four quarters of a mariner's compass. On it he plots the interactions (coactions) of various scientific principles.

This kind of analysis, Mr. Haskell said, shows that such sciences as genetics, systematic biology, and sociology naturally fall into classifications comparable to the periodic table of chemistry.

"It is likely that today, in 1949, we stand before a development of biology and social science comparable to that of chemistry in and after 1869, the year Dmitri Mendeleyev invented, or discovered, the natural classification of the chemical elements," he said.

He pointed out that the "mathematiza-tion" of conventional scientific terms is unifying scientific theories today in much the same way that the mathematical equations of Clerk Maxwell, the 19th century British physicist, unified the sciences of light, magnetism, and electricity.

Mr. Haskell is chairman of the organizing committee of the Council for Unified Research and Experimentation. His lecture, entitled "The Emergence of Unified Science, (The Appearance of Mendeleyev's Periodic Law in Genetics, Systematic Biology, and Sociology)," was given under the auspices of the Foundation for Integrated Education.

Science News Letter, December 24, 1949

HORTICULTURE

Scientist To Spend 92nd Birthday in African Jungle

➤ LIBERTY Hyde Bailey, the greatest authority on palm trees, garden plants and blackberry bushes in the world, will spend his 92nd birthday next March while on an expedition in the jungles of Africa. He plans to bring back with him rare specimens of palms to add to the collection of 150,000 plants in the Bailey Hortorium at Cornell University. "Hortorium" was a new word, manufactured by Dr. Bailey, which he felt more accurately described his collection than "herbarium."

Long and sometimes dangerous plant collecting trips are no novelty to the still

vigorous horticulturist. He spent his 90th birthday alone on an island in the Caribbean, his 89th somewhere up the Amazon River in Brazil.

Dr. Bailey plans to take off by plane sometime next month for Africa, and he'll probably go alone. As to just how he proceeds after he gets there, he doesn't know. "I can organize the trip after I get there," he said. "There is no rush."

Officials at the Bailey Hortorium aren't worried about his lack of plans, however. Dr. Bailey has traveled 250,000 miles in his long lifetime and he has collected 275,-000 plant specimens.

In addition to his travels all over this country, in South America, China and New Zealand, Dr. Bailey has found time to be the pioneer of modern agricultural educational methods, to edit 156 books about plants, to edit a magazine and to engage in plant breeding and experimentation. He accomplished all this because at an early age he planned his own life program: 25 years of study, 25 years of teaching and 25 years to do whatever interested him most.

Now well into his fourth 25-year hitch Dr. Bailey is still enjoying himself, still traveling and still collecting plants.

Science News Letter, December 24, 1949

GENERAL SCIENCE

Eva the Engineer Must Remember To Be Eve

➤ EVA the Engineer will do all right in such a masculine profession as engineering if she remembers to be Eve first of all and an engineer secondly.

This advice comes from a woman who apparently has followed it herself and avoided lonely spinsterhood and being thought "a little queer." She is Mrs. Florence F. Buckland, heat transfer and fluid flow consultant in the General Electric Engineering and Consulting Laboratory.

She also advised teachers and textbook writers to take the feminine viewpoint, remembering that "electricity, heat and op-

tics might be explained in terms of sewing machine motors, cooking and moonlight' and that the properties of matter apply to a cake of soap as well as to a chunk of iron.

Mrs. Buckland's ideas on engineering as a career for women were presented at the meeting in New York of the American Society of Mechanical Engineers.

Science News Letter, December 24, 1949

Chromium, essential in stainless steel and widely used in other applications, is largely imported, the United States producing only about 1% of what it uses.

SCIENCE NEWS LETTER

DECEMBER 24, 1949 No. 26

50,500 copies of this issue printed

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., NOrth 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

Change of address: Three weeks notice is re-juired. When ordering a change, please state xactly how magazine is now addressed. Your lew address should include postal zone number if you have one.

Copyright, 1949, by Science Service, Inc. Republication 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. 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. Advertis-ing Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., PEnnsylvania 6-5566 and 360 N. Michigan Ave., Chicago. STAte 4439.

SCIENCE SERVICE

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

organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; 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; L. A. Maynard, Cornell University, Nominated by the National Research Council: Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution; Rene J. Dubos, Rockefeller Institute for Medical Research. Nominated by the Journalistic Profession: A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate: H. L. Smithton, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley; Vice President and chairman of Executive Committee: Alexander Wetmore; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, A. C. Monahan, Marjorie Van de Water, Ann Ewing. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.

Question Box

ENTOMOLOGY

How do mosquitoes develop resistance to DDT? p. 402.

GENERAL SCIENCE

How can science be unified? p. 403.

MEDICINE

What is the latest known result of atomic radiation? p. 412.

What may substitute for cortisone and ACTH in arthritic treatment? p. 403.

What vitamin stimulates the growth of undernourished children? p. 402.

What development made possible the production of military devices with uses still unrevealed by the government? p. 413.

Photographs: Cover. Mt. Wilson and Palomar Observatories: p. 403. Memorial Cancer Center: p. 405. USAF Air Materiel Command; p. 406, Smithsonian Institution; p. 407, American Museum of Natural History; p. 408, Paul H. Donaldson; p. 409, Max F. Colin, Armaur and Co; p. 410, U. S. Army.