

• New Machines and Gadgets •

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., Washington 6, D. C. and ask for Gadget Bulletin 429. To receive this Gadget Bulletin without special request each week, remit \$1.50 for one year's subscription.

⚙️ **UNIVERSAL TELEVISION** receiver operates on alternating current of any frequency and on direct current as well, eliminating the need of special converters in DC areas. The new receiver is a table model with a seven-inch direct-view video screen, containing 17 television tubes plus one rectifier tube.

Science News Letter, August 28, 1948

⚙️ **ASBESTOS-BASED TAPE**, for electrical insulation, has high insulating strength and is suitable for use where high temperatures are encountered. The non-inflammable paper-like tape can be brought to bright red heat in a Bunsen burner without igniting or melting and, in use, is unaffected by high temperatures for long periods.

Science News Letter, August 28, 1948

⚙️ **COPY-ROLL** kit is a new photo-copying unit with complete processing facilities and tiny self-contained dark room compactly arranged in a carrying case of suitcase size. It will produce letter- and legal-size photo-exact facsimiles of anything written, typed, printed, drawn or photographed in a matter of minutes.

Science News Letter, August 28, 1948



⚙️ **INFLATABLE DRESS FORM**, for the home dressmaker, can be made to take the shape of an individual by a little padding here and there, a tape around the waist, and perhaps the person's own brassiere on the bust. The plastic form, shown in the

picture with a net-jersey cover to hold pins, may be deflated for storage.

Science News Letter, August 28, 1948

⚙️ **DRAWING AID** for engineers and draftsmen is a square plate of cellulose nitrate plastic with cut-out circles which makes it possible to draw accurately standard bolts, nuts, hex head cap screws and similar machine parts without the use of a compass.

Science News Letter, August 28, 1948

⚙️ **SOLID TIRE** for factory-truck use is made of rubber with a soft inner section to provide greater cushioning effects. Its tough, long-wearing rubber tread, that resists cutting and chipping, together with the soft center, permits the truck to pass safely over obstacles with little jar to the load.

Science News Letter, August 28, 1948

⚙️ **CONVERTIBLE CRIB** for the infant becomes a chair, with back and foot-rest, and a table for toys when the sleeping pad is removed and the sectional bottom dropped. Casters under the four legs on the non-tipping device permit it to be rolled from room to room.

Science News Letter, August 28, 1948

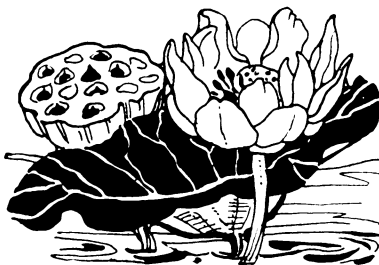
• Nature Ramblings by Frank Thone •

➤ **CIVILIZATION**, we are told, first came into existence in the valleys of great rivers—the Nile, Tigris-Euphrates, the Indus, the Yangtze. Even now, our great cities are built by the waterside—New York, Chicago, New Orleans, Buenos Aires, London, Paris, Rome, Alexandria, Calcutta, Shanghai.

Yet only one of man's major crop plants, rice, is a wet-land plant. All our other cereals, all our principal root crops, most of our vegetables and all our fruit trees demand well-drained soils. Some of them, like barley, will even tolerate a considerable degree of drought. One other extensive culture area, Polynesia, depended on the mud-loving taro for its favorite food, poi; but this region is mostly made up of small islands, supporting a relatively small population. A variety of taro, the dasheen, has been introduced into our own South, but has not yet become a major crop.

Yet there are millions of wet acres, even in the world's most crowded and hungriest lands, that are not exploited for food, at

Wasting Wet Acres



least directly. They produce starchy-rooted plants like cattail, lotus, waterlily and arrowleaf. It would seem at first glance that this stored starch might be made use of industrially if not for food, but no great success seems to have attended experimental efforts in that direction so far.

The only answer that man seems to have devised to the challenge of these deeply fertile but too-wet lands is to drain them

and then plant his conventional upland crops. There is no question that newly drained muckland produces bounteous and profitable harvest, at least in the beginning. But the soils are exceedingly light and friable, so that a relatively short course of cultivation wastes them away. A decade of such farming can destroy the muck that has been centuries in the making. Worse still, such soils are often so full of decomposed vegetable matter that they take fire and burn to ash, right down to the lowered water-table.

It would seem to behoove those who concern themselves with long-range planning for land use to think of ways in which wet or submerged lands can be induced to yield food for man's crowding millions without having to undertake, first the heavy expense of draining, then the risk of quick destruction of the soil's too-rashly exposed riches.

Science News Letter, August 28, 1948