

between trading and professionalism, temporarily came down on the wrong side of the fence, being united with the Grocers Company by charter in 1606. But this inconvenient marriage was dissolved in 1617, when the Society of Apothecaries obtained its own charter, James I saying that the apothecaries practised an art as well as a mystery, whereas the grocers were merely merchants.

THE apothecaries used their new freedom for still further specialization. They enhanced their reputation by devotion to the sick at the time of the Great Plague and rapidly developed into the general practitioners of medicine, a position ultimately recognized by registration under the Medical Act. They gradually abandoned pharmacy for physic and left the way open for the pharmacist as he is known to-day to take their place. Sir Humphry Rolleston did not follow the progress of specialization in recent years. Had he done so he might have shown how to-day, with the progress of medical science, specialization advances apace in both the medical and the pharmaceutical professions. In medicine, the physician and the surgeon find at their elbow the bacteriologist, the pathologist, the radiologist, the psycho-therapist. In pharmacy, the pharmacologist, the biochemist and the serologist are supplanting the galenic pharmacist. It is well for the patient, for whose benefit alone these 'mechanized troops' take the field, that so far they remain auxiliaries and have not yet displaced the 'private of the line'—the general practitioner and the pharmacist at the corner of the road.

#### Flints and Flint-Working

A SPECIAL exhibition to remain for three months has been arranged at the British Museum, Bloomsbury, at the head of the main staircase, to illustrate the changes in flint, and the various methods of chipping it into implements. This supplements the permanent series in the Prehistoric Saloon (Case R), and is intended to make the grammar of the subject clear to those with restricted opportunities of observing or collecting specimens. Patina has not yet been scientifically explained, but the examination of its varieties is a necessary step in solving the problem, and attention has been paid to the depths attained by patina on several specimens. Some old pieces have been re-chipped by living practitioners; and among those whose skill is exemplified may be mentioned Mr. J. Reid Moir, Mr. J. H. Sewell of Saskatoon, M. Coutier of Paris and Prof. A. S. Barnes. Some peculiar forms assumed by flints when fractured by man or natural forces are exhibited, and the technical terms used in prehistory are illustrated by typical specimens. Drawings of flaking methods presumably practised in the Stone Age are reproduced from Warren K. Moorehead's "Stone Age in North America", and a special feature is the wood-technique (blows delivered by a wooden baton) which is believed to have been adopted by St. Acheul man, the long narrow flake-scars due to this method helping to distinguish work of that date from the preceding Chelles or Abbeville culture.

#### Origins of Civilization and the Hittites

THE early history of Anatolia and of the races from which the Turkish people is held to be derived was given due prominence in the communications presented by the numerous foreign members attending the second session of the Historical Congress at Istantboul. In particular, it is stated by the correspondent of *The Observer* in the issue of October 11, much importance was attached to a discussion by Prof. E. Pittard of Geneva of the origin of the early brachycephalic racial type, which, first appearing in Europe in the Mesolithic age, introduced to that continent the domestication of animals and agriculture. He pointed out that nowhere except in the Near East and in the region extending eastwards to Afghanistan were cereals to be found growing in the original wild state, while the same habitat was assigned to the wild prototypes of the domesticated animals. Prof. Pittard then went on to show that a close study of the Hittites indicated that all these elements of civilization were well known to them from early times, this leading to the supposition that we are indebted to this people for their evolution. Recent discoveries and excavations indicate a possibility of demonstrating that Anatolia possessed, just like Europe, a palaeolithic period, from which the mesolithic was evolved, and that the remotest origins of civilization may be found in Anatolia. As the views put forward by Prof. Pittard are said to coincide with the point of view of the Turkish Society for Historical Research, it is possible that they will stimulate much-needed intensive study of Hittite origins. It is eminently desirable, however, that this should be extended to include the Caucasus regions to the north of the Hittite area, with which certain of the evidence, especially of philology, appears to indicate a cultural affinity.

#### Maiden Castle, Dorchester

Two discoveries are announced at the close of the season's excavation of Maiden Castle, Dorchester, by the Society of Antiquaries and the Dorset Natural History and Archæological Society under Dr. R. E. Mortimer Wheeler and Col. C. D. Drew. The first is that of a long barrow of remarkable size, no less than eight hundred feet long, overlying the neolithic town, of which the remains have been identified at various points in the eastern part of the site. Evidently the village must wholly, or largely, have ceased to be occupied when this enormous tomb was constructed. Consequently, as is pointed out by Dr. Wheeler, according to a report in *The Times* of October 11, the discovery is of importance. The superposition of the neolithic barrow over the earlier neolithic town will make it possible to classify the successive phases of neolithic civilization in this part of Britain with greater precision than is possible at present, and it will thus afford a standard of chronological comparison for the interpretation of other neolithic settlements and mounds in this part of the country. The second discovery, which was made not far from the point at which the dismembered neolithic skeleton, previously reported, was found, was that

of the grave of a Saxon warrior of the early part of the seventh century. Its importance lies in the fact that the body had been interred with full battle equipment. A *scramasceax* or cutlass-knife lay across the thighs, and two knives and the remains of a spear-head were by the side. The burial is one of the few found in England which include this type of sword, commonly held to be a characteristic weapon of the Saxon tribesmen. The end of this season's work at Maiden Castle closes the fourth and final year's excavation of the site as a joint undertaking by the two societies; and the trenches are now being filled in. Excavation will, however, be continued on a small scale for some time to come.

### Population Policy in Germany

WE have received, through the courtesy of Baroness von der Goltz, two papers, written by members of the "Reichsbund der Kinderreichen" of Berlin, dealing with the present population policy of the German authorities, both Government and municipal. These papers are interesting as showing the reasoned approval of the measures taken in Germany in recent years, on the part of many—perhaps of most—Germans who have studied the legislation in question. The first paper is entitled "Birth Policy and the Problem of Space", and is written by Dr. Danzer. The author stresses the view that national existence is bound up with the question of the birth-rate, and that neglect of the obvious tendency in western Europe must lead to disaster. He thinks that the world at large is too apt to consider that Germany is over-populated and that a large population is only desired for imperialistic purposes. He points out that England and Belgium have double the population density of Germany; and he remarks that unemployment is not necessarily caused by overcrowding, as is clearly evidenced by the case of the United States. As to space, the resources of Germany are not exhausted, and the more diligent and efficient a people is, the higher the birth-rate can safely be; and, in any event, it is impossible to lay down a theoretical optimum density, which must vary with varying conditions. He makes the point that there is no instance of the decline of any country being caused by a high birth-rate. In spite of the Great War, it has been found possible to increase agricultural production, so that Germany is now nearly self-sufficient, and only has to import eggs and fats. As to the Colonies, Germany only wants these back as a source of raw materials, and not for population purposes. He ends by saying that the white race is seriously threatened, and that the day will come when every able-bodied white man, German, French, British or Italian, will be asked to save the civilization which they have built up in a millennium.

THE second paper, by Dr. Alfred Moritz, describes briefly the measures which have been taken by national socialism to relieve the economic burdens on the German family. The main purpose of these measures is the support of the financially weak.

Years ago, the Führer said that large, healthy families are the real wealth of the nation. The two-child family is mainly the result of egotism, or lack of courage to take responsibility. The policy of the "Reichsbund" is to relieve parents with at least four children. As is well known, a good deal has been done officially to encourage an increase in the birth-rate, and this policy seems to be meeting with some success. By the law of October 16, 1934, account is taken of the circumstances of those with many children. Thus, a worker with an income of 250 marks a month, with three children, pays no taxes; if unmarried he would pay 30 marks, and so on. Then there is the well-known system of wedding loans of 1,000 marks, the loan being reduced by 250 marks for each child. Then steps are being taken to provide better accommodation for large families; the houses will be provided with gardens, where this is possible. It is considered that, generally speaking, life in the big towns is unhealthy. There is a building programme for five million homes, with gardens, and easy access to the towns. Special financial help for large families is being considered in this connexion, including reduction of train fares; and much else is being done to improve the financial position of parents with large families.

### New Form of Saccharimeter

THE saccharimeter, as constructed for many years, differs from the polarimeter in that it contains a system of dextro- and lævo-rotatory quartz wedges between the polarizer and analyser, the adjustment of the wedges replacing the rotation of the analyser. Monochromatic light must be used for polarimetric readings, but with the quartz wedge saccharimeter bichromate-filtered white light can be used since the rotation dispersions of quartz and carbohydrate solutions are almost the same. Until recently it has not been practicable to obtain monochromatic light of sufficient intensity and constancy for use under ordinary laboratory conditions, and the saccharimeter with white light illumination has almost universally been used for sugar analysis. A very satisfactory source of monochromatic light is now obtainable, however, in the form of an electric sodium lamp, and its introduction has led Messrs. Bellingham and Stanley, Ltd., to construct a saccharimeter, without the quartz wedge device, for use with sodium light; the instrument is identical in principle with the polarimeter and differs from the latter only in being provided with a sugar scale, reading from  $-30$  to  $+110$  International sugar degrees. This scale, like the angular degree scale of the polarimeter made by the same firm, is etched on a glass circle and, unlike the ordinary saccharimeter scale, requires no magnification; the Vernier attachment, also, is etched on a glass plate. The elimination of the quartz wedge system has several advantages. It obviates any error due to want of optical homogeneity of the quartz, it renders unnecessary the exact adjustment of the temperature of the apparatus to that of the observation tube and the reading is taken, not by reflected, but by transmitted light.