

of metal in the world's affairs is creating further demands on a mining engineer's accomplishments in an ever-widening field of activity and with larger-scale operations than ever before. A study of history, ancient and modern, in terms of minerals is fascinating because the growth of nations and the cause of many wars cannot be dissociated from the possession or a determination to secure control of high-grade deposits of essential minerals. The question has been asked, "Who owns the earth?", and the answer given is "The nation which controls the greatest mineral resources."

Roman Wroxeter

RECENT excavations on the site of the Roman city of Uriconium, which lies beneath the modern Wroxeter, five miles from Shrewsbury, were described by Miss Kathleen Kenyon, the field director of the excavation, at a meeting of the Society of Antiquaries of London on May 12. Some years ago excavations were carried out with the object of determining the position and character of the defences of the legionaries' camp, but without success, nor has investigation been more successful on the present occasion. Much information, however, has been obtained about the history of the city. It would appear that Uriconium, which was the fourth largest Roman city in Britain, was founded about A.D. 48 as the headquarters of the Fourteenth and Twentieth Legions, of which it was the station while Wales was being subdued. When the legions were moved to Chester, Uriconium became the tribal capital of the Cornovii. Two successive defensive systems of the city have been found, of which the earlier, dating from about the end of the first century of our era, enclosed a much smaller area than the later. This latter dates from the middle of the second century, and encloses about 170 acres. It marks the largest expansion of the town. The structure known as the Baths Building, which was excavated in 1859, was re-examined. It was found that originally it had not been intended for use as baths, but had consisted of two ranges of large rooms on either side of an enclosed courtyard, with a long two-sided hall beside it. This was built about A.D. 140 and must have formed part of the public buildings, possibly the law courts, of the town. The Forum opposite was nearly contemporary. Not very much later the whole was transformed into an elaborate and complicated bath of the usual Roman type. An interesting discovery was the body of an infant which had been placed below the floor at the time of the alteration, possibly as a foundation burial. At the end of the third century the building was destroyed by fire, but was restored in a partial and slipshod manner. It remained in use for a further hundred years.

Archæological Exploration in the Panjab

ALTHOUGH a considerable period of time has elapsed since the Government of India, soon after the discovery of Mohenjodaro and Harappa, decided to allow duly accredited archæological expeditions from outside India to explore Indian archæological sites, little advantage, unfortunately, has been taken of the opportunity. Two American expeditions and one Belgian have visited India, of which the American

expedition to the Salt Hills under Dr. H. de Terra, in a series of investigations extending over several years, has produced much valuable palæontological and archæological material. The excavations at Mohenjodaro for the Archæological Survey were conducted by Dr. E. Mackay, who has since been in charge of further investigations in the Indus valley; but although Dr. Mackay may be regarded as a British excavator, no British expedition has been sent out. This neglect of opportunity is the more to be deplored in view of the evident importance of India for understanding of early cultural development in the Near and Middle East. India itself is now to make an effort to repair this neglect by the inauguration of a "Panjab Exploration Fund", on behalf of which an appeal is issued by Diwan Chaman Lall, president; Prof. E. Dickinson, acting president; and Dr. C. L. Fabri, field director. Funds have been collected in India to begin excavation in the coming autumn on the ancient city site of Surkanwali Ali, near Bhera on the Jhelum, where trial excavations have been made recently by the field director of the Fund. These have revealed the existence of at least five superimposed cities, dating from the Moghul period to pre-Buddhist times. The Fund has the support of the principal scholars and notabilities of the Panjab. A considerable sum is required to place the Fund on a permanent basis; and if a sufficient amount can be raised, it is proposed also to found an ethnographical and archæological museum, for which nucleus collections are already in hand. Contributions should be addressed to the "Panjab Exploration Fund", Imperial Bank, Lahore, or to the London Branch of the Bank, 25 Old Broad Street, London, E.C.2.

Prehistoric Mines in East Africa

EXPLORATION of a cave in the Njoro Forest Reserve of Kenya by Dr. L. S. B. and Mrs. Leakey has brought to light cultural evidence, which they believe, it is stated by the Nairobi correspondent of *The Times* (May 23), points to a connexion with prehistoric opal mining on an extensive scale. The excavations have shown that this cave was used as a place for the disposal of the dead of stone age man. The bodies were brought to the cave, placed in a shallow excavation, and burnt to ashes by a fire lit over them. As time went on, the earlier ashes were disturbed by later incinerations, and the remains of at least sixty bodies have been discovered. The large number of cultural objects found include five hundred stone and one thousand bone beads. The stone beads are especially interesting, as among them are specimens of what appear to be jade and opal, as well as rock crystal and green quartz. Attractive jade pendants were also found. Many of the beads are said to show skilful workmanship, and it is therefore suggested that they may have been brought to East Africa by traders from Egypt and Mesopotamia. The beads are being submitted to experts in England for examination and report. It has been possible to reconstruct from charred fragments both basket work and rope work, and an exquisitely carved wooden vessel. Dr. Leakey, it is stated,