

Educational Topics and Events

BIRMINGHAM.—The degree of D.Sc. has been awarded to A. A. Hirst for papers published in the *Transactions of the Institution of Mining Engineers* on the cleaning of coal, principles involved in separation of particles, and allied subjects; and to F. M. Lea for work published in the *Philosophical Transactions*, the *Journal of the Society of Chemical Industry* and in building research technical papers, mainly dealing with properties of cement.

BRISTOL.—Dr. E. L. Hirst has been appointed to the Alfred Capper Pass chair of chemistry, in succession to Prof. F. Francis, who is to retire in July next. Dr. Hirst is at present reader in the chemistry of natural products in the University of Birmingham, and in addition has had experience as a lecturer in the University of St. Andrews, at Newcastle and in the University of Manchester. He is an organic chemist with an international reputation for his work on sugars, starches and celluloses. His studies have led him to chemical and biological investigations into the nature of vitamin C which involved collaboration on the biological side with the Lister Institute of Preventive Medicine. Dr. Hirst was successful in elucidating the constitution of vitamin C and, in collaboration with Prof. W. N. Haworth, has devised methods for the manufacture of the vitamin from the simpler sugars. He is also interested in the part played by sugars in the growth of plants. For these researches he was awarded the fellowship of the Royal Society in 1934.

Prof. W. E. Garner, Leverhulme professor of physical chemistry in the University, has been appointed director of the Chemical Laboratories, on the retirement of Prof. Francis.

In the eleventh annual report, for 1934-35, to the Court of Governors of the London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1, attention is directed to the finances of the School. The accounts show a deficit of nearly £3,000 for the year, annual subscriptions and donations amounting to about £10,000. It is the aim of the School that funds raised in this way should supplement the University grant and income from endowments to the extent of £12,000-£15,000. Sir Austen Chamberlain, the chairman of the Court of Governors, became a member of the Board of Management, by virtue of his office under the provisions of the revised charter, and Sir Cooper Perry succeeds Sir Harry Goschen as chairman of the Board. Prof. W. Jameson's report on the work of the School for the year ended July 31, 1935, surveys the activities of the School. The Ross Institute of Tropical Hygiene, incorporated in the School, has assisted in various ways industrial undertakings in many parts of the world. These include gold, copper and other mines, development companies in Australia, Africa and Europe, and plantations in India, Ceylon and Malaya. In the Department of Industrial Physiology, consultations and collaboration with industrial bodies have featured largely in the work of the session, and include problems of lighting and dust, protective masks for furnace workers, heat insulation in ships, tropical tentage and insulation of tropical helmets with linings of reinforced aluminium foil, and electric aids to hearing. A list of the papers, reports, etc., published from the School during the year is appended.

Science News a Century Ago

The Royal Observatory, Greenwich, in 1836

THE year 1835 had been for Airy, as he wrote in his autobiography, "a busy and anxious year". Appointed to succeed Pond as Astronomer Royal, during the last quarter of the year he had resided at Cambridge but had visited Greenwich once a week. "Through the last quarter of 1835," he said, "I had kept everything going on at the Greenwich Observatory in the same manner in which Mr. Pond had carried it on. With the beginning of 1836 my new system began. I had already prepared 30 printed skeleton forms (a system totally unknown to Mr. Pond) which were now brought into use. And, having seen the utility of the Copying Press in merchants' offices, I procured one. From this time my correspondence, public and private, is exceeding perfect.

"At this time the dwelling house was still unconnected with the Observatory. It had no staircase to the Octagon Room. . . . The North-east Dome ground floor was still a passage room. The North Terrace was the official passage to the North-west Dome where there was a miserable Equatorial, and to the 25-foot Zenith Tube (in a square tower like a steeple, which connected the N.W. Dome with Flamsteed's house). . . . The Computing Room was a most pitiful little room. There was so little room for me that I transported the principal table to a room in my house, where I conducted much of my own official business. A large useless reflecting telescope (Ramage's), on the plan and nearly of the size of Sir W. Herschel's principal telescope, encumbered the centre of the Front Court."

Of the matters which occupied Airy in January 1836, one was connected with the projected London and Gravesend Railway and another the chronometer work of the Observatory. It was proposed to carry the railway at a high level across the bottom of Greenwich Park. "On Jan. 9th," said Airy, "I received orders from the Admiralty to examine into its possible effect in producing vibrations in the Observatory. After much correspondence, examination of ground, etc., I fixed upon a part of the Greenwich Railway (not yet opened for traffic) near the place where the Croydon trunk line now joins it, as the place for trains to run upon, while I made observations with a telescope viewing a collimator by reflection in mercury at the distance of 500 feet. The experiments were made on Jan. 25th, and I reported on Feb. 4th. It was shown that there would be some danger to the Observatory."

As regards the custody of chronometers, Airy wrote: "In the inferior departments of the Admiralty . . . the Observatory was considered rather as a place for managing Government chronometers than as a place of science. . . . On Jan. 17th I mentally sketched my regulations for my own share in chronometer business. I had some correspondence with Captain Beaufort, but we could not agree, and the matter was referred to the Admiralty. Finally arrangements were made which put the chronometer business in proper subordination to the scientific charge of the Observatory."

The Hot Springs of the Pyrenees

WRITING from Edinburgh to Whewell, on January 7, 1836, J. D. Forbes said: ". . . My special thanks for Hopkins' paper, which arrived at an admirable