

minds us of Hegel, who had incorporated anthropology as the first chapter of his theory of the subjective intellect, that is, according to his use of language, of psychology, an arrangement in which he was followed by his school. Dubois Reymond's thoughtful and well-expressed 'Akademische Reden' reveal the irresistible need of something beyond this material world in their acknowledgment of 'world riddles' and of psychic phenomena as accompaniments of physical processes. The physicist E. Mach's clear-sighted 'Beiträge zur Analyse der Empfindungen' keep within the limits of 'psychophysics,' without throwing any doubt on the existence of the psychical. However, the collected essays of W. Wundt, who was bred a physiologist, prove that even an investigator who starts from purely empirical causes feels the need not only of philosophy, but also of the special branches that have always been included under this head, psychology, logic, ethics; while even metaphysics, though fallen into contempt, is asserting itself again, however much the aim of this new inductive science may differ from the old speculative one that bore the name."

#### CONSANGUINITY AND MENTAL UNSOUNDNESS.

THE question of the effects of consanguinity is one of those vexed problems on which much evidence has been collected *pro* and *con*. The observations have been made by careful observers; and the most probable explanation of the diversity of the results reached, is that other circumstances have in some cases cancelled the bad effects of too close interbreeding, and in other cases brought them into prominence. A very fair consideration of the problem is given by Dr. G. E. Shuttleworth, in the *Journal of mental science* for October, 1886.

The common misgiving as to the propriety of cousin-marriages is of rather recent origin. In ancient times marriages of near kin were not forbidden; the first prohibition of them is in the fourth century A.D. The Church soon came to cast its odium on marriages even of the seventh degree of relationship, and the fees for removal of such objections by dispensation were an important source of revenue. This has undoubtedly influenced popular opinion on the question.

From the physician's point of view, the evidence from the animal world is important. Here there is almost a consensus, that, while the effect of 'in-and-in breeding' is to intensify *points*, in the long-run it is opposed to vigor of constitution. It is to be remembered that every breeder takes care to exclude any animals with any known morbid

tendency, while, on the contrary, in the genus *Homo*, as Dr. Clauston remarks, there seems to be "a special tendency for members of *neurotic* families to intermarry." The result of this will be that in some portions of the population the offspring of such marriages will show the evil results of it to an unusual extent. And thus we find, that in rural and especially in mountainous districts, where the population is small and fixed, the comparative amount of idiocy is greater than elsewhere. Statistical information is inadequate on the subject: the motion to include it in the census returns of England was rejected "amidst the scornful laughter of the house, on the ground that the idle curiosity of speculative philosophers was not to be gratified." In France the returns have given rise to various estimates (varying from  $\frac{1}{10}$  to  $2\frac{1}{2}$  or 3 per cent) of the frequency of consanguineous marriages. Mr. G. H. Darwin came to the conclusion that in London  $1\frac{1}{2}$  per cent of all marriages were between first-cousins, in urban districts 2 per cent, and in rural districts  $2\frac{1}{2}$  per cent.

If, now, we ascertain the ratio of idiots and insane patients that are the offspring of such marriages to the total number of patients in the asylums, we will have some means of estimating the results of consanguinity. From quite an extended series of records, it is concluded that the ratio just referred to in the idiot-asylums is from 3 to 5 per cent: hence "*first-cousin* marriages, at any rate, are to some extent favorable to the production of idiot children." But this conclusion must be tempered by the consideration that in a large number of such cases of idiocy and imbecility other causes for this condition are present; and this consideration leads Dr. A. Mitchell to the opinion that "under favorable conditions of life the apparent ill effects of consanguineous marriages were frequently almost *nil*, while, if the children were ill fed, badly housed and clothed, the evil might become very marked." From such facts and figures we may conclude that first-cousin marriages should, as a rule, be discouraged; but that, if a close scrutiny reveals no heritable weakness, neurotic or otherwise, the bans need not invariably be forbidden.

#### ALLGEMEINE NATURKUNDE.

IN the production of elaborate works on natural science for the general scientific reader or student, the Germans are *facile princeps*. Besides bearing evidences of thoroughness and general accuracy, such works usually present a homogeneity and

*Allgemeine naturkunde*. Leipzig, Bibliographisches institut. 8°. (New York, Westermann.)