

•New Machines And Gadgets•

⚙️ **METALLIC TIRES** for trucks are principally rubber but have a layer of fine metal wire of high tensile strength bonded by a special rubber cement between the two inner layers of rubber. They are built for use where rubber-tired vehicles operate under the most hazardous conditions.

Science News Letter, June 22, 1946

⚙️ **DETECTION** device measures both oxygen and hydrogen impurities in gases with the same instrument. Samples of the gases are dried and purified by activated charcoal and put in a calorimeter containing a precious-metal catalyst. Oxygen and hydrogen present combine, creating measurable heat.

Science News Letter, June 22, 1946

⚙️ **AIR SAMPLER**, used to determine the quantity of disease-spreading airborne bacteria within buildings, is portable and electrically operated. As air is driven slowly through the device, static electricity attracts the positive and negative germ-laden air particles onto surfaces coated with a nutrient sticky jelly.

Science News Letter, June 22, 1946

⚙️ **ADHESIVE TAPE** has its sticky coating in spaced bands, making its removal easier. It is perforated with spaced holes to permit ventilation, and has V-shaped notches on its edges so that it can be torn off in desired lengths.

Science News Letter, June 22, 1946

⚙️ **SHOWER** and window curtains of plastic film are waterproof and mildew-proof, sheer enough to drape, and tough



enough to withstand scrubbing with a brush. Rows of airy lace patterns, shown in the picture, are printed in white plastic ink on six different translucent pastel backgrounds.

Science News Letter, June 22, 1946

⚙️ **MOTION PICTURE** machine that can be used in a well-lighted room sends invisible ultraviolet rays from the projector to the screen. The screen is of a fluorescent material that absorbs ultraviolet radiation and emits visible light. The usual bright cone of light between projector and screen is eliminated.

Science News Letter, June 22, 1946

⚙️ **CONDENSER** microphone, no larger than a quarter, is a non-direct onal program pick-up device for use in broadcasting. Its small size, one inch long and one inch in diameter, helps eliminate distortion due to sound waves striking simultaneously against different portions of a microphone diaphragm.

Science News Letter, June 22, 1946

⚙️ **LABORATORY** pilot plant, a miniature production plant made of tantalum metal and Pyrex glass, can be used with most reagents except caustic alkalis and hydrofluoric acid. Designed for heat transfer determinations, it can be used as a complete reaction unit.

Science News Letter, June 22, 1946

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 6, D. C., and ask for Gadget Bulletin #16.

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