Medical Matters.

BACTERIA IN BUTTER.

Dr. C. J. Lewis (Scottish Medical and Surgical Journal) says that the organisms present in butter may be regarded as likely to be of the same varieties as those in milk; but experiment shows that butter is not so liable to contain pathogenetic microbes. Prausnitz estimates that butter

sometimes contains as many as ten to twenty millions of germs per gramme. Laser found that Vibrio choleræ may remain alive and virulent in butter for thirty-two days, and the typhoid bacillus for three or four weeks. The tubercle bacillus finds a suitable medium in butter, in which it may remain virulent for twelve days according to Heim, and even up to ninety days according to Moore. Butter made from the milk of a cow with tubercular udder produced the disease in a rabbit; and though there is no evidence that tubercle has been spread to man by butter, there is ground for suspicion in the fact that in Germany some 30 per cent. of the samples analysed contained the bacillus. Klein, however, recently tested samples of butter from Normandy, Brittany, Ireland, Austria, France, and Dorset, using as much as a quarter of a pound of each of twelve samples, and failed to find in any instance the tubercle bacillus or either variety of the B. pseudo-tuberculosis. The staphylococcus aureus was present, however, in one sample.

CURATIVE POWERS OF OXYGEN.

The medical superintendent of the Oxygen Hospital calls attention to some remarkable results of the use of oxygen in treating advanced cases of tuberculosis. The effects are most manifest in causing the reduction of the temperature and the disappearance of the tubercle bacilli.

During the past year, eighty-eight cases were treated in the hospital. Of these, fifty were discharged cured and thirteen wore greatly relieved; of the latter, nine were cases of consumption, and in all of them the disease was arrested. Only one person treated during the year was unrelieved.

The nearest approach to the pure mountain air is introduced into the wards of the hospital, and so handled, concentrated, and applied that its healing powers are speedily made manifest in many remarkable ways.

THE CRUSADE AGAINST THE MOSQUITO.

An important and practical report on the prevention of malaria in the tropics has just been issued by the Liverpool School of Tropical Medicine. It is one of the most hopeful reports ever issued by the School, and marks an immense step forward in preventive medicine.

The expedition to the Gambia in 1902, which was conducted by Dr. Dutton, was organised to investigate the condition under which mosquitoes propagated in the town of Bathurst and at the principal stations of the colony, and to suggest methods of destroying these insects.

PLACES OF PROPAGATION.

Malaria was found to be prevalent in the colony, to quote from an admirable review of the report which appears in the Morning Post. Of the native children examined, 80 per cent. harboured malaria parasites in their blood. The liability to infection of the Europeans occurred soon after the rains were established, lasting up to the end of November. The various breeding places of mosquitoes are described in detail in the report, particular mention being made of the wells, canoe boats. lighters, cutters, or the foreshore, and of the grass-clogged trenches in many of the streets, which together supply Bathurst with the majority of its mosquitoes during the wet season and for part of the dry season. The number of mosquito-breeding places present in compounds was found to vary with the social position of the occupier. They increased in extent and number in proportion to the wealth and position of the occupier. An account of the examination of one of the large compounds illustrates to what extent mosquitoes are bred by the white man in his own premises in the tropics. In one factory yard six barrels were found, and in the garden there were seventeen tubs and eight small wells, all breeding quantities of culex, stegomyia, and anopheles mosquitoes. Besides these dry-season breeding places, discarded domestic utensils were scattered about the yard and garden, which in the wet season would have acted as breeding places.

CAMPAIGN AGAINST THE MOSQUITO.

It is pointed out that during the dry season, from November to May, natural breeding places for mosquitoes in Bathurst cease to exist, and from this period the people breed mosquitoes





