

the experimental therapeutists may furnish us with useful extracts of the spleen, prostate, pineal gland, pituitary body, and other structures which are at present adjudged functionless. There is a large and imposing monument awaiting the genius whose happy lot it may be to isolate a useful extract of the vermiform appendix of the wombat, one of the very few quadrupeds, I understand, which are decorated with this intestinal frill. Seriously, however, if these extracts are ever to be such as to merit the confidence of the profession, it is apparent that they must be prepared with care and skill by a competent physiological chemist. There must be some attempt to realize in the extract that part of the organ which shall, when injected into the blood or tissues of the patient, be able to represent, to some degree, the function of his disabled organ. To mince up the brain, the heart, or the liver of an ox, and dignify the filtrate obtained therefrom by such pretentious names as cerebrine, cardine, or hepatine, is surely the acme of quackery. It would certainly be an excellent thing to have an examining institution, under the control of the State or some properly qualified and responsible authority, under whose judicial scrutiny all such alleged cure-alls should be required to pass before they could lawfully be placed within reach of a too-confiding public.

#### IMMUNITY.

A very much more hopeful outlook, however, is afforded by the work which is now being done by clever men in rendering animals "immune" or "refractory" to certain diseases. The behavior of bacteria in presence of their own excreta, and in feeding grounds that have been browsed over, as it were, by an allied tribe, or by an adroitly attenuated generation of their own species, suggested to Pasteur, Koch, and other savants, the idea of establishing such artificial conditions within the body as would render it hostile to the germs of disease, and so prevent their development.

It falls not within the scope of this paper to discuss the theories of immunity. From a practical point of view, it matters little which is correct—the theory of exhaustion of the soil as believed in by Pasteur and Cliff; the theory of adaptation as expounded by Grawitz and Flint, who believe that acquired immunity consists in the transformation of the biological function of the organism; or the theory of retention of Chauveau, who explains immunity by supposing that the bacteria first introduced secrete a material that remains in the body, and prevents a later development of the same organism. It is curious to note that variolation or inoculation of smallpox was practised from time immemorial in China and Persia. The practice was imported into Turkey, and thence introduced into Great Britain by Lady Mary Montague in 1721. Vaccination was not discovered by Jenner until 1798. Recent investigations by Eternod, Haccius, Copeman, Klein, and others, whose results were freely