

## News and Views

Sir Thomas Muir, C.M.G., F.R.S.

HEARTY congratulations will be extended by many friends in Great Britain to Sir Thomas Muir, the distinguished mathematician, long resident in Cape Colony, who enters on his ninetieth year on August 25. Born at Stonebyres, Lanark, he was educated at Wishaw School, and he graduated at the University of Glasgow. In 1871, Muir became assistant professor of mathematics there; afterwards, for a while, he held a teaching post in Glasgow High School. Opportunity for public service in Cape Colony came in 1892, when he was made superintendent-general of education, retaining office until 1915, and at its termination receiving the honour of knighthood, having previously (1901) been made C.M.G. Muir was elected a fellow of the Royal Society in 1900. Earlier, the Royal Society of Edinburgh had awarded him its Keith gold medal for researches into the theory of determinants and allied studies, allotting the medal again in 1897 for further work in the same field, and once more in 1916 to signalise the completion of a series of memoirs, all having been issued by the Scottish Society. On the occasion of the first visit of the British Association to South Africa in 1905, also on its subsequent visit in 1929, much active assistance was rendered by Muir towards the success of these gatherings. President, in 1910, of the South African Association for the Advancement of Science—an institution then but seven years old—Sir Thomas delivered an address on "The State's Duty to Science". The following pregnant sentence may be recalled: "All that the most enlightened State can do will never be fully effective without a continuance of that zeal and devotion on the part of the private worker which has been so conspicuous in the past history of science."

## Mummy Wheat

It seems impossible to shake the popular belief that grains of wheat may be interred in ancient tombs for thousands of years and are then capable of germination and of producing a crop. In the *Times* of August 4 there is a description, with an illustration, of a so-called 'mummy' wheat grown from an ear found in a tomb at Mohenjo Daro in Sind. Upon inquiry at an address given in the *Times* we were supplied with a statement by Sir Malcolm Hailey relating to the S.P.G. Mission Agricultural School, Umedpur, which succeeded in reproducing the alleged ancient grains, and one from Mrs. Crosthwaite, widow of the late Canon Crosthwaite, who started the School. In both statements it is announced that seed from the wheat is on sale at one shilling an ounce, on behalf of the Mission Farm at Umedpur, and we understand that there is a large demand for it. There is no doubt whatever that the story of this so-called mummy wheat from an Indian tomb is based, at the best, on a misunderstanding. In the first paragraph of Mrs. Crosthwaite's memorandum it is stated that "Mr. H. C.

Dutta... was given an ear of wheat that was taken out of a tomb during excavations in Sind". The probability is that the ear was a recent one and that either the donor fabricated the story, or someone had placed the ear in the tomb and the donor found it and gave it to Mr. Dutta in good faith. All our knowledge of longevity in seeds, and all experiments on the subject, go to show that the maximum period for any known seed is probably somewhere round about 300-400 years, and that wheat cannot remain dormant for more than 25 years. On several occasions authentic wheat from Egyptian tombs has been examined and in each case the tissues have been so disintegrated that germination was quite impossible. The statement that there is no wheat known to-day with a branched spike, such as was illustrated in the *Times*, and is being sold, is incorrect.

## Industrial Co-operation

THE Department of Industrial Co-operation of Section F (Economic Science and Statistics) of the British Association which was inaugurated at the centenary meeting of the Association in 1931, has issued a classified list of papers, discussions, visits to works, etc., in the programme of the forthcoming Leicester meeting. The papers are of special interest to business men and others concerned with various branches of scientific research bearing directly or indirectly upon industrial administration and management. The comprehensiveness and balance of this programme are a tribute to the efforts of the Industrial Co-ordination Committee of the Association on which not only Section F, but also Section G (Engineering), I (Physiology), J (Psychology), and L (Education) are represented, as well as to the vigour with which the new Department is being developed. The principal discussions arranged by the Department itself are devoted to organisation as a technical problem, to the rôle of accountancy in scientific management, the essential data for the organisation of economic distribution, and the psycho-physiological requirements of modern factory equipment, including particular instances of applied physiology and psychology. These discussions and numerous other papers promise to make the programme of the Department fully as interesting to the scientific worker and industrialist as those of which the account in "Business and Science" received such a wide circulation, and they well illustrate the value of the contribution which the new Department is destined to render in the co-ordination of scientific effort in the management and organisation of industry.

## Verulamium and Colchester

RESUMPTION of the work of excavation on the pre-Roman and Roman sites at St. Albans and Colchester has already been marked by noteworthy results, more especially on the latter site. The first reports from Verulamium, which record *inter alia* the