

MEDICINE

"Shipyard Eye" Research

Virus believed cause of highly contagious disease. Sulfa drug is called almost specific remedy. Several research studies conducted.

► THE LATEST developments in the "shipyard eye" situation are:

1. The cause of the disease, which has been striking in epidemic form at industrial as well as shipyard workers on the East and West Coasts, has been fairly clearly identified as a virus through studies by two groups of medical researchers.

2. Sulfathiazole has been reported as an "almost specific" remedy.

3. Doctors, nurses and first aiders in Detroit, and probably other industrial areas, have been warned to be on guard, taking extra precautions against getting the disease themselves or spreading it to others when treating patients having or suspected of having the disease. In Detroit the Board of Health is requiring that all cases be reported to it.

In 125 cases studied at the University

of California Medical School in San Francisco, undernourishment, occupation and disease germs of the bacteria, that is, non-virus type, were ruled out as possible causes, Dr. Michael J. Hogan and Dr. Joseph W. Crawford report.

A filterable virus has actually been isolated from patients having the disease by Dr. Murray Sanders and Dr. R. C. Alexander, of Columbia University, in New York. Their studies were carried on in "informal collaboration with the Commission on Neurotropic Virus Diseases, Board for the Investigation and Control of Influenza and Other Epidemic Diseases in the United States Army".

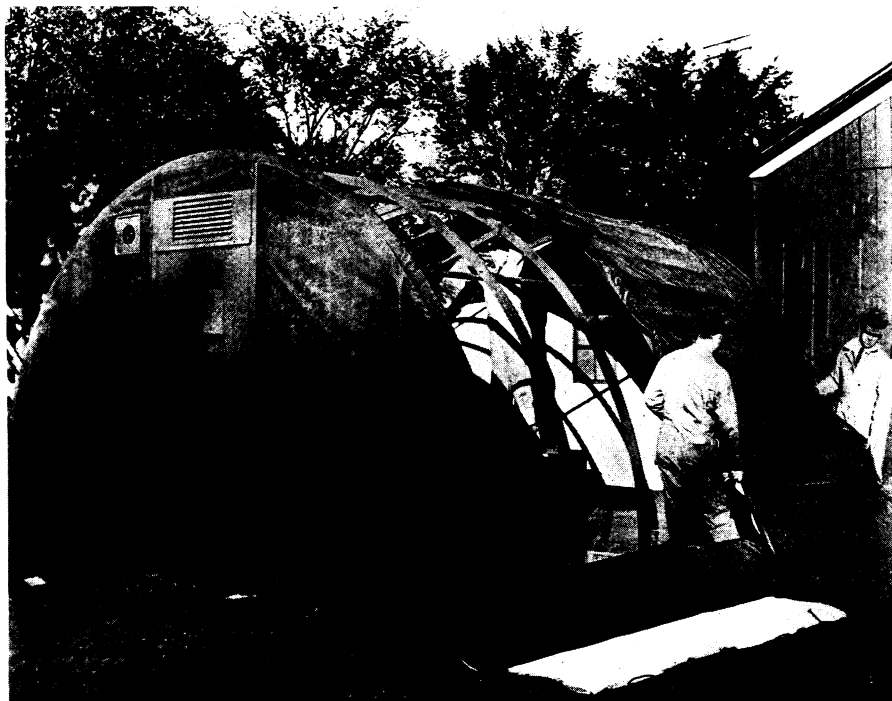
The virus they isolated caused "shipyard eye" when rubbed in the eye of a healthy young man who volunteered for the test. Blood from convalescent pa-

tients in New York and California neutralized this virus. The virus was shown to be different from other disease viruses by further neutralization tests and by difference in size as measured by the bore of the filter through which it could pass. These studies by the New York investigators were reported in the *Journal of Experimental Medicine* (Jan.).

Successful use of a 4% or 5% solution of sodium sulfathiazole sesquihydrate in treating cases of "shipyard eye" at the County Hospital in San Diego, Calif., was reported by Dr. F. J. Walter to the *Journal of the American Medical Association*. If further trial shows that this is, as Dr. Walter calls it, "almost specific" as a remedy for the condition, it will be one of the few instances in which a sulfa drug has succeeded as a remedy for a virus-caused condition.

"Shipyard eye", known medically as kerato-conjunctivitis, is highly contagious, according to a report from the Wayne County, Mich., Medical Society. About 5 out of every 100 exposed persons develop the disease. In spite of its popular name and its outbreaks among industrial workers, the highest infection rate in a recent epidemic was among the doctors and nurses in the affected industry.

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ARCTIC HOME—This portable shelter has been developed for use by Army Corps personnel in cold climates. Blankets of glass fiber insulation in walls and floor save more than 20,000 pounds in the weight of fuel needed to maintain a comfortable living temperature during the heating season. The shelters are lightweight and compact for transportation by plane.

RESOURCES

Shoe Rationing Encourages Use of Leather Substitutes

► LEATHER-LESS shoes may soon be on the market as one of the results of the new shoe-rationing order. A laminated duck fabric with a plastic binder has already been developed for outer soles and is testing out quite satisfactorily. A composition mid-sole is in more or less general use. A plastic inner sole is a reasonable possibility. Cloth uppers have long been used, and a new woven plastic gives promises.

Put the laminated fabric outsole, the composition mid-sole, the plastic inner-sole, and the woven upper together and you will have a leather-less shoe which will probably be ration-free.

Manufacturers are particularly concerned with a satisfactory outer-sole substitute, as the principal shortage seems to be in sole leather. A semi-flexible plywood is being tried. A shoe with an inch-thick hinged wood sole is understood to be now offered to farmers and other workmen. The hinge is under the ball of the foot so that the wearer may walk naturally.

To many men, three pairs of shoes

a year seems like an ample allowance. It probably would be if they were made of a good quality of leather. But practically all the best leather is now going into footwear for the Army and the Navy. Civilians must be satisfied with shoes made from leather of poorer grades.

Better care of boots and shoes will be helpful, under the new shoe-rationing order. Shoes, like automobile tires, will wear longer if given good care. They should be kept well oiled and polished.

They should not be dried out near a radiator or stove. They should be taken to the repairman as soon as the slightest repairs are needed.

The shoe shortage can be helped also if everybody will dig into their closets and get out all those old shoes which may be put into walking condition again through repair. Less manpower is needed to repair old shoes than to make new ones even if made without leather.

Science News Letter, February 20, 1943

RESOURCES

Rubber Flown Here

Returning from bases in the Central American Tropics, Army planes are carrying crude to help ease the present shortage.

➤ ARMY PLANES returning from bases deep in the Central American tropics are loading extra nooks and crannies with crude rubber to help ease the shortage.

More than a hundred tons have been flown to the United States during the past three months. At least half came

from the Republic of Panama, while most of the remainder was picked up in the Canal Zone and Nicaragua, with a few tons from Guatemala.

Continually increasing tonnage makes rubber one of the principal airborne cargoes from our Central American neighbors.

Shipments from the Canal Zone so far have been seized enemy rubber now put to work to help defeat the Axis. The remainder of the supply flown in is a new kind of scrap rubber obtained from wild *Castilloa* trees. Tree scrap is the hardened milky juice that collects at the base of the *Castilloa* tree after tapping it in herringbone fashion, a lower grade than the smoke-cured sheets of *Castilloa* prepared from more carefully collected latex.

Scrap from the *Castilloa* trees is gathered by natives throughout the region, then lugged to the airfields where it brings the basic Rubber Reserve Company price of 33 cents a pound. Packed in hundred-pound bags, the rubber is loaded into available space on planes flying northward and dropped later at San Antonio, Texas. A plane may load as much as 4,000 pounds.

In Guatemala and Yucatan, planes formerly used to bring chicle for chewing gum from inaccessible forest regions to river ports are now transporting *Castilloa* rubber as well.

Other planes throughout the vast Amazon River basin area are flying out crude rubber from another source, the wild *Hevea* trees, to speed the rubber program initiated since the wartime loss of Far Eastern rubber sources.

Although these shipments are only a very small fraction of our needs, they are harbingers of a vast development of Central American rubber production now under way. It is expected to yield long-range benefits as well as furnish an immediate supplementary source of this strategic material.

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INVENTION

New Carrier for Wounded Is Like Papoose Case

➤ QUICKER and safer handling for wounded and sick men being transferred from shore to ship or otherwise handled in transit is promised under patent 2,309,464, issued on a contrivance that looks somewhat like an oversized papoose case. It is the invention of J. P. Lucci and F. M. Reed of Wooster, Ohio.

The patient is first securely wrapped and strapped in warm inner blankets, and then enclosed (except for his face and neck) in an outer case of long wooden slats riveted to straps. Side loops permit carriage like a stretcher, and a ring back of the patient's head provides for hooking onto a derrick, boat davit or other hoisting gear.

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RUBBER CARGO—At an airbase in Nicaragua, sacks of crude rubber from *Castilloa* trees are loaded into a U. S. Army plane. An increasing quantity of this strategic material is being flown from Central America by planes returning "light" from Latin American missions.