

trace any connexion with them of Newcomen or of the "Proprietors of the Invention for Raising Water by Fire" who had exploited the engine. The paper was accompanied by a valuable map of the coal field showing the sites of the engines. In Prof. Roe's paper it was shown that interchangeable manufacture had begun with firearms early in the nineteenth century and had afterwards spread to clocks, watches, sewing machines, bicycles and motor-cars. Of all the products of modern industry, the motor-car has pushed interchangeable manufacture furthest, and to the benefit of the widest public.

Low Temperature Carbonization Plant

THE recent opening by the Duke of Kent of a new plant erected near Chesterfield by Messrs. Low Temperature Carbonisation Ltd. has once again directed public attention to the commercial possibilities of carbonizing coal at comparatively low temperatures (about 600° C.). This method of treating coal has as its main product a smokeless fuel which can readily be burned in any open grate, and in consequence is a valuable contribution towards a solution of the important problem of reducing atmospheric pollution. In addition, the process yields as by-product a tar from part of which a fuel suitable for use in Diesel engines can be prepared and a motor spirit of high antiknock value. The tar is also amenable to treatment by hydrogenation for the production of further motor spirit if desired. In view of a possible national emergency, there is a tendency, particularly among those not acquainted with all the relevant details, to stress the value of low temperature carbonization as a source of home-produced motor spirit. It is, therefore, well to bear in mind that although any method of producing oil or spirit from coal is of national importance, the spirit is in this case only a by-product, and that even if all the tar were hydrogenated to produce additional motor spirit, the total yield would be extremely small when compared with the quantity now imported.

Centenary of the University of Athens

THE University of Athens is the richer to-day by the congratulations of the world of learning on its centenary. Elaborate celebrations have marked this event, which was enhanced by the active participation of H.M. the King of Greece, members of the Government, of the Church and of the Services, the French Minister of National Education, and 150 delegates representing eighty foreign universities. Eloquent addresses, official receptions, musical festivals and classical performances added to the splendour of the occasion. During the past hundred years, the University of Athens has grown from a small establishment with fourteen students, to a mighty seat of learning with nearly ten thousand students of both sexes, an imposing list of professors, and manifold extensions, laboratories and institutes as additions to the original faculties. Parallel with the development, learning has found in Athens the old spirit which made the town famous throughout the classical

and Byzantine periods. To-day, science and letters are steadily pursued by a band of investigators who have made substantial contributions to knowledge. To give just one example, mathematicians are familiar with the names of Hatzidakis, Zervos, Sakellariou and Eginitis. Even the history of science is represented by Prof. Stephanidis, who has many important monographs to his credit. If the English language and literature were not hitherto adequately represented, the omission has been made good by the creation of a Byron chair, which was announced as a gift of Great Britain to the most ancient seat of learning of Western civilization.

Witchcraft in Bechuanaland

WIDESPREAD interest has been aroused by the trial for witchcraft of Bagakgametsi, the former wife of Tshekedi, son of Khama, and regent chief of the Bamangwato tribe. This chief, it will be remembered, earned notoriety a little while ago for inflicting punishment on a white man, as it was held, illegally, and was deprived of his chieftainship in consequence. In February 1936 he married his cousin, Bagakgametsi, but secured a divorce from her on March 7 of this year. She is now twenty-seven years old, and was described by Sergeant Lewis, the prosecutor in the present case at Serowe, as "an educated woman". With her were accused two men, who are described as witch-doctors. The offence alleged was "practising witchcraft calculated to injure the Queen-Mother, Semane"; but it was asserted in evidence, as reported, that Bagakgametsi herself was in fear, or stated that she was in fear of witchcraft by the Queen Mother, and consulted her two co-defendants to verify her suspicion and secure protection. One witch doctor in giving evidence in defence stated that he blew on a horn and threw the bones—the usual divinatory procedure in such cases—and said, "If Semane is bewitching Bagakgametsi she should die from blood". He added that Semane would die within two months. The other witch doctor said that the woman came to him for medicine and said she was afraid that Semane, who was jealous of her, would kill her. On the other hand, it was alleged by the prosecution that Bagakgametsi had asked one of the men for a poison root to get rid of the Queen Mother so that she alone should share Tshekedi's power. The verdict was "guilty", and a fine of £50, or twelve months imprisonment was imposed. The case is interesting as illustrating the strong hold of a belief in witchcraft on this people, even among the more enlightened, as well as the illogical working of the attempt to suppress the belief, which concentrates on the witch doctor, who though in many instances undoubtedly fraudulent, is at least working against an anti-social force which in such circumstances as these goes free. The British code, however, does not recognize witchcraft as such.

Synthesis of Large Molecules

At the Friday evening discourse at the Royal Institution on April 23, Prof. H. Mark discussed "The