

cent. in the treated, showing it to be a specific of marked power.

As to its method of use these investigators say :—"All patients suffering from bubonic plague and especially its pulmonary forms should be treated as soon as possible after the onset of the illness with an intravenous injection of 20 cc of antiplague serum, followed in the first 24 hours by two subcutaneous injections, each of at least 40 cc. Either further intravenous or subcutaneous inoculations may be made according to the severity of the case." They advise that the intravenous injection be made into the veins of the dorsal aspect of the hand or the front of the wrist. This serum can also be employed in 5 cc doses to produce an immunity against an attack, but the passive immunity so conferred is fleeting and the dose must be repeated after 12 days, and hence as a prophylactic its value is markedly lessened though while the immunity lasts it is very complete.

As a prophylactic measure the serum cannot take the place of Haffkine's fluid which has been used with marked success for the last 3 years in India. This fluid consists of the toxines and bodies of the plague bacillus killed by heat, after growing on bouillon for some weeks. Inoculation of this fluid is followed by a more or less well marked local reaction and often with considerable constitutional disturbance. After a few days immunity becomes established and lasts at least several months. This immunity is an active one, lasts for quite a long period, and is as secure as that produced by the antiplague serum, and hence is better adapted for use where a community is to be inoculated against the disease. Needless to say it is a prophylactic agent, not a curative remedy, and hence should not be given once the plague has declared itself in an individual. If given during the incubation stage of the disease it would certainly hasten its onset. Many thousands have already been and are still being inoculated against the disease by this prophylactic fluid and all facts and figures show its efficacy. Thus, taking a single carefully recorded instance into consideration:— In Damaun in Goa, (India), between 26th March and 31st May, 1897, there were 6033 uninoculated individuals amongst whom there occurred 1482 fatal cases of plague, *i.e.* 24.6 per cent. of their number, whilst in the 2297 inoculated individuals there were 36 fatal cases, *i.e.* 1.6 per cent. a reduction of 89.2 per cent. in the mortality. The Bombay