

alkaloids now in progress in the experimental laboratories at Dartford, to show that his inspiring personality was as vigorous as ever after forty years service to the Wellcome Foundation.

Dr. Jowett was not only skilled in chemistry, administration and the management of men: he became a motorist almost as soon as motor-cars were available; he was a keen golfer and an enthusiastic Wagnerian, and in recent years he developed a great interest in local government, becoming a member of the Dartford Borough Council, where as chairman of the Health Committee his administrative experience and scientific knowledge were of great service to his fellow citizens.

Dr. Jowett's friends are not likely to forget his achievements, but they will remember even more vividly his kindly and lovable personality.

WE regret to announce the following deaths:

Prof. F. Breinl, professor of hygiene in the German University of Prague, an authority on bacteriology, on July 29.

Prof. B. G. Cormack, emeritus professor of botany in the Anderson College of Medicine, Glasgow, on August 19, aged seventy years.

Dr. W. G. Plummer, assistant keeper in the Science Division (Physics and Geophysics) of the Science Museum, South Kensington, on August 2, aged thirty-eight years.

W. Rintoul, O.B.E., a director of research of Imperial Chemical Industries, Ltd., formerly manager of the Ardeer factory of Nobel's Explosives Co. Ltd., on August 24, aged sixty-six years.

News and Views

Synthesis of Vitamin B₁ (Antineurin)

SINCE the realization that the molecule of vitamin B₁ contains two heterocyclic rings, a substituted pyrimidine and a substituted thiazole, intensive research has been directed towards establishing the positions of the substituent groups and the method of combination of the two rings. According to a paper of which a brief abstract appears on p. 372 of this issue, Prof. Williams and his collaborators at Columbia University have now succeeded in isolating a compound which is chemically and physiologically identical with the natural vitamin. Several groups of workers in Great Britain and Germany have been working at the same problem, but they will doubtless be among the first to congratulate the American chemists concerned on a brilliant and important piece of organic synthesis. It may be noted that this achievement means that, with the syntheses of ascorbic acid, lactoflavin, vitamin D and vitamin B₁, four vitamins have now been produced from completely inactive organic reagents by purely chemical means.

New Fossil Anthropoid Skull from South Africa

A DISCOVERY is announced from South Africa which, if first impressions are confirmed by more detailed examination, may go far towards clearing up a point which has been a matter of acute anthropological controversy for more than a decade. Dr. Robert Broom, of the Transvaal Museum, and his colleagues, it is reported in a dispatch from the Johannesburg correspondent of *The Times* in the issue of August 26, have discovered in the Sterkfontein caves near Krugersdorp, a natural cast in limestone of the brain of an advanced type of ape and a number of fossilized bones of the skull, including jaws and teeth. It is anticipated that this new evidence will prove of importance in its bearing upon the status of the phylogeny of man and the

great apes, and more especially on the position of the Taungs skull. It will be remembered that, when that fossil was found in 1924, some doubt was expressed as to how far the approximation to the human type in its characters stressed by Prof. Raymond Dart, by whom it was discovered, was due to its immaturity. The young of the chimpanzee, it was pointed out, is well known to exhibit pseudo-human characters, which disappear as maturity approaches; and it was agreed that the Taungs skull was that of an individual of not more than six years of age. As the Sterkfontein specimen, it would appear, is adult, a comparison with the Taungs skull may determine these uncertainties, and at the same time afford an indication of the relation of these fossil types to existing anthropoids as well as to early forms of man.

Roman Leicester—a National Asset

THE fate of Roman Leicester, which now hangs upon the decision of the City Council, is a problem in which the nation is no less deeply concerned, though from a slightly different point of view, than the city itself. A site in the heart of the city's oldest relics, purchased at a cost of £24,000 for the erection of public baths, has yielded on excavation remains of the Roman period, more particularly of the forum, the centre of municipal life, which in certain respects are unique (see *NATURE* of July 11, p. 69). While on one hand the local authority may allow due weight to the advantage to Leicester in the possession of this unique and irreplaceable monument of the past, yet local pride must inevitably be tempered by a sense of the duty of trustees of public funds; on the other hand the nation at large is a custodian of such treasures as this for the benefit not only of contemporary archaeological studies, but also of posterity. The most meticulous records of excavation, however valuable for scientific study, cannot take the place of relics

of antiquity which have been destroyed. Apart from the educational appeal of the buildings in their original relation, and so far as possible, in an appropriate setting, they will afford the scholar a constant inspiration to further research, as well as provide a source of evidence for correcting or reconstructing theory in the light of later knowledge, such as never can be derived from a written record, photograph or drawing. The excavations now in progress may reinforce the argument, or should the City's decision be adverse to preservation, justify a delay, which will then be urged, pending an appeal for funds from outside sources for the complete excavation of the site in the coming year. The conflict between duty to local economies and the preservation of antiquities, which are national in their interest, is one which is likely to arise with increasing frequency in view of the rapid development of urban and suburban properties now taking place. When such developments affect relics of wide historic and scientific interest, as at Leicester, it is a question whether national funds should not be called on to assist.

Potters of Lincoln

MUCH interest is attached to the discovery of a Roman potter's kiln at Lincoln, fully loaded with a light cream ware, and fired, but unopened. It affords evidence that an industry, which discoveries in 1932 have shown to have been in existence here in the Middle Ages, was also extensively practised in the Roman period. Quite possibly, as 'Pottergate Arch' nearby, and the occurrence of 'Pottergate' as a street name in the thirteenth century would suggest, the industry may have survived throughout the interval between medieval and Roman times with little or no interruption. The kiln was discovered, it is reported in *The Times* of August 21, on a site in Cathedral Street. It contained vessels of the mortaria type, the large shallow basins with a heavy rim, in which the Romans used to grind their food. The kiln was a hole in the ground four feet long and two feet wide, with a well-fired wall on two sides. It was roofed over with a whitish clay mixed with sand; and it contained four stacks of pottery, which had been considerably crushed. Curious short pipes, of which the use is obscure, were also found. Many of the vessels were stamped with the potter's mark, which, when deciphered, should afford a clue to the distribution of Lincoln pottery in Britain. The medieval pottery, which was found in this area, was attributed to the fourteenth century. No doubt the potters of that date drew their clay from the same source as their Roman predecessors. This in itself would be sufficient to account for the persistence of the industry in this area.

Minoan Influences in Ancient Syria

SIR ARTHUR EVANS, commenting on the results of Sir Leonard Woolley's recent archaeological investigations in Syria (see *NATURE* of July 4, p. 20 and August 8, p. 235), pronounces the Minoan impact on inner Syria at so early a date, for which the ceramic

relics from Tell-Atchana afford evidence, as "a new historic fact of far reaching importance and revolutionizing all previous ideas". It is, he points out in *The Times* of August 19, a step forward of at least two centuries; for although there are no actual imports from Minoan Crete, the starting point in repeated examples of pottery reflecting Cretan models must certainly touch 1700 B.C. Sir Arthur bases this conclusion on the chronological datum of remains of cups, of somewhat thin make, showing white rosettes on a black ground, recalling the "egg-shell ware" bowls of the great age of Minoan Crete of the Second Middle Minoan period, which goes back to the eighteenth and nineteenth centuries, but in Syria equating with the succeeding Third Middle Minoan style. At the same time, mixed influence is to be seen in the combination of arcaded zones, characteristically Minoan, with highly conventionalized ducks, which find a parallel in early Palestine, while one of the sherds depicts an uprearing goat charged by another, whereas animal designs were excluded from the vase painting of Cretan Palace art. In concluding with an analysis of motifs, which point to a fusion of Cretan and indigenous religious and symbolic ideas, relating to the cult of the double axe, and reference to tradition of a royal alliance with Cyprus, Sir Arthur holds out the alluring possibility that the spade may yet uncover a royal sepulchre at Tell-Atchana.

Special Exhibit at Ipswich Museum

IN 1917, Mr. Reid Moir announced the discovery of flint implements, mammalian and human bones, and fragments of rough pottery, in the lower of two superposed 'floors' in a brickfield of Messrs. Bolton & Co. at Ipswich. These occupation levels occurred in sand, and were overlain by a considerable thickness of hill-wash, while the excavations carried out showed that the now dry valley in which the discoveries were made has been deepened by erosion since the floors were occupied by man. Similar results were obtained, at a later date, by Mr. J. P. T. Burchell, in his researches at Ingress Vale in the lower Thames Valley. Here, at the base of an extensive section of sub-aerial loam, surmounted by a hill-wash containing rafts of Coombe Rock, was found a prolific floor, with flint implements, flakes, and fragments of primitive pottery. The third site, where a similar association of relics occurred, was discovered and investigated by Mr. and Mrs. MacAlpine Woods in a dry valley at Bovey Lane, Beer, Devon. In this case, a hill-wash, some 11 ft. in thickness, contained large numbers of flint artefacts, a few examples of bones and teeth of animals, and some pieces of rough pottery. Through the kindness of the discoverers, the Ipswich Museum now possesses representative series of the specimens mentioned, and is making a special exhibition of them. The matter is of considerable interest to archaeologists as, in each case, the flint implements may be said to resemble, in their forms, those of Lower and Upper Aurignacian times, and are not associated with any microliths. Moreover, there seems good reason to believe that the widespread deposits in which the relics were embedded