

from this the fouling is great. From swimming baths two great benefits should arise besides the fine virile exercise which itself is of the greatest value. First, the art of swimming, which all should possess; and second, the purification of the skin and pores; and bad as the pollution is, some substantial balance of good results from the whole equation. Yet as a purification of the body this method cannot be approved.

Mr. Pearce, of Batley, Medical Officer of Health, has conclusively demonstrated this in an excellent paper contributed to the *Lancet* in September last during the warm dry weather. He shows that there is manifest danger of infection from the use of such polluted bath water. The germs of disease, such as diphtheria and consumption, may be got by bathers to whom the commonest occurrence is the forced swallowing of the fouled water by mouth and nostrils. He has noticed sore eyes in children arising through bathing in infected water, and states that the bath manager at Batley has found the *pediculi capitis* in numbers in the towels after use and in the dressing boxes. He suggests that something should be done to keep verminous persons from using the bath, and that it would be useful to enforce the use of bathing caps by girls. The best remedy, he thinks, would be to exclude all persons not in a state of bodily cleanliness. Here we may ask how far this would go. The real question is, we take it, not only the dirty bathers, but the overcrowding and the use of the polluted water day by day. The cleanest bathers externally are not always continent of the contents of their bodies, and spitting and expectorating cannot be suppressed. Moreover, the air itself in so confined a space as a covered bath becomes fouled, and mingles with the water. In the selection of bathers lies no real remedy of a practicable kind for what is a gross pollution. Outdoor bathing in the canal or a running stream of water agriculturally pure would give reasonable immunity from infection. It is found in many places, as at Oxford, Cambridge, Bedford, and other places where a fine river is at the disposal of the citizens; also for the accommodation of a small part of a great city, Leeds has set a praiseworthy example, which it is to be hoped will be multiplied, by making a large open-air bath at Roundhay Park, with the water of

its rivulet flowing continuously through it; and Sheffield and other places are bringing into use similar clear streams within or near their boundaries.

Where this cannot be done, the authorities must look the matter in the face and forthwith stop all overcrowding by a fixed limit to the number of boxes, the refilling of the baths daily, and the strict suppression of all soaping, washing, and expectorating in the bath. These will mitigate, but not abolish, the evil.

Meanwhile, all authorities who feel they can afford it in these days of heavy rates and high standards of valuation should, as far as possible, follow the example of Belfast, which as yet offers no sign of stagnation in its wonderful progress. The corporation have installed the rapid filter plant in their three swimming baths. Two of these are open-air pools artificially supplied with water. These have not been completely emptied and re-filled since the filtration was started a year and a half ago, the only water that has been added being that necessary to supply loss by evaporation, etc. The water, nevertheless, has maintained its brightness, purity and freedom from peat or other color. The process of supply is continuing during the time the baths are in use by pumping out 8,000 gallons per day of used water into the filters. This filtration is reinforced by the special "Rapid" system of chemical precipitation now well known, which operates within the filter, and is claimed to deal efficiently with not only very fine organic impurities, but with the bacteria themselves, which are destroyed.

#### Report on African Sleeping Sickness.

The results of further experiments made by Colonel Sir David Bruce and his expedition in regard to sleeping sickness were placed before the British Royal Society recently at a meeting presided over by Sir Archibald Geikie in London. In the absence of Sir David through indisposition, the results were summarized by the Secretary (Dr. J. R. Bradford), who said that experiments had shown that the results of injecting extract of infected flies were similar to those obtained by allowing the flies to transmit the malady directly by biting the animal. That is to say that for the first two days after the fly became infected it was capable of transmitting the