

New Machines And Gadgets

Novel Things for Better Living

Dry warm air is needed for many processes connected with the war industries, such as drying black powder, making plastic bonded plywood for airplanes, processing lenses and assembling optical instruments, in the manufacture of engine magnetos and control instruments. To dry air without refrigerating it has hitherto required costly chemicals, used mostly in laboratories. Now a cheap substance has been produced that makes it possible for any factory requiring it to have a dehydration plant.

A new odorless paint, recently introduced, solves the problem of offensive paint odor. It is not perfumed but actually deodorized. This characteristic is particularly important when office, factory or other workplace must be repainted while the work goes on, as it must in these days.

Fibrated leather material has been introduced to replace the gaskets of rubber, cork, hemp and other vegetable substances formerly used for them and now hard to obtain. The leather is separated into its countless fibers and these are recombined with a protein adhesive and formed into large sheets from which the gaskets are cut. The material is resistant to hot oil, boiling water and to gasoline.



The tire shown in the illustration is being prepared for retreading by having its surface roughened so that the new tread will bond itself closely with the old tire and won't come off. The roughening is being done with a retreading brush composed of rope-twisted wires with needle points. The brush is sturdy and durable and the wires won't come out, due to a patented device. It is expected to speed up the rebuilding of tires to meet the great civilian demand expected.

Loss of gasoline in storage tanks can be reduced by a new white paint, having 10 to 15% higher reflecting power than aluminum paint. This reduces in-

side temperatures, keeps the gas cooler, and so cuts down evaporation losses. The new paint is resistant to oil and water, and can be put on with brush or spray.

Synthetic sponge rubber that is more resistant to oil, grease and other solvents than the natural product can replace the latter with advantage in many applications. The new sponge rubber is a synthetic rubber like that now being used for tires and is made from petroleum.

Plastic tubing can be substituted for copper gas lines. The plastic, vinylidene chloride, is flexible, semi-transparent and tough. It is unusually resistant to moisture, brines, solvents, acids and alkalies. Although the plastic softens at high temperature, the tubing can be used for short periods of time up to 275 degrees Fahrenheit with little loss of strength and resistance. The tubing may be joined by standard couplings or flare type fittings.

Puffed soy beans, analogous to puffed rice and other "exploded" cereals, may become an acceptable breakfast dish, according to the claims of a recent patent. The bitter beany flavor of soy beans has hitherto prevented this. Accordingly, the invention is mainly a method of removing this undesirable flavor. The hulls that remain as a by-product may also be turned to useful purposes, the inventor states.

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington, D. C., and ask for Gadget Bulletin No. 91. Science News Letter, February 14, 1942

AERONAUTICS

Weedy Fields With Bushes Best For Air Bases

WEEDY fields, dotted with low bushes and fringed with trees, are far better for war-time air bases than the beautiful, flat, pasture-like expanses of well-kept commercial airports, Maj. Hans C. Adamson, special assistant to the Chief of Army Air Forces, stated in an address at Schenectady, N. Y. Such ill-kempt looking areas are naturally camouflaged, and are exceedingly difficult to detect from the air.

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