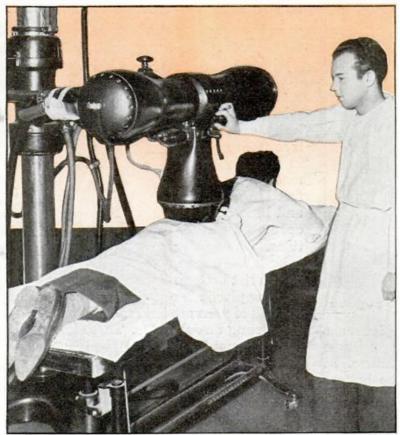
Latest type of oxygen tent is provided with windows which prevent the patient from becoming panicky in confinement

GUARDING the HEALTH of the

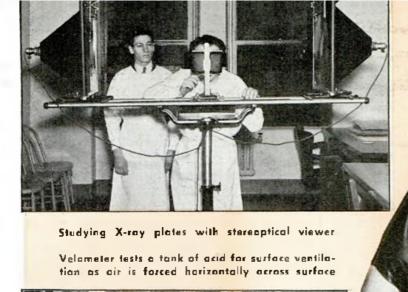


IN TIME of war, doctors
have two enormous tasks
thrust upon them, and are
unable to meet the challenge
by readily training new personnel, as do other services
and industries.

These tasks are to keep the civil population, especially those working in essential industries, in better health than ever—for no nation is easier to defeat than a sick nation; and to keep the army in the finest physical condition, and care efficiently for battlefield wounds and ailments.

The American doctors are far more ready to meet this challenge now than in 1917, for two reasons. They have a nation-wide organization,

Using a therapeutic X-ray machine to treat the dreaded gas gangrene





DEFENSE ARMY

the American Association of Industrial Physicians and Surgeons, whose sole function is to maintain the health of industrial workers; and they have made innumerable strides since the last war in controlling many once fatal injuries and diseases.

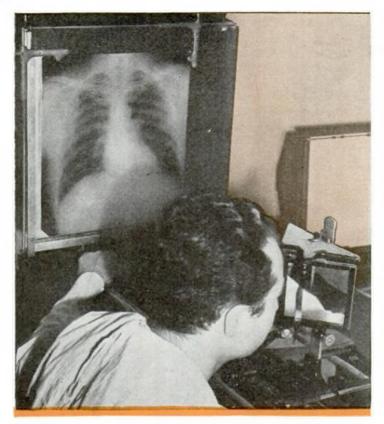
In the last war, the death rate for epidemics and illnesses was enormous. Even if the normal annual toll from such causes is deducted from the total, we find that more American soldiers and civilians died from illness, brought on at least in part by chaotic conditions, than were killed and wounded in action. American doctors are now organizing to prevent a repetition. The government has formed the Division of Industrial Hygiene of the U.S. Public Health Service to track down possible epidemics and industrial illnesses before they start. Thirty-one states have branch offices, and many large cities have sub-units, under the direction of a physic an, and staffed by

If the potient's only offiction is a paralyzed diaphragm, he can actually walk about with this new type partable iron lung, carrying its light, battery-operated mater

DECEMBER, 1941

540 h chuagan

used in San Jare Safel.



Sighting the stereoptical X-ray viewer, which afters third-dimension effect. One of the two X-ray plates is at upper left

industrial bygiene engineers. Their duty is to find situations in industry where hazards to health are created, especially those industries which play important parts in war preparations. Industrial ailments fall into three general classifications, and science has presented the medical profession with

New baking machines speed manufacture of foot cost

precision machines, not in existence during the last war, which tell exactly where dangers lurk.

First of these classifications is dermatitis — skin inflammations. often followed by infections, which may be as serious as mustard gas burns, and just as crippling to military efficiency. It results from the improper handling of lacquers, solvents, acids, alkalis, distillates a general group of skin irritants. Sprays of these substances should usually be applied in a properly ventilated booth, with the operator standing outside. Often protective clothing, such as gloves, goggles, and coveralls are necessary. Tanks should have a specially constructed surface ventilation, which draws fumes away. Inspection is made by a device called a velometer, which reveals whether ventilation is adequate.

Another leading cause of industrial illness is dust. This is subclassified into toxic dusts, in-

cluding lead, mercury, etc., and irritant dusts, including silica, all types of abrasives, and asbestos, which causes asbestosis. If these are allowed to leak into work rooms, respiratory and organic poisonings and irritations result. Production must be so arranged that the toxics and irritants

Gas indicator tests taxic fumes from a paint spray



