantity of salt is not used. "It will invariably be found that the ravages of small-pox are principally confined to those cities, countries, or localities where the population is overcrowded, or dwells in close unventilated tenements, with habits and surroundings which are bad, living for the most part in the use of alcohol, with little or no salt, and upon food which does not constitute the elements for creating the best blood, and have no means of bathing or cleaning their bodies."

Finally, according to this medical philosopher, there is no danger of taking small-pox by attending upon patients, or consorting with them, if the blood be not deficient in its salts.

I am not in a position to endorse the arguments that salt is an antiseptic to the disease, having had no experience in that direction, I am compelled to admit that the facts produced are such as ought to command the attention of the medical faculty, and their accuracy should be proved by investigation.

It is deplorable that the prevalence of the calamity,

the vast numbers swept away by it, the loathsome concomitants, and the deformity entailed upon survivors, has failed to quicken the philosophy or sagacity of the faculty in any country clearly to investigate its cause or cure.

The disease has been called in this country, and perhaps elsewhere in Europe, "the opprobrium of the faculty." It is in fact, if not quite true, nearly so, when the only means at the disposal of the profession is vaccination as a preventive, and isolation as a counteraction to its spreading.

Specifics for Small-pox inoculation.

The first specific in treating small-pox was inoculation. Like the disease itself this preventive was of Eastern origin. Lady Montague supposed that the results she witnessed in the East justified her in using her influence with the Court and the public, for the introduction of inoculation in this country. Many supposed it to be efficacious in preventing a recurrence of the disease; or at all events in mitigating the visitation. But this procedure of "anticipating the disease" was regarded by very many as unphilosophical, and morally improper, and even while it was much practised was generally doubted, and resorted to with misgiving and dissatisfaction.

We have evidence that the Chinese resorted to it, in the hope that inoculation would mitigate the disease and prevent recurrence. No doubt they were influenced by observing how very differently persons were affected, and the mildness of some cases led them to suppose that inoculation from such a type of the disease would produce its like, but viewed in the light of modern science and experience it is well-known that the disease when taken from a person lightly afflicted is often of the severest kind.

The Chinese attempted to propagate this milder form

of the disease, by the following curious and ridiculous method, which they oddly termed—"sowing the small-pox." "They took a few dried small-pox scabs, and planted them in the nose. A bit of musk was added in order to correct the virulence of the poison, and perhaps to perfume the crusts, and the whole was wrapped up in a little cotton to prevent its dropping out of the nostril. Some physicians beat the crusts into powder, and advised their patients to take a pinch of this snuff, and when they could not prevail upon them, they mixed it with water into a paste, and applied it in that form."

Inoculation in the arm originated with the Brahmins. A few slight scratches were made on the skin with a sharp instrument, a piece of cotton which the preceding year had been soaked in variolus matter was then applied, moistened with the holy water of the Ganges, and the preparation was bound upon the punctures. In six hours the bandage was taken off and the pledget allowed to drop spontaneously. The next morning cold water was poured upon the head and shoulders of the patient, which was repeated until the fever came on. When the pustules began to change their colour they were opened with a fine pointed thorn. Confinement was absolutely forbidden; the patients were allowed to be exposed to free currents of air, and when the fever was upon them, they lay on mats at the door, and their regimen consisted of the refrigerating productions of the climate.

Inoculation in the Arm.

It is supposed by those who believe that the disease itself found its way from Arabia, that inoculation may be traced to the same source. The practice of "buying the small-pox," was general in Arabia, and all along the African coast. A healthy child was brought, bearing a few dates or raisins as the price of the matter to be taken from an infected child. This

Buying the Small-pox.

strange arrangement was ultimately introduced into Europe, and to some limited extent was known in England.

Inoculation practised in England.

The medical profession of this country made no recognition of the practice until the year 1703, when one Dr. Alpech, having noticed at Constantinople the process of inoculation prevailing there, and being of opinion that it mitigated the pestilence, recommended it in London. Very shortly afterwards a British surgeon named Kennedy, who had also practised at Constantinople, published a work in favour of inoculation, or as he termed it "engrafting the small-pox."

Great numbers, however, regarded it as unnatural and injurious, and perhaps greater numbers, admitting that it was advantageous in the individual case, objected to it, as a means of far more widely extending the pest, and it fell very much into disuse in the British Isles. Concerning it at that juncture, the following curious passage occurs in an old number of the *Quarterly Review* published early in this century:—

"When in this dormant state, news was brought that multitudes of Indians in South America had been inoculated with as much success by Carmelite friars as the Asiatics had been by Greek old women; a physician and surgeon also began to inoculate in South Carolina, in 1738, and only lost eight out of a hundred persons. But a planter in St. Christophers inoculated three hundred persons without losing one. For it is singular that in those days all inoculations performed by private gentlemen, monks, and old women were uniformly successful, *none lost patients from inoculation except the regular members of the faculty.* The American reports were so encouraging that about the year 1740 the practice was revived by a few surgeons in various parts

of the South of England, and gradually extended there."

In 1754 the Royal College of Physicians gave inoculation their sanction.

Inoculation revived by Sutton.

An irregular practitioner named Sutton, discarding the complicated methods of the faculty, was very successful in propagating inoculation, and to him may be attributed its revival during the latter half of the eighteenth century, when small-pox spread over nearly all Europe, Spain having been the exception, and it is remarkable that the disease spread less in that country than in any other.

During the last thirty years of the century, however, deaths, blindness, disfigurement, and ruined constitutions, were augmented by the pestilence, the public became alarmed, and the practice of inoculation became again unpopular.

Dr. Both says that "in the whole literature of science, and in the experiments and improvements made in scientific knowledge there does not exist one single fact which could support the idea that inoculation was a preventive of small-pox." He says the same also of vaccination, which now comes under consideration.

Introduction of Vaccination by Jenner.

The name of Jenner, and the origin of his discovery, are too well known to narrate the circumstances attending the introduction of inoculation by vaccine matter as a preventive of small-pox. His observation of the freedom of dairy maids from the latter, and the presence of cow-pox in their persons, suggested to him the experiment of inoculating the one disease, as a substitute or anticipation of the other. It is contended by some that the adoption of this remedy or preventive was not the result of his own observation, but be this as it may, he introduced the plan, and by his authority, ability, and

perseverance made it popular with the peoples and governments of Europe, and eventually in America and other parts of the world.

It was in the year 1768 that Jenner's attention was first drawn to the subject, but it was not until some years afterwards that he thoroughly introduced his system.

Jenner on the Cow-pox.

His own account of it is as follows:—"The disease of cow-pox had been known in the dairies of Gloucestershire from time immemorial, and a vague opinion prevailed that it was preventive of small-pox. This opinion, I found, was comparatively new, for all the old farmers declared they had no such ideas in their early days, a circumstance which seemed easily accounted for from my knowing that the common people were very rarely inoculated for the small-pox till that practice was become general by the improved method introduced by Sutton; so that working people in the dairies were very seldom put to the test of the preventive power of cow-pox."

The public mind was prepared to receive almost any specific, so terrible were the apprehensions of the disorder; and although Jenner and his disciples were much opposed, especially by physicians and surgeons, who "time out of mind" have opposed all new ideas and theories, and all novelties of practice, good or bad, the doctrine and practice of vaccination had a speedy triumph, until finally an Act of the British Legislature made vaccination compulsory.

Efficacy of Vaccination disputed.

Discussion has revived, and is now rife as to whether vaccination is as effective as the disciples of Jenner believe, whether it is effectual at all, whether it does not do more harm than good, and under any circumstances whether compulsory vaccination is necessary or just. On all these points many able men give a decided

negative, and the opponents of vaccination are steadily augmenting in numbers.

Vaccination. liable to produce other diseases.

It is agreed that there are various eruptions to which the teats of the cow are liable, and that disease not intended by the vaccinators is frequently produced by their inoculation; carefully collected statistics support the theory that true cow-pox is frequently attended by injurious influences to the patient; that erysipelas and other diseases of the person from whom the lymph is taken are given to the subject inoculated by it.

If it be admitted that small-pox has declined since the discovery of Jenner's system, such opponents as admit it declare that the circumstance is due to the superior skill of modern medical practice; to the prevalence of more *scientific* knowledge on the part of the faculty; and above all to the advance of social and sanitary science, creating conditions unfavourable to the development and spread of the disease. It is alleged that since vaccination has prevailed the disease has been checked and pitting greatly diminished:—But is the credit of this improvement to be given entirely to Jenner's discovery? Is it not due rather to a variety of influences? Have not improved sanitary measures and more skilful management of the disease had their share in the good work? One thing is certain, that where these modifying influences are wanting, the disease and its *sequelæ* are still formidable, notwithstanding the most careful attention to vaccination.

On the whole the present state of things is unsatisfactory. The only hopes of checking the disease, on the part of Allopathists, are compulsory vaccination and isolation. On these two points an American physician who has recently written on the subject has made the following pertinent remarks:—

Arguments against Vaccination.

"That vaccination was made compulsory in good faith by the Legislature, there is little doubt; but if science were consulted in the matter, such a law would be found to be barbarous, dangerous and abominable. If the State demand vaccination, it should first give the subject proper investigation; second, give protection from murderous assault by blood-poisoning by procuring lymph, which can stand microscopic examination; and thirdly, see that no laws are enforced which are based on an experience which is very doubtful, or on an authority of no weight of any kind, directly contradictory to all scientific investigation and facts, and under present conditions exceedingly dangerous and harmful."

Many other able works have been written against vaccination, especially when compulsory, and the forcible isolation of persons who have families and houses.

Dr. Pearce in his "Essay on Vaccination" calls it "a crime against nature," and elaborately argues that it frequently conduces to consumption.

Mr. T. Massey Harding, M.R.C.S., in a very effective pamphlet, shows that cow-pox and small-pox are not in any way similar, and that it is scientifically and physically impossible that the former can be a substitute for the latter, or operate as a preventive.

Dr. Bayard, an eminent continental physician, identifies small-pox with typhus fever, differently named from the parts of the body where it is locally indicated, and argues that there is no scientific principle upon which it could be assumed that cow-pox could be a preventive.

Several eminent medical writers testify that they have seen cow-pox and small-pox at the same time in the same patient.

Dr. Both lays down the following propositions:—

"First, that the origin of vaccination was not of a

scientific character, and that it never at any time had a scientific basis.

"Second, that the prevention afforded is due to the diminution of the excess of albumen by the ulcer produced.

"Third, that the vaccine virus generally employed is nothing but pus, the introduction of which to the blood is criminal under any circumstances.

"Fourth, that nothing specific or preventive is contained in any kind of vaccine virus, no matter how or where produced."

Small-pox dying out when cow-pox was introduced

It should not be lost sight of in the discussion of this subject that small-pox appeared to be dying out in England about the time that cow-pox was introduced as a preventive, although as previously stated it raged upon the Continent and the terror concerning it in the British Isles was as great as ever. The virulence of the disease had also abated, even where it somewhat generally prevailed. Jenner himself states that in 1791 "A species of small-pox prevailed in many of the towns and villages of Gloucestershire. It was of so mild a nature that a fatal instance was scarcely ever heard of, and consequently the lower orders of the community in that district never scrupled to hold the same intercourse with each other as if no infectious disease existed among them. I never saw or heard of an instance of its being confluent. The harmless manner in which it showed itself *could not arise from any peculiarity either in the season* or the weather, for I watched its progress upwards of a year without perceiving any variation in its general appearance." Vaccination was not then prevalent, or it would of course have got credit for the immunity, but Jenner himself believed that the existence of cow-pox extensively among the cattle in Gloucestershire, and communicated by them to the milkmen and

milkmaids accounted for the phenomenon; but the like was seen about the same period in other parts of the country remote from Gloucestershire, where it was pretended that cow-pox appeared upon the tats of the cattle.

From the first introduction of Jenner's preventive, numbers of medical men reported the frequent recurrence in the range of their practice of *post-vaccinal* small-pox.

Vaccination no longer probable preventive

Whatever may have been the utility of the discovery during the quarter of a century, or indeed, less than that, after its application, this has been for a long time admitted by many, even of its most fervent advocates, that the spell is broken, that vaccination is no longer even a probable preventive, and that a second inoculation by it is necessary to secure whatever virtue there is in it, and some affirm that this should be repeated every seven years. So far back as 1833, the *Medical Gazette*, in an article on the subject, stated, "*It is a well-known fact* that small-pox after vaccination has become of much more frequent occurrence within the last few years. Twelve or fifteen years ago cases were occasionally met with, but comparatively rarely. Since that time it is *everywhere becoming more frequent*. It is no unusual circumstance to find five or six individuals of the same family successively attacked by the disease."

Several medical men during the lifetime of Jenner proved that they had patients for small-pox who were vaccinated by Jenner, and many of these occurred a short time after the vaccination.

Objections to revaccination.

The doctrine of re-vaccination, in order to give perfect effect to the remedy, is not without great and numerous objections. Dr. Gregory, who was for some years physician to the small-pox hospital, stated, "*Abundant experience* has shown that after receiving cow-pox effectually, the

human body remains insensible to *the same poison* for a considerable period of time, but for what that period is, whether for life, or for larger or smaller portions of life, are questions of importance deserving rigid investigation."

Such rigid investigation has never been given; the theorists who favour vaccination every seven years do so from finding that a single "engrafting" of the cow-pox does not prevent the disease it was designed to supersede, and does not mitigate its malignance.

Compulsory vaccination is an intolerable tyranny, against which the public should revolt. It is worse than the hazard of small-pox itself, perhaps worse than its advent, because of the consequences which the new disease entails upon millions of persons of different constitutions, in different circumstances, different states of health, and diverse periods of life, especially if, as Mr. Birch, an eminent surgeon, states, "cow-pox has been often fatal, and has introduced new disorders into the human system," and this opinion is supported by thousands of eminent men. Compulsory vaccination a tyranny.

Dr. Moseley goes farther than this, alleging that "the inoculated cow-pox is *not* a much milder nor safer disease than the inoculated small-pox.

Mr. Stuart, a contributor to medical periodicals, and himself a surgeon, relates an instance that came within his practice, of a very healthy child, which after vaccination became very sickly—"He was always afflicted with blotches and ugly eruptions, until he had the small-pox after an interval of three years, subsequent to his recovery from that disease, when he became perfectly healthy as before."

The ugly blotches and eruptions mentioned would not yield to medical treatment, and bore no resemblance to

any diseases known to the faculty. Now, it would be wrong to say *ex uno desee omnes*, but it is quite right to argue that so many cases have occurred, according to the testimony of numerous medical men, of nasty, venoral, dangerous, and intractable disorders after vaccination, that Mr. Stuart fairly made out "the cure to be worse than the disease." If it be said that the vaccinated matter was bad, or taken from an unhealthy person, such may constantly occur in the process, and the statement is itself an argument against vaccination. To subject the whole adult population to repeated visitations of "ugly blotches, and eruptions," through vaccination and re-vaccination, would be an oppression and a cruelty on the part of the most despotic Government, and would effectually deteriorate the subjects.

Consumption has increased since vaccination was introduced.

The allegation has been noticed *en passant* elsewhere in this essay, that consumption has rapidly increased since the introduction of vaccination. Jenner's own eldest son, and a servant who were among the first he experimented upon, died of consumption. Of course it would be useless to argue the one fact from the other, but for the great number of instances of death from consumption which occurred among Jenner's vaccinated patients and those of his disciples. Neither can we conjecture, however numerous the instances pointed out, whether the induction is a perfect one. This is for statists and medical philosophers upon further investigation to determine.

Sources of infection.

Among the great varieties of opinions as to the origin of the distemper, and somewhat akin to the theory that the cow can infect the human body with cow-pox, is the idea that the camel first infected it with small-pox. This is, however, exceedingly dubious, and requires further evidence before it can be confirmed.

Allied to the notion of inoculation from the camel

is Jenner's opinion that it was first communicated from the horse to man, from the human being to the cow, and thence back again to man in the milder form of cow-pox, this idea is expressed by him in the following terms:—

"That the source of the infection is a peculiar morbid matter arising in the horse, I feel no hesitation, being well convinced that it never appears among the cows (except it can be traced to a cow introduced to the general herd which has been previously affected) unless they have been milked by some one who at the same time has care of a horse affected with diseased heels."

This disease of the horse is called "grease," and is always exuded from the heels.

Veterinary surgeons' opinions.

Veterinary surgeons are supposed to have thrown some recent light upon the subject. We have seen that Jenner supposed that the disease called "*grease*" in the horse was identical with small-pox, or essentially like it; hence, he literally inoculated for the small-pox, transmitted from one beast to another, as a medium for its introduction to the human body, and was a supposed improvement upon inoculation from one human being to another.* But Dr. Nittinger, of Stuttgard, has voluminously written to prove the identity of "*grease*" in the heel of the horse, with pulmonary consumption, and veterinary surgeons, especially in Germany, have supported this theory. If it be true, the cause, or one cause at all events, of the great increase of Phthisis has resulted from Jenner's discovery. Besides, small-pox was a pestilential and terrible evil ages before "*grease*" in the heel of the horse was observed, which it must have been if it existed, a fact fatal to Jenner's theory. Dr. Both, already quoted on other points of this controversy, and who, perhaps, has given as much

attention to the disease as any living man, maintains that the horse disorder, called "*grease*," has no affinity whatever to either small-pox or consumption, and could not be made an instrument of communicating either, and after extensive study and observation, denies Jenner's theory that the horse gave the "*grease*" to man, man to the cow, and the cow back again to man in a milder form.

Vaccination increases fevers.

Among the evils attributed to vaccination is a great increase in fevers. There are no statistics published in England to show the proportion of the vaccinated to the unvaccinated among fever patients, but in France there are such statistics, and the inference is unfavourable to vaccination. Dr. Perrin, a French physician, affirms that the effect of vaccination in increasing fevers in France has been very great. In an hospital under his charge, of 154 cases of typhoid fever 76 had been vaccinated, and of these 35 died; of 38 unvaccinated 3 died. The mortality is in the relation of 35 to 6, nearly sixfold greater among those who had been vaccinated.

Baron Michel, a French army surgeon, affirms that after the army of Paris was vaccinated, fevers increased in the same proportion.

Similar statements have been made as to the increase of measles, and the following curious paragraph is quoted from the report of the Commissioners in the Parliamentary Blue Book, and these gentlemen were all Jennerites; the particular witness in this instance was Dr. West, physician to the hospital for sick children.

Dr. West on vaccination and its evils.

"With reference to the alleged increased prevalence of measles since the introduction of vaccination, it suffices to say that vaccination preserves only from small-pox, not from any other disease (*sic*). Measles is, next to small-pox, the most contagious of all fevers. The child

who sixty years ago would have died of small-pox, is now preserved from that, often only to catch, perhaps to die of, measles. *An increased number of deaths from the latter disease was the unavoidable consequence of the comparative extinction of the former.*"

Imperfect manner vaccination is performed.

Dr. West's statement respecting the imperfect manner vaccination is performed is as follows:

"As the best means of obtaining information on this point we examined the cicatrices on the arms of 49,570 vaccinated children in various schools, industrial establishments, and workhouses in London.

"Of these only 180 in a thousand were found to be properly vaccinated.

"In one-fifth of the whole number of children examined, vaccination was found to be wholly bad."

From these statements it is deducible that even if cow-pox be a preventive, no reliance can be placed upon its general administration. Statistics bearing upon the controversy have been gathered and arranged with pains-taking assiduity by medical men of ability, vaccinators and non-vaccinators, and judging with that impartiality which a sincere inquiry after truth dictates, the weight of evidence is against cow-pox inoculation. Besides, as an eminent physician has observed, "Though vaccination can be made compulsory, the pure lymph, and skilful and conscientious operator, cannot be made compulsory also."

It is contended that not only an increase of measles has followed the practice, but of scarlatina and diphtheria, also, which are now classed together in the Registrar-General's reports. During the first seven years after the Compulsory Vaccination Act came into force, the excess of infant mortality from these diseases exceeded a quarter of a million of lives.

Vaccination in the Army.

It is very remarkable that in the Crimean Campaign of the war against Russia, the British and French soldiers who had been generally vaccinated, not only generated small-pox, from an unhealthy condition of the blood and circumstances favouring disease, as Miss Florence Nightingale described, but they also in numerous cases died of cholera, as did also the Russian soldiers, who were also generally vaccinated, while Turkish troops, in the same camps with the French and English and Turkish prisoners in the Russian camp, who were not vaccinated, very extensively escaped.

The preventive power of cow-pox can be best argued on the Baconian principle of induction. If it can be shown by an induction which is complete that cow-pox prevents or ameliorates small-pox, the question is settled in favour of the vaccinators; if the induction be imperfect, the subject remains in doubt until a sufficient number of facts are collected and collated; but if it can be shown that cases sufficiently numerous can be made out in which virulent small-pox ensued after vaccination, the so-called discovery of Jenner is a failure; and if any mitigation of the disease has occurred since cow-pox was introduced, to attribute to it the virtue, is what logicians term a *non causa pro causa*.

Quality of vaccine matter.

A few years ago the Privy Council published an official report in which the facts and propositions are laid down. Dr. Both says, "The vaccine matter generally employed is nothing but pus, as any one can see who has a microscope of a power of three hundred diameters. The vaccine matter upon which I made my statements was obtained from the City physician, and at various times during twelve years; and in every instance, upon examination, proved to be nothing but pus."

Dr. Bayard, who has given the disease and the statistics

of small-pox and vaccination in France most earnest, energetic, and extensive attention, says:—"Hopes, illusions, chimera, deception, decadence—these make the history of vaccination."

He adds that "since the introduction of vaccination, mortality has more than doubled in the ranks of youth." And after adducing certain tables of health statistic for the department of the Loire and the whole of France, he deduces the conclusion that "cow-pox has done nothing but displace mortality."

Dr. Ramley on vaccination.

Mr. William Ramley, a surgeon of extensive practice in such cases, has the following remarkable passage in his work on the subject:—"It results from the general *resumé* of all these authentic facts that out of 504 persons, 75 died from the consequences, and almost all had the small-pox—some sooner, some later—after their vaccination. There is no question here of supposition, or calculation of probability, it is truth. It is evidence which seems to speak, and leaves no doubt. Consider France, Germany, Italy, and other countries where vaccination has been received, penetrate into the interior of houses, interrogate fathers and mothers, and you will be surprised, shocked, and even outraged to see, not only tolerated but maintained, a murderous practice, which carries desolation into families and compromises the reputation of those who protect or practice it."

Population has not been sustained since vaccination.

The French mathematical scholar and physician, Camot, who had studied "all the available figures," stated that in England the proportionate increase of the population had not been sustained since vaccination became general.

Baron Liebig indirectly supports Camot's idea of the population, the increase of which he attributes in England to immigration from Ireland, Scotland, Wales,

and Germany, rather than from the progressive and proportionate advances in numbers of the English people themselves.

Baron Humboldt on revaccination.

The great Baron Humboldt writes, "M. Schöulein, the first physician to the king, perceives with me the progressive advances of opinion respecting the dangerous influence of vaccination in France, Germany, and England. The question of revaccination and the repetition of revaccination becomes from year to year more perplexed."

Dr. Gregory's opinion.

Dr. Gregory, some time physician of the London Small-pox Hospital, stated in a paper read before the Chirurgical Society, "The idea of extirpating small-pox by vaccination is absurd and chimerical. The small-pox attacks the vaccinated. During eleven years 4091 persons attacked with small-pox were admitted into the hospital: 2167 of these had been vaccinated. In two years, out of 794 adult persons—nearly all vaccinated—115 died."

Having glanced at the origin and progress of small-pox to the present time and eliminated evidence of medical men, and statistics from the most reliable sources, opinions may be adduced to almost any extent against inoculation and vaccination, as specifics against the recurrence of small-pox.

The disease, ever since its introduction, has from time to time committed its ravages regardless of any known treatment, and I think the time is approaching when Government will be compelled to modify the compulsory measures which now violate every principle of liberty of the subject; the evidence of the effects is so very unsatisfactory, and the mode of administration so imperfect, as to be open to grave consequences.

In reviewing the treatment of this disease, it is shown that the faculty has not made much progress, if any, in

remedial measures; the malady has proved as difficult to deal with as the rinderpest among cattle, and, in fact, the legal management of the small-pox is very similar; cattle are put out of existence by the pole-axe, and a large per-centage of human beings die from the manner the law is administered. In both cases the law has prescribed and laid down stringent rules under heavy penalties which in some instances amount to tyranny.

Difficulty in the treatment of Small-pox.

Look at the practice resorted to of forcibly taking persons out of their beds when in a high state of fever, placing them in a cold *parish caravan*, jolting them through the streets of London for miles, and when the epidemic is bad it has been known that poor patients are driven from hospital to hospital, until the authorities found room to admit them. It cannot be denied by medical men that to take any patient out of bed in a feverish condition is a dangerous practice, and the effect of the jolting and exposure to a chill tends to drive in the eruption upon the viscera and endangers the life of the patient. It is owing to this and other discomforts attending removal that the mortality in hospitals has been augmented as compared with the results of patients treated in cottages or private houses. The only term I can apply to such a dangerous practice is *barbarism of the olden time revived;* removing a patient from his own private rooms, family, fireside, and social comforts, let them be ever so humble, against his or their will is an act of great injustice, and contrary to every principle of human feeling and scientific practice.

Forcible removal of patients.

Before proceeding to discuss the advantages to be derived from outward applications in the treatment of small-pox, I think it but just to notice another section of practitioners, viz., the homœopaths, who are formidable rivals of the allopaths, and enjoy a considerable

Homœopathic treatment of Small-pox.

share of public confidence as evidenced by their thousands of patients. It will be unnecessary here to consider the nature and theory of their doctrine *simila similibus curantar*, as they have always been able to defend their principles and maintain their position against their enemies in the domain of drug medication. I may observe *en passant* that one of the most striking instances of the validity of their infinitesimal system is vaccination, the small quantity of pus or vaccine lymph which is considered sufficient for preventing or anticipating one of the most loathsome diseases that ever afflicted humanity, is far more insignificant in its potency than the most minute dose ever given by Hahnemann. Yet it is a curious anomaly that homœopathy should be treated with contempt and ridicule by the allopaths.

Without holding myself responsible for the principles held for or against homœopathy or allopathy, I must confess I have seen more favourable results produced in children in the treatment of small-pox by homœopathy than I have by allopathy.

In examining the literature of homœopathy, which is very extensive, one is forced to the conclusion that their opinions are based upon such a philosophy as will compare most favourably with those of the allopaths, and it would be ridiculous to deny that they do not treat small-pox, erysipelas, and other eruptive diseases as effectually as their neighbours.

I know the prevailing opinion of allopaths that homœopathy is a pure system of expectancy. This, however, is a matter I leave to the two bodies to settle between themselves. I simply remark that "those who live in glass houses should not throw stones." It is well known to themselves that they give bread pills and other harmless medicines, and their patients recover. This may

be due to sound medical advice, as it must not be supposed that when a person consults his medical man that it is always requisite he should have medicine poured into him, hence, if homœopathic medicines are ineffectual the recovery of patients must be due to the superior advice they receive, and it is rather a commendation in favour of their doctrine than otherwise.

Homœopaths recognize other remedial measures.

I have noticed that homœopathists, whatever their opinions may be of their own medicines, are not above recognizing other remedial measures, regardless of their sources. As a proof it may be mentioned they resort to the wet sheet packing, bathing, &c., in eruptive diseases: it is immaterial what means are used so long as they cure their patients and do not set up other diseases. I must say, whatever the pretensions may be, or the arguments urged on the part of either "pathies," with regard to the virtues of their remedial measures which have been brought to bear upon small-pox, their efficacy, up to the present moment, has proved exceedingly limited, or its ravages, when the disease did appear, would be more effectually dealt with than it is by the faculty of both schools; in fact, in numerous instances, they have acknowledged themselves powerless.

Such being the case, I hope that the few remarks I have to urge in recommendation of another system will command respectful attention; but before doing so I feel I must make some observations on the treatment of small-pox with cream of tartar. It is scarcely necessary for me to say that amongst my researches I have met with numerous expedients which have been suggested by scientific and philanthropic persons for the purpose of rendering all the assistance they possibly could in ameliorating a disease which has proved fatal to some of our most robust people. In a pamphlet by a Mr. Rose,

Treatment of Small-pox with cream of tartar.

entitled, "A Safe, Speedy, and Certain Cure for Small-pox," that gentleman gives numerous instances of his success in curing small-pox with cream of tartar and rhubarb. Singularly enough, some years ago I happened to meet with Mr. Rose at Dorking; I found him very intelligent, and he enunciated his theory with great force. He says that cream of tartar, from its powerful action on the skin, is, if rightly given, a specific for small-pox; it is generally given with rhubarb, but not unfrequently without; but in such instances rhubarb, or some other simple aperient, is given afterwards to keep the bowels open to a moderate degree. It is of the first importance that the cream of tartar should be pure, as it is often adulterated with alum and other deleterious substances. It may be given in cold or warm water, but boiling water must not be used, as it crystalizes the cream of tartar on cooling, and destroys it virtues. His treatment is as follows:—"For an adult add half an ounce, or in severe cases with persons of strong constitution, three quarters of an ounce of cream of tartar, to half a pint of boiling milk, strain (if preferred, a little sugar may be added), and administer the whey quite warm to the patient when in bed. A copious perspiration speedily follows and continues for some hours. When this has entirely ceased, the patient should, if possible, get up, as lying in bed unnecessarily delays the recovery; care should be used, however, to avoid taking cold. The treatment thus described can be adopted either in the cold or fever stage. In mild cases so treated, a dose or two of cream of tartar and rhubarb should be given to ensure the cure. Severe cases may require a repetition of doses."

Mr. Rose also recommends the use of cream of tartar as a preventive, and in conjunction with his remedy, wisely insists upon a stringent dietetic law.

The success of his treatment is no doubt owing to its specific remedial action upon the skin, kidneys, and bowels; and when these three organs act harmoniously in small-pox, or any other zymotic diseases, premature death is almost impossible.

Mr. Rose laboured hard for a number of years in testing his remedy in upwards of 3000 cases, and proved its efficacy at every stage of the disease; he appealed to Government, to Parliament, and hospital authorities, his success was undoubted, yet the treatment has not been publicly recognized either by Government or the medical profession. His motives were purely philanthropical, he contributed his mite in endeavouring to lessen the sufferings of his fellow-beings without any reward beyond the saving of human life. Mr. Rose's treatment not recognized.

If small-pox has signally resisted both the new and old schools of drug medication, why have they not turned their attention to such a simple remedy as Mr. Rose's? The only inference to be drawn is, that prejudice prevents their recognizing it according to its merits, and if prejudice influences a section of the community who are supposed to possess the confidence of the British people when the lives of thousands are at stake, argument is lost, the advancement of the medical art in the treatment of such a disease prevented, and, as a consequence, the death-rate must continue augmenting.

This brings us to the consideration of the treatment of small-pox, without drugs, by a system called hydro-therapeutics, commonly comprehended under the name of hydropathy. It is difficult to understand why this system has not been recognized by the ordinary medical faculty in our hospitals, considering it has been before the public at least forty years, and has been gradually increasing in reputation as a remedial agent.

Small-pox treated hydropathically.

There has been numerous able works written on the philosophy of hydropathy, and its applicability to the treatment of chronic and acute diseases, and especially cases of fever. As far back as the year 1797, James Currie, M.D., F.R.S., published an elaborate treatise on the treatment of epidemic fevers by the wet sheet and tepid and cold effusions. In speaking of a contagious fever which occurred in Liverpool in 1787, he says:—"At the Liverpool Infirmary I gave the usual remedies, including wine, bark, and opium, without success. I was induced to try the cool effusions in every case of contagious low fever where the strength was not much exhausted, and kept a registry of 153 cases, to which I attribute recovery entirely to these water applications." He further observes in a great number of cases the disease is suddenly cut short by the use of cold effusions on the first or second day, and the good results that ensued were uniform in every case. Dr. Currie, in the same treatise, mentions a Dr. Wright, who had adopted a similar treatment in 1777 with equal success.

Sir Astley Cooper on cold water

Sir Astley Cooper testifies as follows:—"Though cold water is not a positive agent yet it is capable of affording great relief in inflammation by lessening the size of the vessels, and by lessening action, which it affords by diminishing nervous irritability. If cold water be applied generally to the system, it has the power of lessening the pulse to an extraordinary degree, arresting hemorrhage, allaying fever, lowering the rapidity and violence of the heart and arteries, and abating inflammation.

Liebig on cold water.

Liebig says, "That a greater change of matter can be effected by it in six weeks, than would happen in the ordinary course of nature in three years."

My own observation and experience convinces me

that no other remedy ever devised is so effective in small-pox.

Efficacy of the wet sheet pack and medicated baths.

I have already gone beyond the limits I intended to devote to this subject, or it would not be difficult to adduce innumerable testimonies of both medical and lay authorities, on the efficacy of external applications in all forms of fever, especially eruptive fever. The wet sheet pack in the feverish stage of small-pox, acts like magic in arresting the virulence of the disease, and considerably shortens its duration. When the pustules are fully developed on the body, and the fever reduced, the wet sheet pack is discontinued, and Condy's or Liquid Sulphur Baths are used, which soothe the sores, and disinfect the exudations from them, making the effluvia innocuous; a good fire should be kept in the room, with plenty of ventilation. When the patient is strong enough, he should be entirely immersed in a medicated bath once a day, and the body frequently sponged over during the twenty-four hours, if immersion is impracticable, frequent sponging will be sufficient to prevent contagion. In performing these ablutions care must be taken the patient is not exposed to a draught or in any way risk taking a chill. In suggesting this treatment, it is advisable that it should be administered under efficient supervision, and regulated according to the requirements of each case. I have heard of and seen numbers treated in this way, and what is more remarkable I have scarcely ever heard of the disease spreading beyond the room the patient occupied. I could give numerous instances extending over a period of twenty years of the efficacy in the treatment of small-pox, erysipelas, scarlatina, &c., by the wet sheet pack, and other appliances included in the Hydropathic Materia Medica. A number of cases have come under my notice during the present epidemic. I will mention

one which occurred in a poor German family, only recently arrived in this country. The family consisted of man and wife, three children and an aunt; the children and aunt fell ill with small-pox, and being disciples of Priessnitz had great horror of the ordinary medical treatment. The wife, aged about thirty, treated the whole of the cases hydropathically (without any medical assistance). They heard I was a great believer in the wet sheet, and sent for me as a friend; on my arrival, I was introduced to the patients, who were each in a wet pack and apparently progressing favourably. This poor German woman who could scarcely speak a word of English, supported by her husband, brought all the patients through the disorder in a comparative short time. The infant three months old, prematurely born, has, however, since died from exhaustion from the weakening effects of the malady.

Small-pox cured by hydropathic treatment.

One of my own men had the small-pox about two years ago, and I had him treated in the same way most successfully, and to prove the efficacy of the remedy in preventing contagion his wife and children used the same room as the patient the whole of the time, and not one of them took the disease.

Let any philanthropist go the round of the London hospitals, and extend his inquiries into the provinces, in what hospital or "house of recovery" will he find a single bath in use, either medicated or simple, cold, tepid, shower, or Turkish?

Leaving the wet sheet or other effusions out of the question, the virtues of sulphur and Condy's fluid are as "old as the hills." How is it the liquid sulphur bath is not resorted to? It is known as a curative and disinfectant in various skin diseases. And why is it our small-pox hospitals are destitute of this salutary agency?

Condy's Fluid baths are well known as a disinfectant agency in small-pox, and their curative powers is not doubted, but they are not to be found in our fever hospitals. Yet it is much more important to disinfect the patient than to disinfect the apartment after he recovers. To destroy the effluvia of the disease as it arises from the patient is to prevent the contamination of the apartment and its appertenances, and by the remedies indicated this may be effected.

In Germany and many parts of England the wet sheet pack is commonly used for reducing fevers, and Condy's Fluid and Liquid Sulphur baths are resorted to for disinfecting the body with marked success.

Removal of Small-pox patients unnecessary.

I may observe in conclusion that frequently the patient is removed from his home to the certain destruction of his life—the time and circumstances under which he is removed, the method of removing him, and the delay attendant upon his proper reception at the hospital, prove fatal many a time. Patients have been known to die soon after reaching the hospital, and not a few have been attested to as dying *en route*. In fact, to many of the afflicted a removal at all is certain death.

When it is proved beyond doubt by medical evidence that the removal of patients actually endangers life the enforcement of the law amounts to manslaughter. Why are not persons, who, although in humble life, nevertheless have a home, treated in their own apartments? The fluid sulphur bath, Condy's fluid bath, and the wet pack could be effectually administered, and sufficient nurses ought to be supplied to attend these people at the expense of the country if necessary—when a compulsory law is made it should provide for these exigencies. The object of the removal of a patient is to prevent the

Object of removing patients.

disease spreading, but if what I have advanced with regard to the wet sheet pack and disinfectants are preventive measures, the question of isolation would be settled, the disease confined to the apartment without affecting other parts of the house, and consequently other inhabitants.

I have described results that have come under my own immediate notice, where no pretention to scientific administration has been attempted. When results like those of the poor German woman can be produced under bungling management, what might be done under scientific manipulation?

Surely, then, if there is any truth in what I have advanced, and I not only defy contradiction but should be too glad to have an opportunity to practically illustrate the treatment of small-pox under the supervision of the medical board in any hospital. On the score of humanity alone every available remedy calls for an unprejudiced trial. I would to God I had the power to reconcile all the "pathies." I feel persuaded the interests of the invalided public would be much better served, and not a few premature deaths prevented.

If the medical directors of our hospitals were only a little more liberal and less jealous of their paltry dignity; if they culled from every measure that crops up from time to time, remedies beyond all dispute, it would not only add to the stability of the profession as a body, but redound to their honour, and would be an invaluable blessing to the people at large.

CHAPTER IX.

DIPSOMANIA.

"Lord Coleridge, when charging the grand jury at Durham yesterday said that almost without an exception crimes of violence originated in public-houses, and his judicial experience taught him that if England was sober we might shut up nine-tenths of our gaols."—*Globe*, February 23rd, 1877.

I HAVE introduced this chapter in the hope of rendering some assistance to those whose duties it will be to enact coercive measures for the treatment of habitual drunkards.

In my public capacity, as well as in my private circle, I have seen a good deal of the effects of the vice of drunkenness; this has caused me considerable anxiety, and enables me to speak with some degree of authority on the vice of drunkenness.

It is a subject which demands the most serious consideration, and it is gratifying to find that legislators are anxious to deal with the question so as to limit or break the "Devil's chain."

The *Times*, in one of its most efficient articles lately observed—"It is terrible to think of the amount of strictly preventible diseases on all sides of us. The cure is

Times on preventible diseases.

partly with the doctors; but the public, however poorly qualified, has also its not less essential part to perform, and while this is neglected, it is in vain to hope that the other will be done." These words are wise, and challenge the attention of all intelligent men.

Progress of Sanitary Science.

It cannot be denied that within the last twenty years great efforts have been made to bring into force preventive sanitary measures. Although social and sanitary science are comparatively new studies, they are now somewhat fashionable, and their necessity is recognized; scientific men, by the *media* of books, magazines, newspapers, the lecture hall, and the platform, are continually pressing them upon our consideration; and the pulpit is not unfrequently employed to inculcate their doctrines. Better houses for artizans, cleaner lodgings for casuals, more thorough drainage, and baths and washhouses for the working classes have been established, all with some effect.

Habitual Drunkenness.

There is, however, one disease, springing from vicious inclinations, which social and sanitary science has left untouched, namely, habitual drunkenness. A committee of the House of Commons reported,* "In large towns and populous districts, the great evil of drunkenness is on the increase, while neither the educational or moral improvement of the people, nor the amelioration in the character of their dwellings, has borne any proportion to their apparent advantages." In the same report published more than four years ago, and things have not become better since, the committee aver, upon the evidence of numerous witnesses of unquestionable opportunities of observation, competency, and credibility, "That drunkenness is the prolific parent of crime, disease, and poverty—79 per cent. of the criminals passing through our gaols, attributed

*Report of the Select Committee on Habitual Drunkards, June 13th, 1872.

their fall to drink; 20 per cent. of the insanity recorded in Great Britain, and 14 per cent. in America are placed to the same causes, and nearly one-half of the idiots are said to be the offspring of intemperate parents." The more favourable position which the United States is made to hold in the comparison, can scarcely be maintained out of New England and Pennsylvania.

Condition of the City of Edinburgh.

Probably there is no city in the United Kingdom where public spirit and private benevolence prevail more than in the City of Edinburgh, yet the condition of that city, in respect to the morbid vice here complained of, is alarming and terrible. A committee of the Edinburgh Presbytery of the Church of Scotland reported to that Presbytery a few months ago, that out of a population of rather less than 200,000, it was found that within a year 2132 persons were taken up drunk and incapable; 4762 charged with crime were drunk when arrested. Of the total, 4076 were men and the rest women. Eighty-six women were taken into custody drunk, with infants in their arms; 129 men were drunk and incapable while in charge of public conveyances; and 146 were punished for wife beating when infuriated by drink. The painful statement was made to the Presbytery that during the past five years drunkenness, on the part of women, had increased 36 per cent., and among men 33 per cent. It can hardly be doubted by any close observer, that in London, inebriation among women is vastly increasing; in many districts on Saturday nights, and on Sundays, and holidays, as many drunken women as men may be seen, while the public-houses are crowded with them, and they may be found clustering about gin temples in numbers apparently greater than men.

Among men in charge of vehicles in Edinburgh, the increase of cases of drunkenness was in five years 46 per cent. The Presbytery attribute the prevalence of the vice

more especially to young men; but generally in England all ages in the lower and lower middle classes are equally addicted to it. Probably there is no other country in the world where intemperance is so rampant as in Great Britain and Ireland.

Parliamentary Report on Habitual Drunkards.

It will not be necessary to enter into voluminous statistics to prove this allegation. The Parliamentary report of the Committee on Habitual Drunkards, in one brief sentence, tells the sad truth: "It is confined to no class, condition, or sex, and hardly of age."

The evidences we perceive of its dominancy as we pass along the streets, or read the police reports, is only a part of the prodigious influence it exercises; for although, among the upper classes, it has become unfashionable, and the habit is discouraged, the Parliamentary Committee truly reports "that there is a very large amount of drunkenness among all classes and both sexes, which never becomes public, or calls for the intervention of the authorities, but which is probably even a more fertile source of misery, poverty, and degradation, than that which comes before the police courts. For this no legal remedy exists and without further legislation must go on unchecked."

Effects of strong drink.

But it is not merely personal and domestic poverty and disturbance that ensue. Strong drink is a direct incentive to crime; different persons are affected in different ways, according to their intellectual and physical constitution, and, indeed, according to their moral habits in other respects, and their susceptibility of good influences on the part of those they love and respect. In some the tendency is to uncleanness, others yield to absolute sloth, many are impelled to wild and ludicrous merriment, depriving them of the respect of their acquaintances, unless as dissipated as themselves, and of self-respect, as well as the esteem of

their friends after the debauch is over. The chief influence, however, is to violence and crime. Criminality, the result of intoxication, would form a long and terrible record of itself alone. Assaults in the streets, wife beating at home, cruelty to helpless children, manslaughter, and robbery, either by fraud, stealth, or violence, in order to secure the means of procuring their beverages, are well-known results.

Justice Manisty's remarks on sentencing John M'Kenna.

On March 6th, 1877, Justice Manisty, in sentencing John M'Kenna, remarked, "You have been found guilty of the crime of wilful murder, your victim being your own wife. I am not going to dwell upon this painful case. You are a sad, sad instance of the consequences of indulging in drink, which has brought you into the fearful position in which you are now placed; it is only owing to God's mercy that this has not brought many more into a similar case. I am afraid that if this vice continues to be indulged in, as it now so generally is indulged in throughout this country, many more will stand in like position to you. Oh that we could, by administering the law, put an end to it! It is now my duty to pass sentence. Do not fancy that it is my sentence—it is the law. I am merely the officer of the law to pronounce it." Sentence of death was then passed in the usual form. The prisoner was removed from the dock, apparently deeply affected.

Recorder of Dublin evidence before the Select Committee

On the same day the Recorder of Dublin was a witness before the Select Committee on the Irish Sunday Closing Bill. He expressed his belief that intemperance was a national vice in Ireland, and especially so in Dublin. In that city the amount of crime yearly was 50 per cent. more than in any other part of Ireland, and the vast proportion of it was owing, directly or indirectly, to intoxication and intemperance. He once held the view that the less Parliament interfered with the customs and habits of the people

the better, but the evil had now reached such a magnitude that it demanded the interference of the Legislature.

Justice Manisty on drunkenness.

Mr. Justice Manisty, in addressing the grand jury at the Manchester Assizes, February 27th, 1877, expressed his regret that drunkenness was connected with nearly every case in the calendar.

Judges and Magistrates on drunkenness as the cause of crime.

The late Sir Thomas Henry, chief magistrate at Bow Street Police-office, declared that nearly all the cases of crime from violence which came before him could be traced proximately or remotely to inebriation. The Lord Chief Justice of the Queen's Bench, and the Lord Chief Justice of the Common Pleas, have pronounced similar opinions from the bench. The governors of gaols almost unanimously state that nearly all the criminals are habitual drunkards. Chaplains of prisons, pastors of all denominations accustomed to visit their flocks, the agents of town missions, and, above all, medical men, whether attending gaols, police-offices, workhouses, or in private practice, attest the fact that intoxication is the most potent and the almost invariable cause of crime. The general effects upon the community at large, upon the commonwealth in its material interests, its moral character and renown, have grown to appalling magnitude. The late Rev. Dr. Jabez Burns elaborately proved that the national wealth and even grandeur of the country have been greatly obstructed by the general addiction to the use of strong drinks.

Rev. Dawson Burns on drinking.

The Rev. Dawson Burns, A.M. says, "It impedes the accumulation of capital, and the remunerative employment of labour, and stimulates every kind of evil without intermission, and on a scale of national magnitude."

The form of mischief produced by the inordinate use of alcohol here to be discussed is, however, mainly its production of disease.

Indeed, there are few diseases which it does not either

cause, promote, or intensify. Dr. Both, of Boston, United States, a German Physician of repute, is of opinion that eruptive diseases, are remotely if not also immediately produced by alcohol. After a wound the resort to it will cause erysipelas; small-pox he maintains is caused and aggravated by it; according to his theory it expels the natural salts from the blood, causing the exudation of albumen and by consequence small-pox, and typhus fever, which he considers identical, the name being referable to the locality affected. Dr. Both on diseases produced by alcohol.

Another medical man, a citizen of Frankfort-on-the Main, says that, wounds do not heal as quickly in England as on the Continent, and attributes the fact to the use of alcohol.

Sir Astley Cooper declared that the presence of alcohol in the system, rendered surgical treatment frequently unsuccessful, when all circumstances besides were in favour of the patient. Sir Astley Cooper on alcohol.

W. Marcet, M.D., F.R.S., F.R.C.P., proves beyond question that the use of alcoholic drugs causes gout, promotes rheumatism, predisposes to disease of the chest, and softens the brain. Dr. W. Marcet on alcohol.

Families are steeped in poverty through the excesses of either parent, or it may be both parents resort to strong drink. Order and cleanliness forsake the habitation of the drunkard. Idleness ensues for days after a debauch; to use a common phrase among working men and women, "I am good for nothing since such a night, when I had a drop too much." Effects of excesses in drink.

The pawnbroker is then the resort, increasing the poverty and depriving the household of the comforts which make home happy, rendering it difficult or impossible to send the children to school, or for the parents to make a respectable appearance, and often causing the

loss of employment, consigning whole families to the workhouse—for none will employ a known and habitual drunkard. It is computed by the Rev. Dawson Burns that a fifth of the aggregate wages of 6,000,000 of the working classes is spent in liquor.

Drinking conduces to fevers and shortens life.

The catalogue of diseases is long and terrible which drinking produces. It directly conduces to fevers and inflammations; destroys the functions of the liver, spleen, and kidneys, poisons the blood, and by its quickened circulation deranges the action of the heart, lungs and brain, the most vital of all organs.

The effect in shortening the general duration of life in a given population, and in different sections of a population, is testified by Dr. Macnish. He says that "one half of the children born in the metropolis die before reaching their third year, while among the Society of Friends one half attain to the age of forty-seven. It appears also from accurate calculations that in London only one person in forty reaches the age of eighty, while, among the Society of Friends, not less than one in ten reaches that age: arising from their proverbial sobriety."

Drinking the curse of England.

It cannot be disputed by all right-minded people that excessive drinking is the national curse of England, and it behoves the thinking part of the English subjects to consider how the evil is to be abated. I have heard it argued over and over again that excesses in anything is bad; no doubt this is true, and is to be deplored, but so long as the excesses indulged in will not inebriate and incapacitate the individual from taking care of himself there is no necessity for legislative enactment. What, however, causes the vice of inebriation but drink? It is absurd to classify other excesses with drunkenness.

An inebriate is not amenable to reason, hence society demands that he should be restrained by physical force,

and is thus demeaned by his own acts. I cannot conceive it possible for a drunkard to be either a good husband, father, Christian or a good citizen.

Memorial from Fourteen Thousand Clergymen

Fourteen thousand clergymen of the Established Church have memorialized the Bishops, urging the closing of public houses and special legislation, on the ground that the drinking population are literally inaccessible to ministerial influences. The memorial with the signatures occupies 500 pages, and goes minutely into proof of the absolute obstruction which the drinking habits of the people presents to pastoral labour.

Rev. Dawson Burns, Strong drink retards Christianity.

The Rev. Dawson Burns asks the question, "What effect has strong drink upon the purity of individual Christians and Christian congregations?" and he answers the question in this wise, "It is the prompter and promoter of every form of impurity;" and quotes the testimony of patristic divines, modern pastors, and Christian missionaries to prove the almost insurmountable barrier it places in the way of ministerial success, the ingathering of people to the churches, and the conversion of the heathen. "It directly and largely limits the number of persons whom the agencies of the Church are designed to effect."

Convocations of the English Church on Intemperance.

The Convocations of the English Church use remarkably strong language, supporting Mr. Burns' view of the case: "Two thirds of the non-attendants on the ordinances of religion are indisposed from the direct and indirect influence of intemperance; irregularity at first, increasing and ending in a total absence of all religion and obligation." A number of individual clergymen gave evidence to the Committee of Convocation, that just in proportion as intemperance was suppressed in their parishes, attendance upon divine worship and domestic religious exercises increased.

Probably not less than sixty missionaries, members of all churches and creeds, have stated in the missionary reports of their respective societies that the introduction of strong drinks among the heathen presented a greater hindrance to their work than superstition and ignorance united.

Professor Miller on alcohol.

Professor Miller in his work on "Alcohol: its Place and Power," observes:—

"No man is safe. I have seen those at whose feet I had been life-long content to sit, to learn both wisdom and piety, drawn gently on, tempted, bound, enslaved; men not long before eminent for worth and goodness, now secret tipplers, or drunkards but ill disguised; once honoured to bear the message of 'good news' to many, and now themselves poor 'castaways.'

"This 'luxury'—this 'something separate' from food—this 'dainty'—this thing 'delightful to the senses'—is not safe for me—*whatsoever and whosoever I am. I may* remain its master; but it may become mine; and if it do, I am lost—or at least in utmost peril. Why should the oak court the embrace of the ivy, if it know or even fear that the sycophant, as it creeps and clings around, will in the end suck all its sap, and leave it to die a faded withered thing, fit only as a faggot for the burning?

"And why should men, themselves safe—for the time—lead others on by the most powerful of all teaching—namely, example—to dalliance with this drug, when they *see* thousands *so led* perishing miserably, and for ever?

"Let honest men but think—opening their intellects as well as their hearts; and surely they will be forced to abstain from what is certainly something more—far more—than a mere 'appearance of evil.' There is a time for its use. Let its use be limited to that time. All else is abuse; for which there is no time and no tolerance. It is then a positive evil, and of the highest and most heinous kind.

"Let men learn its power, and act wisely on that learning. Let them know and remember that it has vast power as a poison—to be dreaded by all who would live and let live; great power, too, as a medicine—in small quantities, and skilfully employed; much power as a luxury, but of a most perilous kind; no power as food, save only in occasional emergencies; no power to sustain or refresh even a man, under either bodily or mental labour—and let them abolish the term "refreshments" in its ordinary alcoholic sense, as a most foul and fallacious misnomer; no power to afford continued and systematic protection against extremes of either cold or heat; no power to avert disease, but power almost infinite to produce it; no power to cherish old age, but only to cripple and confound it; no power to prolong life, but power to both hasten and embitter its ending: no power to strengthen the morals or the mind, but power to debase, if not destroy the one, and weaken and pervert the other; a power to produce crime, and minister to vice, beyond what pen can write or tongue can tell—'sensual, devilish.'"

Moderate drinkers.

There is a prevailing opinion among a large class of persons who do not indulge to any great extent, that alcohol is strengthening taken as a beverage, believing in its ability to cheer the spirits, and fancy they cannot do without it. These individuals may be termed moderate drinkers.

Alcohol injurious.

Impartially considered, I think enough has been adduced, both practically and theoretically, to prove that alcohol is not strengthening but enervating in its action; it also arrests digestion and nutrition, and is most pernicious to the masses. What is injurious, taken as a daily beverage must also be so to a greater or less extent when taken in moderation, even if it was not

injurious, when taken in moderation, surely the baneful influence of the drink upon the masses is such as to suggest the question—is the amount of probable good sufficient to justify the imbibation of a fluid that sends so many to hell annually? These are considerations which should have an influence over all men's actions relating to their own creature comforts.

Arguments used by Apologists for the use of alcoholic beverages.

Perhaps the most persistent and formidable argument used by apologists for the use of alcoholic beverages, who at the same time are opposed to intemperance is, that it is illogical to argue from the abuse against the use. How far the use of some forms of drink containing alcohol may be useful, or at all events permissible, I will not obtrude my opinion; let the opinions of our leading physicians, moralists, and sanitary philosophers have their due weight, but nothing, alas, can be more patent to observation, amongst all classes of observers, than that moderate drinking leads to occasional inebriety; that again to confirmed habits of drunkenness and all the sequences of diseases, to dipsomania, and finally to the jail, the convict hulk, the madhouse, or the grave, perhaps the scaffold.

Professor Miller on alcohol as food.

Professor Miller remarks on alcohol as food:—

"'Thus,' they say, 'alcohol may be useful to the poor man in an economical sense, and to the dyspeptic man by saving heavy meals.' But this is a mere assumption. And no reasonable man can doubt that the explanation is quite different from their statement of it. Habitual use of alcohol, even in 'moderation,' diminishes the appetite, as we have seen, by exciting a direct and unfavourable action upon the stomach.

'I cannot eat but little meat;
My stomach is not good.
But sure I think that I can drink
With him who wears a hood.'

"The man, in virtue of this morbid condition, comes

to have a less craving for and a less power of digesting food.

'I love no rost, but a nut-broun toste
And a crab laid on the fire;
A little bread shall do my stead—
Much bread I nought desire.'

"*Therefore* he takes less. And the portion of food which he does not take, and otherwise would have taken, is simply lost to his system by the alcohol. This, moreover, has kept waste old material circulating in the blood; and that is offered to the system for nourishment in a fatty and fusted form. There will be no vigorous appetite for fresh food, till that waste material is used up and got rid of somehow—while meantime every successive dose of alcohol prevents the disappearance of this obstructive waste, by appropriating the oxygen instead. And the question comes to be—Whether shall we take alcohol, eat less, and be imperfectly nourished; or take no alcohol, eat more, and be nourished well? Whether shall we thrive better on a small quantity of new nutritive material, with a great deal of what is old and mouldy; or a constant and fresh supply of new material, in sufficient abundance to dispense with the old—which, being then in all respects useless, is extruded from the system? Even one less qualified than a 'licensed victualler' should have no difficulty in giving the right answer—'The fresh article, if you please; and plenty of it.'"

Dr. B. W. Richardson on moderate drinking.

No doubt many of the apologists referred to are sincere, and are themselves examples of the occasional or frugal use of strong drinks, without inebriety; but in many other cases we fear the language of Dr. Benjamin W. Richardson is too applicable, "Because in their hearts they are infatuated with the liking for alcohol, and are glad to find any excuse that will minister to their own inclinations." The same eminent physician in an address delivered in the

Sheldonian Theatre at Oxford said, "The mere moderate man is never safe, neither in the counsel he gives to others nor the practice he follows himself." And the learned doctor winds up his argument by the startling paragraph: "The attraction of alcohol for itself is cumulative. So long as it is present in a human body, even in small quantities, the longing for it, the sense of requirement is present, and as the amount of it insidiously increases so does the desire." The doctor is not sure whether he should call this a physiological or a psychological fact; perhaps it is both, but whichever way we regard its *rationale* the circumstance itself shows that the moderate drinker is not secure, and, at least, may be on the road to dipsomania itself. Indeed, Dr. Richardson's argument closely analysed would almost carry the conviction, that even the love of alcohol on the part of mere moderate drinkers is of the nature of incipient dipsomania.

Sir H. Thompson on habitual use of fermented liquors.

Sir Henry Thompson takes nearly the same view. He remarks that "the habitual use of fermented liquors to an extent far short of what is necessary to produce drunkenness, injures the body, and diminishes the mental powers to an extent of which few people are aware."

Mr. E. Baines on moderate drinking.

Mr. Edward Baines, late M.P. for Leeds, an experienced sanitary reformer and cogent reasoner, says: "Of all the victims of intemperance there is not one who did not begin by moderate drinking, or who had the remotest idea when he began that he should be led into excess."

The same practical observer also states, "I say boldly that no man living who uses intoxicating drinks is free from the danger of at least occasional excess, and if occasional ultimately of habitual excess."

Dr. Christie on habitual drunkards.

Dr. T. W. Christie divides habitual drunkards into those who were never completely drunk but always drinking, and those who were never completely sober.

Dr. Lamb in his report on regimen states, "The suspicion appears just, that the perpetual ingurgitation of those drinks cannot be innocent, however moderate the quantity may be." Dr. Lamb on moderate drinking.

It is alleged by the supporters of moderate drinking that it is not injurious to the constitution, and with some gusto they instance the vigour of two brothers named Elm, both upwards of eighty, that came before one of our judges, who remarked on the clearness with which they gave their evidence. One had been a teetotaler all his life, was complimented for his abstinence and congratulated on his good health, while the other, on being asked if he was a teetotaler also, replied, "I scarcely ever go to bed sober." The judge, surprised, exclaimed, "Elm wet or Elm dry both seem to thrive." This may be true; at the same time it is no argument in favour of strong drink; the probability is, that the man addicted to drink was blessed with a remarkably good constitution, and had he led a sober life like his brother might have lived ten or twelve years longer. Whatever may be said in favour of drinking, or instances adduced of the longevity of persons addicted to drink, we cannot refute the fact that the average life of abstainers is longer than that of drinkers at the present day, which may be entirely attributed to the absence of intoxicating drinks; and if these could be annihilated, the probabilities are that future generations would attain a longevity similar to that of the patriarchs of old. Isolated cases can scarcely be taken as a proof of the validity of a general principle either *pro* or *con.*

Professor Miller protests against the common practice of having recourse to alcoholic stimulants in order to sustain the system under the pressure of overwork. Like every other *real* physiologist (we use this term to exclude certain pretenders who have a theory to support, that Professor Miller on alcoholic stimulants and overwork.

"Alcohol is force," and who trumpet it forth as if it were demonstrated by facts, instead of being in direct antagonism to them), he sees that under such circumstances "Alcohol gives no addition to the amount of vital strength, but merely urges the more rapid and thorough using-up of what you already have;" and that whenever circumstances necessitate its temporary employment for such a purpose, a permanent injury is done, unless adequate restoration is obtained by repose. "When such shift or substitution is not occasional but constant, and when, moreover, there be no sufficient correspondence in the amount of compensating rest, the working organism must soon come to be altogether in a most artificial and unsafe condition. It will resemble an overtasked mercantile house, supported on bills and other means of 'accommodation'; the work is done at a great cost; and at any time, by failure of the artificial support on the one hand (even for a day), or by a sudden increase of outward pressure on the other, the whole concern may fall to pieces, either stopping altogether, or dragging out a crushed existence in insolvency." How much additional force this pithy illustration derives from the mercantile crash which took place while the writer's ink was scarcely dry, we surely need not point out. Yet the merchant who trades up to ten, twenty, or fifty times his capital upon the bill system, paying discounts which far more than absorb his profits, and thus progressively involving himself in hopeless insolvency, is not acting more inconsistently with the obvious rule of prudence and rectitude, than is the man who sets himself to a daily task, whether the work be of the head or the hand, beyond what his natural powers can accomplish, and has recourse to stimulants with the delusive idea that they will support him under it—whereas every draught is like a bill at a long date, with heavy accumulating interest,

which weakens his future resources in a far greater degree than it adds to his present means.

Moderate drinking caused by unhealthy occupation

I admit that a good deal of the moderate drinking may be owing to the innovations produced by unhealthy occupations, and an alcoholic stimulant, in the absence of any other, is resorted to to spur men on in their duties. Excessive and oppressive hours of labour is one of the social evils that will require to be dealt with; in fact Government has already done something towards abating the evils by the Factory Act, which gives local authorities power to inspect workshops, and see that they are large enough, and kept in a healthy state, and it may become necessary to restrict the hours of labour of adults as well as of children. Able-bodied persons should be able to accomplish their daily work without stimulation, thus obeying the laws of nature; but when stimulants are used, nature is excited beyond her powers, which cannot be done with impunity.

There cannot be a doubt that an able-bodied man should be able to accomplish his legitimate labour without alcoholic stimulants, and retain his health much better. There is scarcely any limit to the proofs which can be adduced to support this, but it will be sufficient to give the following quotation which appeared in the *Graphic*, December, 1876, which places the matter beyond all doubt:—

Alcoholic drinks in the Arctic Regions.

"If alcohol is, as is claimed by beer and spirit drinkers, a potent sustainer of vitality, its beneficent effects would never be more clearly manifested than when men are undergoing unusual fatigue in a temperature many degrees below zero. The records of the recent Arctic Expedition do not bear out the theory of those who make the assertion. The teetotalers of long standing, some of whom were good templars, that is, abstainers from their childhood, on board the *Alert* and *Discovery*, these subjected to the same labours and hardships as their companions, in every instance escaped scurvy, and remained in excellent health. One case may be deemed an exception, but it is an exception of a kind that proves the rule. A good templar named Gore succumbed to a temptation while on the sledge journeys, and took to grog. After this, his appetite failed, he ceased to

have refreshing sleep, and he was ultimately attacked with scurvy. The evidence of Ayles, a teetotaler of many years' standing, is very important. His labours were among the severest of any member of the ships' companies. He was not only out for 110 days sledging, but he was out no less than eighty-four days from the ships at a time. He neither drank nor smoked; his companions drank plenty of strong grog and smoked heavily. In the result, Ayles and Lieutenant Aldrich, who was next door to an abstainer, as he diluted his rum more than any other member of the expedition, were the only members of the sledge party who escaped scurvy. In conclusion, it may be observed that the testimony of the two ships' companies, doctors and officers included, is unanimous against the serving out of stimulants during the day, as they emphatically state that no work can be done upon grog; but many of them believe that a glass at night acts as a recuperative agent. This idea certainly appears to be refuted by the experience of the good templars."

Alcohol will not fortify against cold.

Dr. B. Richardson in his remarks on alcohol and its effects in the temperature of the human body, observes that those who are exposed to extremes of cold are best fortified against cold when they abstain from alcohol, and depend upon warm unintoxicating drinks.

The diseases resulting from drink are very numerous, but some of the most painful are dipsomania and delirium tremens.

Dipsomania.

There are two kinds of dipsomania, one is supposed to be hereditary. The appetite for "fire water" is transmitted from drunken sire to son, or, as the Chinese say of small-pox, it is "mothers' milk." There is in this form, original and constitutional defect; and it is observable that the career of excess, leading to the catastrophe, is shorter, even if there be nothing more dreadful in the *phenomena*.

The other form is that which is brought on by long and habitual potations. The unfortunate man finds solace for all his woes *pro tempore*, and a remedy for all his ills in the bottle; he quite acts up to the spirit of the old bacchanalian song,

"If any care or pain remain,
Let's drown it in a bowl."

If he be sick, he drinks to get well; if in health, his exhilaration finds vent in that way. If in prosperity, he treats all his friends, and enjoys what he calls a spree; if in adversity, he is not ashamed to beg to satisfy his craving. His bargains are concluded over the bottle; his "morning," as he and his friends call it, is thence supplied, and, with the tumbler in his hand, he closes the day. So it proceeds until the cup of his madness, misery, and crime is full, and the insanity of *dipsomania* fastens upon his brain. Drinking Customs.

Alexander Peddie, M.D., has probably paid more attention to the "*disease*" (as he firmly and repeatedly calls it) than any other member of the profession. His description of the course of the dipsomaniac is graphic, and excites even more compassion than horror, and must move every humane man to commiserate his misfortunes, and follow him with his aid :— Dr. A. Peddie on dipsomania.

"A process of mental deterioration goes on gradually and simultaneously with the indulgence. The main desire of his life is how to obtain liquor—moral control has lost its sway over him, he has no power to resist the propensity; he has become the involuntary slave of the vice, and would sacrifice his last sixpence, or his shirt, or sell his soul to the devil for 'one drop more.' Yet strange to say the poor creature has no pleasure in drinking socially or convivially, he gulps it down in large quantities, away from society and observation, and even as if it were a drug; the only satisfaction it affords him is by benumbing his sensibilities, and in this way affording him relief from his fancied miseries."

To say the least, drink is a curse.

Moderate drinking is the stepping-stone to become a sot.

Habitual drinking is the stepping-stone to become a dipsomaniac.

Dipsomania is the stepping-stone to the last stage before the grave, namely, delirium tremens.

The above may be considered the educational process of the deterioration of the material body to a stage of physical alteration known as delirium tremens. If we are to recognize a heaven and hell when we depart from this life, with the Bible as our guide, it is self evident that a man suffering from delirium tremens is on the brink of hell, and nothing less than a miracle can save him from that fearful condition.

The explanation of dipsomania is thirst madness, and the disease consists in an unconquerable desire for intoxicating drinks, &c.

Delirium Tremens.

Delirium tremens only differs from dipsomania from its being more intense and directly affecting the brain. It usually supervenes on a fit of intoxication; but it not unfrequently arises from circumstances exactly opposite; namely, where an habitual drunkard omits his accustomed stimulant. The approach of an attack of delirium tremens is almost invariably announced by the patient being remarkably irritable, with fretfulness of the mind and mobility of the body. Watchfulness next occurs, and the patient gets little or no sleep. He has frightful dreams, sees remarkable sights, such as strange animals, monkeys, snakes, and appears to have a kind of clairvoyant insight into purgatory, or hears extraordinary sounds. He then begins to fancy that some conspiracy is forming against him, entertains suspicions about certain persons or things, and imagines that some mischief is intended towards him. Then he is perpetually busied about his affairs, and so on. This is the stage when the patient might at any moment commit suicide or murder.

Object of the Government inquiry.

The Government inquiry was not instituted to deal with the moderate drinker or even occasional drunkards, as those

could be dealt with by the police magistrates when they became a nuisance to society in the streets. It was to obtain evidence on the desirability of introducing an Act to bring dipsomania and delirium tremens cases under coercion. Hitherto they could only be treated as cases of drunkenness, as the law has no power to place them in asylums.

The committee of inquiry examined thirty-three witnesses, all medical men of high standing, magistrates and constables, men of science, and commissioners of lunacy, together with Dr. Parish and Dr. Dodge from the United States, and the committee reported to the House as follows:—

"That occasional drunkenness may, and very frequently does become confirmed and habitual, and soon passes into the condition of a disease uncontrollable by the individual, unless indeed some extraneous influence, preventive or curative, is brought into play. That self control is suspended or annihilated; moral obligations are disregarded; and the decencies of private and of public life are alike set at nought; and individuals obey only an overwhelming craving for stimulant to which everything is sacrificed."

The committee attributed the occurrence of such disease not simply to pure alcohol itself, but to adulteration by the vendors.

Government neglect in prosecuting for adulterating liquors.

The Government exercises extreme vigilance over every branch of sanitary science, more especially in prosecuting for the adulteration of articles of food, such as milk, butter, &c., but it is curious that no attention is paid to the examination of intoxicating drinks sold in licensed houses when it is well known and proved by analytical chemists and men who have given attention to the subject, that a large proportion of injuries inflicted, is the effect of adulteration and not so much from alcoholic influence. It is a well known fact that the beer

which the working classes drink is adulterated with all kinds of rubbish to make them thirsty and induce them to drink to excess. Beer especially, is the English beverage, and so long as the people will persist in drinking it, it is but just that Government should insist upon their having it genuine.

Dr. Forbes Winslow's evidence before the Select Committee

Dr. Forbes Winslow, in giving evidence, said :—

"There is a morbid craving for stimulants which is clearly traceable to a brain condition; it is a form of insanity although it is not recognized by law. A man who has had ample opportunity of observing those cases and studying them is able to diagnose pretty accurately the difference between normal drunkenness and abnormal drunkenness. The vice sometimes passes from a normal into an abnormal state; *and the exaltation of the instincts becomes a disease or mania.*"

Dr. A. Peddie on the treatment of dipsomania.

Alexander Peddie, M.D., Fellow of the Royal College of Physicians, Edinburgh, was one of the most prominent witnesses before the committee. He gave evidence that such disease existed, and was replete with ruinous consequences. He has since written a book with the significant title "The Necessity for Some Legalized Arrangements for the Treatment of *Dipsomania*, or the Drinking Insanity." This title recognized the existence and character of the disease, and on excellent authority.

The following pertinent passage occurs in the work :—

"Now, among this class (the morally and mentally diseased), I hesitate not to place the habitual drunkard or dipsomaniac. I consider that his condition is one of combined moral and mental insanity, and the consequence of a vicious impulsive propensity—for I cannot, in such a case, discriminate it simply as a vice; and I regard it as rendering him incapable of social duties or civil rights; and not merely so, but as lessening his liability to punish-

ment for crime, of the same kind or to the same extent as the other members of the community. That the excessive and uncontrollable desire for strong drink is a disease, and that it is symptomatic of some abnormal cerebral conditions which gives it the character of a form of insanity, cannot be doubted." Again—

"There can be no absolute rule for insanity indicating itself by any particular sign. Hence its physical indication may be addictedness to drinking, as well as hallucination of ideas. To declare whether it is or not, is as much a question for medical science in the one case as the other. But medical observation has declared that *dipsomania* is a proof of mental aberration, and therefore it appears to me that such cases stand on the same footing as other instances of mental derangement."

This is a very full, comprehensive, and decided opinion coming from one of the most eminent among the many distinguished members of the medical profession in Scotland.

Fines and imprisonment for drunkenness and in dipsomania useless.

The question, then, forces itself upon every benevolent mind, what is to be done with our common drunkards, and with our *dipsomaniacs*? The former may be rightly punished, some say, in the way criminals are usually treated, by imprisonment, but the present practice of carrying a riotous or brawling drunkard before a magistrate and fining him five shillings is obviously nugatory. In the case of the genuine *dipsomaniac* it is useless and may be cruel.

Remedies suggested by the Select Committee.

The medical and scientific witnesses gave different detailed opinions, but most of them agreed in the main features of a scheme for the cure of the disease, and the salvation of the patient. The Committee on this point reported to the House as follows:—

"That there is an entire concurrence of all the

witnesses in the absolute inadequacy of existing laws to check drunkenness, whether casual or constant; rendering it desirable that fresh legislation on the subject should take place, and that the laws should be made more simple, uniform, and stringent.

"That small fines and short imprisonments are proved to be useless, as well by the testimony of competent witnesses, as by the fact that the same individual is convicted over and over again to even more than 100 times.

In fact, numerous instances amongst the lower orders in Liverpool are recorded, where they are proud of being brought before the magistrates simply because their names appear in the newspapers, when they have the satisfaction of forwarding a copy to their friends and relations.

"That the absence of all power to check the downward course of a drunkard, and the urgent necessity of providing it has been dwelt on by nearly all witnesses; and the legal control of an habitual inebriate, either in a reformatory or in a private dwelling, is recommended, in the belief that many cases of death, resulting from intoxication, including suicides and murder, may be prevented."

The remedies suggested to the Legislation by the Committee, so far as common street drunkards are concerned, taken by the police before a magistrate for being drunk and disorderly, are, a fine not exceeding 40s.; a register of the fine to be made in a book kept especially for the purpose; and the infliction to be made progressive, with costs. The reason given for this recommendation, a sound one, was not only because something more must be done than is now done, but from the fact that the present penalty of 5s. was enacted in the reign of James I., when that fine, from the decreased value of money, was far heavier han it is now.

The provision recommended for progressive deterring punishment is, that on three convictions within twelve months, the magistrates should be empowered to require sureties for the transgressor's future good behaviour; and in case of not obtaining such sureties (and they very seldom could be obtained in the lower links of life) upon a fresh offence, imprisonment in a reformatory of an industrial nature to be especially provided.

The committee also report:—

"That it is in evidence as well from those who have conducted, and are still conducting reformatories in Great Britain, as by those who are managers of similar institutions in America, that *sanatoria*, or inebriate reformatories are producing considerable good in effecting amendment, and cures, in those who have been treated in them."

Results of coercive treatment in America

"That the average number of cures is stated to be from 30 to 40 per cent. of the admissions. This conclusion being based upon subsequent inquiries, from which it appears that the cures are as complete and permanent as in any other form of disease, mental or physical. The average time taken in effecting these cures is from twelve to sixteen weeks in America. For the English institutions the period has been longer."

Recommendation of the Committee

The whole drift of the report and arguments points to coercive legislation for the treatment of dipsomania cases in providing the asylum, kind supervision, suitable regimen, diversion of the mind, recreation for the body, and skilful treatment, such as that to which hydropathy is related as alone likely to restore the individual to home and liberty as a sane man. This could be best accomplished by experienced individuals who possessed establishments appropriate to the purpose, and who were actuated as well by philanthropic feeling; to whom, in

fact, it would be a labour of love. In those cases the *dipsomaniac* would be a voluntary patient, a refugee, seeking a sanctuary from the ruthless pursuer of his home, fortune, reason, and life; some idiosyncrasies are more likely to be amenable to regulations, when entering a temporary home and shelter, by their own consent, than in a reformatory organized by the authorities.

It is worthy of remark that the system of sureties has been adopted with good effect on the North American Continent, and in Sheffield in this country. The common law of England, however, does not sanction it, and a special Act of the Legislature would be necessary. The committee wisely recommended the repeal of the old statutes of James I., and the enactment of a concise and intelligible one, more suited to the present necessities.

That such measures would be to some extent effectual might be relied on, because the sureties would look well to their diseased friend; and relatives and companions, apprehensive of penalties that could be ill-borne, would pay sedulous attention to his wanderings; more particularly as the recommendation is, that the magistrate might, without further process, estreat the property of the sureties upon forfeiture of bail. And the imprisonment, or confinement, rather, of the demented person might be for a term of not less than three months, and not more than twelve; so as to deprive him for the period within this range of all opportunity of resorting to his usual haunts, and mingling with his former associates, and thus alter his morbid cravings.

Drunkards Register.

The Committee recommended the keeping of a "Drunkards' Register," which might be a very powerful deterrent, because an Englishman, like the Hindoo, fears nothing so much as the loss of *caste*, and the insertion of his name as a registered drunkard, would

be a shame which even his inebriate associates would keenly feel. Instances amongst the lower orders in Liverpool are recorded, where they are proud of being brought before the magistrates simply because their names appear in the newspapers, when they have the satisfaction of forwarding a copy to their friends and relations. It is true that some topers are too far gone to be ashamed of any ordinary occasion of disgrace, but this would be a social stigma which few could endure without compunction and humiliation. It would also check the aberration of others, lest the like thing should happen to them. Families and friends would be more ashamed and afraid of the drunkards' register than even of the habitual excesses of the drunkard.

Of course, if, when the drunkard is temporarily mad, or actually a *dipsomaniac*, and violent or aggressive in his paroxysms, "it may be left to the discretion of the magistrate to send him at once to an inebriate reformatory."

It is not contemplated to restore the confirmed dipsomaniac by these methods; he is past the fear of obloquy or punishments, he hugs his chains, and clanks them in the hearing of everybody, he staggers about under their weight, as if they were silken bands or wreaths of flowers; so far as we have noticed, the object in view is to "quench the smoking flax," but not to "break the bruised reed." If not to stop the drunkard's career at the beginning, when it must be comparatively a secret, it is to catch him in his first public aberration, and save him from farther delinquency and madness.

Objection to legislation.

Objections are raised to what is called an infraction of the liberty of the subject, but in public asylums, the *habeas corpus* would be in force if the recommendation of what has been sneeringly called "the drunkards parliamentary committee" be adopted. There can be no pretence what-

ever for saying that personal liberty is infringed, when the unfortunate dipsomaniac has sense enough left to commit himself to the hospitality, care, and cure provided by a private home adapted to his condition, sometimes at the expense of the country.

Yet in any form objectors are to be found to the plan of secluding the distressed victim of drink, no longer able to take care of himself, and too headstrong in his paroxysms, too stupid in his potations, and too infatuated at all times to allow his family or friends to take efficient charge of him. If in an interval of light and reflection, he voluntarily places himself out of the way of the world, in the custody of intelligence and kindness, with a view to his restoration to the *status* from which he fell, it would indeed be a desperate and scandalous invasion of the liberty of the subject were he prevented by any law, existent or future, from doing so. It is necessary, or at all events, proper to notice the tone and temper in which the objections are urged. It is, however, neither necessary nor comporting with the space at our disposal to take in view all sorts of objections. The most formidable are to be found among influential members of the faculty, although many of the highest standing endorse the plans here advocated.

Dr. C. Bucknill on the treatment of inebriates.

Doctor Charles Bucknill is one of the most recent and powerful of the objectors. In his article in the *Contemporary Review*, before quoted on another point of the controversy, he objects to any confinement of inebriates except for offence against the law, for which he would not hold them as responsible like other men only, but considers their intoxicated habits an aggravation of the offence committed. His opinion is that to limit their freedom at all simply as drunkards, is a violation of personal liberty, and should be regarded with the utmost constitutional

jealousy. He quotes the immortal Milton, in support of his views, who in his "Areopagitica," draws so much of his argument in favour of "unlicensed printing, from the supposed liberty of unlicensed drunkenness" (*sic*). But Milton only argues as to the hopelessness of putting down drunkenness, any more than fornication and some other vices, by statute. He apparently never had presented to his mind the remedial and benevolent proposal now made in the interest of the otherwise hopeless inebriate. The learned Doctor also quotes John Stuart Mill, to the effect that "no person ought to be punished for simply being drunk." One can go the whole length with the great metaphysician in such a proposition, without conceding one iota of what is contended for in this chapter. If we admitted the logician and philosopher to be infallible, the basis of his argument does not cover the question here discussed.

Legislation necessary.

The very fact of further legislation being necessary is a proof of the evil effects of alcoholic drinks upon society at large, hence, while there may be a difference of opinion as to the mode of legislation required, all will agree that something should be done to legally bring the dipsomaniac under treatment.

In England there is a great jealousy about the infringement of the liberty of the subject, therefore it is very difficult to legislate for a social evil taking away the liberty of an individual who has not committed a breach of the civil law, but is killing himself by imbibing excessively of drink which is the beverage of nine-tenths of Englishmen, and is recognized as such by the Government of the country who derive £30,000,000 sterling from the traffic in alcohol liquors for the disbursement of its internal affairs, including crime arising from drink.

The only rational way to look at the matter, is that it

is a necessity to prevent human beings killing themselves when they are brought into such a state by drinking as to be irresponsible beings; and when persons are not able to enjoy liberty within certain limits, although they may not openly break the law, to bring them within the power of the police. The interest one human being should have in another is such (if he fulfils his duty) that he should make it his imperative duty to look after those of his fellow creatures who are not able to take care of themselves; it is not a question of liberty that must be looked to, but *humanity*.

The main object of the Select Committee of the House of Commons was to inquire into what analogy there was between a lunatic and a dipsomaniac, and the committee very justly recommended that there should be a law to bring the dipsomaniac under treatment just as much as the lunatic, within certain limits.

Inebriety and Insanity.

The only difference between inebriety and insanity is, the one is produced by excessive drinking of alcoholic stimulants, and is generally harmless, and immediately the effects of the drink are removed the subject becomes perfectly sane, while the other may be suffering from organic disease of the brain, from which, in all probability, he may never recover, and requires to be placed under restraint to prevent him doing himself or fellow creatures any bodily injury.

It is well known that habitual drunkards cannot overcome their desire for drink without exercising almost superhuman control over their actions; they are generally extremely nervous and highly sensitive, and in their moments of sobriety feel their degraded position most acutely; and being disgusted with themselves, often rush recklessly into their old habits to drown their feelings, and it is with a view of restraining such persons that coercive measures are recommended.

No doubt if the law should come into force the dypsomaniac will no longer be a free agent to manage himself or his affairs, and it will require very stringent and judicious management to prevent great cruelties being inflicted. Institutions or asylums where patients are brought under treatment should be provided with every known appliance that could be made available to lessen or soothe the sufferings and ameliorate the condition of these unfortunates, in the process of weaning them from their old habits and restoring their shattered constitutions.

Inebriates require to be treated kindly.

They should be treated with the greatest kindness and consideration, and legislation which does not regard this fact, and exercise the most vigilant superintendence over the officials in dipsomania asylums, will entail great suffering on the patients, and not a few will be driven into hopeless mania.

The Act of Parliament, wisely and judiciously administered, will not only prove a great boon to individuals but to the public at large, will prevent pauperism and crime of every description, and will materially reduce the rates.

Opinion of medical men on alcohol as a medicine

The baneful effects of alcohol taken in excess need no further comments at my hands, but there is a divided opinion among medical men of equal repute as to the medicinal advantages of alcohol taken in such proportions as may be recommended. I might enter into a long discussion and rake up medical evidence to an indefinite extent both *pro* and *con*, but I have already far exceeded the limits I intended giving this subject. I have read Dr. Richardson's "Researches into Alcohol, and its Medicinal Action;" and if his analytical investigation can be relied upon, alcohol taken in any form is most pernicious and injurious to the body; also that there are other medicinal stimulants in the pharmacy which will effect the same

purpose as alcohol is supposed to do without being injurious, hence the plea often adduced in favour of alcohol and the absence of a better stimulant is at an end.*

Alcohol not a natural drink.

Alcohol cannot be said to be a natural drink at all, for, not being *assimilable* to the body or entering into its elementary composition, it can never even assist in repairing the loss of the fluid parts of the blood caused by evaporation and the action of the secretive and exhalant organs, but only serves to render the blood more thick and viscid. Neither can it assist in the nutrition of the body, as remarked by the late Dr. Abernethy, any more than the "whip or spur" can feed the horse or add to its vital powers. The late Sir Astley Cooper declared the London draymen to be the least able to endure an accident or a surgical operation of any class of patients he had to do with.

Dr. Pereira lays down the following axiom, "A living body has no power of forming new elements, or of converting one elementary substance into another, and it, therefore, follows that the elements of which an animal is composed must be also the elements of his food."

A great maxim of the ancients was set forth in the words, "Know thyself," and did we but pause for a few moments to consider of what minute, delicate and fragile materials we are composed, we should hesitate, seriously hesitate, ere we committed to our digestive organs the heterogeneous, artificial and unassimilable substances partaken of as food and drink by the unthinking multitude around us.

Thirty years ago the medical profession advised alcoholic

* I should recommend all my readers who are anxious for more information on the action of alcohol to read Dr. Richardson's researches, as well as several other excellent works on the subject, which can be had at the Offices of the United Kingdom Alliance, 52, Parliament Street.

drink to their patients wholesale, scarcely without any stint, and there is little doubt that the present tippling, especially among the fair sex, is directly or indirectly due to the indiscreet recommendation of alcohol by the medical profession. As proof of this during the last few years they have considerably modified their views, and seeing that the medical wants of thirty years ago were much about the same as they are now, the modification is an admission of their error, and I hope the process of reduction will go on so that in fifty years hence perhaps the evils commenced thirty years ago will in a measure be compensated for in the shape of a considerable diminution of drunkenness.

Modification of the views of medical men on alcohol.

In tracing the history of medical treatment from Hippocrates, there has evidently been a tendency on the part of the profession to accept the opinions of some medical men of repute as to a particular remedy discovered by them, and prescribing it for nearly all the ills that flesh is heir to; hence, you often see a remedy once in high repute fall suddenly into insignificance to give place to another quite different drug, which again is administered without the slightest investigation as to its action.

In perusing medical literature the idea forces itself upon us that the changes in the treatment of disease are as variable as the fashions, and the change which has taken place respecting alcohol is only a sample of those which have occurred and are occurring, and shows at least a great want of stability in the theory of the medical art.

While the medical profession, as a body, are open to grave censure in prescribing alcohol so extensively, they are compelled in some cases to pander to the whims of their patients, and the medical attendant, no doubt, often permits his *bon vivant* patient to take a little stimulant for the sake of peace and quietness, and to retain his patronage.

There seems to be a kind of inherited vicious taste in this country for alcoholic drinks, which need not be wondered at considering, in a great many instances, drinking commences in the cradle and ends in the grave.

It is no use denying the fact that the prevailing opinion of the medical profession is in favour of alcohol, both as a beverage and medicinal agent, and they still prescribe it largely. Patients are very self-willed, and there are very few general practitioners who are in a position to dictate to them too much without the risk of losing their clients; and there are so many gentlemen in the same profession, making the patients somewhat independent; so that between the *dependency* and the *independence* there is a good deal of diplomacy required on the part of the medical man to discharge his duties conscientiously. Hence it is quite as great an art with the medical profession to study character as to study remedies.

Treatment of Dipsomania.

Without arguing the use of alcohol in the treatment of some diseases, in dipsomania it must be like adding fuel to the fire, and the system adopted of gradually *weaning* the inebriate from stimulants, has been found not only difficult but oftentimes ineffectual. The irritation kept up in the stomach is just sufficient to give the patient a hankering after stimulants and to prevent the return of the normal appetite, in many cases the remedy proves worse than the disease.

The only effectual alternative stimulant is external appliances, such as the hot-air bath, the wet-sheet pack, &c., which bring the skin into vivid action, increase the circulation, while combustion becomes greater, and the disease produced by super-alcoholicism is carried off rapidly. The change effected in the system causes the patient to feel less desire for drink, and his normal appetite is restored.

Dr. John Goodman, M.R.C.S., Lond., an eminent authority, describes the comparative merits and effects of Water and Alcohol upon the human organism:— Dr. Goodman on Water and Alcohol.

WATER.	ALCOHOL.
1.—Increases the interstitial metamorphosis or change of issues.	1.—Arrests the normal change of matter by absorbing the oxygen from the arterial blood, which is necessary for metamorphosis.
2.—Baths cause a considerably increased demand in the system for oxygen, manifested by augmented respiration and amount of carbonic acid expired.	2.—Diminishes the amount of carbonic acid expired, although it increases the amount of carbon in the blood.
3.—Assists in the solution of effete matters and increases all the secretions, carrying off rapidly the waste or effete material from the system.	3.—Lessens the excretion both of solid and fluent constituents of the urine. It also decreases the amount of carbonic acid given off by the lungs, and the other excretions of the body in proportion to the period of its employment.
4.—Increases appetite and demand for food.	4.—Alcohol and tobacco decrease the desire for food generally by arrest of function, diminished metamorphosis of tissue and retention of waste.
5.—Especially by the employment of baths, causing a rapid change of tissue, and increased demand for oxygen in respiration, water increases the rapidity of development of nerve force and animal heat.	5.—By its general effects on the nervous system, as a stimulant, it exhausts the nervous fluid; or, as a narcotic, it impedes its action; it also lowers the vital actions generally, diminishes assimilation, decreases combustion, and, therefore, limits the production of animal heat.
6.—Water, by its cooling agency, tends to *destroy all inflammatory affections* in the mucous membranes, and to increase the healthy action of the mucous, alsine, and all other secretions and evacuations.	6.—Alcohol, by its heating and stimulating influence, *developes inflammatory action* in the mucous membranes, and in whatsoever tissues it enters, and tends to dry up all healthy secretions.

7.—Water drinking and bathing determine the force of blood to the skin, muscular organs, and surface of the body, when the heat of the blood is healthfully diffused, and admirably employed for the reaction, the external sanguification and warmth of the skin, and endurance of atmospheric change.

7.—Alcohol, by combination with the oxygen of the arterial blood immediately after respiration, *at once begins to diffuse its heat in the pulmonary organs;* in the heart through which it passes, and in all the large vessels, the brain, nervous centres, and other internal organs by them supplied, tending to the development of irritation, congestion, or inflammation in the interior of these vital organs, which rob the surface of its blood-heat, and endurance of cold.

Dr. Parish recommends the Turkish Bath in Dipsomania Cases.

Dr. Parish, in his evidence before the House of Commons Committee, stated that, in a private asylum for dipsomaniacs, of which he is one of the physicians, an important part of the treatment was the application of the Turkish Bath.

I have also seen most excellent results from it in combination with other hydropathic appliances in all forms of drunkenness.

Hydropathic treatment of dipsomania.

It supplies a stimulant, improves the appetite, gives tone to the nerves, and promotes general exhilaration in the system of such patients, so that they do not miss the noxious excitements they formerly so greedily sought, but soon learn to prefer the genial, wholesome, sustaining stimulant of the bath, which, unlike the fickle and treacherous alcohol, is followed by no depressing reaction, but is progressive alike in the love for it which it creates, and the vigour which it imparts. The efficacy of the hot-air bath in relieving the system from poisons with which it may be saturated, I have demonstrated elsewhere; it is unnecessary here to repeat my account of the *modus operandi*, let it suffice to relate that so specific is the action on the skin that its suppressed, or repressed and dis-

organized functions are restored and even revived; deleterious matter, which the system has absorbed, is expelled; even the poison of alcohol, which the great reformer, John Wesley, called "slow but subtle," cannot elude its power; the Turkish Bath cleanses the system from the *virus*, relieves the saturated ventricles of the brain, spinal marrow and nervous system, until the patient literally rejoices in the liberty it bestows, and would not again bow his neck to the former slavery which bound him down and debased him. Not only is there a cure, but the patient perceives the *rationale*, soon acquiesces in so genial and practical a philosophy, and learns not only to desire the cure and appreciate it, but to take pleasure in the manner by which he is cured. In this way it is the most important of all instrumentalities in the recovery, renovation, and restoration to home of the dipsomaniac.

Influences for the suppression of drunkenness.

I cannot conclude this chapter without referring to the check given to the drink traffic by the United Kingdom Alliance. No doubt a good deal of the modifications of the law, the conversion of so many ministers, as well as the sentiments expressed by so many of the judges, is owing in a great measure to the influence brought to bear on the public by the Alliance movement.

Sir Wilfrid Lawson's pertinacity in bringing forward the Permissive Bill year by year is most praiseworthy, and he should be regarded as one of the greatest philanthropists of the present age, as no doubt future generations will be benefitted by the influence he has brought to bear on the drink question. I hope the movement will continue to prosper and be well supported.

Although eulogizing the United Kingdom Alliance I must say that I have often been surprised that the attention of the agitators, including Sir Wilfrid Lawson, has not been turned to the question of providing public houses for

the working classes without the beer; such institutions has been advocated by Mrs. Captain Bayley, authoress of "Ragged Homes," Mrs. Wightman, authoress of numerous good books, and Mrs. Donovan, authoress of "Sanitary Facts," &c. These ladies have for years endeavoured to impress upon the public the desirability of forming a society for establishing public houses where no intoxicants should be sold, and where working men could congregate for social intercourse. I think the United Kingdom Alliance would do well to give such a movement their adhesion.

I am afraid, however, that influences brought to bear in the attempt to suppress or check the liquor traffic, will have but little effect so long as the Government of the country touches and handles that which is UNCLEAN. It is, in fact, a calamity, when the Government derives nearly half its income from this vile source. It was a mere sham and a farce to appoint a select committee to inquire into the question of drunkenness with a view of legislating for the evil, when in fact the revenue has a direct interest in the liquor traffic. How then, in the name of all that is honourable, charitable, humane, or consistent, can any Government or collective body expect anything else than the present appalling results from the drinking customs of the country which they patronize and protect? while they place no restriction on the competition of legitimate traders. Well may Judge Manisty remark "that it is only by the grace of God there are not more victims."

CHAPTER X.

LETTERS FROM STATESMEN, NOBLEMEN, MEDICAL MEN, LITERARY MEN OF EMINENCE, AND OTHERS.

THESE letters were received in answer to the following communication:—

The Commissioners of Baths for the Parish of Paddington are about to erect Baths and Washhouses for the Working Classes, and they are anxious to add the Turkish Bath and heated Lavatories (in which to wash and bathe) to the ordinary arrangements. These, it is urged, would be in greater request during the winter months, and would also attract many bathers who do not care to take the ordinary warm bath administered in a cold room.

Mr. Metcalfe and other Commissioners are supporting this proposal, and they are anxious to strengthen their case by opinions as to the value of the Turkish Bath.

Would it be too much to ask for your view on the Bath as a sanitary and cleansing agent, and the desirability of affording the Working Classes the facilities named? They do not ask your opinion of the Bath as a remedial agent, that being beyond the scope of their proposal.

I was one of the first Commissioners appointed to carry out the provisions of the Bath and Washhouses Act in the parish of Paddington, and during the time occupied with preliminaries, selecting the site, &c., I strenuously advocated the right of the poor to be

provided with hot-air baths and warm lavatories, in addition to the usual bathing appliances. I could not be blind to the fact that my colleagues regarded me as a necessary nuisance—*hot-air bath mad*—but being the only Commissioner who had a thorough knowledge of the bath question, it would have been inconvenient to oppose me, at this stage of the undertaking, hence my proposal did not meet with any direct opposition until they had used me for carrying their proposal before the Vestry. Knowing that advocates of any new thing generally experience fractious opposition, I therefore endeavoured to enlist the sympathy and support of the Board, and with this view, I obtained a host of letters from influential gentlemen, having observed when other subjects came before the Vestry, the collected outside opinions materially influenced their action, and I thought it might have some weight in my case with the Commissioners.

Being anxious not to lose the opportunity of having the hot-air bath recognized in the Baths and Washhouses of this great metropolis, I was perplexed to know how the members of the Vestry could be enlightened upon the question, and, "like a drowning man catching at a straw," it occurred to me I would procure a work bearing on the subject by an eminent author, and present it to the members (numbering over seventy), accordingly, at considerable cost, a copy of Dunlop's "The Bath; or, Air and Water in Health and Disease," was presented. Notwithstanding these efforts no impression was made, and as a proof of their indifference to the subject, I found, a few weeks afterwards, copies of the book I had presented, and bearing the mark of the Vestry, exposed for sale in the immediate neighbourhood.

I have thought it right to publish the whole of the letters received in which an opinion is given for or against the bath, in order that both sides of the question may be fairly before the readers, who will be in a better position to determine on their merits.

I may add that although the letters were obtained for a specific object, as stated above, no restriction was placed upon their publication; and as this work is purely philanthropic, and published for the purpose of advocating the erection of hot-air or Turkish Baths for the working classes, it is in this spirit they are introduced here. Some of the letters received were very elaborate, and were really little essays. I was therefore compelled to *delete* extraneous matter with a view of economizing space and sparing expense. Should any gentleman on perusing them think I have omitted any important portion, they will, I hope, acquit me of any intention of giving offence in using their communications for any other object than the one it was given for.

Many of the letters are from gentlemen of distinction, and will, I am sure, command the attention of the readers, and add considerably to the importance of the volume.

From the Right Hon. LORD CARLINGFORD.

In reply to your letter, I have no difficulty in saying that having taken an interest some years ago in the introduction of the Turkish Bath into this country, through the exertions of Mr. DavidUrquhart, I think very highly of it, as a means of comfort, cleanliness, and health, and I should be very glad to see its use extended to the working classes.

Board of Works, Whitehall Gardens.

From LORD KINNAIRD, *Rossie Priory, Inchture, N.B.*

I think the Turkish Bath would be appreciated by many and taken advantage of.

At a time when Pleuro-Pneumonia was raging in this district, I used it with great success for my cattle; and, when the heat was up, and when unoccupied by cattle, I had numerous applications to use the bath.

The great drawback is the length of time it takes for using it, but, on the

other hand, the extra expense of fitting up one in connection with baths and and washhouses ought not to be great. The flue of the furnace being conveyed in fire-clay pipes heats the room, while the furnace supplies steam and hot water for the washhouses and baths.

Besides the above, I steam food for cattle, and my furnace heats a kiln for drying grain.

The water apparatus attached to the Turkish Bath, would be most valuable in your establishment, and would supersede, or could be applied in each bath room. It partakes of the character of a steam, or Russian Bath; is far superior for cleansing purposes than a hot bath, occupying only about twenty minutes; is most efficacious for colds, rheumatism, sprains, bruises, &c.

When any of my work people meet with an accident they come for a hot and cold spray, or douche, and on Saturday evening or Sunday morning the water apparatus is in request.

I will send you some plans and specifications. I have one in the house which heats hot water pipes for passages and conservatory, the other at the farm for purposes described above. I shall be happy to supply you with any information, if you require it.

From the late Right Hon. LORD LYTTON, P.C., G.C., M.C. (*received one week before he died.*)

In reply to your request, I should say that the opinion of an eminent medical man is worth more than all the opinions to be obtained from persons like myself. So far as I can pretend to judge, I should think the Turkish Bath a very desirable adjunct to any bathing establishment, especially for the working classes, partly because no bath is so cleansing from all those morbid particles which adhere to the skin in various departments of operative labour, and partly because it seems to have a specific effect on those sudden chills and rheumatic attacks to which the working classes are necessarily subjected. At the same time, I have heard from an eminent medical authority that the Turkish Bath is likely to do serious mischief wherever there is any tendency to disease of the heart, and in some other maladies.

Argyll Hall, Torquay.

From the Right Hon. JOHN LAIRD MAIR BARON LAWRENCE, G.C.B., G.C.S.I.

I beg to acknowledge the receipt of your letter, and to inform you that in my opinion a moderate use of the Turkish Bath is very beneficial as a cleansing and sanitary agent, when used in moderation, for all persons.

From long experience of its use, I think it would do good if introduced among the working classes.

26, Queen's Gate, S.W.

From A. MCARTHUR, Esq., M.P.

I am in receipt of your letter requesting my opinion of "the Turkish Bath as a cleansing and sanitary agent."

In both respects I consider it most efficacious.

Brixton Rise, S.W.

From the late CHARLES GILPIN, Esq., M.P.

In reply to your note, there can be no doubt as to the cleansing agency of the Turkish Bath, but I fear I should not be an entirely satisfactory witness in its favour, as on the several last occasions of taking it, I have from some cause or other got considerably chilled; so that my faith once strong in the Turkish Bath is now weak.

10, Bedford Square, W.C.

From Right Hon. A. S. AYRTON, M.P.

I am directed by Mr. Ayrton to acknowledge the receipt of your letter, and in reply to state that it is not within the province of the First Commissioner's official duties to express any opinion on the mode of carrying out the parochial provision of Baths, but his personal opinion is that the Turkish Bath can only be regarded as a sanitary agent when used under medical advice for particular disorders, and that, for the purpose of cleanliness, it is better to provide the very cheapest means of washing, and not the most costly, which, used under improper conditions, would be injurious to health.

H.M.'s Office of Works, 12, Whitehall Place, S.W.

From Sir THOMAS WATSON, BART., M.D., F.R.C.P., &c.

In reply to your communication asking for my opinion of the Turkish Bath "as a sanitary and cleansing agent," I cannot hesitate to say that, properly regulated, I believe it to be both the one and the other.

As to "the advisability of affording the working classes the facilities named" in your letter, my own opinion is that, unless you can calculate upon recourse to those facilities by a large number of persons, not belonging to the working classes (as I understand these words), the *expense* of providing them must prove a serious impediment to the project. I discern no other objection.

16, Henrietta Street, W.

From the late Sir W. FERGUSSON, Bart., M.D., F.R.S., &c.

In reply to your note, I have no hesitation in stating that I consider the Turkish Bath as a powerful cleansing and sanitary agent; such as would be a valuable adjunct to all ordinary bath establishments.

16, George Street, W.

From the late Sir JAMES R. MARTIN, M.D., C.B., F.R.S.

In reply to your letter, desiring my opinion as to the desirability of the proposed Turkish Bath and heated lavatories in which to wash and bathe, I beg to state that as popular means, if placed under proper inspection and regulation, the Turkish Bath and heated lavatories may become very highly conducive to the advancement of public health.

You exclude, very properly I think, the consideration of the uses of these additional baths, as remedial means, for they are matters altogether separate and distinct.

37, Upper Brook Street, W.

From Dr. W. B. CARPENTER, F.R.S., &c.

In reply to your letter I have to say that I entertain a very high opinion of the value of the Turkish Bath, *occasionally* used as a sanitary, and more particularly, as a *cleansing* agent.

University of London, Burlington Gardens, W.

Dr. A. LEARED, F.R.C.P., *Senior Physician to the Great Northern Hospital, Physician to the Infirmary for Diseases of the Chest. Author of a paper on the Treatment of Phthisis by the Turkish Bath, which appeared in the "Lancet," November and December,* 1863.

In reply to your letter asking for my opinion of the Turkish Bath as a sanitary agent, it gives me pleasure to have the opportunity of saying that I regard its proposed introduction by the authorities of Paddington into their parish with great interest, and as a most important step. I quite agree that the Turkish Bath would attract many bathers who would not care for the ordinary warm bath.

Speaking from experience of the Turkish Bath in this and in Eastern countries, I should add that it combines care of physical health with agreeable relaxation.

Such a provision for the classes for which the bath is, in the present instance, intended is most desirable.

12, Old Burlington Street.

From Dr. MORELL MACKENZIE, M.R.C.P., *Physician to the Hospital for Diseases of the Throat, and Senior Assistant Physician to the London Hospital.*

I beg to state that I consider that the establishment of the Turkish Baths and hot-air lavatories in the parish of Paddington, as proposed by Mr. R. Metcalfe, for the benefit of the working classes, could not fail to be of great sanitary value.

When the existence of such a lavatory became known there is no doubt that many would use it who do not now avail themselves of the ordinary bath.

13, Weymouth Street, W.

From Dr. W. BATCHELOUR, M.L.A.C., &c.

The Turkish Bath is one of the best sanitary agents, and if placed within the reach of all classes would be a national benefit.

3, Turner's Place, S.W.

From Dr. E. J. PARKES.

If it is proposed to add a Turkish Bath to the ordinary establishment, and if this can be done without great expense, then I think it would be an excellent arrangement. There is, I think, no doubt that the Turkish Bath, if used with the cold douche or plunge at the end, is one of the best cleansing and most effective baths we have.

Of course the question of cost of erection and of working, and the consequent price of the bath, are matters which have to be very carefully considered, and in which I am not competent to form an opinion. I think, however, that if the cost of the Turkish Bath were so great as to raise the cost of common hot and cold water baths, in order to get a return on the money expended, then even the Turkish Bath might be purchased too dearly.

Sydney Cottage, Bitterne, Southampton.

From Dr. C. B. RADCLIFFE, F.R.C.P.

I believe that the addition of Turkish Baths and heated lavatories in which to wash and bathe) to the baths and washhouses, about to be erec in Paddington, would be, in many ways, very desirable.

25, Cavendish Square.

From Dr. J. MACPHERSON, *Inspector-General of Hospitals* (*H.M.R.A. retired*).

I am satisfied that the occasional use of the Turkish Bath forms a very useful supplement to ordinary bathing, as by its employment the skin can be more thoroughly cleansed than by any common bath.

I should be very glad to see the Turkish Bath placed within the reach of the working classes.

35, Curzon Street, W.

From Dr. GEO. WYLD.

I have a high opinion of the hot-air bath, both in a sanitary and social point of view. If hot-air chambers could be opened for the reception of working people, where washing operations could be carried on, they would be very attractive, especially in cold weather, and would, in my opinion, induce many to cleanse themselves who now neglect to do so, or shrink from it.

An important question for consideration would be whether the luxury could be made self-supporting. The hot-air, unless well ventilated, would be more or less injurious.

12, Great Cumberland Place, W.

From Dr. T. H. TUKE, F.R.C.P.

I consider the Turkish Bath of great value in the treatment of disease, and in health most useful in insuring cleanliness and promoting the proper action of the skin.

37, Albemarle Street, W.

From Dr. JOHN MURRAY, M.R.C.P.

I sympathize with the object you have in view. During the past three years I have had considerable experience of the Turkish Bath, and entertain a very high opinion of its value as a cleansing and sanitary agent.

I believe that your proposal, if carried out, will be productive of much good to the working classes.

42, Harley Street, W.

From Dr. J. LOCKHART CLARKE, F.R.S.

I quite approve of the addition of Turkish Baths to the establishment at Paddington, and think it desirable in a sanitary point of view.

64, Harley Street, W.

From Dr. HOLT DUNN.

I have not studied the Turkish Baths as much as I ought to have done; but trust shortly to avail myself of the facilities you have kindly given me, and to become better and more practically acquainted with its many merits as a therapeutic agent, &c.

You ask my opinion of the Turkish Bath as a sanitary and cleansing agent (not as a medical one). I do not think there can be any doubt of its value as both. Since the days of the ancients it is to be found in all the early classical medical literature, I believe, and has been handed down from age to age as no mean legacy bequeathed us by our ancestors.

All modern philosophers agree in the importance of maintaining the action of the skin, and sanitary doctors know it to be as important to have the drainage of our bodies in order, as it is to have that of the locality in which we live, and I know of no means by which the skin can be kept in such perfect working order as by the use of the Turkish Bath, which is the perfection of cleansing agents, and thus becomes also a great, powerful, and important sanitary one.

I am sure the public and the profession are greatly in your debt, and should be very grateful for the time and talent you have devoted, as well as large capital, in order to advance the knowledge of the Turkish Bath, and to perfect it as you have at your own establishment.

69, Hereford Road, W.

Dr. A. TOULMIN, M.R.C.S.E., *Author of a paper on the importance of the Functions of the Skin in the Treatment of Tubercular Diseases, recommending the Hot-air Bath as a specific remedy; read before the Harvean Society, and reprinted from the "London Medical Review."*

Speaking from a long and practical experience of the sanitary and cleansing properties of the hot-air bath (in contradistinction of the vapour bath), I know of no boon, next to a sufficient supply of food and raiment, of so much value to the poor in general as these baths; not alone in a sanitary point of view, but also in a moral and religious one, as the best means of helping the poor out of their present slough of despondency, by removing their strong craving for alcoholic drinks, as the only means they know of for alleviating their permanent sense of want and misery. Dr. Mullinger, physician to the Sultan, tells us "That in Turkey, where there are no poor laws, nor hospitals, nor dispensaries, for the relief of the sick poor, they at once, when ill, have recourse to their bath, as their universal remedy, taking no medicine, and trusting to it alone for recovery," and yet.

Dr. Mullinger adds, "on looking at their bills of mortality, we find them as favourable to longevity as those of England."

I had almost omitted to mention that one of the most important effects of the bath is the removal of all sense of weariness in the fatigued person taking it.

46, Russell Road, W.

From Dr. J. G. WESTMACOTT, L.R.C.P.S., Edin.

In reply to your note received to-day, relative to the sanitary and cleansing agency of the Turkish Bath, I have no hesitation in saying that I believe it would greatly conduce to both.

I have been in favour of the said bath since its first introduction into this country, having also enjoyed the luxury frequently myself.

19, St. Mary's Terrace, W.

From Dr. WILBERFORCE SMITH, L.R.C.P., M.R.C.S.

In reply to your note, it seems to me that the addition of Turkish Baths to the proposed public baths and washhouses would be a valuable improvement.

In my experience, the working classes use the warm bath as a means of ablution far too seldom; and if the process of cleansing the skin were done in the thorough manner insured by the Turkish Bath, this would, I believe, somewhat compensate for its being done too seldom. I should think that heated lavatories, for the use of the ordinary warm bath, would be a great attraction, and an inducement to bathe more frequently.

20, Bishop's Road, W.

From Dr. J. R. REYNOLDS, F.R.C.P.

I think that the Turkish Bath is very useful as a sanitary and cleansing agent, and that it would be well to extend its advantages to the working classes.

38, Grosvenor Street, W.

From Dr. E. CRONIN.

For many years I have had but one judgment as to Turkish Baths (so called). Both in a sanitary and medical point of view, when well constructed and well supplied they are, I am persuaded, invaluable.

Claremont House, Brixton Road, S.W.

From Dr. W. V. DRURY, M.R.I.A.

As I find so many people take Turkish Baths, I should think they would pay well in any good neighbourhood where they were erected at a moderate cost, where there was not already a supply, and where the cost of the bath would bring it within reach of the middle classes.

Never having taken a bath of this kind, I regret that I cannot speak from my own experience, but my patients who use them speak very favourably of them.

7, Harley Street, W.

From Dr. CHARLES WITT, M.R.C.P.

In compliance with your request, I have no hesitation in assuring you that I believe greater benefit can hardly be conferred on the working classes than the establishment of the Turkish Bath in addition to the ordinary ones proposed for your parish.

The advantages of personal cleanliness and comfort need no comment, and these are hardly attainable by any means so effectually as by the Turkish Bath. In ancient Rome, where baths of wondrous splendour were constructed for *popular* use, we see in them remaining proofs of the value then attached to this form of ablution.

Furthermore, I may venture to state my conviction that numerous disorders will be prevented, and that many will unquestionably be cured, by the judicious use of the Turkish Bath, which now again must be considered as one of our most valuable remedial agents.

11, Spring Gardens, W.

From Dr. L. A. GOSSE.

I have had the honour of receiving your letter, and I discharge a duty in replying to the questions it contains, and which seem to me, in fact, to be in the interests of your philanthropic views.

And in the first place you wish to know what I think of the desirability of adding a Turkish Bath to the popular washhouse and ordinary baths which you mean to establish. Now I am convinced of the advantages derivable from the Turkish Bath, from a hygienic point of view, as a means more efficacious than the usual warm baths for cleansing the skin thoroughly, whether from detached epidermis particles or incrusted dirt, and, moreover, to aid, by perspiration, the expulsion of elements noxious to health, especially during the prevalence of epidemics. Therefore, I cannot but approve of

Mr. Metcalfe's proposition of adding a Turkish bath to the washing establishment.

I am of opinion, also, that in order to bring this bath within the reach of the poorer classes, the prices of admission should not be too high.

1, Rue des Granges, Geneva.

From Dr. R. QUAIN, F.R.S.

In reply to your inquiry, I have no hesitation in saying that a well constructed, and carefully managed Hot-air Bath would be a very valuable addition as a cleansing sanitary aid to an ordinary hot and cold water bathing establishment; and no one can doubt that "warmed lavatories" would be a source of great comfort and a security against cold.

87, Harley Street, W.

From Dr. J. J. GARTH WILKINSON, F.R.G.S., &c.

I am of opinion that an occasional Turkish Bath would be a suitable change of skin and body, and of mind too, to the working classes, and that it is a wholesome public object to bring the bath within their reach.

76, Wimpole Street, Cavendish Square, W.

From Dr. THOMAS NEATBY.

There is not room for two opinions as to the importance of the Turkish Bath in a hygienic and sanitary point of view, apart from its value as a remedial agent.

I am persuaded that the classes for whose benefit it is proposed, would, in time, appreciate highly the boon which would be conferred on them by its establishment.

29, Thurlow Road, N.W.

From Dr. HENRY THOMPSON, F.R.C.P.

I am sorry I cannot give you a reply based upon personal experience, but as far as I can ascertain from other people, I should say that Turkish Baths are useful as sanitary and cleansing agents.

53, Queen Anne Street, W.

From Dr. C. T. PEARCE, M.R.C.S.

In reply to your note desiring my opinion of the Turkish Bath as a sanitary agent, I have to say that it is one of the greatest blessings ever introduced of a sanitary nature, because it does that for society which is better than *curing* disease, viz., prevents disease by keeping the bodies of those who use it in a cleanly, vigorous condition. Ever since the introduction of the Hot-air Bath, I have taken some pains to investigate its action, and I habitually use it to preserve my health. The Baths Commissioners of Paddington, in my opinion, cannot do better than adopt the suggestion for the health of the masses, and the saving of the rates to householders. The loss arising from the "sickness of dirt" is enormous.

I shall hope to hear that the authorities of Paddington have set a good example to the other parishes in the metropolis, and that it will be followed extensively.

16, Great Castle Street, W.

From G. SEXTON, Esq. M.A.

I have had considerable experience in the use of the Turkish Bath, and my opinion is, that as a sanitary agent, it is unparalleled. I sincerely trust that you will succeed in establishing one in Paddington in connection with the Baths and Washhouses.

Should this be done, Paddington will have set a glorious example to be followed hereafter, I have no doubt, by hundreds of other parishes.

17, Trafalgar Road, S.E.

Dr. W. JACKSON CUMMINS, M.R.C.S., *Physician to the Cork Infirmary, Author of "Prevention better than Cure," an address to the Students of Cork Infirmary and County Hospital, also a pamphlet on the "Hot-air Bath as a Sanitary Agent," &c.*

The bath is largely availed of by the lower orders in Cork, but I am sorry to say that it has not realized my anticipations that it would tend to diminish intemperance, as drunkenness is largely on the increase; but I am sure it has tended to diminish the injurious physical effects of this degrading vice, and if the Legislature could be induced to sever its alliance with the classes who are interested in enticing the mass of people to commit suicide in public houses, the bath would be a valuable substitute for porter and whisky.

I have charge of the medical department of the principal hospitals here, and have large opportunities of judging, regarding the lower orders, especially trades-people, and the classes above the labourers, the class most addicted to habitual

intemperance, and I can speak highly of the effect of the bath in relieving the degeneration and disease of the organs and tissues which alcohol slowly but surely induces. I can speak in favour of its effects upon the general habits and constitutions, and though it is now twelve years since my pamphlet was published, increased experience has confirmed almost everything it contains, and has made me value the bath more and more.

15, Charlotte Quay, Cork.

From the late Dr. CHARLES BRYCE.

I have much pleasure in complying with your request to state my opinion of the Turkish Bath as a cleansing and sanitary agent for the working classes. My experience of its value in these respects has been of many years, in many lands, and I say confidently, that inasmuch as personal cleanliness is conducive to social and domestic well-being, this bath is surely the most effective and safest of all baths, and, when properly constructed and worked, less costly than the warm water tank into which many people emerse themselves together for cleansing purposes. Besides, a person who has proved the comfort and good of the Turkish Bath, and can resort to it cheaply, is weaned from pothouse indulgence. For which reasons I consider the establishment of Turkish Baths by municipal authorities a most excellent thing.

Old Steyne, Brighton.

From Dr. TILBURY FOX, F.R.C.P.

In reply to your note I beg to say that I regard the proposal of the Commissioners of Baths for the parish of Paddington to establish Turkish Baths as a most admirable one. Putting aside the value of the Turkish Bath as a curative or alleviative agent in disease, I regard the bath, judiciously given, as a great luxury, a source of infinite comfort in giving relief from bodily and mental fatigue, and as an important cleansing agent, as regards the skin of healthy men, and especially serviceable to those who work hard. If the commissioners can bring the bath within the reach of the working classes, they will be entitled to great credit.

In thus praising the Turkish Bath I wish it to be understood that I do not regard it as some authorities do, as a panacea for all evils, and a preventive for every derangement of health. The bath has its great hygienic use, and is harmed by the injudicious utterances of pseudo savans in baneology.

14, Harley Street, W.

From Dr. WILLIAM BAYES.

In reply to your letter, in which you ask my opinion of the Turkish Bath as a cleansing and sanitary agent, and as to its desirability as such an agent for the working classes, I have great pleasure in saying that I conceive the addition of the Turkish Bath (on a good scale) to the baths and washhouses would be an incalculable boon to the working classes, and a great relief to the poor's rate. The Turkish Bath, when used in moderation, is the best and most complete means of purification to the skin. It is further of immense service as a preventive against disease, and especially against the disease of the poor, *i.e.*, rheumatism. Further, it tends, when used in moderation, to strengthen the skin, and thus to prevent colds and bronchial coughs, which form, together with rheumatism, a large proportion of the diseases which specially affect the poor, and lay them up from their work.

I therefore consider that the Turkish Bath should be added to the washhouses as a means of perfect skin cleansing, and as a means of preventing disease.

58, Brook Street, W.

From Dr. J. KIDD.

I think the Turkish Bath is a most important sanitary and cleansing agent. It would be a great boon to the working classes to have facilities for using it.

1, Finsbury Circus, E.C.

From T. S. WELLS, F.R.C.S.

My opinion of the Turkish Bath has been published long ago.* I object to giving anything like a testimonial upon any subject.

3, Upper Grosvenor Street, W.

From Sir W. W. GULL, Bart., M.D.

Sir William Gull directs me to acknowledge your note with his compliments, and to say that the advantages to the working classes of properly arranged baths and washhouses cannot be over estimated. Sir William does not, however, think that the Turkish Bath is especially advantageous. From

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* Lecture on the Revival of the Turkish or Ancient Roman Bath, delivered at the Grosvenor Place School of Medicine.

his experience he should think that opportunity for thorough cleanliess is afforded by the ordinary warm bath; nothing further could be desired.

Turkish Baths are probably more adapted to the indolent and luxurious, than to those who toil for their livelihood.

74, Brook Street, W.

From Dr. T. KING CHAMBERS, F.R.C.P., &c.

I do not consider the addition of the Turkish Bath to baths for the labouring classes as advisable in a sanitary point of view.

1. Unless accompanied by anointing, which is costly, it renders an imperfectly clothed person more susceptible of cold.

2. It diffuses through the air, mixed with steam, the excretions from the skin, which are thus drawn into the lungs of themselves and their neighbours.

3. It discourages the use of the water bath, a healthy cleansing agent.

4. It still more discourages open air bathing, and swimming among young men.

5. It is a lengthy process and therefore a waste of time for those who have none to spare.

64, Brook Street, W.

From Dr. ANDREW CLARKE, M.A.

As I think that the Turkish Bath should not be used without the sanction of a medical man, I am unable to give my support to any project for its indiscriminate and unguarded use.

16, Cavendish Square, W.

From Dr. G. BURROWS, F.R.C.P., F.R.S., &c.

Dr. Burrows presents his compliments, and in reply he considers the Turkish Bath, independent of its uses in the treatment of diseases, most healthful in its uses by official, professional, and other men of sedentary occupations, who never excite their skins into a state of perspiration, but he does not think that such a luxurious kind of bath is required by artizans and the labouring classes of society.

18, Cavendish Square, W.

From Dr. E. SIEVEKING, F.R.C.P.

In reply to your request that I would give an opinion as to the desirability of Turkish Baths for the working classes, "as a sanitary and cleansing agent," I beg to say that valuable as Turkish Baths are in the treatment of certain forms of disease, I do not regard their habitual use as desirable.

For the ordinary purposes of cleanliness, and the preservation of health, warm, tepid, or cold baths, selected according to circumstances, are amply sufficient, and they offer this further advantage, that they consume little time, while the Turkish Bath, if not to prove absolutely prejudicial, demands a considerable expenditure of that, to most people, very valuable commodity.

17, Manchester Square, W.

From Dr. C. J. B. WILLIAMS, F.R.S.

In reply to your letter I must say that from what I have known of the operation of the Turkish Bath in this country, I do not form a high estimate of their utility for the working classes.

It is quite true that they are more cleansing and searching in their operation than other baths, but, if used frequently, they would too much tax the time and strength of the working man, and if used rarely, they would not be an adequate substitute for the more salutary habit of regular simpler ablutions, which are both easier and more safe.

49, Upper Brook Street, W.

From Dr. THOMAS BALLARD, M.R.C.S.

In reply to your request for my opinion of the hot-air bath as a sanitary and cleansing agent, and of the advisability of providing the working classes with the proposed facilities of access to it, I beg to say that I have no reason to regard it as useful as a sanitary agent, and that I consider it less convenient for cleansing purposes than a hot water bath.

I do not think the working classes will appreciate very highly the facilities of access to the hot-air bath, because they have little leisure time, and are not so much disposed to indulge in hygienic diversions as those who have more leisure and means at their disposal.

Facilities of access to plenty of warm water and soap, with the necessary accommodation for bathing and dressing, must be a *great boon for all the poorer classes.*

10, Southwick Place, W.

From Dr. ELIZABETH BLACKWELL.

Dr. Elizabeth Blackwell begs to state, respecting the propriety of introducing the Turkish Bath into the proposed baths for the working classes, that she has known so much mischief arising from the ignorant or careless use of that powerful agent, the Turkish Bath, that she does not consider it a safe appliance for ordinary public baths.

That the public bath house should be warmed in winter and an unlimited supply of hot water provided, is of course indispensable to its utility.

6, Burwood Place, W.

From Dr. HORACE JOHNSON.

It gives me much pleasure to reply to your circular received the day before yesterday.

I am sorry to say, however, I do not think it would be desirable to erect the Turkish Bath referred to.

8, Ovington Square.

From Dr. W. HARDWICKE, *Coronor for Middlesex, late Medical Officer of Health for Paddington.*

In reply to yours asking for my opinion of the Turkish Bath as a "sanitary and cleansing agent," I would refer you to the following abstract from a lecture of mine:—

Public Baths in Ancient and Modern Times.—The hot-air bath system, or Turkish Bath, has many advantages over the ordinary warm bath. It is more suitable for winter use than a common warm bath, and better at all times for cleansing purposes, for the following reasons. No soap is required, the acid secretions of the sweat glands, and the oily product of oil glands, form a kind of natural soap in the surface of the skin, and when perspiration is excited by heat, it readily detaches the loose scales of the scurf skin. It forms a soft lubricating lather, better than soap, and quite as easily washed off by warm water ablution. Cleansing in the ordinary warm bath must be effected by the use of soap, and a scrubbing or flesh brush is often necessary.

Richmond Villa, W.

From Dr. SEPTIMUS GIBBON, M.R.C.P., *Medical Officer of Health, Holborn.*

In reply to your communication, asking my opinion as to the desirability of adding a Turkish Bath and heated lavatories to the new baths and wash-

houses it is proposed to erect in Paddington, I have no hesitation in saying that I consider such an addition would be a very valuable boon to the inhabitants.

The Turkish Bath is a powerful agent, which, now for nearly twenty years, I have been in the habit of employing for preventing as well for curing disease. A well-constructed bath of this description is much wanted in the locality.

11, Finsbury Place South, E.C.

From M. J. McCORMACK, Esq., M.B., *Medical Officer of Health, Lambeth.*

In reply to your favour requesting my opinion as to the value of the Turkish Bath, as a sanitary and cleansing agent, and the advisability of affording the working classes the facilities for using the same, I have no hesitation in giving my humble opinion as to its value, and that it is a step in the right direction as far as sanitary measures are concerned. As to the efficacy of it as a remedial agent I could also testify, but as you say it is not within the scope of your proposal, I need not enter into the question.

Vestry Hall, Kennington Green, S.E.

From Dr. J. W. TRIPE, *Medical Officer of Health, Hackney.*

I consider Turkish Baths more likely to be useful in a sanitary point of view for the working classes than any other, as the pores of their skin must be more filled with dirt from the nature of their employment than those of the middle and upper classes. I am, therefore, of opinion that, irrespective of pecuniary arrangements, they would be most useful.

Town Hall, Hackney, E.

From C. F. J. LORD, Esq., M.R.C.S., *Medical Officer of Health, St. John, Hampstead.*

Your letter about the Paddington Baths did not come direct to me. I regret that it has been since mislaid.

I am very favourable to the use of the Turkish Bath, and consider it as an excellent sanitary and cleansing agent for all classes of the population.

Hampstead, N.W.

From Dr. J. S. BRISTOWE, F.R.C.P., *Medical Officer of Health for Camberwell; Examiner in Medicine to the University of London, Physician to St. Thomas's Hospital.*

I hardly know how to reply to your note without entering upon the very question which you exclude from its scope. I have no doubt that the Turkish Bath is in many cases, and under certain circumstances, a very important curative agent. Apart from that, I fancy its chief use lies among those who are in easy circumstances, and have much leisure on their hands. The time that each bath requires renders it difficult of use at all (in whatever class of life they may be) who are much occupied with work, and while I should imagine it would be undesirable to make provision for the former, it would be equally undesirable I think to encourage the latter to waste their time.

You hint, as a point in favour of the Turkish Bath, that that would be administered in a warm room, whereas the ordinary warm bath would be taken in a cold one. Would it not be possible to overcome that objection by warming all that part of the building devoted to warm baths? If this were done, it seems to me that you would secure for your bathers every advantage that a Turkish Bath itself could afford, excepting that of having a lounging place for the idle, and (what you say you do not require) a place of cure for a small proportion of those who are sick.

11, Old Burlington Street, W.

From Dr. NICHOLAS, *Medical Officer of Health, Wandsworth.*

There cannot be a doubt as to the desirability of establishing baths, hot and cold, as well as washhouses for the poorer classes, and, indeed, for the general public. There might, however, be a doubt as to the advisability of giving the working classes a great facility of access to the Turkish Bath, which is calculated for occasional and remedial, rather than for lavatory use, and that under proper supervision. It would, however, be a useful addition to the establishment proposed if carefully employed, and its too frequent use precluded by a sufficiently high charge for admission.

2 & 3, Church Row, Wandsworth.

From J. J. SKEGG, M.R.C.S., *Medical Officer of Health, St. Martin's-in-the-Fields.*

The proposed idea of establishing in your parish the Turkish Bath for the use of the working class, is a novel and excellent undertaking, and one, if taken advantage of by the class for whom it is intended, will doubtless, in a sanitary point of view, be of great benefit.

26, Northumberland Street, W.C.

From Dr. T. ORME DUDFIELD, L.R.C.P., *Medical Officer of Health, Kensington.*

In reply to your letter I beg to express my opinion in favour of the Turkish Bath, &c., as a sanitary and cleansing agent. If it be practicable, I think there can be no doubt as to the advisability of affording the working classes the facilities named, which I doubt not would be much appreciated by them when understood.

Kensington Vestry, W.

From S. TILLY, Esq., F.R.C.S., *Medical Officer of Health, Rotherhithe.*

Five years ago, in my annual report to the St. Saviour's District Board of Works, I advised that baths and washhouses should be erected for the use of the working classes. I am decidedly of opinion that the Turkish Bath and heated lavatories would have in addition a very beneficial effect, and tend, in a great degree, to promote the operation of sanitary laws.

Emerson Street, E.C.

From Dr. THOMAS STEVENSON, F.R.C.P., *Medical Officer of Health, St. Pancras.*

The Turkish Bath is of great value as a sanitary and cleansing agent. The great difficulty in introducing them for the use of the lower orders is the expense.

10, Edward Street, N.W.

From T. J. HUGHES, M.D., *Medical Officer of Health, Woolwich.*

Not a necessary, only a luxury.

Woolwich.

From Dr. J. WHITMORE, M.R.C.S., *Medical Officer of Health, St. Marylebone.*

In reply to your letter in which you ask my opinion as to the desirability, in a sanitary point of view, of erecting Turkish Baths for the use of the working classes, I find it difficult to speak of this description of bath otherwise than as a medical or remedial agent; there can, however, be no doubt that for effectually cleansing the surface of the body it is greatly superior to the ordinary warm bath, and for that reason is useful as a sanitary agent. The addition of heated lavatories, in which to wash and bathe, appears to me to be a luxury that would prove anything but invigorating to a class of persons whose avocations necessarily expose them to cold and wet.

Court House, St. Marylebone, W.

From F. J. BURGE, Esq., M.R.C.S., *Medical Officer of Health, Fulham.*

In reply to yours, I am of opinion that the addition of the Turkish Bath, &c. *for the purposes named*, would be an unnecessary and useless adjunct.

Broadway House, Hammersmith.

From HENRY N. PINK, Esq., M.R.C.S., *Medical Officer of Health, Greenwich.*

In answer to your questions whether the Turkish Bath and heated lavatories would be advisable for the working classes during the winter months, I would express my opinion in decided opposition to their use. The risk of, and exposure to cold after the use of the hot baths during the winter months would be very objectionable, and I should oppose any proposition of the kind in this district.

Greenwich, S.E.

From Dr. H. BATESON, *Medical Officer of Health, St. George-the-Martyr, Southwark.*

Dr. Bateson wishes me to acknowledge the receipt of yours on the 9th inst., and give you his opinion on the subject.

As a means of cleanliness there is nothing more efficient and satisfactory than the baths in daily use at the Public Baths; there is cold and hot water at the choice of the bather, and this, with soap and brush, is all that is needed.

There is no necessity the rooms should be cold in winter, plenty of appliances being at hand for warming them.

He considers the Turkish Bath a medical agent of great power, and should liken its action upon the skin to a purgative upon the bowels, and this is not required by those who simply desire to wash and be clean.

116, St. George's Road, S.E.

From W. TIFFEN ILIFF, Esq., M.R.C.S., *Medical Officer of Health, St. Mary, Islington.*

My own impression is *against* the propriety of establishing Turkish Baths for the *poor;* I believe them unnecessary and not likely to be much used by the *poor alone.* As to the warm bath in a cold room, it is really a thing so easily remedied that it does not deserve being alluded to.

37, Kennington Park Road, S.E.

From the late Dr. H. LETHBY, *Medical Officer of Health for the City of London.*

I regret that in consequence of great pressure of engagements, I have not had an opportunity of replying to your letter before this.

I do not think that the Turkish Baths are at all necessary for the use of the working classes, but I think that heated lavatories in which to wash and bathe during the cold weather would be a great advantage.

17, Sussex Place, N.W.

From Dr. M. CORNER, M.R.C.S., *Medical Officer of Health, Mile End Old Town, E.*

The sanitary arrangemnts of a community cannot be complete without well contrived public baths and washhouses ; comfortably warmed lavatories would be a good plan and make the places more attractive and numerously attended ; indeed, I look upon a proper amount of heating of the rooms in cold weather as a necessary addition to the healthy influence of the bath. With regard to the Turkish Bath as a sanitary and cleansing agent, I believe its habitual use both unnecessary and highly dangerous, and should certainly not be offered to the uncontrolled use of the public, and especially of the labouring and poorer classes, who would and could not take the necessary precautions to prevent injurious effects after the bath.

The Turkish Bath is essentially a remedial agent and should be used with great care under skilled advice. I believe it often produces insidious injury, of which the sufferer may be at the time unconscious ; it might be useful to add a certain number of such baths for the use of the public, but only under medical advice.

For all purposes of cleanliness, the ordinary bath, with more or less addition of soap, is sufficient and entirely effectual.

Vestry of the Hamlet of Mile End Old Town, E.

From Dr. WILLIAMS, *Hydropathic Establishment, Croydon.*

I am happy to answer your queries relative to the Turkish Bath in health and disease, or, rather, in regard to its value as a hygienic agent in the prevention of disease. I have been twenty-nine years in practice, and of that time about thirteen years I had the care of a large Union district and Union Infirmary. I think, therefore, I may fairly claim to have some practical knowledge of the subject. I may add that for some fourteen years I have had a growing *disbelief in the value of merely drugging the human body.* I do not wish to say, with Macbeth, " throw physic to the dogs," but still, I believe the really beneficial *influence* of drugs is in a very limited area. I

use *drugs* as adjuncts to baths, and not baths as extremely rare adjuncts to drugs, in the prevention and cure of disease. I have nearly *wholly* relied upon baths for a few years past.

Heating the body *before* washing it positively *strengthens* it, especially in delicate people. A great deal of ignorance exists upon the subject in England, and a very large amount of *professional obstruction* is, from the want of practical knowledge of the subject, found even in the *medical profession* itself.

No greater boon could be given to the poor than good hot baths.

From C. R. TIDY, Esq., M.B., M.R.C.S., *Medical Officer of Health, Islington, Professor of Chemistry and Medical Jurisprudence at the London Hospital.*

My opinion is that for all cleansing purposes the ordinary warm bath is sufficient, but knowing very well that a cold room is a frequently urged objection to its use by the lower classes, I think it is quite worth while giving the Turkish Bath a trial.

Further, while I think the Turkish Bath is very useful if *occasionally* employed, it is right I should add I consider its frequent use is both unadvisable and inexpedient.

The Hollies, Cambridge Heath, E.

ERASMUS WILSON, Esq., F.R.C.S., F.R.S., &c. *Author of the "History and Revival of the Hot-air Bath into England and its application to the purposes of Health," &c.*

I consider a heated but properly ventilated atmosphere of the first importance in every form of in-door bath; and especially in the case of the warm bath. The essence of a bath in my opinion is:—

1st. A warm and genial atmosphere; and 2nd a warm shower under which ablution may be accomplished; subsequently cold shower and cooling room.

Mere soaking in warm water is more mischievous than useful; and the exercise of the limbs in rubbing the skin, while the warm shower washes away the exuviæ of the skin, is of considerable importance. In reference to the Turkish Bath, it should be borne in mind that its purpose and medicine is warmth. Excessive heat would be injurious, and the varied processes of the Turkish Bath are unnecessary for general use.

I would certainly support every opinion which favoured a modified Turkish Bath, that is, a hot-air bath, with a current stream of warm water (shower-room) to rinse off impurities. Trusting that these observations may meet the objects you have in view.

17, Henrietta Street, W.

From ERNEST HART, Esq., M.R.C.S., *Editor "British Medical Journal," and President of the Harveian Medical and Quackett Microscopical Sciences.*

I have no doubt that the addition of a Turkish Bath to the establishment which the Paddington commissioners are about to erect for the benefit of the poor, would be of very great public value indeed.

They would not only make bathing a luxury, which could hardly fail to prove inviting to the unwashed, but they would, I believe, do something, perhaps a great deal, to lessen intemperance and vice, and to promote the habits of self-respect, which are a part of morality.

59, Queen Street, W.

From JABEZ HOGG, Esq., M.R.C.S.

I can answer your note from a very extended personal knowledge of the use of the Turkish Bath.

I believe this kind of bath to be of the highest value as a sanitary and cleansing agent, and for these reasons constantly employ it.

No other bath can in any way be compared with it for promoting the healthy action of the skin. This opinion is borne out by every physician who has made the bath a study; and while very many persons are convinced of the importance of the hot bath, and its necessity in maintaining health, a great number are afraid to use it from a well-founded suspicion that there is great risk of becoming infected with a loathsome disease, which, in spite of all precautions, must often be left behind in the bath.

Now, there is no fear of any calamity of the kind occurring in the Turkish Bath, and hence its greater popularity with gentlemen.

A Turkish Bath for the middle and working classes would, indeed, be a boon of great worth, and a very much larger number of persons would resort to it than now resort to the ordinary hot bath.

I do hope the Paddington vestry will be the first to set so good an example to the rest of the London parishes. There cannot be a doubt of its being a step in the right direction.

1, Bedford Square, W.C.

From H. W. BAINBRIDGE, Esq., F.R.C.S., *of the Droitwich Brim Baths.*

Absence and constant engagements have prevented me replying to your note of yesterday by this morning's post. I have no hesitation whatever in answering your inquiries to the best of my ability. The value of a Turkish Bath and lavatories for the working classes cannot, in my opinion, be surpassed or equalled by any other washing establishments.

As a "*cleansing agent*" it is superior to any other bath, for, independent of dirt with which the poor man's skin is necessarily loaded, there is also the excessive secretion to be removed, and in doing this with the Turkish Bath you can at the same time produce a healthy reaction on the surface, which would materially tend to preserve the health of the body. In my opinion, such a step as your commissioners contemplate would be not only a great boon to the working man, but would also confer great praise on those by whose advise such a step had been undertaken.

Droitwich.

From J. BAXTER LANGLEY, Esq., LL.D., M.R.C.S., &c.

I have had great opportunities of seeing the Turkish Bath at work in different parts of the country. They are generally well supported by the higher class of artisans, where the prices are not prohibitory; and I am confident would not only be greatly useful, but widely patronized by a class to whom the private Turkish Bath is inaccessible on the ground of expense.

A very moderate reduction secures to the present baths in the evening a very large attendance, and if public baths, at still more moderate cost, could supply Turkish Baths, it would be an advantage which I should expect to be largely used.

The Turkish Baths at present practically exclude women by their high prices, and in any public arrangements the female sex should be especially provided for.

As a cleansing and sanitary agent, the Turkish Bath *takes the foremost place* of all appliances I know.

50, Lincoln's Inn Fields, W.C.

From R. M. WILLSON, Esq., M.R.C.S., &c.

I am decidedly of opinion that the addition of the Turkish Bath system to the baths about to be erected for the working classes will be most beneficial and much more effectual, as a cleansing means, than the simple warm or hot baths; and I also think that many will be induced to visit the bathing rooms for that luxury who would perhaps scarcely think of using the warm bath only. The Turkish Bath is also well known to act as a powerful preventive means against various impending disorders.

99, Ledbury Road, W.

From E. PARKER YOUNG, Esq., M.R.C.S.

Press of work has prevented me answering your letter ere this; but I am of opinion that the erection of the Turkish Bath with heated lavatories, &c., would be a great boon to the working classes, for I have been puzzled sometimes in recommending my dispensary patients and poorer ones the Turkish Bath (even as a remedial agent, on which I look upon it in *certain cases* with favour), as I know the difficulty of obtaining one at a cheap rate.

I think the Commissioners would do well in erecting one at the same time that the baths are erected, as the cost would be less; and, financially, I feel certain it would pay if properly conducted.

I should be quite willing to support a resolution, if it was moved in the vestry, to sanction the Commissioners in erecting one, if they felt any difficulty in taking upon themselves the responsibility.

10, Delamere Crescent, W.

From T. G. D. THOMAS, Esq., M.R.C.S., *Medical Officer of Health, Harlesdon Deputy Coroner for Central Middlesex.*

Your letter duly received. With regard to the Turkish Baths, I am of opinion that as a depurative agent they would be most useful to the working classes if they were attached to the baths and washhouses.

22, St. Mary's Terrace.

From the late J. B. WALKER, Esq., M.R.C.S.

In reply to your letter, I beg to say that my opinion is very favourable to the use of the Turkish Bath, both in a sanitary and medical point of view.

At the same time, I think it should be used with caution, and be under the eye of an experienced man.

17, Clifton Gardens, W.

From R. EPPS, Esq., M.R.C.S.

I have much pleasure in stating my opinion of the Turkish Bath, which I consider to be a valuable addition, if I may say so, to the *Materia Medica*, it being, in properly selected cases, a valuable medical aid. I must say, however, that I have seen bad results often follow its indiscriminate employment.

89, Great Russell Street, W.C.

From F. B. PEARSE, Esq., F.R.C.S.

There can be no doubt that the hot-air bath is most valuable; indeed, things are not complete without it in a sanitary view of the matter; and if you could add also, when required, sulphur and alkaline vapour baths, it would be a boon to any locality. Baths are of the greatest importance to the working classes.

Haverstock Hill, N.W.

From J. HAWKINS, Esq., M.R.C.S.

I received your favour, and am of opinion that the hot-air bath, as a sanitary and cleansing agent, would be decidedly useful; in some cases it requires one.

36, Colet Place, E.

From W. S. BRITTON, Esq., M.R.C.S.

In answer to your applications, I have the highest possible opinions of the advantages of the Turkish Bath, as a cleansing, sanitary, remedial, and disinfecting agent, and I am sure the authorities of the parish of Paddington would deserve well of their fellow men, and the public in general, if they place this boon within reach of the poorer classes, for I constantly order the Turkish Bath for my dispensary patients, but the expense prevents them from availing themselves of its advantages.

The baths should not be free, a sufficient charge should be made to pay working expenses.

55, Wellington Road, N.W.

From SANDERS STEPHENS, Esq., M.R.C.S.

In reply to your inquiry as to the hot-air bath, Mr. Stephens is decidedly of opinion that it is of great use as a sanitary and cleansing agent, and that any scheme for providing baths, &c., for the working classes would not be perfect without it.

49, Kensington Gardens Square, W.

From Dr. E. HOUGHTON, *Weston Lodge, Upper Norwood.*

In reply to your communication, (which only reached me yesterday, when very busy,) respecting the advisability of adding Turkish Baths to the public

Baths and Washhouses about to be erected for the parish of Paddington, I have no hesitation in giving it as my opinion that, provided they are properly adapted for the purpose had in view, the commissioners will never regret taking the initiative in showing a good example to other parishes throughout the country. It must not be forgotten that for such a purpose rapid cleansing of the person, with as little expense for attendance as possible, is one of the very first desiderata, and unless this can be accomplished, a great impediment will exist to obtaining that reasonable profit which ought to be realized through the addition of Turkish Baths.

I have always looked upon it as very encouraging that the Marylebone Baths, which are certainly the best public baths in London, are the most profitable, at least amongst those which otherwise would have to be supported out of the rates, whilst those which are not remarkable for either cleanliness or good ventilation, have never been anything else than a constant source of expense.

From this I infer that want of success in such undertakings arises either from bad management, high prices, or defective accommodation. I have not time at present to enter into detail, but I heartily wish success to this effort to raise the self-respect of the working-classes, by rendering the process of bathing both cheap and agreeable; and when the baths are in process of construction, I shall be happy to give any farther advice in my power to render them as efficient and as satisfactory as possible in every respect.

From Dr. A. MUNROE, *Melrose Hydropathic Establishment.*

There is nothing like a supply of Turkish Baths for the working classes in Scotland. I have been doing what I can to popularize the bath, and will still continue at the work as far as opportunity can be got, because I have the best of reasons for concluding that the working classes would take advantage of this bath in preference to all other baths, and get more good from it than from any other. I find that boys and girls, when properly introduced, take delight in the bath.

From Rev. C. H. SPURGEON.

I am afraid the great length of time required for the proper taking of a Turkish Bath will prevent the working classes using it very extensively.

As to the cleansing nature of the bath there can be no doubt of its extreme value. I venture to say that no one has ever been clean who has not had a Turkish Bath.

Its health-giving influences I am convinced of by experience; it is, moreover, one of the greatest of luxuries.

Nightingale Lane, Clapham, S.W.

From Rev. J. ANGUS, D.D., *Member of the London School Board.*

From my knowledge of the Turkish Bath, and from the large experience of others, I have no hesitation in saying that it is of great value for sanitary purposes, indeed, a system of public baths would seem to me very defective without it.

College, Regent's Park.

From the late Rev. J. BURNS, D.D., LL.D.

I consider the Turkish Bath of the greatest possible restorative value, and in connection with the baths and washhouses, would be of invaluable worth to the poor.

Church Street Chapel, W.

From the late Rev. G. WADE ROBINSON, M.A.

From a somewhat wide experience of the Turkish Bath, I am quite pursuaded of its invaluable efficacy both in sickness and in health. And I have no doubt whatever that the working classes, as well as all other classes have yet to learn both its sanative and therapeutic virtues.

Brighton.

From Rev. H. ASHLEY, M.A.

I am glad to hear you are trying to have Turkish Baths adopted at the "Baths and Washhouses." A warm bath is a good thing sometimes, but nothing to be compared to the Turkish Bath, the latter, by perspiring, draws evil out of the system and relieves it wonderfully, and the washing and shampooing afterwards removes all. The former does nothing of the kind, it takes no mischief out of the body, but only washes away what little may be on the surface.

Wooburn.

From Rev. C. HOLE, M.A.

In reply to your letter asking my opinion as to the desirability of adding the Turkish Bath, &c., to the proposed new "Baths and Washhouses," I

have no hesitation in saying that I think such an addition most desirable. I have the strongest opinion as to the sanitary advantages of the Turkish Baths, and earnestly hope that the time may come when it will be deemed an essential adjunct to every system of baths for the poor, as I believe its general use by the lower orders calculated to improve their health and self respect.

We know that personal cleanliness induces cleanly habits, and these, very often, raise the tone of the whole character

North Cheam House, Surrey.

From Rev. G. PALMER LANE, M.A.

I cordially approve of your proposal that a Turkish Bath and heated lavatories should be added to the public baths about to be erected in the parish of Paddington.

From my own experience of the Turkish Bath I can conscientiously bear testimony to its thorough efficacy as a powerful cleansing and sanitary agent, and I certainly think that were it brought within the reach of the working classes it would not fail to prove of immense benefit. When its cleansing and sanitary powers become more fully known, I feel assured it will be universally adopted wherever practicable.

Great Gransden.

From Rev. T. LESSEY.

I am strongly of opinion that the Commissioners of Baths will be conferring a great boon on the working classes by adding the Turkish Bath and heated lavatories to the ordinary arrangements.

I should anticipate the very best results from such a liberal and enlightened policy, and sincerely trust it may be adopted.

98, Hilmarten Road, N.W.

From HENRY VARLEY, Esq., *of the West London Tabernacle.*

I have strong conviction that the Turkish Bath is an admirable cleansing and sanitary agent, and most desirable to introduce for the working class.

Personally, I have received much benefit from their use, and continue to use them.

Notting Hill, W.

From D. URQUHART, Esq., *Author of "The Pillars of Hercules," and the Introducer of the Bath into England.*

In reply to your letter, just received, I have to say that I am very glad to learn that your local board are desirous to introduce the Turkish Bath to those they are about to erect. My opinion of their value for those in health and those suffering from disease, is shown in the toil I have undergone, and the money I have expended in importing this practice from the East into Europe, or rather, in restoring it in the West from ancient times.

I would earnestly recommend that yourself or other member of the board should visit the bath at Colney Hatch, where Dr. Sheppard will, I am sure, afford you every opportunity of judging of it, also you should visit the Hammam, 76, Jermyn Street, and take it there. I enclose an order of free admission for yourself and two friends.

Dr. Sheppard, at Colney Hatch, may perhaps be able to find for you a paper I drew up for him to submit to the board on the saving of expense by its means.

I think also that some such paper was printed at the Hamman; the secretary there, Mr. Waugh, will know, and furnish you with one.

I would refer you to my "Manual of the Turkish Bath," but, I believe, it is momentarily out of print.

Montieux, Vaud, Switzerland.

From JAMES LEATH, Esq.

I reply to your favour; my opinion of the Turkish Bath, as a cleansing and sanitary agent is, that it is the ONLY bath that thoroughly cleanses the skin.

Homœopathic Pharmacy, 9, Vere Street, W.

From the late G. DORNBUSCH, Esq.

In reply to your enquiry as to my opinion of the efficacy of the Turkish Bath, I have much pleasure in stating that I consider it in its warmth and moisture combined, superior to any other medical agent in cases in which the skin as well as the mucous membrane, and the respiratory organs, require to be acted upon, as a detergent and purifier of impurities and obstructions in the body. In my opinion a Turkish Bath would be an invaluable addition to any public baths and washhouses. At the same time I wish to throw out a caution that the habitual indulgence in Turkish Baths, too often repeated for any length of time, would be debilitating. I also wish to state that persons who are addicted to the use of intoxicating drinks, or strong tea and coffee,

and tobacco, affecting the brain, and whose nervous system is shattered, would not derive the same benefit as persons who are free from those intemperate habits.

To remove that, commonly called a cold, which is really only internal heat, nothing is more efficient than the Turkish Bath, and if one bath is not sufficient a second or third will remove it if anything can do it. In conclusion I am fully convinced that the establishment of public baths, including the Turkish, would greatly promote the public health. The only class who are likely to suffer in pocket by the extension of public baths and general bathing, in winter or summer, includes the doctors. They would do less business, but the people would enjoy so much more permanent health.

Threadneedle Street, E.C.

From G. J. HOLYOAKE, Esq.

As I have taken the trouble to promote the establishment of Turkish Baths in many parts of the country, and induce Corporations to provide them for the general use of the working class, I can readily answer your question in the affirmative. I consider that the Turkish Bath, as a sanitary and cleansing agent, should be placed within the reach of the working class in every town and district.

20, Cockspur Street.

From E. WHITWELL, Esq.

I am thankful to be able to say that under God's blessing, I derived great good from the three weeks treatment I had under Mr. Metcalfe's prescription, and the "Turkish Bath" was the chief instrument for producing the benefit.

Any arrangement which will give the working classes the opportunity of partaking of similar benefits, will be an important boon to them, and I shall be much interested in hearing of its success.

Kendal.

From J. EWING RITCHIE, Esq.

It is my opinion that there is nothing more luxurious or more necessary to health and comfort than a Turkish Bath.

It is to be hoped that the Commissioners may add Turkish Baths to those they are erecting for the working classes. In our day the comfort and cleanliness should be placed within the reach, at any rate, of the working classes.

Hendon. X

From FRANK WRIGHT, Esq.

In reply to yours I have much satisfaction in learning that it is under consideration to add Turkish Baths to the baths and washhouses in Paddington, for I am of opinion that such an addition will very greatly add to their value. I was made a convert to the use of the Turkish bath by personal experience of its value; and from being a great sceptic have come to regard it as one of the most useful of sanitary appliances, and I now regularly use it as a means of personal cleanliness in the place of an ordinary warm bath. I shall be glad to learn the result of the discussion in Paddington, and sincerely hope we shall not be behind you in Kensington.

Kensington, W.

From the late W. TWEEDIE, Esq.

My long acquaintance with Turkish Baths enables me to speak in the highest terms of their utility as a cleansing agency, and I feel assured that much, very much, disease would be prevented if the poor had it in their power to use such baths as frequently as I think they would do, if placed within their reach.

The members of my family, from the youngest to the oldest, use Turkish Baths, and have done so for fifteen years.

337, Strand.

From GEORGE DIBLEY, Esq.

I am pleased to inform you that the Turkish Bath is a most important cleansing and sanitary agent, and I consider it highly desirable that the municipal bodies should have them attached to their baths and washhouses.

Euston Road.

From E. STEINFIELD, Esq., J.P., *Ex-Mayor of Ballarat East, Victoria.*

Your communication is to hand in which you state that the Commissioners of Baths for the parish of Paddington are deliberating on the addition of the Turkish Bath and heated lavatories to the bath and washhouses they are about to erect; and asking my opinion of the Turkish Bath as a cleansing and sanitary agent, and the desirability of providing the proposed facilities for the working classes.

In reply, I have the honour to state that the city of Ballarat, colony of Victoria, Australia, has the Turkish Bath connected with the public bath.

That a suitable building, with the necessary appointments for Turkish Bath purposes, has been purchased and paid for by the said city council from the city fund (rate-payers' money). That, whilst the baths have been only about three years in existence, they have already proved themselves to be reproductive, according to last balance sheet (1872), receipts and expenditure being about equal (£800 per annum.) A great number of working men, from the nature of their occupation are:—

1. Exposed to all kinds of weather during the different seasons of the year.
2. Compelled to work in an unhealthy atmosphere.
3. Or, become impregnated with dusty substances, composed of different unhealthy ingredients, according to the nature of the occupation.

That, in all such cases, the Turkish Baths approve themselves as a cleansing and sanitary agent.

It is, therefore, my opinion that the Commissioners of Baths for the parish of Paddington would confer a great boon on the working men of its parish by placing within their reach the great benefits of Turkish Baths.

Cannon Street, E.C.

We, the undersigned, have attended the hydropathic treatment under Mr. Metcalfe, 11, Paddington Green, for several years, at intervals, and have been greatly benefited in health.

We believe that the establishment of such treatment, accessible to the working classes, would be of incalculable benefit.

MICHAEL PARFITT, } *London City*
JAMES BURNS, } *Missionaries.*

From R. HALL, Esq., F.S.A.

I have full and entire faith in the efficacy of the Turkish Bath. I think it may be made a very valuable source of health to the many to whom, in consequence of its cost, it is not available; and I shall be happy to aid any project for giving this blessing to the working classes.

Avenue Villa, 50, Holland Street, Kensington, W.

From GEORGE CRUIKSHANK, Esq.

In reply to your letter I must tell you that I wash in *cold* water all the year round, and it so happens that I have not only *never* used a "Turkish

Bath" but have not *even seen one*, and, therefore, can give no opinion respecting it.

I should advise you to consult my friend Dr. Hardwicke, who is the Medical Inspector of Paddington.

263, Hampstead Road.

From J. MACGREGOR, Esq., *Member of the London School Board.*

I do not think the Turkish Bath useful in this climate, except when specially needed medicinally, and that the expense of doing what you propose, in a manner at all likely to secure custom, will be very great.

Proper hot baths are good, and need only half an hour to be spent; the Turkish Bath requires two hours.

Temple, E.C.

From R. HUNTER, Esq., *Bridge of Allan Hydropathic Establishment.*

In answer to your inquiry regarding the value of a Turkish Bath, with its accessories of warm water washings, or baths, as a sanitary measure, I have no hesitation in giving my strongest assurance of its value, while, at the same time, it will act as a preventive of disease; and, without especially intending it, it will prove a valuable aid in curing many common ailments, such as common colds, rheumatic attacks, &c., as a quiet sweat, taken periodically, or after a chill, prevents or carries off the material of disease.

The virtue of the Turkish Bath consists in a free perspiration and thorough washing, and it removes both the material of disease and the cause of bad tempers.

In erecting a Turkish Bath there is great room for skill in economizing space and material, besides ventilation and economy in fuel. I have planned and fitted up two, which gave perfect satisfaction to the extent of fifty per day, while the fuel required for the hot room and water cost only 6d. per day, one of these being in constant use in Glasgow for the last ten years, and is largely frequented; the charge is 1s. The original cost of altering and fitting up a large kitchen, washing-house, wine cellar, and another room for dressing, &c., &c., was only about £100. I have the plans still, and they are at the service of your committee, with more information, if required. As a contrast, the baths with buildings complete, at this place, have cost upwards of £3000; I mean for the bathing purposes, independent of the establishment or dwelling. But our baths are, perhaps, the finest in the kingdom, and were built without regard to expense, fourteen years ago. I strongly recommend having the baths all over the country for the working

classes. They will have the original cost in a year in health, poors' rates, and prevention of crime, in addition to saving many lives. I have in various forms given or advised hundreds of thousands of them in the course of twenty-five years' practice.

From Mr. R. WILLIAMS, *Cardiff Baths.*

In answer to yours, I enclose my pamphlet of notes on the working of this establishment during the late lessee's tenancy, together with an apportioned account for the same time, and would most strongly advise any gentleman, or body of gentlemen, who intend opening baths, not to do so unless they mean to have a Turkish Bath in connexion therewith.

It is simply invaluable, and ought to be the first consideration, and Hot Water Baths afterwards. If the Turkish Bath is properly conducted, I know of nothing so conducive to the general health of the community at large.

I could give dozens of instances in which men and women have been kept off the rates through the means of the Turkish Bath, people who could not afford to pay a doctor, but who could, and did, manage to come to the Turkish Bath, and got cured of various forms of disease, principally rheumatism.

Now, if the Paddington Vestry wish to keep the poor from applying to the *Parish Doctor*, let them build Turkish Baths; and, if there should be a small loss on the working expenses, they will find that to be more than balanced by the increased health of the inhabitants; and the consequent decrease in the number of *bona fide* working men applying for *parish relief.*

I shall be most happy to give you any information you may require, and once more strongly urge any one who thinks of opening baths, that the first thing to be thought of is a Turkish Bath, at such prices as will enable everybody to derive the benefits of the bath, and I say this after some years' experience as manager of this company.

From Mr. JOHN HOWE, *the Sheffield Turkish and Public Baths Company, Limited.*

I have much pleasure in bearing testimony to the benefit to be derived from he use of the Turkish Bath, both as a cleansing process, and a preventive and curative agent in cases of disease.

I believe it to be the greatest boon that can be conferred upon the inhabitants of a poor district; and that it will contribute most materially to the well being of the community. I heartily wish you every success in your effort to obtain the baths for the people.

I may say that several most remarkable cures have been effected at our Baths in cases of fever, rheumatism, and reputed consumption.

From Mr. PHILIP RYDER, *Oriental Baths, Liverpool.*

In reply to your note of inquiry, relative to the Turkish Bath for the poor, I beg to state that, in its application as a remedial agent in the treatment of disease, it is a priceless boon to humanity.

I have for some years witnessed the advantages of the Turkish Bath as a great sanitary blessing in maintaining perfect vigour and a healthy condition of body.

From J. CONSTANTINE, *Turkish, Russian, and Hydropathic Baths, Manchester.*

Yours is to hand. There is no doubt the working classes will use the Turkish Bath freely in any large town if they could have them at a moderate price.

At this place our Turkish Bath accommodation is limited, the lowest price is 1s. 6d., and yet the working classes use the 1s. 6d. bath pretty freely. There can be no doubt as to the superior cleansing properties of the Turkish Bath.

There is a Working Men's Turkish Bath at Sheffield, which is very extensively patronized.

From Mr. W. MATHEWMAN, *The Oriental and General Bath Company, Limited, Leeds.*

I believe the Turkish Bath is the only bath for sanitary, cleansing purposes that is effectual, and, if taken regularly by every one, would prevent a great deal of disease, if not *altogether* get rid of it.

From Mr. T. CARRUTHERS, *Turkish Baths, Luton.*

In reply to yours I have to say that it affords me great pleasure to know that an effort is being made anywhere to give the working, or any other class, the means of cleanliness, which I am confident the hot-air bath (and only that), *is* emphatically.

I have had six years experience as an attendant and manager of a hot-air bath, and am free to say that I know no means of bodily cleanliness that can be allowed to bear the remotest comparison with it. I believe it to be, also, an effectual means of protection from the infection of small pox, as well as all other infections, and, perhaps, contagious diseases, just because it makes the body absolutely clean, which no other sort of bathing can accomplish; *i.e.*, when the Turkish Bath is properly applied—for, I am sorry to say, it is well known that there are Turkish Baths *and* Turkish Baths.

I am of opinion, finally, that the working classes cannot be expected nor relied on in great numbers to use the hot-air bath at a higher price than 6d., and I do not think it can be made self-supporting at any lower rate.

From Mr. W. ALLISON, *Secretary of the Manchester and Salford Baths and Laundries Company.*

I do not think the popularity of the Turkish Bath with the working classes is on the increase. My opinion of it, as a cleansing agency, is favourable, and, if a Turkish Bath could be obtained at as low a rate as a warm bath, it is probable that a great many more would use it.

From Mr. T. S. HUSS, *Corporation Baths, Derby.*

In reply to your letter I am sorry to inform you we have no Turkish Bath here, or nearer than Nottingham. I am just now seeking the same information for which you ask, that I may bring the subject before our Committee of Management.

I may say that the many persons, "strangers," who came here hoping to find a Turkish Bath, and the disappointment they showed, has convinced me of its superiority, and has led me to go into the matter.

Corporation Baths, Derby.

From Mr. JAMES BURNS.

In my popular lectures on Physiology, Hygiene, and Social Reform, I have always advocated that hot-air baths should be attached to every large factory, so that the workpeople could clean themselves and change their raiment before they retired to their homes. I have found in my travels that the idea has been taken up by Town Corporations, viz., Bradford, where I have found the baths crowded; at Keighley, the large pile of baths and washhouses, including Turkish Baths, were not finished at my last visit. My opinion is, that the hot-air bath is of more importance than all other baths as a cleanser. It combines the usual forms of ablution and, in addition, sets the excretions in action, so that any dirt or poison in the pores, with the effete matters caused by labour, are expelled.

It has been proved that painters using the baths are saved from colic, and workmen who inhale or absorb deleterious substances cannot be cleansed with water alone, but require the hot-air bath and shampoo.

Hoping that Paddington may be blessed with such baths.

Southampton Row, W.C.

From Mr. A. SAMWELL, *Turkish Baths, Leicester.*

In reply to your letter of enquiry, I beg to say that I have been manager eight years, during the first four of which it was difficult to pay expenses; but, since taking them on my own account, the prices have been 2s. 6d., 1s. 6d., and 1s., the working classes availing themselves of the opportunity immediately, and now the establishment pays 12 per cent.

I have also been well supported in opening from 5 A.M. to 8 A.M. for 6d., without shampooing. There is now formed in Leicester a new company, who are building very superior baths, which are to open in January next, and which, I expect, will reduce mine to a complete working man's bath.

From Mr. J. TOLLEY, *Oxford Turkish Baths.*

In answer to your letter, allow me to say I have had twelve years experience in the management of Turkish Baths, and, during that time, I have had numbers of proofs of their value. They are, indeed, invaluable for cleanliness and improvement in health; not only so, but they cure almost anything. I have cured others, and, when ill myself, have cured myself; and, I think, if people knew more what the Turkish Bath can do, there would be many more similar establishments in England than now exist. I have often wondered that some one does not take the matter up in the London papers.

From Mr. B. LETT, *The Baths, Worcester.*

In reply to your inquiry for information on Turkish Baths, I am happy to give you the little which I can.

I conclude that if the Paddington Vestry build such baths, the charge for attendance would not exceed 6d. With regard to the success of the undertaking I cannot give an opinion, which would depend upon circumstances. If the medical profession in your district will take the matter up, and prescribe the use of the baths as a healthful and remedial agent, there is ittle doubt of success in a commercial point of view.

For my own part, I am *very much convinced* of the benefits, socially, morally, and physically, that would result to mankind from the more general use of the bath.

From Mr. T. ROBERTS, *Skipton.*

In answer to yours, I beg to inform you that it is about two years since I gave up my Turkish Bath, as I could not get sufficiently supported. Perhaps the population of Skipton was too small. But, after an experience extending over seven years, I feel convinced if the Turkish Bath cannot command the support of the working classes, *none other will.*

As to the necessity of some cleansing agent to which our thickly populated townspeople can resort, no one, I think, having given the least thought to the subject, can, for one moment entertain a doubt; and, for aught I know to the contrary, no other appliance can equal the Turkish Bath as a thorough purifier of the skin.

From Mr. W. LOCK, *Turkish Baths, Eton.*

In answer to your letter, I am happy to give you all the information I can respecting the Turkish Bath. I believe it is the finest institution ever opened. I was in the first established in London. I have always enjoyed good health, and so have my wife and family.

I believe if the Turkish Bath was more generally used throughout the country as a cleanser, there would not be so much disease as there is. The great prejudice which now exists, I have no doubt, will be overcome when the value of the bath is better known.

From Mr. J. HASTIE, *Turkish Bath, Newcastle-on-Tyne.*

In reference to your letter received, respecting a Turkish Bath for the working classes, I have not a very cheering account to give, as I do not think the working men yet understand the value of it. If they did, our town of Newcastle would have four instead of one; still, the visitors who do use it regularly, say they would not, on any account, be without it.

We have three classes, *First* being 2s. 6d., *Second*, 1s. 6d., and *Third*, 6d.; the different prices enable all classes to avail themselves of a bath suitable to their means.

I think you will confer a great boon on the inhabitants of your district in establishing a Turkish Bath for the use of not the working classes alone, but all will be benefited by them.

From Mr. W. CHESTER, *Turkish Baths, Southport.*

As far as it concerns a thorough cleansing, there is no bath to compare to it, and we all know that cleanliness is a great key-note to health.

From Mr. J. ROSE, *Southampton.*

Having been connected with Turkish Baths for about eleven years, I can truly say they are a great boon to any town, I myself having cured hundreds of cases of illness that have come under my notice, besides having benefited many others. I have been very successful both with rich and poor, and am persuaded that if the vestry would add a Turkish Bath to the baths and washhouses, they would confer a great benefit on the working classes, both for cleanliness and retaining health.

From Mr. W. H. GREEN, Common Councilman, *Kidderminster.*

Your kind letter, inquiring for any information I could give relating to Turkish Baths, should not have remained unanswered so long, but for my inability to write, as I am suffering at present from a misfortune which the bath cannot reach.

The letter enclosed, which I wrote to one of our local papers, will give you my general views on the subject, and from that, and other efforts that I made of the same nature, I brought about the adoption of the baths by our corporation.

Upon my solicitation, the whole of our medical faculty signed the requisition to the corporation.

My own experience of the baths began at Worcester. Owing to rheumatism, I found a benefit from them I could not too highly appreciate. For that affliction, and also my general health, I had previously consulted Dr. Bell Fletcher, of Birmingham, and others, with little effect.

Whilst going to the Turkish Baths at Worcester and Birmingham, about twice a week, for two or three months, I was startled at the various cures that I saw, and the expressions of gratitude that I heard from those that had derived benefit from the baths; and knowing that many sufferers among the working classes, that could not afford tc go, were in my own midst, I was determined to agitate the matter, so as to induce the corporation to give the town the advantage of such a blessing which now exists.

Although some prejudice prevailed, yet, I am pleased to say, that some of

those who manifested such prejudice have lived to praise the Turkish Bath, and many are the advantages that would be derived but for such stupid ignorance, which retards the progress of many a blessing.

From Mr. W. GATES, *Turkish Baths, Rotherham.*

I am quite satisfied with my baths, and know that they will do better still. It is very cheering to find that they not only pay, but that they do a great deal of good.

From Mr. E. MARSHALL, *Turkish Baths, Barnsley.*

I am always glad to push the Turkish Bath, for it is superior to all others. The benefits derived from it, the delightful feeling after, are so different from the water or steam; they all come far short of it. I have stayed in the bath all night many times, and gone to business in the morning quite fresh and full of vigour. If you can get a Turkish Bath attached to your baths it will be a blessing to those who avail themselves of it.

Those who filled our bath, qualified or not, when free, were the poor weavers. The same men came again and again, night after night, so long as it was free, even out of the villages.

From MR. GEO. DUNN, *The Priory, Doncaster.*

I had a Turkish Bath attached to the St. James' Hospital for many years, and found it not only useful in a sanitary point of view, but essential in many severe cases of neuralgia and rheumatism, and, in my opinion, no town or district should be without one.

You are at liberty to make any use you like of this letter.

From Mr. T. WALLINGTON, *Turkish Baths, Plymouth.*

In reply to yours I beg to say I have had thirteen years experience as a shampooer and manager in different Turkish Baths in England, and am sorry to say have tried to induce the working classes in different towns to avail themselves of the *only* mode of cleansing their skins, without effect.

I should very much like to see the working classes take to the baths, for I am quite convinced it would be the means of preventing one half of the sickness we have.

From Mr. J. H. BRYNING, *Surrey Turkish Baths, Blackfriars Road.*

In reply to your letter I beg to state my opinion, which is, as a remedial agent, and a means of cleansing, there is no bath equal to the Turkish. It may be given to the youngest infant, or the oldest person, with perfect safety and great benefit.

As to getting the poor to take the bath, let it be ever so cheap, this must take time. They, like the rich, have their prejudices, and being uneducated, you cannot persuade them that it is either necessary or beneficial, therefore, it makes it a work of time.

When you find prejudice in educated medical men, you cannot wonder that the masses should be so.

There is a Turkish Bath in new St. Thomas's Hospital, and they will not avail themselves of its curative powers; therefore it is not used, although Dr. Erasmus Wilson, and Dr. Goulden are both so favourable to its use. There is no doubt if the vestry should provide a Turkish Bath, and the price of admission was 6d. that many of the intelligent working men would avail themselves of it when it became known, but for the class you want to make the bath, viz., the very poor, the charge must not be more than 3d. each.

From Mr. W. FRENCH, *Turkish Baths, Stratford New Town.*

I would like to see the Turkish Bath adopted by the working man, indeed all people in England.

I am convinced it would benefit the health of the masses more as a preventive to small-pox, or any epidemics, fevers, &c., than vaccination, or anything else ever invented; but the opposition of a vast number of medical men, from selfish motives, must be first overcome, for they, as quietly as possible, hinder its use as much as they can.

After over 12 years experience as a proprietor, I can say with truth I have not known one bather of ours to have any of the complaints aforementioned.

Its value in colds, rheumatism, sciatica, gout, and all that family, is well known to all who seek to know. As Dr. Brereton says, "it has become a question, not what the bath will cure, but what it will not."

From Mr. *J.* JOHNSON, 25, *Harrington Square, N.W.*

I have been in many baths, including Liverpool, Southampton, two at Manchester, Southport, Dublin, Brighton, and most of the baths in London. I was a great sufferer from illness, and in the habit of taking Turkish Baths very frequently for the last four years. I have better health than I had for years previously. As to cleanliness, they are perfection itself.

Should you think more of the matter, I could give you a vast amount of information as to benefits derived from the baths, and as to the building of premises, and would take pleasure in so doing.

From Mr. W. EVANS, *Hospital for Throat Diseases, Golden Square.*

In reply to your letter, I beg to state that my father has quite given up the Turkish Bath business.

For some time he left me the entire management of the baths in John Street. This Hospital then required the house to enlarge their premises, so I had to give up, and have had very little to do with the business since.

Having the experience of my father, formerly engaged in the business, I think it would be well to have Turkish Baths connected with the ordinary washing baths, and if so connected, I believe, would be well patronized, not only in London, but in the North of England where the experiment has been tried at the charge of sixpence. When my father was in Bell Street, Edgware Road, I noticed we used to have a great many working men from different parts of London on Saturday nights and Sunday mornings, when our charge for a bath was one shilling.

I think if there is any room to spare in the St. Marylebone Bath, it might be easily converted at a little cost. The idea now is making baths grand, but the plainer they are, I think, the more effectual.

From Mr. CURRY, *Turkish Baths, Goswell Road.*

Mr. Curry desires me to say that you cannot do a better thing than build a Turkish Bath for the working classes.

From Mr. T. SMITH, *Turkish Baths, City Road.*

I will just say that I wish you every success in your efforts to establish Turkish Baths for the working classes, and I am willing to give you all the

assistance I possibly can, and I think I can prove to any one that may call on me, or to a committee that may be formed to carry out the above object, that a good bath can be given to the working classes for 6d.

From Mr. J. P. PRICKARD, *Turkish Baths, Leicester Square.*

Your important letter has only just been handed to me, in consequence of our shampooer putting it in his pocket. It is a most important thing that the working classes should have a Turkish Bath, as they would see if they only knew the benefits to be derived therefrom.

From Mr. J. BURTON, *Turkish Baths, Euston Road.*

Your letter has partly been overlooked, I am now building a bath entirely devoted to ladies. I am confident if I had my way in this matter, I would compel every person, man, woman, and child, to wash every day. You have now an Act to compel children to go to school, at the same time compel them to be clean.

We have spent in draining, sewering, &c., millions of money, but, still, the people are dirty. I should like to see every corporation in England adopt the Turkish Baths.

From Mr. E. FRALEY, *Turkish Baths, Neath.*

In answer to yours, the building of Turkish Baths for the working classes would, in my humble opinion, be one of the greatest blessings that could possibly be conferred upon them.

I hope no village or town will be without its bath, and supported to a great extent by the working man. He is the person who ought to take them most, as his health is his capital.

From Mr. T. ATKINS, *Turkish Baths, Merthyr Tydvil.*

In reply to your letter, I beg to state that after seven years experience, it is my opinion that if the facilities for using the Turkish Bath at a small charge was extended to the working classes, it would be extensively used, and I also think that it would greatly benefit the health of the community, and I could, it necessary, state hundreds of cases in which the baths have proved very efficacious.

From Mr. T. COAKLEY, *Turkish Baths, Belfast.*

I am in receipt of your note requiring information as to the adoption of the Turkish Bath by the Paddington Vestry, and, in reply, beg to state that I am of opinion it would be one of the greatest boons that could be conferred on the working classes. But I regret to have to inform you that though Working Class Baths are now in operation here about twelve years, yet, so very few avail themselves of them, that, in fact, they are not worth keeping open, inasmuch as they are not paying expenses.

The working classes, generally speaking, do not appreciate the bath; at least, in Belfast they do not to any extent.

From Mr. S. WORMLEIGHTON, *Roden House, Limerick.*

I had better state that my connection with the late Dr. Barter, as sole partner in the Limerick Bath, for the last thirteen years, and now sole owner, as well as that of the Waterford Turkish Bath, has furnished me with the means of observing how the working classes appreciate them when placed before them in a proper manner and at a reasonable charge. The value of the Turkish Bath as a cleansing agent cannot be too highly appreciated, for no invention with water was ever known that could cleanse from the interior of the pores as the hot-air bath does.

I look on it as the greatest boon to all classes, not only as a curative agent in cases of illness, but, in its broader sense, as a powerful sanitary pilot that will bring the working man to consider the health of his home as well as that of his own person.

From Mr. S. STOLLS, *Turkish Baths, Lincoln Place, Dublin.*

I have been connected, as manager, with the Turkish Baths for the last twelve years. I find them a first rate cure, especially for the poor, who often are subject to rheumatism and severe colds; I think you will find them the "poor man's friend." We have had men, women, and children, all cripples, brought to this bath, and, after taking them nightly for a fortnight, I have seen them walk out quite well.

If any of your friends should ever come to Dublin I shall be very happy to show them the working of the bath. About ten years ago fourteen lunatics attended here for experiment for a month. Most of them received relief, and some I saw myself were quite cured.

I know of no disease that the Turkish Bath cannot cure. If they had been used more frequently in the treatment of small pox, in my opinion, it would not have lasted so long.

From Mr. T. L. HARVEY, *Waterford Turkish Bath Company (Limited), Waterford.*

In reply to your letter, our Turkish Bath is much used as a general cleanser and purifier of the skin by the middle class, as well as the respectable, but it is not supplied at a sufficiently low rate to be much used by the lower, or working classes.

I am quite satisfied that, taken in moderation, the bath is a most valuable sanitary agent in cleansing and purging the skin, and encouraging a natural and healthy perspiration, preserving the body in health, and, in cases of colds, restoring the normal action of the system, and promoting restoration. In rheumatisim it is most excellent.

The working classes *will use* the baths if supplied at a low rate.

From Mr. T. NICOL, *Turkish Baths, Glasgow.*

I will give you my experience, having been about seven years attendant and proprietor. During the first four years the Turkish Bath was not much patronized or countenanced by the doctors of Glasgow, but, during the last three years, I have had a great number of patients from them, and also from the infirmary, the authorities of which are just now paying cab and baths for several chronic rheumatic patients, from which number I have seen men who were not able to walk, but had to be carried into the bath, able to walk out from the infirmary upwards of a mile after the first or second bath. Four baths as a rule have been sufficient for these cases, the success of which has induced the professional men to now favour the Turkish Bath, and the public follow suit, so that I have been doing more in Turkish Baths during the last two years than I did before.

From Mr. W. FISHER, *Turkish Baths, Princes Street, Edinburgh.*

I have very great pleasure in recommending the Turkish Baths to the public in general. As a cleansing and sanitary agent it is certainly invaluable.

From Mr. J. SUTHERLAND, *Hydropathic Institution, West Campbell Street, Glasgow.*

Your favour to hand.

I cheerfully comply with your request in giving my humble opinion of the value of bathing as a means of cure and comfort to the physical frame, personally on myself and family for more than twenty-five years, half of the

above period in the Turkish Bath daily, and during that time have accomplished cures in skin diseases from simple eruption to scrofula in the neck and other portions of the body, rheumatism, acute and chronic, diarrhœa, indigestion, flatulence, &c.

Those who study the laws of health prize the bath.

The merchant from his counting house, the lawyer from his desk, find it an excellent substitute for exercise. To the languid and careworn it gives energy; to the overwrought citizen, a stimulant. No other thing can be compared to it.

That the Turkish Bath does not weaken, experience has proved beyond doubt, and the day is coming when its value will be acknowledged by the faculty; and the public, more alive to its benefits, would take their motto from Shakspeare, "Throw physic to the dogs," with this addition, "Take the Turkish Bath."

From Mr. T. EDMONSON, *Windermere Bath.*

I am quite satisfied in my own mind that if the working classes had the Turkish Bath at a cheap rate it would be a great benefit to their health. There is no doubt that keeping the skin in proper order is one of the greatest blessings that people can have; I believe that there are many complaints brought on by the skin not being able to do its work, with the pores all being clogged up, whereas if they could get the Turkish Bath it might throw off many a complaint. I hope before many years go round there will be a Turkish Bath in every village in England. Hydropathy is still on the increase.

From Mr. T. SOWTER, *Beulah Spa, Upper Norwood.*

In replying briefly to your communication I would state that, if I gave you the result of twelve months' experience, I must fill sheets with interesting cases cured, or greatly relieved, by the Turkish Bath.

As a blood purifier and preventive of disease, I have the highest opinion of it. I have seen the complexion of a lady completely changed under its use, to the astonishment of the visitors in the house; also, a new head of hair has crowned its daily use. I believe it to be an eradicator of most hereditary diseases, and that it puts the human organism in the best possible position for resisting every invader in the way of disease.

Turkish Baths for the working classes must be a great boon in Paddington, and would only be the forerunner of the same being established in other districts.

THE FOLLOWING TESTIMONIALS WERE PRESENTED TO THE KIDDERMINSTER LOCAL AUTHORITIES IN FAVOUR OF THE TURKISH BATHS BEING ERECTED ON THE RATES FOR THE LABOURING CLASSES.

From DAVID CORBET, M.R.C.S., L.M., L.S.A., *Medical Officer of Health.*

I have been in the habit of recommending my patients of a gouty or rheumatic diathesis a Turkish Bath, at least twice a week, and I have always found, when they have regularly followed it up, that their health has become greatly improved. To the "seedy" man, whether from over-work or free living, I have found no restorative like the Turkish Bath.

Kidderminster, March 8th, 1876.

From WM. RODEN, M.D., A.M., *Fellow of the Royal Medical and Chirurgical Society, London.*

I am of opinion that the Turkish Bath is a remediable means of great power and value in many cases of serious disease. There are, doubtless, forms of disease, on the other hand, in which proper advice should be sought before its use. There are also numerous cases of less serious import in which this bath may be used by the public at large with great benefit; and it is well therefore, that in all large communities the authorities should provide the working, and struggling middle classes, with such a sanitary auxiliary *at as moderate a rate as possible*, having regard more to the general welfare than to the mere pecuniary profit.

The upper classes, and those who use the bath as a luxury, should nevertheless aid the undertaking by paying the reasonable costs of the bath.

Morningside, Kidderminster, March 18th, 1876.

From SAMUEL STRETTON, M.R.C.S., *London, &c., Hon. Surgeon to the Kidderminster Infirmary.*

Although few of my patients may have taken advantage of our local Turkish Bath, my opinion as to its great benefit remains unchanged. In addition to its value as a curative agent, I look upon the bath as a healthful luxury to all those who are able to enjoy it.

March 2nd, 1876.

From E. H. ADDENBROOKE, M.R.C.S., *London, &c., Hon. Surgeon to the Kidderminster Infirmary.*

I hope in any new arrangements that may be contemplated in connection with the baths, that the prices of admission to the Turkish Baths will not prevent their being available at stated times for the working classes, as well as for the more wealthy.

The Turkish Bath is not only a great luxury, if properly carried out, but also is of great assistance in the treatment of some diseases and in the prevention of others.

Kidderminster, March 3rd, 1876.

From JOHN HILLMAN, *Senior Hon. Surgeon to the Kidderminster Infirmary.*

The Turkish Baths are, in my opinion, a great boon to the inhabitants of Kidderminster.

Several of my patients, suffering from gout, rheumatism, congestion of the internal organs, &c., have derived the greatest relief from their use. If the charges for the baths could be reduced a little, I think they would be much more extensively used; they are, in my opinion, too high for the middle and working classes.

30, Mill Street, Kidderminster. March 29th, 1876.

From M. COWEN, M.R.C.S.E., & L.M.

I have recommended patients of mine, suffering from various complaints, to the Turkish Baths, and in every case they experienced great benefit. I therefore have no hesitation in recommending them to the public as a preventive, and an important auxiliary in the cure of disease.

Kidderminster.

The foregoing letters are, to say the least, an evidence of the interest taken in bathing. Fifteen years ago it would have been difficult to obtain the expression of one half the sentiment, and

it is encouraging to find such a change in the feelings of the "upper ten thousand" respecting bathing as a sanitary agent.

Although some of the correspondents may not approve of the hot-air bath being added to the baths and washhouses, yet they all believe in the necessity of baths for the people.

I may observe that the whole of the late Ministry were written to, and, with the exception of Earl Carlingford and the Right Hon. A. S. Ayrton, they declined to give an opinion. The Hon. A. S. Ayrton thinks the Turkish Bath should not be administered except under the supervision of medical men; but it is proverbial that this gentleman must say something odd, and he replies in the usual pedantic style for which he was famed when in office. We assume all establishments to be conducted by qualified persons, and it is rather a reflection on their intelligence if it is thought necessary that every bather should have his pulse felt by a medical man before taking the bath; a practice not only inconvenient, but one that experience has proved unnecessary. The Turkish Bath is fraught with kindness and not danger to animal life, and besides, the information sought was for warm lavatories, and not an opinion of the medical efficacy of the Turkish Bath.

G. Cruikshank, Esq. This eminent artist, I am sorry to observe, says he has never had a Turkish Bath. "It is never too late to mend," and even in his latter days it is quite possible he might add to his fame if he witnessed its surprising remedial effects—for instance, it is not unusual for some individuals to be carried into the hot room, helplessly inebriated, and others suffering from Rheumatism, and after undergoing the bath processes, the one would be sober and the other able to walk out without assistance. As they were before going into the bath, and as they are after leaving the bath, might form good subjects for his genius.

With regard to the letters from medical men generally they may be considered highly favourable, but Drs. Watson, Parkes, Sir W. W. Gull, T. King Chambers, Andrew Clarke, Burrows

Sieveking, C. B. Williams, Ballard, Bristowe and Nicholas, all agree upon the medical efficacy of the Turkish Bath, but add some remarks which are scarcely worth noticing. Their queries are thoroughly exhausted in the chapters on "Economics, and Warm Water *versus* Hot Air," and need no comment here.

It must be admitted there is a tentativeness and lukewarmness about the communications from medical officers—they neither blow hot nor cold, and are apparently afraid to speak out their minds; this some readers will wonder at, but those who have had experience in the management of Local Self Governments will perfectly understand. Every officer finds it necessary for the sake of ease and comfort with his masters to exercise a kind of prudent diplomacy in the discharge of his duties.

The mental composition of the members of Local Boards are so constituted as to embrace an infinite variety of opinions, and, however absurd some of these may be, their officers deem it wise not to intrude their own opinions too much on the Board, or their situations might be in danger.

It is lamentable to find from experience that there is a good deal of friction and party feeling exhibited by our Local Boards in general, and in many cases to the great injury of the management of their affairs. It is an absolute fact that officers wishing to retain their position with any degree of peace, it is desirable they should hold no opinions but simply do as they are bid by the Board, hence the same reticence is observable in all public communications from the highest to the lowest officer.

Notwithstanding, the letters from the medical officers, when closely analysed, disclose evidence decidedly in favour of the Turkish Bath as a therapeutic agent.

Letters were sent to Inspectors of Nuisances, and the replies received, I regret to say, reflect neither credit in their composition nor intelligent knowledge of their duties, consequently they are not published.

I hope to be pardoned for observing that I think the time has

arrived when the educational standard of our inspectors of nuisances should be raised, in fact there should be an educational qualification enacted by Parliament. I have had some painful experience of the general inefficiency of inspectors in the discharge of their delicate duties, and it is really important that they should be gentlemen possessed with as much prudence, discretion and intelligence, as medical officers.

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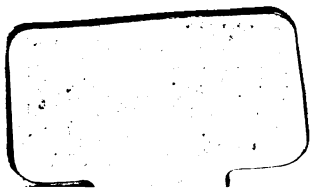
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