

NEW FORENSIC SCIENCE LABORATORY

THE new Home Office Laboratory at Preston was opened on July 27 by Mr. A. L. Dixon, Assistant Under-Secretary of State of the Home Department. The staff and equipment are provided by the Home Office, which also meets the running costs during the initial period. The accommodation has been provided by the Lancashire Standing Joint Committee. The Laboratory will serve the North-Western Area, which includes Lancashire, Westmorland and Cumberland and Cheshire.

The new Laboratory is conveniently arranged on one floor. The administrative offices are arranged in a central hall, from which the various laboratory sections are readily accessible. The Laboratory is furnished with modern equipment for carrying out chemical (including microchemical), physical and biological investigations. There is also a fully equipped photographic section, including apparatus for microphotographic work.

This is the fourth laboratory to be established, others being at Birmingham, Cardiff and Nottingham. Each laboratory is equipped to cover the range of work which would satisfy all general requirements, but it would be impossible to equip each laboratory to cover every possible case. This aspect is, however, largely met by giving each laboratory some special section, and in the case of the laboratory at Preston, the provision for dealing with chemistry problems is made as complete as is reasonably possible. Thus by reciprocal arrangements between these forensic science laboratories (and in special cases certain Government laboratories) it is possible to cover practically every phase of the work.

The principal function of the Laboratory is to give scientific assistance in the detection of crime to the police in the area served by the Laboratory. The police, however, have no control over the work which goes on in the Laboratory; that work is solely under the control of the Director. He has only one thing to do—to find out what the various specimens submitted (and in some cases his observations at the scene of crime) reveal from the scientific point of view. It may well be that the results completely negative the police case and favour the defence. That is no concern of the Director; he will state his findings, which will be available to both sides.

In addition to the purely laboratory work, it is part of the work of the Director to organize courses of instruction which are available to the various detective forces in the area. This course includes the careful collection and preservation of materials to be submitted to the Laboratory for examination.

The Laboratory, therefore, includes a museum in which exhibits from various typical crimes will be collected and used for instructional purposes. Although the new buildings have only been recently opened, the Laboratory was first started in September 1938 in temporary premises with Dr. J. B. Firth as director, and in this interim period on no less than 140 occasions have materials been submitted for examination and some 556 exhibits examined. These figures themselves will indicate in some measure that the new Laboratory with its more complete staff and equipment will be a great asset to the area which it is designed to serve.

J. B. F.

SCIENCE NEWS A CENTURY AGO

Drainage of Lands by Steam Power

THE *Gentleman's Magazine* of August 1839 contains the following information: "The drainage of land by steam power has been extensively adopted in the fens of Lincolnshire, Cambridgeshire and Bedfordshire, and with immense advantage. A steam engine of ten horse-power has been found sufficient to drain a district comprising a thousand acres of land, and the water can always be kept down to any given distance below the plants. If the rainfall is excessive, the water is thrown off by the engine; if the weather is dry, the sluices can be opened and the water let in from the river. The engines are required to work four months in the twelve, at intervals varying with the season; where the districts are large, the expense of drainage by steam power is about 2s. 6d. per acre."

The Travels of J. D. Forbes in 1839

EARLY in August 1839, J. D. Forbes returned to Edinburgh after spending three months in south-east France, Switzerland and Italy. On his way south he visited Paris, meeting Arago, Cauchy, Elie de Beaumont and Niepce, and was particularly interested in Daguerre's pictures. He then travelled south by way of Dijon, Chalons and Lyons on the way to the department of Ardèche. From Montpezat he wrote of the district that "in a geological sense it is interesting in the highest degree, and I have four or five craters, just as well-defined and as recent-looking as Vesuvius, within a day's walk. . . . There are deep granite valleys divided by serrated mountains, through which here and there a cindery volcano thrusts his roasted head, while the valleys are clothed with chestnut and mulberry trees in the most exquisite manner". On July 5 he made an investigation of a meteorite which fell on June 15, 1821, "one of the very few which have fallen so near to intelligent spectators as actually to endanger their lives".

From the volcanoes of Auvergne, Forbes proceeded to Marseilles and then turned north to explore the little-frequented valleys around Monte Viso on the borders of Piedmont. He visited the village of St. Veran, 6591 ft. above sea-level, "the highest in Europe, except that of Soglio in the Tyrol", and attempted the circuit of Monte Viso. From these excursions he returned to Grenoble, and then having visited a brother at Geneva he travelled through some of the unknown valleys to the south, and then by way of Cogne and Ponto he reached Turin. On August 2 he visited the astronomer Plana, "overwhelmed with official engagements", and on the following day the geologist Sismondi.

Kent Zoological and Botanical Gardens

ON Thursday, August 8, 1839, "a party of citizens visited this delightful spot in a steamer, when about 650 gentlemen and ladies were regaled with a dejeuner, under a spacious pavilion erected in the gardens for the occasion. . . . The gardens are those at Rosher-ville near Gravesend. This piece of land, or the greater portion of it, consisting of seventeen acres, was taken into its hands by a company of gentlemen more than a year since, and by then it was made the object of a most extensive plan for the securing of its natural beauties and adding to it new and unusual attractions. . . . Clever use has been made of the excavation into the chalk cliffs . . . a further advance in the valley conducts to the botanical beds where it is