

to increase the payload of airplanes whether in passengers, freight, or bombs.

Chemical Removes Fluorine

Traces of fluorine compounds, found in drinking water in the Midwest and responsible for the mottled coloring of children's teeth, can be removed by use of a chemical, tri-calcium phosphate, Dr. Howard Adler and George Klein of the Victor Chemical Works revealed. Tri-calcium phosphate, dried to a powder from a watery gelatin, absorbs fluorine compounds readily, Dr. Adler explained. Ten pounds of the substance will remove sufficient fluorine from 560 gallons of water to render the small impurity harmless.

Chemical Halts Rose Pest

Red spider, a pest to the rose fancier and a menace to the professional flower grower, can be controlled effectively by a new derivative of the chemical cyclohexylamine, T. S. Carswell and H. L. Morrill of the Monsanto Chemical Company told the Society.

Cyclohexylamine, which has been known in the laboratory since 1893, is now being produced commercially in the United States, they reported in a survey of the uses of the substance.

Destructive influence of the pest, which attacks a wide variety of hothouse plants as well as roses, is particularly felt in the greenhouse, where a single bench of roses frequently represents an investment of \$20,000.

Science News Letter, September 18, 1937

Great Salt Lake in Utah is nine and a half feet lower in elevation now than it was in 1924.

BULBS

TO SPREAD THE fame of our bulbs everywhere, we will send you FREE a nice assortment of HYACINTHS, TULIPS, NARCISSI, IRISES, CROCUS, etc., 350 bulbs in all, guaranteed to flower next spring and summer. It suffices to send us for postage, packing, etc., a one-dollar note by registered letter, printing your name and address plainly. Please do not send coins or stamps. Postage paid all over the world without increase in price. Please mention SCIENCE NEWS LETTER when ordering.

JAN VAN GALEN
Vogelzang near Haarlem
HOLLAND



Names From the Armory

ODD, how many names for use in their peaceful trade botanists have drawn from warlike armories!

Leaves especially seem to have struck the military streak in the scientific imagination. There are hastate leaves, from the Latin hasta, a spear; lanceolate leaves, obviously from the word lance; sagittate leaves, from sagitta, an arrow; gladiate leaves, from the word for a sword; peltate, from the name for a shield; umbonate, from the umbo or boss in the middle of a shield.

Other shapes in botany, applied more often perhaps to shapes of flowers and fruits, are pileate, from pilum, a javelin; galeate, meaning helmet-shaped; clavate, from the term for a club; arcuate, meaning bow-shaped or bow-like.

Naval terms have been drafted into botanical service, too: the parts of an orthodox flower of the pea or bean family are known as banner, wings, and keel. And naviculate, shaped like a little boat, is applied to a certain type of seed-pod.

Some of the commonest terms of plant anatomy are military borrowings. We speak of leaves as arranged in ranks on branches; certain small outgrowths that protect other plant organs are called scutella, or little shields. Many flowers have spurs, and irises at least carry standards. There are guard-cells on the surfaces of leaves, palisade cells beneath.

Common and Latin names alike give Army names to whole plants: gladiolus means a little sword, there is a mushroom known as clavaria or club-fungus, science and common speech agree on the arrowiness of sagittaria or arrow-leaf. And there are spearmint, arrow-root, devil's club, knife-bean, shield-fern, club-moss, and blades of grass.

It is interesting to note, however, that almost all of these terms date from ancient times, before the invention of fire-arms. Only a few plants, and those from lands unknown in classic days, bear such names as cannonball tree and Spanish bayonets. Curious, too, that the military names used are all of hand weapons; catapult and ballista and batteringram seem to have been forgotten.

One wonders what might have come to pass if there had been any women botanists in the old days when names were becoming established. Would we have had fewer names from the armory and more from the household, like fusiform or spindle-shaped, plumose or feathery?

Science News Letter, September 18, 1937

ENGINEERING

Engineers Invent New Word; A "Vodas" Distorts Voice

IF ANY READERS are now going through the process of learning one new word a day to increase their vocabulary, the word "vodas" is recommended. It won't be found in any dictionary now in existence and is as new as today's newspaper.

To save playing the old game of asking "animal, vegetable or mineral?" one should hasten to add that vodas is an instrument through which the electrical impulses of your voice must pass when, and if, you next talk by trans-Atlantic radio telephone.

The vodas does many things to your voice, including the creation of an artificial stammer. And it can turn your normal voice volume into a roar.

Vodas is a newly coined word composed of the first letter of each word in the following phrase: "voice-operated device anti-singing." A vodas, S. B. Wright

The SEX TECHNIQUE IN MARRIAGE • By I. E. Hutton, M. D.



"Dr. Ira Wile describes the book as a clear, succinct, non-emotional, authoritative and conservative exposition of the practical factors involved in making marriage successful on the sexual level. That describes the book exactly . . . It is primarily concerned with the conduct of the honeymoon and with the technique of the sexual performance."

—Dr. Morris Fishbein, *Editor Journal American Medical Assn., in Hygeia.*
Acclaimed by the Medical Press Everywhere
Price \$2, incl. postage. 5-Day Money Back Guarantee
Emerson Books, Dept. 228-A 251 W. 19th St., N. Y.