

flat-bodied and otherwise misshapen: some of them were as much as six feet long. Their claws, however, were disproportionately small, if we take the lobster as our standard of beauty.

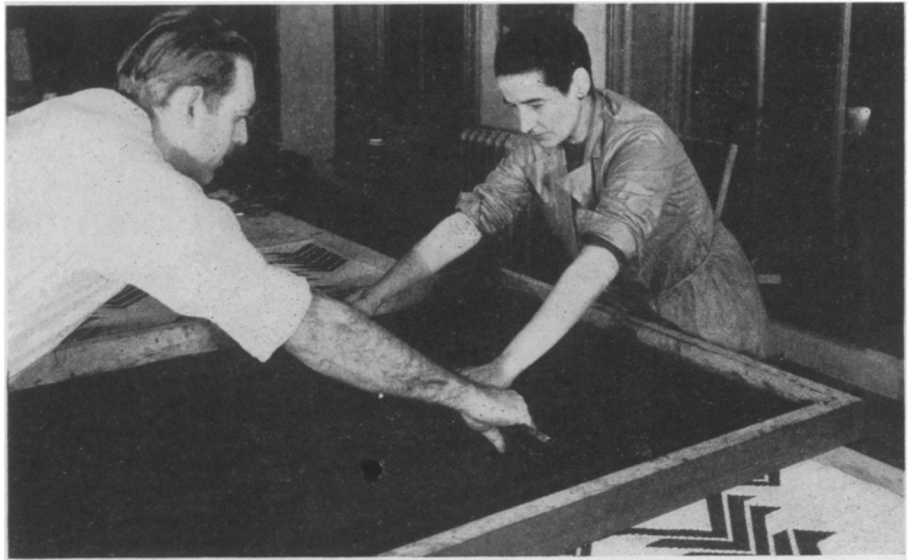
The bulk of the population of the Lost World of Beartooth Butte, the common people of this aquatic settlement, was made up of smaller, shell-cased, wide-headed fish-like creatures that were not yet fish—the then contemporary ancestors, the ostracoderms. (That four-jointed word means "shell-skins," and describes them very neatly). These poor folk were the multitudinous meek of the Devonian "Lost World." They were bottom-creepers, mud-shovellers; they not unlikely lived on the scraps and leavings that fell from the tables of the sharks and the arthrodiere. And in the end, they did not inherit the earth: the last ostracoderm perished ages ago, and the sharks are still with us.

That completes the census of the "Lost World" of Beartooth Butte, so far as animals are concerned. The story of the plants is told much more quickly. All plant remains found belong to one family of land plants, a strange growth with curled stem and no leaves, that probably grew on the marshy edges as cattails and reeds grow on the shores of estuaries today. They were of the group known as the psilophytales, earliest and most primitive of all land plants, and regarded by Dr. Dorf as the undoubted ancestors of all the manifold land-dwelling vegetation of later times.

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*Science News Letter, April 6, 1935*

British tests show that certain kinds of trees attain a diameter of only 4 inches after 16 years of growth in Scotland or Canada; whereas in Australia's climate such trees reach 12 inches in nine years.



**BLOCK PRINTING**

*A printer assists Miss Reeves in block printing a design adapted from art of Mayan Indians in Guatemala.*

ARCHAEOLOGY—TEXTILES

## Designers Borrow Patterns From Ancient America

**T**EXTILE designers are discovering ancient America.

In a search for novelty and inspiration, artists who pattern silks and other fabrics have struck upon the Guatemalan highlands, where descendants of the famous ancient Mayan Indians are still living. Ancestors of these Indians reached the highest peak of prehistoric American civilization, in architecture, art, and learning. The modern Mayas live simply but in their villages may be seen distinctive American art designs adorning shirts, skirts, headbands, blouses and

blankets. Some of the designs are old, traditional; others modern.

The wave of interest had its start last spring when the Carnegie Institution of Washington sent Miss Ruth Reeves, New York textile design artist, to Guatemala to study ancient and modern textiles and costumes. The collection of textiles which Miss Reeves brought back, and costumes collected by Edith Ricketson of the Institution staff, are now being shown at art institutes around the country, under auspices of the National Alliance of Art and Industry.

Thus modern science and art return a compliment which Indians paid to white men four hundred years ago—the compliment of imitating or borrowing. Indians, dazzled by Spanish costumes in their midst, adapted fashions and designs. The conventionalized double-headed eagle on Guatemalan Indian textiles may have been a borrowing from the Hapsburg coat of arms, royal emblem of the Spanish colonial official. So, at least some people have interpreted this Indian design; though others believe the two-headed birds to be a native art idea much older than Spanish Conquest days.



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The Indians borrowed, but they did not weaken their own vivid and individual art of color and design. In highland villages weavers still employ symbols of ancient Mayan gods and nature signs, and use symbolic colors that their ancestors used: yellow symbolizing food, color of corn; red for blood and sacrifice; blue for royalty; black for weapons of the shiny volcanic glass called obsidian.

From her study of Indian needlework and weaving, Miss Reeves and her associates have begun the process of adaptation, to show the public how Indian designs can be used. Designs from the Indian motifs have been worked into hand-

woven and hand-printed fabrics. Others have been put into machine production.

Practical use of the study is already evident. There remains another value in this showing of Indian art. Says the Carnegie Institution:

"It is believed that opportunity to see and examine this collection of superb specimens of the handiwork of these representatives of an ancient race will go far toward proving that the Americas have a cultural past which compares favorably in many respects with that of the first great civilized societies that developed in the ancient Near East.

*Science News Letter, April 6, 1935*

## ARCHAEOLOGY

## Raise Pot Lid, Find Dinner Left on Stove 6,000 Years

**R**AISING a cooking pot lid, archaeologists exploring the oldest city yet discovered in the world have found meat bones still in the pot, says a report just received from Tepe Gawra, Mesopotamia, by the University Museum in Philadelphia.

This uneaten dinner, left in the oven for 6,000 years, reveals how sudden was the downfall of Tepe Gawra's twelfth city, the oldest yet probed. A heavy layer of ashes and charred refuse shows that the city was burned, probably by its enemies.

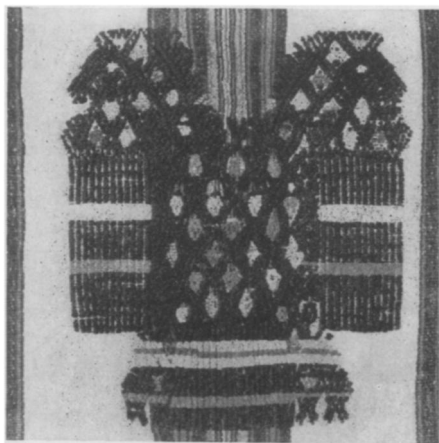
This twelfth level is about three centuries older than the buried settlement found last month at Tepe Gawra, says the report from Charles Bache, field director, of the joint expedition to Tepe Gawra from the University Museum of the University of Pennsylvania and the American School of Oriental Research.

Mr. Bache expects to push the history of the site back through eight earlier levels, which are known to exist from exploratory trenches.

These nine earliest cities, including the one now being unearthed, were all built by "the painted pottery peoples," as the archaeologists call them. Striking geometric designs painted on clay household wares are the conspicuous badge of their culture. These "painted pottery peoples" are known to have swept like a conquering horde from the East over Persia, India, and Mesopotamia, some six thousand years before Christ. Tepe Gawra, with its long series of their cities, is counted on to reveal the customs, household crafts, architecture, perhaps the racial type of these little known city-builders of the ancient world.

Builders of the 4000 B.C. Tepe Gawra were still in the Neolithic or New Stone Age, totally unacquainted with metal implements, reports Mr. Bache. As recently as ten years ago it was believed that no Neolithic culture was to be found in Mesopotamia. The Stone Age city just discovered proves superior in architecture to the three settlements which followed it.

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AN AMERICAN EAGLE

Whether Indians of Middle America borrowed this two-headed eagle design from the Hapsburg coat of arms, or whether they invented the bird themselves long before Spaniards arrived in America, is controversial. This material from the village of Santo Tomas Chichicastenango, Guatemala, has the double eagle embroidered in red, yellow, and white.

## PUBLIC HEALTH

## Says School Funds Wasted Without Health Care

**T**HE POOR school work and low intelligence levels of children handicapped by physical defects, such as poor teeth and posture, are an argument for state medicine or some form of social insurance against sickness, in the opinion of Melissa Brafon Stedman of the Bell High School, Los Angeles.

Pouring money into education is sheer waste unless at the same time medical and dental care are provided so that students may be healthy enough to receive full value from schooling.

Her opinion regarding the need for attention to the child's health as well as his education is based on her findings in a survey of 450 high school pupils. Healthy children are more intelligent and get better grades than the physically handicapped, she found. Her report will be published in the *Journal of Applied Psychology*.

Over 91 per cent. of the group had one or more health defects and the average grades of these pupils were only 76 per cent of the average attained by the healthy children. There was also a difference of 4 points in intelligence in favor of the healthier pupils. Despite their abilities the children with no physical defects were distinctly in the minority. There were only 39 of them.

Rating second with respect to grades were 312 children with postural and orthopedic defects. They dropped to fourth place in intelligence while the 128 possessing defective tonsils and

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