

Baths and wash-houses for the labouring classes.

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Committee for Promoting the Establishment of Baths and Wash-houses for the Labouring Classes (London, England)

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BATHS AND WASH-HOUSES
FOR THE
LABOURING CLASSES



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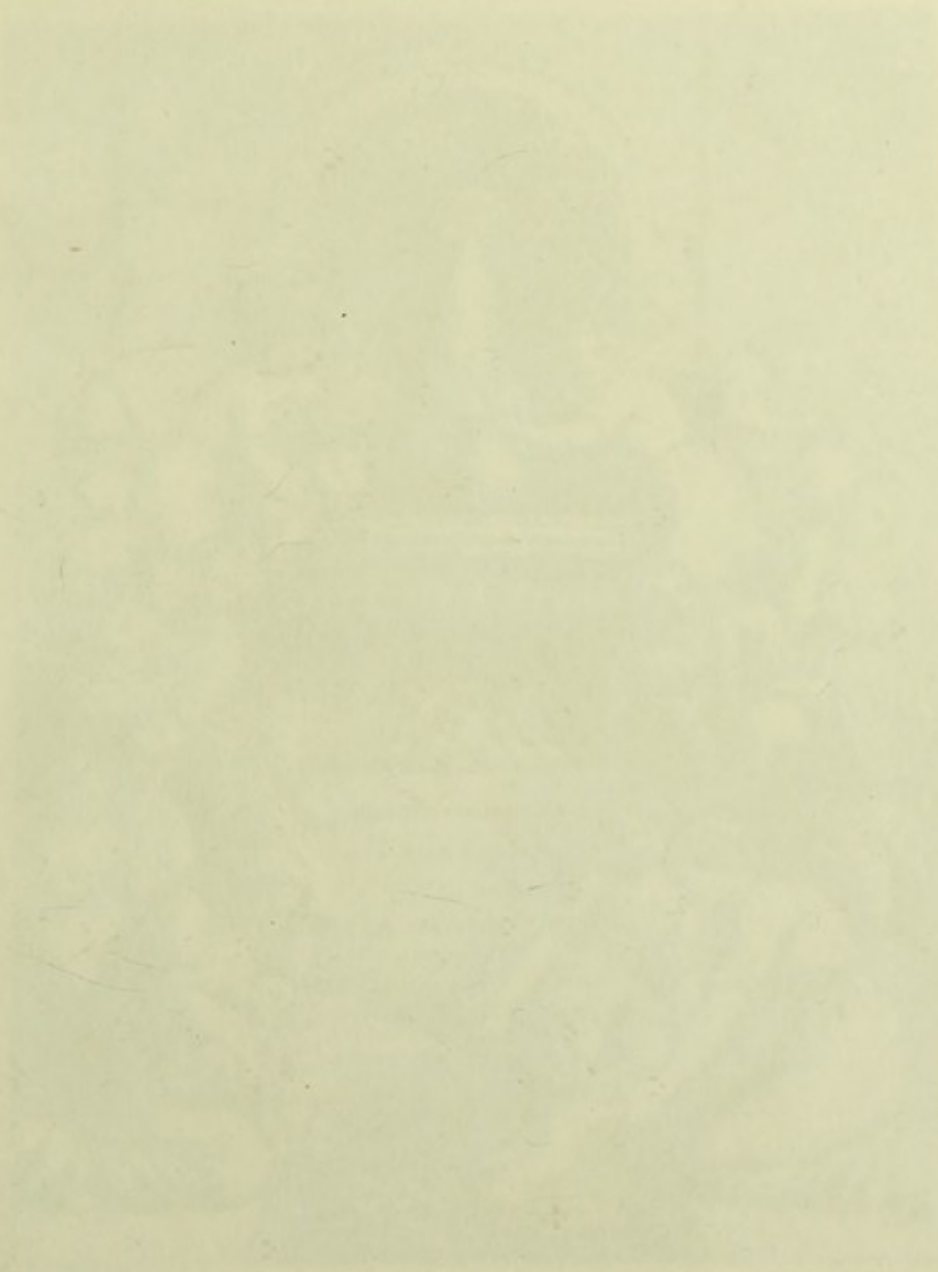
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BOUING CLASSES

1890

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BATHS AND WASH-HOUSES FOR THE LABOURING CLASSES.

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At the General Meeting of "The Committee for Promoting the Establishment of Baths and Wash-houses for the Labouring Classes," held at the London Tavern, on the 28th day of April, 1852;

THE REV. SIR H. R. DUKINFIELD, BART., *in the Chair;*

THE propriety of continuing to keep open the Committee Room at Exeter Hall was discussed, and the opinion of the Meeting was, that on account of its heavy charge on the receipts from the Establishment in Goulston Square, and there not being any special subscription for its support, the Committee had no option but to close it.

The Committee Room has been kept open principally to supply a variety of information to unnumbered applicants, who have wished to establish Baths and Wash-houses, not only in this country, but also in other parts of the world. To give such information was an important part of the duties of the Committee, and one of the main objects for which they were formed. In order that the closing of the Committee Room may not prevent the results of their experience being accessible to those who may stand in need of such assistance, the Committee of Works have thought it desirable that some authentic publication, containing the information which they have hitherto been required to give, should be issued; and at their request, Mr. P. P. Baly, the Engineer to the Committee, has drawn up the Report appended hereto.

(Signed)

WILLIAM HAWES,

Chairman of the Committee of Works.

COMMITTEE ROOM,
5, EXETER HALL,
LONDON.

THE main object of the General Committee was the promotion of the health and cleanliness of the working classes, and, as a necessary consequence, the improvement of their social condition and the raising of their moral tone ; thereby rendering them more accessible to and better fitted to receive religious and secular training.

That cleanliness has been promoted,—the simple facts ; that, in consequence of the exertions of the Committee, above 2,800,000 baths have been given at the various Metropolitan Establishments, at a cost of from 1*d.* to 6*d.* each, in five years (the number in 1847 having been 143,744, and in 1851, having been 742,026) ; that accommodation, sufficient to give more than 2,000,000 baths in a year, at those prices, is now provided in London ; that the linen of above 2,000,000 persons has been washed, dried, and partially ironed at those Establishments ; and that Baths and Wash-houses are now built or building in almost every large town in England ; are sufficient evidence ;—that the virulence of disease must have been lessened, and its progress in many cases checked by such means, is equally certain ;—and that the increased cleanliness of so many families, and its attainment without the annoyances and discomfort (felt by the working man especially) of washing at home, have improved the social condition of all who have now, almost for the first time, enjoyed the advantages of cleanliness, must be beyond dispute. It is difficult, in any movement affecting this vast class, to trace its immediate effect ; but, that important results have, under the blessing of GOD, attended the exertions of this Committee, and must attend the daily increasing demand for baths and accommodation for washing, it requires no argument to prove.

The Committee acknowledge, with cordial gratitude, the patronage most graciously bestowed on them by Her Majesty the Queen and His Royal Highness Prince Albert, to whose benevolent countenance of their undertaking, and munificent and repeated contributions to their funds, they are deeply indebted.

They have also the pleasure of recognising the valuable assistance given to their efforts by the public press in general.

The Establishment at Goulston Square having demonstrated the practical character of the Committee's plans, their present Chairman successfully promoted an Act to enable boroughs and parishes to erect Baths and Wash-houses by means of money borrowed on the security of their rates; and the numerous Establishments erected and erecting in London and the country, under the authority of that Act, are ample proofs of its great utility.

The universal approval of their plans, shown by their general adoption, and by the high testimony paid to their economical arrangement by the French and Belgian engineers who were sent to this country to report upon them by their respective Governments, amply repays the Committee of Works for their anxiety and labour in perfecting them, as it must also the subscribers, whose generosity enabled the Committee to accomplish so much practical good.

The second great object of the Committee was to make these institutions self-supporting: and this has been accomplished. But to accomplish this completely, and to keep open the Committee Room until the works in Goulston Square in all their details were finished, involved a larger expenditure than had been contemplated; and it is but just to the Committee of Works to lay before the subscribers and the public the fact, that members of that Committee, to whom the accomplishment of so much real good to the industrious classes has been entrusted, are now personally liable for a considerable sum, for the payment of which they must look to the kind assistance of the friends to this important movement; for it cannot be right that those who have given so much time and trouble for the last eight years to this subject, and have brought it to so successful an issue, should also, in addition to their contributions as subscribers, be left to pay heavily for the completion of the duties undertaken by the General Committee, and begun under such auspices.

It is also right to state, that but for the importance attached to keeping open the Committee Room, as a centre to which inquiries might be addressed and from which practical information of all kinds could be obtained, the present deficiency in the funds of the Committee would hardly have existed.

Mr. P. P. Baly's Report upon Establishments at work and building, which is appended hereto, will, it is hoped, afford sufficient information to enable the public to benefit by the experience which has been

obtained by the labours of the Committee, and so tend to remedy the evil which might otherwise result from the closing of the Committee Room. The Committee would particularly direct attention to the plans embodied in that Report, which have been designed with a full knowledge of the requirements of such Establishments, the result of their Engineer's practical connection with the constructing and working of several of the most important.

Subscriptions, to enable the discharge of the outstanding debt of above £.2000, which now hangs over the Goulston Square Establishment, but which has been incurred in promoting the general object for which the Committee was originally constituted,—that of “promoting the establishment of Baths and Wash-houses for the labouring classes,”—and not for works or buildings, will be received by any member of the Committee, or by the Secretary, Mr. Woolcott, 14, Buckingham Street, Strand.

The Committee cannot regard the existence of this debt without anxiety as to the future well-doing of the Establishment.

The income from the Bathers and Washers, although sufficient to pay the current expenses and the interest on the debt, is not sufficient to enable the Committee to provide for the renewal of plant, which must be required in a few years; and were they to lose the services of the present acting members of the Committee of Works, they would, probably, experience great difficulty in finding successors who would take on themselves the duty and responsibility of managing the Establishment.

They therefore think it of the first importance that the debt should be so far reduced as to enable them to appropriate a portion of the income in forming a fund to meet contingencies.

By order,

GEORGE WOOLCOTT,

Assistant-Secretary.

SECRETARY'S OFFICE,

14, BUCKINGHAM STREET, ADELPHI,

November 1st, 1852.

BATHS AND WASH-HOUSES

FOR

THE LABOURING CLASSES.

Report

BY THE ENGINEER

TO THE COMMITTEE.

MY LORDS AND GENTLEMEN,

In compliance with the request of the Committee of Works that I would report upon the Baths and Wash-houses already erected, and upon those erecting, I have the honour to submit the following statement:—

The inquiries which are constantly addressed to me, either directly or through the Committee, for information respecting Public Baths and Wash-houses, induce me to make this Report more comprehensive than I should otherwise have thought necessary; but I hope that its publication may tend to the promotion of the important objects which the Committee have in view. Applications for such information have been made, not only by municipal and parochial bodies, and influential individuals in various parts of the United Kingdom, but also by the authorities of many of the chief cities of Europe; and special depu-

tations have been sent by the French and Belgian Governments to obtain such information officially.

The benefit to be derived from Public Baths and Wash-houses is now so generally appreciated and their success is placed so far beyond a doubt, that the present time seems to be especially proper for the making of such a report.

I shall therefore give, succinctly, a statement of such particulars as may be serviceable, under the following heads:—

First.—The progress made in the establishment of Public Baths and Wash-houses.

Secondly.—A general description of the buildings, with plans showing their arrangement, and adapted to the wants of different localities.

Thirdly.—A statement of ascertained and estimated working expenses.

Fourthly.—Miscellaneous suggestions and information.

Fifthly.—Remarks as to their social and moral tendencies.

In drawing up this Report, I have availed myself of such of the papers and reports published or circulated by the Committee as have appeared to be applicable.

I.—*The progress made in the Establishment of Public Baths and Wash-houses.*

The first Establishment in the country was a very small one at Liverpool, which owed its origin to the generous and self-denying exertions of Mrs. Catherine Wilkinson, of that town, during the cholera. Its existence was not known to those who took up the subject in London till after their labours had commenced; but its success was of much use to them as a proof that their scheme was not altogether speculative.

The first Establishment opened in London was that of the Free Baths and Wash-houses, in Glasshouse Yard, London Docks, which was opened, gratuitously, for the very poor, in May 1845.

That Establishment was, for a time, assisted by the Committee; but it was only kept open for a few years.

The second Establishment opened in London, was that of the Baths and Wash-houses in George Street, Euston Square, which was opened in August 1846.

That Establishment was erected by a Committee, formed, in the first place and at the instance of the General Committee, as a Sub-Committee, but which, after a time, became an independent Committee.

The total number of Bathers there up to the end of 1851, has been 559,322, and of persons whose linen has been washed, 1,247,000; and the total receipts there from those Bathers and Washers, have been £.11,566 8s. 2d.

There are, in that Establishment, Baths at prices above the highest charged at the following Establishments, at which the Parliamentary Tariff is observed.

That tariff is fixed by the following Schedule to the Act of 10 & 11 Victoria, ch. 61:—

“ CHARGES FOR THE BATHS AND WASH-HOUSES AND OPEN BATHING PLACES.

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, not 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.—*Wash-houses for the Labouring Classes.*

Every Wash-house to be supplied with conveniences 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.—*Wash-houses 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."

The third opened in London, was the Committee's Model Establishment, at Goulston Square, Whitechapel, which was opened in July 1847.

The total number of Bathers there, up to the end of 1851, has been 483,606, and of Washers, 63,913, representing at least 250,000

whose linen has been washed; and the total receipts there from those Bathers and Washers, have been £.7053 19s. 1*d*.

The fourth opened in London, was the Parochial Establishment of St. Martin-in-the-Fields, in Orange Street, Leicester Square. This was the first Establishment erected under Sir Henry Dukinfield's Act, 9 and 10 Victoria, chap. 74, which has been amended by 10 and 11 Victoria, chap. 61.

It was opened in January 1849, and the total number of Bathers there up to the end of 1851, has been 615,836, and of Washers 94,002, or 350,000 persons whose linen has been washed; and the total receipts from those Bathers and Washers, have been £.10,538 0s. 4*d*.

The fifth opened in London, was the Parochial Establishment of St. Marylebone, in the New Road, near Lisson Grove. It was opened in December 1849, and the total number of Bathers there up to the end of 1851, has been 332,236, and of Washers 29,743, or the linen of 120,000 persons; and the total receipts from those Bathers and Washers, have been £.4594 14s. 5*d*.

The sixth opened in London, was the Parochial Establishment of St. Margaret and St. John, Westminster, in Great Smith Street. It was opened in May 1851, and in that year, the Bathers there were 83,045, the Washers, 13,189, or the linen of above 50,000 persons; and the receipts from those Bathers and Washers, £.1119 3s. 2*d*.

A Parochial Establishment at Greenwich was also opened in 1851; whereat, in that year, there were Bathers 20,885, Washers 682; and receipts from Bathers and Washers, £.366 1s. 5*d*.

The aggregate numbers at those six existing Establishments up to the end of 1851, are Bathers 2,094,930, Washers 513,367, or the linen of above 2,000,000 persons; and receipts from Bathers and Washers, £.35,228 6s. 7*d*.

In the present year, the Parochial Establishments of St. James, Westminster, and All Saints, Poplar, have been opened.

Parochial Establishments for St. Giles and St. George, Bloomsbury, St. George, Hanover Square (two buildings), and Bermondsey, are in course of erection, or under consideration; and the act has been adopted by the metropolitan parishes of Lambeth, St. Saviour's, Southwark, and St. James, Clerkenwell.

In the country, Establishments have been erected at the following places:—

At Liverpool, three ; two of them since the formation of the Committee ; at Birmingham, Bath, Bristol, Wolverhampton, Coventry, Plymouth, Chester, Preston, Hull, Sunderland, Bolton, Macclesfield, Oxford, Maidstone, Exeter, Rotherham, Colchester, South Shields, Dublin, Belfast, and many other cities and towns, one or more each. These have all been erected since the Committee for promoting the Establishment of Baths and Wash-houses for the Labouring Classes, first drew public attention to the subject.

In consequence of the favourable report made to the French Government, by the commission appointed to inquire and report on the Public Baths and Wash-houses in England, 600,000 francs were voted by the late National Assembly, to assist the promotion of such institutions in France after the plan of the Model Establishment ; and a scheme was set on foot for erecting fourteen Establishments in Paris, for which 2,000,000 francs would be required. The municipality of Venice contemplate an expenditure there of £.33,000, in the erection of Baths on the same plan. The Norwegian Government have applied to the Committee for the plans, &c. of their Wash-house at Goulston Square as a guide for the erection of one at Christiania ; and a subscription has been commenced for the erection of Baths and Wash-houses at Copenhagen.

The Belgian Government and the authorities at Hamburg, Turin, Munich, Amsterdam, Lisbon, and New York, have also been furnished with information on the subject ; and there are grounds for hoping that the example of England will be followed in many foreign countries.

When it is remembered that in 1844, Public Baths and Wash-houses had scarcely ever been heard of out of Liverpool, and that the views of their promoters were considered by many persons rather as resulting from injudicious zeal than as capable of being practically realised ; the foregoing facts will be deemed satisfactory and gratifying proof that the cause which the Committee undertook has met with the approval of sound public opinion.

The Model Establishment, in Goulston Square, Whitechapel, though the third in London, in point of priority of opening, was the first in which the plans approved by the Committee were developed. There are in that Establishment 94 First and Second Class Baths, and 84 Washing Compartments, with requisite accommodations for Drying and Ironing. In erecting it on that scale, the Committee deemed it of great importance to provide a building which, in the simplicity of its arrangements, and

the completeness of its fittings, should serve as a model ; and their great expenditure of time, labour, and money, for securing that end has been fully justified, not only by the official approbation of the French and Belgian engineers sent to inspect it, and the approval of many other engineers both British and foreign who have examined the works, but also by its general arrangements and mode of construction having been almost universally followed (though in some cases without acknowledgment) in London and the country.

In some instances a want of accurate acquaintance with the facts, and in others (it is feared) a not altogether unwilful misrepresentation of them, seems to have given an impression that the Committee indulged in a needlessly profuse expenditure in the erection of the Model Establishment ; and it may be as well that I should allude to this error for the sake of correcting it.

The duties which the Committee undertook to perform included that of providing, for a purpose not theretofore attempted, an apparatus properly adapted to secure the ends in view. After many and most careful inquiries in various parts of England, they failed to find any specimen of such an apparatus, and, therefore, they had to invent it. Experimental (or trial) works, failures, and the repetition of experiments were unavoidable, and, of course, they were attended with expense. But the propriety of such an expenditure is to be judged of, not so much by its amount as by its results ; and those results are such as fully to justify the course pursued by the Committee. In the first place, their plans have received the practical approval of being adopted for many important Establishments since erected in England. They have not only (as I have already stated) received the official sanction of commissions sent from France and Belgium, but they have (as appears by the visitor's book, at Goulston Square) obtained unsolicited testimonials in their favour from a very large number of British and Foreign engineers, and other men of science ; and they have also received (what perhaps may appear to many) the more conclusive approval of having been followed, and even published as if original, by some who do not appear to have been scrupulous in giving, as their own, the ideas of others*.

* *Note, by the Committee of Works.*—As an illustration of unscrupulous plagiarism, Mr. Newland's Report on Sanitary Improvements to the Health Committee of the Corporation of Liverpool, published in 1848, which contains drawings of apparatus prepared originally by

In the next place, the apparatus invented for the Committee has, to a very great extent, secured the objects they had in view,—the combination of facility and rapidity in working with economy. It may be sufficient to state, by way of illustration, that so far as the Committee could ascertain when they commenced their labours, the cost (in fuel) of heating 1000 warm baths by apparatus then in use, was about 75s., and that that cost was reduced at the Model Establishment to about 24s., and has since been considerably lessened. When it is considered that coals and coke form one of the serious items in the working expenses, the importance of a large primary outlay to secure a reduction of more than two-thirds in a constantly recurring expense will be indisputable.

Again, of all the modes of drying in vogue when the plans for the Model Establishment were under consideration, there was not, so far as the wide inquiries of the Committee could ascertain, a single mode which did not involve either a great loss of time, or a costly expenditure of fuel. By the plan finally adopted by the Committee, after long perseverance in experiments, more than 2000 towels can be dried in three hours at a cost, for coke, of less than 3s. 6d., and, as will appear by a table given later in this Report, nearly 37,000 articles, including blankets, and other heavy goods, have been dried in a single week at a cost for coke of less than £.4.

Further, if there be deducted from the cost of the Establishment an expenditure which was rendered inevitable by an unexpected defect in the subsoil, the total outlay, when compared (according to the accommodation afforded) with the outlay on some Establishments which had

Mr. Baly for the Committee, and of which the model, exhibited at the meeting at Oxford in 1847, of the British Association for the Advancement of Science, was made under his directions and is now in his possession, may be referred to. There is not the slightest hint in the book that Mr. Newland was not the author of the plans he published; though he followed one of the originals to which he was indebted so closely as to copy a decided error from an imperfect design. The Committee feel it to be due to Mr. Baly to state, that he has at all times most cordially aided them by placing, with unhesitating liberality, his plans and working drawings and all information at his command, at the service of every person who has asked him for such aid; that it is against his wish that even so gross a case as that of Mr. Newland's book is mentioned here; and that if the Committee were to act altogether without reference to his wishes, they would feel bound to take this opportunity of exposing instances of surreptitious copying of his plans, and other mean attempts to filch a reputation from his labours, which have come to their knowledge.

the benefit of the experience paid for by the Committee, leaves a very moderate margin attributable to their experiments.

And lastly, the Committee were working, not for Whitechapel alone, but for the whole country. If they had not gone through that course of experimental works which resulted in as near an approach to a satisfactory solution of the various difficulties as is often attained by a new apparatus, those who can now safely adopt or borrow from their plans would have been beset by difficulties from which the Committee have freed them; and the great probability is, that the disappointment of such failures as the Committee had to encounter and overcome would have proved too much for the perseverance of municipal and parochial authorities, or the patience of their ratepayers, and that the success of the cause which the Committee undertook would have been seriously perilled.

I have dwelt the longer on this point because I have reason to apprehend that my silence, hitherto, under accusations and insinuations of extravagant outlay at Goulston Square, may have been somewhat prejudicial to the Committee. For my own part, I should be quite content to leave my individual justification to a fair comparison of the plans of the Model Establishment with those which may be seen elsewhere.

II.—*A General Description of the Buildings, with Plans showing their arrangements, and adapted to the wants of different localities.*

It is important to secure a site to which easy access by all classes, for whom the Baths and Wash-houses are principally intended, may be obtained, and which will afford facilities for an ample supply of water, and efficient drainage.

The situation should, if possible, be so chosen as that the buildings may have entrances from not less than two sides, each communicating directly with a good public thoroughfare, so that the entrances to the Wash-houses and the Women's Baths may be as distinct as conveniently can be from the entrances to the Men's Baths.

An entire separation of the men's entrances from the women's is of course desirable.

By a due arrangement of the entrances, a less number of attendants

may be required and greater facilities may be given for the supervision of each department.

The building ought not at first to be too large, but should be so arranged as to be capable of enlargement.

For a district containing a population of from 80,000 to 100,000 persons, it would be more advantageous to provide two Establishments than to concentrate the business in one.

If a sufficiently large site can be obtained, it is desirable to construct the Baths and Wash-houses with the waiting-rooms upon the ground floor, with dwelling-rooms for the Superintendent and Matron on the first floor.

The building, with its machinery and fittings, should be constructed with the best materials and workmanship, plain, but strong, suited to the classes it is intended to accommodate, and with a due regard to ventilation, light, and order.

In the construction of the machinery and fittings, it is highly important that their substantial character should be borne in mind, on account of the wear and tear incident to their use; and so that all needless expense and inconvenience for premature repairs may be avoided.

The risk of the wear and tear of much of the apparatus will at times be very great, for in some of the metropolitan Establishments as many as 2500 separate Baths have been given in one day; and in one week of last July there were 62,218 bathers at the seven of those Establishments which were then open.

It would be false economy to make a saving in the expense of construction at the risk of requiring a single additional attendant: and therefore the plans which experience shows to be the best should be carefully followed.

It will be evident that an expenditure of £.300 at the outset, to save the services of a single bath attendant, would be true economy.

The supply of water at command should be sufficient to meet the largest demand in the busiest period of the year.

The amount of water which may be required can be estimated by averaging the water for Baths (allowing for waste) at fifty gallons for every Bather, and for the Wash-house at forty-five gallons for every Washer.

Too much importance can hardly be attached to obtaining the best

valve or cock for the supplying of the water to, and its withdrawal from the Baths.

In the summer, when it is difficult to accommodate all who apply for Baths, one minute saved in filling or in emptying a Bath is important. Upon 1000 Baths such a saving would be equal to the addition of four Baths for eight hours each to the Establishment; producing, when fully employed, 16s. a day.

The cost of fuel depends greatly upon the perfection of the apparatus.

At one of the earliest Establishments, with coals at 12s. a ton, the average expense of fuel for heating 1000 Warm Baths was about 75s.

The necessity of economizing fuel induced the Committee to bestow very great pains on the subject for the Model Establishment, and their success was shown by their accomplishing the heating of 1000 Warm Baths, with small coals at 10s. a ton, at a cost not exceeding 24s.

It must be borne in mind that apparatus, which, to those who are not practically acquainted with engineering, may appear to be of the simplest kind, will very often be found to consume an extravagant amount of fuel; and as coals form one of the large items of constant expenditure, economy in their consumption ought to be specially regarded.

A very free ventilation of the whole of the building should be commanded.

The drain pipes should be so arranged as to carry off into the sewer, immediately and without the risk of stoppage, all fouled and waste water.

I have attached to this Report plans of three classes of buildings suited to the wants of different localities in relation to their population. It is needless to enter here into a detailed description of those drawings, as the writing upon them is sufficiently explanatory.

No. 1 represents a first class Establishment suited to the wants of a large town.

The cost of such a building (exclusive of the purchase of land, but inclusive of the machinery and pipe work) is £8,500, to which must be added £400 for furniture, linen, &c.

Plan No. 2 represents a second class Establishment, suited to the wants of a town with a population of about 30,000.

The cost of such a building (exclusive of the purchase of land, but inclusive of the machinery and pipe work) is £.4,000, to which must be added £.300 for furniture, linen, &c.

Plan No. 3 represents a third class Establishment, suited to the wants of a small town.

The cost of such a building (exclusive of the purchase of land, but inclusive of the machinery and pipe work) is £.2000, to which must be added £.250 for furniture, linen, &c.

To meet a case in which the funds, at the immediate disposal of the authorities, might not be sufficient for the erection of a building on Plan No. 2, although the district might eventually require it, such portion only of that plan as is shaded might be erected in the first instance, and the building might afterwards be extended without inconvenience when the funds would justify the enlargement. This would be much more advantageous than to erect a complete building on the scale of Plan No. 3 in the first instance, and to add to it subsequently.

If swimming baths were omitted, buildings affording the same accommodation in other respects as those described above might be constructed for, Plan No. 1, £.8000 ; Plan No. 2, £.3750 ; Plan No. 3, £.1800.

The cost of ground is so dependent on locality, that I have purposely omitted it from the estimates. Boroughs and parishes can, under Sir Henry Dukinfield's Act, appropriate town and parish lands for sites.

The Plans Nos. 1 and 2 comprise dwelling-rooms for the Superintendent and Matron, which effect a proportionate saving in the working expenses.

It is scarcely possible to impress too strongly on those who have the erection of such establishments, the importance of availing themselves of the experience which has been gained by their predecessors. When the Committee undertook the erection of the Model Establishment, it is scarcely too much to say that the whole plan of the building, its apparatus and fittings, was entirely to be invented. Difficulties, not anticipated by them at the outset, arose as they proceeded with the works, and experiments, some of them of a costly kind, had to be made before they were satisfied with the apparatus which it would be best to adopt. This was especially the case with respect to the apparatus for drying, which it was most important should combine great rapidity of drying, with great

economy in the use of fuel. A careful examination of the modes of drying used in various manufactures in the country, failed to satisfy the Committee with the propriety of following any then known plan, and they had to devise a new plan for themselves, or rather for the country at large, because the Committee felt that the work which they were doing was for the whole community. It is but right that I should state that the Committee are greatly indebted to the scientific acquirements and practical knowledge of their Deputy-Chairman, William Hawes, Esq. for the successful issue of those experiments, and that the system of drying which is now adopted was suggested by that gentleman.

The objects to be attained were,—

- 1.—Rapidity of drying, so that poor women need not, after the completion of their washing, wait long for their clothes to dry.
- 2.—The greatest economy in the apparatus and in the fuel used.
- 3.—Separation of the clothes of washers, to prevent theft, and to avoid unpleasant comparisons.

The plan of drying generally in use at hospitals, workhouses, and other large drying establishments, such as calico and silk-printing works, consists in placing the articles to be dried in a chamber, through which a current of heated air is either forced by a fan, worked by steam or other power, or drawn in by the difference between the specific gravity of the air in the heated chambers and that of the external atmosphere.

When the air is forced in, it is generally previously heated by passing through iron tubes exposed to the direct action of a furnace; but when admitted directly from the external atmosphere, it is heated by heated flues or pipes placed at the bottom of the drying-chamber, the fresh air being admitted through a channel communicating with the under side of the flues or pipes. Neither of these plans was found applicable to Public Baths and Wash-houses, for by neither could a sufficiently high temperature, with economy of fuel and rapidity of drying, or the separation of the washers' linen, be attained, although these conditions were absolutely necessary to enable the Committee to supply the poor with the means of washing, drying, and ironing, at the small charge (one penny for the first two hours, and one penny per hour afterwards) which was originally contemplated.

The objections to the first plan are, the cost of machinery and of the mechanical power required to drive the air through the pipes where it is

heated, and then through the vast number of small channels necessary for separate drying-chambers; the loss of heat consequent upon its traversing those channels, and the difficulty of heating air (a bad conductor of heat) without a great waste of fuel, as well as the impossibility of preventing waste of heat in cooling that air (expensively heated) during the short time occupied in its passage through the drying-chamber. It is obvious that whatever quantity of heated air escapes without absorbing the quantity of moisture due to its temperature, or without being reduced to the temperature of the water held in the clothes to be dried, is wasted.

All the experiments tried by the Committee proved that, for the purposes of these establishments, this plan of drying was too slow and too expensive.

The second plan failed from the all but impossibility of heating the air which was admitted, to one uniform temperature; and though, by a very minute subdivision of the current and its careful distribution over a very large extent of heating surface, this was accomplished, still the cost of fuel, and the impossibility of using all the caloric so given to the air, rendered this mode almost as objectionable as the first.

Great difficulty was experienced in both cases in maintaining a temperature sufficiently high to ensure the rapid drying, and the perfect purification of the clothes; and the consumption of fuel was found to be the same, or very nearly so, during the whole period of the apparatus being at work, no matter how many or how few clothes were drying.

Both these plans were based on the principle of using a current of heated air as the means of drying the linen, and of exposing the linen to that current throughout its passage from the inlet to the outlet of the chamber.

The air had first to be heated by an expensive process, and then rapidly cooled; both conditions difficult to realise with such a bad conductor of heat.

The information obtained during the course of these experiments enabled me to arrange a drying-chamber in which all these sources of expense and waste are very nearly avoided, and the separation of the linen is accomplished.

The plan adopted, is to prevent the free influx of air into the drying-chamber; to place the wet linen in such a position in relation to the

heated surface, that the caloric is radiated directly upon the clothes, and is absorbed by the water in them; and to permit that water, when converted into steam, to escape from the drying-chamber by the force exerted by its own elasticity. With this system the waste of heat, and consequently of fuel, is avoided, the heat being applied directly to the purpose required.

The surface whence the caloric radiates may be heated either by a fire passing through a large iron flue, or through a brick flue covered with iron plates, or, by a stream of hot water at high pressure constantly circulating through iron pipes.

The chamber heated by either method to a temperature above 212° , is rapidly cooled, when the wet linen is first introduced, by the absorption of the heat by the water in the linen, and the thermometer generally falls in a few minutes to from 210° , or 220° , to 120° , or 130° ; in a short time, however, it gradually rises, and as soon as it again indicates 220° , or 230° , it is clear, as water cannot exist as water at those temperatures, that it has all been converted into vapour, and thus removed from the linen, which is then dry.

Directly the thermometer indicates a high temperature, the fireman, without touching or examining the linen, damps the fire, and there is no waste. The chambers, being closed, retain their heat for a long time, and when again wanted are very soon, with little loss of time or fuel, brought into full action. No current of air has to be heated and again cooled, and no waste can arise from its escape. There is no exit for anything but vapour.

The practical result attained by this plan of drying has been to enable the Committee to dry clothes at a remarkably small expense for fuel, and with great rapidity, as will appear by the Tables below.

At the Model Establishment, where the experiments (which have been attended with such gratifying results) were made, a large chamber, heated by a flue, has been adopted, the chamber having divisions so as to separate the clothes of the washers; but in the Establishment more recently erected by me, in the Parish of Saint Martin-in-the-Fields, and at Hull, Bristol, Preston, and St. James, Piccadilly, where the arrangements are still more simple, the application of hot water has been so successful that a small drying chamber is placed close to each wash-tub, whereby the greatest possible economy of time

is secured to the washers. At the parochial Establishments of St. Margaret and St. John's, Westminster, and All Saints, Poplar, which have also been erected under my directions, the drying closets are heated by iron flues. In the drawings accompanying this Report the drying closets for the second class washers are shown to be heated by iron flues, and those for the first class washers by hot-water pipes; and this arrangement will be adopted at St. George and St. Giles, Bloomsbury, Bermondsey, and St. George, Hanover Square. The arrangement of the hot-water pipes at St. James's, Westminster, is shown in a drawing annexed to this Report; and it will be seen that no heat can be lost, and, therefore, no fuel wasted.

By the old mode of drying, even with an extravagant consumption of fuel, it was found that to maintain a temperature of 230° in one large chamber, was almost, and in numerous small ones, quite impossible.

The Committee found such a temperature to be indispensable to the proper purification of the linen of the poor, and especially for that of the towels which had been used by the lowest class of bathers; for, even after they were boiled, and well and carefully washed, it was found to be absolutely necessary to expose them to a high temperature, to deprive them of all ill odour. The difficulty in this respect, which has happily been overcome, was such as to threaten the usefulness of the establishment.

The towels washed as before, but dried at a high temperature, are now quite sweet, and of better colour than when dried either in the open air in London, or in a chamber at a low temperature.

The first class washers have three troughs; the second class washers have two troughs. One of the troughs, in each case, is used as a boiling tub, and the water in it is boiled by blowing steam into it. The other troughs are supplied with hot and cold water by means of taps. When the clothes are thoroughly cleansed they are placed in a wringing machine, which is a chamber with perforated sides, in which they are subjected, by simple machinery, to very rapid rotation, the centrifugal action carrying off a great portion of the water which they have brought from the washing trough. After this wringing they are hung on horses (or maidens), which are pushed into the drying chamber, where they are exposed to a temperature varying, according to circumstances, from about 140° to 240° , and when they are drawn out sufficiently dried they are taken to the

ironing board, where they are ironed and whence they are carried away by the Washer.

The importance of drying at a high temperature, or, at any rate, of exposing the clothes in the course of drying to a temperature not far short of 240°, is, in a sanitary point of view, considerable; for such a temperature tends greatly to the purification of clothes from infectious agencies, and secures the destruction of insect life. Some vermin survive being boiled; but, with their eggs, are destroyed by exposure to a dry heat.

The following statement shows the results, after washing, wringing, and drying, at the Model Establishment:—

DESCRIPTION OF THE ARTICLES.	Weight when dirty, and before being washed.		Weight after being washed.		Weight after the wringing process.		Weight when taken from the drying chamber dry.		Water taken up in washing.		Water extracted by the wringing machine.		Water absorbed by the drying process.		Time employed wringing.	Time employed drying.	Temperature of the drying chamber.
	lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.	Minutes.	Minutes.	Degrees.
Twelve Bather's Towels .	7	11	16	12	11	12	6	12	9	1	5	0	5	0	2	30	200
Ditto	7	13½	16	15	11	13	6	14½	9	1½	5	2	4	14½	2	25	210
Ditto	7	15	17	1½	11	14½	6	15½	9	2½	5	3	4	15	2	35	190
Three Fine Sheets .	4	15½	13	2	8	4	4	3½	8	2½	4	14	4	0½	2	15	180
Three Middling ditto .	5	4	14	1	8	3	4	12	8	13	5	14	3	7	2	25	190
Three Coarse ditto .	7	8	16	2	9	0	6	15½	8	10	7	2	2	0½	2½	30	190
Three Small Blankets .	6	15	22	15½	9	10½	6	3	16	0½	13	5	3	7½	2	15	200
Ditto	6	10	21	4	9	1	6	0	14	10	12	3	3	1	2½	15	200
Three Large ditto .	9	1	24	14	12	3	8	12	15	13	12	11	3	7	3	25	210

It is obvious from this table that the drying of the things washed is most thoroughly done. The excess of the weights in the second column over those in the fifth column cannot be attributed wholly to dirt; and therefore the articles, when taken from the drying chamber, contained decidedly less moisture than they did when they were received for the wash.

The following is a return of the articles dried at the Model Establishment in one week ended January 24th, 1852, showing the satisfactory working of the drying chamber there, and also its great advantage in the

economy of time, trouble, and expense, to those of the labouring classes who resort to it:—

Day of the Week.	No. of Washers, Driers, and Ironers.	No. of Hours occupied Washing, Drying, and Ironing.	Household Linen Dried.		Body Linen Dried.		Working Men's Clothes Dried.	Towels belonging to the Establishment dried.	Total No. of Articles dried.	Temperature of the Drying Chamber.				Coke consumed.	Remarks.
			Woollen Goods, Blankets, and Counterpanes.	Linen Goods, Sheets, and Tablecloths.	Woollen Goods, Petticoats, Shirts, Drawers, Stockings, &c.	Linen Goods, Shirts, Chemises, Gowns, Petticoats, &c.	Jackets, Trousers, Waistcoats.			9	12	3	6	Bushels.	
Monday ...	126	280	100	56	1116	828	8	525	2633	140	170	210	220	42	The expense of the Fuel for drying these 36,844 Articles was under £4.
Tuesday ...	197	503½	190	266	2820	2424	26	675	6401	200	210	217	220	48	
Wednesday	238	545½	204	240	3096	2928	27	825	7320	170	210	220	220	48	
Thursday ..	278	630½	168	216	3192	2964	29	300	6869	170	190	200	210	46	
Friday	274	545½	144	228	3586	2712	14	725	7409	160	120	210	220	48	
Saturday...	260	494½	108	204	3300	2232	18	350	6212	200	210	220	240	50	
Totals...	1373	2999½	914	1210	17,110	14,088	122	3400	36,844	—	—	—	—	282	

N.B.—The average time occupied by every Washer was about 2½ hours, and the average charge to her (exclusive of soap) was only threepence.

To those who are practically acquainted with such subjects, it will be evident that the system adopted at the Model Establishment is one which combines, in a remarkable degree, rapidity of execution with economy of fuel, and fully justifies the expenditure at the Model Establishment which was necessary to attain those objects.

III.—A Statement of ascertained and estimated Working Expenses.

The following were the actual Working Expenses of the Model Establishment during the year 1851:—

	£.	s.	d.	£.	s.	d.
Wages of Superintendent, Bath Attendants, Money Taker,						
Bath and Wash-house Scourer, Towel Washers,	589	18	9			
and occasional Assistants,						
Ditto Matron, Women's Bath Attendant, Washers',						
Driers', and Ironers' Attendants, Money Taker,	218	10	6			
and Towel Rinsers,						
Carried forward, ...	£.808	9	3			

	£.	s.	d.	£.	s.	d.
Brought over,	808	9	3			
Ditto Engineers' Mechanic, Fireman, and Boiler Cleaners,	259	12	7			
Ditto Sweeping Flues,	7	2	7			
Refreshment for Men for extra work,	7	0	10			
				1082	5	3
Water, 223,030 barrels,	146	13	6			
Coals, 609½ Tons,	341	2	3			
Coke, 247½ Chaldrons,	122	1	6			
Gas, 473,800 Cubic Feet,	94	16	0			
				704	13	3
Soap for Bathers, 17 cwt.	58	0	4½			
Ditto and Soda for Washers, and Washing Towels, &c. ..	74	18	2			
				132	18	6½
Mops, Bath Brooms, Scrubbers, Pails, &c.	48	3	6			
Acids, Soft Soap, Cotton Waste, Oil, Candles, &c. ..	67	14	0			
				115	17	6
Matting and Thermometers,	16	16	9			
Brushes, Combs, and Flesh Brushes,	4	0	0			
Printing Bathers' and Washers' Cheques (213,000), ..	33	3	0			
Furnace Bars and Engineers' Tools,	23	4	1			
				77	3	10
Printing Notices, Posters, Hand-bills, and Circulars, ..	49	14	0			
Bill-sticker, Stationery, Postages, Messengers, Light Gold, } Gratuities, &c.	24	7	9½			
Rent of Notice Boards,	8	2	8			
				82	4	5½
<i>Extraordinary Charges</i> attendant on the over-assessment for Parochial Rates and Taxes:—						
Law Charges,	59	10	6			
Surveyor's Charges,	21	0	0			
				80	10	6
Portion of Assistant-Secretary's Salary, to be borne by this } Account,				100	0	0
				2375	13	4
Ground Rents,	52	10	0			
Rates, Taxes, and Insurance,	65	19	6			
				118	9	6
Total, ...	£2,494	2	10			

These working expenses include the expense of a steam engine rendered necessary by the nature of the water supply, and the full wages

paid to the Superintendent and Matron, who, however, repay the Committee £.26 a-year for rent of dwelling-rooms in an adjoining house. There are other items of expense which, with the experience gained by the Committee, need not be incurred elsewhere; and that experience enables me to give the following as sufficient estimates of the probable working expenses for such Establishments as those for which I have given plans.

Those expenses are based upon the assumption of the Establishments being in full work, and of the wages paid to the staff being equal in amount to those which are paid in London, though doubtless the wages in some parts of the country would be decidedly less.

In order that these Establishments shall be self-supporting, it is necessary that the greatest economy be practised in their management: they must be conducted with order and discipline, and every attention must be paid to the cleanliness of the whole building, its machinery, and fittings; the staff employed must be active, obliging, and cleanly, and in every other respect thoroughly efficient.

The opening of the Baths (but not of the Wash-houses) on Sunday morning till half-past eight o'clock is taken for granted. Some objections have been made to this; but it may be sufficient for me to state that, the opening of the Baths at the Model Establishment early on Sunday morning was adopted with the full approval of the present Archbishop of Canterbury and the Bishop of London. But for this accommodation, many labouring men in Whitechapel would be wholly deprived of the use of the Baths, and of the moral benefit of using them.

PLAN No. 1.

STATEMENT OF WORKING EXPENSES.

STAFF REQUIRED.					PER WEEK.			PER YEAR.		
					£.	s.	d.	£.	s.	d.
Superintendent, }	...	...	...	...	—			100	0	0
Matron, ... }	...	...	...	...		
Engineer, ...	...	...	...	...	2	0	0	104	0	0
Fireman, ...	...	...	...	...	1	4	0	62	8	0
1 Attendant upon Men's 1st Class Baths,	...	...	...	...	1	2	0	57	4	0
2 Ditto Men's 2nd Class Ditto,	...	...	...	...	1	0	0	104	0	0
1 Ditto Women's 1st and 2nd Class Do.	...	...	...	...	0	14	0	36	8	0
1 Ditto Laundry, ...	...	...	...	...	0	14	0	36	8	0
Money-taker to Baths, ...	...	...	...	...	1	0	0	52	0	0
Ditto to Laundry, ...	...	...	...	...	0	15	0	39	0	0
1 Man to Wash Towels, ...	...	...	...	...	1	0	0	52	0	0
1 Woman Ditto, ...	...	...	...	...	0	14	0	36	8	0
Total, ...	...	...	...	...				679	16	0

N.B.—The Superintendent and Matron to be provided with apartments, coals, water, and gas. The Towel Washers to assist as Bath Attendants on Friday evening, Saturday, and Sunday morning before half-past eight, and to make themselves generally useful.

ADDITIONAL STAFF REQUIRED DURING SIX MONTHS OF THE YEAR.					PER WEEK.			PER 6 MONTHS.		
					£.	s.	d.	£.	s.	d.
1 Attendant upon Men's 1st Class Baths, ...	...	...	...	...	1	1	0	27	6	0
2 Ditto Men's 2nd Class Ditto, ...	...	...	...	...	2	0	0	52	0	0
1 Ditto 1st Class Plunge Bath, ...	...	...	...	...	1	0	0	26	0	0
1 Ditto 2nd Class Ditto, ...	...	...	...	...	1	0	0	26	0	0
1 Boy to assist Fireman, ...	...	...	...	...	0	10	0	13	0	0
1 Man to Wash Towels, ...	...	...	...	...	1	0	0	26	0	0
1 Woman Ditto, ...	...	...	...	...	0	14	0	18	4	0
Total, ...	...	...	...	...				188	10	0

Total for the Year, say £.868 6s.

SUMMARY OF WORKING EXPENSES.

							£.	s.	d.
Staff,	...	...	...	...	...	...	868	6	0
Coals,	...	...	...	...	...	...	250	0	0
Water,	..	...	...	...	...	..	150	0	0
Gas,	...	...	...	...	...	...	60	0	0
Soap and Soda, for Washing Towels, and for Cleansing,	...					...	40	0	0
Printing Tickets, Notices, and Stationery,	...				...	...	50	0	0
Cleansing Utensils—Mops, Brushes, Brooms, Flannels, &c.	...					...	60	0	0
Wear and Tear, New Furnace Bars, and Sundries for Engineer's									
Department,	...		...	...	...	...	50	0	0
Taxes,	...	...	...	...	...	...	35	0	0
Sundries, ...	...	...	...	...	...	...	50	0	0
							£.1613	6	0

N.B.—The Secretary's or Clerk's Salary, in respect of this Establishment, would have to be reckoned, say, at £.100 per Annum.

PLAN No. 2.

STATEMENT OF WORKING EXPENSES.

STAFF REQUIRED.					PER WEEK.			PER YEAR.		
					£.	s.	d.	£.	s.	d.
Superintendent,	...	...	...	...	—			100	0	0
Matron, ... }	...	...	...	...				104	0	0
Engineer, ...	...	...	...	...	2	0	0	27	6	0
Boy to assist,	...	...	...	...	0	10	6	57	4	0
1 Attendant upon Men's 1st Class Baths,	...	...	...	...	1	2	0	52	0	0
1 Ditto Men's 2nd Class Ditto,	...	...	...	...	1	0	0	36	8	0
1 Ditto Women's 1st and 2nd Class Do.	...	...	...	...	0	14	0	36	8	0
1 Ditto Laundries, ...	...	...	...	...	0	14	0	52	0	0
Money Taker to Men's Baths,	...	...	...	...	0	15	0	52	0	0
Money Taker to Laundry, ...	...	...	...	...	1	0	0	39	0	0
1 Man to Wash Towels, ...	...	...	...	...	0	14	0	52	0	0
1 Woman Ditto, ...	...	...	...	...	0	14	0	36	8	0
Total, ...	...	...	...	...				592	14	0

N.B.—The Superintendent and Matron to be provided with apartments, coals, water, and gas. The Towel Washers to assist as Bath Attendants on Friday evening, Saturday, and Sunday morning before half-past eight, and to make themselves generally useful.

ADDITIONAL STAFF REQUIRED DURING SIX MONTHS OF THE YEAR.					PER WEEK.			PER 6 MONTHS.		
					£.	s.	d.	£.	s.	d.
1 Attendant upon Men's 2nd Class Baths,	...	...	...	...	1	0	0	26	0	0
2 Ditto Plunge Bath, ...	...	...	...	...	1	0	0	26	0	0
1 Woman to assist in Washing Towels, &c.	...	...	...	...	0	14	0	18	4	0
Total, ...	...	...	...	...				70	4	0

Total for the Year, say £.662 18s.

SUMMARY OF WORKING EXPENSES.

							£.	s.	d.
Staff,	...	...	...	...	...	...	662	18	0
Coals,	...	...	...	...	...	...	150	0	0
Water,	...	...	...	...	...	...	100	0	0
Gas,	...	...	...	...	...	...	35	0	0
Soap and Soda, for Washing Towels, and for Cleansing,	...					...	25	0	0
Cleansing Utensils—Mops, Brushes, Brooms, Flannels, &c.						...	40	0	0
Printing Tickets, Notices, and Stationery,	...				...	...	25	0	0
Wear and Tear, New Furnace Bars, and Sundries for Engineer's									
Department,	...		...	...	...	...	30	0	0
Taxes,	...	...	...	...	...	...	25	0	0
Sundries, ...	...	...	...	...	...	...	50	0	0
Total,							£.1142	18	0

N.B.—The Secretary's or Clerk's Salary, in respect of this Establishment, would have to be reckoned, say, at £.75 per Annum

PLAN No. 3.

STATEMENT OF WORKING EXPENSES.

STAFF REQUIRED.					PER WEEK.			PER YEAR.		
					£.	s.	d.	£.	s.	d.
Superintendent, }	...	...	...	...	—			100	0	0
Matron, ... }	...	...	...	...		
Engineer, ...	...	...	...	...	2	0	0	104	0	0
Boy to assist,	...	...	...	...	0	10	6	27	6	0
1 Attendant upon Men's 1st Class Baths,	...			...	1	2	0	57	4	0
1 Ditto Men's 2nd Class Ditto,	...			...	1	0	0	52	0	0
1 Ditto Women's Baths and Laundry, ...	...			...	0	14	0	36	8	0
Money Taker to Baths,	...	...	...	...	1	0	0	52	0	0
Ditto to Laundry,	...	...	...	...	0	15	0	39	0	0
1 Man to Wash Towels,	...	...	...	...	1	0	0	52	0	0
1 Woman Ditto, ...	...	...	...	...	0	14	0	36	8	0
Total,	...	...	...	...				556	6	0

N.B.—The Towel Washers to assist as Bath Attendants on Friday evening, Saturday, and Sunday morning before half-past eight, and to make themselves generally useful.

ADDITIONAL STAFF REQUIRED DURING SIX MONTHS OF THE YEAR.					PER WEEK.			PER 6 MONTHS.		
					£.	s.	d.	£.	s.	d.
1 Attendant upon Men's 2nd Class Baths,	...			...	1	0	0	26	0	0
1 Ditto Plunge Bath,	...			...	1	0	0	26	0	0
Total,	...	...	...	...				52	0	0

Total for the Year, say £.608 6s.

SUMMARY OF WORKING EXPENSES.

	£.	s.	d.
Staff,	608	6	0
Coals,	80	0	0
Water,	60	0	0
Gas,	20	0	0
Soap and Soda, for Washing Towels, and for Cleansing, ...	15	0	0
Printing Tickets, and Stationery,	10	0	0
Cleansing Utensils—Mops, Brushes, Brooms, Flannels, &c. ...	20	0	0
Wear and Tear, New Furnace Bars, and Sundries for Engineer's Department,	20	0	0
Taxes,	15	0	0
Sundries,	25	0	0
	£.873	6	0

IV.—*Miscellaneous Suggestions and Information.*

A thoroughly good system of book-keeping, so contrived as to afford adequate checks, is very desirable*.

The following is a brief abstract of Sir Henry Dukinfield's Act, 9 and 10 Victoria, chapter 74, "An Act to encourage the Establishment of "Public Baths and Wash-houses;" Royal Assent, 26th August, 1846.—Amended by 10 and 11 Victoria, chapter 61; Royal Assent, 2nd July, 1847.

The Preamble states that it is desirable for the health, comfort, and welfare of the inhabitants of towns and populous districts, to encourage the establishment therein of Public Baths and Wash-houses, and open bathing places.

Section 1.—The Act may be adopted for any incorporated borough in England; and, with the approval of the Home Secretary, for any parish in England not within a borough.

* *Note.*—With a view to assist Town Councils and Parochial Commissioners, and their officers, I have published, under the sanction of the Committee, distinct copies of this Report, to which there are annexed copies of the account books, tickets, handbills, &c., used by the Committee; also Bye Laws, adapted from one of the metropolitan parishes.

Section 2, amended, interprets the words "parish," "borough," "rate-payers," "churchwarden," "overseers," "vestry," "commissioners," "clerk," "justice," and "lands," giving them wide meanings, for which the Acts must be referred to.

Section 3.—The Council of any borough may determine that the Act shall be adopted for the borough; it will then come into operation therein.

Section 4.—The expenses of executing the Act in a borough are to be charged on the borough fund; and the income from the Baths and Wash-houses is to be carried into the credit of the borough fund. A separate account, to be called "The Public Baths and Wash-houses' Account," is to be kept.

Section 5.—On the requisition in writing of ten or more ratepayers, a Vestry Meeting is to be convened with seven days' notice, and if it be resolved by the Vestry that the Act ought to be adopted for the parish, a copy of the resolution, signed by the Chairman, is to be sent to the Home Secretary, and, on his approval, the Act is to come into operation in the parish. Provided that two-thirds of the votes on the question, must be in favour of the resolution.

Section 6.—Not less than three nor more than seven ratepayers are to be appointed Commissioners, of whom one-third, or as nearly as may be one-third, are to go out of office yearly, but may be re-elected.

Sections 7 to 15.—Provide for the regulation of the Commissioners, and the yearly appointment of Auditors.

Section 16.—The expenses of executing the Act in a parish to an amount sanctioned by the Vestry, are to be paid out of the poor's rate.

Section 17.—The overseers are to raise the necessary amount.

Section 18.—The income, after defraying the expenses, is to be paid to the overseers in aid of the poor's rate.

Section 19.—Two or more neighbouring parishes may concur in adopting the Act.

Section 20.—The Commissioners are to be a corporation.

Section 21.—The Town Council, with the approval of the Treasury, and the Commissioners, with the sanction of the Vestry and the approval of the Treasury, may borrow the money required on the credit of the Borough fund or the poor's rates.

Section 22.—The Public Works Loan Commissioners may make loans to the Council and Commissioners.

Section 23.—Various provisions of the Companies Clauses' Act are incorporated with the Act.

Section 24.—Power is given to appropriate corporation and parish lands, and to purchase and rent lands for the purposes of the Act.

Section 25.—Power is given to erect buildings suitable for Public Baths and Wash-houses, and as to such Wash-houses either with or without open drying grounds, and to make open bathing places, and to convert any buildings into Public Baths and Wash-houses, and to alter, enlarge, repair, and fit up the same.

Section 26.—Regulates the mode in which contracts are to be entered into.

Section 27.—Gives power to purchase and rent existing Baths and Wash-houses.

Section 28.—Enables the Commissioners, Trustees, and others to afford supplies of water and gas, either without charge or on favourable terms.

Section 29.—Frees the Councillors and Commissioners from personal liability in executing the Act.

Section 30.—Provides for an appeal to the Quarter Sessions.

Section 31.—Gives power to sell and exchange lands.

Section 32.—Authorises the sale of Baths and Wash-houses and open bathing places if given up.

Section 33.—Vests the general management of the Establishments in the Councillors and Commissioners.

Section 34.—Enables them to make bye-laws.

Section 35.—Provides for the publication of such bye-laws.

Section 36.—Requires the number of Baths for the labouring classes in any building under the management of the same Council or Commissioners to be not less than twice the number of baths of any higher class in the same building.

Section 38.—Provides for the recovery of the charges at the Wash-houses by detention, and, if necessary, sale of clothes brought to be washed.

Section 39.—Imposes a penalty of £.50 on Councillors, Commissioners, and Officers accepting any fee for the performance of their duties, except salaries, or being interested in contracts, &c.

Section 4 of the Amending Act incorporates the Lands Clauses' Act, but provides that purchases shall not be made except by agreement.

Section 5—Provides that the number of washing tubs for the labouring classes, in any building, shall not be less than twice the number of the washing tubs of any higher classes in the same building.

Sections 6 and 7—give the tariff which is stated above, in lieu of the tariff to the former Act.

It appears needless to give in this place a more full abstract of these Acts, which have been published for the Committee by Benning and Co., Law Booksellers, 43, Fleet Street, with plain directions and forms for putting them into execution, at the small charge of 6*d.* for the first Act, 2*d.* for the second. When a Town Council or parochial authorities contemplate the adoption of the Act, it will be essential that its provisions should be considered, not in the form of an abstract, but in the language employed by the Legislature.

The provisions of the first Act, modified to meet the municipal arrangements of Ireland, were extended to that part of the United Kingdom, by the Act of 9 and 10 Victoria, chap. 87.

Those provisions have not yet been extended to Scotland.

Any borough or parish which adopts the Act, can borrow the requisite amount of money on the security of the rates, at £.4 per cent. interest, repaying the loan by thirty yearly instalments.

If £.8500 were borrowed to erect an establishment according to the Plan No. 1, the first year's repayment would be,

	£.
Interest at £.4 per cent. on £.8500,	340
One-thirtieth part of £.8500 (say),	283
	<hr/>
	£.623

The second year's repayment would be,

	£.
Interest at £.4 per cent. on £.8217 (say),	328
One-thirtieth part of £.8500,	283
	<hr/>
	£.611

And the subsequent repayments would be less by about £.12 every year.

I may here state that the official report for 1851, of the St. Martin-in-the-Fields Establishment—the oldest Parochial Establishment—estimated its net profits for that year, at £.1000.

The following statistical details may be found of use.

I.—An Account of the Bathing and Washing at the Establishments in London, which are conducted under or in accordance with the Acts 9 & 10 Vic., cap. 74, and 10 & 11 Vic., cap. 61,—and at a few out of the many similar Establishments in the Country.

RETURN FOR THE YEAR ENDED CHRISTMAS 1851.

NAME AND TITLE OF THE ESTABLISHMENT.	BATHS.		WASH-HOUSES.			TOTAL RECEIPTS.
	Number of Bathers.	RECEIPTS.	Number of Washers.	Number of Hours Washing, &c. &c.	RECEIPTS.	
<i>Metropolis.</i>		£. s. d.			£. s. d.	£. s. d.
The Model, Whitechapel,	156,310	2143 7 8	43,462	98,824	531 1 2	2,674 8 10
St. Martin-in-the-Fields,	213,485	3437 17 9	50,200	103,836	499 14 1	3,937 11 10
St. Mary-le-bone,	173,157	2242 3 7	24,718	72,236	300 18 10	2,543 2 5
St. Margaret & St. John, Westminster, (Opened 12th May.)	83,405	972 2 1	13,189	27,895½	147 1 1	1,119 3 2
Greenwich, (Opened 2nd Sept.)	20,885	345 17 5	682	2,754	20 4 0	366 1 5
Totals,	647,242	9141 8 6	132,251	305,545½	1498 19 2	10,640 7 8
<i>Country.</i>						
Liverpool,—						
Cornwallis Street, (Opened 12th May.)	86,899	1283 12 1	NOT	OPEN.	... ..	1,283 12 1
Paul Street,	42,353	576 4 10	19,455	116,630	190 12 10	766 17 8
Hull,	63,765	640 18 1	4,968	19,290	91 6 8	732 4 9
Bristol,	43,373	547 19 11	5,746	11,511½	62 11 1	610 11 0
Preston, (Opened 26th May.)	24,515	244 12 10	2,179	6,585	27 19 4	272 12 2
Birmingham, (Opened 12th May.)	78,646	1015 11 9	908	3,688	26 14 8	1,042 6 5

This return does not include the bathing and washing at the Establishment in George Street, Euston Square, which is not conducted according to the Acts.

II.—An Account of the receipts of each succeeding Quarter, commencing Lady Day 1852, and ending Michaelmas 1852—(Nine Months).

NAME AND TITLE OF THE ESTABLISHMENT.	Lady-day Quarter. 1852.	Midsummer Quarter. 1852.	Michaelmas Quarter. 1852.	Total Receipts in nine months. 1852.
<i>Metropolis.</i>	£. s. d.	£. s. d.	£. s. d.	£. s. d.
The Model, Whitechapel,	547 4 3	805 0 9	1010 17 5	2363 2 5
St. Martin-in-the-Fields,	782 19 3	1124 9 9	1126 18 2	3034 7 2
St. Mary-le-bone,	382 4 1	740 1 2	1040 2 11	2162 8 2
St. Margaret & St. John, Westminster, Greenwich,	246 4 6	503 14 1	803 2 9	1553 1 4
St. James, Westminster,	107 4 0	256 7 3	508 9 9	872 1 0
(Opened June 12th.)	.....	79 10 11	620 15 9	700 6 8
Poplar, (Opened July 19th.) . . . . .	.....	.....	280 8 0	280 8 0
TOTALS,	2065 16 1	3509 3 11	5390 14 9	10,965 14 9
<i>Country.</i>				
Liverpool,—				
*Cornwallis Street,	241 12 3	470 13 11	643 18 3	1356 4 5
Paul Street,	107 12 6	180 15 10	299 15 11	588 4 3
Hull,	122 7 10	189 19 9	256 6 7	568 14 2
Bristol,	127 17 9	169 0 7	210 19 2	507 17 6
Preston,	60 8 4	96 15 0	174 17 6	332 0 10
Birmingham,	146 3 8	421 3 10	834 19 11	1402 7 5
Maidstone, (Opened May 24th.) . . . . .	.....	67 0 8	151 5 2	218 5 10

* The Wash-houses at the Cornwallis Street Establishment are not yet completed.

The foregoing return, upon being compared with the return preceding (No. 1), shows most satisfactorily that the supply of Baths and Wash-houses is less than the demand; for, with the increase of the total supply, the resort to every separate Establishment is also increasing.

During the month ended July 1852, the receipts at the Metropolitan Establishments named in the return (No. 2) amounted to £.2768 5s. 5d., against £.1506 3s. 4d. in the same period of last year. The number of Bathers was 199,934, against 104,856 in the corresponding month of 1851; showing an increase of £.1262 2s. 1d. in money, and 95,078 in Bathers. In the same month of 1848, the first year of the "Model" Establishment being opened, the number was only 934 Bathers, and the receipts only £.91 5s. 10d. This verifies one of the points originally maintained by the Committee:—that the practice of bathing was restricted in England to a comparatively few, because only a few could command the use of a bath; and that, were Baths greatly increased in number, and afforded at a greatly diminished charge, a habit of bathing would become at least as universal in this country as it is in any foreign parts. The English are by choice a clean people.

II.—A Statement of the Numbers of the Bathers, and the Receipts, at the Model Establishment (Quarterly), for Four Years and upwards.

BATHS.

Quarter ending	1848.			1849.			1850.			1851.			1852.		
	Number of Bathers.	Total Receipts.		Number of Bathers.	Total Receipts.		Number of Bathers.	Total Receipts.		Number of Bathers.	Total Receipts.		Number of Bathers.	Total Receipts.	
		£.	s. d.		£.	s. d.		£.	s. d.		£.	s. d.		£.	s. d.
March, ...	5,799	70	12 8	11,668	161	16 9	17,500	248	1 4	23,665	335	0 2	24,565	357	0 3
June,	15,906	178	10 2	34,279	435	8 6	48,678	679	8 8	51,884	726	3 2	47,117	655	18 10
September,	18,848	224	15 4	47,712	610	0 6	49,841	657	0 6	55,540	733	7 8	64,724	869	16 3
December,	8,084	106	11 1	14,423	197	14 1	21,500	295	13 1	25,222	348	16 8			
Totals, ..	48,637	580	9 3	108,082	1404	19 10	137,519	1880	3 7	*156,311	2143	7 8			

* Upwards of one hundred and eight thousand were Second-class Bathers—1d. Cold, 2d. Warm.

Of the Bathers, there were in 1849, 4695 Women; in 1850, 10,589; and in 1851, 14,397.

V.—A Statement of the Numbers of the Washers, and the Receipts (Quarterly), at the Model Establishment, for Two Years and upwards.

WASH-HOUSE.

Quarter ending.	1850.			1851.			1852.		
	Number of Washers.	Number of Hours Washing.	Total Receipts.	Number of Washers.	Number of Hours Washing.	Total Receipts.	Number of Washers.	Number of Hours Washing.	Total Receipts.
			£. s. d.			£. s. d.			£. s. d.
March, .....	.....	.....	.....	10,046	25,175	144 4 10	16,966	36,935	190 4 0
June,	2,449	5,730	32 15 2	9,980	23,225	126 15 3	9,472	23,060	149 1 11
September, ...	3,910	8,018	41 16 3	9,146	19,310	100 5 0	7,805	18,996	141 1 2
December,	7,888	17,970	97 14 4	14,290	31,114	159 16 1			
Totals,	14,247	31,718	172 5 9	43,462	98,824	531 1 2			

The poverty of the people residing about the Model Establishment, which was intentionally placed in a very dirty district, is sufficient to account for the receipts being lower than those received in better localities. It is, however, placed where the most good was likely to be done; though, to accomplish it, great labour and perseverance have been required.

V.—A RETURN of the PUBLIC BATHS and WASH-HOUSES in the Metropolis from the date of Opening the respective Establishments to December 1851.

NAME AND TITLE OF THE ESTABLISHMENT.	Total No. of Bathers.	Total No. of Washers.	TOTAL RECEIPTS.		
			£.	s.	d.
George Street (<i>Opened in 1846</i>)	559,322	311,838	11,556	8	2
The Model (<i>Opened in part in 1847</i>) ...	483,606	63,913	7,053	19	1
St. Martin's (<i>Opened in 1849</i>)	615,836	94,002	10,538	0	4
St. Marylebone (<i>Opened in 1849</i>) ...	332,236	29,743	4,594	14	5
Westminster (<i>Opened in 1851</i>)	83,045	13,189	1,119	3	2
Greenwich (<i>Opened in 1851</i>)	20,885	682	366	1	5
Total	2,094,930	513,367	35,228	6	7
Of these numbers were belonging to the year ended 1851	742,026	218,318	12,906	12	5

The Committee have established beyond a doubt the fact, that Public Baths and Wash-houses, if properly constructed, and managed in accordance with the economical principles now adopted, will not only repay the working expenses, but will ultimately leave a considerable profit at the disposal of the authorities: thus satisfying at one and the same time, the desire of the philanthropist with the requirements of the political economist.

V.—*Remarks as to their Social and Moral Tendencies.*

That the physical condition of man is influenced by the circumstance of cleanliness in their dwellings, in their persons, and apparel, more particularly in populous districts, is borne evidence to by the universal observations of those most competent to give an accurate opinion, namely, medical men; and the various sanitary reports bear ample testimony to the accuracy of their undivided opinions.

To improve the physical and moral condition of those classes of the community which form the great basis of society, and upon the condition of which depends the safety and well-being of the whole superstructure, must be an object of primary importance to the statesman as well as the philanthropist; and it is not assuming too much to assert that cleanliness of person and apparel are means essentially conducive to those important results. Cleanliness is the natural companion of order, and they are both the handmaids of religion. The trite proverb, that "Cleanliness is next

to godliness," is essentially true, and is one of the dicta of that homely wisdom whose oracles are transmitted from one generation to another, because they are felt to be the voice of truth confirmed by experience.

The workman returns from his day's labour to his home;—on the one side is the public-house, with its flaunting gas and jovial song,—on the other his homely room, the comfort of which is entirely destroyed for the time by the exercise of those very qualities which, in more favourable circumstances, would conduce to his happiness, namely, the industrious efforts of his wife to increase his comforts and maintain his respectability, by providing him cleanly apparel.

The room itself is encumbered, and its atmosphere is damp and unwholesome; and in this state of things, that which is disagreeable and injurious by day, becomes baneful by night; the delicate are frequently thus rendered sickly, and the sickly become diseased, and there is no alternative but neglect. The natural result is, that frequently the necessity is deferred as long as possible, cleanliness becomes too onerous to be scrupulously enforced, and habits are engendered, the prevalence of which are unhappily but too evident to need illustration.

The large and increasing number of persons who avail themselves of the Wash-house at the Model Establishment in Whitechapel, affords a gratifying proof of the gradual removal of the prejudices which existed against washing in a public establishment, and is contrasted with the fact, that although in the first instance these Wash-houses were opened gratuitously in order to induce the working classes to frequent them, yet few availed themselves of the privilege thus offered; at the present time, women not only crowd there, but will incur considerable inconvenience in waiting until accommodation can be afforded them.

The Model Establishment is situated in one of the lowest, most populous, and dirtiest districts of the metropolis, among persons in extreme poverty, and of the most degraded habits.

It therefore had to contend with considerable discouragement and peculiar difficulties, yet was one in which the introduction of the means of cleanliness of person and apparel was calculated, if successful, to produce the most marked results.

The progress already made,—the triumph already achieved over inveterate habits of indolence and neglect, give increased hope that the just appreciation of the advantages already felt and acknowledged by the

classes for whom they are specially designed, will be constantly on the increase.

In all measures of social improvement the effect to be produced upon the rising generation ought to be considered; and in this instance there is great reason to believe that habits of cleanliness will be induced among them, which in after life will become a necessity of their existence.

To place, on a large scale, such resources within the reach of the labouring classes, to afford the means of a sanitary indulgence, the use of which, up to a recent period, was limited to the affluent, would some years since have seemed to be an idle dream of a philanthropist rather than the sober practical realization of experienced men. If it had merely taken the form of a charitable institution, it would only have served to divert the stream of charity into a new channel, which, great as it is in this Christian country, is not ample enough for the numberless demands made upon it. But it is the proud distinction of these institutions that, by the admirable arrangements which have been effected, they are self-supporting; and they not only pay their own expenses, but become remunerative. No honest blush need cross the mechanic's face at receiving here a dole of charity; he is enabled to pay for the benefit he receives, and he is only bound by that reasonable tie of gratitude to those whose position, influence, and skill have practically devised those means for his comfort, the acknowledgment of which is alike honourable to the recipient and to the donor.

I hope that I have not extended this Report too much, and I will conclude by expressing my most sincere wish that it may promote the object so long and so usefully advocated by the Committee, at a great expenditure of time and money, and with a steady perseverance which nothing but the goodness of the cause could have elicited.

I have the honour to remain,

My LORDS and GENTLEMEN,

Your obedient faithful Servant,

P. PRICHARD BALY, C.E.

14, BUCKINGHAM STREET, ADELPHI,

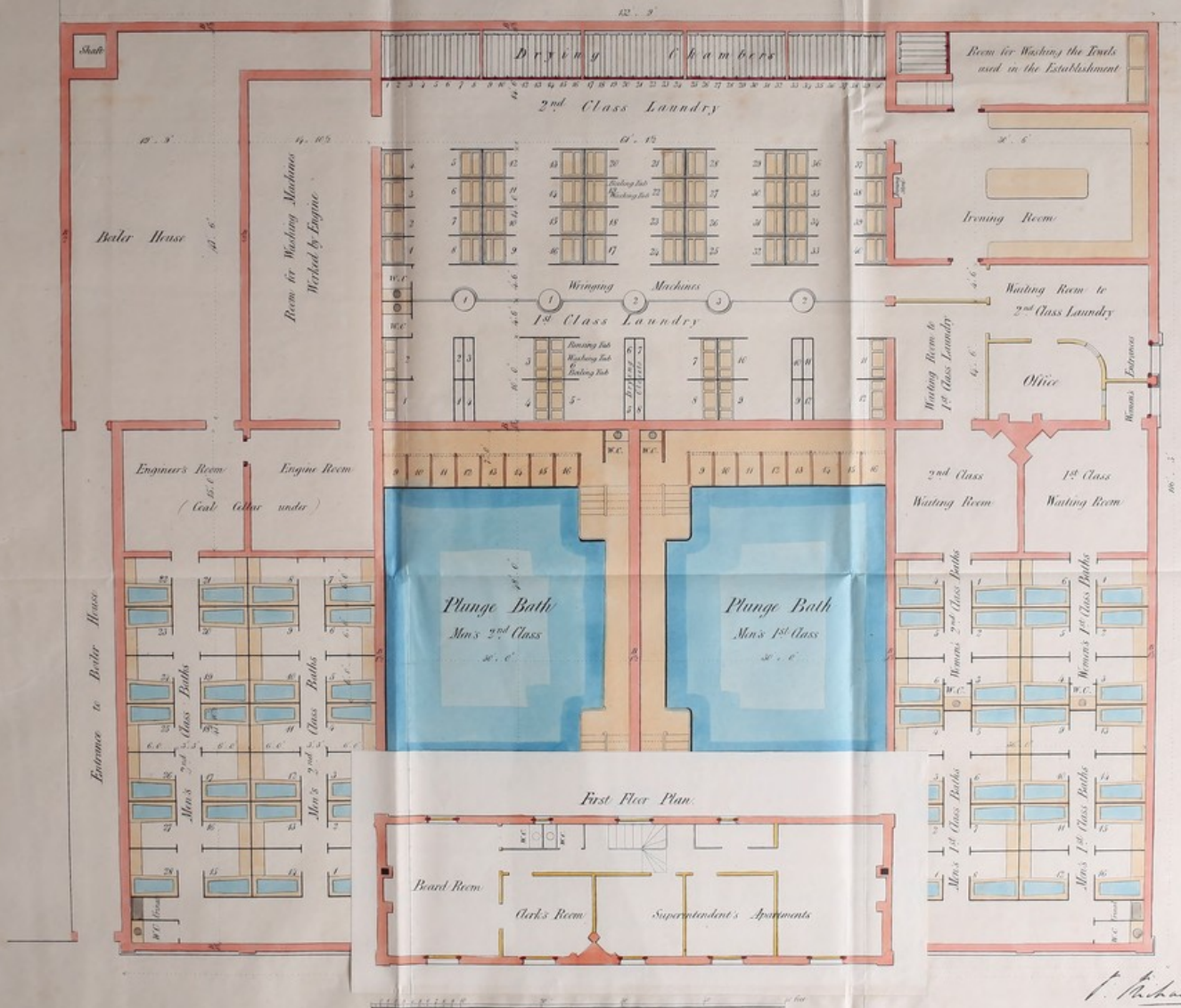
October 1st, 1852.

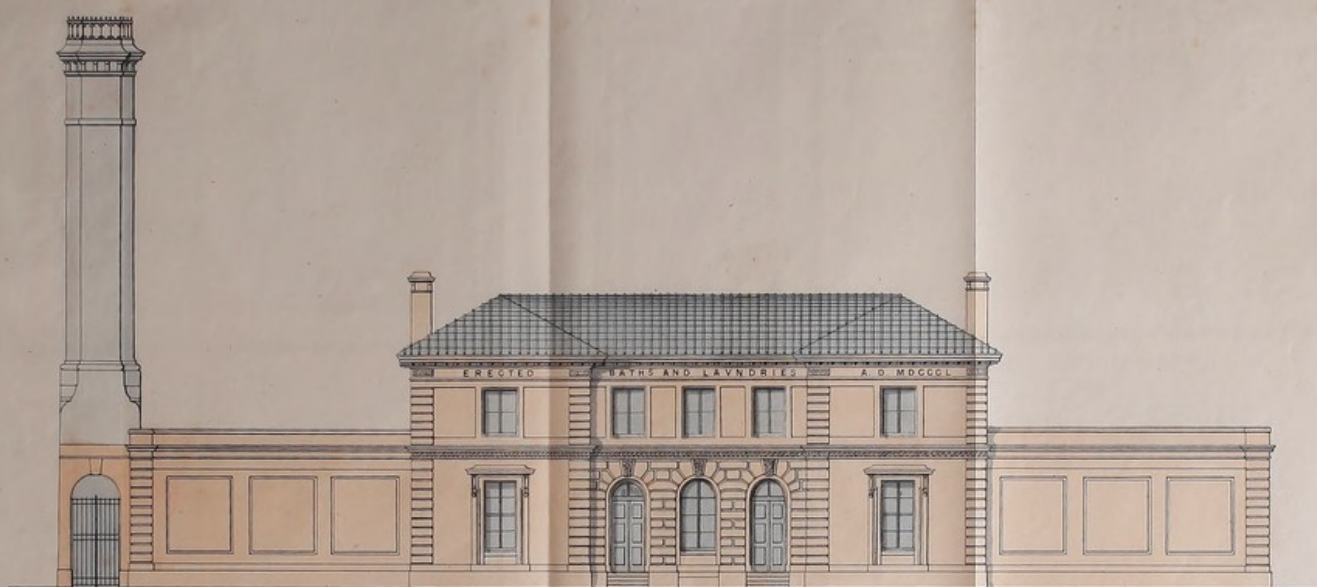
PRINTED BY T. BRETTELL, RUPERT STREET, HAYMARKET.



Plan of an Establishment to cost £ 8500.

PLATE I.



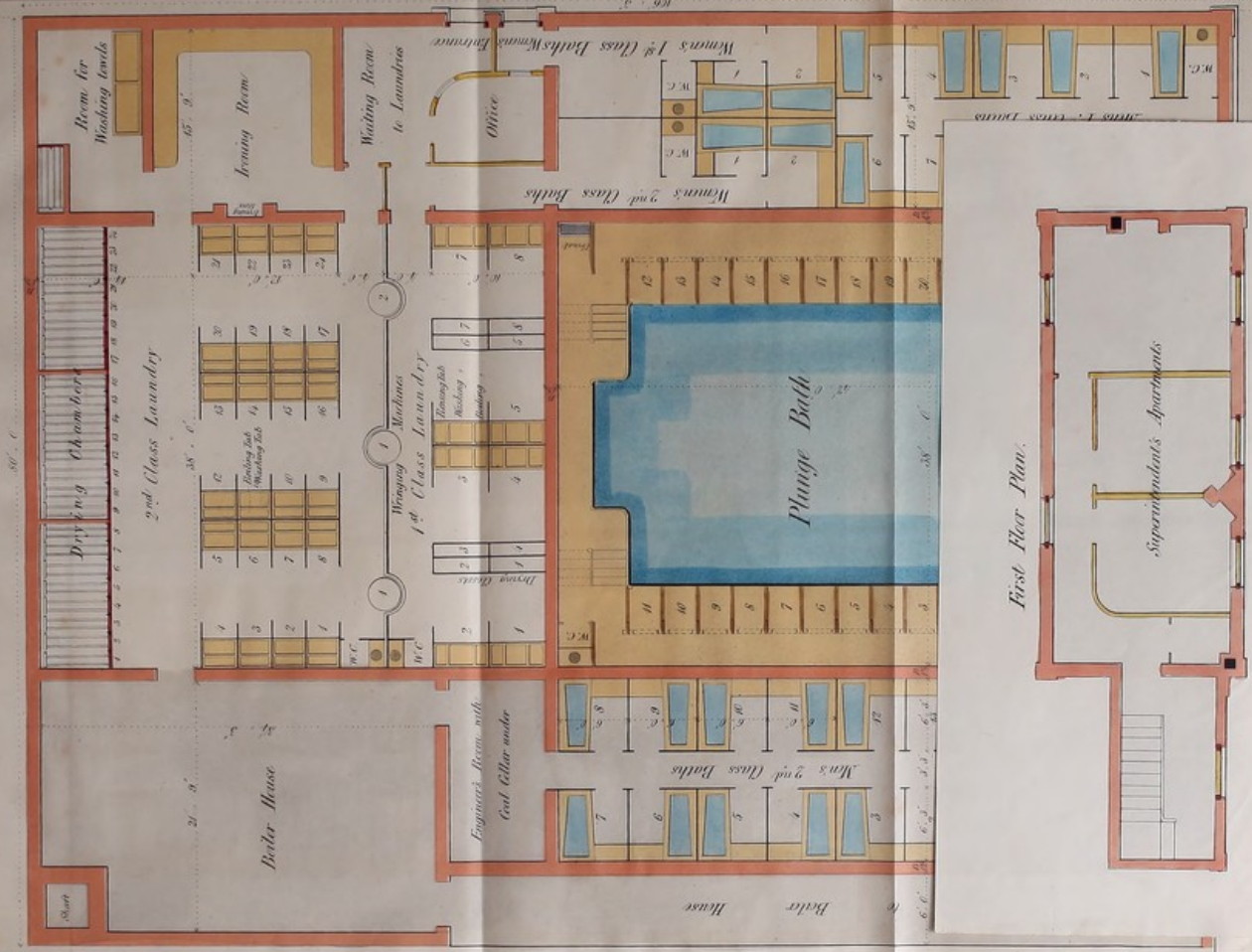


The Bristol, 18th Report of the Mayor.

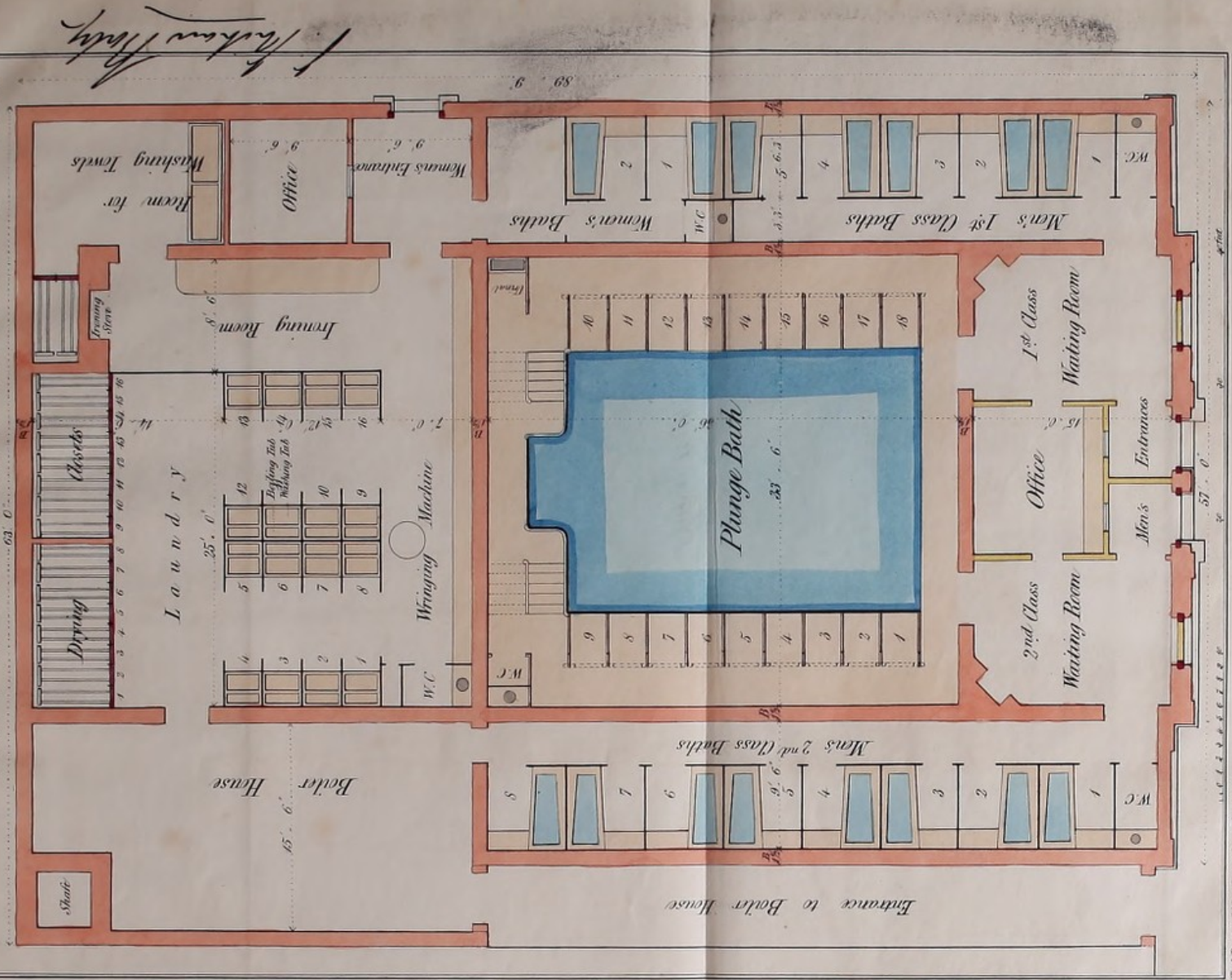
ELEVATION OF AN ESTABLISHMENT
ADAPTED TO PLAN N° 1.

J. Richard Haly

Plan of an Establishment to Cost £4000.



First Floor Plan.



J. Barker & Co.

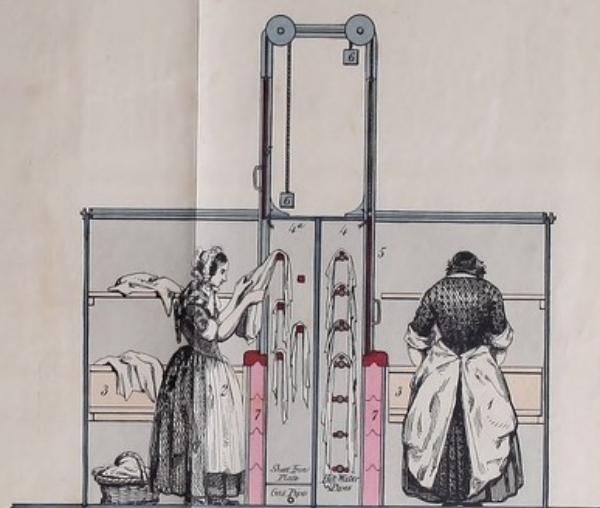
Drawing shewing the Arrangement of a Washing and Drying Compartment with Women at work.

- | | |
|--|--|
| 1. Woman Washing. | 5. Slide Door to enclose the Chamber. |
| 2. Woman hanging up her Linen. | 6. Balance Weights for Slide Doors. |
| 3. Wash and Berling Tub. | 7. Hollow Bricks to confine the heat in the Chamber. |
| 4. } Drying Chamber heated by Hot Water. | |
| 4a. } Drying Chamber heated by Gas. | |



Thos. Bramwell, Ladbroke Square, Street, Westminster.

Scale of inches 0 1 2 3 4 5 6 7 8 9 10 Feet



J. Richard Moly

Examination of the ...

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Le 892

