

SIR W. BRAGG AT SHREWSBURY

NEW LABORATORIES OPENED

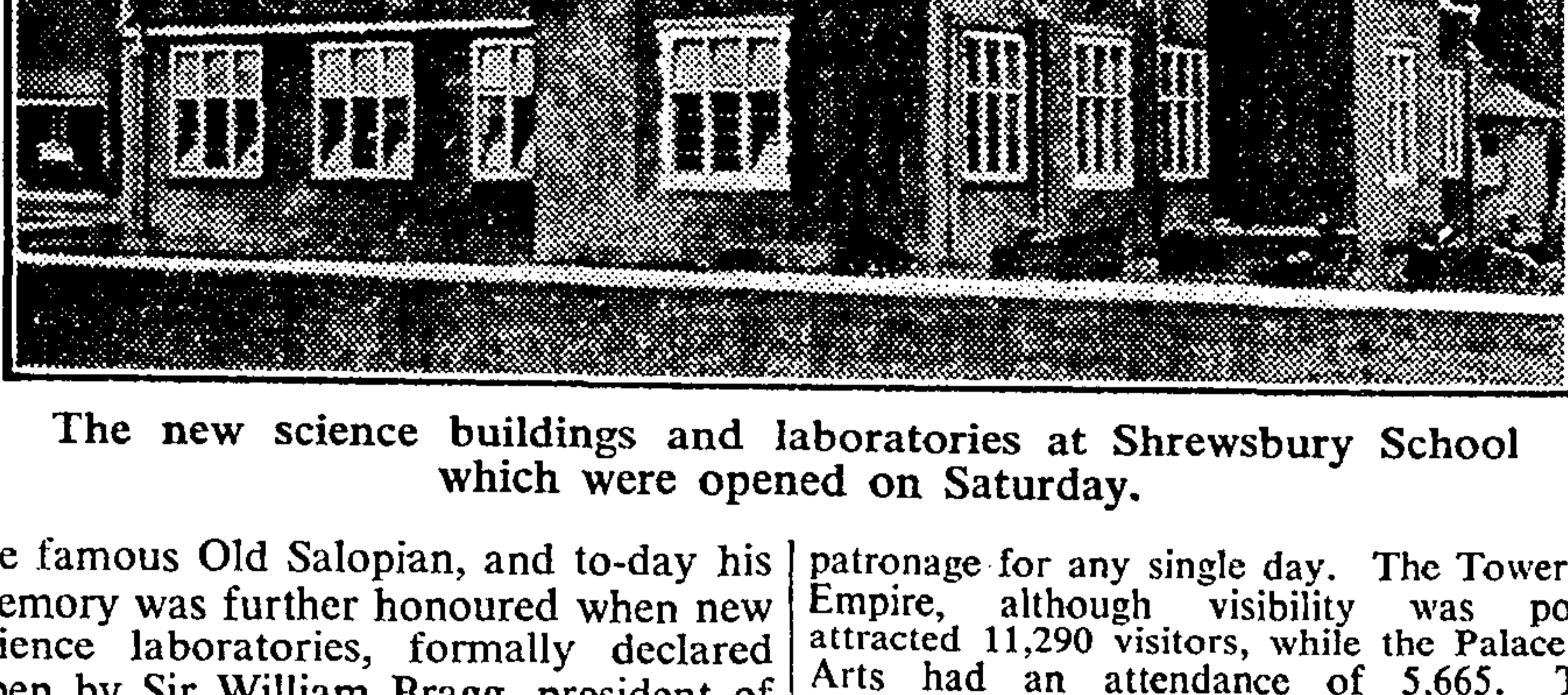
THE DARWIN TRADITION

FROM OUR SPECIAL CORRESPONDENT

SHREWSBURY, SEPT. 25

In the register of Shrewsbury School covering the period 1798-1836—the school was founded in 1552 under a charter of Edward VI—there appears in the handwriting of the then headmaster, Dr. Samuel Butler, an entry begun in 1818:—"Charles Darwin, son of Dr. Darwin, of Shrewsbury. Age 9. Left School Midsummer, 1825." As a boy Darwin worked at chemistry in a rough laboratory fitted up in the tool house at his home in Shrewsbury, and this fact brought for him at school the nickname "Gas."

The Darwin Science Building, opened in 1911, has ever since borne the name of



The new science buildings and laboratories at Shrewsbury School which were opened on Saturday.

the famous Old Salopian, and to-day his memory was further honoured when new science laboratories, formally declared open by Sir William Bragg, president of the Royal Society, were dedicated "in thankful commemoration of the life and work of Charles Darwin." The two gables of the new building bear respectively the Darwin coat-of-arms and that of the school. Many members of the Darwin family attended to-day's ceremony.

After L. M. MINFORD, head of the school, had delivered an oration in Latin extending to Sir William Bragg a welcome on behalf of the school, the headmaster, Mr. H. H. HARDY, spoke of the part played by Shrewsbury School in developing and shaping the mind of Charles Darwin. While it was possible at that time to leave without learning anything of science, to-day every boy had some acquaintance with it, and during the last five or six years the number of medical students particularly preparing for their future work had doubled and quadrupled. Shrewsbury was not turning from its great tradition of classical education to science, but it was their business to produce educated men of all kinds, educated scientists among them.

SIR WILLIAM BRAGG said that the classical tradition could not receive its fulfilment except in conjunction with the study of the natural knowledge. He referred to the limited world when men were dependent on their senses unaided, and the tremendous step forward when the first instruments were made which increased the powers of seeing, hearing, and observation. These presented a newer world and altered our lives, the microscope and the telescope opening up regions of minute objects and regions of space apparently illimitable—a hitherto unseen world. It was incumbent on us to know what was in that greater world.

Continuing, Sir William Bragg spoke of what science had done and was doing for the production of food and agricultural questions generally, the method of transport of food from one country to another; and travel by air, land, and sea. Roads were a matter of scientific research; and for industries such as steel, textiles, potteries, and rubber, for the means of communication, for matters of defence, and for the investigation and detection of crime, unseen knowledge and aids to the senses were being brought into service.

APPLICATIONS OF SCIENCE

He gave instances to illustrate how "this new knowledge" helped to solve some problems. When visiting some lead works in Sheffield a fortnight ago he was told how the question of the manufacture of lead pipes had been investigated, because Roman pipes were still in existence while present-day products had not the same lasting properties, and how the secret of the weakness in the manufacture was discovered. He himself was approached a few years ago to examine two parcels of soil and rocks from New Zealand, both apparently the same. Sheep in the district where one of the rocks was to be found thrived while those in the district where the other rock came from were dying. On examination it was found that in one sample there was an absence of cobalt, the one or two parts to a million generally to be found. An injection of a tablet of cobalt beneath the skin of the sheep sufficient to last a year met the case.

During the War a little group sought to solve the problem of finding the position of German guns. At the firing of a gun there was a pulse from its mouth which spread away and became so feeble that it was difficult to detect. One of the group was lying in his bunk when a German aeroplane came over, and one of our own guns began to fire at it. Near the investigator's head was a knot-hole in the wood, and through it came a little puff of air every time the gun went off. He made a receptacle—a kind of box—with a little opening in it, and put across the opening very fine wire which was kept red hot by electric current, and was chilled by the pulse of gunfire. By placing a lot of these receptacles in a row a few hundred yards apart for a mile and observing when the pulse struck each one in turn it was easy to establish where the gun was placed.

As natural knowledge was used more and more the technician in a department of industry or administration became more important, and it became more essential for the administrator to be able to speak to him in and understand his technical language. There was a real need at the moment for men with the administrative gift who were able to talk with their technicians, but it was not easy to find these people for they did not know enough about natural knowledge and had not learned sufficient science to fulfil the requirements.

There was, however, more than the material side. "To find the right life and the best way to live it," he said, "it is necessary to take into account the fact that you are part of your friends, of your neighbours, and of your race, and the work you do must be for their benefit. You must put your own self to one side." He hoped the new science laboratories would tend to link together a classical tradition and a study of nature.

RELICS OF DARWIN

The new buildings contain complete new physics and biology departments, the old Darwin building being given over to chemical laboratories. Mr. John R. Smith, of Messrs. Munby and Smith, 9, Old Square, Lincoln's Inn, London, is the architect, and the builder responsible is Mr. T. E. Morris, of Messrs. T. Morris and Sons, Shrewsbury.

An exhibition of relics of Charles Darwin at the school includes an atlas defaced by the scribble of the nine-year-old boy, a copy of the first issue of the first edition of "The Origin of Species" containing the famous reference to the possibility of a polar bear developing by natural selection into an aquatic animal—removed in the next issue because of the ridicule poured on the writer's argument, and a letter to R. Lawson Tait acknowledging birthday greetings in February, 1882, in which Darwin adds: "I feel a very old man and my course is nearly run." He died in the following April.

SCOTLAND'S DAY AT EXHIBITION

TORCHLIGHT PARADE OF PIPERS

FROM OUR CORRESPONDENT

GLASGOW, SEPT. 25

Yesterday was Scotland's day at the Empire Exhibition, and in spite of wretched weather conditions the occasion was loyally celebrated. The exhibition has been persistently dogged by bad weather at the week-ends, and the number of dry Saturdays since it was opened in May could be counted on the fingers of one hand. Yesterday was no exception. A dull and threatening morning was followed in the late afternoon and evening by torrential rain, which in normal circumstances would have cleared the avenues of all but the most enthusiastic visitors. In spite of these conditions an attendance of 178,731 was recorded for the day.

Two of the most popular features of the exhibition were able to announce record

patronage for any single day. The Tower of Empire, although visibility was poor, attracted 11,290 visitors, while the Palace of Arts had an attendance of 5,665. The Highland Clachan was also a strong magnet and 17,046 persons passed through the turnstiles during the day.

The total attendance at the exhibition to date is now 9,752,236, but better weather conditions will have to be experienced during the last month of its run if the figure of 12,000,000 aimed at is to be attained. The display of tartan, a grand pipe band competition, and a torchlight procession headed by massed pipe bands were the main features of yesterday's programme.

WOMEN AND THE KILT

Free admission to the Clachan was offered to all male visitors wearing the kilt, but some controversy was caused by the decision of the Clachan committee not to offer a similar concession to women. Their view was that there was no traditional authority for the wearing of the kilt by women. This, however, did not prevent many of the women visitors wearing kilted skirts, but they were obliged to pay the usual 6d. for admission. The parade of tartan dress was rather spoiled by the wearing of raincoats. During the afternoon 18 bands took part in the pipe band contest, which was divided into two grades.

After the contest the massed pipe bands, numbering about 400 pipers, marched over the stretch of main avenues that has come to be known as the Royal Mile, the salute being taken by the Duke of Atholl. After darkness had fallen the massed bands again marched through the avenues accompanied by 100 kilted torchbearers. The playing of the pipes evoked great enthusiasm among the crowds, who cheered again and again as the kilted players paraded past them.

Messages of good wishes for the success of the day were received from Mr. Walter Elliot, Minister of Health, Colonel John Colville, Secretary of State for Scotland, and Mr. Malcolm MacDonald, Secretary of State for the Colonies, all of whom had hoped to be present but were detained in London by the international situation.

Another large crowd is expected at the exhibition on Tuesday, when the King and Queen will bring Princess Elizabeth and Princess Margaret. Their Majesties will arrive by train from London at Ibrox Station at 10.30 a.m. on Tuesday and will be joined by the Princesses, who will travel from Balmoral to meet them. The Royal Family will spend two hours in the exhibition before proceeding to Clydebank for the launch of the Cunard White Star liner Queen Elizabeth.

Miss Marjorie Mason, Lancashire's Cotton Queen, is to visit the exhibition as the guest of the administrative committee to-morrow. If the international situation permits, two Cabinet Ministers will preside over sessions of a health conference to be held in the exhibition on Friday. The conference is convened by the Scottish Health Services Campaign and will be attended by local government experts from all over Great Britain. Present arrangements are that the opening session will be presided over by Colonel Colville, and that Mr. Walter Elliot will take the chair at the afternoon session.

FLARE PATH FOR EMPIRE FLYING-BOATS

PRE-DAWN START FROM SOUTHAMPTON BASE

FROM OUR CORRESPONDENT

SOUTHAMPTON, SEPT. 24

Just before dawn broke at Southampton to-day two Imperial Airways flying-boats, the Canopus and the Corinthian, took off from Southampton Water, the former for Singapore and the latter for Durban. Thus began pre-dawn flying from Southampton on Empire services, and it is likely that the system will be developed.

Flare buoys were laid in Southampton Water. The system of flares enables the aircraft to rise from the water during darkness. A line of six flares mounted on buoys and pointing into the wind marks an area of clear water midway across the estuary from which the flying-boats take off. The flares consist of two bulbs placed on top of a slender mast projecting from each float. The buoys are anchored, and the floats contain 12-volt batteries for feeding the 18-watt amber-coloured bulbs. This colour is not likely to be confused with the navigation lights of shipping in Southampton Water. The flares are 200 yards apart, thus giving a flare path of 1,000 yards.

At both ends of the line of flares and about 100 yards from the end buoys a motor-launch will be stationed. After every take-off the launches and flares remain in position until the possibility of the aircraft returning has passed. The buoys will then be hauled into launches and taken away until they are needed again for the next landing and take-off. The flare path can be quickly placed in position, and later on may be used for night landings. For the present the main use will be for taking off.

MEMORIAL TO GRESFORD COLLIERY VICTIMS

Widows and mothers of 15 men from Gresford Village who were the 265 persons killed in the colliery disaster four years ago assembled in the twelfth-century parish church at Gresford yesterday when a bronze tablet to their memory was dedicated by the Archdeacon of Wrexham, the Ven. J. E. Williams, a former vicar of Gresford. The cost of the tablet has been defrayed by the widows and mothers themselves, and is the first to be erected to any of the men.

TRIPLE IN D

MOTHER AND

FIANCEE

The theory that seeing her son committing a riding accident, turned the gun on her young man's fiancée, took her at an inquest on more, Carrigans.

The dead was McCLINTOCK, 58, whose son, WILLIAM, former second Artillery; and Miss Artillery; and Miss Artillery, of Sidmouth, occurred on Saturday inquest was held home.

The jury found that of unsound mind, shot herself, and in grief, also shot her son's fiancée. Mr. McClintock to have been married had been in an inquest months since he reported his wife's point meeting.

FATHER

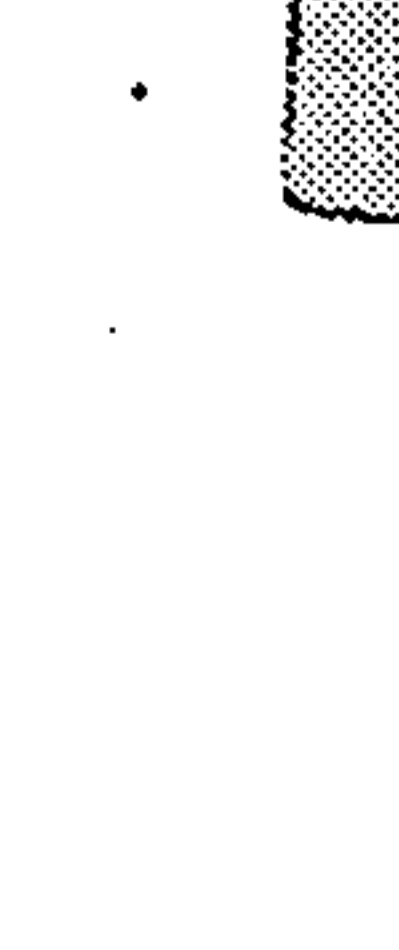
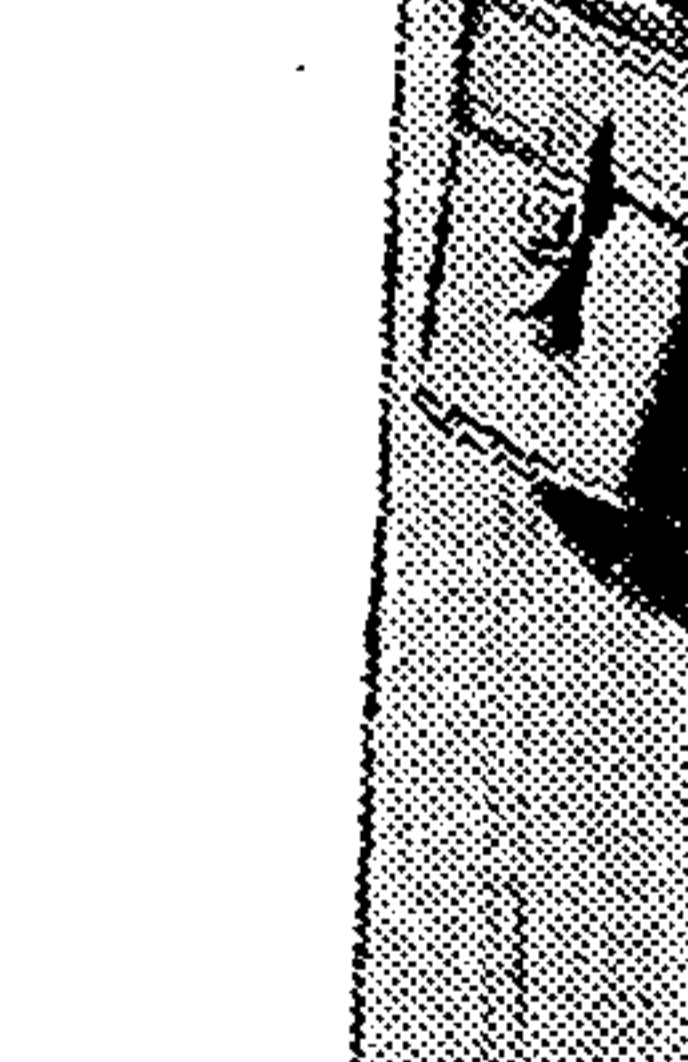
Giving evidence, McClintock, said London during between mid-day to his wife, who had been rather neurotic her son's illness. less depressed. At study, where his wife was in the garden. left the study shortly heard two shots. importance to their usual custom for pigeons."

On going to the to see his son with attendance. On a blood on the boy thinking there had sent for the two after him. A doctor learned that his afterwards one of found Mrs. McClintock. He had not seen morning, but when body he heard a voice saying, "Miss self." He went to Miss MacWorth's.

Answering that thought his wife mental breakdown. it seriously when said it would be the boy and then to

PASSENGER

While going down London Docks to sengers for Buenos Royal Mail motor was involved in a steamer Brier Rose was slightly damaged while the other was damaged. The High journey to Tilbury. The Brier Rose Southampton.



RA

A perfect town in "Scout" proof comfort out the other patterns sizes.

AQUA