Terms of contract and specification for the erection of the Royal Victoria Hospital at Netley, issued by the War Office

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N.B.—*Tenders will be received at the War Department, Pall Mall, London, on Tuesday the 30th of September*, 1856.

The War Department reserve to themselves the right of rejecting the whole or any of the Tenders.

No notice will be taken of any Tender, unless upon the subjoined printed form.

War Department, Pall Mall,
1st September, 1856.

TERMS OF CONTRACT

AND

SPECIFICATION

FOR THE ERECTION

OF

THE ROYAL VICTORIA HOSPITAL

AT

NETLEY,

IN THE PARISH OF HOUND, IN THE COUNTY OF HANTS.

LONDON:
PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1856.

Mr. H. Hayward. RMC/52C
Supt Works.
R.V. Hospital Valley.

Demolition commenced Oct 66

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A Contract having been made for the excavations for the foundations, sewers, drains, and plinth, as well as the brickwork for the footings, the sewers, and the pipes for the drains,—

This Contract will include all the buildings, yards, and enclosure walls, according to the plans included in the following List, and described in this Specification.

List of Plans, Drawings, and Working Drawings, prepared for the Royal Victoria Hospital Netley.

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„ 3. First floor plan of do.
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TERMS OF CONTRACT.

1. The person whose Tender may be accepted is to enter into a Bond, with two eligible securities, jointly and separately to be bound under a penalty of Ten thousand Pounds for the performance of this Contract, according to the following terms, and for the due performance and completion of this Contract within two years of the date of the order to commence being given, under a penalty of Two hundred Pounds for every day beyond the prescribed time for the works being finished. Bond.

2. One half of the expense of the stamp duty on the Contract and Bond to be paid by the Contractor. Stamp duty.

3. This Contract is to include all and every kind of labour and materials whatsoever, and of every description of artificers' work required to be done in erecting and completely finishing for occupation the said Royal Victoria Military Hospital, chapel, offices, and outbuildings, fence walls, appendages, appurtenances, and all contingencies complete. The said works are to be executed in perfect accordance with the Specification hereto annexed, its conditions, and the drawings therein referred to, together with such other detail drawings and particulars as may hereafter be provided by the Superintending Officers of the War Department, under whose direction and to whose satisfaction the whole of the works are to be performed. Labour and Materials.

4. The Contractor is to perform all and singular, to the entire satisfaction of the Officers of the War Department having the superintendence of the works, the several works according to the drawings made for the purpose, and also according to such other detail designs, drawings, specifications, regulations, and instructions as shall from time to time be given by the Superintending Officer, in the most substantial and workmanlike manner, and shall and will do, execute, and provide, not only all the work, implements, and materials, and labour and things, described and specified in the Specification, the working drawings and details, &c., but likewise all such other works, materials, implements, &c. as are necessarily implied or may be reasonably inferred in or from the same, although the same may not be therein expressly mentioned, shown, or contained; and in case it shall happen that any part of the said works which are delineated and described upon the said drawings shall be omitted in the Specification, or vice versâ, the Contractor is well and truly to perform, execute, and perfect, with sound and good materials of every kind, all and singular such works so omitted as aforesaid, as if the same had been fully expressed and described both in the said drawings and specifications correctly, it being the true intent and meaning that the works, labour, implements, materials, and things hereby contracted to be done, executed, and provided shall include all that is or shall be requisite for erecting, building, completing, and perfecting in every respect the said Military Hospital, offices, chapel, outbuildings, &c., &c. The Contractor to perform the work to the satisfaction of the Officers of the War Department.

5. Should any discrepancy be found to exist between the dimensions shown, written, figured, and set out in the drawings, and those as measured by the scales, the former shall be taken as correct, and no discrepancy whatever shall vitiate the Contract. Should there be any difference between the working drawings and the details and the explanations or figures thereon written, or between them and this Specification, the Contractor is to adopt that which may be considered by the Superintending Officers as most favourable to the strength, duration, and comeliness of the building, &c., or best adapted for the purpose required. Figured dimensions to be taken in preference to the scale, if disagreeing with each other.

6. The Contractor is to provide all materials, bricks, stone, tiles, slates, lime, sand, laths, cement, timber, ironwork, ironmongery, lead, glass, paint, or any other material or thing requisite to complete the works of every description and qualities mentioned in the Specification, together with all labour, implements, tools, tackle, scaffolding, cranes, ladders, ropes, carting, engines, machinery, utensils, pumps, weighing and proving machines, all hoards, boards, shores, Contractor to provide all materials, implements, labour, &c.

enclosings, casings, centerings, temporary sheds, clerks' office, workshops, tarpaulins, carriages, carts, barrows, planks, all requisite stumps, stakes, lines, cords, ropes, levels, squares, and instruments, with all freight, hoisting, and everything necessary of every description that may be required for the due execution and completion of the whole of the works; and no materials of any description brought to or left upon the ground by the Contractor or by his order, for the purpose of being used in or about for carrying on the works, are to be removed from the works by the Contractor or by his order, or by any person or persons whatsoever acting for him or them, or in his or their behalf, without the sanction of the Superintending Officers. All the materials brought upon the ground as aforesaid are to be considered the property of the War Department. Those not required or done with are to be removed at the completion of the works, or immediately that the Officers of the department require.

Materials not to be removed without the sanction of the Superintending Officers when brought upon the ground.

Works to be carried out as described, and not covered up.

7. The works are to be carried on in any manner, at any times, and in any quantities, as the Superintending Officer may deem necessary and direct for the general welfare of the work.

No work is to be covered up or in any way hidden before a proper inspection can be made, in which event it shall be uncovered, laid bare, and reconstructed at the Contractor's expense.

Contractor to set out the works, &c., and to find testing machines, &c.

8. The Contractor is to find all labour, rods, attendance of men and foremen, &c., for correctly setting out the works according to the drawings; and he is to make himself answerable for the perfect correctness of every part of the works; he is also to provide efficient assistance and machines, &c., with every thing necessary for the purpose of weighing, measuring, proving, and testing of all materials that may be required for the satisfaction of the Superintending Officer and his clerks of works, to ensure the stability of the work.

Copies of drawings.

9. The Contractor is, at his own expense, to provide for himself and his workmen a set of copies of all the drawings and detail drawings (a printed copy of the Specification will be furnished to the Contractor), and all other drawings and papers prepared by the Architect for his guidance in the execution of the several works, which are to be kept in some place convenient of access on the ground, the drawings to be pasted on boards, and in case they are lost or injured the Contractor is at his own expense to provide other copies. No drawing is to be considered valid unless signed by the Architect or the Superintending Officer.

No deviation without a written authority.

10. No deviations whatever are to be made from the drawings and directions herein contained, either in material or workmanship, without a written authority from the Superintending Officer; and in case any part of the work shall be altered without such authority, or shall in the opinion of the Superintending Officer be executed in a slight or unsubstantial manner, the same shall be immediately taken down or up, and shall be re-erected by the Contractor, at his or their expense.

Alterations or deviations may be made.

11. It shall be in the power of the War Department to reserve to themselves the right, and to be in their power at any time, to alter, add to, deviate from, omit, or vary any portion of the works in any manner that may appear to them desirable; and their so doing shall in no way vitiate or in any degree affect or annul the Contract; but the value of such alterations, deviations, variations, deductions, additions, or omissions shall be ascertained by measurement, and added to or deducted from the amount of the Contract, being valued at the prices specified in the Schedule attached to this Specification, subject to the percentage named by the Contractor in his Tender.

Contractor's attendance.

12. The Contractor or his foreman to attend daily on the works or at the Royal Engineer Office, at any time the Superintending Officer may require.

Reports and returns.

13. The Contractor shall furnish to the Superintending Officer by nine o'clock every morning a return of the number and description of artificers and labourers employed on the works, also a return of the quantity of each description of materials provided during the preceding day.

Office, shed, &c.

14. The Contractor is at his own expense to erect such sheds as may be required for the deposit or working of materials, as also a good and sufficient

brick-built office for the Superintending Officer and his clerks of works, with fire-places, desks, drawers, and fittings complete, and also for himself, to be open at all reasonable hours, upon such parts of the ground as may be approved of by the Superintending Officer.

Foremen and men, &c. disapproved of, &c.

15. The Contractor shall keep on the ground a competent foreman in each respective trade, to superintend the works constantly during working hours; and the Superintending Officer shall be at liberty to discharge him or them, or any man or men employed on the works, whom he shall consider unfitting by reason of incompetency, misconduct, or for any wilful neglect, who shall not in such case be again introduced upon the premises without his permission; and if the Contractor shall fail to remove such party or parties, after forty-eight hours notice for such purpose from the Superintending Officer, it shall be lawful for the said Superintending Officer to discharge such master, foreman, or workman, and to hire and employ any other person in his stead, at the expense of the said Contractor.

Suspension of work.

16. The Contractor, upon any written order from the Superintending Officer for that purpose, shall suspend any portion of the works which he may direct, and shall provide for effectually securing and covering the several walls, &c., as occasion may require.

The Contractor to be answerable for any accidents under certain circumstances.

17. The Contractor is to be answerable for any damage, accident or accidents, which may occur to any passenger, workman, person, carriage, cart, vehicle, or animal, &c., for want of proper lighting, watching, hoarding, or enclosing, or for any accident from defective scaffolding or tackle, or by reason of holes or trenches dug and left unfenced, or by materials being placed in improper situations, and the like, and he shall and will make good the same at his own cost and charge, holding in all such cases the War Department harmless.

Care of works. All damage and injury whatever to be made good.

18. From the commencement up to the actual completion of the works, the entire care and charge of the same, and of all things whatever appertaining thereto, is to be with the Contractor solely. The War Department will not be liable or accountable for any thing that may be stolen, injured, damaged, or destroyed by fire, from storms, floods, or otherwise.

Watchman or keeper to be kept on the premises.

19. A watchman or keeper is to be stationed on the premises until the completion of the works, at the expense of the Contractor, for the safe-keeping of all the materials or implements on the works; and if any damage or loss should happen to any of the said works, materials, or implements, either from the inclemency of the weather, the want of sufficient protection in shoring or supporting efficiently, from accidents, spoliation, fire, carelessness, bad labour, casualty, or for any cause whatever, during the progress of the works, the same shall from time to time, with as little delay as possible, be made good effectually by the Contractor. He will be held responsible to leave every part in a clean and perfect state, and to make good whatever is imperfect, or any thing which may have been destroyed, affected, defaced, or injured from any cause during the progress of the works, at his own sole cost and expense, without any charge of any kind thence arising or becoming due, except the amount of the consideration of the Contract.

Materials and workmanship to be of the best description; if otherwise, to be rejected, and reconstructed and made good at the Contractor's expense.

20. All the materials and labour used are to be the best of their respective kinds, and strictly in accordance with the directions herein-after contained, sufficient and proper. The materials are in all cases to be counted, weighed, proved, and tested before use, as the cases may be, to secure their perfect stability and sufficiency (whenever required by the Superintending Officer). The workmanship to be executed in the most sound, satisfactory, efficient, and substantial manner; and the Superintending Officers shall at all times have the power of ordering the removal of any materials used, proposed or intended to be used, or brought upon the ground, which appear to them to be unsound, imperfect, insufficient, or improper, or of inferior quality or description, or to order the pulling down and reinstatement or reconstruction of any work that may in their judgment be performed in an unworkmanlike, unskilful, or unsatisfactory manner, or not in accordance with the drawings and directions given, or either of them; and the Contractor shall proceed to remove such inferior, imperfect, or improper materials, or reinstate, reform, rectify, or

reconstruct such defective or unsatisfactory workmanship, or work improperly performed, as the case may require, at his own proper cost and charge, within three days after a written notice given to him or his foreman for that purpose, signed by the Superintending Officer or the clerk of works in his absence.

Failing to do so, how the workmanship, materials, &c. are to be dealt with.

21. Should the Contractor after such specified time refuse, delay, or neglect to take back or remove any materials or articles so reported unsound, of bad quality, or not agreeable to the terms of the Contract, and to provide immediately suitable materials in lieu of those condemned, or to comply with the requirements of such notice, according to its purport, then the War Department shall have the power and be at liberty forthwith to reject and remove the same from the premises, at the expense and risk of the Contractor; and the Superintending Officer shall in such case be at liberty forthwith to alter and pull down and reinstate all unsound and unsatisfactory work, and cause the removal of all defective materials, by any other workman, tradesman, person or persons that he may consider fit to employ to perform the work and supply proper materials, the Contractor or his sureties paying every expense that may be incurred thereby, the expense thereby incurred to be deducted from any sums due to the Contractor from the War Department, or he may be called on by the said department to pay the amount of such extra expenses to such persons as they may appoint to receive the same; and in case the Contractor shall refuse to do so, then he shall forfeit his Bond.

Expenses to be deducted.

In case of insolvency or delay, &c. on the part of the Contractor these presents, at the option of the War Department, to become void, &c., and the materials, &c. to become their property.

Contractor in such case not to molest or hinder.

22. In case the Contractor shall become insolvent or bankrupt at any time, or shall, before the full completion of the works, matters, or things, be prevented or delayed by any cause whatever, or shall improperly delay or refuse to proceed with the execution of the works contracted for or undertaken by him, or shall not proceed therein to the entire satisfaction of the Officers of the War Department, it shall be lawful for them, after having given him seven days' notice in writing, signed by the Superintending Officer for the War Department, of his or their intention so to do, to dismiss the Contractor, and to employ any other builder, workman, or person or persons to proceed with the works, and to complete the same, either by contract, measure, and value, day work, or otherwise, at the expense of the Contractor or his sureties, and the value thereof shall be retained or deducted out of the monies due or remaining to be paid to the said Contractor, who shall also be answerable, as well as his sureties, to the full extent of cost, over and above the said monies, the same being recovered as and for breach of Contract, the amount of which shall be valued and decided by sworn surveyors appointed by the War Department; and on the expiration of the said notice the Contract shall, at the option of the Secretary of State for War, become void as to the said Contractor, but without prejudice to any right of action in the said Secretary of State for War which the Contractor may be subject unto for any voluntary neglect in not proceeding with the said work, pursuant to his Contract; and the amount already paid to the Contractor by the War Department shall be considered the full value of the works executed by him up to the time when such notice shall have expired, and no further claim whatever shall be made by the Contractor, under these presents, for contract works or additional works which may have been done by him up to that time, and the materials, whether prepared or unprepared, and all scaffolding, implements, and machinery which may at that time be on the premises, shall become the property of the said War Department, without further payment for the same; and the Contractor shall not in any manner hinder or molest the said War Department or the persons employed by them in proceeding with and completing the works, and using such materials and implements as aforesaid.

In case of death.

23. In the event of the death of the said Contractor before the matters and things herein undertaken by him shall be fully performed, his sureties, his executors or administrators, shall perform the same, and shall be understood and deemed to be in his stead, the giving to or leaving at the usual or last place of abode of the Contractor, his sureties, executors or administrators, or giving to his or their foreman or superintendent of the works, of any notices, instructions, or drawings to be given, furnished under the Contract, shall be deemed good service or delivery thereof to the Contractor, his sureties, executors or administrators.

Award of the Commanding Royal Engineer in all cases having reference to the works, &c. to be conclusive.

24. If any doubt or doubts should arise with respect to the value or amount of works executed or omitted, as to their state and condition, and having regard to any and every question that may arise concerning the materials or execution of the works contracted for, the interpretation and meaning of the drawings and of these presents, and of the Specification of the works hereunto annexed, or of any other matter or thing whatsoever having reference to the works, during their execution or afterwards, at the arrangements of the accounts or otherwise, the same shall be judged, determined, and adjusted solely by the Commanding Royal Engineer, without reference to any other person; it being the intention of these conditions that all works, &c. of every kind that may be necessary for completely finishing the works proposed, for the rectification of any failure, from whatever cause arising, and the well maintaining, sustaining, and supporting the whole of the works, as well as the alterations and additions, deviations, omissions, &c., should any such be made, so that the whole may be sound and firm, comely and convenient, finished and complete, are implied in the specifications and drawings referred to, although the same may not therein be specially expressed, and that on these as well as on all other matters and things having relation to the works no reference to any other person than the aforesaid Commanding Royal Engineer is to be allowed or permitted, and his award in all cases shall be final and conclusive, and without appeal.

Task-work, sub-contracts, &c.

25. No part of the work is to be let out as task-work to journeymen or task-masters, nor shall any sub-contract be made, otherwise than with one master workman of each respective trade, to be approved of in writing by the Commanding Royal Engineer, to whom the Contractor is to be responsible or accountable for the due performance of the whole of the work contracted for by him.

Commencement and completion of works, under a penalty in default.

Extra time for additional works.

26. The works are to be commenced weeks after signing the Contract, and the whole of the said works, all and singular as shown in the drawings and mentioned in the specifications forming part of these conditions annexed, or by them or either of them implied, or to be reasonably inferred from them, and other such working and explanatory drawings and instructions as may from time to time be furnished by the Superintending Officer, are all to be finished and completed, and the buildings and all appertaining delivered up fit for use and the reception of inmates, and the premises generally clear of all scaffolding and rubbish and other impediments, by or within the period of two years from the time of commencement, in the best, most effective, substantial, and workmanlike manner, to the entire satisfaction of the Officers of the War Department, to be testified by a writing or certificate under their hand. The time must be rigidly adhered to, and a sufficient force of men and quantity of materials must be provided to effect this object; and in default of such finishing and delivering up as aforesaid the Contractor is to forfeit the sum of Two hundred Pounds per day for as long as the same shall be incomplete or unsatisfactory after the above-named time. This condition is not to be void or the Contract invalidated by the introduction of additional works, but one week will be allowed for every Three hundred Pounds' (300*l.*) worth of work, or so much longer as the Officers of the War Department shall consider reasonable and determine. In case of such default, the forfeits to be deducted out of the next payment which may be due to him under his Contract. But such period of time as the works may be suspended by the written order of the Superintending Officer, by reason of unfavourable weather or other causes, is to be fairly allowed for, and the time during which such interruption shall have continued is to be added to the aforesaid scale of completion.

Roads.

27. Should the Contractor require any roads in addition to those already existing, leave will be granted him to form and maintain the same, at his own expense, on application in writing being made to the Superintending Officer, provided no objection appears; but, if required, they shall, on the completion of his Contract, be removed, and the ground restored to its former state, at his expense.

Inspections.

28. The Commanding Royal Engineer, or any person deputed by him, shall at all times be allowed to inspect the works in progress, whether on the premises of the War Department or those of the Contractor, and to make use of all roads, whether made or maintained at the Contractor's expense.

Contract and mode of payment.

29. The Contract is to be entered into with the Principal Secretary of State for War, and to be tendered for in one sum. And the said Secretary of State for War will covenant with the Contractor, his executors and administrators, to well and truly pay or cause to be paid to the said Contractor, his heirs, executors, administrators, and assigns, the price agreed upon for the stipulated works, as shown in the drawings and described in the specification, &c., at and after the rate of 80 per cent., upon all works actually done and fixed in their proper place or situation, and also upon all extra works that may occur, in periods of not less than two months for such works as may be judged by the Officers of the War Department superintending the work fair and proper, and to be valued by them and certified under their hands to be performed to their satisfaction.

The reserved 20 per cent. is to accumulate until it amounts to the sum of 10,000*l.*, but all payments due for the works beyond this sum will be paid in full on the certificates of the Superintending Officers. 50 per cent. of the reserved 10,000*l.* to be paid six months after the certificate of the entire completion, and the remaining 50 per cent. to be paid at the end of 12 months, but not until the Superintending Officers have certified that all the works have been completed to their full and entire satisfaction, and all defects or unauthorized deviations, if any, have been rectified.

All alterations, additions, or omissions made by order of the War Department and under the written instructions of the Superintending Officer to be subject to the same conditions of payment detailed in this article for the principal works.

On payment, to overlook the works and make good.

30. At the payment of the balance all the works must be carefully overlooked, and all failures, blemishes, and imperfections appearing (reasonably accruing to the contract works) must be rectified by the Contractor, at his expense, so as to leave all in a perfect and finished state to the entire satisfaction of the Officers of the War Department in charge of the works. The payment of such balances is not, however, to exonerate the Contractor from any liability on account of not having well and sufficiently performed all works contracted for by him; but all settlements, defects, shrinkages, and imperfections which may be subsequently found in the works, attributable to bad workmanship, or the use of bad materials, must be rectified and made good by the Contractor, at his own expense, and this must be done notwithstanding the certifying Officers may have certified that the works may have been completed to their satisfaction; and if either before or after the Contractor shall have received from the War Department any payment on account of the works it shall appear that they are not performed according to the terms of this Contract, it shall be lawful for the War Department to institute any action or suit against the said Contractor for the damage sustained by them in consequence of such nonperformance; and the certificate shall not be pleadable in bar thereto. The War Department are also hereby empowered to employ other person or persons to make good and amend such works, defective, imperfect, or improperly performed, should the Contractor refuse or neglect to rectify the same after a week's notice in writing from the Officers of the Department, and to recover the cost thereof from the Contractor as and for liquidated damages.

Payments to be made.

31. Payment will be made direct to the Contractor, and not to an agent or attorney, by bills of exchange, to be drawn upon Her Majesty's Paymaster General, at seven days' sight, which bills, however, must not be drawn until advice shall have been despatched from the office of the Accountant General of the War Department, authorizing the Contractor or party so to draw, and which authority will be despatched within 16 days from the receipt in that office of the certificate from the station at which articles were delivered or the work performed, showing the receipt of such articles, and the due performance of such work according to the terms and conditions of this Contract, or within 16 days after the removal of objections, if any, which may arise thereon. Should, however, the Officers of the War Department superintending the works deem it necessary to withhold their certificates, they are hereby empowered to do so.

SPECIFICATION.

32. Perform all digging and ground work in and about every part of the works, to the several required proper and sufficient lengths, breadths, and depths, &c., for all removals of surface earth, for all additional foundations, sewers, drains, drain-pipes, cesspools, ha-has, slopes, traps, trenches, tanks, wells, vacancies under-floors, certain levellings, terraces, making up and filling in of hollows, &c., and the removal of ground work generally, and levelling where the several buildings, works, yards, courts, &c., require for the well-being and perfection of the whole, and also for all other works which require the ground to be excavated, levelled, removed, made up, or filled in, &c., to the lengths, breadths, and depths shown in the drawings given and to be given, or described, necessary, or may be required; the ground in all situations required to be properly levelled and rammed down, if necessary, for all concrete, footings, drains, &c., the ground afterwards to be filled in with dry earth properly rammed and beaten down to such levels as may be directed, and around the tanks, cesspools, &c., great care must be taken not to injure the drains. This provision is for services that may be required in addition to those at present under construction for excavations for foundations, sewers, drains, drain-pipes, cesspools, &c., &c. The earth and rubbish arising from the levellings and excavations, and the removal of the ground work generally as required, in addition to that already contracted for in carrying out the several works as shewn in the drawings, and detailed in this Specification, is to be placed in such situations on the ground as required to be raised or levelled, or to fill in the hollows or variations of levels about the buildings, to form the various levels of the roads, yards, &c., and to be placed around the outside of the building, &c., as may be directed by the Superintending Officer, and all other parts that require to be raised, sloped, or levelled.

Digging and filling in, and levelling, &c.

Remove earth, &c. as required.

33. The yards in the rear of wing buildings and around the bath building in centre to be covered with a four-inch coating of broken granite stone, of not more than $1\frac{1}{2}$ cubic inches in each stone, properly rammed down and consolidated, with four inches of gravel thereon well rolled, and to be left in every respect perfect and complete. Any superfluous rubbish that may accumulate is to be cleared and carted away, or to be laid on such portions of the estate as may be directed, and at the completion of the works leave the premises perfectly clean and clear.

Yards.

34. The paths and roadways of the garden in the rear of centre building to be formed as described for the yards in the rear of wing buildings. The whole surface of the garden, except the paths and roadways, to be properly formed and levelled, and covered with good vegetable soil, to be provided by the Contractor, for two feet in depth.

Paths and Roadways.

Garden.

35. The formation of the yards, roads, pathways, and garden to be executed at such time as may be directed by the Superintending Officer.

Time of Formation.

BRICKLAYER.

36. Execute in the best manner possible all the brickwork, which is to be built with the best hard, sound, well-burnt, and square stock bricks; no soft, place, or inferior bricks to be used.

Brickwork.

Bricks.

37. The bricks to be equal to samples, which may be seen at the Surveyor's Office, War Department, Pall Mall.

Colors indicating brick or stone.

38. All walls and other parts of the elevations, &c. which are tinted red, to be built of brick, except the plinths, quoins, columns, pilasters, dressings of doors and windows, cornices string courses, consols, trusses, and other stone work, as shown in the drawings, which are to be all of the best Portland stone. The facing bricks to be of the best quality, as hereafter described; the fire-bricks selected of the very best description, and must be subjected to such test as the Superintending Officer may direct, at the Contractor's expense, prior to being used; the same precaution must be taken in reference to the fire-clay for setting these bricks.

Bricks to be watered.

39. The bricks in course of being used, as well as the brickwork in course of erection, shall, in the event of dry weather, be well watered at the Contractor's expense, when and as often as the Clerks of Works or Superintending Officer may deem necessary for the stability of the work.

Bond.

40. The brickwork to be carried up according to such bond as may be ordered by the Superintending Officer, and false headers are never to be used, except permission in writing of the said Superintending Officer be previously obtained. The bricks are to be uniform in size, none of them to exceed in size the common brick. The bricks to be selected of uniform colour, size, and shape, for external faces, and finished with a neat flat joint, and jointed; no joint to exceed one-third of an inch in thickness; to be worked fair inside, and flat pointed, where whitewashing is to take place, and rough drawn as a key for plastering; every alternate course of the work is to be thoroughly grouted with liquid mortar.

Lime and sand.

41. The lime to be used is to be the best Petersfield grey lime, or other equally good stone lime, supplied from kilns erected on the spot; it is to be used as fresh as possible, kept closely covered before used, and made into mortar, with such clean sharp water, river, or pit sand, free from saline particles, as the Superintending Officer may approve, free from all earthy and vegetable matter, thoroughly screened and washed, if considered necessary by the Superintending Officer, in the proportion of one-third of lime and two-thirds of sand, or in such other proportions as may from time to time be directed by the Superintending Officer, thoroughly compounded and mixed in pug mills, and made up in quantities only sufficient for immediate consumption; the water to be used for this purpose must be pure fresh, and free from all loam, saline particles, clay, or vegetable matter.

Blue Lias lime.

42. Blue lias lime to be burnt on the premises may, at the option of the Superintending Officer, be used for the brickwork, where considered necessary and advisable.

To provide measures.

43. The Contractor is to provide such measures as the Superintending Officer may direct for ascertaining the proportions of the materials used, and to keep the same on the ground for the use of the Clerk of the Works.

Grout.

44. The grout to be in the same proportions as and of the same materials as the mortar, mixed up as wanted in large tubs, and only used by pouring into the works from buckets with ladles whilst hot, taking care that none is to appear on the exterior face of the walls.

Cement.

45. The Roman or other cements to be obtained from such manufacturers as the Superintending Officer may approve, and they are to be of the best quality, to be used fresh, with perfectly clean washed sharp sand in equal quantities, except for linings of tanks, which are described to be in pure cement; there is not to be less than thirty-six bushels of cement to every rod of brickwork; no cement is on any account to be

used after it is set, or begun to set; in either case, the contractor is to remove this cement from off the works.

Concrete.

46. The concrete to be composed of perfectly clean gravel or ballast, free from loam, clay, vegetable, or other foreign substance or matters, with the proper proportion of sand and small stones, and unslaked, ground fresh blue lias lime, or other approved fresh well burnt finely ground stone lime, Dorking or other, in the proportion of seven parts of gravel to one of lime measured dry, well compounded as described for the mortar, brought to a proper consistency, mixed just before and as it is required for the works, thrown into its place while hot, shot and distributed in even surfaces from a height of not less than eight feet from the level of the concrete as required direct into its place, the runs being shifted for that purpose, to be well saturated with water in layers not exceeding twelve inches in each layer, to be completed and brought to a level before another layer is commenced.

Courses, &c.

47. No four courses of brickwork are to exceed in height more than 1 inch, exclusive of the height of the bricks when laid dry; and no vertical joint to exceed quarter of an inch in thickness; no header of the facework to be cut off excepting where it may be indispensable for good bond; and every joint to be fully flushed with mortar the whole breadth of the walls.

Brickwork to be carried up regularly.

48. The brickwork must be carried up regularly, and no part left more than 3 feet above any other parts; to be truly levelled every 7 feet in height.

Backing in brickwork at stone plinth to out buildings, including kitchen blocks.

49. The backing of the stone plinth, where not carried through the whole thickness of the walls, is to be built in cement, according to article 45; the 3 feet of brickwork to finish at the exact height of the stone plinth.

Thickness of walls.

50. All the exterior walls, as figured on the ground-floor plans, are to go upwards in one thickness from the top of the plinth to the wall plate of the first floor, the exterior walls of the first and second floor plans are to go upwards in one thickness from the first floor line to the underside of the roofs, and all the interior walls from the ground floor line to their whole height are to be in one thickness as figured on ground plan, except in the centre building, which are to be executed as figured on the several plans.

Brickwork to be well bonded to stone dressings.

51. The brick and stone work to be well bonded together, great care being taken to preserve the solidity and substantiality of the work.

Apertures, cut-holes, chase, &c.

52. Leave apertures in the walls for doors, windows, and chimney openings, and apertures for ventilators, wherever shown, described or directed, with all other apertures required, and to leave chases wherever required for the rain, soil, and waterpipes, cut and form in a workmanlike manner mortices and rail holes, also chase and groove and point with cement where necessary for asphalte fillets, lead dressings, &c., &c.

Temporary Openings.

53. Leave temporary openings in such walls and situations as may be directed for getting in boilers and apparatus, &c., and make good the same when required.

Air bricks.

54. Provide and build in air bricks 9″ × 3″, for ventilation to floor timbers, &c., and form flues through walls for same, as may be directed to the number of 738; also 6 air bricks 12″ × 12″ to the walls of desiccating rooms.

Point after work.

55. Any brickwork that may be affected by the frost, to be pointed in spring succeeding the certificate of the completion of the buildings.

Grouting. 56. The whole of the brickwork is to be flushed quite full with mortar at every course, and grouted at every alternate course if directed by the Superintending Officer, care to be taken not to stain any of the facings.

Exterior facings. 57. The whole of the exterior facings from the level of the plinth, together with the chimney shafts, dome, the campaniles, and all appurtenances in connection, and the boundary wall, &c. are to be built and faced with the best hard, and square kiln wood, burnt red stock bricks, to be picked and of a clear uniform colour and size, according to a sample which may be seen at the Surveyor's Office, War Department, Pall Mall, and of such dimensions as to keep a regular course to bond in with the general stock brickwork.

Bond.

Courses. 58. The interior walls to be built in English bond, the others to be laid in the manner of Flemish bond, with all the heading bricks carried into the work wherever possible; the courses are to be laid truly level, and all the joints answering to each other are to be straight, and the perpendicular or vertical joints are to range alternately one under the other as the case may be.

Point. 59. All brickwork is to be well bedded in mortar or cement, and flushed up at all the joints; the facings are to be carried up in the rough and pointed when directed at the end in the most careful manner, with a neat flat joint, and jointed.

Flues or channels in the walls for ventilation. 60. The flues or channels in the walls for ventilation, which necessarily form part of the building, are to be constructed in the most careful manner, of such dimensions as are figured on the drawings, or as may be directed during the progress of the work; they are to be of 4 inch tubular glazed pipes, built close in with the 12 inch tubular glazed smoke flues, as shown in the drawing.

Setting stoves and ranges. 61. To set all the stoves, ranges, and coppers with stock bricks set in mortar.

Set boilers, &c. 62. The contractor to execute proper foundations in stone and brick work for the two steam-engines as will be directed, and for this purpose must include the sum of 50*l*. The contractor also to provide all materials for setting boiler and desiccating apparatus.

Boundary walls. 63. The fence or boundary walls are to be according to the drawings, 14 inches thick, faced and pointed on both sides to match the other work, with stone plinth and capping as shown. The gate piers to be of brick, with Portland stone capping as shewn in drawings.

Neat flat joint and color or limewhite.

Clean off. 64. The joints of all the work, and of such of the rooms, stores, or cellars not intended or described to have the walls rendered, are to have a neat flat joint, and to be twice coloured or lime-whited, as may be directed, all inequalities of surface in unplastered walls to be rubbed smooth. Clean off all soffits of cement and mortar arches which are intended to be coloured or limewhited immediately the centering is struck, and whilst the mortar is soft.

Bed in mortar and cement. 65. Bed in mortar or cement all plates, door cases, door and window frames, wood bricks, bond timber, lintels, templates, girders, and all timbers, stone, iron, or whatever else may so require, set, bed, and back out all the stonework in door and window openings, the dressings to windows, archivolts, key stones, entablatures, cornices, angle quoins, bases and chimney caps, columns, and pilasters, &c. &c.

Rough and axed arches over door and window and other openings. 66. Turn brick arches 14 inches deep, rising 1½ inch in each foot, in half Roman cement, and sharp river or pit sand and fresh water, to be turned over all door, window, and other openings, where required and ordered, within the exact thickness of the stone dressings from the

external face of the wall, with proper cut skewbacks. The whole of the internal openings to be the whole thickness of the respective walls, turned with three half-brick rings, with proper skewbacks, &c.

67. Turn discharging and relieving arches over all openings, and wherever directed or required for the security of the work, the segments to be neatly filled up and cut to backs; the skewbacks to be accurately formed, and render smooth the backs. **Relieving arches.**

68. Turn brick groin arches in cement to principal entrance porticos of wings 1 brick thick, as shown in the drawings, with the groin points or arrises accurately cut, and fill in over the arches with concrete; the whole of the vaulting is to be completely grouted in a solid manner with liquid mortar, and when the centering is removed, the whole of the soffits are to be plastered, with large bead at the groin points, and painted 4 oils. **Groin arches, porticos.**

69. The arches over the passage of communication between the wing and centre building to be also groined and turned in cement, and the spandrills filled up with concrete. **Arches over passages, &c.**

70. The arch over desiccating room to be one brick thick in mortar carried by iron girders. **Arches of desiccating room.**

71. To put to all the external openings throughout the back of the hospital buildings, and also where shown in elevations, and to the whole of the openings to the offices and buildings in the yard, arches according to the drawings, formed of red bricks cut and rubbed to suit the respective openings, and dressed neatly. The exterior soffits of arches over the openings not to rise more than half an inch on face, except the semi-circular headed openings. The skewbacks to batter $4\frac{3}{4}$ inches, to form abutments for arches. They are to fit in an accurate manner, to be properly and closely set, and afterwards the joints to be raked out, and the pointing to be finished like the brickwork in connexion. **Arches to doors and windows external.**

72. Cut all splays and turn arches in two half rims over the chimney openings (where required) on wrought iron chimney bars. **Chimney arches.**

73. Raise the chimney shafts and ventilating towers, as shown by the drawings, as required, and properly turn all the flues; carefully gather the same over, where required, or build in such a manner as to be most favourable for good draught, and carefully work to the forms shown, or as may be directed; all flanges, cappings, &c., to be in cement; the flues to be of the several dimensions figured on the drawings. **Chimney stacks and ventilating Towers.**

74. All the smoke flues, except boiler flue, to have tubular glazed socket pipes 12 inch clear diameter, with proper bend pieces, &c. **Flues.**

75. The flue from boiler to be fixed in basement story of centre tower to be carried into the chimney shaft in Purveyor's Office, as shown by dotted lines in the ground plan. This flue to be 24″ × 24″ in the clear, of 9-inch brickwork (the top being arched), and is to be carried up with and finished the same as other flues. Corbel out with Purbeck stone, where necessary, for projecting chimney breasts. There are to be two similar flues, from boilers in wing buildings, carried under central staircase into the projection for lifts, as shown on drawings. **Flues to boilers.**

76. Chimney shafts to outbuildings, and also to one-story offices each side of kitchens, to have brick cappings and splayed brick plinth. **Chimneys of outbuildings.**

77. Put to each of the fireplaces on the ground floor fenders of nine-inch brickwork, where the same can be properly applied to support the slabs, and of such heights as the profile of the ground may require; and **Fenders, trimmers.**

tor this work, and for the sleeper walls, include 5 rods brickwork, and put to all the other fireplaces proper brick trimmers, to be 18 inches longer than the clear width of the respective openings, and 18 inches wide.

Pits to latrines.

78. Build the pits for privies, as shown on drawing No. 54, with brickwork in pure cement, and render the same with pure cement.

Setting hearths.

79. To bed all hearths solid in mortar at front of all chimney openings and back hearths to all the fireplaces throughout the building (where required). All to be level with the floors on the top side.

Walls, shafts, &c. of swimming baths.

80. The walls of the bath to be constructed of the thicknesses as shown in the drawings, and to be 5 feet deep up to the level of the ground floors at the shallowest part (at one end), and to have a fall of 3 feet, to be built in brickwork in Portland cement, as described, and paved with 2 courses of tiles bedded in cement on a foundation of puddled clay and concrete, as shown on drawing No. 40. The sides and ends to be lined with blue and white pattern porcelaine tiles, bedded and jointed with hydraulic cement, with bordered top, and proper perforated tiles for the supply, waste, and overflow. The tiles to be made by Singer and Green, of Lambeth. Build small shafts next the wall of swimming bath for access to the cocks on supply, waste, and overflow pipes, &c.; render the inside with cement.

Foundations to Baths.

81. Build brick foundations under the slate divisions in bath-houses of centre block as shown on drawings.

Water tanks.

81½. Construct two tanks where directed in yards behind wing buildings, 20 feet long and 10 feet wide in clear; the walls round to have two double course of footings, and to be 12 ft. 9 in. high on the average above the footings. The arches to be 1½ brick thick, turned, on strong centres, and leave man-holes in centre 30 inches diameter, with brickwork carried up to receive stone curbs. Build inverts across as shown, and pave the bottoms with brick, an edge in cement on concrete 12 inches thick. Similar concrete to be filled in over arches. The man-holes to have 4 inch Purbeck stone covers 3 feet square, with iron rings for lifting same, let in and run with lead, with rebated Purbeck stone curb 8″ × 8″. All the brickwork to be built with roman cement. The paving at bottom to be covered with Seysell asphalte ⅝ inch thick, covering the inverts, and with skirting round the walls 14 inches high. The remainder of the face of the brickwork inside the tank, as well as the arch, to be covered with roman cement, mixed in the proportion of two of cement to one of sand.

Cut and rub.

82. Cut and rub all requisite splays and skewbacks, ramps, chamfers, &c.; form all groin work, securely pin in where required or necessary with stone tiles, slate, or iron wedges, ties, or cramps, as may be requisite, set in cement, cut out for all chasings and toothings for inletting of pipes, ventilators, &c., and perform all labour of every kind necessary to carry out the intention of the work in every respect, and corbel out for all projections in brickwork or stone for chimney breasts, support of stairs or landings, arches, or for any other purpose whatever required.

Bond courses.

83. Bond courses in cement to be built where directed by the Superintending Officer as the work proceeds, and hoop iron to be built in same, of such substance and such manner as may be directed, for which purpose include 50 rods of brickwork extra in cement and 10 tons of hoop iron.

Scaffolding, &c.

84. Provide, erect, maintain, and alter, from time to time, as occasion may require, scaffolding sufficient for the whole of the bricklayers', masons', plasterers', and carpenters' and joiners' works, and works of every kind requiring; all which scaffolding must be kept complete, with all proper poles, braces, ledges, putlocks, boards, blocks, cords, ropes, wedges, pullies, ladders, tools, tackle, and machinery, with all the other

usual requisite appurtenances of the same. The scaffolding is to be altered and enlarged as occasion may require; to remain for the use of the several artificers, and to be finally struck and removed from the premises. The carver is to have the use of the scaffolding without extra charge. The scaffolding for raising coats of arms to be strong, and to be erected when directed, and the Contractor to find tackle and assistance in lifting same. **Scaffolding, &c. for Carver.**

85. Repair, amend, and rectify all settlements, cracks, and defects which may at any time occur by reason of accidents or other cause (such as can reasonably accrue to a Contractor), not only in this trade, but in all others during the progress of the works, and during 12 calendar months after the certified completion of the same. **Reparations.**

86. The Contractor is to omit no materials or workmanship whatever which is either necessarily connected with or implied in the proper completion of all the works, as shewn in the drawings or described in the specifications. **Materials and workmanship.**

MASON.

87. All the stone is to be of the best quality, free from salt, vents, sand-holes, and other defects, as shells, cracks, &c. The strata to be the best, and all is to be subject to inspection and rejection in regard to material and workmanship if in any case it be found defective. The whole of the stone work is to be left in all respects perfect at the delivery up of the building, and the Contractor must therefore take all precautions which he may deem necessary for protection from chipping or being broken, or otherwise injured by accident, or the weather; provide good complete scaffolding, and omit no material or workmanship whatever which is necessarily connected with or implied in the proper completion of all the works as shown in the drawings or specification. **Stone.** **Protect.** **Provide all materials and workmanship.**

88. To provide and fix a Penrhyn granite-stone plinth in one course, 1ft. 6in. high, bedded 9 inches in wall, and to have 2¼in. splayed projection on face, as shown on the drawing of outbuildings, to be set on a layer of Seyssel asphalte, 3-8ths of an inch thick, already provided. No length of stone is to be less than 3 feet. The top edge to be weathered 1½ inches on the projection, to project 2½ inches from the face of the buildings; all mitres and returns to be worked out of the solid stone; all the joints of the stone are to be worked quite fairly; all the parts of the plinth, where in sight, are to be finished very neatly, in manner of broad channel tooled work. **Plinth to outbuildings.**

89. The piers and arches are to be of the best Portland stone, in acordance with article 87, rusticated, and are to be finished in the very best manner, as shown in the drawings, vermiculated according to a plaster model, to be furnished by the Contractor at his own expense, to the approbation of the Superintending Officer. The piers are to be worked out of stone in courses, alternately square on the bed, and alternately of the same length and breadth. The Contractor shall be at liberty to make each course of one stone, each stone to have two holes on the top and bottom bed for slate dowels, which are to be 1½ inches square and 3 inches long, to be bedded in fine setting mortar, neatly pointed. The imposts to be in one stone, wrought and moulded as shown in the drawing, and to be dowelled as before; the springing stone of archivolts, to be in one stone, with the archivolt worked out of the same, the remainder of the cornice to be in accordance with the drawings, plate No. 24, as shown in red lines. The key stones each to be in one stone, to be executed in accordance with the drawings, with carved heads on the front, as shewn and described on the drawings. The cornice above the piers and arches to be moulded as shewn in the drawings; fine rubbed worked to the profile, and cut out of the best solid Portland stone; to hold the full scantling, plugged and channeled with lead, with proper weatherings, throatings, and drips; none of the stones of this moulding are to be in **Piers and arches.**

length less than 3 feet, and the angular stones are to have such additional width on their beds, so as to return to the same length on the face as that in the front, about 5 feet square.

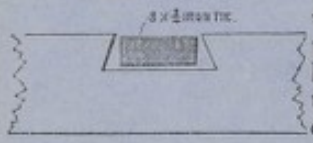
Blocking course.

90. The blocking course over the cornice to be of Portland stone of the dimensions and form as shown in the drawings, to be rubbed work over the whole of the external faces; each stone to have on the horizontal joint one slate dowel, and the vertical joints one plug of the same description and size set in cement. All mouldings and plain faces to be rubbed work. All the stones in the piers, and also in the work above the spandrels of the arches, and the cornice stones to be cramped with copper.

Bases, columns, and capitals.

91. To provide and fix bases, columns, and capitals, wrought, as shown in the drawings, out of the best Portland stone; the whole to be fine rubbed; the mouldings to be perfect, and the arrises sharp, and to be in every respect according to the profile given by the drawings, Plate No. 24. The bases and capitals are to be cut each out of one stone to finish to the dimensions figured; the shafts of the columns to be in four stones; each joint of the bases, columns, and capitals is to have a plate of 5lb. milled lead extending the whole size of the stone, except to within 1 inch of the outside thereof, and to have two slate dowels to each joint.

Facia of architrave.



92. To provide and fix to the whole three sides of the portico, Portland stone facia of the several dimensions figured on the drawings, the drops to the triglyphs, and the fillet or tenia to be worked on the same, to have proper skewbacks and joggled joints, as shewn in the drawings, and to have slate dowels of the same dimensions as before described, both in the horizontal and vertical joints. The top bed to be channelled for iron chain bar, the bar to be 3 in. × $\frac{3}{4}$-in. the channel to be $\frac{1}{4}$ of an inch wider and $\frac{1}{4}$ of an inch deeper than the full size of the iron in order that its whole surface may be covered in about $\frac{1}{8}$ of an inch thick in lead, and to undercut on each side $\frac{1}{8}$ of an inch to form key for lead, to be continued all round the back of the portico, so as to form a complete circuit.

Frieze.

93. To provide and fix an entire frieze to the whole three sides of the portico, according to the working drawings, of the best Portland stone, of the thickness shewn in the profile; the stones forming the quoins of the frieze are to be cut from solid stone, so as to show in their returns a width of 2 feet 9 inches at least. Great care must be taken to connect the architrave with the brickwork by bond stones and copper cramps.

Cornice.

94. To provide and fix to the whole three sides of the portico and to the pediment thereof, according to the working drawings, a cornice of the best Portland stone, the angle stones forming the horizontal and raking cornice to be in one stone each, as shewn by the red line on the elevation, the apex also to be in one solid stone, on a horizontal bed, forming a portion of the tympanum, as shewn in the drawings, all joints to be plugged with slate dowels, and to have copper cramps.

Tympanum.

95. The Portland ashlaring to be cut out in courses, to suit the height of 5 courses of the brickwork; the whole of the ashlaring is to be formed in the manner of and in the proportion of the Flemish bond of brickwork; thorough bond stones to be introduced, as shewn in the elevation and section, in the former by a light tint, and in the latter by a darker tint than the other portions. The bond stones are to be secured to the brickwork by bond stones and cramps; the whole of the ashlaring to be secured by slate dowels. Sufficient projection of stone to be provided for the carving as will be directed.

Pilasters.

96. To provide and fix to the porticos pilasters, according to the working drawings, with bases, shafts, and capitals, with the cornice complete, of the best Portland stone, agreeably to the figured dimensions.

Carving.

97. To execute all the ornaments, carving, and enrichments of the capitals of the columns and pilasters, and those of the soffits and mouldings of the architraves, those of the frieze, and those of the mouldings, soffit, triglyphs, &c.; the whole of the ornaments, carvings, and enrichments are to be done in the very best style, with spirit, boldness, and without blemish. Models and templates are to be made by the contractor, at his own expense, from the working drawings, to the satisfaction of the superintending officer.

Blocking course.

98. The blocking course on the pediment to receive the Royal Arms, to be worked out of three solid blocks of the best Portland stone, as shewn by the red lines; both horizontal and raking joints to be plugged with copper or gun metal plugs, 3 inches long and 2 inches square.

Royal arms.

99. The Royal Arms with its base to be in one solid block of stone of the best Portland, worked out in every respect according to the drawings, the carving and enrichments to be perfect, to be done in the very best style, with spirit, boldness, and precision, and without blemish, after models in full size, which the contractor is to have made at his own expense from the working drawings, to the satisfaction of the Officers of the War Department. This carving is to be executed by Mr. Evan Thomas, of Belgrave Place, and the cost calculated at 280*l.* P.C. The stone for arms included with the cost of carving.

Main cornice and trusses.

100. Provide Portland stone, and mould the cornice all round the buildings where not shewn of iron, and all the bed mould in all respects similar to cornice of portico, well bedded on wall; and bed mould and trusses according to detail, drawing No. 30; every stone properly plugged and cramped with copper cramps, where necessary. The trusses, as shown on elevations, to be moulded 2 feet 7 inches long, bedded on walls 1′ 2″ at the least, and made secure by dowels top and bottom. The neck moulding at foot of trusses of Portland stone to bed into wall 9 inches.

Parapet.

101. To provide and fix a Portland stone parapet, with piers and balls, as shown in the drawings, the stones not to be less than 3 feet in length between the piers, the piers to be wrought out of 2 blocks of stone, in height and plugged, the bases and balls to be in one stone each, all the joints to have slate dowels 3 inches long and 2 inches square, and the whole to be fixed in the most perfect and workmanlike manner.

Do.

102. The parapet in centre to be as described for the wings, except that it is to be open and filled in with ballusters, and finished with balls, as shown in the drawings.

Steps.

103. To provide and fix to principal entrance doorway under the portico steps of solid Purbeck stone scantling, 15″ × 6″, properly back jointed and worked all over, to have a rounded nosing and fillet, as shewn in the working drawings, and to have 3 inches lap one over another. The upper step or landing to be in breadth the full thickness of the wall.

Floor of Portico, First floor.

104. To fill in over the arches of the portico with concrete to the proper level, to receive a coating of Orsi and Armanis lava for floor, to have proper gutters and 6″ brass grates, and bell traps let into gutters, with 2″ lead down pipes into drains.

Rustic quoins.

105. To provide and fix at angles of the buildings, in a manner shown by the drawings, rustic quoins of solid Portland stone, each stone to rise 15 inches or 5 courses of bricks, and of the lengths figured on the drawings, each quoin to be in two stones, with occasional solid stones

for bond. The quoins to the projecting front to be vermiculated, and all other faces to be channelled with margin round, as shewn in drawing.

Window sills.

106. To put to all the windows, where shown in the drawings, Portland stone sills of the form and dimensions shown and figured in the working drawings. The sills of the ground floor in the front, and those of first floors in the wings, and also of those shown in the drawings on the flanks, the corridor connecting the buildings, the porches, and the church are to have blocks of Portland stone of the dimensions and shape figured and shown, the whole to be sunk, weathered, and throated, and to be tooled fair on all exposed parts.

String courses. Imposts.

107. To provide and fix to the several floors where shown in the elevations, and where directed, weathered and throated string courses of the best Portland stone, and to form the window sill to the upper story, the sills to be in one piece, the string course to bed 6 inches in the walls, and the window sill 8 inches, as shown in the drawing, no stone to be less than 2 ft. 6 in. long; to be rubbed on all exposed parts. The face of all strings to be channelled with margin round.

Circular heads to windows, imposts, archivolts, and key stones to recesses.

108. To provide and fix imposts and circular moulded heads to the windows on the ground floor of the several dimensions as shown on the working drawing, to be of the best Portland stone. The imposts on the brick piers, the archivolts, and key stones to the recesses to be worked agreeably to the drawings of the best Portland stone, the whole of the stones to bear the full thickness throughout; all exposed parts to be rubbed and to be neatly jointed, and the face of imposts to be channelled.

Architraves to the several windows.

109. To construct the architraves to the several windows of the best Portland stone; the lintel to be in one piece, and the jambs to be in four stones each. The top and bottom stone of the jambs to be rebated for the window frame, the whole to be dowelled; the holes to be $1\frac{1}{2}$" square; the cornice, consoles, &c. to be provided, worked, moulded, and carved according to the drawings, and of the several dimensions figured; the whole to be rubbed, and to be neatly jointed, and to have York bond stones where deemed necessary, cramped, and run with lead.

Pilasters to circular headed windows, upper story

110. To provide and fix Portland stone pilasters with bases and imposts, each pilaster to be in one piece, and rebated for window frames, to be fine-tooled and properly fixed. The archivolts and key-stones to be the same as described in Article 108.

Bay windows to centre block.

111. To provide and fix to bay windows of centre block Portland stone pilasters with bases, caps, architraves, cornices, blockings, and parapets, as shewn in the drawings, and worked as before described in Article 109, each joint between the columns and architraves to be plugged with slate dowels.

Porches to do.

112. To provide and fix to the porches of centre block, Portland stone columns, bases, and caps, architraves, cornice, and blocking course, as shown in the drawings, the horizontal joints to have a sheet of milled lead, weight 5 lbs. to the superficial foot, to within half an inch of the outer surface, and to have a slate dowel let in very exactly, and set at both ends thereof in Parker's cement, work as before described.

Columns, architrave, cornice. and blocking courses to centre block and corridors.

113. To provide and fix the best Portland stone, $\frac{3}{4}$-columns, bases, and caps; the columns to be in 3 pieces (unless the contractor prefers making them in two): The columns to be bedded on the bases with sheet lead, weight 5lbs. to the superficial foot, to within $\frac{1}{2}$ an inch of the outer surface, as well as the joints of the columns, and the capping. The

architrave, cornice, and blocking course to be in accordance with the drawings of the Roman Doric order, no stone of the architrave to be less than 3 feet in length, and to have a bearing in the wall of 9 inches, all exposed parts to be rubbed and neatly jointed.

Principal entrance door.

114. To provide and fix Portland stone jambs, archivolts, and key stone to the principal entrance doorway, the jambs to be in blocks, forming quoins and architrave, dowelled and rebated to receive the door frame. The archivolt and key stone to be the same as described in Article 89, and as shown on the drawing.

Window sills to rear of building, outhouses, &c.

115. To provide and set in mortar Portland stone window sills, 10 inches wide, of the same thickness as those before described, properly sunk and weathered, tongued for sill of sash frame and throated, and to be set in one length to all window openings, as shown in plate 36, the ears built two and a half inches into the wall at each side, bedded parallel with the face of the brickwork and to project $2\frac{1}{2}$ inches.

Cornice to church.

116. To provide and fix a Portland stone cornice and pediment to the church, as shown in the drawings, plate 33, each stone to be in as long pieces as possible, and of the several scantlings figured on the drawings, sunk and weathered, moulded and rubbed on all exposed parts, secured at the joints, and run with lead. The stones forming the angles, and at the apex of the pediment, to be in one stone each, as shown by lines on the drawings.

Columns and ashlar work to altar end of church.

117. To provide and fix two Portland stone columns to the chancel end, as shown in the drawings, and two $\frac{3}{4}$-columns and piers to chancel window, with bases and caps, the bases and caps to be wrought separate, bedded on sheet lead, 5 lbs. to the superficial foot, plugged, columns to be in two pieces, the joint bedded in lead and plugged, as before described. The back and two side walls of chancel recess, including the cornice, to have Portland stone ashlar as high as the cornice and well and securely bonded to the brickwork, as shown on drawing No. 33.

Steps to chancel recess.

118. Two Portland steps (in 3 stones) to chancel recess, moulded as shown, and the recess to be paved with Minton's tiles, of the value of 3*s.* 6*d.* per foot superficial.

Chimney plinths, and cappings.

119. To provide and fix Portland stone plinth to chimney shafts, wrought and weathered, and of the several dimensions shown in the drawings. The cappings to be of Portland stone, wrought as shown, to be in as large blocks as possible, to be sunk through for smoke and air flues; joints to be plugged and dowelled.

Windows and doors of church, bathing rooms.

120. The whole of the window and door dressings of the Church, bathing rooms, &c., where of stone, to be of the same nature of materials and work as described for the other buildings.

Steps.

121. The whole of the steps externally throughout the buildings to be of the best Purbeck stone, known by the name of cap-and-feather, to be of the several dimensions figured on the drawings, all rubbed on exposed surfaces, and back jointed and moulded where shown; the upper step or sill in all cases to be one foot longer at each end than the door opening, and mortice holes to be cut for all metal dowels for door frames 2 inches in depth, and under-cut on each side $\frac{1}{8}$ of an inch, to form key for lead; and similar landings to be fixed where shown.

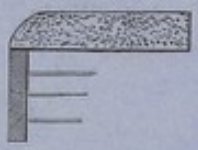
Chimney piece.

122. Provide and fix a marble chimney piece to the Chelsea Board Room to drawing, which will be furnished, and for which provide the sum of 50*l.* P.C.

Verandah and covered ways, curbs, and plinths.

123. To provide and set in mortar Portland stone bases or plinth of the best quality, to support the cast-iron column, 1′ 6″ × 1′ 6″ × 1′ 6″, sunk 1 inch for base of column, tooled at front and top, and set in mortar. To provide and set Portland stone curb, 1′ 7″ × 6″, set on a bed of concrete, in cement; the heading joints to be plugged with one stone plug in cement, 2 inches long, and 1½ inch square; these stones (excepting the closers) are not to be less than 2′ 6″ in length.

Slate coping to swimming baths.



124. To provide and set in cement a rubbed slate curb, 3 inches thick, 1 foot wide, and in lengths of not less than 3 feet all round the top of the swimming bath. Plain work where seen, the outer edge to be rounded, set flush with the face of the glazed tile work, and the heading joints made in cement.

Back hearths to fire-places.

125. To provide and bed in mortar 3-inch Purbeck back hearths to all fire-places throughout the buildings, in one stone each, to the size of the openings, jointed and set level with front hearth. To put to all the fire-places, Portland stone front hearths, except in the kitchens or other apartments which are described to be paved; each stone to extend 18 inches longer than the clear width of the respective openings, 1′ 6″ inches wide, and 2½ inches thick. The joints (where the two hearths meet) and edges to be properly squared and straight throughout, and laid level on top sides with the floors; all exposed faces to be rubbed, and laid in one stone, free from flaws or other defects.

Gate piers to enclosure walls.

126. To provide, work, and fix to the entrance gateways, plinths of granite, and caps, and string stones of the best hard Portland stone, set in mortar, the plinths to be wrought, rebated, and weathered, to be in one stone each. The piers of gateway to have granite spur stones 15″ × 15″, and 30 inches high, rounded, and with rounded top fitted to angles, and also rounded posts for catches of gate, which are to be let in and run with lead.

Corbeilles to carry cisterns to water-closets.

127. To put to each of the water-closets built into the brick walls where required, for carrying cisterns, corbeilles of Purbeck stone, with the outer lower corners rounded off, to be wrought and built in in cement.

Templates.

128. Provide and fix Purbeck stone templates under the ends of all iron girders, and 3-inch York stone on all coupled girders, the full width of wall above. Provide and fix Portland stone corbels, moulded as shewn on drawing, under end of binders for floor of gallery in chapel.

Stone skew backs.

129. The arches of desiccating room to spring at both ends from Purbeck stone skew backs, 14″ × 9″, the joints being plugged and run with lead.

Purbeck stone plate under ends of joists.

130. To provide, and build into the brick walls, Purbeck stone paving to receive the ends of the joists, 9 inches wide, and 2½ inches thick, in as long lengths as can be obtained; the width to be increased to 13½ inches, at intervals of 6 feet in length, having the 13½ inch wide stone three feet long each.

Flagging in kitchens, &c.

131. To provide and set in mortar three-inch Purbeck paving, chiselled and jointed for floor of kitchens, scullery, larder, pantry, rooms for arranging dinners, boiler rooms, engine rooms, coal store, and store rooms, women's washing rooms, ablution rooms, desiccating rooms, small coal stores, and shed.

132. The cellars to be paved with three-inch Purbeck, and the flapway to have granite curb 12″ × 8″. **Flagging in cellars.**

133. Staircases to cellars to have tooled Purbeck stone steps 12″ × 7″, rebated and back jointed with fair ends, and cut and pinned into wall. Purbeck stone tooled winders and landings. **Staircases to cellars.**

134. The bath room and space around the swimming bath to be paved with Seyssel asphalte of Pyrimont on fine concrete. **Seyssel asphalte pavement.**

135. To prepare the ground of the coal yard by putting thereon sufficient hard materials, and to pave over the whole surface with Aberdeen, Guernsey (or any other description of equal quality, approved by the Superintending Officer) granite paving, each stone being 8 inches deep, and sorted 5 inches wide, top and bottom, to be laid with such currents as may be expedient, on a bed of concrete 12 inches thick, and to be completely grouted over the top and between the joints thereof with stone lime and sharp sand, the whole of the paving is to be thoroughly rammed three times over, and such parts as may sink within twelve months after the same are laid are to be properly relaid and made good. **Paving of large coal store.**

136. To put to the gateway to the coal store a granite stone sill 18″ inches wide and 8 inches thick, to be in one stone the exact size of the gate opening in the clear of the rebates. To cut out mortice holes to receive the plugs at the bottom of the iron socket bases. **Granite stone sill to coal store.**

137. To provide and set in mortar on a bed of concrete 6 inches thick, Purbeck stone channel course to surface drains, as shown in light brown on the plan of drains, the stone to be 15 inches wide by 4 inches thick, properly sunk, and straight on edges laid with a fall to cesspools; also to provide and set in mortar on a bed of concrete 6 inches in depth, on the outside of the channel stone where next the curbs or walls of the buildings, and on each side of the channel stone where the channel courses are isolated, Purbeck stone curbs 9 inches deep and 6 inches wide, tooled on face and set straight and to fall of gutter, all joints to be closely jointed, and no length to be less than 3 feet throughout, except for closers, the channel stones to be perforated for iron gratings 9 inches square, and the number required is 34. Also provide similar channel stones where shown for drainage of garden, 24 inches long and 15 inches wide, with curbs all round. Dish out for and provide and let in the iron gratings; the number required is 44. **Surface drains.**

138. To provide and put to the large gates granite sill as shown in drawing. Also fend stones at each angle each side of outside front and rear, notched to corners, to be 10 inches in diameter, and 12 inches above the ground, and 15 inches under the ground line. **Granate sill and fend stones.**

139. Hooks and pivots for gate and door hinges, catches for latches and for holding gates and doors open, to be let in where necessary in solid stone, and run with lead. **Gate and door hinges, &c.**

140. To cut and form in a workmanlike manner all apertures, mortices, and rail holes in stone for ironwork or plumber's work of every description that may be required during the erection or for the completion of the buildings; also for the insertion of pipes of waterclosets, &c. &c.; also chase or groove where necessary for asphalte, fillets, &c. **Cut holes chase, &c.**

141. To provide and fix granite stone bases 1′. 7″ × 1′. 7″ × 0′. 9″ to iron columns of galleries in the church to be bedded in cement on brick piers, to be weathered and sunk for columns to be wrought fair and rubbed. **Stone bases to iron columns in church.**

Principal staircases of two-wing building

142. Provide to the principal staircase of each wing steps and landings of Portland stone constructed in the manner shown on Detail Drawing, No. 29. All the steps (excepting first of each flight) to be solid feather-edge steps, each (two being cut out of a block) to be properly back jointed, moulded nosings and return nosings, and rubbed fair, cutting the necessary holes for stubbs of girders. The two first steps on ground floor and the first on second floor to be solid rubbed steps with circular ends back-jointed, according to the drawing.

Landings.

143. The landings and half spaces to be 6″ landings, joggle-jointed and run with lead, and securely pinned into the walls six inches at least. All the exposed surfaces of landings, including the soffit, to be rubbed fair, and the edge of landing forming well hole to be moulded to correspond with nosing of steps.

Purbeck landings.

144. The ground-floor of staircase, including the passage from the corridor, to be laid with 4″ rubbed Purbeck landings. Provide and mould the stone over girders, forming bed mould 6″ deep, worked fair and plugged to landings, and cutting therein holes for stubbs of girders; above the caps of columns a template 6″ deep to be securely fixed and plugged to cap, as shown.

Columns of staircase.

145. To execute the four square columns of Portland stone of principal staircase according to the detail drawings, carefully working the caps and bases, the shafts to be in three stones, the joints properly plugged, and to have inserted 4lb. milled lead placed within $\frac{3}{4}$″ of the face, holes 7″ deep, to be cut out of solid stone, to receive the ends of cast-iron girders.

End staircases.

146. The staircase at each end of wing to have Portland stone steps and landings, the steps, excepting the first one, to be feather edge, scantlings similar to the principal staircase, but without moulded nosing, securely pinned into the wall 6″ at one end, the landings rubbed fair, joggle jointed and run with lead, the upper landings 7 feet long, to be supported on iron girders. The first step to be solid Portland with circular end and back jointed.

Staircases of centre building.

147. Construct the two staircases in centre building of Portland stone, the steps to be 4′. 0″ wide and pinned 6″ into the walls in every other particular to correspond with that described in Art. 142. The landing 6″ deep, to be supported on cast-iron girders. The staircases to galleries of chapel of Portland stone to correspond with the other staircases.

Staircases of rear buildings.

148. The staircase of buildings at rear to be of Portland stone corresponding with the other staircases (with the exception of moulded nosings).

Purbeck paving corridors, &c.

149. The corridors on ground-floor of centre building and the two staircases to be paved with 3 inch rubbed Purbeck on concrete 12 inches thick. Also the passage leading to bath, and the lobby leading to chapel, to be similarly paved.

Landings chapel.

150. The landing on one pair floor of chapel staircase to be 6 inch stones as shewn in detail drawings joggled together. The openings from lobby to corridor, and from corridor to lift to be of 4 in. Portland stone.

Dome and lantern, centre building.

151. The stone work of dome to be of Portland, constructed in the manner shown on drawing No. 27.; all the different blocks of stone forming the lower cornice finely tooled, to be well bedded on walls of the lengths shown by red lines, to be securely cramped and plugged with slate dowels, the blocking course above ditto to be jointed in alternate joints, and to average 1′. 6″ on the bed; insert at this level 3″ tooled

slabs channelled to receive wrought iron bond; construct the attic balustrade with capping die and base, each one stone in height, vertical joints averaging 3 feet apart, every stone plugged or cramped and run with lead; above this provide the weathered sill of Yorkshire stone prepared for bases of columns. All the different blocks composing the bases, shafts, and capitals of columns, are to have set within each joint thereof 5lb. lead with dowels.

Stone work at back of columns.

152. The stone work at back of columns and above columns, keystones and architrave fairly rubbed, to be the total thickness of walls, 2′.3″, shewn on drawing, forming pannelled spandrels, every stone securely jointed and plugged, and cramped and run with lead, the necking under cornice with moulded modillions to be 9″ on bed properly cramped and plugged to cornice. The main cornice over to run the whole thickness of wall in lengths of 3 feet. Cramped every joint, no joint to be within 3 feet of angle, the top of cornice channelled to receive one tier of copper chain bar.

Attic above main cornice.

153. The attic above main cornice, composed of base die and capping, each stone in one height, every stone and horizontal joint plugged or cramped and run with lead. Provide 16 Portland stone inverted brackets at feet of pilasters, carved and wrought according to the drawing, to be 2′.6″ high, 14 inches on face.

Base of lantern.

154. The base of lantern to be constructed of 6″ tooled York landing circular on plan, weathered and throated in four stones with two cramps 1′.0″ long to each joint, and made secure to cast iron plates by stubbs inserted 1″ into landings, immediately on this landing is to be formed a balustrade as shewn, with balusters plugged at top and base, above this is to be securely fixed 6″ landings in two stones cramped together, and 3″ paving in one piece.

Fixing lantern, columns, caps, and bases.

155. Securely fix the lantern, columns, caps, and bases, (each of one block,) the cornice and blocking, and the stonework above, with one or two vertical joints only as deemed proper for construction, securely cramped and plugged with copper and run with lead, performing all the carved work, and other work to complete and make perfect the dome and lantern.

Campaniles centre building.

156. Construct the campanile according to the drawing No. 28, of Portland stone, rubbed fair, and worked fair on the inside thereof, the whole to be jointed in alternate joints, preserving the lengths of stone shewn on detail, and marked by red lines. The lower string, finely tooled, 1′.3″ deep, bedded 8″ into wall, plugged to blocking over ditto; blocking, 1′.4″ deep, bedded 2 feet on wall, and 6″ landing, fixed on ditto, in 4 stones, 5′·4″ by 5′·4″ joggle jointed, and run with lead, the angles forming openings, to be in two stones, bonding together, plugged on each horizontal joint of the heights indicated by red lines. The shafts of columns in 3 stones with milled lead inserted within $\frac{3}{4}$″ of surface, and plugged with 2 plugs to each joint. The pediments in 3 stones only, properly cramped and run with lead, and the work above pediments constructed of 4 solid blocks 3′.8″ × 3′.8″ × 4′.3″ high, securely cramped at every joint, and plugged to stones in each horizontal joint. The small dome over to be of 4 solid stones, jointed as deemed constructive, and made perfectly secure to work below it, inserting copper spindle, and cutting hole for finial.

Carved work.

157. Execute the carved work according to the drawings, including the brackets above pediments, carefully carved and wrought as shown on detail, made secure to pediments.

Stone balusters to campanile.

158. Provide 4 stone balusters and 2 half ditto to each campanile, the attic balustrade base and cap to correspond with the main attic.

Sinks.

159. Provide and fix two 6-inch Purbeck sinks, 4·8 × 2·0, in medical officers' kitchen and sick officers' kitchen, with holes for bell traps and proper bearers.

Coping to walls of waterclosets.

160. The walls of waterclosets in the rear of centre building and of passage to bath-room and of projection of staircase to have rubbed Portland coping, weathered and throated and plugged.

Coping.

161. The walls around tank next centre tower to have Portland coping as other walls.

Index stones to drains.

161½. To provide and lay Purbeck stone index stones 15 inches square and 4 inches thick, and laid on a bed of concrete 18 inches square and 6 inches thick. Those over the junctions of the principal drains to be octagonal or circular, 18 inches diameter, and to be grooved thus, with lines indicating the directions of the drains over which they are placed, and the depth of the latter below the surface. The number of these index stones is 120.

PLASTERERS' WORK.

Lath, plaster, and float.

162. To lath, plaster, float, and set ceilings and quarter partitions to the whole of the buildings, except the partition in the nurses' rooms, operating theatre, and small wards attached to the same, which partitions in centre building are to have two coats of Parian cement. The lathing to be lath and half heart of fir laths, free from sap; the laths not to overlap at ends, but to abut against each other, and nailed separately, and to break joint every three feet.

Walls of hospitals.

163. To cover all the walls of the wards, nurses' rooms, waterclosets, baths, passages, and all the rooms and corridors in centre building, the bath-house, chapel, &c., &c., with two coats of Parian cement. The first coat to be floated half an inch thick, with equal parts of clean-washed sharp sand, and the surface dragged while soft, but not made too rough. On the next day, put on a setting coat $\frac{3}{16}$ths of an inch in thickness, of net cement; lay down with a beech float and trowel. The walls of the kitchens and stores in outbuildings to be rendered, floated, and set in mortar.

Cornices.

164. The front corridor on first floor of centre building and the officers' day-room on same story, the front and side corridors on ground story, the medical officer's room, his clerk's room, and his private room, the apothecary's room, the small board room, and the ante-room, to be plaster cornices on bracketing, average 24 inches girt. The libraries in wings also to have cornices 24 inches girth, with mouldings on girders 9″ girth to mitre in. The corridors on the ground and one pair story in wings to have plaster cornices, where not formed in deal, 24 inches girth. The Chelsea board-room to have bands to form the ceiling into panels with cornices, enrichment flowers, consoles, &c., as shown on detail drawing, No. 57. The enrichment flowers, consoles, &c. to be executed in Bielefield's patent machie, and the panneled pilasters on the walls to be executed in Parian cement. The cove in chapel and the various soffits, mouldings, caps, strings, &c. to be executed in plaster, according to drawing No. 33. The ceiling of chapel to have four centre flowers (Bielefield's), value 6*l.* each, and the enrichment over chancel window to be calculated at £2. Run-cornice round lobby entrance to chapel as on drawing No. 57.

Skirting.

165. All the rooms, corridors, &c., except Chelsea board-room, and where otherwise shown to have skirtings formed by running a flush head in the Parian cement at such distance from the floors as may be directed. The Chelsea board-room and other places where shown to have moulded skirtings in Parian cement, as shown on drawings.

166. Run angle and flush beads to all angles of chimney breasts, window and door reveals, and wherever necessary. **Angle and flush beads.**

167. The ceiling of passage of communication between centre and wings to be plastered on the surface of groined arches, and to have cornice moulded 9 inches girt. The walls to be Parian, with flush bead for skirting. **Ceiling to passage.**

168. The ceiling of cellar to be lath and plaster, float and set. **Ceiling of cellar.**

169. To execute all requisite beads, quirks, and arrises, to plaster all the internal reveals in the material described for the several buildings, to perform all dubbing out, to find all needful additional projections and thicknesses, and to counter-lath the work all over any large timbers, and where else may be requisite; all the mouldings are to be run with copper moulds. **Sundries.**

170. The blank windows to be cemented with Portland cement, and painted 4 oils at back of sashes, when the blanks are not intended to appear. **Cement blank window.**

171. To provide all moulds of the best description which are to be prepared according to drawings to be given, and execute all such modelling as may be necessary for the completion of the several works, as shown in the drawings and described in the specification, and omit no materials or workmanship whatever which is either necessarily connected with or implied in the proper completion of all the works as shown in the said drawings or described in this specification. **To provide all moulds.**

172. To whiten two coats all the ceilings throughout the buildings. **Whiting.**

173. To flat point the walls of the wash-houses ablution rooms, latrines, and urinals, coal stores, and sheds, and lime-white two coats. **Flat point and lime-white.**

174. Every precaution is to be taken to prevent the plastering from blistering; the lime is to be run and the stuff to be thoroughly screened and mixed up a considerable time before use. **Blisterings, &c.**

175. Line the walls at the back of all the waterclosets seats with Singer and Green's white porcelain tiles, 6″ square, having deal rounded capping at top, as shown on the drawing. **Porcelain tiles.**

PLUMBER.

176. The lead and every other material of the best quality, and of the best and strongest construction; the sheets to be of even substance; the cast lead to have the selved ledges cut off before laid; all joints to be strongly soldered; and the lead to be perfectly pure and free from sand cracks; the pipes to be properly fixed with sufficient wall-hooks, and not to weigh less than as follows:— **Lead.**

¾ bore	2½ lbs.	To the foot run without joints.
1 do.	3¾ lbs.	
1¼ do.	5 lbs.	
1½ do.	7 lbs.	
2 do.	9½ lbs.	
3 do.	14 lbs.	

177. Lay the gutters and chimney gutters and valleys of roofs to all buildings throughout with the best milled lead, 7 lbs. to the superficial foot, except to the valleys, which are to be of 6lbs. lead, turning up under the slates at least 10 inches, to be well and properly dressed; the lead to lap where required at least 5 inches, and turned up 6 inches **Gutters and valleys.**

against all brick or stone work and other perpendicular sides, to be properly dressed round all angles, and to drips; all gutters not to have less than 1½-inch fall in 10 feet; all valleys to be laid with milled lead as above, and to be 24 inches wide. The flashings to be milled lead, 5 lbs. to the foot superficial, stepped flashings 12 inches wide, and horizontal do. 6 inches wide, to be provided and fixed to all parts of the roofs, flats, &c., where necessary, to all gutters, chimney shafts, flats, bay windows, towers, turrets, campaniles, and all other parts requiring to be let two inches into brick and stone work, burnt in where necessary, pointed in cement, and firmly secured with T dog nails, &c., all jointings of flashings are to lap over 3 inches at the least, to turn over the lead 4 inches, and upon the slate 7 inches. The lanterns, skylights, ventilators, &c., are to be properly flashed.

Flashings generally.

Put to the eaves of all roofs over the iron gutters, 5 lb. lead flashing, 12 inches wide, properly lapped, and also 5 lb. flashing where the covered way intersects with roofs of outbuildings.

Intersections of covered ways with outbuildings to have 5 lb. flashings.

Tanks on roof.

178. The quartering round the tanks on roof next staircases to have 6 lb. lead, dressed all round with 5 lb. flashing, on curb, nailed with copper nails, and dressed over the iron, to prevent the water running in between the wood and ironwork.

Hips, ridges, &c.

179. Cover all ridges and hips with 5 lb. milled lead, 21 inches wide, properly dressed and secured.

Flats.

All flats of towers, bay windows, passage ways on roofs, with their gutters and cesspools, &c., to be laid with milled lead 7 lbs. to the foot superficial, properly dressed over rolls and drips, and to cesspools, to turn up against all walls, parapets, &c. six inches at least, and under the slates nine inches, and extend beyond all joints two inches. The cesspools throughout are to be large, and lined with 7 lb. milled lead, strongly soldered at the angles, and to have all requisite solder joints, and pipes out of 8 lb. milled lead, properly dished and soldered to the bottom of cesspool, and to have proper elbow joints; and all are to be covered over with waggonhead copper gratings 16 ozs. to the foot superficial, perforated regularly over.

Cesspools and gratings.

Copper covering to dome.

180. The dome to be covered entirely with sheet copper, weight 20 ozs. to the foot superficial, seamed, shaped, and made complete, according to the drawings. The upper dome also to be covered with copper, weight 20 ozs. to the foot superficial; the copper covering turned out over the Portland curb, so as to prevent the wet from drawing into the joints of the work.

Provide, &c. &c.

181. Provide all joints, elbows, solder, cement, nails, lead-headed nails, hooks, holdfasts, copper tacks, solder, dots, wall-hooks, &c., &c.; the whole of the lead work to be rendered properly secure and watertight; all plumbers' work to be done in the best manner, and no materials or workmanship are to be omitted whatever, which is either necessarily implied or connected with the proper completion of all the works, as shown or described in the drawing or in this Specification.

Ball and cross to dome.

182. Provide and fix securely on lantern of dome the ball and cross of chased copper, weight 30 ozs. to the foot, with the requisite copper spindle necessary for fixing it.

Fleuron and ball.

183. To fix securely on top of campaniles the fleuron and balls of chased copper, weight 30 ozs. to the foot superficial, with spindle and iron tie therefrom, secured inside dome.

184. The pipes for carrying the water from the roofs in all cases, except the outbuildings in rear of wings, to be of 4-inch lead pipe, perfectly soldered, and fixed with tacks in chases left in the brickwork. In all cases where practicable, the water is to be carried into soil pipes from closets. **Rain water pipes.**

185. Provide and fix 8 lb. lead on all stairs and landings, 1 foot less than the width of stairs, secured on steps by brass stair-rods and eyes, let into stone and run with lead, and on landing by grooves cut in stone and burnt in. **Lead covering to stairs.**

186. Branch from the main water service with 4-inch pipe, and carry same up the lift by chapel from the supply of large tank. The pipe to have socket joints run with lead, and securely fixed to the brickwork, and put on 4-inch Jenning's ball valve at end. This tank to have a cast-iron standing waste, 9 inches diameter at one end and 6 inches at the other, well and securely fixed to tank, and fitted with 6-inch washer and waste; connect 6-inch iron socket pipe to same for waste, and continue into drain. **Supply to large tank in centre building.**

187. Supply the stone sink in medical officer's kitchen, and sick officer's ditto, by 1″ pipe from the nearest service, and proper bib and stop-cock. Put 5-inch brass grate and bell-trap, and 2-inch pipe from thence to drain, with small D trap; continue this service by ½-inch pipe, for supply of boilers in these two kitchens, and put ½-inch ball-cock to each. **Sinks in medical officer's kitchen, &c.**

188. Provide and fix from brick tank in yards to the pumps in engine rooms, 4 cast iron suction pipes with rose end. **Suction pipes**

189. The waterclosets throughout the building to be fitted up with Jenning's self-acting yellow white earthenware pans and apparatus. Each closet to have 1″ service from the cistern over, for supplying 2 closets, as shewn in drawings. The basins to have a 4″ lead pipe to convey the soil into the down pipes, which are to be of 8 lb. lead, 5″ diameter on one pair-story, and 6 in. diameter on ground floor, well secured by proper lead tacks in chases in brickwork. **Water closets**

190. The cisterns in the wing buildings to be supplied by 1¼ lead pipes, connected with the iron pipe outside the building. Each cistern to have a Jenning's 1¼″ India-rubber tube ball-cock and ball, a 2″ trumpet-mouthed standing waste, 1½″ brass washers and waste, and 1½″ lead waste pipe, with small trap at bottom. **Pipes, &c. to cisterns.**

191. The cisterns in centre building to be supplied by lead pipes branching from iron tank in roof, with stop-cocks on same, and each cistern to have ball-cocks, waste, &c., as before described. **Do. do.**

192. Provide and lay 2-inch iron socket pipe from the main water services back of wing buildings, to supply the cisterns in contagion and itch wards, and the privies and urinals; 1¼″ lead branches from these iron pipes to cisterns, and privies, with ball and stop-cocks as required; the cisterns to have waste pipes, &c., as before described. Branch from the privies with 1″ lead pipe for service of urinals, with proper stop-cocks; fix to back and on each side of slate divisions of urinals, ¾″ perforated copper pipes, fixed with bands and screws. **Water service pipes to cisterns, urinals, &c.**

193. The privies to have cast iron valves, and sockets pipes 7″ diameter and 2 feet long, with small socket cast on to receive 2″ lead overflow pipes from privies, as shown on drawing. **Cast iron valve, &c. to Latrines.**

194. Supply the large bath in rear of centre building, by two 4-inch cast-iron socket branch pipes, from the main iron pipe near the tower. These branch pipes to run into bath at opposite ends, and each to have **Supply to swimming bath.**

proper stop-cock; provide and fix two washers for the waste of bath, having stop-cock on each, and also two iron pipes about 8 feet long each, connected with drain for overflow; all the connections of pipes with bath to be properly made with the perforated tiles.

CARPENTER AND JOINER.

Provide and perform, &c.

195. The contractor is to provide all materials and workmanship, and to frame, fix, and finish all the works necessary for the complete execution of works throughout, with ironmongery of every description, and all appurtenances which may be required, so as to finish in every respect; omitting no materials or workmanship of any description which are necessarily connected with or implied in the proper completion of all the works, as shown or described in the drawings or in this specification.

Description of timber.

Oak.

Deals.

196. All timbers are to be of the very best description, and are to be of Baltic timber from Memel, Riga, or Dantzic, sawn die square, and free from dead knots, sap, or shakes, and where possible the timbers are to be in one length. The oak to be of English growth, well seasoned and free from sap, shakes, and waney edges. The deals and battens to be of the best description, Christiana or Memel, perfectly seasoned, and free from sap, shakes, or large knots, and perfectly dry.

Ironmongery.

197. The ironmongery is to be of the very best description and quality, and is to be fixed with screws, and all brass work with brass screws.

Specimens of locks to be seen in the Surveyor's Office, War Department, Pall Mall.

Spikes, nails, screws, &c.

The contractor is to provide and fix all requisite spikes, nails, screws, wall-hooks, and all necessary and proper ironmongery and brasswork for the different works; all hinges not otherwise described are to be of wrought iron.

Workmanship.

198. All the intended works are to be prepared, framed, and put together and completed in the best manner, as directed, carefully, substantially, and accurately, and with the best description of workmanship.

Working.

Thicknesses.

199. The joiners' work is to be cut out three months previous to its being put together. The whole of the carpenters' work is to hold the scantlings specified, when finished; the joiners' works to hold the several thicknesses hereafter described, with the exception of the usual allowance for working, and to be fitted in the most complete and workmanlike manner, with all appurtenances complete, as may be directed.

Laid level.

Timbers not more than 12 ins. apart.

200. All timbers are to be laid truly level, to prevent unnecessary thickness of plastering or scribing of the joiners' work. The principal timbers are to tail upon the walls as much as possible, but in no case less than 6 inches. Girders, lintels, &c., not less than 9 inches; none of the timbers in joists, rafters, ceiling joists, or quarters, &c., to be more than 12 inches apart.

Bonds and plates.

201. All bonds and plates are to cross each other at the angles, and to extend beyond as much as possible. They are to be dovetailed, and pinned together with oak pins. The crossings and laps are to be scarfed and wedged, and pinned or spiked together.

Centering.

202. Provide all centering to arches for vaults, groins, cambering, and discharging arches over door and window openings, &c., &c., wherever necessary and requisite, including easing and removing when done with and to become the property of the contractor. No centering is to be removed until the clerk of works or superintending officer shall direct the same to be done.

Moulds for iron and stone work.

203. Provide all moulds for cast and wrought iron work, copper and stone work, to be used in the building. Such moulds to be prepared and submitted to the superintending officer or clerk of works for approval previous to the casting or performing the work of each description.

Provide and perform.

204. Provide and fix all temporary enclosures which may be required for doors and windows, &c., all hoards, shores, ties, struts, shoots for rain water, &c., which may be required. Provide turning pieces to chimnies, &c., strutting supports, carriages, or other timbers, as found necessary; cut holes, dishings, and other works required by the plumbers and other trades. Provide all rods, moulds, rules, laths, trammels, and other implements of every description for the use of the several workmen, and make good after them when and where required, and perfect any part or parts that may receive injury. Fix all smiths' work as far as connected with the carpentry.

Oak Bricks.

205. Oak bricks to be provided for the proper fixing of the joiners' work, &c., but only such as are absolutely requisite, and none to be placed within 9 inches of flues, but iron holdfasts, &c. are to be used instead. The door openings to have No. 14 oak bricks, No. 4 being in arch. No. 14, similar oak bricks, to windows having wood finishings, but not to those which have cement jambs. Put templates where necessary in any part of the building, beams, binders, breastsummers, bearers, purlins, and other timbers which bear upon the walls or do not lie upon the plates, or where stone templates have not been previously specified.

FLOORS.

Plates and joists, ground floor.

206. To provide and lay down plates and joists to ground floor, the plates to be of oak and the joists of best Memel, Riga, or Dantzic.

Oak plates - - - - - -	4″ × 4″
Memel, for joists notched to plates to rooms and passages - - - - -	6″ × 3″
Memel, for joists to chapel - -	7″ × 2½″

Floors on the first and second story.

207. The floors to wards for 9 patients to be constructed as shown by the detail drawing and as follows:—Each girder to have two fir flitches 14″ × 5″, with 9″ wall bearings, and wrought iron flitch between 12″ × ⅝″, securely bolted through the wood flitches by No. 8-¾ bolts, and to be fixed on an arched line; the ends of girders to have Purbeck stone templates 3′. 0″ long, 18″ wide, and 6″ thick; in some cases one template only will be required for 2 girders; each end of girders to be secured to template with No. 2 wrought iron pins 1″ diameter, 4″ long, let into fir, and also into stone, and run with lead. The girders to be all cased with inch deal one side, and beaded casing and backings. Joists 8″ × 3″, deeper ditto 10″ × 3″, and the end of every fourth joist to be secured to the Purbeck stone-plate course by iron dowels 1″ diameter, 3″ long, similar to those for ends of girders. Ceiling joists 4″ × 2″. The floor joists to be strutted at about every 6 feet. The floors of the other wards, orderlies' rooms, waterclosets, &c. to have a similar construction, as also the first floor of outbuildings, with the following variations:—The corridors, waterclosets, &c., to have single joists 8″ × 3″, but no girders or ceiling joists. The cook's room and sculleries on each side of dining-rooms to have single joists 9″ × 3″; every fourth joist in all cases to be secured as before described. Joists in rooms over vestries 8″ × 3″. The floor of operating theatre and the ward below to have No. 3 girders of the same scantling, and supported with No. 3 columns, as shown by detail drawing, and the floor of the day room over Chelsea board-room to have No. 4 girders and iron flitches.

Large wards, &c., &c.

208. The wards for 16 men and the dining-rooms to have the floors constructed with similar girders, but from the length of bearing, the

scantling to be as follows:—Fir flitches 15″ by 7″, and wrought-iron flitch 14″ by $\frac{7}{8}$″, secured with No. 12 $\frac{3}{4}$ bolts; the joists and other timbers as before described.

Joists for cellar story and water-closets.

209. That portion of the building having a cellar story to have the ground floor formed with joists 8″ × 3″. Each of the waterclosets in rear of centre building to have ceiling joists 4″ × 2″ fixed 9 feet from level of floor, and trimmed for flaps. Plates 5″ × 3″.

Flooring.

210. Flooring of rooms and passages throughout the buildings, where not described to be stone or lava, to be $1\frac{1}{2}$″ yellow deal batten floors, wrought, ploughed, and tongued, with hoop iron, the hoop iron to be No. 15 B.W. guage, and to be painted two coats in oil before being fixed in the flooring. Curbs round hearths to be of oak, wrought and mitred $4\frac{1}{2}$″ × $1\frac{1}{2}$″, except in centre buildings, which are to have deal mitred boarding, to be nailed with flooring brads weighing 20 lbs. per thousand.

Access to clock.

211. The sum of 10*l.* to be included in tender for access from two-pair story of tower to clock room.

Roofs.

212. To be framed as shown on the drawings, and to be of the scantlings thereon specified, and as follows in this article. The timber to be of the best Memel, Riga, or Dantzic, to hold the full scantling throughout, to have wrought-iron straps to king and queen posts and for feet of principal rafters, to be 2″ × $\frac{3}{8}$″ fixed with keys and wedges; these straps to be not less than 2 feet on each side posts and rafters.

Ceiling joists.

213. The ceiling joists to be of Memel, of the dimensions figured on the drawings; all to be spaced 12 inches in the clear, and secured to fillets at the ends.

Roof-trusses, &c. to wings.

214. Tie beam 12″ × 6″; principals and collars $8\frac{1}{2}$″×6″; struts $4\frac{1}{2}$″×3″; queen's (oak) 12″×6″ at ends; small kings (fir) 12″×6″ at ends; wrought-iron straps to feet of principals and head, as also the stirrups to suspend tie beams 2″×$\frac{3}{8}$″; and also $\frac{3}{4}$″ bolts, and sets of keys and wedges where required; straining piece 6″×4″ bolted with $\frac{3}{4}$″ bolt; purlins $8\frac{3}{4}$″×5″, with fir templates on division wall 2′-6″ long 6″×4″; binders over corridor 10″×5″; binders to roof of portico 8″×5″; plate 6″×4″; pole plate 5″×4″; angles and dragons 6″×4″; $1\frac{1}{2}$″ ridge 9″ wide, 2″ hips and valleys 11″ wide; $2\frac{1}{2}$″ rounded ridge, and irons to hips and ridges; binders for ceiling joists, where required, 12″×3″, supported on walls by 3″ York templates 1′-6″ by 9″; ceiling joists 7″×$2\frac{1}{2}$″; common rafters $4\frac{1}{2}$″ by 2″.

The roof over principal staircases.

215. Trusses No. $2\frac{1}{2}$; tie beam 9″×4″; principals and collars 6″×4″; struts 4″×4″; oak queen's 7″×4″ at ends; all wrought-iron work as to last roof; straining piece 4″×4″; purlins $8\frac{3}{4}$″ by 5″; plate 6″×4″; pole plate 5″×4″; angles and dragons 6″×4″; rafters $4\frac{1}{2}$″ by 2″; hips, ridges, and ceiling joists as before described.

Roof over passage to dining rooms.

216. Plate 5″ by 4″; rafters $4\frac{1}{2}$″ by 2″; ceiling joists 7″×$2\frac{1}{2}$″; the remaining timber, &c., to be as the other roofs.

Roof over dining-rooms.

217. Trusses No. 4, and 2 half ditto; tie beam 9″×4″; principals and collars 6″×4″; struts 4″×4″; oak queens 7″×4″ at ends; straining piece 4″×4″; purlins $8\frac{3}{4}$″ by 5″; plate 6″×4″; pole plate 5″×4″; the other timbers to be as before described.

Roof over cook's room and scullery.

218. The timbers to be as before described, but these roofs will not require trusses.

Roof of the one story offices on each side of kitchen.

219. No. 10 trusses, 4 half ditto; tie beams, 9″×4″; principals, 6″×4″; struts, 4″×4″; oak kings, 7″×4″ at ends. The other timbers to be as before described.

220. The lower roof of campanile to have joists 8″ × 2½″; oak plates with girder, 12″ × 9″, but no wrought-iron flitch. The ends to rest upon templates, 6″ × 4″. The upper roof to have rafters 5″ × 2½″; oak plates, 4″ × 4″; angle ties under hips 10″ × 5″; struts, 4″ × 4″; and in other respects the roof to be finished as shown by detail drawing. Each block of the outbuildings to have 19 trusses and 2 half ditto, and the scantling to be the same as roofs of similar span. The division walls in this and other cases to be carried up with template for purlins as before described.

Roof of campanile.

Roofs of outbuildings.

221. To be all finished in accordance with detail drawing.

The roofs round covered ways.

222. One truss only will be required. Tie beam, 9″ × 4″; principals, 6″ × 4″; struts, 4″ × 4″; oak kings, 7″ × 4″ at ends. All the other timbers and iron work to be the same as to similar roofs.

The roof over boiler-room, store, &c., side of corridor to kitchen.

223. Tie beams 9½″ × 5″; principals, 5″ × 3″; struts, 4″ × 2″; oak queens, 10″ × 3″. Iron straps to feet of queens and to feet of principals, 2″ × ⅜″, secured by ¾ in. screw bolts; purlins, 8¼″ × 5″; poll plates, 5″ × 4; angle ties, 6″ × 4″, and wall plates, 6″ × 5″; common rafters, 4½″ × 2″. The rafters to continue and form the roofs over the two side corridors, and to have collars and struts 4½″ × 2″. The roof over the back corridor to have twenty collars 6″ × 3″; purlins, 8½″ × 5″; rafters 4½″ × 2″; pole plates, 5″ × 4″, and 2 in. ridge 11 inches wide.

Roof to centre building.

224. Joists, 8″ × 2½″; plates, 6″ × 3″.

The flats of porches and passage to bath room, &c., water-closet buildings.

225. To provide and fix ¾″ yellow deal close boarding to roof, with all necessary tilting fillets of deal, and to cover the same with asphalted felt to receive the slate covering. (M'Neill's Patent.)

Boarding to roofs.

226. The roof of bath house to have 1¼ inch boarding planed on soffit, and ploughed and tongued. The purlins and ridge to be wrought and stopped, chamfered; and form the ventilators and skylights as shown; all to be planed, and the skylight bars to be of iron. Form small skylights in flat of passage from corridor to bath house.

Roof of bath house.

227. The tank on roof next principal staircase to be enclosed on the outside with quartering heads and sills 4″ × 2″; joists 4″ × 4″; quarters 4″ × 2½″; and inch boarding for lead.

Tanks.

228. To construct to the roofs gutters, as shown by the plans, with 1¼ inch deal edges shot, supported on strong fir bearers; the gutter to be, when the lead is laid, not less than 1 foot wide in any part, and to have a fall of not less than 1½ inch in 10 feet, with proper rebated drips 2 inches deep.

Gutters.

229. To provide and fix fir joists 7″ × 3″, 12 inches in the clear, and binders as figured in drawing, with fir wall plates 5″ × 3″, ceiling joists 7″ × 2½″, all to be covered with 1¼ deal, edges shot, to be laid to a fall of not less than 1 inch to 10 feet; all the lead flats to have felt, as described, for the slate boarding.

Joists on lead flat of centre block.

230. To provide frame, and fix quartered partitions of Memel fir to lecture-room and wards attached; partitions of nurses' rooms, servants' rooms, larders, closets, bath-rooms, and sick officers' servants, cook, and assistant cook, in the centre block, and wherever such may be required and shown in the drawing.

Quarter partitions.

231. To have head-sills and interties 6″ × 5″, templates 6″ × 4″, the interties to form sill for truss over door head. Principals for trusses 6″ × 5″; oak kings and queens 7″ × 6″; straps and iron-work as described for roofs; for feet of kings and queens ¾ bolts to feet of principal rafters, door-posts, and posts 6″ × 3½″, quarters and puncheons 6″ × 3½″.

The partitions of wards and operating theatre.

Orderly room partitions, &c.

232. The partitions dividing orderly rooms and others shown on the plan, to have heads and sills 5″ × 4″, posts 5″ × 2½″, braces 5″ × 3½″, quarters 5″ × 2½″.

Quarter partitions.

233. The quarter partitions in centre building to have head sills and interties 6″ × 5″, angle-posts 6″ × 6″, door-posts and braces 6″ × 3½″, queen-posts 7″ × 6″, quarters 6″ × 2½″, with iron straps 2″ × ¾″, and ¾ screw-bolts where required.

Cove of ceilings, &c., &c.

234. Provide and fix sufficient ribs with joists, cradling, bracketing for the cove of ceiling of chapel, and also bracketting, &c. for the ceiling of Chelsea board-room, and for the cornices described in plasterers' works.

Sash frames.

235. To provide and fix sash-frames to ground and upper floors of the several dimensions figured on the drawings. Memel deal cased frames, prepared for 2-inch sashes, with English oak sunk sills, rebated, sunk, and weathered, and ploughed for lead tongue between oak and stone sill, fixed in sill with white lead, inch deal inside and outside linings, 2-inch deal heads, and 1¼″ pulley stiles tongued to outside and inside linings, ⅜-inch parting bead, ½-inch back linings nailed to outside and inside linings, ½-inch pendulum slips, leaving ⅛ of an inch on each side for boxing to play, and nailed to groove in head, and 1-inch pocket pieces, 2 inches wide, let into centre of pulley stile, undercut and rebated at top, and squared at bottom 6 inches above the sill, 20 inches long; the inside beads to be 1¼ inches wide by ¾″ thick, pulley stiles wedged and grooved in sill, nailed and grooved head, double hung with 2-inch brass-framed pullies, inside of oak sills to be sunk ½ an inch in depth to receive flange of cast-iron apron, to be fixed flush in sill, with 4 1½-inch strong full-cut screws to each; the sash frames to be securely fixed.

Sashes.

236. To provide and hang 2-inch Memel yellow deal sashes, bevel bar, dowelled and bevelled at meeting bar, prepared to hang double, and hung with patent sash-line sufficiently stout to fill the sheave of pulley box, and secured with cast-iron sash weights; all bottom sashes to be stopped 2 inches from head of sash frame; all the sashes to be secured with the best patent spring fastenings.

Transom lights.

237. To provide and fix 2½″ bevel bar sashes or transom lights over doors of wards in the corridors, and fanlight over external doors. Also to 14 of the doors of the first floor of centre block, and 8 on ground floor, and over all doors on the second floor.

Sashes to water-closets.

238. The sashes to the watercloset to be the same as before described, and as shown in the drawings.

Sashes to partitions.

239. The sashes, when across partitions, to have mullions, and both lights to be double hung, excepting to the W.C. &c., where the sashes are to have solid frames, with ornamental paul to head, which are to have the sashes hung on brass centre, with lines and pullies, and to have quadrant stays and fastenings to each.

Sashes semicircular and segmental.

240. The windows having semicircular or segmental heads, to have the spandrel filled in square to the inside.

Internal windows.

241. The internal windows to be similar to the external, but to have 2½ in. oak, wrought double-beaded and double-rebated sill, and to have beads on both sides.

Skylights to post-mortem rooms.

242. Drawn metal bar hipped lights as drawing, with iron curb at bottom, fixed with screws properly fixed, glazed with rough plate glass, ¼ inch thick, with lead clips at bottom, wrought and framed curbs 6″ × 4″;

bevelled on the edge, and secured with bed bolts, the heads let in and covered ; deal moulding inside, 7″ girt for condensation, with hollow 3″ girt, with 5 lb. lead 12 inch wide dressed in and copper nailed. Oak sills 6″ × 3½″. Trimmers for ceiling 8″ × 6′, struts 4″ × 4″, quarters 6″ × 2″. The vertical sides which are glazed to have wrought framed and rebated posts 6″ × 6″, with beads mitred in and glazed with 20 oz. plate glass ¼ inch thick, two centre openings to have Moore's ventilators 3′.3″ by 2″.9′, glazed with 20 oz. plate glass, with sets of lines and pullies, the ends to have inch boarding for lead 5 lb. lead aprons 1′.6″ inch wide, and the spandrels or cheeks covered with 6 lb. lead, secured with laps and soldered dots, and with copper nailing where required.

Skylight.

243. The skylights over operating theatre to be in accordance with detail drawing, No. 41; the lead of curb is to dress and form a gutter for condensation inside.

Windows of Bath house, &c.

244. The windows of bath-house and the upper windows of tower under dome to have 2-inch semicircular sashes, hung with hinges, and to have lines and pullies for opening same. The frames to be solid with oak sills. The window of chapel to be 2½″ sashes, fixed in solid frames with oak sills.

Windows of urinal and privies.

245. The windows of urinals and privies to the buildings in the rear of wings to have fir solid frames, oak sills, and sashes, as shown on detail drawings, the upper part of sashes to be hung on centres, and to have lines and pullies.

Doors, frames, &c.

246. To provide and fix door frames to all external door openings to all the buildings, those for the principal doorways to be 6″ × 5″, the remainder 5″ × 4″, wrought, framed, and rebated, and beaded for 2½″ inch doors, prepared for fanlights over doors, transom wrought, framed, double-rebated, weathered, chamfered, and beaded, to provide and fix wrought iron spuds and rings, for fixing frames to stone sills.

Doors, external.

247. Doors of 2½ inch wainscot to be put to all the entrances in the front and flanks of centre blocks and wings in 2 panels, handsomely bolection moulded on one side, and moulded on the other, and hung (each door with 3) with the best 5-inch brass butt hinges, and stout screws those that are hung folding to have brass flush bolts of sufficient length, one at the top and one at the bottom, to drop into an iron socket leaded in the stone sill. To have a 10-inch fine iron rim, drawback lock round wards, brass handles and side plates on both sides, with escutcheon fixed to doors, with strong round headed 3-inch full cut screws, to have a solid bow key, lettered and marked W ⅄ D, and no key to pass a second lock, to be kept open when necessary by self-acting brass back fasteners, as shown in the drawings.

The external doors in the centre block to have the upper part open for glass, with beads or mouldings secured by brass screws.

Doors at end of corridor.

248. The door at the opposite end of corridor next centre building, and also those from centre building to passage of communication, to be 2½ inch wainscot folding doors. Each leaf in two panels; the lower panel bead flush, and bolection moulded; the upper bolection moulded and open for glass, with wainscot beads fixed with brass screws and sockets, with locks and hinges, as to last doors, but to have transoms and fixed fanlights over.

Door from principal staircase to kitchen.

249. The door from principal stairs to kitchen to be 2½ inch deal, in two leaves, to swing each in two panels ; the lower bead flush, both sides, the upper open for glass, with beads screwed in each leaf; to be hung with a pair of Read's spring centres, iron flush bolts to suit height of door, and to have a 7-inch mortice lock and brass furniture ; also to fix to

each door two brass door handles. The door frame to be secured with four strong wrought iron holdfasts built into brickwork; 2½ inch moulded fan over in proper frame, as before; the sill of fan to have a groove and lead tongue let into stone landing.

Other external doors.

250. The other external doors to have 2½ inch four panel bead, flush both sides; four panel door with proper frames, transom and fastenings as to other doors; the butts to be 5″ iron, 1½ pair to each door.

Jamb linings.

251, 2. To provide and fix to all internal door openings Memel yellow deal jamb linings and soffit 1½″ inches thick, prepared to the width of the several thicknesses of the walls, wrought and rebated for two inch doors, ploughed and tongued and grooved, and grooved and tongued at angles, and beaded on edges. To provide and fix 1″ yellow deal, framed grounds round jambs on each side, wrought, beaded on one edge, and splayed for plaster, secured with proper dovetailed backings, and similar grounds and architraves to all doors, except the front corridor on ground and one-pair stories, the sick officers' rooms, the day room, medical officers' rooms, the board-room, &c. which are to have framed grounds splayed to plaster, and deal moulded architrave 7 inches girt.

Framed grounds, &c.

Jamb linings.

253. The jamb linings next the corridor where of sufficient width to be framed in moulded panels to correspond with doors. The jamb linings and architrave in Chelsea board-room to be as per drawing No. 57. The jamb linings to doors of waterclosets in centre building to be staff-beaded on both edges.

Screens to openings.

254. The screen in arched opening between waiting-room and office, and the similar screen in purveyor's office to have rebated and staff-beaded frames, heads, mullions, and transoms 6″×4″, with 2-inch sash door, lower part bead flush both sides with corresponding framing on each side, and 2-inch fixed sashes over. The doors to be hung with 1½ pair 4-inch butts, and to have iron rim lock as other doors.

Doors from centre staircase to yard.

255. The doors from centre staircase to courts by bath-house to be 2-inch 4 panel, lower parts bead flush on both sides, and upper parts open for glass, locks and hinges as before.

Doors, internal.

256. To provide and fix to all the other rooms throughout the buildings, except the nurses' rooms communicating with the wards, 2-inch 4-panel doors of Memel yellow deal bead, and flush both sides, hung with three 4-inch wrought iron butt hinges, and stout 2-inch screws to be secured with 8-inch iron rim, two bolt brass knobs round ward locks, except doors to waterclosets which are to have brass pulpit latches and 6-inch brass rod bolts.

The 12 doors on first floor for surgeons' room, sick officers' room, day room, corridor, and stair to be moulded on both sides, and to have 8-inch best mortice, three bolt locks with brass furniture.

The 9 doors on ground-floor, for medical officers' rooms, apothecaries' rooms, board-room, corridor, and staircase to be similar to the last.

The 4 doors on first floor for surgeon, bath-room, and officers' servants; and the 8 doors on ground-floor for medical officers' kitchen, porter, ward-master, and fatigue man to be moulded on one side, and bead flush on the other.

Doors to Chelsea board-room.

257. The doors to the Chelsea board-room to be 2½ inches thick, hung with 5 inch butts, and to have mortice locks and brass flush bolts, the whole as shown on drawing No. 57.

Doors of chapel.

258. The doors of chapel to be bead flush on both sides, with hinges, locks, &c., as to wing building; where of sufficient width, to be hung folding.

Doors of corridors to lifts.

259. The doors from corridors to lifts to be 2 inch deal, bead flush both sides, hung folding, with 5 inch butts to fir rebated, beaded, and staff beaded frames 5″ × 5″. Each door to have an iron rim lock, and one 12-inch and one 36-inch barrel bolt.

Doors of corridors to tower.

260. The doors from corridor to tower to be similar, but to have semi-circular fans, and proper transoms over.

Benches in pantry, larder, scullery, and room for arranging dinners.

261. To provide and fix benches in pantry and scullery, 2 feet wide and 1½ inches thick, planed both sides, ploughed, and cross joints, front edge and ends rounded, scribed to wall at back and ends, screwed to rails with stout 3-inch screws. Memel fir rails at intervals of about 4 feet, 3″ × 3″ under each top, wrought and framed to uprights, and wedged 6 inches in walls, with oak wedges, legs of Memel fir, wrought 3″ × 3″, framed to top rail, stepped into a stone plinth as per sketch.

Sink in scullery 6′.0″ × 2′.6″ extreme size 1½ both sides and cross-tongued bottom, and 1½ inch, two sides, and dovetailed rim with fir, wrought and framed rail and standards 3″ × 3″, the standards to have Portland stone bases, as described for other fittings.

Shelves in pantry, and larder, and scullery.

To provide and fix yellow pine deal shelves and bearers; shelves to be fixed three tiers high over the benches, in positions shown on the drawings. Yellow deal bearers for shelves 3″ × 2″, wrought both sides, and framed, wedged into wall on fir plate built in wall, 4½ inches by 2¾ inches, with oak wedges, uprights at walls 3″ × 2″ wrought and framed top rail and braces, and nailed to oak plugs in wall, bearers to be fixed at intervals of about 4 feet, 1½″ yellow pine deal shelves 2 feet wide, wrought both sides, ploughed, and tongued, front edge of shelves and ends of all bearers rounded.

The provision stores to have benches and shelves where shown on plan, as detail for scullery, &c.

Dwarf dressers in kitchens of wing buildings.

To provide and fix, in accordance with drawing, two dwarf dressers, with doors and drawers in front, 21′.6″ and 14′ long, 2′.3″ wide, 2″ deal top, planed both sides, ploughed, cross tongued, glued, and grooved for sides, edge rounded at front and ends, 1¼″ deal sides, wrought both sides, ploughed, cross-tongued, rebated for back, tongued at top and framed at bottom, 1″ deal bottom wrought one side, ploughed, tongued, and framed to sides, 1¼″ deal bearers, 3½ inches, deep under bottoms 3 feet apart, and 1 inch deal skirting, wrought both sides, top edge bevelled and mitred to corners.

Front framing under drawers, 1¼ inch deal at sides, middle and bottom rail wrought both sides, and beaded to uprights between drawers, back rail wrought both sides, framed to runners and nailed to back lining 3″ × 2″, rail under top 2″ × 2″, and framed to bearers 2″ × 2″ under top and blocked; oak runners for drawers 3″ × 3″, double rebated at sides ¾″ back lining planed one side, rebated, and nailed to back edge of sides, top, bottom, and uprights.

Drawer fronts of 1¼″ deal, wrought both sides, dovetailed to sides, ploughed for bottom and blocked; sides ¾ inch deal, dovetailed to front and back, ploughed and blocked to bottom; back ¾ inch deal, dovetailed to sides and nailed to bottom; bottom ¾ inch thick, tongued to sides, and nailed to back; to have two hardwood knobs on each drawer, screwed into front.

Fronts blocked to stand flush with 1¼″ framed doors in one panel, square and flat both sides, panels ½ inch thick; hung folding, with 2-inch brass butt hinges, and each secured with one 4-inch brass cupboard lock with fine wards and brass plate ⅛ inch thick, let in flush and screwed with two screws, on stile of doors to receive bolt of lock, and two 6-inch flat bolts.

Dresser for sick officers' kitchen, &c.

The dresser in kitchen for sick officers, and in that for medical officers, to have 2-inch deal, ploughed and tongued tops, rounded on edge, on strong wrought and framed rails and legs, enclosed under with $1\frac{1}{4}$ inch bead butt and square framing, the front part to be hung as doors with $2\frac{1}{4}$ inch butts, and to have locks, neck bolts, and brass knobs.

The bottom to be of $1\frac{1}{4}$-inch deal on strong bearers, with beaded skirting round. The drawers are to have $\frac{3}{4}''$ bottom and rims and $1\frac{1}{4}''$ front, with good locks and knobs to each. The shelves and standards are to be of $1\frac{1}{2}$-inch deal, with $\frac{3}{4}$ beaded fascia at top. The back to be of $\frac{3}{4}$-inch deal, matched and beaded. The shelves are to be grooved for plates.

A similar dresser for wardmaster's kitchen, but less in size.

Flap to cellar.

261½. To provide and hang 2-inch ledged flaps of English oak to outside well to cellar, wrought both sides, ploughed and tongued, and put together with white lead, hung folding with iron hook and strap hinges; hooks let into stone curb, and run with and including lead; hinges of wrought iron 2 feet 3 inches from hook to end, 2 inches wide, ½ an inch thick at eye, and diminished at end to $\frac{3}{8}''$, bevelled on edges and fixed to flaps and ledges with four wrought iron screw bolts, and nuts $\frac{3}{4}$ inch square, with a Memel fir bearer under flaps $5'' \times 3''$ let into stone curb at each side, and secured on top side with wrought iron hasp and staple, riveted on a plate with 4 screw holes in each plate, and fixed with 1-inch screws; and to supply large padlock, fine bridge thick warded, with bow of key filled and stamped.

Doors above do.

262. The vertical doors above the flap to be of 2″ deal bead flush on both sides, hung folding with hinges and strong fastenings to fir proper frame, $5'' \times 4''$, having iron stubs as before on Portland stone bases $9'' \times 6.''$

Doors to wine cellars.

263. The doors of wine cellars to be 2″ deal bead butt and square, hung with 4″ butts to fir proper frame $5'' \times 4''$. These doors to have best wine-cellar lock.

Sashes and frames to do.

264. The sashes and frames in wine cellar to be similar to those in other parts of building.

Inside shutters to back windows throughout the buildings.

265. To provide and fix deal cased frames, with inside linings and hanging shutters as sashes, grooved at sides and soffits, and inside linings continued from sill to floor, and grooved for $1\frac{1}{4}$ inch pulley stile for shutters, wrought one side, tongued to sash frame and grounds ploughed for $\frac{3}{8}''$ parting beads, and rebated for $\frac{3}{8}''$ freeing beads next sash. Heads $1\frac{1}{4}''$ thick, wrought one side, tongued to grounds, and head and sash frame and end of stiles, ½ inch back linings nailed to fillet on sash frame and grounds, ½ inch pendulum slips, leaving $\frac{1}{8}$ of an inch on each side of boxing for play, and nailed to groove in heads, 1 inch pocket piece 2 inches wide let into centre of pulley stile, under cut and rebated at top, and square at bottom, 20 inches long, inside bead $1\frac{1}{4}''$ wide by $\frac{3}{4}''$ thick; $1\frac{1}{4}''$ deal backs wrought one side, framed, bead flush and square in two panels, panels $\frac{3}{4}''$ thick, fixed between heads, rebated back, to receive ½ inch skirting, beaded on edge 6 inches wide; ½ inch wainscot flap over shutter, wrought both sides and mitre clamped, hung to window back, with three 2-inch brass butt hinges and screws, and brass flush ring let in flush on top side for opening. Inch deal grounds, wrought both sides and framed, ploughed inside for pulley stiles, with $\frac{3}{4}$ inch deal backing, planed one side, beaded and ploughed for plaster, and deal architraves, 7 inches girth on face, planted on grounds and mitred at angles; $1\frac{1}{4}''$ deal shutters, wrought both sides, framed in two moulded and square panels, each hung with best lines and wrought iron weights, with 2-inch brass framed pullies let flush in pulley stiles, and fixed with brass-headed screws, and brass flush lifting rings let in, and fixed with screws to edge of shutter, and secured with strong screw brass-headed shutter fastenings. The number of windows in centre

building requiring these shutters will be 21, and in the wards, &c. of wing building 178.

Shutters in Chelsea board-room.

266. The seven windows in the Chelsea board-room to have 1½ inch 2 panel front shutters, moulded and bead flush, and 1¼ inch back flaps, bead flush and square, hung with 3 inch butts and 2½″ back flap hinges. The shutters to have brass latches, and knob and spring-shutter bar fastenings, 1¼ inch bead flush back lining, tongued to frame 1¼ inch. Window backs and elbows with beaded capping on same. 1½ moulded panelled soffits bent circular, 1½ inch boxing grounds, and architrave 7 inches girt around.

Gates at principal entrances, at the back of the yard, and chapel garden.

267. To provide and fix 3 inch Memel yellow deal gates at principal entrances, at the back of the yards, and chapel garden, 1¾ inch, wrought both sides, framed in three rails and braced, filled in with 1¼ inch, wrought both sides, matched and beaded boarding in half-board widths, with 3½ inch deal moulded capping on top, wrought both sides, edges shot and sunk for gates, weathered tops, edges moulded, the whole put together with white lead, hung folding, with one pair of Collinge's hinges 5 ft. 6 in. long, and one pair cranked ditto, let in and bedded into the stone blocks of piers; to have a strong bolt to bottom of gate 1 inch round iron, with drop staple and hasp for padlock, mounted with strong staples on plate 3″ × $\frac{3}{16}$″, with stops, &c., fixed with strong screws, fastened with a strong swing-bar 3½″ × ½″, chamfered, with a ring 3 inches diameter rivetted to the bar, fall-hinged hasp, and plate-mounted staple, self-acting stops for holding gate open.

Gates of coal store.

268. The coal-store gates to be 3-inch deal, framed, ledged, and braced, filled in with 1-inch matched and beaded boarding, with wicket hung in same; each gate hung with three very strong wrought-ironstrap hook and ride hinges 3′·6″ long, 2½″ × ⅝″ average, bolted with small bolts, the fangs of hooks let into Portland stone hinge stones 2′·0″ × 1′·6″ × 9″; the wicket to be hung with a pair of 5-inch wrought-iron butts, and to have 6-inch iron-rim lock. The gates to be secured with a strong swivel bar fastening 5 feet long, with two strong catches and keeps on strong plates screwed to door.

Racks, &c. in bedding store.

269. To provide and fix in bedding and clothing store racks, shelves, and drawers, in position shown on the plan; the framework to be of Memel fir, standards and bearers 3″ × 3″, wrought and framed; the longitudinal and cross-bearers morticed and housed into standards, cross-bearers to be the thickness of the battens (1½ inches) lower than the front and rear ones, and to be placed about 5 feet 6 inches from centre to centre in four heights, the battens to be 3″ × 1½ deal, wrought both sides, edges shot and nailed to bearers, 2 nails in each bearer. The shelves to be at each end of the room, and as described in Article, No. 261.

Drawers in bedding store.

270. To provide and fix two nests of drawers in positions shown on plan, and in accordance with the drawings, and to be made as follows: The lower drawer to have 1¼ inch fronts, 1 in. rim, and 1 in. bottoms; the other drawers to have only ¾-inch sides and bottoms. The ends and divisions, both horizontal and vertical, to be of 1¼-inch deal, wrought both sides, the horizontal division grooved for the vertical, the top to be of 1½-inch deal, wrought both sides, and the back lined with ¾-inch matched and beaded lining.

Bench in do.

271. The bench in bedding store as shown in drawing of bedding store, and as described for the drug room.

Bays in the pack stores.

272. To provide and fix bays for the patients' packs, similar construction to those detailed for the bedding store, Article 269, and to the extent shown on the plans.

Cask stand to cellars.

273. To provide and fix Memel deal cask stand in cellar, legs 6″×6″, sides 6″×6″, dished to bulge of cask; cross-bearers and legs spaced at every 6 feet, morticed, tenoned, and pinned, and to have a ¾-inch iron tie-rod under each cross-bearer.

Wash tubs.

274. Wash-house in outbuilding. The wash tubs to be as shown in detail drawing, all put together with white lead, and to have wood gratings, as shown on drawing.

Gratings in ablution rooms.

275. The ablution houses to have wrought deal gratings 1½ inch thick, as shown.

Dresser and shelves to dispensaries.

276. To provide and fix wainscot dresser and shelves to dispensaries, with doors and drawers in front of lower part, as drawing, 1½ inch wainscot top, front framing under drawers and sides 1½ inch wainscot, middle and bottom rail, wrought both sides, and beaded, 3 inches wide, framed to beaded rail; under drawers 3″×2″, and framed to runners; rail under top 2″×2″, wrought both sides, and beaded to uprights between drawers; back rail wrought both sides, framed to runners, and nailed to back linings 3″×2″ under top; oak runners for drawers 3″×3″, double and single rebated at sides; ¾-inch back lining, planed one side, rebated and nailed to back edge of sides, top, bottom, and uprights; drawer fronts of 1¼″ wainscot, wrought both sides, dovetailed to sides, and ploughed for bottom and blocked, sides of ¾-inch, dovetailed to sides and nailed to bottom; bottom ¾-inch, tongued to sides and nailed to back; to turn and fix a dark-oak knob to each drawer, screwed and glued into front; fronts blocked to stand flush with front framing, and to be secured with one 3-inch brass drawer-lock to each of the drawers; the doors to be in one panel of 1¼-inch wainscot, wrought-framed bead and flush fronts and square back, hung folding, and secured with a brass flush bolt at top and bottom, and to have a turned wood knob to each, similar to the drawers; panel, ½ in. thick, to be hung with 2½″ brass butt hinges, and each secured with a 4-in. brass cupboard lock, with fine wards and iron plate, ⅛ in. thick, let in flush and screwed with two screws, on stile of door, to receive bolt of locks; 1¼ in. wainscot sides, and divisions for upper part of shelves, 10 inches wide, wrought both sides, let into top, grooved, framed to shelves, and sides rebated for back; 1 inch wainscot shelves, wrought both sides, framed to sides and uprights, with ¾ inch wainscot front to upper shelves, shaped as shown on drawings, wainscot cornice, 3 inches thick and 4½″ girth, mitred at corners; ¾ in. wainscot wrought, beaded and matched backs, behind the shelves planed both sides, rebated and nailed to rebate of sides, and back edge of top of dresser and divisions.

Dispensary shelves.

277. The dispensary to have nest of wainscot shelves, as shown, the shelves of ¾ in. wrought both sides and brass brackets, 4″ high, and 4″ projection, with four centres, with holes and brass screws to each, the shelf rounded on the edge; 1″ two sides, top, and division, and ¾ inch matched, and beaded lining to back.

Drug room, shelves, &c.

278. *The drug room* to have bench and shelves, where shown on plan, and as provision stores, but the bench to be only 1′.6″ projection, and the shelves 11″ wide.

Rails for instruments.

279. To provide and fix 1 inch deal rail, 4 inches wide, the whole length of the pier between the windows front and side, in three heights, planed on one side, OG moulding on edges, and ends returned, with twelve brass hooks in each rail at equal distances; to provide and fix No. 8 double sets of vertical 1 inch deal rail, 2½ inches wide, 2 feet long, each set 8 inches from centre to centre, fixed on wood blocks in wall, planed on one side, OG mouldings on edges, and ends returned, with three brass hook rests on each forenema pipes, &c.

Deal rail and cloak pins.

280. To provide and fix 1¼ inch deal rail, 4½ inches wide, planed one side, chamfered both edges, and ends returned, fixed 7 feet above floor to wood blocks fitted with wrought iron cloak and cap pins in such rooms as may be directed by the superintending officers. The pins to officers' rooms to be brass. The length of rail required will be 630 feet, and the number of pins, 644 japanned, and 76 brass.

Presses in medical officers' rooms, &c.

281. To provide and fix in each medical officer's room, and in the steward or wardmaster's rooms, No. 10 in all, deal dwarf presses 5 feet long, 3′.6″ high, and 1′.2″ deep, on shelf in clear of back and doors, vide plate 46, 1¼″ deal sides, planed both sides, dovetailed at top, framed to bottom, grooved for shelves, and rebated for back; bottom and shelves 1 inch thick, planed both sides, bottom framed 4 inches above floor to sides, and shelves grooved into sides.

Top of 1¼″ deal, planed both sides, glued and blocked to sides, and front framing 1¼ inch, planed both sides, 3 inches wide all round, and beaded; ¾″ deal back, planed both sides and rebated, nailed to rebates of sides, and top and bottom of press, 1¼ inch deal bearers under each shelf 2½″ wide, planed both sides, and framed to back and front under shelves, and ¾″ wide under bottom, with ¾-inch deal torus, moulded and 1½″ tray top, margin or skirting round back and ends, and mitred corners, a deal rounded nosing projecting 1 inch in front, and ends round top. 1¼ inch deal doors, framed in one panel each, planed both sides, square and flat panels ½ inch thick, hung folding to frame, with 2-inch brass butt hinges, and secured with 4-inch brass cupboard locks with fine wards, and half staple screwed to under side of shelf, with two screws ⅜ inch long, to keep both doors closed without a hook, all joints to be ploughed, tongued, and glued at top, bottom, sides, and shelves.

Presses in orderlies rooms off wards.

282. The presses for orderlies' rooms (No. 92 to the wings), as drawing, No. 44, 1¼ inch two sides, top ¾″, beaded skirting 1¼ inch framed sides, bottom, and top filled in with 1¼ folding half doors, as drawing, hung with a pair of 2-inch brass butts, and to have a 4-inch cupboard lock, and one 4″ flat bolt. The drawers to have 1¼″ fronts, ¾″ rims and bottoms, and 1-inch divisions. The drawers to be secured with a drawer lock, and the upper part of press to have 5 brass hat pins.

Curtain rails in centre blocks.

283. To provide and fix curtain rails to windows in rooms of centre buildings 1½ inch deal, moulded at front and returned at ends, grooved and blocked to frieze rail of ¾ inch deal, moulded with three reeds, mitred and returned for at ends, vide Plate 55, fixed with wrought iron brackets, twisted and screwed to under side of rail, curtain bed hooks ⅜ths diameter, rivetted on plate 2 inches by 1 inch, fixed with fine countersunk screws, with centre eyes screwed to rail in centre of support; curtain rod ½ inch round iron, with holes in centre of ends to fit hook, and clear drawn, filed curtain knobs, solid brass, 1½″ diameter. The number of the curtain cornices is 15.

Platform at back entrance under covered way.

284. The platform to be of 1½-inch deal, wrought one d e, ploughed, and tongued with iron, on fir wrought and framed joists 5×3 feet, in three divisions, with four very strong iron flush lifting-rings to each division.

Staircase from kitchen to dining room.

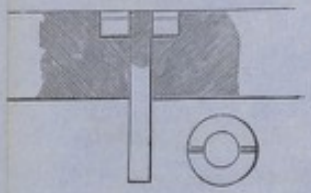
285. Staircase from kitchen department to dining-room, 1½-inch oak treads and 1¼ deal risers, glued and strongly bracketed with strong fir carriages, (rounded nosings); 2-inch torus, moulded wall and outer string, with beaded capping, 1½-inch oak landing, and risers as to steps on strong deal bearers, and 1″ staff-beaded apron lining.

Oak moulded handrail as before, and wrought-iron core, mitred to bevel, and cut and wedged in wall, oak wrought and double chamfered newels 4×4, and inch wrought iron round balusters 1 inch diameter, with strap ends, with two counter-sunk holes, and 1½-inch screws to each.

Covers to cisterns.

286. To provide and fix 1-inch deal covers to cisterns in waterclosets, divided into three spaces, the two end ones to be secured to the edge of the slate by 2-inch flat-headed screws; the inside edges to be grooved, and to have an iron guide for pivot of moveable cover, as shown in the drawing.

Ladders.



287. To provide ladders, sides out of Norway poles, with English oak cleft rounds 10 inches from centre to centre, every sixth and the two end ones to be of iron, properly secured with nuts; the nuts to be round, and sunk flush with the sides, as per sketch in margin. Length and size of ladders as follows :—

—	Number of Rounds.	Width at Bottom in clear.	Width at Top in clear.	Size of Sides at Bottom.	Size of Sides at Top.
4 ladders	35	14 inches	10 inches	6″ × 3¾″	3¾″ × 2″
4 „	25	13 „	9 „	5½ × 3	3¼ × 2
4 „	20	13 „	9 „	5 × 2½	3 × 2
4 „	50	15 „	11 „	7 × 3¾	4 × 2¼
2 „	60	18 „	14 „	8 × 4	5 × 3

Presses for surgeon in charge, and junior medical officer.

288. Dwarf presses one each side the fireplace in officers' rooms the full length of the openings, and to be 1′.2″ wide inside measurement. Tops 1½-inch deal, wrought both sides, rebated for back linings, and grooved for ends projecting 1½″ over fronts and ends, with rounded nosings rebated at back and ends, for top tray skirting; sides 1¼″ deal, rebated for back, grooved for shelves and bottom, and tongued to top, back linings ¾-inch deal, ploughed, tongued, and grooved for bottom and shelves; shelves 1-inch deal, let in ¼″ to back and ¼ inch at each end, all wrought both sides and edges shot; fronts 1¼-inch deal 4 inches wide all round, 1¼-inch deal doors, wrought and framed, square and flat both sides, rebated and hung folding to frame with 2½ brass butt hinges and ¾-inch screws, fastened with 3½ inch brass press locks, to lock into half staple, fixed by 2 fine ¾-inch screws under upper shelf; panels ½-inch deal, top tray skirtings to back and ends, ½-inch deal, wrought both sides, dovetailed, and mitred at angles, rounded corners and edges; skirting ½-inch deal, wrought both sides, edges shot, planted on and mitred at angles.

Bookcase for library.

289. To provide and fix wainscoat bookcase in each of the two libraries, with doors and drawers in front of lower part, 1½ inch wainscot at top, wrought both sides, and rounded on front edge, front framing under drawers and sides 1½ inch wainscot, middle and bottom rail 3 inches wide, wrought both sides, beaded, and framed to beaded rail; under drawers 3″ × 2″, and framed to runners, rail under top 2″ × 2″, wrought both sides, and beaded to upright between drawers, back rail under top, wrought both sides, framed to runners, and nailed to back lining 3″ × 2″, oak runners for drawers 3″ × 3″, double and single rebated at sides, ¾ inch back lining, planed one side, matched, and beaded, and nailed to back edge of sides, top, bottom, and uprights. Drawer fronts of 1¼ wainscot, wrought both sides, dovetailed to sides, beaded on edge, ploughed for bottom, and blocked, sides of ½ inch wainscoat, dovetailed to front and back, bottom ¾ inch deal, tongued to sides and front, and nailed to back. To turn and fix a dark oak knob to each drawer, screwed and glued into front. Fronts to stand flush with fronts of framing. The doors to be in one panel of 1½ inch wainscot, wrought, framed, beaded, moulded in front, and square and flat at the back, panel of ½ inch wainscot, and secured with a 4 inch brass rod spring bolt at top and bottom, a 4″ brass cupboard lock, and a turned wood knob to each door, similar in pattern to drawers, hung folding, with 3″ brass butt hinges. Sides and divisions of upper part to be 1¼″ wainscot 12 inches wide in clear of back, and doors wrought both sides and let into top. Stiles of

1¼-inches wainscot wrought both sides and beaded to top rail under cornice. The doors to be in one panel of 1¼-inch wainscot, framed 2½-inch wide, wrought, framed, beaded, and rebated for one pane of plate glass, secured with 6-inch brass flush bolts at top and bottom, a 4-inch superior brass cupboard lock and an oak knob similar in pattern to drawers hung folding, with 3½-inch brass butt hinges. Top facia to be of 1¼-inch wainscot, wrought, beaded, and framed to uprights or stiles, with a wainscot cornice 3 inches thick and 5 inches girth, wrought, moulded, and glue blocked as shown in drawing, top of ¾-inch deal wrought one side and nailed to top rail and back lining, shelves of 1-inch wainscot wrought both sides. Six in each division fixed and removeable at pleasure by means of brass pins and catches fastened to underside and inside stiles as shown in detail on drawing.

Mess room press.

290. To provide and fix in officers' day room a press or side board, as shown in drawing 46, the whole of the exterior to be Honduras mahogany. The doors to be hung with 2½ inch brass butt hinges, and each secured with a 4 inch brass cupboard lock, with fine wards and iron plate ⅛th thick, let in flush and screwed with two screws. One of the pedestals to be fitted with sliding trays, the other to have a shelf and a lined cellaret, the whole to be framed, polished, &c. in accordance with drawing No. 46.

Dome.

291. Construct the outer dome with curved ribs, bolted on to back of iron ribs, rafters, 5 × 2½ and 12 inches apart, and cover same with two layers of boarding, each 1 inch thick, crossing each other. The angle of dome to have rounded and diminished roll. The floor in dome for clock works to be, as before described, upon joists 9″ × 3″ upon girders 16″ × 10″ in two, with iron flitch between plate 6″ × 5″. The girder to be cased as before described; 3″ partition formed on ditto, boarded with ¾″ matched boarding on both sides, and enclosed at top with joists 8″ × 3″. The boarding on one side of partition and to top to be wrought.

Provide a bearer for bell 26 feet long, 1′. 3″ deep by 9 inches.

Gallery round three sides of chapel.

292. The gallery round three sides of the chapel to be constructed as shown in drawing No. 34. The transverse girders (9″ × 6″) are to be in one length, plugged into stone corbel, and moulded at end, as shown; framed to receive the two longitudinal bearers, which are to be bolted and tenoned into it with bolts. Bearing joists 8″ × 4″. The flooring to be of 2″ battens, wrought on both sides, grooved, and iron tongued, with under edges chamfered, as shown; upper edges of all steps to be rounded. The under edges of all girders, bearers, and joists, to be either beaded or stop chamfered. The gallery front to be 3 framed partition, stop chamfered, filled in with 1½″ framing, square panelled on back, and bolection mouldings to front panels.

Pew partitions.

293. Pew partitions to be 1½″ square, panelled on both sides, with moulded and grooved capping; deal mouldings, according to drawing. Put to all the windows of the galleries and rooms over vestries similar framing and capping. Fit up all the pews with 1½″ wrought, and rounded seats, with 1¼″ bearers, chamfered on edges not more than 3 feet apart, and with rounded ends next the opening; ¾″ book boards, 6″ wide, with ½″ rounded capping; ½″ cut brackets under the same, not more than 3 feet apart, and with the ends rounded next opening; ¾″ kneeling boards, 7″ wide; ½ cut brackets, with ends rounded next opening. Provide and fix proper angle irons to all partitions, and bolts, with nuts and washers, as shown. All the gallery partitions and fronts to be in accordance with drawing No. 34.

Seats.

294. The seats on ground floor to be of 1½ inch deal, rounded on edge and screwed to iron brackets, with 1½ inch rounded rails at top, also screwed to iron. The standards to be screwed to floors.

Pulpit and reading desk.

295. The pulpit and reading desk to be executed according to drawings, which will be furnished, and the contractor is to include the sum of 70*l.* for this work.

Deal casings to soil pipes.

296. To provide and fix deal wrought frame, and rebated for $\frac{3}{4}$″ clamped deal casings, the centre part of each to be hung with 2-inch brass butt hinges, secured with a 4-inch brass cupboard lock, with fine wards.

Towel rollers.

297. To provide and fix a towel roller of deal 1″ 6″ long, clear of the gudgeons, $2\frac{1}{2}$″ diameter, with proper brackets, properly fixed where directed, to each of the lavatories. (No. 100 in all.)

Towel rail.

298. To provide and fix a towel rail of deal for hand towels 2′ 0″ long, fixed to the wall on a deal rail and brackets, as shown in the drawing. (No. 100 in all.)

The towel rail and roller, when against slabs, to be secured with small screw bolts having octagonal heads and nuts.

Forms for waiting rooms.

299. Forms, with backs, in waiting room, to be on cast-iron standards, the same as shown in detail on drawing, No. 34. For each room in the wings there will be required twelve benches, 16 feet long.

Do. do.

The central waiting room to have similar benches, 18 feet long, and 18 in number.

Garden forms.

300. Eight garden benches, each for six persons, with iron standards on oak sills, and seats and backs of $1\frac{1}{2}$″ deal battens, wrought, and fixed with open joints, 10 feet long.

Tables in wash-houses.

301. The tables in wash-houses to be of deal strongly put together, 10 feet long and 5 feet wide, top 2″ thick, legs 3″×3″, and frame 6 inches wide. Each table to have No. 6 legs.

Dinner boards.

302. Also to provide 284 dinner boards for patients, 2′ 4″ × 1′ 6″, made as per drawing. Also 1000 patients' tables for bedside, with Sicilian marble tops $\frac{3}{4}$ inch thick, as per drawing. Also provide and fix 206 sets of bed fittings, as per drawing; and 1000 deal shelves, on cast-iron brackets, as per drawing.

Fittings in desiccating room.

303. The desiccating room to have deal fittings, as shewn upon the detail drawing, No. 43.

Water-closet seats.

304. The water-closets to be fitted with $1\frac{1}{4}$-inch deal seats, and risers on strong bearers, clamped flaps, and beaded frames; both flaps and seats to be hung with $2\frac{1}{2}$-inch brass butts; cut holes for seats and put beaded skirting round; each of the closets throughout the building to have a deal quadrant pot shelf and bracket and paper box, as per drawing.

Seats of privies.

305. The seats for privies in rear of wing buildings to be of 2-inch deal on strong bearers, as shown in detail drawings.

Cupboards under wash basins.

306. Enclose under slate slabs for washing basins, with dwarf framing and bead flush, and square folding doors hung with $2\frac{1}{2}$-inch butts, and having closet locks and bolts; the slate slabs to have fir bearers and legs, 3″ × 3″.

Bearers and legs to slate sinks.

307. The slate sinks to have fir wrought and framed bearers and legs, 3″ × 3″.

Capping seats, &c. to baths.

308. All the baths to have deal capping 2 inches thick, rounded on edges and grooved to fit over slate baths and fronts; capping to have

proper bearers; each bath is to have 1½″ deal seat 12″ wide adjoining, as shewn on drawings, and moveable trellis foot-boards 18″ square.

Similar seats and foot-boards to-dressing closets by large swimming bath. **Seats, &c. to swimming bath.**

309. The small shafts by large bath for access to cock to have 1½ inch wrought and proper ledged flaps, hung with two 4-inch cross-garnet hinges to oak rebated curb 5″ × 3″. Each flap to have a 1-inch sunk-flush ring. **Flap to shaft over cock.**

310. The Contractor to provide a table and two chairs for the chancel of chapel, as will be directed; for this include the sum of £25. **Table and chairs for chancel of chapel.**

311. The railing in front of chancel to have Honduras mahogany in moulded top rail, out of 4″ × 3″, and to be French-polished, and prepared for opening with a gate. **Railing to chancel.**

312. All the staircases throughout the building and the well hole by gallery of chapel to have wainscot moulded hand rails, out of 4 × 3, grooved for iron-core, and French-polished. **Hand rails to staircases, &c.**

313. Provide and fix in ceilings of the water-closets in rear of centre building, 1½ inch bead, flush and square flap, hung with 3½-inch butts, and each to have two neck bolts, and 1½ rebated rounded jambs. These are for access to the cistern over these closets. **Flaps in ceilings, W. C.**

314. Six presses for purveyor's offices and other places mentioned in drawings. To have 1½ inch ploughed and tongued dresser tops, rounded on edge, with clamped ends on bearers; enclose under with 1½ inch framed and beaded dwarf fronts, and 1¼ moulded and square folding doors hung with 2 inch butts, and to have brass cupboard locks, 4 inch brass flush bolts, and hardwood door knobs. The bottom shelf to be 1½ inch ploughed and tongued, on bearers, the divisions to be 1¼ square framing and the ends 1¼ inch moulded and square. The shelves are to be 1¼ deal, with 1½ standards, with fascia and moulding round at top. The book divisions to be ½ inch cut as shown. The back to be lined with ⅜″, both sides matched and beaded in narrow widths. **Presses for purveyor's office, &c.**

315. Three wainscot table desks, 1¼ cross tongued top with moulded nosing tongued on and covered with leather, and buttoned down. The ends of pedestals to be 1¼ bead, flush, and flush framed, with rails to front for drawer and proper runners. Put moulded plinth round. The drawers to have ¾ bottoms and rims, and 1½ fronts, and each to have brass locks and hard wood knobs. The tables to be French-polished. **Table desks.**

316. Three wainscot desks (different sizes) for Medical Officers, &c. Similar in all respects as last, but the top to be sloping (no leather), and rounded on edges. Each to have brass rails and standards. **Wainscot desks.**

317. Deal press for bath room, 1½ cross tongued dresser top, rounded on edge, and clamped ends, and buttoned down, 1¼ bead, flush and square ends under, and the front to have framed bearers for the top and rails for the drawers, ¾ drawers bottom and rim and 1¼ fronts; no locks but knobs. Enclose under drawers with 1¼ bead flush and square, folding doors hung with 2½ butts, having locks, knobs, and flush bolts. The upper part to have 1¼ bead flush and square doors as above with 1¼ bead flsuh and square ends. The standards and shelves to be 1½ cross-tongued, and the top 1¼ inch. Put ⅝ fascia and moulding round, and moulded plinth at bottom. The back to be ¾ matched and beaded. **Deal press for bathman's room.**

318. Wainscot table for small board room, 2½ inch cross tongued top 9′ × 4′, with moulded nosings 5 × 2½ tongued on; leather top and buttoned down; turned legs and 2½ rails and cross rails, French-polished. **Wainscot table.**

Wainscot table for Chelsea board room.

319. Wainscot table for Chelsea Board Room; the same in all respects as the last table, and in accordance with the drawings.

Bookcase to small board room.

320. Wainscot book-case for small board room. The lower part to have 1½ inch dresser top cross tongued, with mitre clamped ends, and all edges to be moulded with 1½" framed rails under, and console blocks on same over pilasters. The ends to be 1½ inch, moulded dwarf framing, and the fronts to have 1½ pilasters, with moulded caps and bases. The doors to be 1¼ inch moulded and beaded, and hung folding, with 2½ inch brass butts, and each to have a brass closet lock, brass flush bolt, and wood knobs. The divisions to be so fixed as to make the closet flush with the door when open, and to be 1¼ inch flush dwarf framing; 1½ inch moulded plinth at bottom. The upper part to be similar in all respects, except that the doors are to be prepared for 2 squares of plate glass, which is to be protected by ornamental brass trellis, as shown by drawing. The cover board to be inch thick, and the shelves 1¼ inch; these latter to be made moveable on brass socket pins. The back to be 1¼ inch square, and flush framed, screwed in, and the whole to be French-polished.

Ditto Chelsea board room.

321. Wainscot book-case for the Chelsea Board Room. This book-case is to be executed in accordance with the drawing, and to be of similar description to the last described. The carving to be boldly executed.

Window roller blinds.

322. Fix to such of the windows as may be ordered, white Holland roller blinds, with lines, racks, &c. complete. The number required is 477.

PAINTER.

Lead and oils.

323. All the lead and oils to be of the best quality.

Knot and prepare.

324. Knot in oil colour, stop, pumice down smooth in every part, and prepare all wood, iron, and other work described and usually painted, for painting.

Paint four oils and colour plain colours.

325. Externally and internally (except otherwise described) all the wood, iron, cement (except the Parian cement on walls), and other works usually painted, are to be painted four coats in good linseed oil and best white lead, and finished stone colour, or any other approved plain tint as may be directed, as dark oak, purple, brown, lead, white, green, fawn, drab, or other approved plain colour; the woodwork of all the exterior doors in the front and flanks of the buildings, not described, to be of wainscot; all the interior work of church, are to be extra grained and finished as wainscot in the best manner, and to be twice varnished. The varnish in all cases to be the best copal.

Wainscot and varnish.

Bronze green.

326. All iron railing and iron work visible, generally painted, internal and external, to be finished bronze green.

Eaves gutter, &c.

327. The external iron eaves gutters, &c., to be painted four coats in oil, to finish the same colour as the stone on which it lays; two coats of paint in all cases to be laid on all iron work used, visible or not, before being fixed, or it leaves the foundry, or is exposed to the air.

Chimney pieces.

328. To paint all the iron chimney pieces four coats in oil, as may be directed.

Railing to chancel.

329. The railing to chancel to be finished in colours, and partly gilt.

Efficient artists.

330. Efficient artists to be employed for the above, and for the wainscot work, and every thing appertaining to the painting is to be done in the best possible and workmanlike manner; and no labour, materials, or workmanship to be omitted which is requisite to render the whole complete in all respects to the satisfaction of the Superintending Officer.

PAPER-HANGER.

Prepare and size walls.

331. Properly prepare and size all the walls and surfaces intended to be papered, and bring the same out to a proper face. Provide for the Superintending Officer's choice sufficient patterns of paper-hangings, of good qualities and figures. Paper the walls of medical board room and ante-room with figured papers valued at 6*d.* per yard; the sitting rooms of the medical officers' quarters with figured paper value 6*d.* per yard, and borders top and bottom, value 1*d.* per yard; the bedrooms with figured paper, value 4*d.* per yard, and borders top and bottom at 1*d.* per yard. Run gold mouldings top and bottom, value 6*d.* per foot, round the medical board room and ante-room.

GLAZIER.

Best glass.

332. To glaze all the windows in the front and side of the centre block with the best Newcastle crown glass, except those on ground floor, extending from the medical officer's clerk's room to the Chelsea board room, which are to be glazed with polished plate, in two squares to each opening. The fanlights over doors in front to be also glazed with plate glass.

Second glass.

333. To glaze all the remainder of the windows throughout the buildings with clear second Newcastle crown glass, as well as all the windows in the outbuildings. The top of skylights, and other necessary works requiring, are to be glazed with approved cast rough plate glass, not less than $\frac{1}{4}$ inch thick; all the glass to be clear of waves and flaws; and bedded solid in oil putty, and finished with a neat bevel outside, and to the height of the rebate inside, in each sash square; to be left whole, clean, and perfectly secured at the completion of the building.

Moore's Patent ventilators.

334. To provide and fix Moore's patent ventilators to the several windows of wards, corridor, &c., as will be directed, to the number of 807. The price, fixed complete, to be 25*s.* each.

Sashes in urinals.

335. The sashes in urinals to be glazed with second glass, except the upper part, which is to be perforated glass, as shown on drawing.

Internal sashes.

336. The internal sashes to be glazed with second glass, and the fanlights over internal doors to chapel to be plate glass, in one square each.

Chapel sashes.

337. The sashes of chapel to have best glass, ground with ornamental border, as per pattern to be seen at the War Department, Pall Mall.

SLATER.

Roofs.

338. To slate all the roofs, except where otherwise described, with the best new strong queen slates, nailed with copper nails, on a layer of asphalted felt on the boarding; the whole of the slating is to be laid with proper bond and jointing, as well at the ridges as elsewhere, and is to be lapped (McNiells and Company's Asphalte Felt).

Campanile towers.

339. The two campanile towers at ends of wings to be covered with Italian tiles, (from Brown of Surbiton,) equal to sample to be seen at the Surveyor's Office, War Department, Pall Mall, and securely fixed to battens; the front part of roof to centre block to have slab slates, with rolls securely and properly fixed and made water-tight, in accordance with detail drawing, No. 60.

Front part of centre block.

Wine bins. 340. Wine bins to be put to the cellars for purveyor's stores, three tiers in height, as shown on plate No. 32; bottoms inch slate sawn fair both sides, with square edges, to have 4½-inch bearings on end and back walls, and 2¼ inches at meeting joints over brick pier divisions of bins. Bottoms to be inserted as the piers are built up; lower bins to have brick on flat 9 inches over the floor.

Baths. 341. The slate baths throughout the building (No. 93) are to be of Magnus's slate enamelled pale green; the internal dimensions to be 5′ 11″ long at top, and 5′ 1″ at bottom, 2 ft. wide, and 1′ 10″ deep, well and securely made, and put together with japanned bolts, and properly prepared for fittings and to be placed on the floors on a layer of asphalted felt.

Rufford and Finch's baths. 342. The remainder of the baths (No. 15) to be of Rufford and Finch's white glazed Stourbridge ware, 5′ 3″ long at top, 2′ 4″ wide, and 1′ 11″ deep. These baths will be fixed in bath-houses in rear of centre building and in the out-buildings in rear of wings, and to be bedded in concrete, as shown in detail drawings.

Enamelled fronts. 343. All the baths are to have ½-inch enamelled slate fronts securely fixed.

Slate partitions. 344. All the partitions shown in the drawings to be of slate are to be 1 inch thick, enamelled on both faces, fixed in rolled iron socket cills and cappings, as shown on detail drawings, and securely screwed thereto. Those partitions extending from floor to ceiling are to be two slabs in height, and are to have a double-channelled intermediate capping and deal moulding at top, as shown on drawings. These iron cills and cappings are to be galvanized; all vertical joints to have copper tongues and grooves.

Doors to baths. 345. The doors of the several baths and water-closets are to be of similar slate, to correspond, having rebated edges, and are to be properly hung with brass hinges, similar to those used at the Metropolitan baths, and as shown on drawings; each door to have a brass bolt fastening, and a large porcelain knob, bolted to door with nut and screw. The dressing closets near the large swimming bath will not require doors; but are to

Curtains to do. have brass rods securely fixed to slate along the whole front, to receive curtains. Each bath room and dressing closet to swimming bath to have 2 porcelain hat pins, with screwed ends and nuts, fixed to the slate partition.

Washing slabs. 346. The washing basins are to have slabs of 1-inch slate, enamelled by Magnus, with rounded edges and corners, and with perforations rebated in each for basins, as per detail drawing, No. 39. These slabs are to have ½-inch enamelled slate skirtings, securely fixed to slate and wood partitions, and to have perforations in same for cocks.

Sinks. 347. All the sinks (No. 110) to be of slate, as shown on detail drawings, the fronts to be enamelled.

Do. Provide and fix 2 slate sinks, as shown in detail drawing, for the post mortem room.

Cisterns to water closets. 348. The cisterns (No. 148) are to be of 1¼″ slate, average 6′ 6″ long, 2′ 9″ wide, and 2′ 6″ deep in the clear; to be enamelled on the under side and on the fronts and ends, where seen; well and securely put together with galvanized iron bolts; the bolt heads to be let in and properly covered.

Urinals. 349. The backs, fronts, and divisions of the urinals in rear of the wing buildings, and the screen of water-closets adjoining, to be of 1-inch

slate rubbed on both faces, with rounded edges, and the vertical joints to have tongues and grooves. Channel for urinals to be of rubbed Portland, dished as channel, and to have 6-inch brass grating, and bell trap. The paving of urinals and water-closets to be of 1-inch rubbed slate, bedded in mortar on concrete.

350. Risers and divisions of privies in yards to be of 1-inch slate, rubbed. **Risers, &c. to privies.**

351. To provide and fix Llangollen slate stone floor to upper gallery of out-buildings, 1¼ inch, planed both sides, to have a rounded nosing on the outer edge in front and return ends, properly fixed on the iron joists and grooved into brick wall, 1 inch bedded in cement. **Floors of galleries to out-buildings.**

352. To provide and fix one row of slate shelves under the wooden shelves in the larder and pantry, of the same dimensions as the wooden shelves, 1 inch in thickness, supported on slate divisions 2 feet or thereabouts apart, and with a skirting of slate ½ an inch thick carried all round against the brickwork at the back of the shelf, properly secured to oak plugs with strong flat headed screws. **Slate shelf in larder and pantry.**

353. Provide and securely fix to stone work at the Chancel end of Chapel three slate slabs of the form shown on drawing, enamelled by Magnus, with the edges rounded and gilt, and the slabs to have the Creed, Lord's Prayer, and Commandments in coloured letters. **Slate enamelled tablets to Communion.**

354. The flat of passages of communication between centre and wing buildings to be of slate with slate fillets over joints, watergroove, &c. and made secure and water tight. **Passage roofs.**

SMITH'S WORK.

355. To provide and fix wrought-iron chimney bars to all chimney openings, cambering three inches, with nine-inch bearings on each jamb, and caulkings let into brick-work at each end of bar. Kitchen 3″ × ¾″, smaller openings 3″ × ⅝″. **Chimney bars.**

356. To provide wrought-iron spuds for letting into stone steps 1½ inch, and into each bottom of door-frames for external doors 5 inches, to be 1½ inch square, fixed in rings $\frac{3}{16}$ths of an inch thick and 1 inch wide; the diameter of ring to be made to correspond with the size of spuds; and the larger frames to have in addition, large screws let into the frames, and covered and run into stone with lead. **Screws and spuds or dowels to door frames.**

357. To provide and fix wrought-iron bracketing and bolts, with nuts, for ladder shed, agreeably to drawings, and fixed to walls of Chapel yard, covered with corrugated iron, No. 18, B. W. guage. **Brackets for ladder shed.**

358. To put to each of the queen or king posts of all the trusses of all the roofs a stirrup turned up out of one piece of wrought iron 2″ by ⅜″, with bolts and key wedges complete. **Stirrup irons, &c. to the roofs.**

359. To put to the feet of the principal rafters 2″×⅜″ wrought iron straps, holed for bolts, screw bolts of round iron ¾ inch, with nuts and washers complete. **Wrought-iron straps to rafters.**

360. To provide and supply all ridge irons that may be necessary for carpenters' use in fixing ridge rolls. **Ridge irons.**

361. To provide and fix twelve iron scrapers of pattern as in Kennard's book, No. 16, plate 106. **Foot scrapers.**

Foot scrapers, moveable.

362. To provide six cast-iron moveable scrapers; the scrapers to be of substantial make, and of the pattern chosen, valued at 5*s.* each. P.C.

Iron capping and curtain rod to closets of swimming baths.

363. To provide and fix a wrought-iron capping and brass curtain rod to the dressing closets to the swimming baths, agreeably to the drawing plate 40, to be properly fitted with screw-bolts and nuts.

Do. do.

Water closets, &c.

Also provide and fix a wrought-iron capping to the slate partitions to the water closets, bath room, &c, throughout the hospital where shown in the drawings, the ends let into the walls and properly wedged, and to be made according to the drawings, the whole of this ironwork to be galvanized.

Cast-iron work to dome.

364. Provide the cast-iron work to dome as shown by detail drawing, casting the proper flanges to receive purlins, and with nuts and bolts and all requisites to complete the dome. This ironwork is to be executed by Mr. James, of Broadwall, Stamford Street, London.

Chain bar.

365. Provide two complete chains of wrought-iron, bars $1\frac{1}{2}'' \times \frac{1}{2}''$ fixed round tower let into stone slab securely linked at angles; also provide and let into top of cornice a copper chain bar $\frac{3}{4}'' \times 1\frac{1}{2}''$ and run with lead and couplings complete.

Covering to bell.

366. Provide and fix the corrugated iron covering over bell securely rivetted and fixed as shown on drawing.

Perforated panels.

367. Also fill into the four angle openings in Tower cast-iron perforated iron panels, as per drawing, well and securely fixed to stone, and 4 similar plates under clock face.

Roofs of bath houses.

368. Provide and fix to the roof of both bath houses wrought-iron rafters and collars, and cast shoes for ditto and for purlins, with the necessary screw bolts, junction plates, &c., complete, as shown on drawing No. 40. The shoes for rafters to have hold-down bolts 3 feet long, properly built in brickwork, and secured to Purbeck stone templates 18 × 18, and 6 inches thick.

Iron flitches.

369. Provide and fix to the girders of the several floors rolled-iron flitches securely bolted to the wood, as shown on drawing No. 30.

Wrought-iron pins.

370. Provide and fix to the ends of all the wood flitches for floors one to the end of every third joist of the floors wrought iron pins, 1 inch diameter and 3 inches long.

Cast-iron work. Ventilating towers.

371. Provide the cast-iron work to the two ventilating towers, as shown on detail drawings, with all necessary screw-bolts, &c., to complete the same. This iron work is to be executed by Mr. James, of Broadwall, Stamford Street, London.

Cast-iron work.

372. The cast-iron work to be of strong grey No. 2 pig iron, cast from second melting, perfectly sound and clear, free from sand holes, flaws or other defects, and to include all patterns and models; such of the cast-iron articles as may require to be tested shall be submitted to a reasonable proof by lever or hydraulic power, as may be considered requisite by the Commanding Royal Engineer or Superintending Officer, to be tested at the manufactory or on the War Department premises at the cost and charge of the contractor, who is to find all the hydraulic power and apparatus necessary for the purpose.

Chimney-pieces.

373. To supply and fix cast-iron chimney pieces in the several rooms hereafter detailed, and agreeably to the pattern No. 209 in Kennard's book, of the several openings figured on the drawings. The parts to be cast with flanges, with holes for fixing with screw nuts to ends of wrought-

iron cramps, turned down and built in walls, jambs, and mantels complete, and the entire fixed perfectly upright and horizontal. These chimney pieces are required for nine rooms on the one-pair story of centre building, and for two kitchens on ditto; also for six rooms on ground-floor, and one kitchen on ditto.

374. To provide and fix in each window in all the wards and corridors throughout, except Chelsea board room, bath house, and chapel, cast-iron aprons, bedded to the splay the several widths of the windows, drilled and countersunk for screws, and fixed flush with inside openings between jambs to be cast entire $\frac{1}{2}$ inch thick, with flanges to fit over brickwork and into oak sills $\frac{1}{2}$ inch thick by 2 inches wide, as shewn. **Window aprons.**

375. Supply and fix register stoves to nine chimney openings on one pair story centre building and six ditto on ground-floor. Also a stove for board room as No. 209 in Kennard's book. Also five ranges, with boilers for kitchens in centre building. All other openings, except kitchens of wings, to have stoves with cast moulded fronts as per drawing. The bathman's room, in centre building, to have a 30-gallon copper ($49\frac{1}{2}$ lbs.) with furnace bars, doors, dampers, &c. **Register stoves.**

376. To provide and fix upon the stone of the cornice of the front and to chapel an ornamental cast-iron gutter forming the upper members of the cornice as shown in the drawings, Plate No. 30, made in the most exact manner, with the proper sockets for outfalls, and jointed so as to be perfectly watertight and secured by bolts and iron ties as shown. All the joints to be chipped and filed, and fitted with iron cement; all castings to be perfectly straight, and all irregular castings will be rejected. **Front cornice, and cornice to chapel.**

377. To provide and fix similar cast-iron gutters to the rear and other parts of the buildings as directed, but of smaller dimensions as shewn by the drawings. **Rear cornices.**

378. To provide and fix cast-iron gutters to the bath-houses, as shewn by the drawings, plate 35. **Gutters to roof of bath-houses.**

379. Provide and fix cast-iron girders, as per drawing, to carry walls over Chelsea board room and over medical officers clerk's office, bolted together through cast hollow cylinders; also, girders with moulded bottom flange to carry landings and half spaces of staircase in centre building and staircases of outbuildings, and similar girders for brick arches over passage of communication between centre building and wings; also girders to carry stone landings on one pair floor over lobby to chapel, and these to have ornamental pendants, properly screwed and tapped into girder, as shown on drawing, and coupled girders to carry landings of stairs at ends of wings, similar to those in principal staircases of wings. **Cast-iron girders.**

380. To provide and fix cast-iron columns, caps, and boxings, with wrought-iron base and cap plates, and wrought-iron bolts and nuts complete, under girders of floors to large wards and operating theatre, as shown in the drawings, plate No. 32. **Iron columns to support floor of operating theatre.**

381. To provide and fix cast-iron columns, moulded bases and caps, and ornamental brackets complete to church gallery, of the form and dimensions shown and figured on the drawings. **Cast-iron columns to gallery of church.**

382. To provide cast-iron valvular ventilating gratings for admission of fresh air, to be fixed in the floors of all the wards and other rooms, as shall be directed, and as shown in the drawings. The number required will be 985. **Cast-iron valvular gratings in floors for ventilation.**

Cast-iron standards for seats.

383. Provide cast-iron standards and rail for seats of church, as shown upon drawing No. 34, for the ground floor only. Also, similar standards for the seats of waiting rooms in centre and wing buildings, and for the garden seats.

Iron girders or supports, and carriages of staircase.

384. Provide of the very best castings with the mouldings well executed, the iron girders or supports and carriages of staircase with all flanges, nuts, bolts and plates, stubbs, &c. requisite for securely fixing the steps, as shown on drawing No. 29.

Cast-iron ballusters.

385. To fix to the principal staircases of wings and the two staircases of centre building and the chapel staircase, and the landings thereof, ornamental cast-iron ballusters and newels according to the drawings, the top rail of wrought-iron, $\frac{5}{8}'' \times \frac{3}{8}''$, let into and securely screwed to the handrail and the ballusters rivetted at top into the iron rail, and let at bottom into the side of steps, and run with lead.

Ornamental railing.

386. Fix on one pair story, around well hole over lobby to chapel, ornamental railing as drawing.

Wrought-iron ballusters.

387. To fix to all the other staircases wrought-iron round ballusters, 1″ diameter, and wrought-iron newels 2″ diameter, with iron core and oak handrail, the ballusters securely rivetted into iron rail, and let at bottom into steps; and run with lead. The staircases to cellars to be similar, but no oak handrail.

Ornamental railing to chancel.

388. Provide and fix to the chancel end of chapel ornamental iron railing as per drawing. This railing to have folding gates in same, with proper hinges and fastenings.

Girders to staircase chapel gallery.

389. Two iron socketted girders, weight, 6 cwt. each, for carrying winders of staircase to chapel gallery across windows.

Iron girders.

390. The brick wall over the room of medical officers on duty in wings is to be carried by coupled iron girders, the top and bottom flanges and the rib to girt 15½ inches, and to be 1¼ thick, with bearing plates on templates; these girders to be bolted together by four ¾″ iron bolts, and are to have fir flitches 9″ × 2″ cased with 1″ deal and beaded; the tops of these girders to have York stone the full width of the wall.

Arches of desiccating room.

391. The arches over desiccating room to have cast-iron skewback girders, 21 inches girth and 1¼″ thick, with bearings on walls; the brick arches are to be secured by four wrought-iron tie-rods, 1 inch diameter, through brick arches and iron girders with cranked ends, let into stone and run with lead.

Cast-iron girders.

392. The walls at end of washhouse above piers to have cast iron girders 15 inches girth and 1″ thick, with bearing plates; these girders are to be bolted together with 1″ bolts through cast-iron hollow cylinders.

Girders to Campanile.

393. The walls of Campanile over staircase to have cast iron couple girders 21 inches girth and 1½″ thick, and to be bolted together with 1″ bolts, through cast iron hollow cylinders; these girders to have fir flitches 4″×4″, to receive ceiling joists.

Columns to covered ways.

394. The columns of covered ways to be as shown on the drawing, and every fifth column to act as rain pipe from the gutters, and to have circular outlet pipe built in the brick piers; the bases of columns to be let into stone and run with lead.

Corrugated iron roofs.

395. The corrugated iron roofs and other works to covered ways to be in accordance with detailed drawings; and all intersections to be properly made, and to have spandrils of corrugated iron where required.

Lead beddings.

396. The bearing ends of all iron girders to have 5 lb. lead under same.

397. All the wards are to have cast iron skirting, according to the established pattern, with eyes cast on and screwed to wood floors. **Cast-iron skirting.**

398. Provide and fix lightning conductors to the seven towers and shafts throughout the building, of Newall's patent copper wire, $\frac{3}{8}$th inch diameter, for which, including fixing to stonework all necessary insulators, tanks, &c., the sum of 130*l.* is provided. **Lightning conductors.**

VENTILATION.

399. Fresh air to be admitted to the several wards and rooms by zinc tubes 11″×7″ in the clear weighing 16 oz. to the foot superficial, supported by hoop iron bands nailed to the fir joists. These tubes to have iron ornamental gratings in the external walls, and to extend where practicable from front to back walls. These flues are connected with the rooms by means of valvular gratings let in and made good to the floor. The wards for nine men are to have two valvular gratings, and those for sixteen men are to have two tubes and three gratings in each. All other rooms, as well as the water-closets, are to have one grating in each, and each tube crossing the corridor to have one grating. The kitchen building in rear of wings, the ward master and assistant ward master's kitchens will not require tubes or gratings. The contagion and itch wards in rear of each wing are to have two tubes and two gratings in each room. The dining-rooms to have three tubes with two ventilators in each. **Fresh air tubes.** **Outer gratings.** **Valvular gratings.**

In the centre building there are to be three tubes in waiting-rooms on ground floor and No. 2 tubes in the stores, servants' bedrooms, kitchens, sick officers' rooms, and day room on one pair floor, and on two pair floor to be fixed in every room. Similar tubes and outer and inner gratings to be fixed in each water-closet. The total number of the outer ornamental gratings will be 601, and of the inner or valvular gratings 985. **Tubes in centre building.**

400. The front wall of the corridors on the ground and one pair floors in the wing buildings to have a fresh air chamber for the supply of the one and two pair floors, 11″ × 8″ in the clear, made of deal, forming the cornice of corridor, as shown in detail drawing No. 32, put together with white lead and made air-tight. **Longitudinal fresh air chamber in cornices of corridors.**

The chamber for the supply of the ground floor to be made of zinc, and to be fixed under the ground floor joists of corridor by hoop iron straps. **Ditto chamber under ground floor.**

401. Similar but smaller zinc tubes to be fixed between the ceiling joists for carrying the vitiated air from the gas burners into the flues formed from same in brick walls. The wards for the sixteen men are to have two, and the wards for nine men, and all other wards and orderly's rooms one each. The rooms in the centre building to have similar tubes. **Tubes for carrying off vitiated air from gas burners, &c.**

Each of these tubes are to have Looker's patent ventilator fixed to the ceiling, as shown in drawings, through which the gas pendant will pass. The total number of these ventilators will be 218. **Looker's patent ventilator.**

402. Provide and fix Looker's patent ventilators into mouth of flues formed in brick walls near the ceilings, and communicating with iron extracting duct in roof. The wards for sixteen men are to have three of these ventilators, the wards for nine men and waiting room two each, all other wards, orderly rooms, lavatories, water-closets, wardmaster and assistant wardmaster's living rooms, and wardmaster's bedroom, one each. The library to have three. The wards and orderlies' rooms in out buildings to have two each. The total number of these ventilators is 930. **Looker's patent ventilating gratings in foul air flues.**

R. O. Mennie,
Surveyor.

SCHEDULE PRICES.

BRICKLAYERS' WORK.

No of Item.	Description of Work.		Prices. £	s.	d.
1	Digging and throwing out ground, &c. to any depth, and for any purpose, (excepting for wells, tanks, or cesspools, exceeding 10 feet in depth,) and filling in and ramming the ground round the walls of brickwork and over drains and sewers, and providing and fixing all the requisite shoring, wheeling, and carriage, trucks, tools, and tackle that may be necessary	per yard cube	0	0	7
2	Do. do. and moving the stuff, under 50 yards	do.	0	0	10
3	Add to price of item 2, for wheeling every additional 25 yards	do.	0	0	1
4	Carting earth or rubbish one mile, including filling the carts,	single load or yd.	0	1	6
5	Carting earth or rubbish one mile, including filling the carts,	per double load.	0	2	4
6	Concrete for foundations and other purposes of 6 parts of coarse screened gravel, one of sharp grit sand, and one of Dorking or Guildford lime, to be thrown from a height of at least 6 feet, including all scaffolding and implements	per yard cube	0	6	6
7	Brickwork with stone, Dorking or Guildford lime, and sharp fresh water or pit sand, all stocks	per rod reduced	11	0	0
8	Do. do. 1 part Roman cement and 1 part sand, all stocks	do.	14	0	0
9	Brickwork in tanks laid in all Roman cement, including doming, all stocks	do.	16	10	0
9½	Add for facing with best red faced bricks	per foot super.	0	0	3
10	Brickwork to coppers, boilers, ovens, and hot plates set in mortar, including fixing all ironwork, cutting splays, flues, &c. according to order, Welsh lumps, fire bricks, and all requisite articles for the brickwork, being provided by the contractor, without extra charge	per foot cube	Materials, labour, and scaffolding. 0	1	6
			Materials and labour.		
11	Brick flat paving, with stocks laid in mortar	per yard super.	0	2	2
12	Do. do. with marle paviors in mortar	do.	0	3	0
13	Brick, on edge, paving, laid in mortar	do.	0	3	0
14	Brick, flat, paving, with best paving bricks, laid in mortar	do.	0	2	6
15	Brick drains, half brick sides, brick flat bottom, and covered with a brick flat, 5 inches wide and 6 inches high in the clear, laid in stone lime mortar	per foot running	0	0	8
16	If done in Roman cement	do.	0	0	11

No. of Items.	Description of Work.		Prices. £ s. d. Materials and labour.
17	9-inch barrel drain, half brick all round, laid in stone lime mortar	per foot running	0 0 10
18	12-inch do.	do.	0 1 1
19	15-inch do.	do.	0 1 4
20	18-inch do.	do.	0 1 10
21	18-inch do. half brick under, one brick over	do.	0 2 3
22	18-inch do. one brick all round N.B.—All drains above 18 inches diameter to be reduced to the superficial rod, and paid for as other brickwork, the full opening being deducted (and no allowance in consequence of being circular).	do.	0 3 5
23	Surface gutters, half brick, laid in sand	per foot super.	0 0 4
24	Do. do. in mortar	do.	0 0 5
25	Do. do. do. in Roman cement N.B.—The contractor to find all centres and moulds for turning drains, up to 18 inches in diameter inclusive, without extra charge.	do.	0 0 7
26	Rubbed and gauged work with best red or white rubbing bricks or marl cutters, set to any curve exceeding 3 inches rise in putty	do.	0 2 6
27	Flat joint pointing, neatly drawn, in chalk lime mortar, or coal ash mortar, as may be ordered, including the requisite colours, and raking and dubbing	per yard super.	0 1 2
28	Flat joint pointing with Roman cement, including raking and dubbing	do.	0 1 10
29	Tuck joint pointing to new work, including raking, cleaning, and colouring	per feet super.	0 0 3½
30	Rough cutting to the tops of walls	do.	0 0 1¾
31	Cutting external or internal angles for face work, including rubbing when necessary	per foot lineal	0 0 3
32	Cutting intersections, or points of groin, and rubbing fair	per foot running	0 0 8
			Materials only.
33	Guildford lime, unslacked	per foot cube	0 0 7
34	Dorking do.	do.	0 0 7
35	Common stone do.	do.	0 0 7
36	Road or pit sand	pr. ld. of 27 cube ft.	0 3 4
37	River sand, clean	do.	0 4 0

Glazed Stoneware, Tubular Drain Pipes, with socket joints, laid and jointed in cement.

No. of Item.	——	Straight, per foot.	Bends, each.	Junctions, each.	Double Junctions, each.	Syphon Traps, each.	Flat Traps, with Patent Flaps.	Jenning's Patent Pipes, per foot.
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
38	3-inch	0 6	1 4	1 4	1 9	2 7	5 2	—
39	4 do.	0 7	1 10	1 10	2 1½	3 7½	5 8	0 9
40	6 do.	0 9½	2 4½	2 4½	2 10	5 2	6 9	1 2
41	9 do.	1 4	3 8½	3 8½	4 9	7 10	8 4	1 9
42	12 do.	2 1	5 9	5 9	7 4	10 6	12 4	2 11
43	15 do.	3 5	8 6	8 6	12 5	—	—	3 9
44	18 do.	4 5	10 6	10 6	16 6	—	—	4 9

No. of Item.	Description of Work.		Prices.	
			s.	*d.*
45	Sound, hard, well-burnt grey stock bricks	per 1,000	32	0
46	Do. red do.	do.	34	0
47	Sound, hard, red rubbers	do.	55	0
48	Malm cutters	do.	95	0
49	Do. seconds	do.	59	0
50	Do. paviors	do.	59	0
51	Dutch clinkers	do.	55	0
52	Welsh fire bricks, common size	per 100	12	0
53	Stourbridge do.	do.	16	0
54	Mortar	per foot cube	0	5
55	Blue pointing mortar	do.	0	6
56	Fine stuff for bricklayers' work	do.	0	8
57	Windsor fine loam	per bushel	2	0
58	Roman cement	do.	1	6
59	Bricklayer	To work the number of hours specified by the Government Regulations. per day.	5	0
60	Labourer (for every description of labourers' work)		3	0
61	Driver, horse and cart		8	0
62	For each additional horse		4	0
63	Proper paving bricks	per 100	4	3
64	28-inch Welsh lumps	each	4	3
65	24 do. do.	do.	3	6
66	18 do. do.	do.	1	10
67	16 do. do.	do.	1	6
68	14 do. do.	do.	1	3
69	18 do. fire tiles, Welsh	do.	2	8
70	16 do. do. do.	do.	2	2
71	14 do. do. do.	do.	1	8
72	12 do. do. do.	do.	1	0
73	Portland cement	per bushel	2	6

MASONS' WORK.

			Materials and Labour.					
			Cornish Granite.		Portland.		Purbeck.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*
74	Stone in block, cut to any scantling, not exceeding 6 feet in length	per foot cube	2	9	2	0	1	2
75	Do. do. exceeding 6 feet in length	do.	3	2	3	0	1	8
76	Add to either of the foregoing, if set in lime and sand mortar	do.	0	5	0	5	0	5

			Materials and Labour.					
			Cornish Granite.		Portland.		Purbeck.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*
77	Half plain work	per foot super.	0	7	0	4	0	5
78	Plain work	do.	1	5	0	8	0	9
79	Plain circular work	do.	2	3	1	0	1	2
80	Moulded work, straight	do.	0	0	1	5	1	6
81	„ circular	do.	0	0	2	10	1	6
82	Sunk work, smooth to a depth of 4 inches from a plain horizontal bed	do.	2	0	1	0	1	0
83	Add to ditto for every additional inch in depth	do.	0	2	0	1	0	1
84	Sunk work, circular	do.	2	7	1	6	1	6
85	Throating, straight	per foot run.	0	0	0	1	0	1
86	„ circular	do.	0	0	0	2	0	2
87	Stop to sunk work	do.	0	0	1	4	0	0
88	„ to moulded work	do.	0	0	1	10	0	0

N.B.—Plain circular work refers to convex surfaces; and sunk circular to concave surfaces.

For circular circular work add one half to the prices for "plain circular," "sunk circular," or "moulded circular," as the case may be.

Items 74 and 75 to include all joints and beds squared their whole depth, if ordered, without any extra charge.

Coping.

				Materials and Labour.	
				Portland.	
				s.	*d.*
89	Averaging 4 inches in thickness, parallel, and throated	Measured on the bed, and no allowance for edges and joints.	per foot super.	2	10
90	Averaging 3 inches ditto		do.	2	5
91	Add to the two last items, if set in mortar		do.	0	1¾
92	Add to items 89 and 90, if set in Roman cement		do.	0	2½
93	Averaging 2½ inches, weathered or parallel, and throated	—	do.	2	1
94	Averaging 2 inches do.	—	do.	1	8
95	Add to the above, if set in mortar		do.	0	1¾
96	Add to items 89, 90, 93, and 94, if weathered or saddled		do.	0	4

Steps.

Set in mortar, the net quantity being measured and allowed.

			Materials and Labour.			
			Portland.		Purbeck.	
			s.	*d.*	*s.*	*d.*
97	Square above 6 feet cube in each stone	per foot cube	4	10	3	3
98	Diagonal winders	do.	5	0	4	2
99	Channel stones 3 inches thick, and properly sunk, as from the quarry	per foot super.	0	0	0	9
100	Add if set in mortar	do.	0	0	0	3
101	Curb wrought and upper angle champered, bedded in mortar	per foot cube	0	0	2	2
102	Holes, round, or square, (plugholes excepted,) not exceeding 3 square inches on plan	each	0	1¼	0	1½
103	Cramps let in, including the labour and fuel in running the lead	per inch.	0	1	0	1
104	Cramps let in, including the labour and fuel in running the lead, including the lead	do.	0	2	0	2
105	Chamfering, not exceeding ½ inch in width	per foot run	0	1	0	1
106	Rebating	do.	0	2¼	0	2½
	Items 105 and 106, if circular, to be paid for at double the price specified.					

N.B.—Items 97 and 98 include the working plain and smooth the top bed face of riser and the ends of each step.

Paving.

Worked smooth on face, and the meeting joints squared three fourths of its thickness.

			Purbeck.		Portland.		Yorkshire.	
			Prepared for laying.	Laying in Mortar.	Prepared for laying.	Laying in Mortar.	Prepared for laying.	Laying in Mortar.
			s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
107	2-inch paving	per foot super.	0 6	0 1	1 2	0 1¾	0 6½	0 1¾
108	3 „	do.	0 8	0 1½	1 5	0 2	0 8	0 2
109	4 „	do.	0 10	0 2½	1 10	0 2	0 8	0 2
110	Add if rubbed		0 3	—	0 2	—	0 3½	—

		s. *d.*
111	Add to items 107, 108, and 109, if laid in Roman cement (extra to the prices specified for mortar)	0 2
112	Add to items 107, 108, and 109, if in hearth-stones or window benches	0 1

Rough Landings.

Above 15 and under 30 feet superficial, including all joints, squared their whole thickness.

			Yorkshire.	
			Not set.	Setting in Mortar.
			s. *d.*	*s.* *d.*
113	4-inch	per foot super.	1 3	0 2¾
114	5 do.	do.	1 5	0 4
115	6 do.	do.	1 10	0 4½
116	9 do.	do.	3 0	0 5
117	Add to the last four items, if wrought on face and edges square	per foot	0 6½	—
118	Add to ditto, if rubbed on face	do.	0 3¾	—
119	Add on landings, if above 30 feet superficial	do.	0 2	—
	The edges where seen when set to be paid for according to the workmanship thereon.			

Sundries.

			Materials and Labour.
			s. *d.*
120	Joggle joints to landings, &c., including lead, fuel, and labour in running, average from 3 to 7 inch landing	per foot run	1 2
121	Notches in hearths for jambs	each	0 3½
122	Pivots for gates let in and run (lead, fuel, and labour included)	do.	2 2
123	Hooks for do. do.	do.	2 2
124	Running balusters with lead (lead, fuel, and labour included)	each	0 3
125	Fixing door scrapers, and running with lead (lead, fuel, and labour included)	do.	0 10
126	Bangor slate plugs, from 1 in. to 2 ins. square, and from 2 in. to 4 in. long, run with cement	do.	0 4
127	Mason — To work the number of hours specified by the Regulations of the War Department	per day.	5 0
128	Labourer — To work the number of hours specified by the Regulations of the War Department	per day.	3 0
129	Plaster of Paris	per cwt.	6 0
130	Cramps for coping wrought iron	per inch run	0 1
131	1 inch Valencia or Bangor paving as received from quarry	per foot super.	0 8
132	1¼ inch do. do. do.	do.	0 9½
133	2 „ do. do. do.	do.	1 0
134	3 „ do. do. do.	do.	1 4
135	Lead for running	per lb.	0 3½
135½	Spreading gravel or broken stones on parades, roads, &c., labour only, from 1 in. to 3. ins. thick	per yard super.	0 1½
136	„ do. above 3 in. do.	do.	0 2
136½	Gravel unscreened	per yard cube	3 0
137	do. coarse screened, or ballast	do.	4 0
137½	do. fine do. do.	do.	4 0
138	Broken granite, to pass through 1½ in. mesh	do.	12 6

CARPENTERS' WORK

No. of Item.	Description of Work.		Prices. s.	d.
138½	Fir in scantling	per foot cube	2	3
139	If cut arriswise	do.	2	5
139½	Add if exceeding 55 feet in length	do.	0	3
140	Oak in scantling, not exceeding 36 square inches in section	do.	4	5
40½	Oak in scantlings, above 36 and not exceeding 81 square inches in section	do.	4	9
141	Do. above 81 and not exceeding 144 square inches in section	do.	5	4
142	Add to oak scantlings if cut arriswise	do.	0	4
143	Add to oak scantlings, above 14 and not exceeding 20 feet in length, when ordered	do.	0	6
144	Do do. exceeding, 20 feet in length, when ordered	do.	1	1

N.B.—The timber to be free from sap, shakes, and large or loose knots, and to be die square.

Planks and Boards.

			½ inch.	¾ inch.	1 inch.	1¼ inch.		1½ inch.		2 inches.		2½ inches.		3 inches.		4 inches.	
			d.	d.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
145	American Pine	per foot super	1¼	2	2¼	0	2½	0	3	0	4	0	5	0	5¾	0	7¼
146	Fir, Memel, Riga, Dantzic, or Petersburgh	do.	1½	2	2¾	0	3¼	0	4	0	5	0	6	0	7	0	9
147	Oak	do.	3¼	4¾	5¾	0	6½	0	8	0	10½	1	1	1	4	1	9
148	Deals or battens, either Archangel or best Petersburgh	do.	1½	2	2¾	0	3¼	0	4	0	5	0	6	0	7	0	9
149	Wainscot	do.	5	8	10	1	0	1	3	1	8	1	10	2	2	0	0

Timber, fixed, but not framed.

			Materials and Labour.			
			Straight.		Curved.	
			s.	d.	s.	d.
150	Fir under 144 square inches in section	per foot cube	2	6	3	9
151	Do. exceeding 144 inches	do.	2	5	3	8
152	Add to the last two items if wrought	do.	0	4	0	6
153	Do. do. if rounded	do.	0	2½	0	3½
154	Girders cut down the middle, reversed and bolted, including the labour of fixing the ironwork	do.	2	7	0	0
155	Add if trussed with oak trusses (including trusses)	do.	1	0	0	0

No. of Item.	Description of Work.		Prices. DEAL. Materials and Labour. £ s. d.
156	Single or double architraves or other mouldings, above 2½ inches girth, the projection before the face of the plastering or wainscoting to be measured in	per foot super.	0 0 10
157	Do. do. do. circular	do.	0 1 8
	Architraves or other mouldings under 2½ inches girth, to be measured by the foot running		

Boarding rough, of deal, laid complete, bevel joints included.

			Materials and Labour. Straight or raking. s. d.	Curved. s. d.
158	1-inch deal	per square.	30 0	33 9
159	Do. edges shot	do.	31 9	35 3
160	1½-inch deal	do.	43 7	47 7
161	Do. edges shot	do.	45 4	49 1
162	Add to the foregoing items if ploughed and tongued or rebated joints	do.	4 6	7 6
163	Add if to ceilings	do.	1 0	1 6

Boardings, wrought.

Straight joints with tongued headings, secured by nails or staples, as shall be directed.

			Materials and Labour. ¾ inch deal. s. d.	1 inch deal. s. d.
164	Wrought one side and edges shot	per square.	27 8	34 3
165	Do. 2 sides do.	do.	30 2	36 9
166	Wrought one side and rebated, or ploughed and tongued	do.	31 2	37 9
167	Do. two sides do.	do.	33 8	40 3

N.B.—All other wrought boarding to be measured under the head of deals, and paid for as such with the workmanship thereon.

Columns.

Glued up and properly blocked, to be measured at the greatest girth.

			Materials and Labour. £ s. d.
168	Plain shafts of 1½-inch deal	per foot super.	0 3 0
169	Do. do. 2 do.	do.	0 3 6
170	Caps to glued-up columns to be measured square at the greatest diameter	per foot cube	0 8 0

No. of Item.	Description of Work.		Prices. Materials and Labour. £ s. d.
	Centering.		
171	For the use of straight centering to vaults, arches, &c., the section whereof to be of any kind of curvature, prepared, fixed, and removed	per square	1 8 0
172	Do. to trimmers, &c.	per foot super.	0 0 4
173	Do. to curved window or door heads, where ribs and backing may be required	do.	0 1 4
174	Centres for camber arches, rough or gauged	do.	0 1 0
	N.B.—The above prices to extend to the first use of centering for vaults, arches, sewers of 5 feet diameter, &c., of brickwork and masonry, and are to include all proper and necessary support and wedges, &c., together with occasional labour of easing the centres when ordered, and also for striking and carrying away the same. And for every subsequent use, easing, and removal of the same centering, including making good all defects and deficiences, to be paid for at one third of the prices here specified. The net quantity of soffitte of arches to determine that of the centering. Cradling to form curves and arches to receive plastering or stucco, ribs three inches wide, and not to exceed twelve inches from centre to centre, the openings to be measured in.		
175	To plain coves or arches straight on the plan	per foot super.	0 0 8
176	Straight cradling to fronts of arches, &c.	do.	0 0 5
	All hanging pieces, ties, braces, supports, and stiffeners, to be included without extra charge.		

Wrought Doors and Gates, Framed Doors in Panels (including Labour in hanging).

			DEAL. Materials and Labour.		
			1½ inch.	2 inch.	2½ inch.
			s. d.	s. d.	s. d.
177	Four panel, framed, square and flat	per foot super.	0 9½	0 11½	1 0½
178	Do. flush, square and flat	do.	0 10¼	1 0¼	1 3
179	Do. both sides	do.	1 1	1 3	1 6
180	Six panel, framed, square and flat	do.	0 9¾	1 0½	1 2½
181	Do. flush, square and flat	do.	0 11	1 1¾	1 4
182	Do., do., both sides	do.	1 2	1 4	1 6¼

Curved heads to doors of any of the foregoing descriptions to be measured net, and to be paid for at twice the price for the straight.

The margins to be proportioned to the size of the doors, or of such widths as shall be directed, not exceeding 6 inches.

The panels in items 179 and 182 to be solid, and the joints ploughed, feather-tongued, and glued.

Framed and Braced Doors and Gates,
including the labour in hanging, with margins not less than six inches wide.

			Materials and Labour.					
			DEAL.				OAK.	
			2½ inch filled in with 1¼ inch Battens.		3 inch filled in with 1¼ inch Battens.		2½ inch filled in with 1¼ inch Plank.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*
183	Wrought, ploughed, tongued, and beaded, or rebated and beaded	per foot super.	1	1¼	1	3½	2	0½
184	Do. and herring-boned	do.	1	3¼	1	5½	2	2½
185	Add if prepared and hung folding	do.	0	1½	0	1¾	0	2¼
186	Add if put together with white lead	do.	0	0¾	0	0¾	0	0¾
187	Add extra if with wicket gate	each wicket	10	0	11	0	16	0

Deal, straight or raking, including fixing.

			DEAL. Materials and Labour.							
			½ inch.	¾ inch.	1 inch.	1¼ inch.	1½ inch.	2 inch.	2½ inch.	3 inch.
			d.	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*	*d.*
188	Rough and fixed	per foot super.	2¾	3½	4¼	4¾	5¾	7	8½	10
189	Edges shot	do.	3	3¾	4½	5	6	7½	9	10½
190	Wrought one side and edges shot	do.	3¼	4	4¾	5½	6½	8	9½	11¼
191	Wrought two sides do.	do.	0	5	6	7	8	9½	11	14
192	Add to items 189, 190, 191, if ploughed and tongued or rebated joints	do.	0½	0¾	0¾	1	1	1½	1½	1½
193	Add to items 188, 189, if in gutter boards	do.	0	0	1	1	1¼	1¼	0	0
194	Add to the foregoing items, if put together with white lead	do.	0¼	0¼	0½	0½	0½	0¾	0¾	0¾
195	Add to do. if pitched on one side	do.	1	1	1	1	1	1¼	1½	1½

			OAK. Materials and Labour.											
			1 inch.		1¼ inch.		1½ inch		2 inch.		2½ inch.		3 inch.	
			d.		*d.*		*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
196	Rough and fixed	per foot super.	8½		10		0	11¾	1	2¾	1	5¾	1	10
197	Edges shot	do.	9		10½		1	0¼	1	3½	1	6½	1	11
198	Wrought one side and edges shot	do.	9½		11		1	1	1	4¼	1	7½	2	0
199	Wrought two sides do.	do.	10¾		11¾		1	1¾	1	5¼	1	8¾	2	1
200	Add to items 197, 198, and 199, if ploughed and tongued or rebated joints	do.	1¼		1¼		0	1½	0	2	0	2	0	2¼
201	Add to items 196 and 197, if in gutter boards	do.	—		—		—		—		—		—	
202	Add to items above, if put together with white lead	do.	0½		0½		0	0½	0	0¾	0	0¾	0	0¾
203	Add to do. if pitched on one side	do.	1		1		0	1¼	0	1¼	0	1½	0	1½

N.B.—The nails to be used in the items specified in the above Table are to be of approved patterns, and of such dimensions as may be ordered.

Feather-edge deals will be paid for at the rate of their mean thickness, according to the prices in the above Table.

Floors, laid complete.

The nails to be wrought, and of approved pattern.

The net quantities only to be allowed in the measurement, and no addition to be made for scribing or other extras, which are to be performed without further charge than the prices in this Table.

No. of Item.			DEAL. Materials and Labour.	
			1¼ inch, with clasp nails, 26lbs. to 1,000.	1½ inch, with clasp nails, 32lbs. to 1000.
	With broken joints:		*s.* *d.*	*s.* *d.*
204	Wrought, rebated, and filleted	per square	46 11	53 10
	With straight joints:			
205	Wrought, ploughed, and tongued, or rebated and filleted, with tongued headings	„	54 6	56 9

Jambs and Soffits.

Wrought back, rebated when required, and fixed complete; the jambs to be tongued and grooved together at head.

No. of Item.			DEAL. Materials and Labour.	
			1½ inch.	2 inch.
			s. *d.*	*s.* *d.*
206	Framed, square, and flat in one or two panels, in height,	per foot super.	0 7¼	0 8¼
207	Do. do. do., and rebated, one edge	„	0 7½	0 8½
208	Do. do. do., and rebated, two edges	„	0 7¾	0 8¾

Ladders.

With oak cleft rounds, nine inches apart from centre to centre, and every sixth round and the two end ones to be of iron; rivetted on washers outside, shouldered on the inside, and the size of the sides to be as directed.

No. of Item.	Description of Work.		Prices.	
			s.	*d.*
209	Under twenty rounds	per round	0	11
210	Twenty and under thirty	do.	1	1
211	Thirty and under forty	do.	1	3
212	Forty rounds and upwards	do.	1	5

Partitions or Closet Fronts.

Framed, square, or raking.

No. of Items.			DEAL. Materials and Labour.				
			1 inch.	1¼ inch.	1½ inch.	2 inch.	2½ inch.
			d.	*d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
213	Frame, square, and flat panel	per foot super.	6	7	0 8¾	0 9½	0 11
214	Deduct if left rough on one side	do.	0½	0½	0 0¾	0 1	0 1
215	Bead and butt, or bead and flush, square and flat panel	do.	8	9	0 9½	0 10½	1 0½
216	Bead and butt, or bead and flush, on both sides	do.	–	10	1 0	1 2	1 3½

The panels to be of such thickness as may be directed.

No. of Item.	Description of Work.	Prices.
	Ridge and Hip Roll.	
		d.
217	Deal, wrought and rounded, $2\frac{1}{2}$ inches by $2\frac{1}{2}$ inches——— per foot run.	$3\frac{1}{2}$
218	Do. do. 3 inches by 3 inches ——— do.	5
219	Add if copper nails are used instead of iron ——— do.	$0\frac{1}{2}$

Staircases.

Upon square or curvilinear plans, consisting of steps, both flyers and winders, and risers of half and quarter spaces, including rough brackets; the carriages to be paid for as cube timber framed.

			DEAL. Materials and Labour.											
			1 inch.		$1\frac{1}{4}$ inch.		$1\frac{1}{2}$ inch.		2 inch.		$2\frac{1}{2}$ inch.		3 inch.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
220	Steps and risers, wrought, glued, and blocked, with rounded nosings, including brackets ———	per foot super.	0	11	1	$0\frac{1}{4}$	1	1	1	$3\frac{1}{2}$	1	$5\frac{1}{2}$	1	7
221	Add to the above item, if the risers are tongued into threads, one edge ———	do.	0	$0\frac{3}{4}$	0	$0\frac{3}{4}$	0	$0\frac{3}{4}$	0	1	0	$1\frac{1}{4}$	0	$1\frac{1}{2}$
222	Do. both edges ———	do.	0	$1\frac{1}{2}$	0	$1\frac{1}{2}$	0	$1\frac{1}{2}$	0	2	0	$2\frac{1}{2}$	0	3
223	Add if steps and risers are squared at one end, and fitted into string———	do.	0	$0\frac{3}{4}$	0	$0\frac{3}{4}$	0	$0\frac{3}{4}$	0	1	0	$1\frac{1}{4}$	0	$1\frac{1}{2}$
224	Do. at both ends ———	do.	0	$1\frac{1}{2}$	0	$1\frac{1}{2}$	0	$1\frac{1}{2}$	0	2	0	$2\frac{1}{2}$	0	3
225	Add if steps are dovetailed for balusters, one end ——	do.	0	$0\frac{1}{2}$	0	$0\frac{1}{2}$	0	$0\frac{1}{2}$	0	$0\frac{3}{4}$	—		—	
226	Do. both ends ———	do.	0	1	0	1	0	1	0	$1\frac{1}{2}$	—		—	

N.B.—Should the steps and risers vary in thickness, each will be measured separately, and will be paid for at the prices specified in the above Table.

No. of Item.			OAK. Materials and Labour. 1 inch.		1¼ inch.		1½ inch.		2 inch.		2½ inch.		3 inch.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
227	Steps and risers, wrought, glued, and blocked, with rounded nosings, including brackets	per foot super.	1	6	1	8½	1	10½	2	2¾	2	7½	2	11¼
228	Add to the above item if the risers are tongued into treads, one edge	do.	0	1	0	1¼	0	1½	0	1¾	0	2	0	2¼
229	Do., both edges	do.	0	2	0	2½	0	3	0	3½	0	4	0	4½
230	Add if steps and risers are square at one end, and fitted into string	do.	0	1	0	1¼	0	1½	0	1¾	0	2	0	2¼
231	Do., do., at both ends	do.	0	2	0	2½	0	3	0	3½	0	4	0	4½
232	Add if steps are dovetailed for balusters, one end	do.	0	0¾	0	1	0	1¼	0	1½	—		—	
233	Do., both ends	do.	0	1½	0	2	0	2½	0	3	—		—	

			Materials and Labour. DEAL.		OAK.	
			s.	*d.*	*s.*	*d.*
234	Housings to step and riser	per foot run.	0	3	0	6½

			DEAL. Materials and Labour. £	*s.*	*d.*
235	Proper curtail step and riser, the whole included	each	1	3	0

String Boards to Stairs, Raking or Level, including Ramping.

			DEAL. Materials and Labour. 1 inch.		1¼ inch.		1½ inch.		2 inch.		2½ inch.		3 inch.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
236	Wrought two sides and framed	per foot super.	0	8½	0	10	0	11	1	1½	1	2¼	1	5½
237	Add if sunk	do.	0	2	0	2	0	2	0	2	0	2½	0	2½
238	Add if moulded	do.	0	1	0	1	0	1	0	1	0	1	0	1
239	Add if mitred and cut for steps and risers	do.	0	5	0	5¼	0	5½	0	5¾	0	6	0	6¼

Handrails, framed, Level or Raking.

			Materials and Labour. Deal.		Oak.		Honduras Mahogany.	
			s.	*d.*	*s.*	*d.*	*s.*	*d.*
240	Averaging 2½″ by 2½″ rounded	per foot run.	0	6¼	0	10	1	4
241	Do. 3″ by 3″	do.	0	7½	1	1	1	9
242	Ramps and knees, or circular on plan averaging 2½″ × 2½ moulded	do.	2	6	4	0	5	0
243	Do. do. 3″ × 3″ moulded	do.	2	10	4	5¾	5	11½
	Add for sinking to hand rails for balusters as under:							
244	Straight	do.	0	1	0	1¾	0	1½
245	Ramped and kneed, or circular on plan	do.	0	4	0	6	0	5½
246	Wreathed or twisted	do.	0	8	0	11	0	10½

Newels.

			Materials and Labour.	
			Deal.	Oak.
			s. d.	s. d.
247	Wrought and framed, level or raking, averaging $2\frac{1}{2}'' \times 2\frac{1}{2}''$	per foot run.	0 $6\frac{1}{2}$	0 $10\frac{1}{4}$
248	Do. do. do. $3'' \times 3''$	do.	0 8	1 1

Bar Balusters, Palisadoes, or Square Rack Staves.

			Materials and Labour.	
			Deal.	Oak.
			s. d	s. d.
249	Averaging 1 inch by 1 inch	per foot run.	0 2	0 $3\frac{1}{4}$
250	do. $1\frac{1}{4}$ inch by $1\frac{1}{4}$ inch	do.	0 $2\frac{1}{2}$	0 4
251	do. $1\frac{1}{2}$ inch by $1\frac{1}{2}$ inch	do.	0 3	0 $4\frac{3}{4}$

			Materials and Labour.		
			Deal.	Oak.	Mahogany.
			s. d.	s. d.	s. d.
252	Joints in continued handrails, including nuts, screws, and washers	each	0 0	1 10	1 10
253	Dovetails in steps for balusters, when not otherwise provided for	do.	0 $1\frac{1}{4}$	0 $1\frac{3}{4}$	0 0
254	Iron balusters, fixing only	do.	0 9	0 9	0 0
255	Iron newels do.	do.	2 10	2 10	2 11
256	Mitres to caps	do.	1 0	1 6	1 6
257	Housings in handrails to receive balusters	do.	0 2	0 $2\frac{1}{2}$	0 $2\frac{1}{2}$
258	Turning newels	do.	1 0	1 6	1 4
259	Turned pendants	do.	0 $1\frac{1}{2}$	0 2	0 2
260	Turned caps	do.	0 9	1 0	1 0
261	Turned balusters	do.	0 6	0 9	0 0

Shutters (Outside).

			Materials and Labour.	
			$1\frac{1}{2}$ inch Deal.	2 inch Deal.
			s. d.	s. d.
262	2 panel, bead and butt, or bead and flush, square and flat, inch panels (labour in hanging included)	per foot super.	0 10	0 $11\frac{1}{2}$
263	4 panel do do.	do.	0 $10\frac{3}{4}$	1 $0\frac{1}{4}$

Shutters (inside) and back flaps.

(Labour in hanging included).

No. of Item.		Materials and Labour. Framed, square and flat.	Moulded on one side.	Moulded on both sides.	Bead and butt, or bead and flush, square and flat.	Bead butt or bead flush, moulded and flat.
		s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*
264	1½-inch deal, 2 panel —— per foot super.	0 10	0 11	1 1	0 11	1 0½
265	1¼ do. 3 do. —— do.	0 10	0 11	1 1	0 11	1 0½
266	1½ do. ,, do. —— do.	0 11½	0 11¾	1 1¾	0 11¾	1 1
267	1¼ do. 4 do. —— do.	0 11½	0 11¾	1 1¾	0 11¾	1 1
268	1½ do. ,, do. —— do.	1 0¼	1 0½	1 2	1 0½	1 2
269	Add if hung in two heights —— do.	0 1	0 1	0 1	0 1	0 1

		Materials and Labour. 1 inch deal	1¼ inch deal.
		d.	*d.*
270	Shutter and back flaps tongued, grooved, and clamped - - per foot super.	7	8½
271	Add if hung in two heights —— do.	1	1

Sash Frames.

		Materials and Labour. For 1½ in. sashes.	For 2 in. sashes.
		s. d.	*s. d.*
272	Deal cased frames, prepared with oak sunk sills, inch deal outside and inside linings, 2 inch heads, 1½ inch pully-pieces, tongued to inside and outside linings, ⅜th parting beads, ½-inch back linings and parting slips, the inside beads 1¼-inch wide and ⅞-inch thick, single or double hung, as may be ordered, including the fixing of the pullies —— per foot super.	0 8	0 8½
273	Deal cased frames as the last item, with ¾-inch inside and outside linings —— do.	0 7¼	0 8
274	Add if wainscot pully-pieces are used —— do.	0 1½	0 1½
275	Add if wainscot beads are used —— do.	0 0½	0 0½
276	Add if double hung with 1½-inch brass framed pullies —— do.	0 1½	0 1½
277	Do. do. No. 2-inch do. —— do.	0 2	0 2

N.B.—No extra charge to be allowed for weather beads, either of metal or wood, when ordered to be fixed in the sill.

		Materials and Labour. Fir.	Oak.
		s. d.	*s. d.*
278	Solid frames, common or transom (prepared for 1½ or 2 inch sliding sashes) 4½ inch by 3½ inch, with oak weathered and rebated sills, deal parting beads, slips, or weather beads, ¾-inch outside linings and inside beads - - per foot super.	0 9½	1 4
279	Do do. 5½ × 3½ do.	0 10½	1 6
	N.B.—If semi or segment heads be ordered to items 272 to 279, the head to be measured as square, and the superficial quantity so obtained to be paid for at double the above prices.		
280	Solid frames, circular, properly wrought, chamfered with proper deal beads, and linings prepared for bull's-eye, or other circular sashes of any thickness (to hang on pivots) to be measured square at its greatest diameter (prepared for 1½-inch or 2-inch sashes) —— do.	1 9	2 11

Sashes.

Sashes, including those in doors or partitions, fixed or hung with hinges or pivots, as may be ordered, or prepared to slide on weather beads or in grooves (exclusive of the price of hinges or pivots).

No. of Item.			Materials and labour. Prepared out of $1\frac{1}{2}$-inch Deal. Straight.	$1\frac{1}{2}$-inch Deal. Circular or curved head.	2-inch Deal. Straight.	2-inch Deal. Circular or curved head.
			s. d.	*s. d.*	*s. d.*	*s. d.*
281	Moulded or bevelled bar	per foot super.	0 $6\frac{1}{2}$	1 1	0 7	1 2
282	Add, if hung single or double, in frames with white or best flax line and iron weights	do.	0 2	0 2	0 2	0 2

The circular sashes to be measured as square, taken to the extreme of the diameter; semi or segment heads to sashes to be measured as square, and to be paid for accordingly.

Skylights.

			Materials and labour. $1\frac{1}{2}$ inch Deal.	2 inch Deal.	$2\frac{1}{2}$ inch Deal.
			s. d.	*s. d.*	*s. d.*
283	Square bar, frame 4 inches wide, pully-lines and weights complete, fixed or to slide	per foot super.	0 5	0 $5\frac{1}{2}$	0 $6\frac{1}{2}$

Skirtings.

(To be grooved and tongued at angles.)

			Deal. Materials and labour. 1 inch.	$1\frac{1}{4}$ inch.	$1\frac{1}{2}$ inch.
			s. d.	*s. d.*	*s. d.*
284	Square skirtings, straight or raking, including backings and fillets	per foot super.	0 7	0 $8\frac{1}{4}$	0 $9\frac{1}{2}$
285	If torus moulded, do. do.	do.	0 $7\frac{3}{4}$	0 9	0 $10\frac{1}{2}$
	Circular skirting, if ordered, will be paid for at treble the price of straight skirting of the same description.				
286	Add, if scribed to step and riser	do.	0 3	0 $3\frac{1}{4}$	0 $3\frac{1}{2}$

Weather boarding with $1\frac{1}{4}$ inch laps.

			Materials and labour. Rough.	Wrot one side.	Wrot both sides.	Wrot one side and chamfered.	Wrot both sides and chamfered.	Wrot both sides and rebated.
			£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*
287	$\frac{3}{4}$-inch deal, average thickness	per sq.	1 7 3	1 9 6	1 11 9	1 11 0	1 13 8	1 14 4

No. of Items.	Description of Work.		Prices.
			DEAL. Materials and Labour.
			s. d.
288	Blockings, including glueing	each	0 1
289	Beaded capping under 2½ inches wide, including fixing	per foot run.	0 0½
290	Edges shot	per 10 feet run.	0 1¼
291	Escalloping, any shape ordered	do.	0 2
292	Fillets, rough, 2 in. × 1 in. and under, including fixing	per foot run.	0 1
293	Do. wrought, do. do.	do.	0 1½
			Materials and Labour.
			s. d.
294	Iron balluster or newels	per lb.	0 6

			Deal.	Oak.
			s. d.	s. d.
295	Mouldings under 2½ inch girth, including fixing	per foot	0 2	—
296	Plough groove	per foot run.	0 0¼	0 0½

			Materials and Labour.
			s. d.
297	Runners to drawers, single rebated, of any size required, including fixing	per foot run.	0 2½
298	Do. do. double rebated	do.	0 4
299	Sinking as to dresser shelves	do.	0 0¾
300	Sash beads, including fixing	do.	0 1½
301	Tongues for plough groove, cross or herring bone, prepared only	do.	0 0½
302 303	Carpenter, Sawyer, to work the number of hours prescribed by the War Department Regulations	per day.	5 6

	PLASTERERS' WORK.		Materials and Labour.	
			Straight.	Curved.
	Rendering.		s. d.	s. d.
304	Rendering, one coat, and set with fine stuff	per yard super.	0 3½	0 4
305	Do. two coats do. do.	do.	0 6	0 6¾
306	Render and float	do.	0 8	0 9
307	Do. do. and set with fine stuff and plaster of Paris	do.	0 9½	0 10½
	Lathing and Plastering.			
308	Lath and plaster, one coat, and set with fine stuff	per yard super.	1 2	1 4
309	Do. do. two coats do. do.	do.	1 5	1 8
310	Lath, plaster, and float	do.	1 4	1 6
311	Lath, plaster, float, and set with fine stuff	do.	1 5½	1 8
312	Lath, plaster, float, and set with putty and plaster	do.	1 7	1 10
313	Add to either of the prices when double fir laths are used	do.	0 5	0 5½

N.B.—The whole of the laths to be strong and of the best quality, out of new lathwood, and free from sap.

The laths will not be allowed to overlap each other at the ends, but the ends to butt, and to be nailed separately, so as to break joint at every three feet.

The whole of the coarse stuff or mortar to be made up with sharp pit or fresh-water sand, or road drift, as may be ordered.

No. of Item.			Materials and Labour. Straight.	Materials and Labour. Curved.
	Rendering with Cement.		*s.* *d.*	*s.* *d.*
314	Rendering, one coat, half cement, half sand	per yard super.	1 4	1 7
315	Ditto all cement	do.	1 9	2 0
316	Render and float, half cement, half sand	do.	1 7	1 10
317	Ditto all cement	do.	2 0	2 3
318	Add, if jointed, in imitation of stone	do.	0 2	0 3
319	Reveals, string courses, skirtings, and other work under nine inches wide, if separate and unconnected with other cement work, half cement, half sand	do.	2 0	—
	N.B.—No extra charge will be allowed for weathering, chamfers, arrises, throatings, or mitres.			
	Cornices and Mouldings in Plaster of Paris.			
320	Plain cornices and mouldings	per foot super.	0 6	0 8
321	Enrichments to ditto, inch girth	per foot run.	0 2	0 $2\frac{1}{2}$
	Friezes and Soffits.			
322	Lath, plaster, float and set, friezes and soffits	per foot super.	0 4	0 5
323	Ditto, ditto, panelled, sunk, raised, or moulded	do.	0 9	1 $1\frac{1}{2}$
324	Render, float, and set, friezes and soffits	do.	0 3	0 $4\frac{1}{2}$
325	Render, float, and set, friezes, and soffits, panelled, sunk, raised, or moulded	do.	0 8	1 0
326	Enriched friezes and soffits	do.	1 0	2 0
	Cornices and Mouldings in Roman Cement.			
327	Plain cornices and mouldings, the part actually run with a mould to be measured only	per foot super.	0 9	1 0
	N.B.—No extra charge to be allowed for mitres, throating, arrises, or weathering.			

			Materials and Labour.
	Lime White and Whitewashing.		*s.* *d.*
328	Lime, white, once done	per yard super.	0 $0\frac{1}{2}$
329	Ditto twice ditto	do.	0 $0\frac{3}{4}$
330	Whiting, with whiting and size, once done	do.	0 $0\frac{3}{4}$
331	Ditto ditto, twice ditto	do.	0 $1\frac{1}{4}$
332	Whiting to plain cornices, once done with whiting and size	per foot super.	0 $0\frac{1}{2}$
333	Ditto ditto, twice done ditto ditto	do.	0 $0\frac{1}{2}$
334	Whiting to enriched cornices, with whiting and size	do.	0 $0\frac{1}{2}$
335	Bead and quirk	per foot run.	0 $2\frac{1}{4}$
336	Ditto curved	do.	0 $2\frac{3}{4}$
337	Bead and double quirk	do.	0 $2\frac{3}{4}$
338	Ditto ditto, curved	do.	0 3
339	Plasterer	per day	5 6
340	Labourer	do.	3 0
341	Boy	do.	1 6
342	Single fir laths	per bundle of 500 ft. run.	1 8
343	Double ditto	do.	2 6
344	Lime and hair mortar	per foot cube	0 6
345	Parian Cement, fine quality	per bushel	6 0

PLUMBERS' WORK.

No. of Item.	Description of Work.					Prices.		
						£	s.	d.
346	Milled lead in sheet				per cwt.	1	8	0
347	Do. cut to dimensions				do.	1	9	0
348	Do. in weights				do.	1	7	0
349	Do. for cramping				do.	1	5	0
350	Add to items 346 and 347, for labour and nails in laying lead				do.	0	3	6
	Lead Pipe.							
351	Including soldered joints, hooks, &c. fixed complete.	½ inch, weighing	1¼	lbs. per foot	per foot lineal	0	0	4½
352		¾ do.	2	do.	do.	0	0	7
353		1 do.	3	do.	do.	0	0	10½
354		1¼ do.	4½	do.	do.	0	1	2½
355		1½ do.	5¾	do.	do.	0	1	6
356		2 do.	8½	do.	do.	0	2	1½
357		2½ do.	10	do.	do.	0	2	7
358	Copper sheet				per lb.	0	1	3
359	Red lead, ground in oil				do.	0	0	5
360	Jenning's india-rubber tube closet with blue basin, sunk plate and ivory handle				each	4	10	0
361	Botten's patent regulator self-acting closet, with ¾-inch supply valve, india-rubber seated bottom valve, flat plate, blue basin, and sunk dish				do.	4	14	0
362	Strong copper-wire				per lb.	0	1	1
363	Do. brass do.				do.	0	1	1

PAINTERS' WORK.

			Materials and Labour.									
			1 Coat.		2 Coats.		3 Coats.		4 Coats.		Flatting.	
			s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
364	In common colour	per yard super.	0	2½	0	4	0	5½	0	7	0	2¾
365	Inside cornices or fascia	do.	0	6	0	10	1	3	1	8	0	9
366	Enriched cornice or fascia	do.	0	8	1	3	1	9	2	2	1	0
367	Block or cantilever cornices on the outside of buildings, to be measured as plain cornices, no allowance being made for the sides of blocks or cantilevers	per foot super.	0	1½	0	2¼	0	2¾	0	3¼	—	
368	Square or moulded skirtings	per foot run.	0	0¾	0	1	0	1¼	0	1½	0	1
369	Reveals of doors or windows	do.	0	0¾	0	0¾	0	1	0	1¼	—	
370	Water trunks, including cistern or hopper heads	do.	0	0¾	0	1¼	0	1¾	0	2	—	
371	Sash squares, one side	per dozen	0	5	0	8	0	11	1	2	0	6
372	Blank do. do.	do.	2	0	—		—		—		—	
373	Sash frames, one side	each	0	5	0	8	0	11	1	2	0	6
374	Do. with transoms (each division to be considered a frame) one side	do.	0	3	0	4½	0	6	0	7½	0	5
375	Lamp-posts or columns	do.	0	9	1	3	1	9	2	3	—	
376	Fanlights, one side	do.	0	6	0	10	1	2	1	6	0	8
377	Ventilator gratings	do.	0	1	0	1½	0	2	0	2¼	—	
378	Hinges, including nuts and other fastenings appertaining	do.	0	3	0	4	0	5	0	6	—	
379	Writing letters or figures	per inch	0	0¾	—		—		—		—	
380	Cutting in lines in colours	per foot run.	0	0¾	0	1½	—		—		—	

No. of Item.	*Graining and Varnishing.*		Graining, wainscot or mahogany.	Varnishing in copal.
			s. *d.*	*s.* *d.*
381	Superficial work	per yard super.	1 0	0 6
382	Rail and pins	per foot run	0 5	0 2
383	Painter	per day of 10 hours		*s.* *d.* 5 6
384	Putty	per lb.		0 3
385	White lead ground in oil	do.		0 4
386	Prepared paint, common colors	do.		0 4½
387	Linseed oil, raw	per gallon		3 3
388	Boiled do.	do.		3 10
389	Spirits of turpentine	do.		4 0
390	Best copal varnish	do.		23 0

GLAZIERS' WORK.

The glass not to be less than 16 ounces to superficial foot.

			Best.	Second.	Third.
			s. *d.*	*s.* *d.*	*s.* *d.*
391	Newcastle glass (the glass to be measured nett) in new sashes, not exceeding 2 feet in one square	per foot super.	0 10	0 8½	0 7
392	Ditto, ditto, exceeding 2 feet in one square	do.	1 0	0 10	0 8
393	Add if ground glass	do.	0 4	0 4	0 4

			Plate Glass.	Flattened sheet Glass. Best. 15 to 18 ounces.	Best. 18 to 21 ounces.	Best. 21 to 24 ounces.	Second. 15 to 18 ounces.	Second. 18 to 21 ounces.	Second. 21 to 24 ounces.
			s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
394	For squares under 1 foot	per foot super.	1 10	0 8	0 11	1 2	0 7	0 9	1 0
395	1 ft. & under 2 ft.	do.	2 5	0 11	1 1	1 4	0 9	0 11	1 2
396	2 ft. do. 3 ft.	do.	2 7	1 1	1 3	1 6	0 11	1 1	1 4
397	3 ft. do. 4 ft.	do.	2 9	1 3	1 4	1 8	1 1	1 3½	1 5
398	4 ft. do. 6 ft.	do.	2 11	1 4	1 6	1 10	1 2	1 4	1 6
399	6 ft. do. 8 ft.	do.	3 1	1 6	1 9	2 1	1 4	1 7	1 9
400	8 ft. do. 10 ft.	do.	3 3	1 7	1 11	2 2	1 5	1 9	1 11
401	Add to the last 7 items for stopping into new sashes	per foot	0 3	0 2½	0 2½	0 2½	0 2½	0 2½	0 2½

Patent rough Plate Glass.

			Plain. ⅛ inch.	Plain. ¼ inch.	Plain. ⅜ inch.	Plain. ½ inch.	Fluted. ⅛ inch.	Fluted. ¼ inch.	Fluted. ⅜ inch.	Fluted. ½ inch.
			s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
402	For squares 20 in. long	per foot super.	0 7½	0 11	1 0½	1 4	0 8½	1 0	1 2	1 5
403	20 & under 40	do.	0 9	1 0½	1 3	1 6	0 10½	1 2	1 4	1 7
404	40 do. 80	do.	0 11	1 2	1 5	1 10	1 0½	1 4	1 6	1 11
405	80 do. 100	do.	1 0½	1 4	1 6	1 11	1 2	1 5	1 7	2 0
406	Add to the last 4 items for stopping in new sashes	do.	0 3	0 3	0 3	0 3½	0 3	0 3	0 3	0 3½

				s. *d.*
407	Glazier	per day		4 6

SLATERS' WORK.

No. of Item.			Materials and Labour. £ s. d.
408	Bangor Duchess slating, laid complete on boards, with 3-inch laps	per square of 100 ft. super.	1 8 0
409	Add if pointed on the under-side, with lime and hair mortar	do.	0 2 1½
410	Add if copper-nailed	do.	0 1 8½
411	Filleting with Roman cement	per foot run.	0 0 1¾
412	Do. with slates 3 inches wide, and not less than ½-inch thick, laid in cement	do.	0 0 3½
413	Bangor slates Countess	per 100	0 12 9
414	Do Duchess	do.	0 19 6
415	Westmoreland slates	per foot super.	0 0 3
416	Copper nails	per lb.	0 1 4
417	Iron nails dipped in boiled oil	do.	0 0 6
418	Iron nails painted	do.	0 0 6
419	Slater to work the number of hours specified by the War Department Regulations	per day	0 5 6
420	Labourer to work the number of hours specified by the War Department Regulations	do.	0 3 0
421	Slates, ridge or hip, with circular roll girth 14 inches	per foot run.	0 1 1

Welsh Slate.

Sawn out to size, exclusive of fixing.

			½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	3 in.
			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
422	Slabs self-faced, under 18 feet superficial	per ft. super.	0 5	0 6½	0 8	0 10	1 0	1 6	2 1
423	Ditto planed one side	do.	0 6	0 7½	0 9	0 11	1 1	1 7½	2 3
424	Ditto ditto, both sides	do.	0 7	0 8½	0 10	1 0	1 2	1 9	2 5
425	Add, if fixed	do.	0 2	0 2	0 2½	0 3	0 3½	0 4	0 5
426	Rounded nosings or corners	per ft. run.	0 2	0 2¼	0 2¾	0 3½	0 4½	0 6	0 10
427	Add, for slabs above 18 feet superficial	per ft. super.	0 1	0 1	0 1¼	0 1½	0 1½	0 2	0 2

SMITHS' WORK.

			s. d.
428	Bars for chimneys, windows, balusters, coppers, and stays without bands	wrought iron, per lb.	0 3
429	Bell-wire copper	do.	1 4

			Bells only.			Add, if with springs and carriages.
			3 in.	3½ in.	4 in.	
			s. d.	s. d.	s. d.	s. d.
430	Bells (house) composed of one part tin and three parts copper	each	0 8	1 1	1 9	0 6

			s. d.
431	Bells hung complete, with best brass mounted cranks, copper wire, check springs, and staples, labour and all materials excepting the spring and carriage pull and rope	1 story per pull	11 0
432	Ditto ditto except ditto ditto	2 stories do.	12 0
433	Ditto ditto ditto ditto ditto	3 ditto	14 0
434	Ditto for the second pull in any room, if ordered to the same bell	per pull	2 0

No. of Item.	Description of Work.		Prices.
			s. *d.*
435	Bell pulls, with screws complete — Brass, outside, of any pattern	each	1 6
436	Ditto, ring, to pattern	do.	1 3
437	Lever, with iron knobs	do.	3 0
438	Slide or bolt (brass)	do.	1 6

			Not fixed.	Add, if fixed.
			s. *d.*	*s.* *d.*
439	Cranks, brass, common, for bells of any pattern	each	0 3	0 2
440	Do. do. spring rose purchase, corner mortice, single or double, or chain mortice, of any pattern, with brass headed nails	do.	1 4	0 4

			£ *s.* *d.*
441	Gates, plain, wrought iron, to drawing and specification, with fastenings and hangings complete	per cwt.	2 2 0
442	Gratings, wrought iron of any kind	per lb.	0 0 3½

			Inches.					
			¾.	1.	1¼.	1½.	1¾.	2.
			s.	*s.*	*s.*	*s.*	*s.*	*s.*
443	Hooks, brass, screw to pattern	per lb.	3	3	3	3	3	3

			18 inches.	24 inches.	30 inches.
			s.	*s.*	*s.*
444	Springs, door, extra strong	each	3	4	5

Articles of cast iron, including models or patterns.

			s. *d.*
445	Gratings for drains	per cwt.	11 0
446	Do. for buildings or air bricks	do.	11 0
447	Columns, gutters, girders, strings, steps, facias, and similar articles	do.	13 0

			2½ inches.	3 inches.	4 inches.
			s. *d.*	*s.* *d.*	*s.* *d.*
448	Strong rain-water pipes with flanges, including wrought iron holdfasts, &c., fixed complete	per foot run.	0 8	0 9	1 0
449	Hopper-heads for rain-water pipes, including ditto, fixed complete	each	2 6	3 0	3 6
450	Shoes for ditto ditto ditto	do.	1 2	1 6	2 0

			s. *d.*
451	Gas or water pipes from 2 to 10 inches diameter, socket or flange	per cwt.	11 6

		Inches in diameter.											
		4		5		6		7		8		9	
		s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
452	Stench or bell-traps	1	0	1	3	1	6	2	0	2	6	3	0

No. of Item.	Description of Work.		Prices.	
			s.	*d.*
453	Smith }	to work the number of hours prescribed by the War Department regulations } per day	5	6
454	Bellhanger }		6	0
455	Hammerman or Labourer }		3	0
456	Coals, Newcastle or Swansea, of the description ordered	per cwt.	1	8
457	Improved bar British wrought iron, No. 3. of mitre lion, on star, from $1\frac{1}{4}$ inch flat by $\frac{1}{4}$ inch to $1\frac{1}{4}$ inch thick	do.	11	6
458	Do. round or bolt, do. iron, from $\frac{1}{4}$ inch to 2 inches diameter	do.	12	6
459	Hoop iron, wrought	do.	13	6
460	Best blistered steel (L.)	per lb.	0	8
461	Best sheer or cast steel	do.	0	$9\frac{1}{2}$
462	Sheet or plate wrought iron, from No. 14. to 20. by the wire guage	do.	0	$1\frac{1}{4}$
463	Copper sheet, No. 16. 18. or 20. by the wire guage	do.	1	4

TENDER FOR ERECTING THE ROYAL VICTORIA HOSPITAL AT NETLEY IN THE PARISH OF HOUND IN THE COUNTY OF HANTS.

, the undersigned, do hereby tender to provide all the labour, material, and machinery, of every description and kind whatsoever, which may or shall be required for the erection of the Royal Victoria Hospital, and do further tender to erect the whole of the buildings comprising the said hospital to the full and entire satisfaction of the War Department and of such Officers as the Secretary of State for War may appoint to superintend the said works, as they are detailed in the Specification of the same, for the sum of*

* The amount to be here inserted in figures and words.

and do hereby engage, in case this Tender be accepted, to complete the whole of the said buildings by the First day of October One thousand eight hundred and fifty-eight, agreeably to the terms of Contract, General Regulations, and Specification of the same.

And should it be determined to extend the time for the completion of the building until 1st October 1859, will make a deduction of

.

And willing to execute all extra work that may be ordered, and to allow for all work which may be ordered to be omitted at per cent † the prices contained in the Schedule attached to the Specification.

† Above or below.

And do hereby agree and bind , as well as , executors, administrators, heirs, or assigns, to abide by and fulfil all the said terms of Contract, General Regulations, and Specifications of the work, without reference to any other party whatsoever; or in default thereof, to forfeit and pay the sum of Ten thousand Pounds sterling (10,000*l.*), and furthermore to forfeit the sum of Two hundred Pounds (200*l.*) per day for every day that the completion of these works shall be delayed beyond the time specified.

And do hereby agree that the said penalty or penalties of 200*l.* per day for every day's delay in the completion of the works shall be summarily deducted by the War Department from any sum due or to become due in respect of this Contract.

Dated this day of 1856.

_____

Address_____

Witness_____

Address_____

_____

Sir,

In case you should accept
offer to perform the work expressed in the tender hereunto subjoined, we engage to become jointly and severally bound with

in the required sum for the due performance of the contract.

Dated this day of 1856

Name _____

Address _____

Witness _____

Address _____

Name _____

Address _____

Witness _____

Address _____

To the Director General of Contracts,
War Department, Pall Mall.

SPECIFICATION

FOR THE FOLLOWING SERVICES

TO

THE ROYAL VICTORIA HOSPITAL

AT

NETLEY,

IN THE PARISH OF HOUND, IN THE COUNTY OF HANTS:

VIZ.,

HOT AND COLD WATER SUPPLY;
SUPPLY TO BATHS AND BASINS;
SUPPLY TO BATHS IN CENTRE BUILDING, AND HEATING CHAPEL;
STEAM ENGINES, BOILERS, AND FORCE PUMPS;
COOKING APPARATUS TO KITCHENS COMPLETE;
LAYING ON STEAM TO CISTERNS OF WATERCLOSETS;
PROVIDING AND FIXING LIFTING APPARATUS AND PATIENTS' HOISTS;
PROVIDING AND FIXING CAST-IRON FIRE MAINS; AND
VENTILATING ARRANGEMENTS FOR EXTRACTING VITIATED AIR.

LONDON:
PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1856.

ROYAL VICTORIA MILITARY HOSPITAL.

COLD WATER SUPPLY.

1. To supply and fix in the places provided on the roofs seven galvanized cast iron cold water cisterns. The cisterns in the centre tower to be 20 ft. × 12′ × 7′. The cisterns to be carried on cast iron girders, and to be fitted with all necessary stays and tie rods, to render the same perfect. To lay on the main cold water service to the centre cistern in 4″ cast and galvanized pipe, with 4″ patent valve and float (the rising main is supposed to be brought to the outside of the centre building). A 4″ cast and galvanized waste pipe fitted with copper trumpet overflow, with washer, to be provided and connected with the drain below. The whole of the seven cold water cisterns to be connected together by means of a 4″ cast and galvanized main pipe running the entire length, each cistern being provided with a stop valve of the size of the pipe, and so arranged that any cistern may be unconnected or disused without disturbing the general arrangement. From the 4″ connecting mains six 2″ wrought iron galvanized cold water mains would be branched for the supply of baths and cold water to basins in each wing. Each of these twelve mains being furnished with a main stop-cock at its connections with the connecting mains, six 1½″ wrought iron galvanized mains will also be taken from each, for the supply of the single ranges of baths, and one 1½″ galvanized main in each, would also be connected for the supply of the baths in the outbuildings, each of these fourteen mains would also be supplied with a stop-cock in each; on each floor a galvanized iron T piece will be inserted, for connecting the cold water with the 92 baths in the wing buildings, and also with 282 wash basins in the same, and also with eight baths and sixteen wash basins in the outbuildings. The whole of the cocks for the baths and basins, and connecting the same with the pipes, are provided for in the Articles 3 and 4.

Also to provide and fix the cocks and pipes to all the sinks from the mains provided in this service.

Also to provide and fix a water-guage to the centre cistern, the same to be brought down to the most convenient parts, with all necessary pulleys and chains and guides. The indicators to be so arranged as to show the number of gallons in all the cisterns.

Also to paint the girders in two coats of red lead paint.

The above works include all cutting away and making good in brickwork for the pipes, cocks, girders, and cisterns, proper places being provided in the building for the cisterns, and chases for the main pipes.

The works also include everything necessary for leaving them in perfect order, including all bearers and fastenings.

HOT WATER SUPPLY TO WING BUILDINGS.

2. To supply and fix in the place appropriated in the towers two galvanized cast-iron hot-water cisterns with close tops and waste steam pipes of the capacity of 2,000 gallons each, with all necessary cast-iron girders and bearers to support the same. The hot-water cisterns to be heated by means of 2 coils of 2″ cast-iron galvanized pipe, each containing a sufficient heating surface, and connected with the steam boilers by 1½″ wrought-iron steam pipes, with gun-metal cocks and levers, with provision for returning the condense water back again to the boilers, with air pipe in wrought iron and condense water-cocks for blowing through at starting. The hot-water cisterns to be connected with two galvanized iron supply cisterns with overflow pipes. From the hot-water cisterns the hot water to be made to circulate from end to end of the building by means of 4″ circulating pipes, connected with a second hot-water

circulating cistern, fixed beneath the other, and attached by a 4″ rising main. Cocks to be provided in each circulating main, so that a portion might be used or repaired without interfering with the working of the whole. Four expansion joints to be provided and fixed in each range of circulating pipes. From these circulating pipes six 2″ wrought-iron galvanized hot-water mains to be branched for the supply of baths and hot water to basins in each wing; each of these twelve mains to be fitted with a gun-metal stop-cock at its connexion with the circulating pipes (in order that the pipes and cocks of each main may be repaired without disturbing the general arrangement); six 1½″ wrought-iron galvanized mains to be branched from each set of circulating pipes for the supply of the single ranges of baths; and one 1½″ galvanized main in each would also be connected for the supply of the baths in the outbuildings. Of these 14 mains would also be supplied with a stop-cock in each main and on each floor, a 1½″ galvanized T piece to be inserted for connecting the hot water with the 92 baths and 92 sinks in wing building, and also with 282 wash basins in wing buildings, also eight baths in the outbuildings, and 16 wash basins and 8 sinks in the same. (The whole of the cocks for the baths, basins, and sinks, and the connecting of the same, are provided for in Articles 3 and 4.

Also to lay on the hot and cold water supply to post-mortem room, and to wash-house, with cocks, &c. complete.

To supply and fix in the wash-house twelve white pine washing tubs, put together with copper bolts, with all necessary washers, plugs, waste pipe, and traps, and making good to drain.

Also to provide and lay 45 feet run 12″ iron pipe for carrying the hot and cold water supply pipes through the outbuildings, and the same to be made perfectly water-tight.

Also to paint the girders as before.

The above works include all cutting away and making good in brickwork for the pipes, cocks, girders, and cisterns, it being understood that proper places and foundations will be provided for the cisterns, and also that chases will be provided in the building for the insertion of the main pipes.

The works also include everything necessary for leaving them in perfect working order, including all bearers and fastenings.

SUPPLY TO BATHS AND BASINS.

To supply and fix in the wing buildings 282 wash basins, 13″ diameter, as shown on the plans, and to lay on to each basin from the several main service pipes hot and cold water, with patent self-acting bib-valves to each.

To supply to each basin a wrought iron galvanized waste-pipe attached with a gun metal plug chain and union, and to connect the same by means of trough pipes, properly trapped with the main waste to each basin, and also to connect an overflow pipe dipping into the trough pipes before mentioned.

To supply and fix in the ablution rooms, with all fittings as before described, two stands as per drawings, with sixteen basins in each, with hot, cold, waste and overflow pipes.

The whole of the above, with the exception of the stand in the ablution rooms, are exclusive of the slabs and frames in which the basins are to be fixed.

To supply and fix sixteen sets of basins and fittings for the outbuildings, fitted in a precisely similar manner to those before described.

To supply ninety-two sets of hot, cold, waste, and overflow cocks and fittings for the baths in the wing buildings, and to lay on to each bath the hot and cold water from the mains, and to attach the waste and overflow pipes to 3″ main pipes properly trapped before entering the drains.

To supply and fix, as before described, eight sets of fittings for the baths in the outbuildings with hot, cold, waste, and overflow pipes and cocks, as before.

It is understood that all necessary grooving and drilling to attach the fittings to the baths will be done by the parties supplying them.

Also to supply and fix to the 111 sinks in the wing and outbuildings waste pipes in 3″ cast iron galvanized pipe, with branched outlets properly trapped.

Also to supply and fix in the itch wards two sulphur baths, with all necessary appurtenances.

Also to do all the necessary cutting away and making good to brickwork.

CENTRE BUILDING:—SUPPLY TO BATHS, BASINS, HEATING CHAPEL, &c.

To supply and fix a hot water apparatus for warming the chapel by means of three circuits of 4″ cast-iron pipe, connected with a wrought-iron cylindrical boiler, with flue through the same, fixed complete, with all necessary furnace work and brickwork.

From this boiler will also be connected a coil of 4″ pipe passing round the large plunge bath, for the purpose of tempering the same when required. Each circulation will be provided with a stop valve to enable the chapel and baths to be warmed either together or separately.

To supply and fix by the side of the above boiler a second wrought-iron boiler, with all necessary furnace work and brickwork, for the purpose of heating the water for the baths, and to connect the same with 2 1½″ galvanized wrought iron circulating pipes, with a galvanized wrought iron hot water cistern of the capacity of 250 gallons fixed over the corridor.

To supply and fix seven sets hot, cold, waste, and overflow fittings as described for the baths on the ground floor, and to connect the same with the hot, cold, and waste mains.

To supply and fix one set of fittings, as before, for the bath on the first floor, and to connect the same with the various mains.

To lay on the hot and cold water supplies in wrought iron galvanized pipe to the shower bath to be fixed over the above bath, with cocks and levers. Also to provide and fix one set of curtain rods and one set of curtains for ditto.

To supply and fix a vapour bath in the bath room; also to supply and fix in the bathman's room a copper steam boiler for working the same, with casing in iron. Feed gear and furnace complete. The bath to have every necessary appurtenance to render the same complete.

To supply and fix a coil of pipes for the purpose of warming the towel closet, and to lay on the steam for the vapour bath boilers, with all necessary cocks and condense pipes to make the same complete.

Also to paint in two oils the girders that carry the cistern.

The above includes the whole of the cutting away and making good in bricklayers' work only.

STEAM ENGINES AND BOILERS.

To provide and fix, where shown on the drawings, 4 wrought iron cylindrical steam boilers 15 feet long, 3 feet 9″ diameter, with flues through them, and wrought iron furnace work with the fires inside the flues; these boilers are to be provided with 2″ blow-off cocks and pipes, steam and water gauges, and self-acting float and feed gear, also with two 3″ safety valves each. They are to be connected together by means of 3″ cast flanged steam pipes, provided with stop valves, so that the boilers may be worked either together or separately, and also to be so arranged that the condensed water from the tanks may be conveyed into either boiler. Balanced damper gear is to be provided for each boiler, and the counterbalance weights brought down into the stoke-hole; all necessary soot doors for cleaning the flues are also to be provided.

Provide and fix two 4-horse high pressure steam engines, with grasshopper motion, beam, parallel rods, expansion gear, governor, fly wheel, and cold water pump. The whole of the wrought iron work to be made bright, and all the bearings to be either bushed with steel or gun metal. The engines are to be

connected with the steam boilers by means of wrought iron steam pipes provided with stop-cocks, and the waste steam is to be conveyed in a thick cast pipe (to prevent noise) to whatever point may be considered necessary.

The foundations for the engines are provided, but all necessary works for leaving the engines and boilers in working order are included, as well as the brickwork in setting the boilers.

Also to provide and fix two sets of treble action force pumps, to be worked by the engines, the same to be connected with the rising mains and suction pipes before provided, and left complete.

COOKING APPARATUS FOR KITCHENS.

To provide and fix, where shown on the Drawings, two steam cooking apparatuses, each consisting of six pans of seventy gallons each, four of the pans to be made double for boiling, and two single for steaming. The pans are to be made of cast-iron, $\frac{9}{16}$" thick, and bolted together with flange joints. They are to be fitted up with cast iron panelled fronts made to unscrew, and cast tops and skirtings with counterbalanced covers, fitted with water joints. Each pan is to be provided with a $1\frac{1}{2}$" gun metal draw off cock and pipe, and on to each pan the steam is to be laid, as well as the cold water and condensed pipes. The waste steam is to be taken from each pan where directed, and a moulded skirting 12" high is to be provided and fixed against the wall at the back of the apparatus.

A strong kitchen range with large roasting oven and back boiler is to be provided and fixed where shown, and hot water is to be laid on to the three washers in scullery, and one place in kitchen, for which purpose a hot water cistern with steam coil is to be fixed in the scullery, and steam laid on to the same.

Cold water is to be brought from the main supply and laid on to five places in scullery, and also to the cooking pans, and the steam is to be brought from the steam boilers and laid on to the cooking apparatus, with all necessary cocks aud fittings.

The wood fittings are not provided for in this specification, but the apparatus is to be left in perfect working order.

Also to supply and fix on the right of the chimney openings a double oven and a steamer for potatoes, with all necessary fittings, as before subscribed.

Also to include all necessary cutting away and making good in brickwork.

Also to provide fire screen of seasoned pine, lined with tin, with doors at back.

LAYING ON STEAM TO CISTERNS OVER WATERCLOSETS.

To provide and fix in 130 cisterns a heating surface of galvanized wrought iron steam pipe, connected with the main steam boilers by wrought iron mains, furnished with gun metal stop-cocks, each cistern is to be provided with a gun metal stop-cock for regulating the supply, and the condense pipes are to be connected with the traps of closets, to prevent them from freezing. The above includes all cutting away and making good in brickwork.

LIFTING APPARATUS AND PATIENT'S HOISTS.

To supply and fix, where shown on the plans, two double lifting apparatuses, consisting of two framed closets with self-acting balanced shutters, running on guides with gun metal friction rollers, and suspended over an endless wrought iron patent linked chain, passing over a grooved and shrouded pulley at the top, turned and fitted to a spindle running in gun metal plummer block bearings.

The lower part of the chain to pass over a similar pulley, with spur-wheel and pinion movement with ratchet-wheel, catch and stops, and gear for winding the lifts from the kitchen.

To supply and fix two lifts, as above, in the places shown on the drawing, in the centre building.

To supply and fix, where shown on the plans, two double lifting machines, as those above described, but connected by proper gear and shafting, furnished with friction clutches with the steam engines.

To supply and fix, where shown on the plans, two patients' hoists of sufficient size to carry a full-sized bed on the platform, and arranged for working and stopping on each landing. The above to be furnished with double safety ropes and friction rollers passing over the upper spindle. They are also to be connected with the steam engine by means of shafting, with fast and loose pulleys, and friction clutches.

The whole of the cutting away and making good, as well as all the wood-work, is included in the above works, and the whole is to be left complete and ready for work.

It is proposed, where practicable, to carry the shafting beneath the basement floor, covering it with cast-iron chequered plates.

FIRE MAINS.

To provide and fix from the cold water main cisterns nine 3″ cast-iron fire mains, each main being provided with a stop valve, and also three fire-cocks on each, one being on each floor, making twenty-seven in all.

The arrangement to be so made that the whole body of water in the entire building may be concentrated on any point.

The above includes the cutting away and making good of the brickwork; but the main chases are supposed to be provided in the building.

VENTILATING ARRANGEMENTS.

To supply and fix, as shown on the drawings, a galvanized wrought-iron main foul air duct, made in compartments, and to connect the same with the vitiated air flues by means of wrought-iron galvanized nozles, each of which are to be supplied with a directing piece, to prevent the currents from the various flues interfering with each other.

To provide and fix galvanized iron tubing of the dimensions given for connecting the smaller wards with the main air shaft.

To supply and fix in the towers two wrought-iron galvanized flues for conveying the smoke from steam boilers 2 ft. 3 in. diameter, made of plates $\frac{3}{16}$ in. thick, with trumpet tops, made good to upper post of tower, and curved nozle pieces for connecting with brick flues.

To provide and fix all necessary stays and bearers for carrying the same, and to leave the whole in perfect order, with all necessary soot and sweep doors, and also to include all cutting away and making good of brickwork.

Also to supply and fix in the towers two coils in cast-iron pipe, with all necessary steam pipes, air pipe, condense pipe, bearings, cocks, &c., to make the same complete.

R. O. Mennie,
Surveyor.

VII a

AUDIT HOUSE, SOUTHAMPTON,

THURSDAY, JUNE 18TH, 1857.

AT A

GENERAL MEETING

OF THE MEMBERS OF

THE MEDICAL PROFESSION,

Of Southampton, Netley, Bitterne, Millbrook, Fawley, &c., held this day at the Audit House, or Council Chamber, Southampton.

DR. OKE IN THE CHAIR.

JOHN WIBLIN, Esq. F.R.C.S. moved:—"That the Medical practitioners of Southampton, and the neighbourhood having been called upon by the Mayor of the Town, JOHN WHITE, Esq. to meet and give their opinion on certain statements which have appeared in the public journals, and have been debated in the House of Commons, relative to the site selected by the Government for the construction of the Royal Victoria Hospital at Netley, near Southampton, and also as to the salubrity of the locality, and the districts adjoining the Southampton Water, in accordance with such request, have this day held a public meeting at the Audit House, and after the most deliberate and patient consideration of the important subjects submitted for their opinion unanimously state that the alleged insalubrity of the site at Netley and district adjoining, is unsupported by evidence and totally without foundation."

Dr. W. BULLAR seconded the resolution, and it was carried unanimously.

JOHN ORSBORN, Esq. M.D. and F.R.C.S. of Bitterne and Netley, then proposed:—"That the individual experience of the members of the profession practising in and around Southampton is not only completely subversive of the statement, that it is a district peculiarly liable to ague and fever, but tends in the strongest manner to show its almost complete exemption from the former disease and the comparative infrequency of the latter, a conclusion fully confirmed by the annual register of sickness and mortality among the poorer classes in the parishes of Saint Mary Extra, Bursledon, Hamble and Hound, the last being the Parish in which the Hospital has been commenced.

The resolution was seconded by Dr. PARDEY, and carried unanimously.

Mr. ALDERMAN DUSAUTOY, J.P. and M.R.C.S. moved:—That a committee be formed consisting of Drs. Oke, Bullar, Orsborn and Pardy, and Messrs. Dusautoy, Wiblin and Sampson, with power to add to their number, to embody the foregoing resolutions in a memorial, to be placed in the Audit House, on Saturday the 20th, inst., from twelve o'Clock to six p. m. under the care of some person, in order that it may be signed by the Medical Gentlemen of Southampton and its Vicinity who approve of the propositions carried at this meeting, and that when completed, it be forwarded to the Mayor, with a request that he will use every exertion to bring the subject of this meeting under the notice of the Government and Parliament.

Dr. MARSHALL seconded the resolution which was carried unanimously.

Dr. JOSEPH BULLAR proposed:—A vote of thanks to the Mayor for the interest he has taken in so important a matter and the promptitude he has shewn in calling a meeting of the Medical Profession.

Mr. SHORTO seconded the motion which was carried unanimously.

Mr. WIBLIN proposed a vote of thanks to the Honourable RALPH DUTTON, M.P. for his important communication to Dr. Oke, approving of the proposed meeting and promising his cordial support.

Seconded by Mr. JEANS, and carried unanimously.

W. S. OKE, M. D. Chairman.

Dr. OKE having left the chair, it was moved by H. Bencraft, Esq. that the thanks of the meeting be given to the Chairman which was seconded and carried by acclamation.

(Copy Memorial from the Medical Practitioners to the Mayor of Southampton.)

To the Worshipful the Mayor of Southampton.

We the undersigned members of the Medical Profession practising in and around Southampton, beg to represent to your Worship, that in consequence of the statements that have appeared in the public papers, and which have been repeated in the debates in Parliament as to the alleged insalubrity of Southampton and of the district in which the new Military Hospital is in course of erection, have instituted very careful inquiries into the subject; and we now desire to express our deliberate conviction that the said statements are without foundation, and have originated in a complete misconception of the physical and climatic characteristics of this part of the Country: and that not only is our individual experience subversive of the truth of such statements, but it completely establishes the almost entire absence of Ague, and the comparatively rare occurrence of Fever in these localities; a conclusion which is fully borne out by the general Register of Deaths, as well as the Parochial Register of Sickness and Mortality of the Parishes of St. Mary Extra, Bursledon, Hamble, and Hound, in which district the Victoria Hospital is now being erected. We therefore beg to record our firm and unanimous opinion that in a sanitory point of view the site of the said Hospital has been wisely selected, and that there is no proof nor any probability that danger will accrue to its inmates from malarious or other endemic diseases.

WILLIAM SAMWAYS OKE, M.D., Ext. Licent., R.C.P.L.
JOSEPH STACE, M.R.C.S., Eng., 39 years resident.
ROBERT S. FOWLER, M.R.C.S., Eng.
HENRY DUSAUTOY, J.P., M.R.C.S. & L.A.S.
THOMAS SHUTTER, M.D., retired list, Bengal Service, resident of Ten Years standing, but not a Candidate for Practice.
JOSEPH BULLAR, M.D.
JOSEPH H. JEANS, M.R.C.S., L.A.C., M.D.
HENRY BENCRAFT, M.R.C.S., Eng. L.A.C.
JOHN WIBLIN, F.R.C.S. Medical Superintendant of Quarantine.
JOHN H. ALDRIDGE, M.D., M.R.C.S., L.A.C.
EDWIN HEARNE, M.B., London.
CHARLES PARDEY, M.B., &c.
J. SHORTO, M.R.C.S., Eng.
PATRICK MACKEY, L.A.C., 22 years resident in Southampton as Assistant and Practitioner, and one well acquainted with the neighbourhood to which this Paper refers, having for several years held the position of Parish Surgeon in that district, and still and for the last 6 years holding the same status in the united Parishes of Southampton.

J. M. SIMPSON, M.R.C.S., Eng.
WILLIAM BULLAR, M.D.
JOSEPH MARSHALL, M.D.
ALEX. HARVEY, M.D.
J. KING SAMPSON, M.R.C.S., L.A.C.
EDWARD T. HALL, M.R.C.S., & L.A.C.
JOHN ORSBORN, M.D., F.R.C.S., Eng.
FREDERICK SMITH, M.R.C.S., & L.S.A.
GEO. H. K. LAKE, M.D., M.R.C.S., L.A.C.
THOMAS WARD, M.R.C.S., & L.A.S.
JAMES R. WARE, M.R.C.S., & L.A.C.
THOMAS SIMPSON, M.R.C.S., Eng.
ROBERT BATES, M.R.C.S., L.A.C., Botley.
SAMUEL CHURCHILL, M.D., M.R.C.S., Eng.
EDWARD H. MAUL, M.D. Edin
FRANCIS COOPER, M.R.C.S., Officer of Health.
GEORGE CHEESMAN, M.R.C.S. & L.A.C.
GEO. EDWARD WEBSTER, M.R.C.S.
WILLIAM SIMS, M.R.C.S., L.S.A.

FRIDAY, THE 19th DAY OF JUNE, 1857.

A Meeting of the Sanitary Committee appointed by the Local Board of Health, was held this day in the Public Health Office in Southampton.

HOSPITAL AT NETLEY.

At this Meeting Mr. COOPER, the Officer of Health, reported that he had been requested by the Worshipful the Mayor to enquire into and report upon the site selected for the Royal Victoria Hospital at Netley, and submitted his report accordingly.

The report of Mr. COOPER having been read and considered:—

IT WAS RESOLVED UNANIMOUSLY—"That the report of Mr. COOPER be received and adopted."

IT WAS RESOLVED UNANIMOUSLY—"That the Town Clerk be directed to forward a copy of Mr. COOPER'S report to Lord PALMERSTON, "and to inform his Lordship that a deputation from the Committee, consisting of the Worshipful the Mayor, Mr. Alderman PALK, and Dr. HARVEY "with Mr. COOPER, the Officer of Health, will be ready to give evidence before the Commission appointed to enquire into the subject of the site of "the Hospital at Netley, should they be called upon to do so."

COPY OF MR. COOPER'S REPORT.

Southampton, June 17, 1857.

TO THE SANITARY COMMITTEE.

Gentlemen,—From the debates of the 5th and 8th instant, in the House of Commons, on the Netley Hospital, it was deemed by the Mayor necessary to investigate the charge of unhealthiness brought against the site of the erection, as well as the implied insalubrity of the locality of Southampton.

The Mayor, Mr. Alderman Palk, and myself therefore went to Netley on the 13th instant, and after carefully going over and examining in detail the site, nature of the soil, and elevation, could not but feel that the charges urged against it were not simply without foundation, but that it required more than ordinary ingenuity to torture the situation into an unhealthy one, or to charge upon the locality any of those evils which appeared in the public press, and which were never heard of till mentioned in the House of Commons on the 8th instant.

The site of the Hospital is not only beautiful, but salubrious, standing on the slope of a plateau of common land, which extends over an area of more than twenty miles, which rises gradually from the sea to a height of several hundred feet towards the Bitterne Hills, and which from its gradual inclination and porous soil, not only presents the means of a natural and perfect drainage, but which, from its wide and extended acreage, presents an open space of great extent, and over which the air has a free and uninterrupted circulation, and across which the atmospheric current is as free and pure as in any part of England. The Hospital itself stands at an elevation of about fifty feet above high water mark, and about five hundred yards from the highest tide. The beach is shingle, and a little distance seaward is covered with sand and mud, the result of marine vegetation and alluvial deposit, brought down by the rivers Test and Itchen. Along the shore and river side in some parts the mud is of a considerable depth, underlaid by blue clay and sand; in others the mud is not deep; but in no instance that I am aware of, has sulphuretted hydrogen been known, except where sewage matter has been deposited; and in no part of the river or sea side is there any marsh such as has been represented by the speakers on the Netley Hospital question.

I wish to guard myself scrupulously however in the present matter against any opinion, except as concerns the site and neighbouring locality of the Hospital—and I unhesitatingly repeat that a finer or healthier site could not be found. The charge of the ground being marshy is simply incorrect; the foundation of the Hospital is on rubbly gravel, which is underlaid by brick earth or clay mixed with veins of sand. Geologically, no finer or more salubrious site could be chosen, as the strata of earth renders it impossible for damp to exist if the most ordinary means of drainage be adopted; and, indeed, the nature and slope of the whole plateau of common render dampness or bog impossible. The opinions, therefore, which have been pronounced against the position of Netley have been given in error.

The level of the Hospital above the sea is such as to secure it from any amount of marine or other exhalation, and its aspect towards the water such as to secure a good sea breeze a great part of the twenty-four hours, a strong current of air being always caused by the flow and ebb of the tide, and the sweep of the land on the north and north-east being so extensive as to secure at all times an unimpeded circulation of air.

With respect to diseases of a malarious character, such as ague, erysipelas, &c. I have to inform the Committee that ague of an endemic character is unknown in Southampton; it is sometimes imported by the steamers from the West Indies, but as a disease existing amongst us of an indigenous type it is never met with. Erysipelas is also nearly unknown in private practice; it is sometimes met with, but generally speaking it is so little seen amongst us as to be disentitled to a place in our local diseases.

If we compare Southampton with other large towns, we shall find it stand exceedingly well with respect to its sickness and mortality. I believe there is scarcely a town of equal size in the kingdom with so small a number of deaths. The table which I subjoin shows very decisively that our death rate is only a fraction or two over 21 per cent. taking an average of seven years, which is very conclusive as to the healthiness of Southampton, and to the alleged illness and mortality prevailing in the town. All our diseases are of a mild type, and their duration by no means over the average of similar diseases in other places.

Our position is somewhat anomalous as to our mortuary returns, because we are frequently called on to register deaths that occur at sea, and to record cases which have resulted fatally either from accident, illness, or climatic changes—in the large steamers of the port, which swell our mortality tables higher than they otherwise would be, and which make our mortality appear greater than it really is.

Besides which, our population is to a large extent not only a migrant one, but the humbler classes, from the nature of their calling, are very much addicted to drinking—which is a prolific cause of suffering, disease, and death. Notwithstanding, our mortality returns are decidedly low, and I do not think, as I have already said, we need fear comparison with any town in the kingdom. With respect to the peat on which the Southampton Water rests, that is by no means injurious; the whole basin from Calshot to Redbridge was at one time a forest, which from some convulsion of nature, was submerged, and the whole mass of timber converted into a stratum of fibrous or peaty matter, but which, from the action of the sea, has been rendered entirely friable—easily broken up between the fingers or moderate pressure—and which is entirely destitute of smell. I have examined several specimens of it, and superjacent deposits, and can speak confidently of its nature. More or less all sites like ours would present the same features; and wherever large rivers running through agricultural districts of loam or sand and clay empty themselves into an estuary or inlet of the sea, and where a large population is resident there, you may expect to find the same conditions as are found at and about Southampton.

It is absurd, however, to compare the banks of the Thames with the site of Netley, or to speak of the slimy, offensive, and exhaling deposits of the London river in the same breath with the frontage of the Southampton Water, where the tide rises to refresh and purify the air and locality, and a vast body of sea water removes much of the floating matter that is brought down by the rivers.

In a city, where two millions and a half of persons are crowded, and whose river is polluted by the collected inhabitancy of such magnitude as London, it is utter nonsense to talk of its stream being in the same sanitary condition as Netley or ourselves. Nothing can be finer than Netley—a pure and rather bracing air, a clear and unsmoked atmosphere, a fine water view where ships and steamers are constantly passing, and where the eye, on which much depends in disease, will look in vain for anything to offend or give annoyance; but where everything is picturesque and beautiful, where Nature has teemingly poured forth her beauties to enlighten the sight and cheer the mind, and where the invalid from every clime may find congenial enjoyment, repose, and health. Whatever may be said against the language I now use, no one can dispute our figures, and I, therefore, point to our Statistics of Mortality as conclusive evidence of the health of our population. To this we may safely appeal, and whatever interested parties may say against us, to this they must come at last. Figures may be awkward, but they are undeniable. I subjoin the Table of Mortality for the last seven years, in which the average will show 2.29 as the rate of death per cent. or 22.90 per thousand; the rate of mortality for seven years before the introduction of the Health of Towns' Act being 24.1 per 1000—thus showing a saving of 48 lives per annum on the present rate of our population.

I have the honour to be, Gentlemen,

Your obedient servant,

FRANCIS COOPER,
Officer of Health.

RATE OF MORTALITY.

	Births.	Population.	Deaths.	Per cent.
*31st March, 1851	1167 ..	34,098 ..	191 or	2.61
*31st March, 1852	1192 ..	34,856 ..	800 or	2.29
31st March, 1853	1329 ..	38,873 ..	882 or	2.26
31st March, 1854	1365 ..	39,926 ..	885 or	2.20
31st March, 1855	1474 ..	43,114 ..	1117 or	2.59
†31st March, 1856	1391 ..	40,686 ..	835 or	2.05
31st March 1857	1650 ..	48,262 ..	980 or	2.05
Rate of mortality				2.29
Rate of mortality .....22.90 per 1000.				

* Population by Census—1851, 29.25 to 1 birth.

† 1856—A large portion of the shipping and seafaring population in the Crimea.

FRANCIS COOPER, Officer of Health.

TUESDAY, THE 23rd DAY OF JUNE, 1857.

A MEETING OF THE COUNCIL OF THE BOROUGH OF SOUTHAMPTON

WAS THIS DAY HELD

AT THE AUDIT HOUSE, IN SOUTHAMPTON.

At this Council the Sanitary Committee submitted the foregoing Report of Mr. Cooper, together with the Resolutions passed thereon.

At this Council the foregoing Resolutions passed at the General Meeting of the Medical Profession, together with the Memorial, were submitted, and the same having been respectively read and considered,

It is Resolved unanimously,

That the Report of the Sanitary Committee be received and adopted; that the same, together with the Proceedings of the Medical Society be printed and forwarded to Lord Palmerston, and the Members of the Borough and County, and that the Members of the Borough be respectfully requested to take the earliest opportunity to contradict the statement made in the House of Commons, in respect of the insalubrity of the site chosen for the Military Hospital at Netley, and that Lord Palmerston be requested to receive a Deputation upon the subject, and that the Town Clerk be directed to ascertain his Lordship's convenience to receive the Deputation, and that the following Gentlemen be requested to accompany the Deputation of the Council, viz.:

Dr. OKE, Mr. WIBLIN, and Dr. ORSBORN (Bitterne).

It is Resolved unanimously,

That Mr. Alderman Andrews be added to the Deputation of the Council.

It is Resolved unanimously,

That the Resolutions of the Medical Society and the Memorial be advertised in the "*London Times*."

At this Council it was moved by Mr. Councillor Davis, seconded by Mr. Alderman Andrews, and

Resolved unanimously,

That this Council is of opinion that the statement made in the House of Commons, by Mr. Stafford, M.P., relative to the unhealthiness of the site of the Military Hospital at Netley, is not founded on fact, but on the contrary, the site chosen is most eligible for the purpose, which is borne out by all the Medical Authorities of this Town and surrounding Districts.

At this Council it was moved by Mr. Alderman Andrews, seconded by Mr. Councillor King, and

Resolved unanimously,

That the thanks of this Meeting be given to the Medical Practitioners in the Town and neighbourhood, for their able and satisfactory Report, and for their valuable services rendered to the Corporation and the Town at large, upon the subject of the site of the Hospital at Netley.

Printed by order of the Corporation of Southampton.

CHARLES E. DEACON,

Town Clerk.

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1857.

HOSPITAL AT NETLEY.

PROCEEDINGS

OF THE

MEDICAL PROFESSION,

AND OF THE

CORPORATION OF SOUTHAMPTON.

CHARLES E. DEACON,
Town Clerk.

CROPP, PRINTER, SOUTHAMPTON.