

MEDICINE

Blood Casts Aid Injured

► CASTS made of solid blood can repair severed nerve ends. The new blood casts were described to the Fourth International Congress on Otolaryngology in London by Dr. J. A. Sullivan of Toronto.

The casts are used on patients who have suffered wounds that cut their facial nerves or who have had tumors removed from a nerve.

The nerve stumps are sewn end to end,

with fine sutures, or stitches. Then the sutured ends are placed in a flexible mold and some of the patient's own liquid plasma is poured in. The blood solidifies in three to seven minutes, after which the mold is removed, leaving the severed nerve ends encased in a cast of solid plasma.

Dr. Sullivan reported that this method knits the nerve ends together most effectively.

Science News Letter, July 30, 1949

BOTANY

English Grow Poison Ivy

► THE English, it is generally admitted, are quite hardy. As gardeners, some of them would seem even foolhardy. For they grow poison ivy as an ornamental vine!

Not long ago, an American botanist, leafing through a prewar nurseryman's catalog from England, came upon this astonishing entry:

"*Rhus Toxicodendron* Linn. The American 'Poison Ivy', a loose, rambling shrub or climber; the sap contains an irritant poison. Although a wonderful piece of brilliant autumn colour it should not be planted where likely to be handled."

The startled botanist set off a chain of inquiry which wound up at the London headquarters of the Royal Horticultural Society. The response:

"As far as they are aware the plant is still permitted to be sold freely here. It is essentially grown by the plant connoisseur, who cultivates it as an ornamental for its beautiful autumn foliage.

"The attitude here is that while some people are sensitive to its toxin, by no means all people are. It has never shown any tendency to become a weed here and is not found growing wild. There have been cases of *Rhus toxicodendron* dermatitis (ivy poisoning), but it is so rare here that the diagnosis is often missed until someone with special knowledge of the plant points it out.

"The beautifully coloured autumn leaves have even been used by horticulturalists to set off displays of their fruit at horticultural shows."

The very first Englishman to encounter poison ivy and write about it took an equally cool view of the plant. He was none other than the redoubtable Capt. John Smith, who met up with poison ivy during the early days of the Virginia colonization. For a man with his reputation as a first-class frehand exaggerator, Capt. John Smith gives an exceedingly conservative description:

"The poisonous weed, being in shape but little different from our English yvie;

but being touched causeth redness, itching, and lastly blysters, the which howsoever, after a while they passe away of themselves without further harme; yet because for the time they are somewhat painefull, and in aspect dangerous, it hath gotten itself an ill name, although questionlesse of noe very ill nature."

Yes, the English are a hardy race.

Science News Letter, July 30, 1949

VETERINARY MEDICINE

Quick Detection Possible For Chicken Tuberculosis

► A QUICK method for detecting tuberculosis in chickens was described by Drs. A. G. Karlson and W. H. Feldman of the Mayo Foundation and Dr. M. R. Zinober of the U. S. Bureau of Animal Industry to the American Veterinary Medical Association in Detroit. To a drop of the bird's blood a drop of a tuberculosis antigen is added. A cloudy precipitate indicates that the chicken is diseased; if the bird is healthy, the fluid remains clear. This test is more accurate than the older tuberculin test, the two researchers declared. It gave positive readings wherever the tuberculin test was positive, but also correctly indicated numbers of fowl to be tuberculous where the tuberculin test gave only negative results.

Science News Letter, July 30, 1949

ICHTHYOLOGY

Philippine Fish Killed by DDT Anti-Mosquito Spray

► YOUNG fish in shallow rearing ponds in the Philippines were killed in large numbers when the area was sprayed with DDT to control malaria mosquitoes, reports Dr. Earl S. Herald, curator of aquatic biology at the Steinhart Aquarium in Golden Gate Park.

The losses occurred in a big lot of young milkfish, a species of considerable economic importance in the Philippines,

The owner of the ponds tried to reduce the damage by increasing the depth of the water; nevertheless he lost about half of his entire stock. Because of his protests, no further spraying was done over his ponds.

Dr. Herald also notes that another Philippine fish known as snakehead or mudfish are often killed by anti-malarial DDT spraying. Some Filipinos capture and eat such poisoned fish, but thus far none of them has been reported as suffering any ill consequences.

As a matter of fact, human beings seem to be tougher than snakes in this respect, for numbers of water-dwelling serpents have been killed by eating DDT'd fish.

Dr. Herald made his studies while serving as a member of the Army Air Force Committee on Aerial Dispersal of Insecticides.

Science News Letter, July 30, 1949

AERONAUTICS

Large-Size Flying Boats Superior to Landplanes

► THE flying boat is superior to the landplane in large sizes, the Anglo-American joint aeronautical conference was told in New York by D. Keith-Lucas of Short Brothers and Harland, Ltd., England. The large flying-boat is superior in the three things that pertain to the overall efficiency of an air line: economics, safety and reliability, he stated.

The landplane is the more efficient only in the smaller sizes, he continued, and only if by efficiency is meant its aerodynamic and structural efficiency as a flying machine. The greater the size, the greater is the advantage of the flying boat, until, on economic grounds, particularly in connection with provision of airports, it becomes impossible for the landplane to compete.

He compared a flying boat and a landplane dynamically similar, powered by the same engine, having the same range and able to carry the same weight of pay load. The flying boat is lighter than the landplane at weights greater than 100,000 pounds, he said, and faster at extremely high weights. But the landplane and the flying boat will have the same speed if they are large enough; this point of equal speed occurs somewhere between 250,000 and 500,000 pounds gross weight.

For practical purposes, the difference in performance between the flying boat and the landplane is extremely small at weights greater than about 250,000 pounds. The availability of bases and the distance to alternate landing places overshadow the flying efficiency. Future safety requirements will demand longer runways and alternate airports for landplanes, he declared, which can be provided only at an enormous capital expenditure that even military necessity might not justify.

Science News Letter, July 30, 1949