

of these misdemeanors. He finds that it is not only the pseudo-civilized, coal-black Ethiopian, but more frequently the species to which I alluded in *Science* (No. 416) as "the hybrid," that is developing a marvellous fondness for whiskey, who almost invariably goes armed either with a razor or a "bull-dog" revolver, who are the law-breakers, who are rapidly becoming the skilled burglars, and who are far more dangerous than a savage for a lady to meet alone anywhere after dark.

This "Friend of the Negro," mark you, ascertained still more, much of which is quite in tune with the present writer's remarks in the *Washington Annotan Magazine* of last February, and several other quarters. He adds, "What makes it more disheartening is that here they are in every respect in the full enjoyment of all their legal rights, and in all particulars are on a perfect equality as citizens with the whites. They have the same privileges in the schools, are taught the same branches, have the same school buildings, and there is the same amount per capita spent for them as for the whites. They are abundantly provided with churches and Sunday-schools [*sic*], and, in addition, have the example [*sic*] of some of the ablest and most cultured of their race residing here in our midst." (!)

Now to this particular "Friend of the Negro" I would briefly suggest a study of a few of the higher and a few of the more lowly races of man since the dawn of history. Make those studies comparative. Next, master some of the more practical laws — and there are few or none that are not so — of biologic evolution. Get a good realizing sense of how long it has taken the white race to arrive at its present stage of civilization, and especially the fact that races of men are often quite as far separated mentally, intellectually, and psychologically, as are other races of vertebrates. Induce, if possible, some friend who is informed in such matters to impart a few wholesome facts in the premises. If I am not radically mistaken in the grade of good sense of our "Friend of the Negro," at the end of six months' time he will awaken to the fact that he has before him for study one of the most advanced races in civilization on the face of the globe, the "so-called white," which race is now the victim of another and a *parasitic* race, the "so-called negro," — vicious, low, and barbarous, with a race history, so far as it can be traced, (!) that will not bear investigation. It is not so very long ago since some of them were human flesh-eaters. As an evolutionist, as a zoologist, and as perhaps other things, I can inform the *Star's* contributor that it is quite a useless experiment to place a turkey-vulture in a cage of sky-larks and expect him to sing next morning. Moreover, it is just possible that the experiment may prove a dangerous one for the larks.

DR. R. W. SHUFELDT.

Takoma, D.C., Aug. 10.

BOOK-REVIEWS.

Achievements in Engineering during the Last Half-Century. By L. F. VERNON-HARCOURT. New York, Scribner. 311 p. 8°. \$1.75.

THE author of this work has already made himself known as a writer on engineering topics by his previous books on "Rivers and Canals" and "Harbours and Docks." In this book he describes briefly some of the principal engineering works carried out within the last fifty years, avoiding technical phraseology as far as possible. This will, of course, add to the attractions of the book for the general reader, for whom it is mainly intended; but the attention given to details, and the comparisons made between similar works carried out under different circumstances, give the book a special value for engineers.

There has been no lack of material for the book. In fact, one of the chief difficulties in the preparation of a work of this kind, when undertaken with due regard to "perspective," is the judicious selection of subjects. In this respect, we think, the author has made no mistake. Beginning with railways, he treats first of the London underground and the New York elevated roads; then of those crossing the Alps, the Andes, and the Rocky Mountains; after which a chapter is devoted to narrow-gauge, Fell, Abt, and the Rigi and Pilatus railways.

Two chapters are given to tunnels, one being devoted mainly to

those piercing the Alps, the other treating of river tunnels, such as the Detroit, Hudson, Mersey, Severn, and Sarnia, and the Thames subways. After a chapter on the progress and principles of modern bridge construction, he gives some details concerning the Hawkesbury, St. Louis, Garabit, Hooghly, Brooklyn, Forth, and Tower bridges, with some remarks on the possibility of a bridge across the English Channel. A brief chapter on submarine mining and blasting relates principally to the operations at Hell Gate in the East River.

The engineering works involved in the improvement of the chief sea-ports of the world and of some of the great river channels are very fully described; and ship-canal are by no means neglected, two chapters being given to the Amsterdam, Manchester, and Suez canals, as well as to the work thus far done on the Panama, Corinth, and Nicaragua canals. The latter, by the way, he locates on the Isthmus of Panama, under which name he seems to include all the territory extending from the mainland of South America as far north as the United States.

In the last two chapters of the book the author writes of the Manchester water-works, the Vyrnwy dam and lake, the Eddystone lighthouse, and the Eiffel tower. The book is handsomely illustrated, full-page views being given of many of the subjects treated of, and an excellent portrait of Robert Stephenson making an appropriate frontispiece.

As a whole, the book is one to be commended, though there are points in which it might be improved, as viewed from an American standpoint; and there are occasional evidences of hurried work, as, for instance, the following sentence, which, though conveying much information in small space, would hardly pass muster as a sample of good style: "The elevated railways are owned by two separate companies, and worked by a third company, to whom the lines are leased for 199 years, by means of locomotives, with coupled driving-wheels $3\frac{1}{2}$ feet in diameter, and bogie wheels 2 feet in diameter" (p. 20).

AMONG THE PUBLISHERS.

THE Humboldt Publishing Company have just ready "Mental Suggestion," by Dr. J. Ochorowicz, sometime professor extraordinary of psychology and nature-philosophy in the University of Lemberg. The preface is the work of Charles Richet.

— Longmans, Green, & Co. have just ready "Cookery for the Diabetic," by W. H. and Mrs. Poole, with a preface by Dr. Pavy; and "With Sack and Stock in Alaska," by George Broke, which will interest all who enjoy records of travel in out-of-the-way lands.

— Charles Collins has just published a fourth revised edition, by Professor Sheldon, of Olmsted's "Natural Philosophy;" also Sheldon's "Electricity," being chapters on electricity prepared for and included in the preceding book, but published separately for the use of students in college.

— Macmillan & Co. call attention to the new work of Louis Dyer, late assistant professor in Harvard University, entitled "Studies of the Gods in Greece." Professor Dyer explains the development of the cults of Demeter, of Dionysius, of Æsculapius, of Aphrodite, and of Apollo. The gods are treated with the reverence that is due to them, and the fact is emphasized that there is much in Christianity that is of Greek rather than Jewish quality.

— D. C. Heath & Co., Boston, have just published a "Manual of Plane Geometry," on the Heuristic plan, with numerous extra exercises, both theorems and problems, for advanced work, by G. Irving Hopkins, instructor of mathematics and physics, Manchester High School, N.H., with an introduction by Professor Safford of Williams College. The book is designed primarily for the author's pupils, and secondarily for the constantly increasing number of teachers who are getting more and more dissatisfied with the old methods of teaching geometry.

— G. P. Putnam's Sons have just ready the third part of the "Talleyrand Memoirs." This instalment continues the report of the Congress of Vienna in 1815, the Second Restoration, and the Revolution of 1830. It contains three portraits of Talleyrand, one

after F. Gerard, one from a bust by Michelet, and one from an engraving by Napier. They have also ready "The Leaf-Collector's Hand-Book," by Charles P. Newhall, which is intended as an aid for students in classifying the leaves described in the author's former volume on "The Trees of North-eastern America," published last fall. A third volume on "The Shrubs of North-eastern America," is in preparation.

—The Century Company will publish George Kennan's "Siberia and the Exile System" this autumn. The book will appear simultaneously in England, France, Germany, and Holland. Unauthorized editions have already been published in Russia, Poland, Hungary, and Bulgaria, and many of the magazine articles have been reprinted in Italian and Swedish. Five unauthorized German editions have been issued.

—The Open Court Publishing Co. have issued a small book by Th. Ribot entitled "The Diseases of Personality," being a study of insanity and other abnormal and diseased conditions of body and mind. It partakes of the general character of recent French works in physiological psychology, but bears at the same time the marks of the author's individuality. It presents a large collection of facts relating to the theme of the book, and in that respect will be useful to all students of the subject; but the author's theories seem crude and unscientific. His idea of personality itself is vague and uncertain. Sometimes he speaks as if he thought personality the same thing as consciousness; but near the close of the

book he says that "the organism and the brain as its highest representation constitute the real personality" (p. 156). Elsewhere he speaks of the "dissolution of personality," and of the "transformation of the ego;" and again, in speaking of a man who is sometimes drunk and sometimes sober, he asks: "Have we not here, as it were, two incomplete and contrary individuals welded together in one common trunk?" Such notions indicate a strange aberration of judgment; and it is certainly not by theories of that sort that mental derangements can be explained.

—The Fleming H. Revell Company have ready the "Life of John Kenneth Mackenzie," medical missionary to China, written by Mrs. Bryson, who was an intimate friend of the doctor's from 1875 until his death in 1888, and worked with him in central China and afterwards on the banks of the Pei-ho.

—Professor John Fiske will open the September *Popular Science Monthly* with a paper on "The Doctrine of Evolution: its Scope and Influence;" and Herbert Spencer writes on "The Limits of State-Duties," in which he maintains that an industrial State should not attempt to mould artificially the minds and characters of its citizens. Continuing his Warfare of Science series, Dr. Andrew D. White will relate, in the same number, how hygiene succeeded fetichism as the reliance of the Western world in checking the ravages of epidemics. A fifth paper, concerning "Glass in Science," will be added to the illustrated series on glass-making, by Professor C. H. Henderson, describing the making of spectacle-

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glasses, the grinding of lenses for telescopes, the blowing and graduating of thermometer-tubes, the making of hydrometers, etc.; and the question "Can we always count upon the Sun?" is asked, though not in any sensational manner, by Mr. Garrett P. Serviss. The sun-spot period now approaching its maximum makes this query very timely.

— Henry Carey Baird & Co. have just issued a complete treatise on "The Electro-Deposition of Metals," translated from the German of Dr. George Langbein, with additions by William T. Brannt, editor of "The Techno-Chemical Receipt-Book."

— The "Manual of the Paleontology of the Cincinnati Group," by Joseph F. James, Part 1 (Journal Cincinnati Society Natural History, April, 1891, issued July, 1891), is part one of what is designed to be a manual of the fossils of lower silurian age in the vicinity of Cincinnati. The necessity of some such work as this will be better understood when the fact is recalled that the five or

six hundred species of fossils known from the locality are described in many different publications, such as State surveys, reports of societies, and scientific journals, extending over many years. The reports of the Ohio and New York surveys contain many, but by no means all, of the species. If the plan of the present publication be carried out, it will include descriptions of all genera and species recorded from the Cincinnati formation. The present, the first part, treats of *Plantæ* and *Protozoa*. The author does not believe the so-called marine plants described from the formation are really such, but refers them to inorganic causes, markings of organisms, annelid trails, etc. Two species of Heterophyta (*Cryptogamia*) are described, one of which, however, is considered problematical. The *Protozoa* include two orders, *Foraminifera* and *Spongida*. Of the first one genus and two species are described, and of the second fourteen genera and nineteen species. Two new species, *Rhombodictyon globosus* and *Cyathophycus siluriana*, are described and illustrated.

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