

tions, with detailed captions written by Fundaburk or quoted from appropriate technical literature.

The text provides a reliable survey of Southeastern archeology but does not contribute new data or interpretations. The illustrations, however, are exciting even to specialists on the Southeastern Indians. Fundaburk searched for them in a large number of private collections and obscure museums, as well as in the major museums. She found good examples of typical artifacts and many remarkable pieces not previously illustrated or described. The specimens are well identified and scrupulously documented, and the photographs are excellent and clearly reproduced. Perhaps the most remarkable feature of the book is that Fundaburk was entirely unknown to Southeastern archeologists before she began her research for this work. With the appearance of her book she has gained their respect and admiration, not only for the obviously great amount of time and expense it involved but also because of the discernment evident in her interpretations.

A number of audiences will find this book useful. Southeastern archeologists will be particularly pleased with the numerous artifacts described and illustrated for the first time, especially those from Alabama, a state where little serious work in archeology has been done. Amateur archeologists and "Indian relic" collectors will like the large number of illustrations and will learn from the picture captions and the text. Artists and connoisseurs of primitive art now have a good source of Southeastern Indian motifs and designs and a striking demonstration that the prehistoric art of this area often equals better-known styles of primitive art in interest and value in terms of modern Euro-American esthetic tastes. Public and school libraries will find this book to be a reliable and readable addition to their reference works on Indians.

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Pharmacology in Medicine. A collaborative textbook. Victor A. Drill, Ed. McGraw-Hill, New York, ed. 2, 1958. xi + 1273 pp. \$19.50.

This second edition attests the success of multi-authorship in a text on pharmacology. As with internal medicine, the increased scope of the field makes authorship by one or two individuals almost too demanding in comprehensive volumes. In the more than 1200 large pages (the weight of the volume is about five pounds) the burden has been spread among some 85 authors,

most of them senior professors of pharmacology. The result is an excellent and detailed coverage of the field.

The type is clear and pleasant; there are two columns to the page for easier reading; and tables, structural formulas, and pertinent references are plentiful. The book will have appeal both to workers in pharmacology and to many others who seek readable presentations in specific areas.

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Exploring the Atmosphere's First Mile. vol. I, *Instrumentation and Data Evaluation*; vol. II, *Site Description and Data Tabulation*. Proceedings of the Great Plains Turbulence Field Program, 1 August to 8 September 1953, O'Neill, Nebraska. Heinz H. Lettau and Ben Davidson, Eds. Pergamon Press, New York and London, 1957. xiv + 578 pp. Illus. 2 vols., \$20.

In the summer of 1953, meteorologists from ten universities and five government laboratories joined in the Great Plains Turbulence Field Program, the most intensive observing program to which the atmosphere has ever been subjected. An area near O'Neill, Nebraska, was chosen for the program. This area is said to be the flattest site in the flattest state in the flattest region of the United States. Lettau and Davidson, the leaders of the program, have edited this report, which has been written by about thirty-five of the participating scientists. The purpose was to describe the state of the lower part of the atmosphere in sufficient detail to make possible accurate calculations of turbulent transfer of heat, momentum, water vapor, and other gases and pollutants. The ultimate purpose was to achieve an accurate theory of atmospheric turbulence which would provide explicit data on the dependence of evaporation on wind speed, radiation, and the nature of the surface; which would express the warming or cooling of the air in terms of similar factors; which would specify the characteristics of the turbulent motions by the static stability and the configuration of the boundary, and so on.

Volume 1 contains accounts of the synoptic observing program, subsoil measurements, interface measurements, mast profile observations, fluctuation quantities, and free-air observations, plus a general introduction and a summary of some of the results of calculation. Volume 2 contains summaries of the data taken in seven observation periods totaling 171 hours. Additional data are on file at the Geophysical Research Direc-

torate and at the cooperating universities. Many of the participating scientists have been working since 1953 in reducing the data and in applying the results to theory. Testing of theories will be greatly facilitated by publication, and we may expect these volumes to be exploited like a productive gold mine for years.

The most dramatic achievement of the program was the discovery of the low-level jet, a high-speed layer of air that is observed at night at a height of about 500 meters above the ground. This discovery has stimulated wide discussion, and Blackadar and Buajitti have been able to explain the phenomenon as an inertial oscillation resulting from diurnal changes in eddy viscosity.

Another development of great interest was the field testing of the sonic anemometer, applied to the problem of direct measurement of turbulent heat transfer.

The part of the program which lay at the heart of the undertaking—observations of vertical profiles of wind, temperature, and humidity—has been somewhat disappointing. Although observations were made on a much more intensive scale than ever before, the calculations reflect the same stubborn sources of error, and the various independent methods of calculating evaporation and heat transfer do not agree as closely as had been hoped. The profiles of vapor pressure are particularly unreliable.

A second field program, designed to measure directly the diffusion of gas and to relate these measurements to profiles of wind, temperature, and humidity, was carried out during the summer of 1956 at the same location. The report of this program is not yet available.

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General Diagnosis and Therapy of Skin Diseases. An introduction to dermatology for students and physicians. Hermann Werner Siemens. Translated from the German by Kurt Wiener. University of Chicago Press, Chicago, 1958. vii + 324 pp. Illus. \$10.

The author's method of introducing dermatology to students and physicians is as revolutionary as would be the case if modern pedagogy returned to syllabication as an aid in the teaching of spelling, rather than insisting on an initial grasp of each word as a whole. Through the medium of close-up photography Siemens has made a unique presentation of the elements that must be observed and understood in order to diagnose and treat diseases of the skin. Each minute