

INTERNATIONAL CONFERENCE OF PHYSICIANS

(Continued from p. 431)

SURGERY OF CONGENITAL HEART DISEASE

The outstanding event of the Conference on Sept. 9 was an all-day discussion on the surgery of congenital heart disease, for which the Sections of Paediatrics and Cardiology combined. The diagnosis and treatment of the cyanotic group was introduced by two workers from the famous Baltimore Clinic—Dr. Helen Taussig and Dr. Alfred Blalock. Dr. Blalock has worked out a technique for the anastomosis of one of the systemic arteries to the pulmonary artery, thereby increasing the circulation to the lungs; in other words, an operation designed virtually to create another ductus.

Dr. Taussig said that in diagnosing the condition of cyanosis a history of squatting on the part of the child was very helpful. These children tended to sit down on their haunches, with their weight on their heels. The cyanosis was of varying degrees; the heart was not greatly enlarged, the basal systolic murmur was characteristic, though a number of the patients had extreme pulmonary stenosis with no murmur, and there were helpful electrocardiographic and especially fluoroscopic signs. Infants were generally less cyanotic than older children. Some might have lips of normal colour and only slight abnormalities of the fingernails, and yet be extremely incapacitated, with an oxygen saturation which fell rapidly during exercise. The degree of incapacity varied from day to day and from season to season. Conditions essential for operation were: (1) inadequacy of circulation to the lungs; (2) availability of systemic arteries; (3) existence of a pulmonary artery to which to anastomose the systemic artery; (4) greater pressure in the systemic artery than in the pulmonary. The greatest concern in the clinical diagnosis was with the structure of the pulmonary artery, and in many children diagnosis was difficult because the pulmonary artery was not very large and the pulsations not easy to detect.

In the first 350 operations which Dr. Blalock had carried out according to this procedure the number of excellent results was 248, or 71%. The deaths numbered 60, cases unimproved 8, much improved 18. In 16 of the cases the operation was exploratory only. Infants stood the operation less well than older children, and children under two were not recommended for operation if there was an even chance of survival. There had not yet been opportunity to answer the question how well the anastomosis would adjust itself to the growing child. Arterial oxygen circulation, which before operation might be 65%, rose post-operatively to perhaps 85%, and was maintained at about that level for the one or two years over which observation had so far extended. Some cases showed cardiac enlargement in the first three weeks after operation, due to adjustment to the altered circulation, and thereafter the size of the heart remained stationary; only 8% showed a progressive cardiac enlargement.

Technique of Arterial Anastomosis

Dr. A. Blalock followed with a colour film illustrating the details of his operation. Anastomosis between the right pulmonary and the right subclavian was favoured. It was possible either to do an end-to-end anastomosis or, as he preferred, an end-to-side; the latter allowed the blood which was to be oxygenated to go to both lungs, and also it permitted with greater safety the performance of further procedures at a later date should this be necessary. The anaesthetic used was cyclopropane throughout. More attention was paid to pressure within the pulmonary artery than to the turns of the vessel. A transverse opening was made in the upper surface of the pulmonary artery of approximately the same size as the opening of the end of the subclavian. Many peculiar anomalies were found. In one case a strand of tissue connected the pulmonary to the carotid and the subclavian; there was apparently no innominate artery. The strand was destroyed and anastomosis carried out between the junction of the carotid and the subclavian and the pulmonary artery, and this patient did very well. Up to now he had carried out the operation in 474 cases,

with 86 deaths. The mortality with the various procedures was as follows:

Anastomosis	Cases	Deaths	Per cent
Subclavian and pulmonary artery:			
End to side	331	37	11
End to end	23	4	17
Carotid and pulmonary:			
End to side	30	9	30
End to end	1	1	100
Innominate and pulmonary:			
End to side	47	13	28
End to end	1	1	100
Aorta and pulmonary:			
Side to side	2	1	50
Subclavian artery to pulmonary vein (unintentional)	2	2	100
Exploratory thoracostomy	37	18	49

In not one of the patients in whom the subclavian artery had been ligatured and who had survived the operation had there been any difficulty with the circulation in the arm. Ages of the patients varied from 2 months to 44 years. The ideal age for operation was from 3 to 9 years. Heparin and dicoumarol had been very rarely used; one death was attributable to the latter drug.

The discussion was continued by Dr. James W. Brown (Grimsby), who said that he had had to care for over a hundred cyanotic children; many of them had existed rather than lived. About a quarter managed to survive until school-leaving age. If an extremely bad prognosis was justification for surgery the cyanotic group was a challenge; but operation was not a cure: it was a physiological readjustment which allowed a greater circulation to the lungs.

Patent Ductus Arteriosus and Coarctation

Dr. C. Crafoord (Sweden), who claimed a mortality as low as 1% in the surgery of these conditions, and Dr. Rae Gilchrist (Edinburgh) opened a discussion on this subject. Dr. Gilchrist said that with increasing experience he felt that cases of patent ductus in childhood, with very few exceptions, should be given the benefit of surgery. He would hold his hand until the child had reached the age of 7 or 8, because up to that time it was possible that the ductus might close spontaneously, which he had seen happen in two or three cases. Over the age of 10 the difficulties in the way of thoracic surgery were greater, and the technique a little more hazardous, the arteries less resilient, and the mortality from intrathoracic interference increased. He doubted the wisdom of recommending surgery for the young person of 20 or 22 if he or she was not incapacitated; certainly the dangers should be explained to the patient. If a person with patent ductus developed a fever that fever should be watched very carefully, and the possibility of infective endocarditis should be borne in mind. On the results of surgical measures he had nothing but encouragement to report. The mortality in this country and in America was under 5%. The follow-up in Edinburgh had been encouraging also. He read a letter from the schoolmaster of a boy of 13 who had his ductus ligated eight months previously stating that he was an entirely different boy since his operation, that his thrust and resourcefulness were now much more positive and sustained alike in play and work. Another boy in the two years after this operation had gained nearly 20 kg. in weight and 20 cm. in stature, and on the second anniversary of his operation covered seven miles (11.2 km.) on foot in an hour.

Two surgeons—Mr. O. S. Tubbs and Mr. Holmes Sellors—recounted their experience, and Prof. Crighton Bramwell (Manchester) spoke of middle-aged patients with coarctation. In his series there were 13 who were over 30 years of age when they first came under observation. The three oldest were dead, but all had lived to over 50 and had died from conditions unassociated with the defect of the vessels. Of the remaining ten, several were able to undergo severe physical exertion without the production of symptoms. The third decade was the dangerous period because people with good muscular development might be subject to physical strain and women to childbearing.

Dr. Maurice Campbell spoke of blood pressure in cases of coarctation. Sir Thomas Lewis in his classical paper in 1933 had said that there was no rise in blood pressure for a number

of years. In some statistics which Dr. Campbell had collected, relating to children between the ages of 7 and 16, it appeared that on the average the blood pressure rose in these cases from about 140 to 180-200 at the later age. His impression was that during the period of most rapid growth the constricted part of the aorta failed to grow in the same way as the rest of the arterial trunk.

SOCIAL MEDICINE IN THE CURRICULUM

In the Section of Social Medicine, under the chairmanship of Sir Wilson Jameson, three discussions took place—one of them, opened by Sir Ernest Rock Carling, on the care of the aged and infirm, a second on social surveys, and a third on social medicine in the curriculum. Dr. John B. Grant, in introducing this last subject, described developments which were taking place in the U.S.A., particularly the organization by the medical schools themselves of comprehensive health care for groups in the community. The two medical schools in Baltimore were organizing health centres of this kind, providing medical care within their own area and, of course, offering material for teaching purposes. The same thing was taking place in New York and elsewhere. The positive aspects of health would be explored, social therapy be integrated with clinical therapy, and families—not individuals merely—would be afforded a preventive and rehabilitative service.

Prof. John Ryle (Oxford) said that it was a curious reflection that the emphasis in medical teaching should have been so predominantly pathological, with very little attention paid to the subject of health, and, further, that the teaching of pathology should have been concentrated upon the individual and not upon the community. Everyone said that prevention was better than cure, and yet the seven years' curriculum of the medical student had embodied hitherto only a relatively few hours' instruction in public health. Many had become dissatisfied long ago with this imbalance, and their colleagues in the public health field had insisted that it required correction. Ten years ago the General Medical Council made a recommendation on the subject, which had been postponed owing to the war, that throughout the whole period of studies the attention of the student should be directed to the importance of the measures by which health might be assessed and maintained and disease prevented. At last there was an awakening on this subject, and what had come to be called social medicine, with its related disciplines, social pathology and social physiology, might be considered as having the G.M.C. recommendation in view. But up to the present this occupied only a minor part in the teaching programme, and the teaching of medicine was still very largely concentrated upon the state of the sick individual considered in complete detachment from his personal and social environment. For one like himself, bred in the clinical tradition but always interested in the broader natural history of disease, it had been a stimulating experience to play a small part in the development of social medicine at Oxford, with, as essential corollaries, the inauguration of a research department and association with colleagues in the fields of public health and industrial medicine. He gave a description of the Oxford courses. Prof. Axel Strom (Norway) and Prof. J. M. Mackintosh continued the debate.

INFECTIVE HEPATITIS

The Section of General Medicine held a symposium on this subject. Dr. A. M. McFarlan discussed the epidemiology. A study of the epidemiological curve over recent years in different countries revealed a steady rise in incidence, followed by a slow fall, and in the course of years a further rise. There was also a seasonal fluctuation in line with the respiratory rather than the intestinal group of diseases. The incidence was highest during school age; in East Anglia it was highest between the ages of 5 and 10 in the towns and between 10 and 15 in the rural districts. Taking some 900 villages in which cases had been notified over two years, there was only one case in each of about half the villages. Protein deficiency did not seem to have had much to do in England with the occurrence of the disease. Something in the Middle East environment appeared to make people more susceptible to the disease even after they had returned to Britain.

Dr. J. H. Dible described the pathology, which he said had been established on a sound basis as a result of the liver biopsy technique. Restoration of the histological appearance readily took place even where there had been a severe lesion. Dr. F. O. MacCallum mentioned transmission experiments. There was no universally susceptible animal, and therefore use had to be made of human volunteers. A Danish visitor, Dr. M. Jersild, gave an account of a recent severe epidemic in Copenhagen. In the years 1944-6 there were 160 chronic cases (duration over three months), and 98% of the patients were women. Acute hepatitis (less than three months) also increased in Denmark during the war, but in this condition there was no pronounced sex difference. The chronic state was sometimes marked by intense pain at the right costal margin and varying degrees of icterus.

Army Experience

Dr. E. R. Cullinan said that in both world wars infective hepatitis had crept in like a stealthy enemy and made its greatest ravages in the armies massing around the Mediterranean. The clinical description given in the official history of the war of 1914-18 could be repeated almost exactly for the war of 1939-45. A second attack occurring even within a month bore no relation to the first in duration or severity. Treatment in the British Army overseas was empirical—adequate rest, liberal diet, especially proteins, and prolonged convalescence. In the winter of 1942-3 infective hepatitis cost the British Army in the Middle East over half a million man-days. Officers were twice as often attacked as other ranks. The epidemiological puzzle remained unsolved.

An account of infective hepatitis in British West Africa was given by Dr. G. M. Findlay. Among West African soldiers during the years 1941-5, out of 1,397 deaths from medical causes 85 were from infective hepatitis.

Finally, Dr. W. N. Pickles made some observations on infective hepatitis in general practice. He gave an account of an epidemic occurring in Yorkshire in 1929 among a population of 5,700 in which there were 270 sufferers, of whom he himself attended 115. The disease ran a mild course in the great majority of his patients. In this and succeeding epidemics he believed he was justified in attributing the spread to droplet infection. Contact sufficient to reproduce the disease was very casual, and there were no explosive outbursts such as would occur from contamination of food or water, although, of course, he would not deny that the disease could arise in that way.

ELECTRO- AND PHONO-CARDIOGRAPHY

The Section of Cardiology devoted a full day to electrocardiography. Dr. F. N. Wilson (Michigan), in a long and impressive contribution on the clinical value of chest leads, said that British physicians and physiologists had done more than those of any other nation to make electrocardiography a useful clinical method, and Sir Thomas Lewis had done more than any one man to establish the principles and methods of analysis upon which the interpretation of the electrocardiogram depended. He added, however, that, except in rare instances, clinical diagnosis should not be made on the basis of electrocardiographs alone. He sometimes wondered whether electrocardiography as practised in the States was not doing more harm than good. It was essential that the man who interpreted the electrocardiogram should have a clear idea of the clinical history and laboratory findings, and if the electrocardiographic interpretation was not confirmed by these other findings it had better be discarded. He was followed by two British exponents of chest leads—Dr. Curtis Bain and Dr. Terence East.

The use of the phonocardiogram in clinical cardiology occupied another session. The subject was introduced by Dr. William Evans (London Hospital), who said that phonocardiography was born soon after electrocardiography, but, while the latter had gained ground rapidly in clinical medicine, phonocardiography had languished. There were signs of a revival, however, and he predicted that this method was likely to have a place in cardiology not far behind the other. He went on to suggest certain ways in which the phonocardiogram helped in the clinical classification which had to be constructed for triple heart rhythm—a classification very necessary

on account of the confused terminology in the literature. In triple heart rhythm there were three sounds; the additional sound might come after the second or in front of the first or immediately before the second, and he proceeded to discuss the significance of the various indications.

He said that in 74 consecutive cases of mitral stenosis submitted to phonocardiography a mid-diastolic murmur had been heard in every instance. In the patient with emphysema the triple heart rhythm was in his belief the first physical sign of right heart failure. It might disappear for a time under treatment, but it was of bad prognostic significance; the prognosis was quite different for the patient with dual heart rhythm. He mentioned innocent triple heart rhythm, but declared his belief that the third heart sound did not occur physiologically after the age of 40. This test, Dr. Evans added, had come to stay. Seven years' experience had taught him the advantage in clinical diagnosis of finding and placing the added sound, also that the quality and intensity of murmurs mattered far less than their place in relation to the cardiac cycle. Directly they placed a stethoscope on the chest they should ask whether the first heart sound or the second heart sound showed accentuation or splitting, whether more than two heart sounds were heard, and whether a murmur, presystolic or systolic, was connected with the first or second heart sounds, or a murmur with the third heart sound—the mid-diastolic murmur of mitral stenosis.

Prof. C. Lian (Paris) described his telestethophone with which it was possible to record the heart sounds while hearing them reproduced by a loud-speaker. Triple rhythm, he said, was the principal indication for employing phonocardiography in the clinic. In the variety of triple rhythm in which the second sound was single a distinction had to be made between gallop rhythm and reduplication of the first heart sound. The clinical distinction might be difficult, but phonocardiography was decisive because in presystolic gallop rhythm the first constituent of the double sound preceded the summit of the R-wave in the electrocardiogram, whereas in reduplication of the first heart sound both constituents fell after the summit of the R-wave. In healthy subjects no part of the vibrations belonging to the first sound occurred before the summit of the R-wave. He indicated other ways in which phonocardiography assisted in the differentiation of the varieties of triple rhythm. A long argument developed between the French and British schools as to the precise significance of some of the findings.

SYMPOSIUM ON PAIN

In the Section of General Medicine symposium on pain, in which various speakers dealt with cutaneous, deep, visceral, cardiac, and gastric pain, and headache, a philosophical introduction was given by Prof. E. D. Adrian. As a physiologist he confessed that the contribution which physiology had to make to this subject of pain was not as important as it ought to be. There was always a tendency to take pain too much for granted. So far as the surface of the body was concerned, the common factor in pain was that it proceeded from a cause which was likely to bring about injury. It was a danger signal; the function of the pain mechanism was to prevent damage, but it was not always very effective for this purpose. Pain usually continued after the damage was done. To understand an attack of pain it was necessary to keep in mind the different levels of the nervous system at which pain messages could take effect. Automatic brakes came into play when the danger signal operated and prevented the damage from becoming worse. They were low-level reactions, and, as the lower levels of the nervous system were under the control of the higher levels, the danger signals must come into consciousness to some extent. If one trod on sharp stones the pain signals reaching the higher levels of the brain would prevent one from continuing to walk on such a surface; but as often as not some damage had been done before it could be avoided. While the pain in the foot, however, might not prevent the immediate damage, yet in the higher levels of consciousness there would remain a warning against walking on sharp stones.

In general the appearance of pain in a particular situation would label that situation as dangerous and to be avoided. Pain signals, therefore, could only have this value if they

appealed to the highest levels of total activity, levels at which consciousness came into play. Only at such levels could the brain abstract the significant features of the situation. Without the higher powers of the mind we should not realize that the discomfort following the eating of unripe plums was due to their unripeness. Thus man was helped to escape the recurrence of damage. He could analyse the situation and plan a complicated course of action to prevent the situation arising in future. He could plan hospitals and anaesthetics and medical care so as to free himself from pain and put the alarm bell out of action, relying on his intelligence to prevent the damage from getting worse. Pain had therefore a far greater survival value for man than it could have for creatures with smaller brains.

Considerations of this kind, of course, could be pressed too far. It did not follow that experience of pain was a necessary ingredient in intelligent behaviour or knowledge of good and evil. The central nervous system of man was so highly organized as to make him uneasy in certain sensory situations—noise, for example—and to tend to make him avoid them, without any actual experience of pain. Prof. Adrian turned to the less speculative ground of detailed study of the nervous mechanism responsible for pain. Ambitious attempts to distinguish sharply between the sensory apparatus of pain on the one hand and that for finely graded discriminatory sensations on the other had had to be given up, and the tendency now was to think of sensory fibres and endings as forming more or less a continuous series in which sharp distinctions could not be enforced. Pain mechanisms employed few if any of the largest nerve fibres, which seemed to be concerned with touch and muscle sense, but there was no one size or variety of fibre devoted to pain.

Lord Moran, who presided, pointed out how often the pain symptom led to mis-diagnosis, deep somatic pain being attributed to a local lesion.

B.C.G. VACCINATION

On the last day of the Conference the Sections of Disorders of the Chest, Paediatrics, and Social Medicine combined for a discussion on B.C.G. (*Bacillus Calmette-Guérin*) vaccination under the chairmanship of Sir Wilson Jameson. Dr. W. H. Tytler gave reasons why the success obtained with this vaccination in some other countries could not be expected to be repeated in Great Britain, with a relatively low child mortality from all forms of tuberculosis. Moreover, any attempt to introduce a new general measure of vaccination would arouse opposition and would prejudice, for example, diphtheria immunization, for which there was urgent need. The vaccination of children exposed individually to special risks was a different story. Altogether, the subject was worthy of attention, but it must not be regarded as likely to revolutionize the tuberculosis situation in this country. More was to be expected of it in some other parts of the world, as, for example, in Eastern Europe and in Africa.

Three Scandinavian workers—Prof. A. Wallgren (Stockholm), Dr. J. Heimbeck (Oslo), and Dr. J. Holm (Copenhagen)—then described the situation in their respective countries. Prof. Wallgren claimed that experimental research work and clinical experience alike had shown that vaccination conferred an increased resistance to subsequent infection. In addition to specific immunity there was created a non-specific resistance, which in the long run was more valuable. Dr. Heimbeck gave an account of the immunization of hospital nurses, and said that the Norwegian experience had definitely proved the efficacy of B.C.G. vaccination. The morbidity due to tuberculosis had been reduced to one-sixth and the mortality to one-tenth. Of 13,000,000 Scandinavians, more than 1,000,000 had now been voluntarily vaccinated. Dr. Holm said that in Denmark as a result of B.C.G. the morbidity rate had been reduced to one-fourth or one-fifth. He added that in Denmark the vaccinations were carried out by specialists; only a few of the 100,000 vaccinations in 1946 were by general practitioners. The mortality in Denmark was now 32 per 100,000 population; this was for all forms of tuberculosis, and was believed to be the lowest in the world. Dr. Holm said that the Danish authorities would be prepared to send by air supplies of the vaccine to Great Britain if necessary.

Advocatus Diaboli

Dr. G. S. Wilson (Medical Research Council) said that it was almost heresy to question the value of this vaccination, but he was bound to make some criticism of the published experiments. He felt that while B.C.G. might be of value in the early stages of a campaign against tuberculosis it would be subject to the law of diminishing returns, and when applied to a population with a fairly high level of genetic immunity the result was likely to be of much less value. He proceeded to dissect four recent inquiries—one by Rosenthal, Bland, and Leslie in 1945 concerning infants in Chicago, another by Levine and Sackett in 1946 concerning infants in New York, a third by Heimbeck concerning Norwegian nurses, and a fourth by Aronson and Palmer in 1946 concerning North American Indian children and young adults.

The results in some of these surveys looked impressive, but closer examination showed that there were gaps in the statistics. In the first of the surveys the workers had not begun their observations on the infants until between three and seven months after vaccination, by which time a number in both the vaccinated and unvaccinated groups had died. It was not stated whether the controls were observed for the same length of time as the vaccinated, nor was there any exact information whether the control children in the contact group were isolated under the same conditions and for the same length of time as in the vaccinated group. In the second series it was not clear whether there had been any endeavour to ensure that the two groups were identical in every respect except for vaccination, or whether the children were of the same age and sex, belonging to the same economic level, and with parents similarly co-operative. He pointed out certain hiatuses in the other surveys which prevented them from being taken quite at their face value. This did not mean that B.C.G. was useless, only that its value was not yet statistically proved. It was, moreover, a live vaccine, subject to considerable variation. Its administration sometimes caused abscess formation, and it involved separation of infants from tuberculous mothers, with risk of cross-infection. All these objections were small individually, but collectively they were formidable. He asked whether it was wise to vaccinate these infants at birth. Infants were not vaccinated against smallpox at birth, because it was known that the antibody did not reach maturity until later.

In the ensuing discussion Dr. David Nabarro (London) and Dr. W. R. F. Collis (Dublin) suggested that a controlled experiment be tried, the latter saying that it was not his experience in Ireland that any ill effects followed upon administration. Dr. Philip Ellman praised the work done in Scandinavian countries, but thought that enthusiasm ought to be tempered with caution. Certainly other anti-tuberculosis measures ought not to be superseded by B.C.G. prophylaxis. He had been struck in Scandinavia by the different pattern of tuberculosis, in particular the high incidence of erythema nodosum, which was comparatively rare in this country. He hoped the Ministry of Health would facilitate clinical trials with a view to arriving at the best means of active immunization. Prof. Wallgren said that vaccination of the newborn was really at the dictate of convenience; but it was no easy task, and occasionally four times the dose used for adults had to be given. He added that personally he had never seen a vaccinated infant who had tuberculous meningitis.

Among the contributions to the Conference proceedings by visitors from abroad were papers by Prof. W. Löffler (Switzerland) on transient pulmonary infiltrations, Prof. L. M. Pautrier (France) on sarcoidosis, Dr. S. Lomholt (Denmark) on vitamin D in the treatment of cutaneous tuberculosis, Prof. J. A. Barré (France) on pyramidal syndromes in the presenile dementias, Dr. G. Rylander (Sweden) on the results of frontal lobe operations assessed by psychological tests, Dr. F. J. Kallman (U.S.A.) on genetical aspects of schizophrenia, Prof. E. Stromgen (Denmark) on his Bornholm social survey, and Prof. W. S. Dawson (Australia) on depression, this last being part of a discussion in the Section of Psychiatry in which the psychodynamics of depression were considered, its psycho-analytical aspects, and the relationship between depression and obsessive-compulsive symptoms. The meetings, which were held in ten different halls, were invariably crowded and the discussions well sustained.

MR. CHURCHILL AND THE PHYSICIANS**INTERNATIONAL CONFERENCE DINNER AT
GUILDHALL**

A dinner in connexion with the International Conference of Physicians was held at the Guildhall on Sept. 10. Lord Moran presided, and the distinguished guests included the Lord Mayor and Sheriffs, the Belgian, Chinese, and Egyptian Ambassadors, Mr. Winston Churchill, M.P., Lord Woolton, Viscount Hall, the Presidents of the Royal Society, the Royal Society of Medicine, the Royal College of Obstetricians and Gynaecologists, the General Medical Council, and the British Medical Association, the Master of the Society of Apothecaries, and the Masters of several of the City Companies. Nearly 500 were present.

Mr. Winston Churchill, in proposing the health of "The Medical Profession," spoke as follows:

A third of a century has passed since the last International Congress of Physicians was held in London. I was reading a few days ago the reports of that meeting in 1913, and the speeches which were delivered by my two great friends and political colleagues of those days, Lord Morley and Sir Edward Grey. Reading them again, it was impossible to resist the impression of the sedate, orderly, progressive, and liberal-minded world in which they dwelt or of the splendour of Europe rolling in culture and wealth and also, alas! in pride, on the eve of the great catastrophe which overwhelmed the human race and in the aftermath of which we are still involved. I say to our foreign friends from so many countries now 34 years later how warmly we welcome you back to the banks of the Thames and how proud we are to do our best to entertain you in the City of London amid the ruins we have not yet been able to repair, and in this ancient hall which bears in every aspect the scars of honourable and victorious conflict. What a fearful journey we have all made since the Congress of Physicians in London in 1913, and what a contrast is the shadowed world of to-day to the hopeful though already anxious society of men and nations which then represented our national and international life, and what a change we have in all the doubts and confusions of the present time from the glittering structure of society which in so many lands had been built up across the centuries by so much toil and skill.

I noted in reading those speeches that both John Morley and Edward Grey spoke in 1913 of the advance of science with unquestioning faith in its wholly beneficent mission. Now, however, when mankind, without having improved at all, in fact having lost the sense of many of its most precious values, has got control of the most terrible agencies of destruction, and when many of its ablest brains are working night and day for the annihilation of the human race—or such portions of it as they may be temporarily opposed to at any time—working on these methods of annihilation both by the devastation of explosions and by the organized spreading of disease among men, cattle, and crops, when we look at these manifestations of scientific "progress" it is evident that a certain amount of discrimination must be mingled with our satisfaction at our triumph over nature and our piercing of her secrets.

But to-night all our thoughts are turned to healing and not destruction, and we can unfeignedly and unreservedly rejoice in the progress of medicine and—if I am allowed to mention it here—of its close and faithful companion, surgery. Medical science and surgical art have advanced unceasingly and hand in hand. They have certainly had no lack of subjects for treatment. The medical profession at least cannot complain of unemployment through lack of raw material. The genius of mankind is stirred and spurred by suffering and emergency, and a long succession of noble discoveries in the application of the healing art stand forth with all the greater brilliance against the dark and hideous background of hatred and chaos. The miseries of the population have given opportunities to the medical profession of rendering service to their fellow mortals on an unexampled scale, and at the same time unfolding science in many other spheres offers an ever broadening outlook for the toil and devotion of those who follow the practice of medicine. There is no profession or calling whose members can feel greater or deeper conviction of duty of lasting value to be done. There is no profession in which they can feel a surer confidence in an expanding future than those who have gained a command over pain and disease. This, my lords and gentlemen, must be at once an intense and lively inspiration to those who devote their lives to the study and practice of medicine, and I am very glad to offer those who are gathered here in this most distinguished assembly my respectful congratulations on the path in life that they have chosen.

I have been inclined to feel from time to time that there ought to be a hagiology of medical science. One ought to have saints' days to commemorate the great discoveries which have been made for all mankind and perhaps for all time—whatever time may be left to us. Nature, like many of our modern statesmen, is prodigal of pain, and I should like to find a day when we could talk aloud—a day of