



OLD ROMAN SETTLEMENT—This massive masonry is part of the remains of the Capitolium of Cosa. Rising in the background are the outer walls of the once enclosed part of a temple. On the left is a converted anti-aircraft barracks that serves as work and storerooms for the archaeologists.

MEDICINE

Noses and Ears to Order

➤ **NOSES** and ears by mail order are the latest aid to patients who have lost an ear or nose through injury or disease.

The mail-order ears and noses are replacements for artificial ones that have deteriorated or lost their lifelike coloring. They are possible through a permanent mold method devised by Dr. Arthur H. Bulbulian of the Mayo Clinic in Rochester, Minn. He has been constructing artificial noses and ears, medically known as prostheses, since 1936, and has made them for nearly 200 patients.

Lack of an ideal artificial skin material for these devices is the chief technical handicap yet to be overcome, he reports. Plastics of a pliable type and prevulcanized latex are the two types of material he is now using. They can be made to look very lifelike but have the disadvantage of deteriorating and losing their lifelike coloring in time, often after a few months' use.

To overcome this, he devised the permanent mold method by which the devices can be duplicated quickly, accurately and economically. Every patient for whom he makes an artificial nose or ear has a permanent metal or dental stone mold made and kept on file with the technical information needed to make an exact duplicate of the first prosthesis he got. The patient can send for a new one without having to go to the clinic for it.

Artificial noses are needed chiefly by patients who had to have most of their own noses removed because of cancer. Ears are replaced for patients who lost theirs through accidental injury or who were born with malformed ears. The tags of malformed or injured ears are removed by surgery and then the artificial ones are made.

Some patients can have skin and tissue taken from their own bodies to have damaged ears or noses reconstructed through plastic surgery. But patients with poor general health, with skin devitalized by X-ray treatment for a cancer, old patients and those who have to wait for plastic surgery until the doctor is sure the cancer will not come back need the prosthetic replacements.

Nose replacements are more important than ear replacements, Dr. Bulbulian points out in a report in the *PROCEEDINGS OF THE STAFF MEETINGS OF THE MAYO CLINIC*. Women seldom need artificial ears because they can cover the site of the ear deformity with their hair. Men need them depending on 1. whether the remaining ear sticks out or lies flat to the head, 2. whether or not his public appearance demands it (Dr. Bulbulian reports one made for a minister, for example), and 3. whether they wear eyeglasses which need a place for the bow to rest.

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ARCHAEOLOGY

U. S. Scientists Explore Ruins of Old Roman Town

➤ **AMERICAN** Air Force reconnaissance photographs taken during the war have proved exceedingly helpful to American scientists exploring the ruins of an Italian town that died and was deserted by its people 2,000 years ago. The story of this place, a hill town named Cosa in Etruria, was told by Prof. Frank E. Brown of the American Academy in Rome, in the journal *ARCHAEOLOGY* (Spring) published in New York.

Cosa was not a large town; its present ruins cover an area of only a little more than 33 acres. But it had all the features of a complete Roman city: walls, gates, streets, a forum, temples, public buildings, private houses. Roman life followed the same pattern there that it did in the larger frame of the capital itself.

The town existed as a Roman settlement from 273 B. C. Before that, however, there was a town on the same site that belonged to the pre-Roman civilization known as Etruscan. It was abandoned by its population some time during the first century B. C.

In addition to the air photographs, the American exploring party has had a ground survey made, with markers set in concrete to guide the digging that will get under way during the coming season. This was by no means the first concrete poured in Cosa, however: preliminary explorations showed that the Romans had used their own type of concrete in buildings put up as long ago as the second century B. C.

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CHEMISTRY

TCA, New Weed-Killer, Is Effective Against Grasses

➤ **TCA** joins 2,4-D in man's war against weeds. This new killing compound, which spells out in full as Tri-Chloro-Acetic acid, is recommended for use against certain weed grasses, such as quack-grass and Johnson grass, as well as against prickly-pear cactus.

Its value for this purpose was discovered by Du Pont research biologists at their pest control research laboratories. Subsequently, tests were made at the Kansas State Agricultural Experiment Station by J. W. Zahnley, station agronomist, and G. L. McCall, a Du Pont Company biologist.

TCA is recommended especially for use on grass and cactus patches that have resisted other means of eradication. It creates a kind of temporary desert, where nothing at all will grow for from one to three months. For this reason it is distinctly not recommended for use on lawns or golf courses. The temporary soil sterility which it creates, however, passes off after a longer or shorter time, depending on the rainfall.

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