



RESEMBLING SEA-FOAM CANDY—The white material in the glass jar at left is made from blood—perhaps the blood you donated to help save the lives of our fighting men. From the fluid part of blood scientists are extracting not only albumin, used instead of plasma to relieve shock, but many other substances technically known as fractions. The fraction shown in the pictures taken at Walter Reed General Hospital in Washington, by Fremont Davis, Science Service Staff Photographer, is fibrinogen, necessary for normal clotting of blood. Fibrinogen is converted by thrombin, another blood constituent, into fibrin, the essential portion of the blood clot. The blood clot is nature's way of stopping bleeding. Fibrin foam on the forceps, right, is employed to help stop bleeding. These are the first pictures showing fibrinogen used in operations at an Army general hospital. Frequently the use of electro-cautery, which seals off the blood vessels the surgeon's knife has cut across as he opens the brain to find and remove a brain tumor, for example, is not entirely successful and fibrinogen comes to the rescue. A bit of the taffy-like stuff shown at left is dropped into water containing thrombin and with a forceps the surgeon lifts out the foam, which looks like a damp wad of cotton. The syringe is used in measuring the solutions of thrombin and saline. Put onto the bleeding spot in the patient's brain, this fibrin foam acts just like nature's blood clot and swiftly stops the flow of blood. The scientist primarily responsible for the development of fibrin foam is Dr. Edwin J. Cohn, in charge of the Office of Scientific Research and Development project at the Harvard Medical School's Laboratory of Physical Chemistry.

sults largely through the development and use of finer and finer sized carbon blacks. However, when these fine carbon blacks were used in Buna rubber, the increased fineness results in high tire temperatures."

Certain extender pigments will double the tensile strengths normally achieved with low proportions of the finer carbon blacks, he stated. "When smaller proportions of carbon blacks can be made to develop as much strength in this synthetic rubber as was obtained by the larger ratios now generally thought necessary, rubber articles can be made which have not only this necessary toughness but also a minimum of electrical conductance and internal heating when under continual use."

Science News Letter, May 6, 1944

PUBLIC HEALTH

Paralysis Foundation Spent More Than Million

➤ MORE than one million dollars, \$1,278,836.04 to be exact, was granted and appropriated by the National Foundation for Infantile Paralysis last year in fighting this much-dreaded disease.

Virus research, after-effects research, education, medical publications, and epidemics and public health were the five main categories under which the funds were allocated, according to the Foundation's annual report. General administrative expenses totalled \$84,970.53.

The money comes from funds contributed by the public during celebrations of President Roosevelt's birthday. Half the money remains with the local chap-

ters which provide care for infantile paralysis patients in their areas, the other half going to national headquarters for use in fighting the disease on a nationwide basis.

The Foundation's report reviews the support it has given the Kenny method of after-effects treatment and reveals that it has spent more than \$500,000 in testing and evaluating the method and training doctors, nurses and physical therapy technicians in its use.

Science News Letter, May 6, 1944

Black ilmenite, a common mineral in the earth's crust, by an elaborate chemical process yields pure white titanium oxide, a versatile substance used in skin protectives, welding rods, white paints, and paper.