He follows Liebmann, *Analysis of Reality*, in asserting that force is not true cause. For example, force cannot produce motion. But he has in mind Schopenhauer's idea of force, a sort of synthesis of the powers of nature—may one say, the total potential energy of the universe—the thing-in-itself of the metaphysician. True force—always something akin to the human will—is that which releases this fundamental power, producing the various manifestations of energy. The true cause of the falling of a stone, for example, is not gravity, but the removal of an obstacle; and so in all motion. This view, sufficiently common in one form or another, may have little significance for physics, which concerns itself with the how and how much rather than the what and why, but is intrinsically important and deserves greater elaboration than it has hitherto received.

This view leaves no place for matter as something upon which force can act or in which it may 'reside.' The universe is to be explained dynamically. So all talk of atoms and molecules, except as for a time they may pictorially assist the learner, is aside from the purpose. They may be handy to have about, as they make no trouble and deny nothing, but they also explain nothing. Ostwald's concept is the true one, simply putting will for force and acts of will for energy.

For it is the world of will—of longing, of striving, of action—of which we are conscious. Here is the real world. But the will encounters opposition from without on the part of something which we feel to be akin to the human will—the powers of the external world. The nature of the world is will.

E. A. STRONG.

YPSILANTI, MICH.

International Catalogue of Scientific Literature. Report of the Committee of the Royal Society of London, with Schedules of Classification. March, 1898. Schedule Q, Anthropology.

It will be remembered that at the International Conference for a Catalogue of Scientific Literature, held at London, July, 1896, the classification of the sciences to be catalogued was referred to the Committee of the Royal Society for organization. The report of this Committee is now published, and it is to its classification of the Science of Anthropology (known as 'Schedule Q') that the present review is confined.

The Committee states that these schedules 'are not put forward as final or authoritative' (p. 9); therefore, an examination of them should be carefully carried out by special workers in science, to see how far a catalogue based upon them will reach the highest degree of usefulness.

Obviously, the schedule should include all the prominent branches of a science, and should reduce repetition of titles to a minimum.

With regard to Anthropology the Committee excludes from it the branches of experimental and comparative psychology, grouping these under the general schedule of 'Psychology' (Schedule P). While the anthropologist may regret this, it is in accordance with the precedents of the American Association and other similar bodies.

The general science of anthropology is divided into eleven primary branches, as follows: (1) Museums and Collections; (2) Archæology (prehistoric); (3) Anthropometry; (4) Races; (5) Industrial Occupations and Appliances; (6) Arts of Pleasure; (7) Communication of Ideas; (8) Science ('chiefly of primitive races'); (9) Superstition, Religion, Customs; (10) Administration; (11) Sociology ('chiefly of primitive races'). The total number of sub-headings is seventy.

What will first impress the anthropological student in this classification of the subjects of his science are its omissions. Nothing is said of that most prominent branch sometimes called 'developmental somatology,' which investigates the influences of heredity and environment and the physical transformations of man (evolution, monogenism, polygenism, etc.)

The whole science of ethnography, as such, is overlooked, as under the unfortunate heading 'races' the only sub-titles are 'General Works,' 'Classification by Name and Language,' 'Racial Peculiarities.' Another ill-chosen term is 'arts of pleasure' as a synonym for the fine, or æsthetic arts. Many of the most noteworthy developments of these are in no sense ministers to

pleasure, such as the vast domain of religious and symbolic art; and consequently under none of the sub-headings are these mentioned. Why 'administration' and 'sociology' should be separated is not obvious, and that it is erroneous is apparent from the substantial duplication of the sub-headings, as 'marriage' under the former, 'relations of the sexes' under the latter; 'crimes' under one, 'ethics' under the other; 'governing powers' under the one, 'family and clan' under the other, and so on.

A curious omission in these days is that of folk-lore from the leading titles. It is a clear-cut, independent branch of anthropology, with a field of its own and a vast literature; yet it appears only as a third-rate subordinate subject; though the Committee perhaps thought to make amends for this by inserting it twice, once under 'arts of pleasure' and again under 'superstitions!' This would involve duplicating at least a thousand titles a year. The drama is placed under 'arts of pleasure,' history under 'science,' while writing and records are included under 'communication of ideas.' This seems a forcible divulsion.

The advanced anthropology of the present day does not intend to confine itself to 'primitive races' nor prehistoric remains, but aims to study the progressive and regressive developments of the species Man as a whole, and as divided by natural or artificial lines into groups, ethnic or demotic. All art, science and history, when treated in this spirit and for this purpose, become the material of the anthropologist, and the subjects of his investigation.

This broad comprehension of the spirit of the science seems obscurely set forth, or rather, is not at all recognized in the items of the schedule, and it is earnestly to be hoped that before it is proceeded with, it will be recast in a frame more adequately adapted to represent the true scope of anthropology.

D. G. Brinton.

SCIENTIFIC JOURNALS.

The greater part of the *Botanical Gazette* for August is taken up by an extensive and elaborately illustrated article carried out under the direction of Professor Geo. F. Atkinson, on the 'Development of some Anthracnoses,' by Miss Bertha Stoneman. The paper aims to ascertain, by the growth-characters developed in artificial cultures, the relationships of certain fungus diseases grouped under the common name of anthracnoses and the connection of these imperfect fungi with perfect stages. The other article of the number, by Mr. William L. Bray, discusses the relation of the flora of the lower Sonoran zone in North America to the flora of the arid zones of Chili and Argentine.

The *American Naturalist* for August contains the following articles: 'Dentition of Devonian Ptyctodontidæ,' C. R. Eastman; 'The Wings of Insects' (III), J. H. Comstock and J. G. Needham; 'Alternation of Sex in a Brood of Young Sparrow Hawks,' R. W. Shufeldt; 'Noxious or Beneficial? False Premises in Economic Zoology,' Samuel N. Rhoads; and 'A Pocket Mouse in Confinement,' J. A. Allen.

The frontispiece of *Appleton's Popular Science Monthly* for September is a portrait of Charles Goodyear and a sketch of the life of the inventor of vulcanized rubber is given by Mr. Clarke Dooley. The opening article is an illustrated account of geological waterways across Central America, by Dr. J. W. Spencer. There are popular entomological papers by Clarence M. Weed and Margaret T. D. Badenock, and several articles on educational and sociological topics.

NEW BOOKS.

Introduction to the Theory of Analytic Functions. J. Harkness and F. Morley. London and New York, The Macmillan Company. 1898. Pp. xv + 336. $3.00.

Inorganic Chemistry According to the Periodic Law. F. P. Venable and James Lewis Howe. Easton, Pa., The Chemical Publishing Company. 1898. Pp. v + 266. $1.50.

Organic Evolution Considered. Alfred Fairhurst. St. Louis, Christian Publishing Co. 1897. Pp. 386.

The Psychical Correlation of Religious Emotion and Sexual Desire. James Weir, Jr. Louisville, Ky. 1898. Pp. 338.

The Elements of Physics. Alfred Payson Gage. Boston, Ginn & Co. 1898. Pp. viii + 381.