

people in this country to make insulin, and he could appreciate the excitement which Banting and Best must have felt when they carried out their first experiments. One of the first two patients was a man who was brought in apparently in a moribund condition. He was six feet in height but weighed only six stone, and could not walk or stand. He left hospital after a month or two, and subsequently became managing director of a large steel company and was still living a completely healthy life. The discovery of insulin was only one of many advances in recent years which were the result of animal experiment. It was a curious situation that the greater the success of medical research in preventing or controlling disease the greater was the likelihood that, the disease being prevented or controlled, the triumph would be forgotten.

The resolution of thanks was seconded by Dr. R. D. LAWRENCE, and supported by Lord LAMINGTON, who presided.

MEYERSTEIN INSTITUTE OF RADIO- THERAPY

GIFT TO THE MIDDLESEX HOSPITAL

Sir William Bragg, President of the Royal Society, opened on June 9 the Meyerstein Institute of Radiotherapy at Middlesex Hospital. This is a self-contained unit of four floors, made possible by the generosity of Sir Edward Meyerstein, a great benefactor to the Middlesex, who, having already contributed £30,000 towards the cost of the institute, announced at the opening ceremony his intention of giving the remaining £16,500 necessary to complete it.

Staffing and Equipment

In the institute all forms of radiotherapy are available for both in-patients and out-patients, both hospital and private. It is closely linked with the main hospital, and the resources of the Middlesex staff and laboratories are available for the service of the unit. The honorary director is Dr. J. H. Douglas Webster, and there are five whole-time medical officers and a resident house officer, a sister, and six radiographers.

The most modern equipment, both on the radium and x-ray side, has been installed, and elaborate protective precautions have been taken. The treatment cubicles are all provided with duct suction ventilation giving a change of filtered air twelve times an hour. Protective lead has been embodied in the walls to prevent stray radiations from reaching the corridors, and lead has even been put into the flooring of the second floor, on which powerful tubes are installed, to prevent extraneous irradiation of the patients in the cubicles below. In every cubicle there is a two-way communication between patient and radiologist by means of microphones and loud-speakers. Two of the three cubicles on the ground floor contain shock-proof x-ray tubes, and the third is for telerradium. Here, with 4 grammes of radium, mass irradiation is carried out at 8 cm. distance. The radium when not in use is housed in a safe surrounded by ten inches of lead, and the transference of the substance to the applicator is effected pneumatically through a flexible tube.

The first and second floors are devoted to x-ray therapy, one for female patients and the other for male. The control of 200 kV shock-proof tubes is by a multiple interlocking device, so arranged that the apparatus as a whole must be switched on always in the same order—for example, no current can be conducted through a tube unless the appropriate cooling pumps are already working. In this way the plant has been rendered immune to abuse. The dose of x rays to the patient, measured either with an ionization chamber or by a calibrated clock, is completed automatically by the closing of a lead shutter on the tube head, and the interlocking is such that it is impossible for the patient to receive an over-

dose. There is also interlocking on the door of the cubicle, so that the moment the door is opened the lead shutter will close. On the first floor Siemens tubes cooled by oil are used, and on the second floor Metropolitan Vickers tubes, constructions which it is possible to dismantle completely, so that in the event of a broken filament or cracked target they may be taken to pieces, the faulty part replaced, and the whole reassembled. The couches and various centring and control devices are by Newton and Wright. The top floor is in part used for treatment by surface radium, with well-provided mould and mounting rooms.

The Opening Ceremony

At the opening ceremony, in the absence of Prince Arthur of Connaught, the president of the hospital, the guests were received by Mr. T. B. Money-Coutts, vice-chairman. Sir William Bragg, before declaring the institute open, referred to the reputation which Middlesex had sustained for many years in research and advance in radiotherapy. He believed that Sir Edward Meyerstein got the inspiration for his present benefaction when he found that as a result of this work the word "inoperable" had been struck out in relation to certain conditions and "operable" substituted. The application of radium and kindred radiations to the cure of disease and alleviation of suffering was not miscalled a romance. He himself, although not a medical man, had been in touch more or less with every phase of this progress. He remembered a day, many years ago, when he was at work in his laboratory and a young man entered and began to explain some of his theories concerning a magnetic detector. He was the future Lord Rutherford, who was afterwards to achieve unrivalled fame for his work on radio-activity.

The new institute (Sir William Bragg continued) had an interest to the scientific mind beyond its obvious purposes. It was an instance of the application of science to human need and desire. A correspondent in the *Times* had been complaining of the vagueness of the customary interpretations of the word "science." He himself thought there was nothing better than the words which the founders of the Royal Society employed in 1660 when they met to consider the beginnings of the study of experimental science—"the improvement of natural knowledge." Since the Society was founded there had been a very great "improvement," with tremendous changes in men's activities and powers. The improvement was due mainly to the extension of the natural senses through the development of instruments. With such extension a new world, unseen by the natural eye, came into view. Upon that unseen world the work of the institute depended. The radiations which it employed in its beneficent work were far beyond the range of human senses. They had effects of which humanity was glad to avail itself, but without the explorations of the unseen world nothing would have been known about them.

Before the ceremony closed Dr. Hans Holfelder, a friend of the director, presented to the hospital on behalf of the medical faculty of Frankfurt University a portrait of Professor Röntgen.

C. W. Laymon and H. E. Michelson (*Arch. Derm. Syph.*, Chicago, January, 1938) point out the immunity of certain areas of the body to the invasion of certain diseases and the rarity of lichen planus of the eyelids in particular. They report five cases and classify them into three types: (1) Typical lilac-coloured pitted and scaling papules; similar lesions occur elsewhere on the body. (2) An annular variety similar to that seen on the penis with the same type of lesion on other parts of the body. (3) A variety seen in brunette women aged about 30 in which the upper eyelids are discoloured with a brown, symptomless, retiform eruption, similar to that seen in a pigmented case of erythema abigne. Their cases responded to treatment with x rays and the injection of mercury bichloride.