

GEOLOGY

Geological Survey Funds

► THE U. S. GEOLOGICAL SURVEY has been granted \$28,095,000 for fiscal year 1957 for geology research, mapping, investigating water resources and supervising mineral leasing, Secretary of the Interior Fred A. Seaton has announced.

Of the total, \$6,778,000 will go to geologic research, mapping, and investigation of mineral and fuel-producing areas. For water resources investigations, \$8,513,000 has been allocated, of which \$5,070,000 has been earmarked to match state offerings. The topographic division, which prepares and up-dates quadrangles of the national atlas, will get \$12,873,000.

Smaller amounts have been designated for the conservation division and for additional construction at the Survey's Pacific Coast Center in Menlo Park, Calif.

Survey research will emphasize geological mapping and mineral investigation, vital to the nation's expanding fuel and construction requirements. Scientists will try to uncover new knowledge of mineral and fuel deposits and new ways of searching for these resources.

Geologists and chemists will attempt to develop a scanner that can quickly reveal the geochemical pattern of large tracts of country. Research will be started on the use of sound vibrations to discover mineral deposits buried at moderate depths.

The Survey and individual states will engage in the largest cooperative water resources program undertaken since the Geological Survey was founded. A corps of trained flood specialists will collect data on floods to use for rehabilitation and basin developments.

The quantity, quality and location of the nation's water resources will be appraised. Investigations will include stream flow, chemical content of water, ground water levels, sediment discharge and water temperature.

Maps will be expanded and revised to correspond with highway, railroad and building developments in large areas of the country. Mapping projects will also be carried out in Alaska, Hawaii, Puerto Rico and other island possessions.

One of the largest and most inaccessible areas of Alaska, the Brooks Range near the Arctic Circle, will be mapped by engineers using airplanes, helicopters and two-way radios.

Survey scientists will investigate oil resources in the following states: northwestern New York, central Texas, the McAlester Basin of eastern Oklahoma and the Anadarko Basin in western Oklahoma, the Ouachita Mountains in northern Arkansas, Wilson County in Kansas, the Sumatra-Alice Dome in Montana, southwestern Wyoming and the central Nebraska Basin.

The scientists will look for metals and mineral fuels (coal, oil and gas) in the following areas: the Republic district of Washington State, the Yellow Pine and Mackay districts in Idaho, the Duck Creek Pass area in Montana and the Bingham copper mining district in Utah.

Geological mapping will be undertaken in the Humboldt, Stillwater and Snake Ranges in Nevada, the Bullfrog area of Nevada, the Blue Ridge and Piedmont Regions of North Carolina, and northern Maine.

Science News Letter, July 28, 1956

AGRICULTURE

Disease-Resistant Grass Developed

► A NEW VARIETY of sirup-producing cane grass has been developed cooperatively by the U. S. Department of Agriculture and five state agricultural experiment stations.

Jointly announced by experiment stations in Alabama, Arkansas, Georgia, Mississippi and South Carolina, the sweet sorghum is well adapted for growth in southeastern United States.

The hybrid, named Wiley after Department of Agriculture chemist Dr. Harvey W. Wiley, who pioneered in research on sugar-yielding sorghums, was tested 40 times in eight states over a three-year period. The tests revealed the sorghum has greater disease resistance than any other commercial sirup-yielding variety. It is immune to red rot and leaf anthracnose, costly sorghum blights.

The new sorghum was developed from crosses made by Dr. Francis J. LeBeau, former pathologist at the U. S. Sugar Crops Field Station, Meridian, Miss., and Otto H. Coleman, Sugar Crops Field Station agronomist.

Seed stocks of Wiley are being increased in several southeastern states this year. Certified seed will be available next spring.

Science News Letter, July 28, 1956

BIOCHEMISTRY

Report Research On Enzyme Adaptation

► A STUDY of the day-to-day adaptations of animals' enzyme systems, believed the most complete of its kind, is published in *Physiological Review* by Drs. W. E. Knox, V. H. Auerbach and E. C. C. Lin of the Harvard Medical School and Cancer Research Institute.

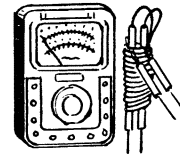
The survey is expected to provide a basis for research into the relations between enzyme levels in body tissues and their metabolism and regulation.

Science News Letter, July 28, 1956

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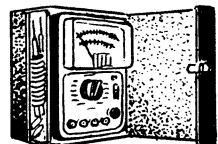
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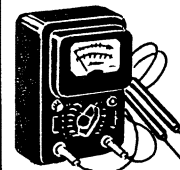
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CAT. MT-3: 20,000 ohms/volt dc, 10,000 ohms/volt ac. Has no skipped ohm ranges. (Ohms are: 0-5,000 X1, X10, X100, and X1,000. DC current 0-50 microamperes, and 0-2.5, 25, 250 ma. ac and dc volts 0-10, 50, 250, 500, 1,000. Any standard 20k ohm/volt multiplier probe extends range to 5 kv. Any 3 v external battery in series with the + pin jack extends the ohms range to 10 megs. Reads db -20 to +5 and +5 to +22. The special pin-jack for the first db scale can be used for ultra-sensitive output volt readings of 0 to 1.4 v because 0 db is 0.775 v. This is a big accurate laboratory instrument: 4 1/4" wide, 6 1/4" long, 2 3/4" deep. It is an astonishing
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