

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).

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