

with discovery of a skull showing more clearly what his face was like. The new skull includes eye socket, nose bones and other previously unknown features.

Definite proof that man reached the Straits of Magellan just after the most recent ice age was unearthed in caves where fire-scarred bones of extinct ground sloths and horses were found under four other culture layers and a bed of volcanic ash.

America acquired new evidence of early inhabitants when Utah caves yielded flint and bone tools unlike those of Folsom Man and an infant's skeleton 5,000 to 10,000 years old.

Folsom hunters of ancient America were more definitely assigned to the late Ice Age, when geologists in Colorado dated an earth layer containing Folsom tools as belonging to that era.

The biggest human skull ever found was unearthed among Indian remains in Virginia.

Excavating Plains Indian sites took on a practical angle, when archeologists reported these Indians apparently found certain areas undependable for farming.

Villages of Indians who met Columbus were excavated in the Bahamas.

Ruins of a pyramid near Guatemala City revealed Mayan Indians rebuilt the pyramid eight times.

Shattered thrones unearthed in Piedras Negras, Guatemala, inspired a new theory that social revolt helped destroy the Old Mayan Empire.

Chemical analysis demonstrated Ecuador's Indians actually achieved an alloy of platinum.

A new type of Stone Age man was unearthed at Steinheim, Germany, with skull older, yet partly more modern in type, than Neanderthal Man.

The long-sought Temple of Ares, god of war, was unearthed in the Athenian Agora.

Flint tools found near Bethlehem revealed man's existence in Palestine, at the dawn of the Stone Age.

Help for understanding politics in the Bible era was provided by finding several thousand letters to a Syrian king, about 1900 B. C.

A prince's palace occupied in five historic eras was unearthed at Megiddo, Palestine, and also a great hoard of ivory and gold art.

A real estate deed 3,500 years old, unearthed at ruins of Dura on the Euphrates, added over a 1,000 years to antiquity of that city.

Tepe Gawra, Mesopotamia, "world's oldest city," was revealed as having flute music, art vases, and fine architecture at the very early era of 400 B. C.

(To be Concluded)

PREVIEW OF THE ANNUAL SCIENCE EXHIBITION

(Continued from page 8)

NATIONAL LIVE STOCK AND MEAT BOARD

Chicago

Booth 57

The National Live Stock and Meat Board will present an exhibit of children's diets in wax models, illustrating the normal diet for children of three different age groups. The background will consist of the Food Value charts in the form of electrically illuminated transparencies. Nutrition literature will be available for distribution.

NATIONAL TUBERCULOSIS ASSOCIATION

New York

Booth No. 74

This society will display a six panel Tuberculin Test Exhibit.

PHIPPS AND BIRD, INC.

Richmond, Va.

Booth No. 18

An exhibit for physiologists of a Kymograph with the various attachments demonstrating the practicability of ink writing, thus doing away with the need for smoking and shellacking of Kymograph paper. Also on exhibition will be a micro-centrifuge developed primarily for Phipps and Bird for semi-micro qualitative analysis in chemistry and inexpensive enough to be furnished individual students; the Coleman pH Electrometer with glass electrode; and an inexpensive oven with thermostatic control within a temperature range to 175° C.

PRENTICE-HALL, INC.

New York

Booth No. 78

"... popularized science of the most satisfactory sort..." is how *The New York Times* describes "Ascaris: the Biologist's Story of Life," the new book by Dr. Richard Goldschmidt, of the University of California. The exhibit will include the fields of Physics, Chemistry, Engineering, Meteorology, Biology, Hygiene, Mathematics, Statistics, Psychology, and Education. Advance proofs will enable visitors to examine important books that will be published in 1938.

RADIO CORPORATION OF AMERICA

New York

Booth Nos. 88, 89

Radio Corporation of America will illustrate some of the work done in its laboratories from the standpoint of research and the commercialization of research projects. New and useful instruments for laboratory application will be shown in operation as well as evidence of research work which has not yet reached the public.

H. M. RANDALL

University of Michigan

Booth Nos. 43, 44

Spectroscopy of the Far Infrared. This exhibit will consist of the actual apparatus, whenever its transportation is possible, used in this type of spectroscopy. Thus, thermocouples, echelette gratings, prisms and plates of crystals transparent beyond 15 μ , together with samples of the uncut crystals as they appear when removed from the melt, will be shown. A crystal cutting machine will be

in operation. The gratings, their ruled surfaces having dimensions up to sizes of 10×20 inches, are ruled with from 25 to 1200 lines per inch. Supplementing this exhibit of equipment will be photographs and charts describing spectrometers, ruling engines, amplifiers, and other devices employed in this work. Numerous examples of automatically recorded spectrograms of various substances in the far infrared region, obtained from both the recording prism and grating instruments will be provided for inspection. Colored film will show making of gratings.

REILLY TAR & CHEMICAL CORPORATION
Indianapolis
Booth 34

The Reilly Tar and Chemical Corporation will exhibit a full line of refined coal tar chemicals manufactured by them. The exhibit will also include other products of the Reilly organization including synthetic resins, carburizing compound, wood preservatives including a colorless wood preservative, pipe coatings and Reilly pitch products including Reilly plastic pitches.

PROFESSOR J. A. REYNIERS
University of Notre Dame
Booth Nos. 80, 81, 82, 107, 108, 109

The Laboratories of Bacteriology of the University of Notre Dame present apparatus for conducting Germ Free Experiments. This apparatus is used for conducting all forms of experiments in Bacteriology and Immunology under sterile conditions. It is used especially for raising animals and plants germ free. The units exhibited will be, raising cages, sterilizing panel, operating cage, storage cages. A photographic explanation will accompany the exhibit.

W. B. SAUNDERS COMPANY
Philadelphia
Booth No. 24

W. B. Saunders Company will exhibit their complete line of text-books and reference volumes dealing with the biologic sciences. Of special interest will be the newly revised editions of Bastedo's "Materia Medica and Pharmacology," Williams' "Personal Hygiene," and Bogert's "Fundamentals of Chemistry"—also, two new, outstanding books: Heilbrunn's "General Physiology" and, Merritt and Fremont-Smith's "Cerebrospinal Fluid."

**SCHOOL SCIENCE FAIR AND CLUB PROJECT
OF THE AMERICAN INSTITUTE OF
THE CITY OF NEW YORK**
Booth Nos. 98, 99

An exhibit of scientific projects developed by High School boys and girls, under the direction of Dr. Morris Meister and Dr. Gerald Wendt, of the American Institute of the City of New York. These exhibits are winning exhibits from the Children's Science Fair. There will be descriptive material on the fair and work with school science clubs, including a series of laboratory courses for selected club members. The magazine "The Amateur Scientist" written, edited and produced entirely by boys and girls in science will be displayed.

SCHWARTZ SECTIONAL SYSTEM
Indianapolis
Booth No. 14

The Schwartz Sectional System of Indianapolis will exhibit its well known line of sectional filing cabinets for chemical reagents, science materials and apparatus, samples and specimens. The cabinets have been still further improved. The unique cabinet designed for the Eastman Kodak laboratory will be demonstrated.

THE SCIENCE LIBRARY
Booths 102 and 103

The books of 1937 in the Science Library will reflect the scientific progress of the year. The catalog of the books appears in the current issue of the *Scientific Monthly* and will be available in reprint form at the exhibition. It has proved useful to public and private libraries in selecting new books. The centerpiece of the library is the Orion, by Rand McNally and Company.

THE SOILS CONSERVATION SERVICE
U. S. Department of Agriculture
Washington, D. C.
Booth No. 16

The Soil Conservation Service of the United States Department of Agriculture will exhibit a folio of contour maps of Lake Mead and illustrate photogrammetric methods used in its production. The maps are of the area now drowned by the waters behind Boulder Dam. The Service will also exhibit operating models of lysimeters used by soil scientists and hydrologists to measure the life history of a rain drop.

PROFESSOR W. A. SPENCER
Armour Institute
Booth No. 36

A well-selected group of models afford an exacting method of impressing upon the mind a most vivid picture of type curves, areas, surfaces and solids. This group of models is a new departure in respect to materials and design. Tempered presswood, plastics, impression plaster, brass and chromium tubes, fish-line, coupled with bright colors make these models distinctive.

SPENCER LENS COMPANY
Buffalo, N. Y.
Booth Nos. 26, 27

A comprehensive display of microscopes, microscope lamps, photo-micrographic camera, microscope accessories; microtomes and accessories, the new Quebec Colony Counter, a lecturer's table projector and other instruments of particular interest to the scientist. Representatives, competent to discuss your problems with you, will welcome your visit.

SUPERIOR TUBE COMPANY
Norristown, Pa.
Booth No. 5

The Superior Tube Company calls itself a unique institution. Its product is small tubing only. Started three

years ago, the company shows that twenty million feet have been marketed. Tubing as small as .010" OD with a wall thickness of .0007" has been produced. Principal metals are Nickel, Monel, Inconel, Steels, including Stainless, and also Aluminum, Brass and Copper. Their exhibit consists of a model production draw bench and a display of tubing in sizes being regularly produced. *Uniqueness* is its outstanding feature.

THE UNITED CHAPTERS PHI BETA KAPPA

Booth No. 35

Evidence that the 80,000 members of Phi Beta Kappa recognize science as essential to liberal culture, and that scientists value general culture—particularly, *The American Scholar*, Phi Beta Kappa's quarterly publication of lively, authoritative articles on diversified subjects.

U. S. PUBLIC HEALTH SERVICE

Washington, D. C.

Booth No. 83

Exhibit on the treatment of early syphilis describing the effectiveness of various schemes of treatment in the attainment of satisfactory clinical results in the prevention of late crippling manifestations of syphilis. The efficiency of modern anti-syphilitic treatment in the prevention of communicable forms of relapse in syphilis is also described.

UNIVERSITY PRESSES

A Cooperative Exhibit

Booth Nos. 68, 69

The university presses are again combining to exhibit their new research publications and text-books at the annual science exposition. The following presses will cooperate: Columbia, Minnesota, Yale, Stanford, Harvard, Collegiate Press, Illinois, Oklahoma, Pennsylvania, Oxford, Cornell, and Chicago. Special attention will be directed to new books, and a check list of titles will be distributed to all who call at the booth. For the convenience of scientists who wish to examine new publications in their special fields, an index in the check list will list the publications in the order in which they will be shelved.

PROFESSOR HAROLD C. UREY

Columbia University

Booth No. 42

Professor Harold C. Urey will place on exhibit samples of water which have an increased concentration of the O^{18} isotope approximately four and one half times that of natural water. Also there will be very sizable samples of ammonium chloride whose nitrogen contains as high as 2.5 per cent. of N^{15} , being a six and one half fold increased concentration of this isotope. These samples have been prepared by the distillation of water and by a chemical exchange reaction between ammonium ion and ammonia gas. Diagrams will be shown illustrating the method used, and there will be exhibits illustrating the method of the researches and the progress made in using these materials.

D. VAN NOSTRAND CO., INC.

New York

Booth No. 56

A display of representative selections of standard text-books and reference works in the various fields of science, mathematics, and technology. Particular attention will be paid to the more recent publications. The feature of special and outstanding interest will be the pre-publication display of "Van Nostrand's Scientific Encyclopedia." This is a unique and outstanding contribution to the scientific literature covering the physical sciences, mathematics, engineering, and medicine. A distinguished editorial staff has spent five years in the preparation of this book and the attention of every visitor is most earnestly directed to this remarkable publication. In its 10,000 articles, 2,000,000 words and 1200 illustrations, it constitutes a convenient and comprehensive reference to the practical application, fundamental principles and current developments in this great field of exact knowledge.

F. A. VARRELMAN

De Paul University

Booth No. 13

An exhibit illustrating genetic plant types. These plants for the most part selected from specimens at the Garfield Park Conservatories of the Chicago Park System will illustrate a number of interesting factors: 1. Convergence as shown by certain milk-weeds, spurges, and cacti, and also by composites etc. and between Edhedra and Equisitum etc. 2. Fruits that bear flowers and roots and then bear vegetative stems, in opuntia. 3. Possible plant "drosophilas," oxalis with a six weeks cycle, Monsonia with a three weeks cycle, Erodium with four weeks cycle.

WESTON ELECTRICAL INSTRUMENT CORPORATION

Newark, N. J.

Booth No. 19

The Weston Electrical Instrument Corporation will exhibit a representative group of electrical indicating instruments in both portable and panel types. Photoelectric devices including light measuring instrument photographic exposure meters will also be shown. New lines of bi-metallic industrial and laboratory thermometers will be featured. Principle of operation will be demonstrated.

JOHN WILEY AND SONS, INC.

New York, N. Y.

Booth No. 17

A representative group of books in all the fields of pure and applied science will be on display.

THE WILLIAMS AND WILKINS COMPANY

Baltimore, Md.

Booth No. 7

A display of their most recent books in the field of general science, as well as all of their scientific periodicals. In addition, they will exhibit the books of William Wood Company (a division of The Williams and Wilkins Company) in the field of medical sciences.