

has a very simple "Finder" (fig. 24), which requires to be fixed in a given position on the body of the instrument. A small slip of paper being fastened on the slide, the finder fixed, and the object brought into the field, by simply bringing down the point of the finder on to the slide a mark is made which serves to indicate at any future time the position in which the slide must be put in order that the particular object may come into the field of vision. There are frequently occasions on which it is of very great importance to examine structures immediately after removal from the living body. In these cases much that would otherwise be lost is gained by maintaining the object at about the temperature of 100° F. For this purpose, and for many others, where the effects of elevated temperature have to be studied, the "Hot Plate" of Max Schultze will be found more convenient, and quite as useful, as the other more complicated forms of apparatus that have been proposed. This consists simply of a long bent brass plate placed on the microscope stage, the brass of the plate and of the stage being prevented from coming in contact by wooden supports. In the plate over the centre of the stage is a small aperture. Around this hole on the under surface of the plate is arranged the flat spiral bulb of a thermometer, the straight tube of which projects from beneath the upper edge of the plate in front of the observer. By applying a spirit lamp to one or both extremities of the plate, the temperature of the central part, as indicated by the thermometer, may be regulated at pleasure. A modification of this hot plate is supplied by Mr. Collins (fig. 25). When it is desired to

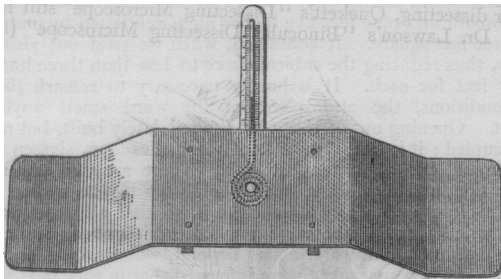


Fig. 25.—Mr. Collins's Schultze's Hot Plate.

examine a drop of fluid—for instance, blood—without a thin glass cover, evaporation may be prevented by using Recklinghausen's moist chamber. This is merely a glass cylinder, wide enough to receive the end of the microscope, one end being placed on the slide or stage over the object, and the other fastened round the tube of the microscope by an elastic band, permitting focussing movements. A strip of moistened blotting-paper on the inside prevents the drop of fluid under examination from drying up. A combination of hot-plate and moist chamber is often very useful.

Mr. Baker's "Investigating Tube" is an erector in a long tube which screws on to the lower end of the tube of the microscope in place of the object-glass, and, passing through the centre of the stage, projects at some distance on the other side. The object-glass is screwed on to the end of the tube, and the microscope may then be used for examining aquaria, etc., or for dissecting objects placed on the table in front of it.

\*\*\* Owing to the length of space which this report and the necessary illustrations occupy, it will be necessary to publish the remaining and concluding portion in our next issue.

TWO ATTACKS OF MEASLES WITHIN SIX WEEKS IN THE SAME PATIENT. Dr. Minot reported to the Boston Society for Medical Improvement the following case of this. A little boy, 3 years old, sickened on December 21st. An eruption, supposed to be that of measles, appeared on the 25th. The diagnosis was, however, at first a little doubtful, as the eruption was complicated by urticaria for two days. After this time it had a perfectly normal appearance; moreover, the child had the catarrh and other general symptoms of measles. A companion who saw him early in the disease, was attacked with measles exactly a fortnight afterwards. A sister of the first patient, 4 years old, and a young lady visiting in the family, also caught the disease, at intervals of a few weeks, the symptoms and appearances in each being perfectly characteristic. On February 3rd, after a few days' indisposition, the eruption reappeared on the first patient and went through its course in the usual manner, being accompanied by the catarrh and other symptoms of measles. The interval between the two attacks was six weeks. Singularly enough, of the three individuals who caught the disease from this patient, two, the young lady and the little boy (her brother) had had the disease before.—*Boston Med. and Surg. Journ.*, May 9th, 1867.

## REPORT

ON

### THE WORKHOUSE INFIRMARIES OF BRISTOL, CLIFTON, AND BEDMINSTER UNIONS.

THE Bristol Union, consisting of the central parishes of the town, contains a population of 66,000. The Workhouse is built in the country, on an open space of eleven acres, and usually contains about eleven hundred inmates. On entering it, we first visited the Imbecile Department, which is a wing of the main building. The male part of this consists of a dining-room, two day-rooms, and five sleeping-wards, containing over fifty people, who are attended to by three paid nurses, assisted by the most competent of the patients. The day-rooms are light and cheerful, and are furnished, amongst other things, with a bagatelle-table, which seemed to afford much amusement to many of the patients. The wards, and everything connected with them, are kept remarkably clean; but the cubical space per bed is, as a rule, less than 600 feet. We noticed, with satisfaction, that those beds occupied by patients subject to epilepsy had well padded sides to them, and that those used by patients who were in the habit of passing their urine under them, were covered with macintosh, and each had an opening in the centre for the water to run through into a vessel placed below. There were excellent bath-rooms and lavatories attached to these wards, with a plentiful supply of hot and cold water.

The Female Imbecile Department, consisting of seven day-rooms and nine sleeping-wards, contained ninety-six patients: these we found very similar in their arrangements to the male ones, except that we noticed that those patients suffering from epilepsy had rooms specially set apart for their use. The whole of these women were under the charge of three paid nurses, assisted by paupers.

In the part of the building used by the aged, we noticed nothing special, the wards being kept extremely clean; but the cubical space per bed was not more than five hundred and fifty feet. Passing on, we came to the Infirmary, which is a separate building, holding 180 beds. The wards are built in two stories, with a central corridor on each, running between them, those on the lower story are thirteen, and those on the upper fourteen feet in height. Ventilation is carried out by means of windows, opening on one side into the open air, and on the other into the central corridor, and we observed that to secure a thorough current of air, some of these were fastened open by means of chains and padlocks. There are altogether twenty wards; viz., sixteen large and four small ones; the latter being used for cases requiring special attention or quietness. No ward contained less than eight hundred cubic feet per bed; those specially intended for the reception of fever cases, being allowed from seventeen to eighteen hundred for each patient. To each ward are attached a good water-closet, scullery, and lavatory; also, with one or two exceptions, a bath-room, served with hot and cold water. The water-closets, we were informed, have a strong solution of sulphate of iron poured down them every morning; and chloride of lime is thrown into all night-stools or bed-pans, before they are used. All necessary water-pillows, macintosh-sheets, and cans for containing warm water, are supplied. The sheets and linen, we were told, are changed, as a rule, once a week, and oftener, if ordered by the medical-officer. The nursing is performed by pauper-nurses, two to each ward, the whole being superintended by a paid female nurse; from the appearance of the wards, and the state of the patients, together with the statement of the medical officer, we should consider that these duties were well-performed. The clothes, beds, etc., from the fever-wards, are, we understand, first disinfected by exposure to a temperature of 300 Fahr., then washed in a building specially allotted for the purpose. The linen from the other sick wards is also washed in a separate laundry, and does not come in contact with any of the articles used in the healthy part of the establishment. All these laundries we found to be well arranged. The cooking for the sick is done in the common kitchen of the Workhouse, the food being carried a short distance, across an open space, in covered trays.

We were informed by the medical officer, that, about two years ago, during a severe epidemic of typhus fever in Bristol, many cases were admitted into the Infirmary. All the nurses employed in attending on the sick contracted the disease, and five of them died from it. Since then, the guardians have decided on building a hospital for the reception of contagious diseases, which will be completed next year. It will consist of two pavilions, connected to each other at one end, by means of a passage; this passage communicating with a kitchen, in-

tended for their special use. Each pavilion will contain three wards, viz., two on the ground-floor, 40 feet long, 30 feet broad, and 13 feet high; and one on the upper floor, 80 feet long, 30 feet broad, and 14 feet high. Thus each pavilion will be capable of containing thirty-two beds, with an allowance of eighteen hundred cubic feet for each. Sculleries, bath-rooms, lavatories, and water-closets, will be attached to each ward. Ventilation will be carried out by means of windows on each side of the wards opening to the top, and also by means of funnel-shaped openings in the ceilings, communicating with the open air by means of a tube, and having a gas-light constantly burning under them. We would suggest that the water-closets should be served from a cistern, situated over the wards, the water in which could easily be kept saturated with some disinfectant, and would thus ensure the disinfection of all matters passing into the drain. We consider that the arrangements in this Workhouse are good, particularly the laundries.

The Clifton Union is composed of the parish of Clifton, some of the other suburban parishes of Bristol, and a few agricultural ones. The Workhouse, situated on an open space of rising ground, contained when we visited it 730 inmates. It consists of four parallel blocks of buildings, connected by a passage, which passes through the centre of each, and serves to separate the male from the female departments. The first block we came to contained aged and infirm people; we noticed nothing particular about this, except that there was no water-supply on the upper floor of the female side. The second block is intended for the use of able-bodied paupers; but when we visited it, two of the wards were occupied by the sick. They had neither bath-rooms, lavatories, nor sculleries attached to them, and were badly ventilated. The third block constituted the Infirmary, the male part of which consists of three regularly occupied sick-wards, a lock-ward, an itch-ward, and a day-room, for the use of convalescent patients. This day-room seemed to us rather cheerless, and, together with the itch- and lock-wards, is situated on the ground-floor. These itch and lock wards, we were informed, are locked-up from nine o'clock at night till seven o'clock in the morning; the patients during that time having no means of communicating with any one. There is no bath-room on this floor, the patients with itch having to use one of the baths upstairs, attached to the other sick-wards. These sick wards, three in number, opening one into the other, are ventilated by means of gratings in the ceilings, and by windows on each side of them, which, however, do not open to the top of the ward; they contained in all twenty-seven beds; with an average of about 700 cubic feet for each bed. There are water-closets attached to each, and two bath-rooms for the use of the three wards; but no lavatories, or sculleries, the plates, cups, etc., being washed in one of the bath-rooms, which, when we saw it, was in an extremely dirty condition. The female part of the Infirmary, in its general construction, is very similar to the male side, above described, there being in addition two lying-in wards, one containing three, the other seven beds; they were clean and well-ventilated. There are two bath-rooms for the use of all the patients in this wing of the building, but no lavatories or sculleries, the plates and cups being washed in the wards or in the passages outside them.

The arrangements for washing the patients, in both the male and female parts of the Infirmary, we found to be peculiar. In the male department, the use of one basin and one towel a week was allowed for each ward; in the female department, similar arrangements existed, except that we found only one basin for the use of the patients in both lying-in wards. And we were informed in one of the sick-wards, that the only basin in the wards was retained to make poultices in; a bucket serving not only for the purpose of washing the wards, and the patients' hands and faces, but also any bad legs, or wounds, requiring such treatment; lastly, the plates and cups. Again, we were informed in another ward, that, if the patients wanted to bathe any sores, etc., they had to do so in their chamber-utensils. All the towels that came under our notice were in an extremely dirty condition. There are macintosh-sheets, but no water-pillows supplied to cases requiring them, and one extremely bad case of bed-sore came under our notice; the patient lying on the common hard ward-bed. Under such conditions, we should consider his recovery impossible. The sheets and linen of the patients are changed once a week, and washed in the common laundry of the Workhouse. The nursing is performed by pauper nurses, one for the male, the other for the female departments. The fourth block is for the use of imbeciles. It has lately been enlarged by the building of four new wards, with good bath-rooms, lavatories, and sculleries attached to them. When these are occupied, the department in its sanitary arrangements will be, we should think, by far the best part of the workhouse, at present it is crowded. The great point that struck us in our inspection of the Clifton Workhouse, was the total absence of any proper washing arrangements for the inmates. That a single basin, and only one clean towel a week, should be supplied for the use of a

dozen patients, seemed to us incredible, till, by constant inquiry, we assured ourselves that such was actually the case.

The Bedminster Union includes a portion of the suburbs of Bristol, inhabited chiefly by tanners, coalminers, etc., and several of the neighbouring agricultural parishes, containing in all a population of nearly 45,000. The Workhouse is situated four miles from Bristol, and generally contains about three hundred inmates. On entering the building, we first noticed the receiving-wards, which are small; but we were informed that they never contained many people at the same time. Passing on, we came to the kitchen, in which the cooking for the whole of the establishment is done. It was also small, but kept clean, and the soup that was being made seemed good. The Infirmary is a detached building, and, in describing it, we shall give a detailed account of some of the wards. The first we visited was the lying-in ward, containing four beds in a space of 2400 cubic feet. The medical officer informed us that the patients here had always been healthy. Proceeding onwards, we came to a female sick ward, twenty feet four inches long, sixteen feet six inches broad, and ten feet high, ventilated by means of two windows each, only three feet square, both on the same side, and not opening to the top of the ward, which contained nine beds, thus allowing less than 380 cubic feet for each. The next ward we visited contained six beds, with an allowance of 450 cubic feet per bed. One small scullery, and two water-closets were attached to these two rooms; both were dirty. On going upstairs, we first entered a small and badly ventilated convalescent room. On the same floor was another female sick-ward, twenty-nine feet six inches long, seventeen feet two inches broad, and nine feet five inches high, ventilated by four windows, each three feet square. It contained, when we paid our visit, thirteen patients, thus reducing the cubical space to less than three hundred and seventy feet for each. It is hardly necessary to remark that, under such conditions, the atmosphere of the ward smelt anything but pleasant. Opening out of this was a ward lately built, but not at present occupied; it is twenty-nine feet two inches long, sixteen feet three inches broad, and about ten feet high. There are two small windows on each side, and also some small ventilators in the walls. There is no water-closet or scullery attached to it, so that all slops would have to be carried through the ward previously described, to be emptied into an extremely foul water-closet beyond, which would be for the use of twenty-six patients. We were informed that in this next ward there would be twelve beds, thus allowing less than four hundred cubic feet per bed. Can it be possible that such an arrangement has been, or ever will be, sanctioned by the Poor-Law Board? There were also two small rooms on this floor, eight feet four inches long, six feet three inches broad, and ten feet high, intended for the reception of special cases. The male wards we found to be in nearly every respect similar to the female one, except that here one of the wards was set apart for the use of imbeciles, whilst in the female wards, sick patients and imbeciles were mixed indiscriminately together. Cases of a contagious nature are not admitted; but if any such arise in the house, the medical officer endeavours, as far as possible, to isolate them. Sometimes, from want of rooms to remove them to, they are obliged to be left in the wards with the other patients. There is no bath-room in the infirmary, neither is there any supply of hot water, except from one small boiler, and we were informed that there was, as a rule, only one basin in a ward, and that in some cases four, in other cases only two towels a week, were supplied for each. There were no water-beds or pillows, nor any macintosh sheets. The sheets and linen of the patients are changed only once a fortnight, and the washing for both the sick and the healthy is done in the same building, consisting of three rooms, each sixteen feet long, by fourteen feet broad, which, when we visited them, were extremely dirty. The nursing of the whole of the sick, over sixty in number, is superintended by a paid female nurse assisted by one pauper nurse in the female wards, and by three pauper nurses in the male wards. Medicines are given in proper medicine-glasses. The diets for the sick are under the charge of two medical officers, who, as a rule, employ a similar form to that used at the Bristol Royal Infirmary, ordering what extras they may consider necessary for special cases. Some of the pints of beer ordered for the patients, came under our notice, and, on measuring them, we found them to be a quarter of a pint short. To sum up: the wards were crowded and badly ventilated. The water-closets were extremely foul. The lavatories were small and dirty; and there was no bath-room attached to the infirmary.

**MEDIAN LITHOTOMY.**—Dr. Thomas M. Markoe, Surgeon to New York Hospital, strongly commends (*New York Med. Jour.*, April, 1867) the Median, or "Allarton's operation" for stone; and says that, from a trial of it in twelve cases, he is its warm advocate. He reports, in addition to his own twelve cases, eleven contributed by his friends, in which the operation was successfully performed.