

It is stated that some two thousand people representing fifty different countries will be present at the Seventh World Conference of the New Education Fellowship to be held at Cheltenham on July 31–August 14, under the presidency of Sir Percy Nunn. The theme of the Conference will be "Education and a Free Society". One main lecture will be delivered each day and translated from French into English or vice versa; the same evening the lecture will be discussed in a symposium, to which educationists from different lands will contribute. During the first week, the Conference will consider "The Individual and Freedom" and during the second, "Human Relationships and Freedom". Particulars can be obtained from Miss Clare Soper, 29 Tavistock Square, London, W.C.1.

RESEARCH studies in education occupy some thousands of university graduates every year in the United States. A bibliography published by the Office of Education, Washington, as Bulletin No. 5 of 1935 (pp. 328, price 25 cents) lists 3,506 such studies reported in 1933–34, including 465 doctors' dissertations, 2,763 masters' theses and 274 studies reported as faculty research. Many of them deal with topics of current controversies: special taxation for support of schools, equalisation of educational opportunity, emergency feeding, emergency schools, effects of the depression, child-labour and unemployment, the new systems of education in Italy, U.S.S.R., Greece and Germany, Federal emergency relief and leisure-time activities. The Office of Education has in its library a collection of 1,811 of these studies, which is said to be in constant use both in Washington and, through inter-library loans, throughout the country.

Science News a Century Ago

William Radcliffe and the Textile Industry

WILLIAM RADCLIFFE (1760–1841) was one of the improvers of cotton machinery who failed to reap any reward for his work. He died in poverty in 1841. *The Times* of June 14, 1836, contained the following quotation from *Blackwood's Magazine* regarding him: "The power-loom system, commonly so known, ought to be called the Radcliffe system. Without the dressing machine invented by Mr. William Radcliffe, of Stockport, the power loom was utterly worthless, except as a piece of curious mechanism. That of Dr. Cartwright has never been other than useless; yet he obtained a grant from Parliament of £10,000 for the invention. Mr. Samuel Crompton, for his splendid discovery of the spinning mule, received the niggardly award of £5,000 from the same source; but Mr. Radcliffe was beggared by his inventions. His patents were invaded by a joint-stock purse combination; and he himself, from a prosperous manufacturer, brought to bankruptcy through expenses, time, and labour lavished upon his valuable inventions. . . ."

Ventilation at the Custom House

At the last ordinary meeting of the session of the Royal Society held on June 16, 1836, twenty communications were made. Among the subjects dealt with were the tides, magnetic observations, the respiration of insects, the human voice, the fermentation of vegetable matter, voltaic batteries and heating and ventilating. After the meeting, the Society adjourned for the long vacation to meet again on November 17.

The paper on warming and ventilating apartments was by Dr. Andrew Ure (1778–1857), then an analytical chemist in London. He had, he said, been consulted by the directors of the Customs Fund of Life Assurance, on the mode of ventilating the Long Room in the Custom House. In this room, about two hundred persons were employed. All these persons were found to suffer more or less from ailments of the same general character, the leading symptoms of which were a sense of fulness and tension in the head, throbbing of the temples, giddiness and occasional confusion of ideas, depriving them of the power of discharging their duties, in which important and frequently intricate calculations were required. Dr. Ure examined the condition of the air in the room, and said that: "In all these qualities the air respired by the inmates of the room bears a close resemblance to the pestilential blasts of wind, which, having passed over the scorching deserts of Arabia and Africa constitutes the *Simoom* of those regions, and is well known by its injurious effects on animal and vegetable life."

Dr. Ure expressed surprise that in the report of the Parliamentary Committee on Ventilation, no reference had been made to the methods employed in factories, although they afford the best models for imitation, being the results of innumerable experiments made on a magnificent scale, with all the lights of science and all the resources of the ablest engineers. He showed that the ventilation effect of a steam-driven fan was thirty-eight times greater than the effect produced by a fire using the same amount of coal.

Reform of Medical Education

In *The Times* of June 16, 1836, a letter appeared from "M. D.", the object of which, he said, was to direct attention "to a subject which I am quite sure will be acknowledged by every medical practitioner in the kingdom to be of the first importance to the community. . . . I allude to the unprotected state of the obstetric department, a branch of medicine practiced by males and females without any responsibility, and by too many who are perfectly ignorant, or who possess a superficial knowledge only, of the important duties which they are often called upon to perform. . . . At the present moment, there is not even the form of an examination by either of the English medical corporate bodies into the acquirements of either male or female practitioners. This, Sir, is a simple statement of a monstrous anomaly which exists in the medical profession."

The Sussex Scientific and Literary Institution

ON June 18, 1836, the *Athenæum* published a note from a correspondent regarding the above institution, which he said "owes its existence to the exertions of Mr. Ricardo, Mr. Horace Smith, Sir Richard Hunter, and a few other gentlemen, who originated a plan for the admission of the public to Dr. Mantell's Museum of Geology and Comparative Anatomy. . . . Reading rooms are opened for the members; the formation of a library is commenced; and the unique collection of organic remains, belonging to Dr. Mantell, are exhibited in these rooms and arranged with great taste. Dr. Mantell has given three lectures in the Town Hall on behalf of the Institution; and a short time since, a geological excursion to Lewes took place, under his guidance, and he conducted the members to the quarries, which had afforded many of the interesting organic remains in the Museum."