



### Breadfruit's Cousin

**WE WEAVE** glamour around the breadfruit of South Sea Island stories, yet practically ignore a rather close relative that is native to our own land. It is as though we had the second cousin of a maharajah living in our own block, but paid no attention to him because he was born in America and spoke with a Yankee accent.

Or perhaps an Ozarkian accent would hit the analogy a little closer, for our cousin of the breadfruit is the Osage orange, known also as mock orange and simply as "hedge." The Osage orange has its present center of distribution in the corner of the country where Missouri, Arkansas, and Oklahoma come together.

The kinship between Osage orange and breadfruit is easily evident to anyone who has ever seen both, even though not a botanist. The structure is essentially the same: a composite fruit formed of a multitude of narrow, close-fitting wedges, or rather prisms, their tapered ends coming together at a common point in the center, with the tough caps over the outer ends set edge to edge to form a continuous coat.

Here, however, the resemblance ceases. For the fruit of the Osage orange is anything but edible. It is intolerably bitter, and reputed to be poisonous. Even its scent affects some persons unpleasantly. It is distinctly not a plant to be cultivated for its fruit.

Widely cultivated, though, it has been. During pioneer farming days in the Midwest, and to a considerable extent in the East as well, farms were fenced with miles and miles of Osage orange hedge. Its quick growth, rather attractive glossy foliage, stout stems and terrific thorns combined to make it a very good shrub for that purpose.

Then came the invention of barbed wire, and at the same time the rapid rise in Western land prices, so that a farmer could no longer spare from crop production the rather considerable strip of land alongside the hedge, where its shade and the demands of its roots combined to interdict the growth of crops. So out came the miles of Osage hedges, dug up by the men who planted them or by their sons and grandsons.

There were even "hedge-jerking" rigs, with giant plows pulled by steel cables around a steam winch, that contractors took from farm to farm, cleaning up half a mile of hedge in a day. They plowed themselves out of a job eventually, of course, but in the meantime they had pretty well sent the Osage hedge to Limbo. You will still find surviving stretches of old hedge here and there in the country, but nobody ever sets out a new one any more. Osage "fence" definitely belongs to the past.

*Science News Letter, August 29, 1936*

#### WILDLIFE PRESERVATION

### Balance Wild Duck Losses By New Increases

**ALTHOUGH** wild ducks have perished by the hundreds in the drought area of the north central plains, the reported duck increase in Canada may offset the loss, says the U. S. Biological Survey.

*Science News Letter, August 29, 1936*

#### PALEONTOLOGY

## Fat Content of "Fossil" Bones Helps Fix Their Age

**DETERMINING** the fat content of so-called "fossil" bones is one way of fixing the age of archaeological discoveries, according to Dr. Josef Gangl of Vienna, Austria.

It is a lucky chance that the alterations which fatty substances undergo when buried are exceedingly slow—so slow that even for geological periods they may be considered proportional to the total time elapsed, says Dr. Gangl. The accuracy of the method is such as to allow science to fix the age of bones within 100 years when bones are thousands of years old.

This method of age determination, which, of course has been tested with many bones of well-known age, enabled

#### MEDICINE

### X-Rays Show Long Past Injuries of Skull in Adults

**SKULL** fractures show up just as well in X-ray pictures taken months or sometimes even years after the injury as they do immediately after the accident.

This fact, of great importance in settling legal disputes regarding injuries, is revealed by X-ray pictures taken of 100 patients with fractured skulls over a period of from one to ten years after injury. The investigation was made by two physicians, Drs. Mark Albert Glaser and Edward S. Blaine, Los Angeles.

In children, evidence of the fracture disappears from the X-ray plates sooner than it does in adults. The line of a simple linear fracture in children under 5 years old is likely to disappear completely within six months. In adults, it generally does not begin to fade until 18 months to two years after the fracture. Where the fracture is a crushing in of the skull rather than a linear split, the healing is more rapid and the line of the fracture may not be visible on the X-ray after about one year.

In cases where the bone fragments have been removed or where part of the bone has been taken away in a surgical operation, the bone never fills in or becomes smaller—the only change is a rounding of the edges.

*Science News Letter, August 29, 1936*

Dr. Gangl to solve a big puzzle of prehistoric science. He could pronounce a decisive verdict in the much-discussed case of the "Bone Awl of Maria Saal," found near Klagenfurt, Austria, in 1924.

The bone owes a world-wide fame to some runic letters incised in it. Nobody was able to decipher these letters. They were thought to be some magic script from the last centuries before our era, and they seemed to prove the southern origin of runic script in general. Therefore the Bone Awl of Maria Saal was treated as a most important finding. It was, however, easy for Dr. Gangl to show that the grease adhering to this bone was obviously recent grease and consequently the bone itself recent.

*Science News Letter, August 29, 1936*