

# To Excavate Big Assyrian Mound

*Archæology*

## Americans Will Search Palace of Biblical King

THE University of Pennsylvania Museum and the American School of Oriental Research in Bagdad have joined in equipping an archæological expedition which will carry on excavations in a hitherto little known section of Kurdistan, in northern Mesopotamia, Horace H. F. Jayne, director of the University Museum, has just announced.

"The site which has been chosen for excavation," Mr. Jayne states, "is known as Tell Billa, one of the largest and most imposing mounds in the land of ancient Assyria. It is situated about fifteen miles northeast of Mosul and about five miles east of the famous ruins of Khorsabad.

"Tell Billa first attracted the attention of Dr. Speiser in 1926 when he was making an archæological survey of northern Iraq. A surface examination disclosed that the huge

mound contained extensive remains of the prehistoric period, going back to the original inhabitants of Mesopotamia and the neighboring regions of the Near East. Furthermore, the historical period is also well represented.

"The site is of particular archæological interest in that a fragment of an inscribed brick picked up on the mound bore the seal of Sennacherib, the Assyrian king of biblical fame, making it clear that the Tell contains one of the summer palaces of the great ruler.

"Sennacherib reigned in Assyria from 705 B. C. to 681 B. C. He laid unsuccessful siege to Jerusalem, his army being decimated by a plague in 689 B. C. He razed Babylon to the ground. It is the fall of Sennacherib's army before Jerusalem that Byron celebrates in his poem 'The Destruction of Sennacherib.'

"Tell Billa was occupied from about 4000 B. C., till the fall of the Assyrian Empire in 606 B. C. It is likely, therefore, to yield sculptures from the Golden Age of Assyrian art as well as prehistoric remains of the aboriginal population of the land. In any case it is certain to furnish important scientific information relative to the early history of Mesopotamia."

The expedition, which will begin work in November of this year, will be headed by Dr. Ephraim A. Speiser, assistant professor of Semitics at the University of Pennsylvania, and the staff will include Dr. C. S. Fisher, who has been engaged in archæological research for the past thirty years, Dr. S. N. Kramer, who holds a fellowship from the American Council of Learned Societies, and A. H. Detweiler, an architect.

*Science News-Letter, July 19, 1930*

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### Solar Prominences—Continued

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more widely opened, without the difficulty of fogging and loss of contrast experienced with the other lines. The result was that the first photograph made in this way proved a success. The prominence drifted slowly across a narrow tangential slit, and behind the second slit, at the focus of the observing telescope, a small cylinder with its axis parallel to the slit, carried a strip of sensitive film at a speed equal to that of the moving solar image. A smooth and uniform motion of the cylinder was produced by a small clepsydra. The photograph showed the form of the prominence very well, and with considerable contrast. It was then concluded, on account of the great width of the dark shades at H and K, that for prominences of not too great size (the image of the sun on the slit plate is two inches in diameter) it would only be necessary to use a wide slit, and give a short exposure. . .

Although this method will serve to photograph the invisible prominences it is evident that there are two objections to it. In the first place it would be very troublesome to find invisible prominences, and to do so it would be necessary to take

a large number of photographs with the slit tangent at various points on the limb. This could be remedied by using a curved or ring slit. Again, prominences surpassing a certain size could not be photographed, though for single narrow prominences reaching to a considerable elevation it would be desirable to make the direction of the slit coincide with the direction of the longest axis of the prominence, the direct light from the limb being excluded by a small strip of metal, sliding under the slit. To overcome all of these difficulties I have devised a new form of apparatus, which will much excel the rotating cylinder in ease of adjustment, and allow the use of ordinary glass plates, instead of the celluloid film, which decomposes if kept for any length of time. A new form of clepsydra, of much larger size and with an improved valve, will replace the smaller one before used. The equatorial is also to be supplied with a 12-inch photographic object glass, and a new tube parallel to the old one, so that by a suitable form of cell, either object glass may readily be used on either tube, as the spectroscope is too large and heavy to be easily moved.

*Science News-Letter, July 19, 1930*

### Soil Congress

PREPARATIONS are rapidly being completed for the meeting of the Second International Soil Science Congress in Leningrad and in Moscow, July 20 to 31. During the first six days the sessions will be held in Leningrad, and the rest of the time they will take place in the capital. In addition to the scientific papers and addresses, there will be a series of short excursions into the country around both cities, giving the delegates an opportunity to see various types of soil as they exist in Russia and to observe Russian methods of meeting the technical problems of soil utilization in forest, agricultural and grazing lands, and in the reclamation of marshes and other waste areas.

The Congress will meet under the presidency of one of the most noted of Russian soil scientists, Dr. C. C. Gedroiz. In addition to the large number of Russian workers who will be in attendance, about 200 foreign soil scientists, representing 33 European, Asiatic and American countries, will also be present.

After the adjournment of the formal sessions, there will be a 29-day excursion by rail and river boat and Black Sea steamer.

*Soils Science*

*Science News-Letter, July 19, 1930*