



A GOOD FIT FOR THE DEAD

Of old Mesopotamia was gotten in adjustable coffins like this one which was found recently at Tell Billa.

CHEMISTRY-HORTICULTURE

Sure-Kill Poison Found For Troublesome Bushes

A POISON for undesired bushes such as poison ivy and European barberry, quick and sure in its action yet clearing out of the soil after its work is through, was described in Cleveland before the meeting of the American Society of Plant Physiologists by Prof. R. B. Harvey of the University of Minnesota.

This new agent in man's chemical warfare against tough weeds is ethylene oxide, chemically related to the ethylene chloride which has been found very effective in hastening the ripening of fruits and vegetables. Professor Harvey discovered the value of ethylene oxide during the course of experiments with various ethylene compounds. He found that the oxide killed the fruits and vegetables instead of speeding up their ripening processes.

He tried the compound on some large barberry bushes, which are being harried out of existence in the great grain areas because they harbor the black stem rust of wheat. What he calls "depth charges" of ethylene oxide dissolved in water were sunk into holes pierced in the soil at the roots. A few days later the bushes were revisited, and in every case they were found to be in the last stages of the death struggle. About one and one-half ounces of ethylene oxide, diluted out to a ten per cent solution in water, sufficed for a large bush.

At present barberry bushes are fought either by digging them up, which leaves stray roots free to sprout again, or by dumping common salt at their roots. "Depth charges" of ethylene oxide, Professor Harvey concludes, seem to offer the best means so far discovered.

Science News Letter, January 3, 1931

ARCHAEOLOGY

Adjustable Coffin Found At Tell Billa in Mesopotamia

AN extraordinary coffin made in two parts so that one could slide partly into the other, thus adjusting the case to the length of the individual, is the newest discovery from old Mesopotamia.

The telescopic coffin, beautifully made of terra cotta, has been found by the joint expedition of the University of Pennsylvania Museum and the American School of Oriental Research, which is excavating at Tell Billa, in Mesopotamia.

The tomb in which the coffin lay was encountered some weeks ago, and when the archaeologists realized that it had not been disturbed it was pronounced a very valuable discovery. The tomb walls were built of stone and the entrance was bricked up. The fine earth which drifted into the tomb served to protect the sarcophagus and the objects lying around it.

The adjustable coffin in the tomb proved to contain only dust, but other objects were better preserved. Some fine bronzes were there, including an

elaborate apparatus for smoking hashish or some similar substance. Two elaborate candlesticks were at the head of the sarcophagus. With them were half a dozen vases, some little plates and a red beaker. The vases contained children's bones, it is reported. In the plates could be seen traces of foods no longer identifiable. The beaker was for water or some other drink.

Tell Billa, which today is a very large and imposing mound covering about thirty acres, was a place of habitation for thousands of years from about 4000 B. C. on into historic times. One of the summer palaces of the great Assyrian King Sennacherib who located at this place.

The tomb which has been explored belongs to a period after the fall of the Assyrian Empire. It is assigned to the fourth or fifth century B. C., when a line of Persian kings ruled that region until they were swept away by the conquests of Alexander the Great.

Science News Letter, January 3, 1931

CHEMISTRY

Iodine in Paying Quantities Discovered in California

IODINE, expensive and pungent-smelling chemical, has been discovered in paying quantities in southern California. This comparatively rare chemical element has long been controlled by a South American monopoly which regularly maintains a "pegged" world price on the commodity at a high level. Industries concerned with an iodine supply during possible future war blockade are much interested in the California prospects.

Some time ago Los Angeles petroleum chemists, analyzing brackish waters from oil wells near Long Beach, Calif., discovered iodides in commercial quantity. So great is the mass of worthless salts associated with the iodine, however, that difficulty has been experienced in extraction of the desired product. At least one company, however,

has attained some success with the problem, and California iodine is appearing on the market.

One of the favored methods of manufacture involves the treatment of the brine with nitrous acid which drives the iodine out of its salty compounds and permits it to be absorbed in activated charcoal much as war gases were caught in gas masks. Distillation of the loaded charcoal yields the precious product, which commands about four dollars per pound.

Iodine holds a queer economic position in chemical industry. To be sure, it goes into drugs, disinfectants, a few dyes, photographic supplies and a host of minor applications. Apparently nobody uses it in huge quantities, though very many persons require small quantities of the substance. Accordingly no-