

previous to 1850 in the *Bulletins de l'Académie Royale de Belgique*. These must have been known to Dr. Latham, though he nowfere acknowledges indebtedness to them.

The work of Broca, in which he states that the Celts were a mixed type, is his "Nouvelles Recherches sur l'Anthropologie de la France." His words are, "C'est dans cette race mixte que se constitua plus de quinze siècles avant J. C. la nationalité des Celts."

In designating the ancient, blond, dolichocephalic people as Kymric, I follow the best French authorities, such as Dr. Collignon. The ancient Britons, Queen Boadicea and her subjects, were of this type. I cannot understand how Professor Haynes can say "all Celtic people now have black hair," in view of the type of the Scotch Highlanders and the Irish east of the Shannon. In reference to the invaders of Rome, I simply claimed that they spoke a Celtic dialect; I now go further and aver that, in the case of free tribes, speaking a dialect does prove blood relationship in all cases I know of.

D. G. BRINTON.

Philadelphia, April 19.

The Question of the Artificial Production of Variations in Type.

ATTEMPTS have been made to modify the forms of animals, or produce new species, by deforming the parent, e.g., in the case of the attempt to produce a breed of short-tailed mice by mutilating the tails of the parents. Is this not beginning at the wrong end? Are not all transmitted variations transmitted by parents which were modified before birth? All successful attempts to produce and transmit modifications in the breed being the result of breeding from animals that have been congenitally modified, would it not seem the proper and only method to study the laws governing the modifications of the embryo and having discovered these, the production of modifications in species would be a matter of slight difficulty. Congenital variations are the result of law and not of chance.

GERALD M. WEST.

Clark University, Worcester, Mass., April 17.

AMONG THE PUBLISHERS.

MESSRS. MACMILLAN & CO. have issued a second edition of Mr. A. R. Wallace's well-known "Island Life, or the Phenomena and Causes of Insular Faunas and Floras." The work has been carefully revised throughout, and, owing to the great increase in our knowledge of natural history of some of the islands during the last twelve years, considerable additions and alterations have been required.

— We have received a copy of the "Graphic Atlas and Gazetteer of the World," edited by J. G. Bartholomew, F.R.G.S., F.R.S.E., and published by Thomas Nelson & Sons. It is an entirely new atlas, with over 220 maps, charts, plans of cities, etc., all revised to the present date. A most valuable feature is the Gazetteer of the World, with nearly 55,000 places, specially complete in American names, and results of new census. In the United States section a separate map is given of each of the States and Territories, specially compiled from the latest Government Survey Maps. In proportion to its contents this volume is quite unique among atlases for compactness and portability. It is of quarto size, bound in half-morocco, gilt top, and sold at the very moderate price of \$7.50.

— Both admirers and critics of Spencer will be interested in the paper on "Herbert Spencer and the Synthetic Philosophy," in the *May Popular Science Monthly*. The writer, Mr. William H. Hudson, was formerly private secretary of Mr. Spencer, and gives an insight into the process by which his philosophic thought unfolded. The paper contains also a statement of the relation between the work of Darwin and that of Spencer. Professor Frederick Starr will contribute some "Notes upon Anthropological Work in Europe," telling what museums and other facilities for the study of anthropology exist abroad. The article is illustrated with twelve portraits of leading European anthropologists. "Cave-Dwellings of Men" is the subject of a copiously illustrated article by Mr. W. H. Larrabee. It relates not only to the ancient cave-dwellings of America and the Old World, but describes also the

way in which modern troglodytes are living in several parts of Europe to-day. In an article on "Evolution in Folk-Lore," Mr. David Dwight Wells gives two versions of a negro legend nearly a century apart in time, which show the alterations produced in the tale by the change from free life in Africa to slave life in America. An Index to Volumes I. to XL. of *The Popular Science Monthly* is well advanced in preparation, and will be published in the course of the coming summer. The entire contents of the forty volumes will be entered both by author and by subject in one alphabetical list, and the Index will have all the most approved features of the latest magazine indexes, besides some novel ones. The compiler is Mr. Frederik A. Fernald of the editorial staff of the *Monthly*.

— *Nature* notices the appearance of a very useful work, in Russian, by Professor Samokvasoff, on Russian prehistoric antiquities, under the title of "Foundations of a Chronological Classification of Antiquities, and Catalogue." As seen from the title, the work consists of two parts: a catalogue of the very rich collection of the Russian professor, partly illustrated, and a general description of the various epochs which may be distinguished in the relics of the past on the territory of Russia. He has no difficulty in showing that the Slavonians of the first centuries of our era were by no means mere savages. The burial places of that period, usually situated close to the earthen forts, some of which must have required the work of a considerable population, contain hundreds and thousands of graves, so that it is certain that the Slavonians of that period were living in large societies, and had their fortified towns. The same burial customs prevailed over large areas, but the treasures now unearthed from various graves show that differences of wealth and social position existed at that time as well. Considerable amounts of Greek, Roman, and Arabian gold and silver coins were found in the graves, the metal alone of the coins found in some graves attaining, at its present prices, the value of several hundred pounds; while numbers of objects of art, of Greek, Roman, Byzantine, and Arabian origin, are proofs of the brisk foreign trade which took place at that time. The graves of the pagan Slavonians contain flax, woollen, silk, and gold-embroidered tissues; ornaments in gold, silver, bronze, and bone; iron weapons and parts of armament; gold, silver, bronze, iron, and clay vessels, and so on; while the sickles and the grains of wheat, oats, and barley which were found in the graves of South Russia, together with small idols and other objects devoted to pagan worship, are proofs of agriculture having been carried on during the pagan epoch.

INDUSTRIAL NOTES.

Scientific Improvements.

It has been the good fortune of an American firm, J. W. Queen & Co., of Philadelphia, to furnish an epoch-making contrivance for those who have to use the lantern at varying distances from the screen. The NEW MULTIFOCAL ATTACHMENT, which they have wisely protected by patent, is the most valuable accessory that has ever been offered to the exhibitor and lecturer. It consists of an *achromatic* combination of lenses which is placed just behind the ordinary projection objective. This new accessory, having been prepared after a special formula, is so delicately adapted to its work that its curves help to correct and improve the definition of the objective, but the principal purpose of this new accessory, as expressed by its name, *multifocal*, is to provide many points of image production in the range of the objective, each image point giving a different size of picture for the screen, according to the desired distance. In common experience the lecturer is obliged to set the instrument at one invariable distance from the screen, or else carry several screens of different sizes. Every one can appreciate the relief offered by the Multifocal Attachment, which allows complete liberty of choice for the station of the lantern with only one screen. The exhibitor can now literally "cut his coat according to his cloth," and diminish or increase the size of his picture so as neatly to cover the screen at any distance. It is simply impossible to express the satisfaction and freedom from care which the possession of