

"We have to be careful not to exceed the 'hardware tolerance' of the amputee with all these gadgets, or he will just decide to throw them away," Col. Fletcher said.

Another method involved the use of electric buzzers of different frequencies to signal contact with the various fingers. This, too, worked much better in the Laboratory than it did on an amputee.

Future developments may center around stimulating the nerves directly, at some level between the lost limb and the brain. Neurosurgeons can already isolate nerve fibers in the arm which travel down to the finger tips, but getting them stimulated in the correct way is the problem.

Science News Letter, February 15, 1958

#### SURGERY

### Titanium Finger Joint Can Save Amputation

► A HINGED titanium finger joint that promises to prevent amputation of the finger in many cases was described to the American Society for Surgery of the Hand meeting in New York.

The device has been used successfully in 14 patients, Lt. Col. Earl W. Brannon, chief of the orthopedic service at Lackland Air Force Base Hospital, said.

The hinged titanium prosthesis, designed to replace irreparably damaged finger joints, is a replica of the normal joint and replaces the entire joint. To date, it has been used only in the small joints of the finger.

It is locked in place by a half-threaded rivet screw. Each section has a triangular stem to be inserted in the finger bones, which keeps the metal joint from rotating. The hinged joint portion is finely beveled and smoothed to prevent catching or irritating adjacent tissues by its movement.

Various sizes, Dr. Brannon said, now are made for various fingers and for persons of different size hands.

Science News Letter, February 15, 1958

#### AGRICULTURE

### Certified Seed Insures Superior Alfalfa Crop

► FOR MAXIMUM benefits from improved varieties of alfalfa, a farmer should be sure to use certified seed.

Dr. Karl Quisenberry, assistant administrator of the U. S. Department of Agriculture's Agricultural Research Service, warns that appearance alone will not show if seed has the improved qualities built into it by plant breeders.

A farmer who purchases and plants seed of "non-certified Ranger," for example, has less than a 50% chance of getting seed of Ranger performance, he said.

A further problem in planting non-certified seed is that especially bred qualities, such as high yield and winter hardiness, may be lost when the variety of grass or legume seed has not been produced, harvested and processed under properly controlled conditions.

Science News Letter, February 15, 1958

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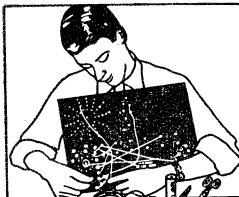
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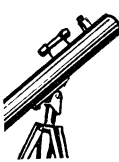
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