

## GENERAL SCIENCE

# Federal Research Funds

► MANY SMALL U. S. colleges with scientific research resources are not being used for federally supported research, the National Science Foundation has found.

In the first of a series of reports on the current status of government research and development activities, the Foundation points out that less than one-third of the educational institutions with "immediate potential capacity" for carrying out research and development have received government funds.

Of the more than \$2,000,000,000 of federal funds spent for research and development during the year ending June 30, 1952, about \$338,000,000 went toward financing research at nonprofit institutions. All but two percent of this money was spent by four agencies—the Department of Defense, the Atomic Energy Commission, the Department of Health, Education and Welfare and the Department of Agriculture.

And these four agencies spent 83% of the research money at only 50 institutions, excluding "research centers," the Foundation discovered in its survey.

"This concentration," the report states, "is largely accounted for by the more fully developed scientific facilities and staff of the institutions receiving the most funds and by the critical national defense needs."

"Research centers," operated by nonprofit institutions for the government, have resulted from increased federal spending for scientific research. They seldom include educational activities. Usually carrying out specialized scientific programs, the research centers received a little less than half of the funds that were spent at all nonprofit institutions.

Four out of every five dollars that went to nonprofit institutions during 1951-52 was for applied research, development and large-scale additions to the research and development plants of these institutions. The other one-fifth went to basic research.

The report, entitled "Federal Funds for Science" (see p. 76), will be followed by other studies by the National Science Foundation on government expenditures for science.

Science News Letter, August 1, 1953

fill in the color within the border. This eliminates the time-consuming "free-hand method" that also requires a great deal of skill and some guesswork, inventors Benjamin N. Greene and Sid S. Franklin confide.

Madame can have an impression of her own lips taken, and corrected to perfection. However, if she does not want to go to that trouble and expense, she may be able to buy stencils of sultry movie star lips at cosmetic counters. These ready-made lip designs should come in "many assorted sizes and styles," if patent No. 2,646,054 captures the American woman's fancy.

Science News Letter, August 1, 1953

## SCIENCE NEWS LETTER

VOL. 64 AUGUST 1, 1953 NO. 5

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., NORTH 7-2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1953, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS OF SCIENCE (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, Eldorado 5-5666, and 360 N. Michigan Ave., Chicago 11, State 2-4822.

## SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Ferdinand Payne, National Science Foundation; Karl Lark-Horovitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; R. A. Millikan, California Institute of Technology; Homer W. Smith, New York University. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; Ross G. Harrison, Yale University; Duane Roller, Hughes Aircraft Co. Nominated by the Journalistic Profession: A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Lee Memorial Journalism Foundation. Nominated by the E. W. Scripps Estate: John T. O'Rourke, Washington Daily News; Charles E. Scripps, E. W. Scripps Trust; Edward J. Meeman, Memphis Press-Scimitar.

Officers—President: Harlow Shapley; Vice President and Chairman of Executive Committee: Leonard Carmichael; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, Marjorie Van de Water, Ann Ewing, Allen Long, Horace Loftin. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. Interlingua Division in New York: Alexander Gode, Hugh E. Blair, 80 E. 11th St., GRameray 3-5410.

## ANTHROPOLOGY

# Search for Native Ills

► NEW EVIDENCE to show whether diseases like tuberculosis and syphilis were first introduced to American Indians by the white settlers from Europe, or afflicted the Indians in pre-Columbus days is expected from an X-ray study of bones in the Smithsonian Institution.

The research is a cooperative program conducted by Dr. T. Dale Stewart, physical anthropologist of the Smithsonian, and Dr. William J. Tobin, orthopedic surgeon, working with Sister Charles Regina, Georgetown University Medical Center, and experts of the Armed Forces Institute of Pathology.

Signs of tuberculosis have already been discovered in prehistoric Indian bones from the ruins of Pueblo Bonito, a 1,000-room apartment house found in New Mexico which dates back to about 1050 A.D. It is in such crowded-together conditions that tuberculosis might be expected to take its toll, rather than in the free-roaming life more typical of the early Americans.

Such pathological conditions have been found in prehistoric bones before, but the discovery has always been incidental. The search for such evidence of disease has not been done systematically before.

The present study is an extensive undertaking and is made possible only by the cooperation of scientists from the different fields of anthropology and medicine. A recent count in connection with an anniversary of the Smithsonian anthropology division shows that the Institution houses

some 18,000 skulls. By no means is every skull accompanied by a complete skeleton.

Early anthropologists had a way of picking up skulls and leaving other bones where they were found. But between one-fourth and one-third of the 18,000 skulls have other bones with them. Relatively few skeletons are complete with all 200 bones of the human body.

When all the bones have been examined, it may be possible to estimate the incidence of various bones diseases, fractures, and other pathological conditions, among the American Indians.

The X-ray study is made possible by a grant from the Picker Foundation, a research organization of a manufacturer of X-ray equipment.

Science News Letter, August 1, 1953

## INVENTION

## Patented Device Produces Sultry Movie-Star Lips

► THERE IS too much fuss, muss and time involved when women "put on" their lips, concluded two inventors of Miami Beach, Fla. So they invented a "lip imprinting device" that helps milady do the job with dispatch.

It works like a rubber stamp. Coated with the user's lipstick, the custom-made metal stamp impresses an outline over the user's lips so that the woman merely has to