

It has long been proposed to use rockets as boosters to assist in getting a heavy bomber or transport plane off the ground, and this method is now in general use in England and in Germany. Once in the air, flight can be maintained with much less power than is required at take-off, so that with rocket assistance heavier loads can be carried.

German planes shot down during the Battle of Britain disclosed the fittings of rockets under their wings. The Heinkel 111K used two rockets said to provide 3,000 horsepower for three minutes, long enough to assist at take-off and up to

3,000 feet. The rocket tubes were then dropped off. This plane is powered with 1,300 horsepower engines, so that the rocket assistance was equivalent to more than two extra engines.

Rockets have been proposed for carrying messages to the rear, for increasing the range of anti-aircraft guns, for shooting bombs downward, and for many other purposes, so that while the rocket propelled airplane may still be a thing of the future, there are many immediate and practical uses for high-power rockets.

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serious than formerly because of the speed and effectiveness of the sulfa drug treatment for it.

So, although war or civil disturbance has always in the past brought an increase in venereal disease rates in armies, we are sending to war an Army in which the venereal diseases are taking less and less of a toll.

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PUBLIC HEALTH

New Health Record

U. S. Army has less venereal disease than during World War; syphilis rate is lowest in Army history. Thorough control program credited.

► NOT EVEN the venereal diseases, those hitherto invariable scourges of an army mobilized for war, have been able to spoil the excellent health record of our present Army.

"Venereal disease is substantially less than during the World War, with the syphilis rate now the lowest in Army history," the War Department announces in its latest statement on the health of the United States Army in training in this country.

This statement may be looked on as official announcement of a hard-won victory, another of the triumphs which the medical department of the Army has rung up as a result of efficient use of modern scientific methods for fighting disease. Here is how this medical victory was won.

When we started increasing the Army in 1940 through the Selective Service Act, we were all proud of the fact that it was the first Army in history recruited entirely from men free of any venereal disease, at least at the time of selection.

Then came a period of disillusionment. Venereal disease rates, which had been declining in the Army for many years, began to rise. Men free of syphilis or gonorrhoea when examined by Selective Service boards arrived at Army induction camps with freshly acquired infection. Venereal diseases and prostitution had gotten out of control by public health and police authorities in many towns near the rapidly growing Army camps. Civilian authorities declared they

could not handle the problem alone, urged the Army to invoke the May Act, passed by Congress to enable the Army to protect the men from venereal disease that might be acquired in communities near Army camps.

The Army, meanwhile, called in from civil life every specialist in venereal disease control it could get. It assigned venereal disease control officers to the headquarters of each corps area, to each major division in the field, to the air forces and to each large Army camp. These officers got full cooperation from the civilian agencies for the control of venereal disease in communities near Army camps. Under their direction, each soldier is taught how to protect himself from venereal disease and facilities for prophylaxis are provided.

The venereal disease rates as a result have shown a steady decline. The victory score board shows that in 1941 the total venereal disease rate, on a yearly basis, was 40.5 per 1,000 men. For the first six months of 1942 the rate, on a yearly basis, was 38 per 1,000, including cases arising in newly inducted soldiers where the infection actually was acquired in civil life.

"This means," states the War Department, "that about 19 new infections occurred among every 1,000 men during the first half of this year. Soldiers thus infected lose an average of 18 days or less from duty."

Most of the venereal disease rate now is due to gonorrhoea which is much less

INVENTION

New Polarizing Glasses Used for Different Colors

► POLARIZING eye glasses which will transmit or cut off light of two different colors or regulate intensity and color at will by simply rotating the lenses, are described in U. S. Patent 2,298,058 issued to Edwin H. Land of Cambridge, Mass., and assigned to the Polaroid Corporation of Dover, Del.

The new rotatable lenses are superposed on the regular polarizing glasses, much used to cut off the glare of light reflected up from horizontal surfaces. The new lenses contain two polarizing films, with their polarizing axes crossed at right angles. Each is impregnated with a dye and polarizes only a particular color, instead of all colors or white light as is the case with the regular glasses.

Suppose the two colors are yellow and blue. When turned say to the extreme left, yellow light is transmitted, to the extreme right, blue is transmitted. Midway between, the light is neutral or without color. At other positions any desired degree of coloration for either color can be obtained.

Or suppose that one film is green and the other neutral. When the neutral film is crossed with the regular glass, which is also neutral, say at the extreme left, scarcely any light at all passes. As the lens is turned, the light becomes brighter and greener until at the extreme right it is fully green.

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