

peroxide was produced at the rate of 70-80 tons per day at Angoulême, and of 25-30 tons at Basens. It was used with a hydrocarbon in the manufacture of "anilite" for aeroplane bombs.

Switzerland, Italy, and Spain delivered machinery and raw materials of various kinds; Chile furnished millions of tons of sodium nitrate; and Norway supplied more than 200,000 tons of ammonium nitrate. England supplied benzene,

naphthalene, and coal, and America sent raw materials and finished explosives.

The tremendous strides made during the war may be appreciated from the following table, giving the productions in tons per day:—

	Before 1914	July, 1917
Poudres B	15	370
Nitro-explosives	6	700
Chlorate explosives	4	176

War-time Archæology.¹

THE volume before us might truly be described as a "war number," for it represents not only the published work of the British School at Athens for the first regular session after the armis-

of Archæology who lost their lives during the war, and the school's distinguished and learned librarian, F. W. Hasluck, who died early in 1920 of a malady caused or aggravated by war service in Greece, are appropriately commemorated, and a brief summary shows the war work which fell to other students. It is a striking and varied record. If the school had done nothing beyond training for eventual public service in Greece and the Near East so large a body of men accustomed to observe accurately, handle native labourers tactfully and economically, and act with expert knowledge and executive efficiency, it would have earned many times over the miserable allowance which

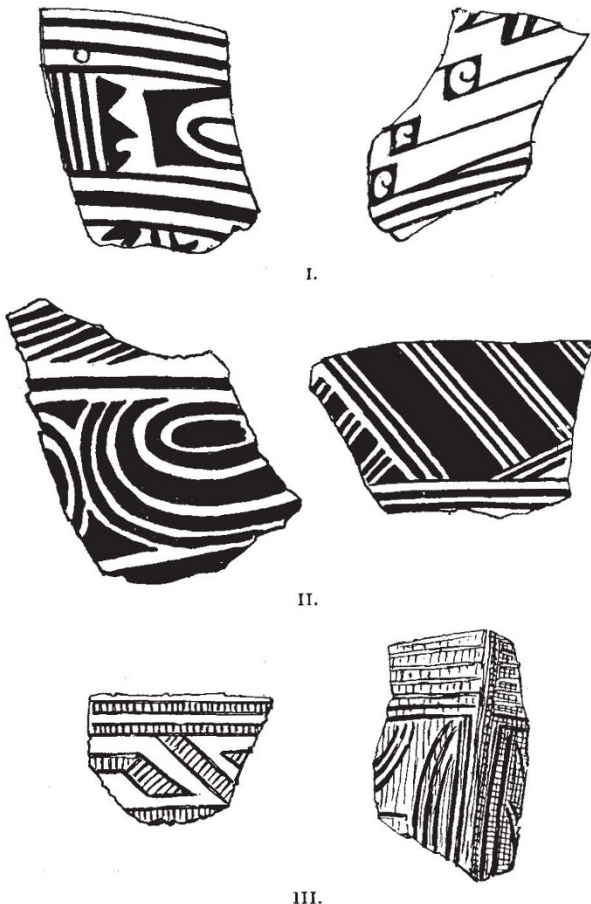


FIG. 1.—Specimens of prehistoric pottery from Dikilitash. I. Dimeni ware; fine reddish biscuit, surface usually bright chestnut; patterns, a mixture of geometrical and curvilinear figures in dull brown paint. II. Black or red biscuit; patterns, geometrical designs, parallel lines in sets of threes, and rows of concentric circles, in dull white paint. III. Coarse black or red biscuit; patterns, similar to those of I. and II. filled in with cross-hatching or painted; specimen on right is painted and incised. From "The Annual of the British School at Athens."

tice, but also mainly the results of observations made while on duty by actual and former students. The seven students of the British School

¹ "The Annual of the British School at Athens." No. xxiii. Session 1918-19. Pp. xvi+260+xvi pls. (London: Macmillan and Co., Ltd., n.d.) Price 30s. net.



FIG. 2.—Wall of ruined fort near Kato Kastelli, in ancient Doris. From "The Annual of the British School at Athens."

it receives annually from the Treasury. Special mention is made in the annual report and in a letter of thanks from the Secretary of State for Foreign Affairs of the services of the director, Mr. A. J. B. Wace, who was attached to the British Legation at Athens during the war while carrying on the school as a hostel for British officers in transit or on duty in Greece.

The greater part of the volume is devoted to the publication, by Prof. E. A. Gardner, Messrs. Carson, Welch, Woodward, and others, of sites, inscriptions, and other antiquities discovered during the British occupation of Salonica. This district was previously very ill-explored, but numerous finds were made in trenching operations and military surveys. The contents of the museum formed at British G.H.Q. have now been presented by the Greek Government to the British

nation, and are placed in the British Museum. The corresponding discoveries in the French zone of occupation, further west, are summarised by Capt. Ch. Picard, now director of the French Archæological School at Athens. The finds in

and raising a number of questions which can only be solved by systematic excavation as soon as local conditions allow.

Mr. M. N. Tod publishes twenty-five Greek inscriptions from the same district, and Mr. A. M. Woodward adds a note on the Byzantine castle of Avret-Hissar (*Gynaikokastro*).

Other war surveys are published by Mr. F. W. G. Foat, who was in charge of "educational work on topography and archæology" at the Y.M.C.A. rest camps in ancient Doris, and on the island of Lemnos by Mr. F. L. W. Sealy, who appends also notes on birds and fishes observed there. Mention should also be made here of Mr. Hasluck's paper on "The Rise of Modern Smyrna."

Further afield, Mr. S. Casson, who was for a while in charge of the Salonica Museum, made good use of a flying visit to the Caucasus and Western Turkestan to describe an extensive series of prehistoric mounds, and to throw fresh light on Herodotus' account of the ancient routes eastward from Scythia.

Other papers, such as those on the fictitious legend of "Saint Gerasimos and the English Admiral" and on "The Folklore of a Turkish Labour Battalion," illustrate more special aspects of research under war conditions, and also the great variety of subjects which are studied by members of the British School at Athens.



FIG. 3.—Ruins at Hagia Sophia in Lemnos. From "The Annual of the British School at Athens."

both zones were of all periods. The most novel illustrate the earlier periods from the Neolithic to the early Iron age, revealing new distributions of pottery styles, and types of primitive figurines,

The Annular Eclipse of April 8.

By DR. A. C. D. CROMMELIN.

THE occurrence of a central solar eclipse within the limits of the British Isles is a somewhat rare event. On the average, one total eclipse is visible here in seventy years, and one annular eclipse in about sixty years. It is, therefore, noteworthy that the decade now commencing supplies examples of both. There has been no British total solar eclipse since 1724, the interval being about three times the average; the last annular eclipse was in 1858. After the present decade there will be totalities in 1999 and 2090, and annularity in 2093.

The central line on April 8 passes across South Uist, just misses Cape Wrath, and then runs a few miles north-west of the Shetlands. The south limit of annularity enters Scotland near Ardnarmurchan Point, and runs nearly parallel to the Caledonian Canal, emerging near Wick. Thus practically the whole of the counties of Ross and Cromarty, Sutherland and Caithness, and a corner of Inverness, together with the Outer Hebrides, Skye, and the Orkneys and Shetlands, will enjoy the annular phase.

The eclipse occurs about 9 a.m., the sun's altitude being about 23° ; the duration of annularity is 111 sec., the width of the annulus of sun-

light being $26''$. This implies that $1/19$ of the sun's disc will remain uncovered; in other words, the illumination will exceed normal sunshine on the planet Jupiter. Remembering what a resplendent object Jupiter appears in the night sky, it will be seen that there will be nothing approaching darkness. Venus will doubtless be readily visible, about 20° east of the sun; it will be a slender crescent, inferior conjunction occurring a fortnight later. The only other object that may possibly be visible is Vega, which will be high in the west, three hours past the meridian.

Dr. J. K. Fotheringham, who has made a special study of the records of ancient eclipses, intends to examine the question of its visibility, as it is important to know what degree of solar obscuration is implied by the frequently recurring phrase, "Stars were visible." It is used, for example, by Thucydides with reference to an eclipse which was not total anywhere.

As regards useful observations that may be made in the coming eclipse, the exact times of the beginning and end of annularity can be accurately noted, especially by the method of projection upon a white screen; they serve to correct the position of the moon; those who cannot deter-