

the influence of forests on climate, and on changes of climate, to see what the greatest authority on climatology has to say on these subjects. Regarding the former, Hann says that the influence of forests upon rainfall is a slight one. Regarding the latter, while granting that Stein, Huntington and others have shown that there is a general desiccation going on in Asia, the author adds: "How far in all these accounts we have to do with a progressive desiccation, and how far with climatic oscillations, is still a question." In other words, there is as yet no sufficient evidence for believing in considerable *permanent* changes. Oscillations, yes, some of longer, others of shorter periods; but permanent progressive changes, no, not yet.

The teacher of climatology will feel safe and sure with Hann's book on his study shelf, close at hand. The man of science, in whatever field he may be working, who needs the fullest, latest, most authoritative information on climatology, will find in Hann's new volume what he seeks, and he will find it clearly set forth.

The remaining volumes, dealing with the special climates of the different parts of the world, will be published shortly.

R. DEC. WARD

*Reservoirs for Irrigation, Water Power and Domestic Water Supply.* By JAMES DIX SCHUYLER, M.Am.Soc.C.E., M.Inst.C.E., etc. Second edition revised and enlarged. Bound in cloth; dimensions, 6½ by 10¼ inches. Pp. 573; illustrations 381; folding plates 6. Price, \$6.00. New York, John Wiley and Sons; London, Chapman and Hall, Ltd.

The growing importance of storage reservoirs and their appurtenant structures in the development of domestic water supplies, hydraulic power plants and irrigation projects warrants the revision and enlargement of this already useful work. The scarcity of water furnished by the normal flow of streams for irrigation in the arid regions; the increasing demand for water power due to the decreasing coal supply and the increasing possibilities of electric power and the sanitary needs of the many growing towns and cities throughout the

entire country are requiring wide information on the subject of water storage and water-storage structures. This information abounds in the book under review, as may be inferred from its chapter subjects, the titles of which are as follows: Rock-fill Dams; Hydraulic-fill Dams; Masonry Dams; Earthen Dams; Steel Dams; Reinforced Concrete Dams, and Miscellaneous. In these chapters are discussed individually more than 200 important dams, of which the majority are of the masonry type. However, over a score each of rock-fill, hydraulic-fill and earthen dams and nearly a half score of steel and reinforced concrete dams are described in detail.

The style and arrangement of subject matter of the book lack uniformity and its substance is rather a collection of facts relating to dams and reservoirs than a scientific treatise thereof. The author has included but little of the principles of design and construction except as incident to description. The work is therefore better adapted to use for reference than for study. It is an excellent memory storehouse for the practising engineer. Such works, although not forming the highest type of engineering literature, are none the less essential parts thereof, and are especially valuable as sources from which to draw inferences from basic facts.

The first edition of this work found its way into the libraries of many engineers and the second edition is certain to find a still greater circulation. Sufficient new and rewritten material has been incorporated into the text to make the book essentially a new work. In addition to the new and revised subject matter the book contains 234 new cuts and photographs and 3 plates. The work will, therefore, be equally of interest to those familiar and unfamiliar with the first edition.

F. W. HANNA

U. S. RECLAMATION SERVICE

#### SCIENTIFIC JOURNALS AND ARTICLES

*The American Naturalist* for April opens with a paper on "Heredity of Hair Color in Man," by Gertrude C. and Charles C. Davenport. This article includes a number of tables showing the distribution of color in the off-