

## MEDICINE

# Paralyzed Walk Again

Hemiplegia patients respond to physical medicine treatment utilizing massage, applications of heat, therapeutic baths and active exercises.

➤ AN INTENSIVE program of rehabilitation which enabled patients with partial paralysis to walk again is reported by Comdr. Edward W. Lowman (MC), U. S. N., Department of Physical Medicine, of the U. S. Naval Hospital in Philadelphia in the *Journal of the American Medical Association* (May 29).

Use of physical medicine, which proved so effective in these patients, includes massage in the first stages of treatment, application of heat and therapeutic baths, followed by active exercises in bed when the patient is able to move.

The patient is encouraged to try to walk within two to eight weeks after treatment is started. This is a gradual process, beginning with sitting up in bed and placing the feet on the floor from

the bedside, and concluding with exercises in the gymnasium.

Twelve out of 18 patients with hemiplegia, paralysis of one side of the body following brain hemorrhage, responded to this reconditioning program within 118 days. Treatment was begun two to four weeks after the onset of their illness. Three others of the group showed definite improvement while three did not respond to the treatment.

Nine out of ten additional patients learned to walk again after 67 days of treatment, with improvement being noted in the other patient.

Commander Lowman attributed the greatest factor in the success of the rehabilitation treatment to "cooperation on the part of the patient, fostered by his desire to regain his independence."

*Science News Letter, June 5, 1948*

## AERONAUTICS

# Safer Rough-Sea Landings

➤ AN experimental flying boat with a new type of lengthened hull, to permit safer landings in rough sea, has made its first flight, the Glenn L. Martin Company revealed. It was developed for the U. S. Navy, and its new hull is expected to improve materially the performance of flying boats.

The most striking feature of the Martin XP5M-1, as it has been designated by the Navy, is the length of its afterbody. By extension of the hull bottom to the extreme end of the plane, a much longer base is provided between the main and the rear steps. This lessens pitching and bouncing in rough water, and also protects the tail surfaces from the waves by the added buoyancy in the stern.

Model tests show that this added length will reduce the normal time and distance required for takeoff, and also give a smoother takeoff. On landing, the point of the step touches first and noses the plane down gradually so that skipping-off will not occur.

The new flying boat will require a crew of 11. Every reasonable provision for the men will be installed, including

heating and ventilation, bunks, and a galley for cooking so that they can stay aboard for several days at a time if necessary. It is powered with two Curtiss Wright engines, each of which develops 2,700 horsepower. When completely developed it is expected to have a greater range than present flying boats of its class.

*Science News Letter, June 5, 1948*

## ENTOMOLOGY

# New Deadly Spider Species Discovered in Palestine

➤ A NEW black widow spider species has been discovered in southern Palestine, before the beginning of the present turmoil made field work impossible. It has been given technical description by Dr. A. Shulov of the University of Jerusalem.

The new spider is more variable in both color and markings than its coal-black American relative. Its hue ranges from black with a brownish cast to a yellowish gray. The abdominal markings are yellow, and more elaborate than

the familiar red hourglass pattern of the American species.

It is apparently highly poisonous, for when captured specimens were permitted to bite a number of mice and rats most of the animals died.

It spins its webs in the open, on shrubs and wire fences. Most of its prey consists of beetles, but it also captures ants and occasionally even small scorpions.

Dr. Shulov has named the new species *Latrodectus revivensis*. The first or generic name it shares with all black widow spiders. The second or specific name refers to the settlement of Revivim, where it was first found. Full technical description is published in the biological journal, *Ecology* (April).

*Science News Letter, June 5, 1948*

## SCIENCE NEWS LETTER

Vol. 53 JUNE 5, 1948 No. 23

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.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available, 25 cents.

Copyright, 1948, 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.

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. Advertising 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.

**Board of Trustees—Nominated by the American Association for the Advancement of Science:** Edwin G. Conklin, American Philosophical Society; Karl Lark-Horovitz, Purdue University. **Nominated by the National Academy of Sciences:** Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. **Nominated by the National Research Council:** Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution. **Nominated by the Journalistic Profession:** A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Executive Editor, Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. **Nominated by the E. W. Scripps Estate:** H. L. Smithton, Executive Agent of E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers, Cleveland, Ohio.

**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:** Frank Thone, Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ron Ross. **Science Clubs of America:** Joseph H. Kraus, Margaret E. Patterson. **Photography:** Fremont Davis. **Sales and Advertising:** Hallie Jenkins. **Production:** Priscilla Howe.