

Do You Know?

Piano strings are almost eight times as strong as ordinary steel.

Some *forest fires* travel faster than a deer can run.

X-rays have now been used in hospitals for just 50 years.

Lily bulbs, formerly Bermudan, are being grown in Florida with apparent success.

Mica, an essential in electrical instruments, is no longer under government restrictions.

A *whistle* that emits sound waves of too high a frequency to be detected by human ears, but which do irritate pigeons, is to be used experimentally to drive out perching pigeons on a Western public building.

Essential *oils*, though having a widely different chemical composition, have three common properties; volatility; combustibility, and the ability to form only a temporary grease spot on paper.

A solution of certain *resins in alcohol*, for application to the hands of surgeons and nurses making the use of rubber gloves unnecessary, is reported to have been developed in Germany.

Government chemists are obtaining 90 gallons of *liquid fuel* from one ton of such farm wastes as corncobs and cottonseed hulls; the fuel is 50% ethyl alcohol, the rest being butanol, acetone and other flammables.

Five breeds of *dogs* were found best for Army purposes, and only these, or positive crosses of these breeds, were accepted for military uses; they are the German Shepherd, Belgian Sheep, Doberman Pinscher, Collie and Schnauzer.

Ambergris is a curious substance that seems to be produced only in the intestines of sick whales; formerly used in perfume making, it has now been replaced by synthetic chemicals.

The *helicopter* is proposed for the farm spraying program because it is a type of aircraft that can hover just over an orchard tree until the spraying of the tree has been thoroughly completed.



Syncretic Holiday



See Front Cover

► HALLOWE'EN, as the shape of the word indicates, is a contraction: in extended form it is the Eve of All Hallows, or in more modern ecclesiastical language, the Vigil of the Feast of All Saints. As such, it is supposed to be a day of soberness and fasting, in preparation for the solemnities of the morrow.

What connection has such a strictly religious observance with pumpkins and cornshocks such as those pictured on the cover of this SCIENCE NEWS LETTER, with black silhouettes of witches and cats, with kids wearing false-faces and fancy costumes and playing pranks in the streets after their usual bedtime?

The story is a long and curious one, involving pagan antiquity, the policy of the ancient Church, and a transplantation of European culture into a new land. It begins with the harvest-home feast observed in practically all agricultural lands, where the people rejoice and give thanks for a good crop, and take a little time off from hard work. In ancient Latium, it took the form of the Saturnalia, when the banished father of the Olympian gods was permitted to return for a little while, and everybody had a good time and nobody worked.

Came Christianity, and Jupiter and all his court had to join Saturn in exile. The feast remained, for the policy of the Church was not to uproot violently but to convert and change meanings; the places of the many lesser gods were taken by the host of saints. The gods, going underground, became imps and hobgoblins, and had their day (or

rather, their night) just once a year. As slaves had enjoyed a brief spell of license under the Roman rule, serfs and lower servants and children took leave to frolic under the newer dispensation. Gradually the Saturnalia dwindled, until none but children were left to impersonate the departed and all-but-forgotten pagan deities.

When Europeans colonized the New World they, of course, brought their culture with them, including this transmogrified and much attenuated relic of the ancient Saturnalia. They found in the new agricultural products they received from the Indians materials that could be adapted for the old observances: corn grains to rattle in startling showers against window-panes; pumpkins that could be hollowed and carved and fitted with candles to make grinning heads of fiery demons.

It's a far cry from the legendary Golden Age of Saturn, when nobody had to work and everybody could do just as he pleased, to present-day pranksters with jack-o'-lanterns, and many of the connections are not at all clear, but children, those severest of traditionalists, still hang onto what they can remember of the ancient ritual.

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PSYCHOLOGY

Food for Europe Urged By Psychologists

► IF OUR peace is not to be wrecked, food must be sent now to the hungry people of both Europe and Asia as a preventive of World War III. This is the decision of the Council of the Society for the Psychological Study of Social Issues, as announced by Prof. Theodore Newcomb, of the University of Michigan.

Starvation and misery, especially in childhood, sow the mental seeds for future wars, the psychologists agree.

An insurance against another world war, this group of scientists advocate the following steps: 1. Back a program of aid in Europe and Asia; increase the allocations of food. 2. Support OPA controls (on meats, fats, oils, sugar, fuels, etc.) as needed to implement the program. 3. Advocate immediate use of surplus Army trucks, planes and fuel for transportation of food. 4. Vote an appropriation of \$550,000,000, the balance already pledged to UNRRA, and authorize an additional contribution of \$1,350,000,000, as recommended in President Truman's message of Sept. 6 to Congress.

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