

Bristol, where they are boosted at a repeater station, then they go to Penzance, the British terminus of the cable. Under the ocean they travel for 2024 nautical miles to Bay Roberts, Newfoundland, where there is another repeater, feeding them into 1345 miles of cable ending at Rockaway, N. Y. They are again given a boost, and carried over land wires to the receiver in New York City. Here a light, which fluctuates in step with the current, impresses the picture on a photo-

graphic film wrapped around a drum.

Mr. Milnor explained how the electrical waves become distorted by their long passages through the cables. Electrical "shaping networks" are included in the repeater stations to restore the waves to the forms which will give a faithful reproduction of the original picture. The speed of transmission, he said, is 2.2 square inches per minute with 60 lines of the picture to each inch.

Science News Letter, February 15, 1941

MEDICINE

Army, Navy Go Into Action In War Against Influenza

Navy Laboratory Is Testing Vaccines; Army Planning Defense Against Possible Epidemics in Training Camps

THE ARMY and Navy have gone into action against influenza. The Navy is attacking on the laboratory front, while the Army is preparing for defense against possible epidemics in training camps.

Latest move is the appointment by Surgeon General James C. Magee, U. S. Army, of a board of civilian physicians to investigate influenza and other epidemic diseases in the Army.

This board consists of Dr. Francis Blake, Yale University School of Medicine, chairman; Dr. O. H. Perry Pepper, University of Pennsylvania; Dr. A. R. Dochez, Columbia University; and Dr. Ernest W. Goodpasture, Vanderbilt University. Others probably will be added to this group.

Almost simultaneously, Secretary of the Navy Frank Knox has "called up" Laboratory Research Unit No. 1 of the U. S. Naval Reserve. This unit, organized at the University of California under the direction of Dr. Albert P. Krueger, will concern itself primarily with research and experiments on the influenza virus.

The Navy has plans for other Laboratory Research Units but is not ready yet to announce details about them.

The Army's board is comparable to the "Pneumonia Board" and other special boards organized during the World War in 1918. It will advise the Surgeon General on measures for preventing or controlling epidemic diseases and investigating their causes. In addition to the central board there will be a team of expert scientists and "technicians" who may be called on consultation, and spe-

cial investigative teams who may be sent for temporary duty at military stations for the study and control of epidemics.

First move of Laboratory Research Unit No. 1 of the Naval Reserve will be to test the influenza vaccine developed at the Rockefeller Institute. The value of this vaccine is said still to be unknown. The tests will be made on naval personnel. One-half of the personnel of a ship, for example, will be vaccinated

and the other half left untreated. If the disease appeared among the crew, the worth of the vaccine, it is stated, could then be determined with greater accuracy than might be possible under ordinary civilian conditions.

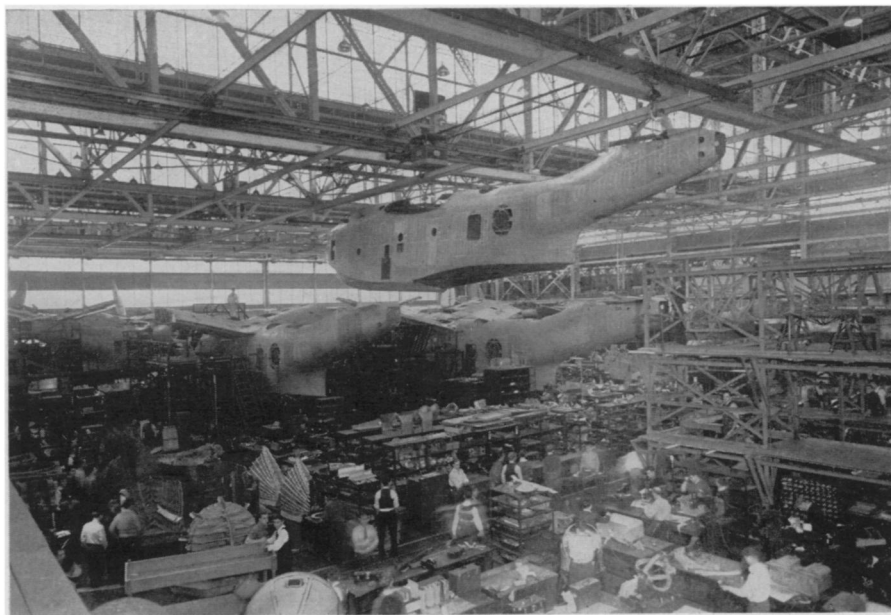
These studies may yield clues which may help to bring about the production of an even more effective vaccine than that being tested. The present vaccine has been given in large quantities all over the country, but Dr. Krueger stated that it is too early to verify results of these vaccinations and that it may be a year or more before any definite conclusions about the vaccine can be reached.

The work of the Navy Unit will be to isolate the strains of the influenza virus and that of other diseases, and to develop means of curing and control of infections. They will also direct a program for preventing epidemics.

The unit, one of two in the United States, is composed of a lieutenant, seven chief pharmacists, and two pharmacists' mates, according to Navy ratings, in addition to Dr. Krueger. The lieutenant, second in command, is Dr. Robert A. Hicks, of Tucson, Arizona. The remainder are young scientists trained at the University of California.

Headquarters of the unit will remain on the Berkeley campus. Field work will be done with the fleet and throughout the Twelfth Naval District.

Science News Letter, February 15, 1941



ALOFT

This Navy air leviathan hasn't its wings yet, but already it soars forty feet above the assembly floor with the aid of a power crane. This 20-ton PBM-1 patrol bomber is being manufactured by the Glenn L. Martin Company, who claim to be turning them out at the rate of more than one a week.