

Do You Know?

Water beetles carry a reserve supply of air under their wing covers.

Coffee-producing Brazil raises more meat than coffee, on a valuation basis.

Agriculture in Siberia is highly mechanized, tractors furnishing 70% of its draft power.

South America, long an importer of rice, is now growing more than can be eaten there.

Alaska's Bristol Bay region is the world's chief production center for red salmon.

The most valuable forest product of Honduras, Central America, is mahogany.

Fishing companies like swordfish because little labor is required for processing, in comparison with that needed for the more common smaller fish.

The American pronghorn antelope, *Antilocapra americana*, is the only hollow-horned animal which annually sheds its horns.

Meteorites, stone and iron masses that fall from the skies, are the only objects that man can touch and handle that have not originated on the earth.

Malaria mosquitoes have a flying range of only one mile at most from their breeding places; other varieties have a flying range of five miles or more.

A new insecticide, composed of chili pepper, sabadilla, arsenic, and quicklime, now being produced in Peru at an annual rate of a million pounds, is particularly suitable to protect growing cotton from worms and aphids.

The "Big Inch" pipe line, stretching 1,363 miles from Longview, Texas, to the New York-Philadelphia area, delivered nearly 93,300,000 barrels of crude oil from Texas fields to eastern refineries in its first year of operation.

With bamboo now being grown in the southern states and in Middle America, bamboo sprouts will be available but will probably not become as important an item in the American diet as they are in the Chinese or Japanese.



Ready for Spring

► NEXT SPRING'S Easter bonnets and dainty gowns are already being made, and shortly after Christmas they will be moving onto the merchants' shelves. But even the fabricators of fashions are not more forehanded than the herbs and shrubs and trees of the woodlands. Practically every flower and leaf that will gladden our eyes next April and May is already in place, and only awaits the signal that will be given by the returning sun and the warm spring rains.

Preparation for next spring's flowers, as a matter of fact, began immediately after last spring's flowers had faded, and in most plants went on even while fruits and seeds were ripening. The leaves of plants like dog-tooth violet and trillium, that stood all summer long with no flowers to grace them, were busy all the time making food and sending it down into underground bulbs, corms and rhizomes. In the meantime, buried growth-points were forming up into the beginnings of buds, enfolding the embryonic structures of another crop of flowers. When the new growing season comes on, the food reserves will be liquidated and poured into the task of speeding the growth and unfolding of the new flowers.

Something of the same sort goes on, all over the branches of woody plants that blossom early in spring, like dogwood and redbud, and the lilacs and forsythias of our gardens. In the axils of this year's leaves, or at the twigtips, the buds of next year's growth form during the summer. Already in them are the beginnings of next spring's bloom.

Only by provisions like this can we have spring flowers at all. Flowers are expensive things: they need a great deal of food for their structure, and more for

the energy expended in the rapid process of blossoming. Most plants have to make their own food, which is the job of mature leaves. If flowers come before the leaves, or while the leaves are young and small, the food will have to be stored ahead of time—usually during the preceding summer and early autumn.

The whole process of forcing flowers, so that we have a foretaste of spring even in winter, is based on this fact. We bring bulbs or cut branches indoors, giving them as nearly spring-like conditions of temperature, moisture and light as we can provide. These stimuli cause the unlocking of the natural food cupboards, and release the chain of events that ends in the early unfolding of the flowers.

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ORDNANCE

Flame Throwing Tank Hurls Blazing Oil in Chunks

► LIKE an armored blowtorch, the Army's new flame throwing tank, details of which have been revealed for the first time by the War Department, can crash through heavy vegetation in the teeth of enemy fire, directing its cone of fire at enemy infantry who cannot be effectively reached otherwise by foot-soldiers or tanks.

The flame throwing tank consists of a standard M1A1 portable flame thrower mounted on either side of a light or medium tank. Details of how the apparatus is mounted are not given for security reasons. However, it is stated that the flame throwers do not interfere with the other armament of the tank.

A new flame gun, developed by the Chemical Warfare Service, was also revealed. Known as the M2-2, it can shoot liquid fire a greater distance than the earlier M1A1 model, which has a range of 60 yards.

The apparatus fires jellied oil, a thickened fuel made of blazing oil chunks which spatter and cling to the target. The M2-2 can also fire a combination of gasoline and diesel oil.

A third item, the Smoke Drake, was also announced. It consists of the largest smoke-making machine in the world, the M1 generator, mounted on the amphibious "duck." One of these machines can blot out a square mile in 10 minutes with a dense white smoke screen. The fact that the smoke generator can operate from land or water makes the smoke screen more effective, since the smoke machine can move anywhere, as wind directions shift, to blanket targets.

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