

• New Machines and Gadgets •

⚙️ **TOUGHENED GLASS** insulators for electrical transmission lines have been developed which will stand tensile loads up to 30,000 pounds. Ultimate strength could not be determined, it is claimed, because the special cap and pin fitted to permit the maximum possible load, broke during every trial, while the glass remained intact. Compressed surface and internal tension enable the glass to withstand heavy blows. But when it is broken or punctured, the insulator is completely shattered, permitting a faulty insulator to be easily located by visual inspection from the ground.

Science News Letter, December 12, 1942

⚙️ **A WEBFUL** of bombs for anti-aircraft use is the subject of a recent patent. A shell containing the apparatus bursts near the enemy plane, and releases the web with bombs attached. Becoming ensnared in the long strands of the web, the plane is brought down by the exploding bombs.

Science News Letter, December 12, 1942

⚙️ **A NEW FINISHING** agent for textile fabrics has been developed from petroleum. This replaces large quantities of sulfonated tallow formerly used. The tallow can now be used as a source of glycerin, a vital war material. Cost of the new finishing agent is said to compare favorably with materials formerly employed.

Science News Letter, December 12, 1942

⚙️ **AN ELASTIC YARN** with many of the characteristics of rubber has been produced synthetically and the present output is being used for military equipment. The new material, a vinylite resin, is said to be superior to rubber because it has better resistance to sunlight, tropical heat and humidity, and is not affected by body acids. Experiments indicate that the yarn can eventually be used to replace rubber in consumer goods, such as elastic webbing, women's girdles, suspenders, and surgical stockings.

Science News Letter, December 12, 1942

⚙️ **SILVERED GLASS** is replacing aluminum light reflectors formerly used for street lights, floodlights, searchlights and other equipment used in the war production program. A worker is shown applying silver in the form of the nitrate, to plain glass. A chemical change makes the silver stick to the glass but



eliminates other chemical ingredients. One company reports saving over a half million pounds of aluminum by this substitution.

Science News Letter, December 12, 1942

⚙️ **A NEW TYPE** of low-cost speed regulator will soon be placed on the market which will automatically keep the patriotic driver within the 35-mile limit.

Science News Letter, December 12, 1942

⚙️ **WALT DISNEY** fans may soon be startled to hear Donald Duck quacking above their heads, or a bee zooming at them through the audience. A newly patented method of sound reproduction would place loud speakers in the walls, ceiling, front and back of a theater.

Science News Letter, December 12, 1942

⚙️ **A GLOVE** which will fit either hand has recently been patented. The inventor claims that it is "neat, stylish and form-fitting," and that it can be sold singly, in pairs or in threes.

Science News Letter, December 12, 1942

⚙️ **AN OLD-FASHIONED** Gloucester fish net was substituted for war-scarce burlap by a leather tanning company, who needed a cotton material for increased friction on the pinch rolls of unhairing and fleshing machines. To their surprise, they found that fish net

• RADIO

Saturday, December 19, 1:30 p.m., EWT

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Watson Davis will review the highlights of the happenings in the world of science during 1942.

Monday, December 14, 9:15 a.m., EWT; 2:30 p.m., CWT; 9:30 a.m., MWT; and 1:30 p.m., PWT

Science at Work, School of the Air of the Americas over the Columbia Broadcasting System. presented in cooperation with the National Education Association, Science Service and Science Clubs of America.

"Mysteries of the Heavens" will be the subject of the program.

was more effective than any other cotton samples tried, and that it lasted 56 times as long as burlap.

Science News Letter, December 12, 1942

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 134.

Plastic "pearl" buttons made from casein can be improved by adding 2% potassium aluminum sulphate to the casein.

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