

## News and Views

### Sale of Food and Drugs

THE annual report of the Ministry of Health for 1937-1938 contains some very interesting information relating to the results of the examination of samples of food and drugs by public analysts in England and Wales. In all, 151,370 samples of food and drugs were examined, and of these the surprisingly high number of 8,401 or 5 per cent were reported against. The distribution of the adulteration among the counties and towns is amusing, but the differences in sampling probably makes the comparison of the different areas inconclusive. Oxfordshire and West Suffolk lead the English counties with 24.2 and 25.8 per cent of adulterated samples respectively, and the city of Oxford does little to redeem this with 12.5 per cent, which is high among the boroughs. These figures may well be compared with 8.4 per cent in Cambridgeshire and 5.1 per cent in Cambridge itself. The metropolitan boroughs show a quite low rate of adulteration, the worst being Shoreditch, with 11.1 per cent.

Of the common foodstuffs, 7 per cent of the samples of milk were unsatisfactory, one even containing formaldehyde, an adulterant also found in two samples of cream. Some remarkable cheeses have been exposed for sale; one, a cooking cheese, consisted practically of crude casein and water, and others sold under fancy names were found to be made of fat not derived from milk at all! The unsatisfactory jams and marmalades showed among other things the presence of pieces of glass, and other samples were deficient in fruit or soluble solids. Many samples of canned fish were contaminated with lead or tin, and the latter metal was also found in tinned fruits, vegetables and soups. A number of samples of beer were found also to contain lead, but the most remarkable beverage was a 'non-alcoholic' raisin wine, which yielded 17 per cent of alcohol. The chief errors found in the drugs examined were of the nature of deficiencies, namely, tinctures of iodine without sufficient iodine or potassium iodide, and mercurial ointments without, in one instance, any mercury.

### Exhibition of Archæological Finds from Afghanistan

AN exhibition of antiquities of both archæological and artistic interest from the Swat Valley and Afghanistan in the Indian Section of the Victoria and Albert Museum, South Kensington, opened on April 25. These antiquities are the material results of an archæological expedition to the Swat Valley and Trans-Oxiana in 1938, which was supported by the Museum and the Royal Geographical Society, and was led by Mr. Evert Barger. An account of the expedition was given by Mr. Barger before the Royal Society of Arts on November 30 (see NATURE, 142, 1029, 1046; 1938). The object of the expedition,

as was then stated, was to study the development of the Græco-Buddhist art which flourished in these regions from the first century B.C. until the fifth century of our era. The importance of this investigation lies in the fact that it followed up the route by which Indian cultural influence penetrated to central Asia and eventually to China; but although the Swat Valley had been visited by Sir Aurel Stein in 1926 no excavations had been carried out previously. The finds now exhibited reveal a remarkable local hybrid culture, caused by the meeting of Græco-Roman and Indian influences. Especially notable are a large number of very fine carvings in grey schist, illustrating scenes in the life of Buddha. An outstanding specimen is a seated Buddha, of which the drapery and head-dress are markedly Greek. This came from Amaluk, a ruined monastery in the hills, 4,000 ft. above the valley. Another carving shows Buddha being asked to preach the law. Several small plaster heads of Buddhas and Boddhisattvas, and specimens of ironwork, including door-hinges and a monastery bell, come from Swat. In the region across the Oxus, the ancient Bactria, no excavations were made; but coins, seals and fragments of pottery, found on the sites of ancient cities, are shown. Little is known of the ceramics of this area. Three Hellenistic column bases of stone, seen and photographed at Kunduz, are the first Greek structural remains to be found in Afghanistan and constitute the expedition's most important discovery.

### Cultural Contacts with India

It may be recalled that at the meeting of the Royal Society of Arts at which Mr. Barger described the results of his archæological investigations of the evidences the spread of Indian cultural influence to the Oxus and beyond, when Lord Zetland, Secretary of State for India, was in the chair, attention was directed in the discussion which followed to the importance of the study in Britain of the culture and archæology of India as an influence making for closer contact between Great Britain and India. Lord Zetland, when presiding at the twenty-ninth annual meeting of the India Society at Burlington House on April 24, took advantage of the occasion again to emphasize the importance of such cultural contacts. Pointing out that politics was not the only link between Great Britain and India, he referred to the invitation which he himself had tendered to Sir Leonard Woolley, when Lord Linlithgow, as Viceroy, had intimated that he would welcome the visit to India of an archæologist of world-wide distinction. This intimation was evidence of the interest taken by the Viceroy in the archæological problems of India. In the result Sir Leonard Woolley had produced a report of the highest interest, which contained suggestions for the future work of the Archæological Department. Lord Zetland went on to say that

although we were living in times of financial stress, when it was impossible to devote as much money as could be wished to work of this character, he was not without hope that the outcome of Sir Leonard's visit would be greatly to the advantage of the cause of Indian archaeological exploration and research. His concluding remarks were especially noteworthy: "As a people", he said, "we should surely stand condemned if, when judgment was passed on us at the bar of history, it should be said of us that we had neglected in our long contact with India those cultural values, which alone raised man above the level of the animal world and were an index of his achievement in the domain of the spirit."

#### Neanderthal Man in Central Asia

AN announcement of a discovery in the Uzbek republic of the U.S.S.R. of very considerable interest is announced by the Russia To-day Press Service. The skeleton and other traces of man of palaeolithic age have been found in a cave some twelve miles north-west of the town of Baisun. Stone implements found on the site are said to fix the date of the stratum, in which the discovery was made, as late Mousterian. Prof. Gerasimov, the well-known Russian archaeologist, has succeeded in restoring the skull, and a commission has been appointed, which will make a special study of the reconstructed relic. These remains are the first indisputable signs of palaeolithic man to be found in central Asia, and previously no traces of the Mousterian culture had been known to occur there. The skull, it is stated, was found lying under a single stratum, close to the wall of the cave, while the remainder of the skeleton lay scattered beside it. The remains are those of a child of about eight years of age; and as it is in a fair state of preservation, it is possible to decide that it differs markedly in structure from the human skeleton of to-day. The contour of the skull, particularly, is said to recall that of the anthropoid ape—a statement which, at first sight, seems to conflict with the further comment that it is said to refute the racial theory that present-day man developed independently of Neanderthal man. The trend of recent discovery, it may be pointed out, would certainly not necessarily be widely at variance with modernistic tendencies in a skull of such a facies, but until further details are to hand judgment one way or the other is obviously premature.

#### Introduction of Screw Propulsion

AT a meeting of the Newcomen Society held at the Science Museum on April 19, in a paper entitled "The First Twenty Years of Screw Propulsion 1838-58", Engineer Captain E. C. Smith gave some interesting information regarding the early inventors of screw propellers, Sir Francis Pettit Smith, John Ericsson, George Lowe, George Blaxland and Bennet Woodcroft, whose names were most closely associated in the minds of their contemporaries with the early trials of sea-going screw-driven vessels and the adoption of the screw-propeller on a wide scale. It was appropriate, Capt. Smith said, that the subject

should be dealt with at a meeting at the Science Museum, for Bennet Woodcroft was the virtual founder of that institution, while Smith was for some fourteen years the curator under Woodcroft. Both these pioneers were buried in Brompton Cemetery, and their tombstones mention their participation in the introduction of the screw. Ericsson's work began with his patent of July 1836, the building of the little *Francis B. Ogden* and then the slightly larger *Robert F. Stockton*. Soon after the trials of the latter in the Thames in 1839, she was sailed to America; Ericsson soon followed her and it was in the United States that his main work in connexion with screw propulsion was done, his most notable vessel being the U.S.S. *Princeton*, built in 1841-43. She was the first screw-driven warship ever launched. By 1850, about a hundred and fifty American vessels had been fitted with the screw. The most important work in England was done by Smith, but of this Capt. Smith is to deal with in a future paper. In an appendix to the paper prepared by Dr. H. W. Dickinson, Mr. A. A. Gomme and Mr. E. W. White, a review was given of the various law cases which arose out of the patents and over which a vast amount of time, energy and money were wasted.

#### Acquisitions at the British Museum (Natural History)

THE trustees of the Museum have purchased for the Department of Geology the terminal section of a tail-sheath of an extinct giant armadillo (*Hoplophorus* sp.) discovered in the Pleistocene deposits of Santa Fé, Argentine. The giant armadillos had a solid bony shell and armour of the same type on the head and tail. When danger threatened, they withdrew their limbs into the shell, closed the head end by means of the bony casque, and lashed the club-like tail from side to side so as to ward off attack from the rear. Some genera had massive horny spikes on the end of the tail, but in *Hoplophorus* the tail was covered with scales. The Department of Mineralogy has acquired a superb specimen of chessylite from Tsumeb in South-West Africa, and an extremely beautiful specimen with bright yellow plates of wulfenite (lead molybdate) on a glistening white ground of calcite crystals from Arizona. The Department has also purchased from the widow of the late Dr. A. E. H. Tutton a collection of the salts, chiefly double sulphates and selenates of the alkalis (potassium, rubidium, caesium, etc.), utilized by Dr. Tutton in his researches on the relation between physical properties and chemical composition in isomorphous series of compounds. An important addition to the departmental library is a first edition of the "Speculum Lapidum" by Camillus Leonardus, physician to Cæsar Borgia, to whom the book is dedicated. It is a fine example of the printing press of Sessa in Venice. The book was one of the most widely read 'lapidaries' of the time, and its editions ran from the first in Latin in 1502 (forty-four years before Agricola's "De Natura Fossilium") to an English edition in 1750, bridging the gap between medieval and modern mineralogy. The late Frederick Adams of Jersey has bequeathed to the Department