

MEDICINE

Averting Polio Damage

There is some hope that nerve injury and crippling will be prevented in the future by treating polio victims with blood plasma and its albumin fraction.

► **HOPE** that infantile paralysis patients may be helped to escape nerve damage and crippling by treatment with blood plasma or its albumin fraction appears in research by Drs. Robert M. Eaton and Albert G. Bower at Los Angeles General Hospital.

The hope is based on three points: 1. The amount of albumin in the blood of infantile paralysis patients was often found to be lower than normal. The more severe the disease, the lower the amount of albumin.

2. Albumin is known to be important for keeping the fluid part of blood from leaking through blood vessel walls into the tissues.

3. Such leakage and accumulation of fluid, known medically as edema and familiar to the layman as dropsy, would be especially likely to injure the spinal cord. Even a small accumulation of fluid could cause damaging pressure because the spinal cord is encased in hard bone. Destruction of nerve cells in the spinal cord is what causes the crippling and paralysis in infantile paralysis. Preliminary results in

treatment of 76 patients are in accord with this theory, Drs. Eaton and Bower report in the journal, *SCIENCE* (Oct. 21).

"Generous amounts" of plasma, from one

ENTOMOLOGY

Giant Snails Repelled

► **THE** Giant African snail has not yet invaded the United States, quarantine officials say. The notorious plant destroyer has made several dockside beach-heads, but on each occasion it has been repulsed by the vigilant authorities.

In scattered instances the snails are kept for scientific purposes, but they have attracted the most attention recently when they were discovered at east and west coast ports in cargoes of surplus war material from the Pacific. Fifteen such snail-infested shipments have been discovered. In all cases a chemical fumigant or live steam was used to kill them.

Publicity given to these unwanted stowaways has caused worried farmers and gar-

deners throughout the country to write to Washington, claiming that giant snails are eating up their vegetables and flowers. In every case investigated so far the offender turns out to be a local snail that has been there all the time. In no case has the giant African snail been found at large.

Blood plasma has been given polio patients in the past, they point out. But this was done with the idea of giving the patients the immune, or anti-polio, substances in the globulin fraction of the plasma, somewhat as immune serum globulin is now used to ward off or reduce the severity of measles. Their theory is that the albumin of blood, with its anti-edema action, is the part that will be helpful.

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The efforts of the Bureau of Entomology and Quarantine to repel the giant snail have been completely successful, despite the fact that they have no legal power to quarantine snails. Quarantine laws are clear and unequivocal when it comes to insect pests, but no mention is made of the mollusks, the phylum to which snails belong. Congress had before it a bill introduced by Rep. Wingate H. Lucas (D., Tex.) that would remedy this omission, but it was not enacted in the rush of adjournment.

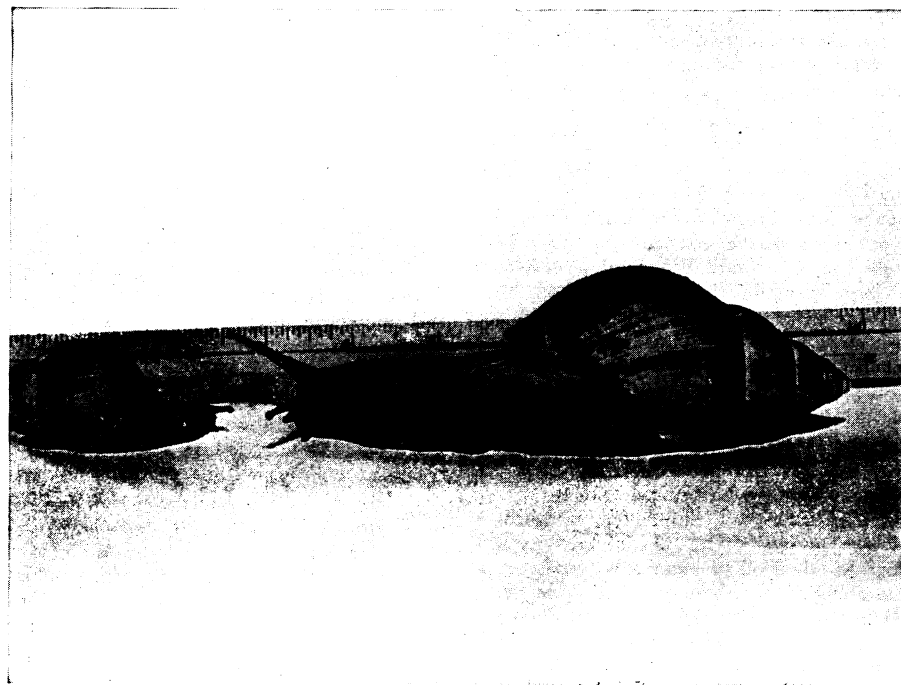
The snail that has given the most trouble in this country is a European variety that was introduced into California in the 1850's. Hundreds of thousands of dollars are spent every year to wipe out this pest which feeds on the choicest garden crops. In localized areas in Florida and Texas snails have caused damage, but on the whole the 800 or so native types and the 50 imported types have never reached serious pest proportions.

The Giant African snail, which started in the sub-tropics of its native Africa, has been carried steadily eastward through India, Ceylon, East Indies, the Marianas, and finally Hawaii. It is thought that the Japanese introduced them throughout the Pacific Islands as a food source for their soldiers. When the Japs departed, the snails rapidly multiplied to the point where they have become a serious menace to island agriculture. (See *SNL*, July 17, 1948, p. 44).

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Modern *farm machinery* is little used in Egypt because of cheap labor and small farms.

Fish gigging, with a pronged spear, is said to be about 10 times as efficient as the hook and line method; that is why the gig is unpopular with hook-and-line sportsmen.



NO ADMITTANCE—Quarantine officials are on the look-out for these stowaway giant snails and let them know in no uncertain terms that they are unwanted. So far none have succeeded in invading the U. S. for when discovered in ship cargoes they have been destroyed.