

to four times its weight of sterilised broth, a portion of the bulb from a dog which had died of rabies after being found in the streets in a mad condition. A second dog was inoculated with a hundredth part of the quantity, and a third dog with a two-hundredth. The first dog was seized with rabies after an incubation period of 18 days, the second after 35 days, the third remained unaffected; *i.e.*, in this last case, and by the method of inoculation used in this experiment, a certain quantity of virus proved insufficient to produce rabies. This last dog was susceptible of rabies, as all dogs usually are, for it was again inoculated on September 3rd, 1882, and was seized with rabies 22 days later.

IT IS NOT IN THE QUANTITY of the virus therefore by which protection is afforded, but through some changes produced in it by cultivation, which is nevertheless called 'attenuation'. M. Pasteur continued, many attempts were made to attenuate rabies-virus by passing it through the bodies of certain animals. But in the majority of the experiments on animals, the poison increased in virulence, just as in rabbits and guinea-pigs; fortunately this was not so in the case of monkeys. After detailing his experiments with monkeys he says;—it is thus impossible to doubt that by transmission from monkey to monkey, and from the different monkeys to rabbits, the strength of the poison is weakened in the latter just as it is weakened in the dogs. The application of these facts yields a method of vaccinating dogs as a protection against rabies.

THE COMMISSION ON RABIES asked for by Pasteur, has performed experiments on thirty-eight dogs, nineteen of which had been supplied by Pasteur as insusceptible to rabies, while the other nineteen could be made mad. As to the present condition of the dogs which have been the subject of enquiry, the Commission report that, in the case of the nineteen trial dogs, of six which were bitten, rabies occurred in three; of seven which were inoculated in a vein it occurred in five; and of five which were inoculated by trephining it

occurred in all; while not a single sign of rabies has shown itself in any of the nineteen vaccinated or protected dogs.

M. PASTEUR ENQUIRES, "is the application of the new advance to be confined to the prevention of diseases in animals?" We most certainly hope so. During the course of the commission inquiry one of the protected dogs died from a sanguinous diarrhoea. Pasteur says, "in order to determine whether rabies had any share in its death, three rabbits and one guinea-pig were at once inoculated with its bulb by trephining. All of these four animals are still in the best of health, which is a certain proof that the dog did not die of rabies, but of a common disease." But is it a certain proof that the rabies poison had nothing to do with causing the death of the dog?

DISINFECTANTS.—At the Health Exhibition recently Prof. de Chaumont delivered to a numerous audience a lecture on the Prevention of Cholera. The most important point in the advice he gave was, his warning about disinfectants. Fire, he said, was the only true disinfectant, most so called disinfectants being simply deodorants. If there existed a system of drains properly flushed and properly protected, there would be no need for disinfectants. In other words, have all excremental matter completely removed.

INTERESTING EXHIBITION.—The supra-conservative *Medical Times and Gazette*, London, Eng., has been forced to change its views once more. It had opposed the germ "theory" of disease, and also the teaching of such subjects as physiology in the schools, because "a little knowledge," &c. In referring to the Biological Laboratory, under the charge of Mr. Watson Cheyne and his assistant, Mr. Joseph Lister, at the International Health Exhibition, the *Times* says (Aug. 30th, '84). "Obviously no greater incentive to safeguard health can be imagined than a study of the life history of the organisms, whose entrance into, and development within, the body constitutes disease, and of the power of