

merely for want of encouraging scope in schemes—a waste we could ill-afford at the moment. By this, we should not, however, like to be taken to imply that this system has not been a success. On the contrary, it has to its credit the large success of the war effort and many an innovation and invention useful for improvements in agriculture, dairying, industry, health and epidemiology. But we should like to emphasise that the success has been in spite of the none-too-encouraging rewards from the promising results of schemes.

It must, however, be said for the Indian Councils that the funds at their command have not been so munificent and their experience so ripe as to expect flawless organisation and administration in these matters. So far, they have been more or less makeshift arrangements. But it is now quite clear that each of these Councils—and more that are to come—need a standing army of trained scientists each with a specific branch of applied science for his life-work. If we are, therefore, to expect efficiency and loyalty from those who would devote themselves to fruitful careers of scientific research in the service of the Councils—and, therefore, ultimately of the nation—we can-

not grudge security of employment and fair wages in return.

To plead in this strain for the Scheme Workers is not to invite the Councils to offer every entrant a sinecure. For, we admit, it is not given to every college graduate to become a successful scientist endowed with an analytical research mentality, no more than for every paint-dauber to become an accomplished artist. The scheme will, therefore, have its place as a period of training and trial under a critical teacher. And this period could be reckoned as a continuation of the academic training of the candidate. But, having sifted the grain from chaff, fair and encouraging conditions of service must be offered to the worker.

We may venture to suggest that this is a subject that could be taken up by the newly formed Association of Scientific Workers with the Councils of Research. We have reason to hope that the Government will, both in the interest of rapid development of the country and of justice to the Scheme Worker, generously treat the scientists, on whose contentment and enthusiasm depends to a degree the pace of material progress of the nation.

### INDIAN SCHOOL OF MINES—EXPANSION

THE Indian School of Mines, Dhanbad, is to be called, hereafter, the Indian School of Mines and Applied Geology. Steps towards its re-organisation have been recommended by the Committee appointed by the Government of India in a report, which has been just published.

The Committee has formulated proposals for the extension of the activities of the School, for an increase in the annual intake of students and generally for raising the School to the standard of the Royal School of Mines, London.

Recognising the increasing demand for mining engineers and geologists in the country the Committee recommends that the annual intake of the School should be increased gradually from the present total of 24 to 60, consisting of 48 mining and 12 geology students. Admission will continue to be through an entrance examination, and candidates at this test should have taken physics and chemistry at the Intermediate or equivalent examination. The Committee recommends also the abolition of the three-year certificate course, as a result of which all entrants will be required to take the full four-year course leading to the granting of the Diploma in either Mining Engineering or Geology.

REVISION OF CURRICULA SUGGESTED

The Sub-Committee appointed for the revision

of curricula has made special recommendations in which they insist that subjects like fuel technology, oil technology, refractories and ceramics, metallurgy, and geophysical prospecting should be given greater attention hereafter. It has pointed out that as in the Royal School of Mines, London, greater emphasis should be laid on geology in teaching mining.

The Committee has proposed a scheme of post-graduate training to enable the graduates of the School to pass the competency examinations prescribed under the regulations. This scheme is estimated to cost Rs. 2.63 lakhs per year, a sum which, it is urged, should be shared equally by Government and the Industry.

The need for increased association between the School and the Industry has been emphasised by the Committee who suggest that the mining associations should provide endowments in the School, and also that representatives of the Industry should be associated with its Governing Body in greater strength than at present.

Interim action on the lines of the recommendations of the Reorganisation Committee has been initiated by the Works, Mines and Powers Department (India) sometime ago, and some of the additional accommodation that will be necessary for the School in its expanded phase are already under construction.