

brick wall of the tower, with the masonry work still sharp and plumb. Between this wall and the outer boundary of the sacred enclosure of which it seemed to form a part were found curious chambers which seemed to have served as store-chambers for the oil used in the sacred shrines. This construction dates from the time of Nabonidus, about 550 B.C.

The joint expedition of the University Museum and the British Museum has been at work at Ur of the Chaldees since November 1, 1922. The work has, however, been interrupted during the summer when the climate is unbearably hot for whitemen. Ur is located about six miles east of the Shaat-el-arab river made by the merging of the Tigris and Euphrates rivers, on the edge of the Syrian desert, and about 80 miles from Basra at the head of the Persian Gulf. The first task the expedition undertook was the excavation of the Temple of the Moon God, which was rebuilt by Nebuchadnezzar and further repaired by Cyrus. This excavation led to that of the Ziggurat, and to that of the building upon which in part it stood.

The tower or Ziggurat measures about 198 feet by 133 feet at the base of the first story which is 27 feet high. The second story is about 14 feet high, and measures 119 by 75 feet. The whole structure stood on a brick platform about 20 feet in height. Important excavations have been made also at Tel-el-Obeid about four miles from Ur, where records have been found dating back to 4,600 B. C.

Ur itself was, according to the Biblocal account, the ancestral home of Abraham, from whence he emigrated to seek a new home in the Land of Promise. It is about 140 miles southeast of the great city of Babylon, now like Ur a heap of ruins, but for centuries the greatest city in the East and probably at that date in the whole world.

PLANT EXPLORER FINDS NEW BARLEYS AND WHEATS

Naked barley, whose peculiar virtue is that it is easily threshed, is one of the desirable agricultural immigrants brought back by Dr. Harry V. Harlan, plant explorer of the U. S. Department of Agriculture, who has just returned from a year's journey to India, Abyssinia, and Egypt. He was unsuccessful in finding any new varieties of bald or beardless barleys, but brought back a general assortment of foreign varieties of small grains and legumes.

While unwhiskered barleys are known in this country, having been introduced from India many years ago, they are not of the most suitable varieties, and Dr. Harlan hoped to find some of the variants of the species which would serve for breeding crosses. These were said to be found in Nepal in India, but Harlan learned that travel to that rather remote region was so slow and uncertain that if he tried to make the trip he would be in danger of missing the trip to Abyssinia on the way home. But while in India he found some very early varieties of barley, as well as early wheat and legumes, seeds of which he brought along.

The "naked" barley, or barley which is easily separated from the glumes which enwrap the grain, and is therefore easily threshed, was found in Abyssinia and Egypt. Varieties of emmer, also easily threshed, were found. Emmer is

a small grain used in Abyssinia for both forage and bread, but in most varieties the difficulty in threshing it makes it unsuitable for bread making. It is grown to a slight extent in this country. Interesting varieties of field peas, thought to be new to this country, were also found.

The natives of Abyssinia subsist chiefly on meat and bread, Dr. Harlan said. Asked where they got the vitamins which other races secure from dairy products, fruits, and fresh vegetables, Dr. Harlan said they used milk to some extent, but ate their meat mostly raw, in many cases devouring the slain animals while they were still warm, possibly by this means getting the vitamins from the fresh meat. This diet, while simplifying domestic economy, makes the Abyssinians very subject to tape-worm, Dr. Harlan said. They use honey for sweetening and make a powerful drink from it.

Dr. Harlan was in the Punjab in India during the hot season last summer, and said for days the temperature never fell below 100 degrees, day or night.

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MILK VITAMINS KILLED BY HEATING IN COPPER

The use of copper utensils in the pasteurization of milk may cause destruction of the scurvy-preventing vitamin, says a report to the American Medical Association by Dr. Alfred F. Hess and Mildred Weinstock of the College of Physicians and Surgeons of Columbia University. The copper may be present in quantities far too small to cause copper poisoning and yet be sufficient to destroy practically all of this essential vitamin.

This anti-scorbutic vitamin C is known to be destroyed by oxidation. This was proved by heating milk to which a small quantity of hydrogen peroxide, an efficient oxidizer, had been added. This is suggested by Dr. Hess and Miss Weinstock as a possible reason for the increase in infantile scurvy in Berlin, where small amounts of hydrogen peroxide have been legally permitted as a preservative for milk.

The experiments just completed by these investigators indicate that the destruction of the vitamin is greatly increased in the presence of a chemical substance which acts as a catalyzer, or substance which by its presence increases the intensity of chemical reactions. A series of animal experiments showed that copper acts as such a catalyzer and in its presence the vitamin was greatly reduced by heating. since milk is frequently pasteurized in copper utensils, and since it is one of the chief sources of this important vitamin, the investigators declare that this discovery is an important one and should receive careful attention.

About 2,800,000 tons of newsprint paper were used in the United States last year.
