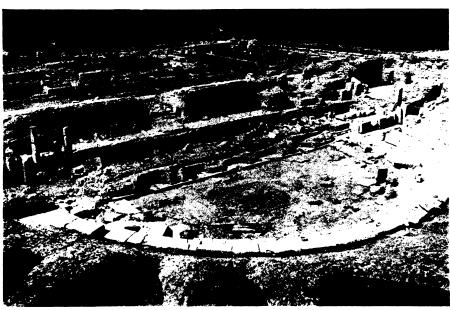
valuable known in the commercial field. A price of \$150 is asked for a gram. At this rate a teaspoonful is worth nearly \$600; a quart, \$150,000. Princeton now has on hand about a glassful and is about to raise its production to a thimbleful a day.

What effect the drinking of heavy water will have on animals and human beings is not yet known, but it is believed that it may bring on a fever, and therefore might be useful in diseases that are treated by raising body temperatures.

Science News Letter, October 14, 1933



DOWN TOWN DISTRICT

Looking over the ruins of Minturno, Italy, where an American expedition is finding much buried history. The theater in the foreground was a gift to the city from the Emperor Augustus, as a peace offering because the city was aroused over having to look out for a detachment of returned soldiers. The outer wall of the theater was divided into 24 shops, arranged in a semi-circular arcade. One of the shops was converted into a Christian chapel and a bronze tablet with small Christian crosses has been unearthed in it.

RADIOLOGY

## Birthmarks Permanently and Safely Treated By Radium

OLES, birthmarks and similar masses which are known to physicians under the name of nevi may for the most part be safely and permanently removed by radium treatment, it appears from the experience of Dr. William S. Newcomet, Philadelphia radiologist, Dr. Newcomet reported to the American Congress of Radiology the results he had obtained in treating such cases during the last fifteen years.

"There is a well grounded idea existing among the laity that to treat a nevus is to invite malignancy," said Dr. Newcomet. "Yet it is a well established fact that many cases of malignancy start from nevi. Unfortunately, even with the publicity that has been given to this

subject, there still remains, among a certain class, a constant fear that it is dangerous to remove nevi."

Dr. Newcomet prefers radium to X-rays for treating these cases on account of the susceptibility of the surrounding parts of the body and also because it is easier to confine the effects of radium to a more limited area. In fact, he stated that these marks should always be irradiated with radium, never with X-rays. Occasionally the radium treatment must be followed by surgery to remove scars in the case of very large marks. Sometimes when the patient has been treated in childhood, some slight deformity has resulted in adult life from lack of development of the affected

part or because some of the natural tissues were replaced by the tumor mass. These cases are comparatively rare, Dr. Newcomet finds.

"In the majority of cases results of treatment were very satisfactory," he declared. "The marks or tumor masses had disappeared; the site was practically normal and without scar. No other method could accomplish so much and, while the treatment is not so rapid as some other method, results are better.

"These lesions are not dangerous to life, therefore there is no justification for the employment of any dangerous procedure. In conclusion the fact is stressed that in all cases the mild application of radium may bring about a diminution of the tumor mass and it should always be used previous to operation. . ."

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ARCHAEOLOGY

## Ruins Shed Light On Rome's "Bonus Army"

RCHAEOLOGISTS excavating the ruins of Minturno, Italy, have dug up relics of evidence showing how the Roman Empire solved one "bonus army" problem. The evidence is found in the city's water pipe system which has been investigated by the University of Pennsylvania Museum expedition to Minturno, led by Dr. Jotham Johnson.

Dr. Johnson, who has just returned to Philadelphia, said that a length of lead water pipe was found bearing the name of the slave who made it. It dates back to a period in the career of Augustus between 40 B.C. and 14 A.D. The Emperor Augustus had sent some returned soldiers, "bonus army" men as it were, to the vicinity of Minturno, about 100 miles south of Rome. This aroused the people of Minturno to great discord and dissatisfaction. To appease the city, the Emperor presented it with an acqueduct and theater. The city thus acquired "modern" plumbing, with water under pressure in the pipes. Dr. Johnson remarks that it is significant that the wells previously used, were filled in.

The lead pipes were made from sheets folded over and clamped. The lengths as originally found varied from six to twenty feet according to diameter. About 18 tons of this ancient pipe were excavated by peasants during the World War and sold as scrap metal.