

**Robert Liston (1794-1847)**

ROBERT LISTON, who died in his prime of an aortic aneurysm on December 7, 1847, is chiefly remembered as the first surgeon in Europe to operate under ether anaesthesia. He remarked at the time: "This Yankee dodge beats mesmerism hollow". He was not a good writer or speaker, and he contributed little to the science of surgery, but he was unsurpassed as a lightning and dexterous operator, whose methods of crushing stone and amputating thighs were the envy and despair of other surgeons. Educated at the University of Edinburgh, he became assistant to John Barclay, the anatomist. In London he worked under the two Blizards and attended Abernethy's lectures. Quarrelling with the authorities, he was expelled from the Edinburgh Royal Infirmary, but was reinstated as surgeon five years later. In 1834 he was elected surgeon to the newly founded hospital attached to the University of London. Six feet two inches in height, Liston was a man of fabulous strength, whose brusque voice was known to strike terror in the hearts of students and patients. His publications include "The Elements of Surgery", 1831-32, and "Practical Surgery", 1837. Liston is eponymously commemorated through 'Liston's long splint', which remained popular well into this century, and through 'Liston's bone forceps', which are still in common use.

**Science in Post-Primary Education**

It is encouraging to see that the Association of Women Science Teachers is fulfilling its aim of producing a series of reports on science in post-primary education. Whereas Parts 1 and 2 of this series dealt more with the principles of this education, their application to grammar school pupils of 11-18 years, and reference to subsequent training in universities and colleges, the third part of the report just published has been written in response to requests for advice on science syllabuses to those planning courses in the secondary modern schools (Science in Post-Primary Education. Third Part of the Report of a Sub-Committee of the Association of Women Science Teachers. Work in Secondary Modern Schools. John Murray, London). Recognizing that a suitably planned science course should be part of every child's work at the secondary stage, the Association of Women Science Teachers now presents specimen syllabuses for the age group 11-13 years for use in schools working under different conditions. The syllabuses are drawn up in various ways with the intention of avoiding uniformity and of offering suggestions for different methods of approach; the basic content of each has been tested by teachers in secondary modern schools. They are suitable for: a town school with laboratory and children of average ability; a similar school with children of below-average ability; a rural school with no laboratory and children of average ability; a similar school with children of below-average ability. A perusal of these syllabuses will show that the compilers recognize that the interests of the children should form the starting point for the study of scientific problems and that the study of plenty of examples and applications should come before principles are given, many difficulties in the past having arisen by the imposition of deductive thinking on those for whom it is unsuitable. It is hoped, therefore, that those teachers introducing the study of science as elementary general science into the new secondary schools will

find these syllabuses useful. The compilation of syllabuses for the age group 13-15 years is contemplated, should there be a demand for them.

**Physical Society of Württemberg and Baden**

THE Physical Society of Württemberg and Baden recently held its first post-war meeting in Stuttgart; the meeting was convened by Prof. Erich Regener, known for his pioneer work on cosmic rays. The meeting, which lasted two days and was attended by some two hundred members, approved a significant alteration in the Society's statutes. Instead of stressing as before the purely scientific purposes of the Society, paragraph 2 now runs as follows: "The fact that the knowledge gained in physics increasingly influences the mental attitude of mankind and penetrates into all domains of human activity, imposes upon the Physical Society the obligation of keeping alive in scientific workers a sense of sharing the responsibility in the shaping of human life. The Society shall stand for the freedom, the truth and the dignity of science." In a report explaining this change, Prof. Regener points out how the trend towards de-personalization of the whole world-picture even manifested itself in the description of results (compare the frequent use of such phrases as "it has been observed", "computation shows" . . .), and how physicists often disregarded all practical applications of their science, except as a means to make better experiments. After the experience of recent years (atom bomb, etc.), the physicist can no longer be 'disinterested' in the consequences of his work without injuring both his science and himself. "Physics—and the attitude of physicists—stands to-day at the focus of public interest. The only possible attitude for us is to declare as valuable nothing but what serves the welfare of mankind, and to discard anything opposed to it."

**Over-population as a World Problem**

SIR JOHN MEGAW's experiences in India have impressed on his mind the need for a sustained effort to replace the natural checks on population, such as disease, famine and war, by arrangements that will involve less suffering and less inefficiency of the survivors (Occasional Papers, No. 1. British Social Hygiene Council, London. 6d.). He is deeply appreciative of Malthus, whom he defends against some current misjudgments. He shows that the efforts to raise standards of living above misery in Porto Rico, and in India, have largely failed because the birth-rate, or rather the survival-rate of infants, in several cases has gone up. In Porto Rico production of sugar in 1928 was nine times that of 1899, and in the same period literacy went up from 15 to 60 per cent of the population. Yet, under-feeding and general misery remain characteristic, with a birth-rate still of 40 per thousand but a death-rate reduced from 27.1 to about 20.6. The population in 1940 was nearly 1,900,000 and is now more than 2,000,000 on 3,423 square miles. The future of such a community is full of problems unless the birth-rate declines. India's increase of nearly 5,000,000 a year is even more formidable, because the problem is on such a large scale. The bibliography at the end of the pamphlet is not a very good one. Prof. A. V. Hill contributes a useful preface to the pamphlet and hopes that education carried far beyond mere literacy may help.