

MEDICINE

Blood Vessels on Demand

► **SUCCESSFUL** establishment of the first human blood vessel bank, at New York Hospital, Cornell Medical Center and Bellevue Hospital, New York, is reported in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (March 24).

Arteries and veins for the bank come from patients who have died and whose relatives permit an autopsy to be made. Withdrawals from the bank are for grafts for patients needing operations on the heart and blood vessels, including cases of cancer in which a vital blood vessel must be sacrificed if the cancer is to be removed to save the patient.

Usually the graft taken for the bank is

the aorta, large artery leading directly from the heart. Preferred blood vessel donors are between the ages of three and 45.

Operation of such a bank is expensive. The growing use of blood vessel grafts for life-saving operations, however, suggests that other large cities should have such banks. The New York bank draws on all available hospitals in the city.

The details of how to operate a blood vessel bank are reported by the following: Drs. Edward B. C. Keefer, William DeW. Andrus, Frank Glenn, George H. Humphreys II, Jere W. Lord, Jr., Wallace B. Murphy and Arthur S. W. Touroff.

Science News Letter, March 31, 1951

RADIO

Make Small Walkie-Talkie

► **SOLDIERS** in combat areas will soon have radio voice communication with a new "walkie-talkie" half the size and weight of the present type and with twice the range.

Initial units, made by the Radio Corporation of America, Camden, N. J., have been turned over to the U. S. Army Signal Corps. It is said to be a striking example of the Army's progress in providing lighter, smaller equipment to make fighting forces more mobile and effective.

The tubes used in the equipment are sub-miniature structures smaller than half a cigarette, and in some cases have been supplanted by tiny germanium crystal units. Some of the resistors are no more than a quarter-inch long. Tiny transformer coils are less than a quarter-inch deep and half an inch in diameter.

The new walkie-talkie is designed to provide two-way voice communication up to a distance of five miles on frequencies within the very high frequency range. It is fitted with a carrying harness by which it can be strapped to the operator's back.

It can also be used fixed in a vehicle. The battery power supply is of about the same size as the transmitter-receiver, and forms a unit with it. The total weight is approximately 25 pounds.

Science News Letter, March 31, 1951

On This Week's Cover

► **AN EXPERIMENTAL** missile model and its "sabot" are stopped at the split second of separation in a shadowgraph photo taken in the free flight tunnel of NACA Ames Aeronautical Laboratory near San Francisco. It is shown on the cover of this week's *Science News Letter*. The missile was traveling at 1,500 miles per hour. Sabots, the plastic carriers that house the experimental models, break away as the model leaves the gun barrel.

Science News Letter, March 31, 1951

GENERAL SCIENCE

Permanent Appointments For Draft Advisers on Science

► **SELECTIVE** Service Director Lewis B. Hershey has given permanent appointments to his six Scientific Advisory Committees.

These are the committees, with Dr. M. H. Trytten of the National Research Council as general chairman, which designed the Trytten report. The Selective Service program for deferment or postponement of service of college students will be based on this report.

The members of the committees expected they would be disbanded after

submission of their report. Now they have themselves been "drafted" to advise on operation of their own college deferment system.

The program calls for immediate testing of all college men who would otherwise be draft-eligible this June. Those who receive a mark equivalent to 120 in the old Army General Classification Test or above, or who are in the upper segments of their classes, would be either deferred or have their drafting postponed from year to year.

The committees cover the following fields: agricultural and biological sciences, engineering sciences, healing arts, humanities, physical sciences, social sciences.

Science News Letter, March 31, 1951

GENERAL SCIENCE

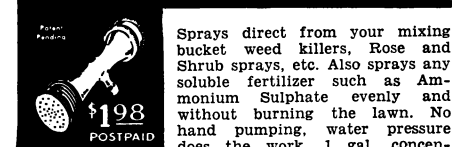
Rifle-Shotgun Developed for Wilderness Downed Men

► **COMBINATION** rifle and shotgun, developed by the Army Ordnance Corps for the Air Force, is pronounced by experts at the Wright-Patterson Air Force Base, Dayton, Ohio, to be the most desirable type of gun for the airman who has made a parachute landing in a wilderness area.

It might be called a survival weapon, to enable the wilderness wanderer to kill wild animals. As a rifle, it is accurate up to 200 yards, and can be used to kill a deer. As a shotgun, it can be used for shooting small animals and birds, tough targets even for an expert rifleman.

The gun has two barrels, one over the other. It is described by the Air Force as a combination "over-and-under" .22 calibre rifle and .410 gauge shotgun. It can be folded to less than 15 inches in length. Within its stock is storage space for four shotgun shells and nine rifle shells.

Science News Letter, March 31, 1951

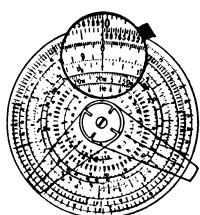


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