

In emphasizing the importance of this investigation, it was pointed out that five-sevenths of the surface of our globe is covered by the waters of the seas. The water area can produce far more food than all the land can ever be made to yield, and one of the purposes of the expedition will probably be to take an inventory of such food possibilities which will be needed if our population continues to increase. Fish, mollusks, and marine animals are dependent upon the microscopic plants that grow in the sea as far down as the sunlight penetrates. The floating mass of minute forms of vegetable and animal life, collectively called "plankton", varies greatly with slight changes in the temperature and composition of the sea water, according to laws not yet discovered but which the proposed expedition may aid in understanding.

The exploring ship will map the ocean bottom by means of the new sonic finder which determines depths by measuring the lapsed time between sending down a sound and getting back the echo from the bottom. By this instrument, soundings can be made by a ship in motion and much more easily and quickly than by the old way of heaving the lead.

The geologists of the conference expressed the hope that a study of the sediment being deposited on the ocean bed would lead to greater knowledge as to the age of the earth, the origin of oil and shale deposits, and the balance of oceanic and continental areas which is responsible for earthquakes.

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GREEKS USED SLOPING ROOF 3000 YEARS AGO

Crown Prince Gustaf Adolf, heading the Swedish archaeological expedition which is excavating the ancient city of Asine, Greece, has unearthed evidence that the so-called saddle-roof was known in Greece more than 3,000 years ago. The architecture of that Mycenaean, or pre-Hellenic, period, is partly illustrated by fragments and ruins found at Mycenae. It has long been a question whether these houses had flat or sloping roofs, but word has just come from Greece that the Swedes at Asine have discovered and explored a tomb, which no one has entered or disturbed for 3,000 years, and have found that this tomb is in the shape of a house about 24 feet square cut into the rock, with the top cut into the exact form of a saddle-roof, with two sloping sides, and gables at the ends.

The Crown Prince's expedition, which has now been at work a number of years, has just completed the spring term of excavation, and is returning to Sweden in order to make a scientific study of the treasures found. Up to date, more than 500,000 important treasures and fragments have been found, which are being classified and studied at Lund University by special permission of the Greek government, to which the bulk of the finds must eventually be returned. The finds include decorated vases, funeral urns, gold ornaments, silver and copper coins, etc, which illustrate the civilization and art during thousands of years of history in Asine. This city, situated on the Greek Peloponnesus, flourished and fell a

number of times during the pre-Christian era. And a discovery just made by the Swedish expedition points to a surprising gap in its history. The excavators, after having cleared the strata which contained relics dating to about 300 B.C., found that the level directly beneath this contained a layer of relics undoubtedly belonging to a period about 1600 B.C. The scientists are now hoping that other excavations may throw some light on what had happened during the intervening 1,300 years.

One of the most important discoveries made at Asine this year is that of a house which expert archaeologists from other countries pronounce the first house of the geometric period thus far excavated. A description of this house is, however, not now available.

The Swedish expedition will resume its field work in the autumn of this year.

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THE NEW SUNSPOT CYCLE SETS IN

By Isabel M. Lewis,
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Old Sol is rousing himself once more like some huge giant awaking from his slumbers. After passing through a remarkably quiescent state during the sunspot minimum period of a year or more ago, he shows numerous signs of renewed activity

Sunspot groups belonging to the new cycle are now appearing in increasing number and size in high solar latitudes as the spots of the old cycle dwindle away in low solar latitudes. Eruptive solar prominences, flames of incandescent hydrogen, helium and calcium, are more in evidence now than they were at the sunspot minimum and, in general, they rise to greater heights. The bright masses of calcium gas elevated somewhat above the normal solar surface, which give the sun its rice-grained or mottled appearance and which appear in greatest intensity in the vicinity of sunspots, are now more brilliant than formerly and more prevalent.

Then, too, the solar corona observed last fall in Mexico at time of total solar eclipse was brighter and more intricate in its structure than the corona of 1922 observed in Australia at a time when the sun was in an unusually peaceful state. Everything points to the gradual increase in the activity of the sun which will culminate a few years hence - probably during the year 1928 - in the outbursts of the sunspot maximum period when for weeks at a time the surface of the sun will never be free from spots, when great eruptive prominences will frequently attain to heights of many thousand miles and streams of electrons shot forth from the sun with unusual force and intensity will penetrate deep into our own atmosphere and set up magnetic and meteorological disturbances of various kinds.

Much has been learned of the nature of sunspots in the past two decades largely through the daily systematic observations of solar phenomena at observatories where much time is devoted to solar research, as at the Mt. Wilson and