animal charcoal, as they yield less phosphate of lime to the water. They, however, require careful use in order to be moderately effective, and two should be used alternately, a day at a time each. The block which is not in use should be scrubbed with a solution of Condy's Fluid, then baked in an oven for half an hour, and exposed to the air until it is required for use.

Spongy iron removes lead from water, but it adds to it salts of iron. It oxidises organic matters, and removes suspended impurities, but, although it adds nothing of an organic nature to the water, it

allows bacteria to pass through.

Drs. Sims Woodhead and Cartwright Wood, in conducting an inquiry into the relative efficiency of water filters, made exhaustive tests, with the result that only three domestic filters out of the twenty-one examined afforded protection against water-borne diseases. They are the Pasteur-Chamberland filter, the Berkefeld filter, and the Porcelaine d'Amiante filter of a French firm of Dr. Plagge, on behalf of the manufacturers. German War Office, conducted further examinations of the Pasteur and of the Berkefeld filters respectively, with the result of a report summarised in the British Medical Journal, that some of the Berkefeld filters were found to pass germs into the filtered water. He showed, also, that such filters should be sterilised by boiling at least once a day, and that, on account of the mechanical weakness of the filter tubes, they should be put into cold water and brought to the boil, and then be allowed to cool thoroughly before they are taken into use again.

The Pasteur Chamberland filter owes its power of resisting the passage of microbes to the composition of the porcelain cylinder, which is so uniformly close in its texture that, although it allows water to percolate, it keeps back all bacteria. The surface requires to be cleaned, but sterilisation is not necessary. Water passes through this variety of filter very slowly, trickling drop by drop when no pressure is applied. When it is under a pressure of 1½ or 2 atmospheres, such as is present in the pipes of a public water service, it yields two or three

quarts in an hour.

Excellent though such filters are in their results, they are beyond the reach of some purses, so that a more inexpensive safeguard is required. This can always be found in the oldest method of filtration known, and that is by boiling the water. No fully developed germ can resist the temperature of boiling-point, yet, even with boiling, water does not become absolutely sterile. Bacteria, when under conditions which are unfavourable, are modified into spores, in which form they remain until favourable conditions of life and activity are met with. Spores are just as virulent as the fully-developed germs, but they are more hardy, and are able to resist the temperature of boiling water. To

obtain water which is sterile, it should be boiled for about half an hour on three or four consecutive days, so that the spores of the early stages may develop and be destroyed during the later stages. The only objection to boiled water as a beverage is that it has lost its briskness, and tastes flat and insipid. This is due to the passing off of bubbles of air when heated. The briskness of water can be restored by the use of a machine by Desmaroux, Muiche, or Waterhouse Forbes, or, more simply, by pouring water at a height from one jug into another.

## The League of St. Bartholomew's Hospital Murses.



A General Meeting of the League of St. Bartholomew's Hospital Nurses took place at the Hospital on Saturday, June 25th. The President, Miss Isla Stewart, presided. A marked feature of the meeting was the pro-

fessional importance of the business transacted. The League was informed of the work done in the nursing world at large by its members since the last meeting, and we must congratulate those concerned not only on the satisfactory reports they were able to make, but on the businesslike method with which they were presented.

Treasurer's Report.—After the minutes of the last meeting had been read and confirmed, Mrs. Dyall, Hon. Treasurer, said that the balance in hand at the end of the year, after defraying all expenses, including those of the Delegate to Berlin and a share in the entertainment of our American guests,

was £49 12s. 8d.

Secretary's Report.—The Secretary, Mrs. G. F. Wates, stated that forty-six new members had joined the League during the year, that it had been found necessary to increase the issue of League News to 600, the decisions of the League to affiliate with other nursing organisations, to appoint a representative on the Executive Committee of the Society for the State Registration of Trained Nurses, the formation of a Sub-Committee to issue collecting cards, in connection with the Hospital Rebuilding Fund, to nurses past and present, and other details of interest, including the appointment of the following representatives of the League on the Provisional Committee of a National Council of Nurses for England:-Miss Cox-Davies, Matron New Hospital for Women; Miss. Jenkins (Sister Casualty), Miss Madden (Sister Mary); Miss H. Todd, Matron National Sanatorium, Bournemouth; and Miss Henman, Home Sister Charing Cross Hospital. Miss E M. Waind signified her previous page next page