

again the management was so fortunate as to be able to secure a convenient house for the purpose opposite the hospital.

ADDRESS BY SIR WILLIAM OSLER.

Sir WILLIAM OSLER said that change was the order of the day. There was only one thing that did not change, and that was man himself. He had not changed for countless generations. He was the same helpful, helpless, feeble, strong, active, weak creature which they all were and all knew themselves to be. Probably as far as his diseases were concerned there was little change during the historical period, and the doctors had not changed.

Practical Uses of Modern Laboratories.

There was one thing, however, with regard to disease that had changed, and that was the method, the way of looking at things, and of investigating. That was an absolutely radical change, and it was as representative of that change that that laboratory was being opened that day.

Typhoid Fever.

In the last generation typhoid fever was well treated, well nursed, and was then sent out of the hospital, and the doctors and hospital governors were well pleased if the case recovered—and nothing else was done. Now what happened when a case came into a hospital to day? There were at least four agencies at work. In the first place, in the hospital much greater care was taken with the diagnosis, and elaborate laboratory methods were used in cases of doubt, methods which required expert knowledge, great skill, and represented long, weary, and laborious research into the nature of the disease. To-day a case of typhoid fever was treated certainly with fewer drugs, probably was better nursed, and was not allowed to leave the hospital until it was shown to be safe from the standpoint of the community, that the convalescent was no longer a distributing centre of typhoid germs. To determine this elaborate methods must be carried out in well-equipped laboratories by well-trained men. In the second place, the case was reported to the local health authority, and the conditions under which a case of typhoid fever arose were carefully investigated, to determine whether it was an isolated or sporadic case, or one connected with an epidemic. Again, no well-conducted general hospital was complete that looked at the case only from the medical standpoint. It had to look at the patient from the wider humanistic standpoint, the standpoint of social service. In a well-organized hospital the social service department visited the family where the case occurred, and saw that those organizations were put into operation which looked after these people and took care that the conditions in the house were so ordered that another case did not arise. The social service department was one which was likely to grow and increase, and was an enormous addition to the usefulness of the hospital in the community. The fourth point was the development which had recently taken place in laboratory methods. If a case occurred in a large household, or where there were a large number of people, such as a common lodging-house, to-day, the medical officer of health would inoculate all persons who had been exposed to the disease, and under such conditions it had been shown unquestionably that inoculation against typhoid fever was not only safe, but imperative where large bodies of persons were exposed to the disease. The reports of the United States army were remarkably interesting in that connexion. The troops were stationed in districts where typhoid fever was endemic periodically, and since inoculation the incidence of the disease had progressively fallen, until last year there were only one or two cases of typhoid fever in the entire camps of the United States army. These changes had all been in the recent generation.

Arthritis.

A generation ago cases went into the hospital and were labelled rheumatoid arthritis. To-day they were studied with a view to differentiating them into various groups with the possibility of determining their cause. First it was ascertained whether the cause were septic disorders of the teeth or tonsils, and that could only be done by using laboratory methods. In another group of cases the cause might be poison, some trouble in the gastric intestinal canal, and to ascertain this an elaborate, difficult,

THE NEW PATHOLOGICAL LABORATORY AT THE ROYAL MINERAL WATER HOSPITAL, BATH.

June 5

OPENING CEREMONY.

THERE are few provincial hospitals better known than the Royal Mineral Water Hospital, because the area from which its patients are drawn is only limited by the ocean around the British Isles. For 172 years its wards have been freely open to sufferers from arthritic diseases, but the efforts of the staff have been considerably embarrassed in recent years by the lack of modern laboratory appliances. Now, as the result of their efforts, an up-to-date department has been provided for these important necessities of the modern hospital. A well-lighted room, some 28 feet square, in a detached building in the garden, has been transformed and fitted up with all the usual apparatus for biochemical and bacteriological examinations, with a view to make researches into the nature of the various forms of chronic arthritis and other allied conditions.

Laboratory researches were begun in 1908, chiefly at the expense of the medical staff, in an underground and otherwise unsuitable room, but the good work that was done there in the past was a stimulus which has culminated in the new department. A museum is included and a library is being formed. Towards the cost of this latter, Sir William Osler has contributed £10, and as the hospital is a national one, it is hoped that generous benefactors in other parts of the United Kingdom will contribute books, reprints, and specimens pertaining to the work carried on.

On June 4th, in the presence of the Mayor of Bath (Dr. Preston King) and a large number of medical men and other visitors, the laboratory was formally opened by Professor Sir William Osler.

The President of the hospital, the Rev. C. E. B. BARNWELL, who was in the chair, after welcoming Sir William Osler, gave a sketch of the history of the Royal Mineral Water Hospital. The fame of Bath had brought to it not only fashionable people, but from an early date a contingent of poor persons, so that the "Bath beggars" became notorious. Eventually Dr. Oliver, Beau Nash, and Mr. Henry Hoare, banker, and others determined to erect a hospital, and as an Act for the suppression of play-houses had been passed they were able to purchase the Bath Theatre for a song. Ralph Allen gave money and also the stone free of charge, and Mr. Wood, a well-known architect, gave his drawings and plans without fee. The fortunes of the hospital fluctuated, but its fame increased, and the demands for admission to it increased. It was decided to build another hospital, and the managers were fortunate enough to acquire the rectory garden for an exercise ground, and finally the rectory house. Recently the Mayor, Dr. Preston King, had recognized the need of building suitable accommodation for the nurses, and



and costly investigation was necessary, and one which would have to be carried out in such a hospital as that on a very large scale, so that there would be plenty of use for the new laboratory. It was to be hoped that in a few years, by investigations carried on on these lines, it would be possible to obtain a clear and well-defined knowledge of the causes of gout—a disease which was so common, so prevalent, and was not only distressing to the individual, but such a waste of human life and such a waste of energy.

#### *The Staff and Organization of a Clinical Laboratory.*

In establishing a laboratory the men were all-important. The subject was becoming so complicated that it was not possible for any one man to control a clinical laboratory thoroughly. There must be a man for both departments, the one for the bacteriological and more clinical side and the other for the chemical side. One difficulty was that in the development of that laboratory side of medical life, which was going to increase enormously in the next few years, a group of young men must not be turned into blind alleys. It was not right to take the ablest young men and put them in the laboratory work and not make proper careers for them. No doubt with the increase in laboratory work there would be increased opportunity for careers for a certain number of men. There should be in a laboratory two groups of men: the men who wished to make laboratory work their career, and the group who intended to become surgeons and physicians or take up special departments. There could be no better training for the latter than to devote one, two, three, or four years to work as an assistant in such a laboratory. It was a great help to a man both in medicine and surgery and would be a great help through all his life if he spent his waiting years in obtaining experience in laboratory methods. The work of a laboratory was primarily for service in the interest of the patient; it should be specifically for the benefit of the sick in the hospital for the purposes of diagnosis and treatment. But in the larger laboratories, where there was a large collection of cases, such as in Bath, in the interests of the public who supported that hospital such a laboratory should be a centre of research. The doctors always studied the individual with a view to his immediate and definite benefit. That was their primary object, but there was an ulterior object, a larger aspect—the prevention of disease, which was quite as important as the care of the individual. There was great opportunity in Bath of solving one of the serious problems of humanity. He had not the slightest doubt that the cause of arthritis would be found out. There were two needs which were very important. The first was a good museum, so that a person who was interested in arthritis might see every possible illustration of the different types of arthritis. The second need was for a well-equipped and up-to-date library, and as a great believer in books as tools he would like to give a contribution of £10 towards the library. Another need was a new x-ray department. It was a necessity. Bath now had a great opportunity. The laboratory was an excellent one, and its success would depend upon whether they had the courage and the money to get the right sort of men to manage it. The hospital had an active, energetic staff, and the citizens and others must come forward with the money to equip and run the laboratory.

#### *The Budget Proposals.*

Sir William then referred to the Budget proposals with regard to the question of providing extensive laboratory equipment throughout the country. It was a scheme which he doubted not would be most serviceable, and he hoped that when it was put in order the laboratories would be linked up with such institutions as the general hospitals. Unquestionably a very large part of the work which would be done could be done in the laboratories of the general hospitals. No doubt specific public health work would be done by public health laboratories, but all the specific clinical work was best done in the laboratories of the general hospitals. It was to be hoped that in this new scheme these laboratories would be linked up, and some scheme arranged by which all the specific clinical work was done for the practitioners of the neighbourhood in the hospital laboratories. In conclusion, he said that Bath had a medical history which was perhaps unique for a city of its size; probably more distinguished physicians came out of Bath than out of any city of its size. Caleb Hillier

Parry was an ideal physician, a devoted student of his profession, a public-spirited physician, devoted to the widest interests of science, and a devoted student of books and he was glad his library was preserved in the Royal United Hospital.

#### VOTES OF THANKS.

The Mayor (Dr. PRESTON KING), in moving a vote of thanks to Sir William Osler, said that the opening of the laboratory marked a definite step forward in the history of the hospital and an epoch in the history of the city. For its prosperity Bath depended upon the waters, and, in order to maintain that reputation, must treat patients with the waters properly and scientifically, and, in order to do that, an understanding of the diseases which came to Bath was necessary. The recent discovery that the Bath waters were radio-active afforded an explanation of their potency in the past, and, in addition to pathological researches, he suggested that careful investigation should be made as to the action of the radio-active waters of the city of Bath in connexion with the cure of these diseases.

Dr. LLEWELLYN, who seconded the motion, said that he hoped the work done in the laboratory would dissipate much of the obscurity which shrouded arthritic diseases.

Dr. MICHELL CLARKE, professor of medicine in the University of Bristol, who supported the motion, said that there could be no doubt as to the importance of the part such a laboratory as that which had just been opened would play in the future. There must be a close association between the men in the laboratory and the men in the wards, and the laboratory would need a man who would give his whole time to the work which was engrossing and likely to increase.

The resolution was very heartily carried, and Sir WILLIAM OSLER made a suitable response. A vote of thanks to the President, moved by Lord ALEXANDER THYNNE, brought the proceedings to a close.

June 4 1914  
Bath  
CUS 417/117.12326