

SCIENCE AND EDUCATION IN SOVIET RUSSIA

THE last year has aroused widespread interest in all aspects of life in Soviet Russia. Here are some views on Russian activity taken from two recent talks in the 4YA Winter Course series on "Modern Knowledge". Professor Richard Lawson, Professor of Education at Otago University College, gave his impressions of Education in Russia, and Dr. C. M. Focken, Lecturer in Physics, dealt with "Science in the Soviet".

SCIENCE

THE significant contribution which the new Union of Socialist Soviet Republics has made to science is to show us that science is a collective human enterprise. The great change it brought about was to make Russians conscious for the first time of the necessary connection between the ordered development of science and the life and work of the whole community.

* * *

A TREMENDOUS task faced the Soviet planners. A large proportion of the people were illiterate, only a tiny minority had any acquaintance with science or technology. The aim was to make the whole productive and cultural activity of 160 million people scientific. So the first twenty years of the Republic's life was devoted to the double task—the building up of scientific education and the application of science to industrial, agricultural, and medical needs.

* * *

THE methods and technique of the laboratories and equipment are all essentially similar in the Soviet and in other countries. A fundamental difference lies in the role of science in the organisation of society. In other countries politicians, leaders, and administrators are not supposed to require any training in science. The governors of the Soviet Union consider that to ignore or even neglect technological and scientific problems in state planning is fundamentally absurd. In the Soviet, the State Planning Commission enjoys more prestige than the Foreign Office.

* * *

IN certain branches of physical science, Soviet discoveries and application have already made a deep impression abroad. In physics, for example, no one had previously been able to explain reliably why materials were not much stronger than they are found to be in practice. The fundamental work of the Leningrad School of physicists was the starting point of a great advance in the understanding of the strength of materials and the ways of improving them. Proposals for radical changes such as turning coal into gas underground are also characteristic of the Soviet approach. This would eliminate at one stroke a large part of the laborious task of the miner.

* * *

TWO years ago a large number of valuable prizes were offered for the first time to Russian inventors, scientists, artists, and authors. At the inauguration of these prizes to mark his 60th birthday, Josef Stalin said: "The power and significance of established scientific tradition should be utilised. But the scientist must never be tradition's slave. He must have the courage to smash the old standards and ideals when they begin to act as fetters to progress."

EDUCATION

THIS is the greatest educational enterprise in all human history. In Tsarist Russia there was 75 per centage of illiteracy in the European provinces and 90% in the Asiatic provinces. To-day an attempt is being made to educate all in Russia, young and old. In 1940 there were about 40 million pupils in the schools—nearly the equal of the whole population of Britain. But that is not all. In the same year there were 50 million adults attending education courses.

* * *

NATURALLY, in all countries education must run roughly parallel to the social and political system. Naturally, therefore, in Russia, an important study is that of the economic structure of their own country and also of others. In the first flush of Communist enthusiasm much more time than at present was given to social studies, even among young pupils. But this has been, and is being, more and more modified to make way for the reintroduction of some of the old traditional subjects which, it was realised, had been too hastily abandoned.

* * *

THE aim is to make every school a ten year school, and to give this course to every child. Then, of course, there are the summer camps for the four- and seven-years schools, where, under teacher-supervision, sports, drama, music and craft-works are carried on. Education has been universal and compulsory since 1930. Schools have been built by the hundred thousand—many of them very fine buildings with their own cinemas and theatres attached.

* * *

ADVOCATES of the abolition of corporal punishment in New Zealand can cite Russia as an exemplar—for there it is non-existent—indeed there is very little punishment even of the milder sort. Any social "disorganiser" is regarded as a case to be inquired into by the teacher, in the home, the circumstances, the time-table, the child's health, and so on. Indeed more and more responsibility is being thrown on the teachers for the children's welfare.

* * *

ANOTHER change that has recently taken place is in the restoration of control to the teachers. At first, in the revolt against all representatives of it—including the teachers—pupils could discipline teachers, could put up their notices, could report on the teachers and against the teachers to the local Soviet. They had their Young Pioneers clubs, as they were called, who saw to it that everything in the school and in the teaching corresponded with the Bolshevik doctrines. But this has gone, and now it is recognised that a child is a child and that the so-called self-government was a misnomer.

Important to bicycle enthusiasts!



Of course you know we're making fewer B.S.A. bicycles, and you may have to wait for yours. But B.S.A. is always worth waiting for and the Post-war B.S.A. models will be superb!

The Spinway precision balanced chain-wheel—exclusive to B.S.A. Bicycles—is something more than just a chain-wheel. Every tooth is cut by hand—its plating, longer wearing—its steel, tempered to perfection. Like the many other "hidden" B.S.A. quality features, Spinway makes for maximum ease of running—strength—lightness—safety—long life...

You'll be proud to ride a B.S.A.!

Master Distributors for New Zealand:
A. G. HEALING & CO. LTD.,
Christchurch and Wellington.
Distributors for Auckland District:
SKEATES & WHITE LTD.,
Auckland.

BSA

THE BICYCLE THAT LOOKS PERFECT, IS PERFECT, AND STAYS PERFECT

PHOTOGRAPHIC EQUIPMENT BOUGHT!

Turn your discarded Photo apparatus into Cash. We want Cameras, Metal Tripods, Filters, Developing Dishes, Home Movie apparatus, etc. Call or write.

KODAK NEW ZEALAND LTD.
162 Queen St., Auckland; 292 Lambton Quay, Wellington; 681 Colombo St., Christchurch; 162 Princes St., Dunedin.

**THROAT EASED
COLD STOPPED**

Pulmonals
12, 19, 29