the Portales Complex. Although these people apparently lived mostly on wild foods, a large number of fragments of various kinds of domesticated squash and beans were also found. This is the time during which agriculture was first introduced.

Following the Portales people was the Guerra Complex of occupations six to eight. The Guerra people had corn.

This first corn was of the same type as the 5,500-year-old corn found in Bat Cave, New Mexico. Corn was added to the diet of squash and beans, but wild foods still made up the largest part of the menu.

### **Agriculture Important**

It was in occupation nine that agriculture really began to assume importance. Here the cultivated food remains were just about as numerous as the wild plant remains. Plant remains included not only corn of a later variety than that in Guerra level and gourds, beans and squash, but cotton was also found.

Of particular interest to the story of corn was the finding of a few grains of teocinte. Teocinte is a grass. Prof. Paul C. Mangelsdorf, botanist of Harvard University, has found evidence that early Americans crossed teocinte with primitive corn to improve the food capacity of the latter plant. Dr. MacNeish says of his finds in occupa-

"I believe we may have here actual evidence of the importation or breeding of this grass for just that purpose."

With the improved corn, there were other important traces of forward steps in civilization. Cotton cloth which may have been woven on a loom was found. There were also nets, string, net bags, baskets and woven water bottles, twilled mats with

or without woven designs. Buried dead were found in this layer, the bodies placed carefully in grass-lined pits and wrapped in mats tied up with rope. Some of the pottery found may have belonged to this period.

#### **Cigarette Butts Found**

In occupation 10, still further advances were found. Projectile points had sawtooth edges. Manos and metates were discovered, as were fragments of clay pipes. One of the most distinctive features of this layer was cigarette butts. The cigarettes of that day were made of cane filled with tobacco. Then there were cotton cloths with colored designs, large containers made with wooden rims and net bottoms, wooden pegs and evidence that the dead were buried with gifts including pottery.

The Romero Cave resident of that day got most of his food from agriculture. At that time, the farmer raised not only corn, beans, squash and gourds, but also tobacco, chili and cotton. Corn now was of a number of races, most of which had been bred from teocinte.

Pottery of that day was polished and had engraved decorations.

Other later occupations brought the story of man in Central America and his corn up to historic times.

Dr. MacNeish has by no means finished the story as found in these Mexican caves. He will be back there this year to piece together the material for new chapters. By that time he will perhaps have a carbon dating for the introduction and early improvement of corn as well as the comparative dates provided by the strata in which they were found.

Science News Letter, August 28, 1954

DENTISTRY

# Correcting "Buck Teeth"

➤ CORRECTION OF crooked teeth, "buck teeth," and jaw malformations should be started before a child reaches his teens, advises Dr. Alton W. Moore of the University of Washington School of Dentistry, Seattle.

Girls should have necessary corrective treatment even earlier than boys, because a girl matures more rapidly. By the time a girl is 13 years old, her facial pattern is set. In a boy, the process is not completed until several years later.

Speaking at a meeting of a dental society, the Society for the Advancement of Orthodontic Practice and Research, Dr. Moore

"Corrective treatment for protruding teeth can be started in most cases before a child is 10 years old. Too often, treatment is delayed until he had reached the end of his growing cycle, on the theory that the results of earlier treatment would be nullified by subsequent growth.

'Our studies have shown that the growth and development of the facial pattern can be favorably influenced and modified by treatment during the child's period of rapid growth. In many cases, early treatment has made it unnecessary to use more drastic methods later."

Dr. Moore listed four factors for the successful treatment of protruding teeth. These involve inhibiting the forward growth of the upper dental arch, promoting the forward growth of the lower arch, maintaining the proper occlusion of the teeth, and creating necessary space by selective extractions.

'One important advantage of early treatment is that by controlling the growth of the facial pattern, fewer extractions of good teeth are necessary," Dr. Moore said.

The research was conducted on more than 50 patients at the Children's Dental Clinic at the University over a period of several vears.

Science News Letter, August 28, 1954

Specimens of the leatherback, a marine turtle considered the largest modern reptile, have weighed almost 1,500 pounds and measured eight feet in length.

INVENTION

## Patent Awarded for Shrimp Cleaning Machine

➤ A "UNIQUE and valuable" machine in which shrimp are loaded and cleaned, without the meat ever again being touched by human hand, has been awarded patent number 2,685,705.

The device will make shrimp processing at least ten times faster than the present average of 70 to 90 pounds per day now cleaned by a single operator, the inventors claim. They are Philip A. Streich, Philadelphia, and Emmitte P. Tait, Atlanta, and

Virgil R. Clark, Decatur, Ga.

They assigned patent rights to the Tait-Clark-Streich Machinery Corp. of Decatur, Ga. The recent rapid rise of the frozen food industry inspired development of the shrimp cleaning machine.

It consists of a pair of conveyor chains, the shrimp being loaded onto one of the chains, then passed between a saw and stripping brush for stripping and deveining, and finally deposited on a disposal chain which carries the shrimp away from the machine for washing and packing. The last operation can take place in another room, if necessary.

The machine may be constructed in "batteries" or banks in which a single power source can be used to rotate all the shafts simultaneously.

Science News Letter, August 28, 1954

## **HOW TO RETIRE SOONER**

by earning a small income

Government figures prove you need much less money if you retire to the country, and now a new book shows over and over again how to make the money you do need, whether you retire with or without a lot of money in the bank. Fred Tyler's HOW TO MAKE A LIVING IN THE COUNTRY is "virtually a blue print for the retired man or woman wanting to make their own way," says the Chicago Daily News.

With this book, you learn:

—how to make the most income from tourist cabins and a trailer camp (including where to locate for the most business at highest rentals);

—what to do to earn \$3000 a year from a week end roadstand (even if you never raise a green

ena rodustante thing); -how 500 chickens will bring you a fine living on your own bit of land; -the best way known to learn which business to

start;

—the only sure way to get a good buy in a business put up for sale;
—how a \$2500 investment in a part-time business will bring you all the income a retired family may need in the country;
—the dozens and dozens of other dignified, easy to start part-time enterprises that pay well in the country (from renting out equipment for week end farming to dozens of other profitable ideas).

Read this 75,000 word book now. Check off

the ways you'd like to earn a small income in See how easily they make retirethe country. ment possible for you—now. Despite its big size, HOW TO MAKE A LIVING IN THE COUNTRY costs only \$1. Money back, of course, if not

For your copy, simply send this ad with your name and address and \$1 bill to HARIAN PUB-LICATIONS, 22 SCRANTON AVE., GREENLAWN (LONG ISLAND), NEW YORK.