

and compatible with the human organization. The indisputable object of education should be the perfecting of the individual in view of the general progress; it is an economical object, having as its consequence a much greater conversion of human activity into useful work. In physical education it is necessary to apply all the general knowledge we possess concerning the relations between the function and the organ, concerning the modifications endured by the organs, of which we modify the function. Unfortunately, we are still far from the thought of applying to ourselves this powerful agent for improvement, although we impose it on our domestic animals; our own unions are not often made in view of the inheritance of vigor and health which we shall leave to our descendants. Georges Demyen, in the popular science monthly.

DR. KLEIN'S REPORT ON THE HISTORY &C.
OF DIPHTHERIA.

The report of Dr. Buchanan, Medical Officer of the Local Government Board, for 1889 has just been published. Besides many other special auxiliary reports, it includes one by Dr. Klein on the intercommunicability of diphtheria between the human body and cows and cats, references to which have from time to time appeared in this JOURNAL during the past two years. Dr. Klein had continued his researches into the bacteriology of diphtheria, and publishes in this report an elaborate article on the etiology of the disease, in which he discusses very fully its bacteriology. In particular science is indebted to him for having precisely defined the characteristics of the true pathogenic organism of this disease, which it would appear had previously in many cases been confused with other bacilli frequently, but not constantly, found in diphtherial membranes. He found that cultivations of this pathogenic bacillus were capable of producing in cats the same well-defined symptoms of feline diphtheria as result from direct inoculation of the cat with the material of human diphtheria. He found further that the feline diphtheria thus set up may infect with the same disease other cats kept in the same cage, and that from the disease thus produced by contagion new sub-cultures of the bacillus could be obtained. The only missing link in this reasoning is that it cannot be proved experimentally that feline diphtheria thus induced can be transferred to human beings; it will not, however, be forgotten that cats suffering from a disease of the same

character as that observed in experimental cats have been supposed, on good circumstantial evidence, to have been the originators of epidemics of diphtheria among the human inhabitants of the households to which they belong. Some experiments with milch cows yielded results of considerable importance; it was found that on or about the fifth day after inoculation in the shoulder with pure cultivations of the diphtheria bacilli, milk drawn from the udders with aseptic precautions contained bacilli which were proved by cultivation experiments to be undoubtedly of the same species as those with which the animals had been inoculated. On the previous day in these same cows an eruption of small vesicles had made their appearance on the udders, and these rapidly passed into pustules and crusted ulcers. Dr. Klein looked upon his udder-eruption as being a local manifestation of a constitutional disease induced by the diphtheria inoculation.

WHAT IS KNOWN OF HYPNOTISM.

The able editor of the British Medical Journal furnishes that valuable weekly with a lengthy paper on "Schools and doctrines of Hypnotism," and says in conclusion: To sum up, then, in a few words the actual state of the question, an impartial observer might, in my opinion, conclude that hypnotism is a pathological modification of the nervous system, which always indicates that the subject belongs to a neuropathic class. The complete and typical form of hypnotism described by Charcot is rare. Suggestion plays a considerable part in hypnotic phenomena, but there are somatic phenomena which are independent of it. Hypnotism may frequently be dangerous, and very rarely useful. It may be the cause of crime, or of mental disorder: it can really cure no disease not more easily curable by simpler and less dangerous methods. A considerable number of facts attributed to it which have most impressed the public imagination, such as the actions of medicines at a distance, the so-called telepathic communication or communications made without speech, and the *clairvoyant* phenomena sometimes described, are mere errors of experiment arising from insufficient precautions and a too vivid imagination. Precisely those phenomena which have been most publicly talked about and excited most interest in "psychical" circles so-called, are the least real. The hopes which the therapeutic hypnotist aroused have not been rea-