

New Machines and Gadgets

☛ **PERMANENT CREASE** in the trousers is now possible as well as a permanent wave in the hair. The crease is maintained by a tape laid along its under side. The edges of this tape are folded inward and are covered with an adhesive which softens with heat so that when the trousers are pressed these edges will adhere to the cloth. The middle portion of the tape then forms a bridge between the two sides of the crease thus preventing the crease from pulling out. This is a recently patented invention.

Science News Letter, September 5, 1942

☛ **WELDED INNER TUBES** may help the tire situation somewhat. Two or three old tubes, pretty well shot to pieces, may have their good parts cut out and welded together end to end by a special vulcanizing process — and presto, one tube emerges still good for many miles.

Science News Letter, September 5, 1942

☛ **NON-STICK WRAPPERS** for sticky candies and other sticky products can be made by applying a coating of a new white, odorless, synthetic wax in conjunction with the usual paraffin.

Science News Letter, September 5, 1942

☛ **PENCIL CLIP** and pencil sharpener are combined in a single device that has been recently patented. When the clip is slid off the pencil, a little blade springs out at the proper angle to sharpen the pencil by the usual twisting motion. Then the device can be closed up and replaced on the pencil as a clip occupying little more space than a regular clip.

Science News Letter, September 5, 1942

☛ **HEELS**, the kind that women wear, are getting so high that one inventor has proposed a kind of metal frame sky scraper construction for heels which would give greater strength and stability. The heel cannot be broken in two, although it might be bent. At the same time he proposes a transparent covering for the heel so that the beauties of the internal construction will be visible to observant engineers. The only obstacle to the immediate adoption of this patented heel is the critical shortage of metals.

Science News Letter, September 5, 1942

☛ **AIRPLANES OF THE FUTURE** flying at high altitudes may have their bearings lubricated with metallic vapors instead of the usual oil which becomes



gummy at low temperatures. The vapor, which may be that of magnesium, chromium, gold, zinc, lead or, best of all, of barium, is sprayed on the bearing electrically and condenses to a thin soft lubricating film. In the picture scientists are watching a bearing lubricated with barium running at 314 degrees below zero Fahrenheit, in liquid air.

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If you want the sources of 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 120.

PUBLIC HEALTH

Tuberculosis Death Rate Still Declines But Slower

➤ **DEATH RATE** from tuberculosis in the United States continues to decline, despite an upswing of cases in European countries, it is revealed in a report by the National Tuberculosis Association.

Last year 44 persons died of TB for every 100,000 population, compared with 46 the previous year. This totaled 59,173 persons dead and 105,714 new cases reported.

Despite continued improvement in the death toll, there is slowing up of the downward trend of TB cases in this country. Dr. Kendall Emerson, managing director of the Association, warns that under wartime conditions, tuberculosis may show an increase here, just as it already has in warring countries of Europe.

"Various theories have been offered to explain the increase abroad," Dr. Emerson reports. "Among them are decreased resistance, due to longer hours of work,

strain, anxiety, inadequate diet, broken rest, overcrowded homes, and shortages of medical and nursing personnel.

"There is every reason to believe that, as the war goes on, these factors will operate in this country unless voluntary and public health authorities are able to use all of their resources."

Every effort is being made to keep TB out of the armed forces. Army doctors are fully equipped for X-raying and are authorized to reject all those who may have or who have had the disease.

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RESOURCES

Increased Use of Wood Bearings May Save Metal

➤ **WOODEN BEARINGS** may replace metal in many cases where load, speed and temperature are low. In fact, for more than 40 years, bearings of impregnated wood have been used for such things as washing machines, wringers, and rollers for textile machinery. Extension of their use would save metal for war purposes.

Science News Letter, September 5, 1942

Basic Horticulture

By VICTOR R. GARDNER

Consistently maintaining a good balance between fruits, vegetables and ornamentals, this new text for the beginning college course in horticulture thoroughly covers the basic principles underlying the culture of horticultural crops. Current practices are described and explained, and all material, including the illustrative, is so chosen that the text is equally usable in all parts of the country and in all climates. Problems are given at the end of each chapter.

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