

Liverpool University

School of Medicine
Introductory Address
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October 5th 1909

THE HOSPITAL, ITS HISTORY, WORK AND INFLUENCE”

Many centuries ago it was said by Cicero: “By no other act do mortals approach more closely to the Gods than in restoring men to health.”

This is the 49th Annual Meeting, and the commencement of the 50th year of the Hospital Saturday Fund. The Fund has 20,000 Collectors, and more than 100,000 Subscribers. Besides supporting the Hospitals in this great city; it assists in the provision of surgical appliances, and dentures, and residence in convalescent homes; and takes a prominent part in ambulance work in the Factories and workshops.

The Council of the Fund have a definite and noble programme to meet the pressing needs of the present difficult time. “It desires that no hospital shall close its doors or restrict its activities from lack of financial support”. The need for such a Fund can be appreciated by the statement concerning one only of our hospitals, my Alma Mater, St Thomas’s Hospital. Whereas 15 years ago the cost of maintenance was £63,000 a year, the expenses of carrying on its beneficent activities reaches now the great sum of £173,000 a year. And this is no exceptional example. Everyone of our hospitals has experienced great increase in the cost of maintenance; while many of those who have become rich by the new distribution of wealth have yet to learn the privilege of giving. Last year your Fund collected no less a sum than £97,000 and I trust that its efforts for the relief of physical pain and suffering may result this year in the collection of at least £150,000.

I propose to offer you a few remarks on the work and influence of the voluntary hospital; and to intertwine a sketch of the origin and growth of the hospital, with a few brief remarks on the history of the Healing Art.

The problem now before those responsible for the maintenance of the London Hospitals, and which threatens in the near future to become acute, is whether the voluntary principle can be maintained.

Under the voluntary system the great hospitals not only fulfil the purpose for which they were originally founded, viz., the relief of the sick poor; but provide the necessary means of medical education, which would be without them unattainable. The many purely scientific, but all important, aids to diagnosis and treatment, such as radiology and clinical laboratory methods, which the great advances in science have placed at our disposal, have been developed, co-ordinated, and made generally available, in our great hospitals, for the poorest patient These are but one of the cause of the serious increase in the cost per bed.

Would the work be anything like as well carried on if the hospitals came under Government or Municipal control? I think not. Anyone who had experience of Government control during the Great War must be opposed to Government control or rate-aided hospitals. In war, waste, inefficiency and extravagance may be inevitable; but in peace, waste, inefficiency and extravagance, should be deemed an abomination for which there is no excuse. Your Society is wholeheartedly in favour of the Voluntary System, and so am I.

It is very necessary to be on guard against, either open or insidious attempts to undermine the Voluntary system. Any new plan- the object being the laudable one of raising money for the hospitals – should be scrutinised most carefully.

The ancient and beautiful practice of giving without looking for and demanding any reward, still holds in my opinion, the field in England. The value of Medical and Surgical treatment in the hospitals cannot be estimated in terms of the coinage of the realm. Anything in the nature of a commercial bargain, or anything which interferes with the independent management of the hospitals, appears to me to controvert the principles of the Voluntary system; and I trust will ever be found in the life and conduct of our English Hospitals, impracticable and impossible.

The appointment of the best men to fill the vacancies on the honorary Medical Staff is a matter of infinite importance to the patients, and to medical education. With Government control, the baneful influence of political interest would creep in. Napoleon's great maxim "La carrière ouverte aux Talents" would no longer, as at present, apply. In a great London Hospital, in the time of Oliver Cromwell, the Treasurer and Almoners received a letter ordering them to appoint a certain Surgeon to the Hospital Staff, not because of his professional ability, but because he was a loving friend of the Commonwealth.

There can be no doubt that the Voluntary Hospital in Great Britain has had a remarkable effect for good upon all classes in the making of modern England. It has been of great Missionary and Social value inculcating the highest principles of humanity in a common and noble service. Again the voluntary hospital presents to our view a wonderful advance, hand in hand, of Scientific and humanitarian ideals. The voluntary hospital, indeed, is not only a centre of relief of the sick and injured; but it is an impregnable bond of union between all classes of the community, rich and poor alike; in the finest and most beautiful of the many types of Christian Service. All that is best in life is associated with sacrifice, and everyone working in a British Hospital, which is a microcosm of the community, is associated with some form of Service or Sacrifice, in the effort to alleviate pain and suffering.

Surgery is the oldest branch of the Healing Art, for injuries must have been common events in the lives of our most remote ancestors: it is indeed coeval with man himself. The poetic fancy of the late Dr Weir Mitchell, a great American physician and philosopher describes the dawn of [Surgery](#) :-

“The hunt is o'er – the Stone-armed spears have won
Dead on the hillside is the mastodon
Unmoved the warriors, their wounded leave
The world is young, and has not learned to grieve.”

“But one gentler sharer of the fray
Waits in the twilight of the westering day
Where 'neath his gaze, a cave-man, hairy, grim
Groans out the anguish of his mangled limb”.

“Caught in the net of thought the watcher kneels

With tender doubt, the tortured member feels.
And first of men, a healing thought to know
He finds his hand can check the life's blood flow.”

As a tribe evolved into a nation some knowledge of the effects of injuries must have arisen and been handed down to succeeding generations. It is of surpassing interest to note, that thousands of years before trepanning was deliberately employed for the treatment of organic disease of the brain, a decompressive craniectomy was performed in many parts of the world, as a therapeutic measure, for pain in the head, for fits, for insanity (the Biblical disease – possessed of the devil), and for fracture of the skull.

Mesopotamia is the Site of the Scriptural account of the origin of man and has been described as “the cradle of all culture”. But Babylon, “the glory of the Kingdoms, the beauty of the Caldee’s Excellency”, and Nineveh, the “Exceeding treat city of three days’ journey”, represent a phase, not the beginning of intellectual activity. The earliest mention of Babylon is in an inscription on a tablet ascribed to a date about 3800 years B.C. In the reign of Nebuchadnezzar it covered an area of 100 square miles. The wall surrounding it was in length about 50 miles, being 300 feet high and 85 feet broad, so that a 4-horse chariot could turn on the top of it. The water Supply of Babylon was from a reservoir 40 square miles in extent: the houses of the city were 3 or 4 stories in height. It is scarcely conceivable that a city of magnificent buildings with a record dating back 3000 years B.C. should not have had Surgeons – Men famous in the treatment of wounds and disease.

And indeed they had Surgeons, for we now know that about 2200 B.C. certain regulations for Surgical practice were enforced – as follows: -

- 1) If a Surgeon causes a severe wound with a bronze knife and cures his patient, he shall have 10 shekels of Silver.
- 2) If a Surgeon causes a severe wound, and the patient dies, he shall have both hands cut off.

In considering the Medical and Surgical wisdom of the ancients, we must guard ourselves, against unduly assuming knowledge of their ignorance, or of their accomplishments, which we do not possess.

The difficulty of real knowledge of ancient things lies largely in the accident of our remoteness. We stand very far off and have to strain our eyes. For us the comparison of ancient and modern, is largely a comparison of something half seen at a distance, with something which we know intimately We see only the bold outline, we are apt to miss the little lights and shades We have not the knowledge or the sympathy to catch, across a gulf of years, the peculiar thrill, of what was once a “winged word” flying from “soul to soul”.

The germ of the Hospital arose thousands of years before the Christian era, but it has only become a complete and valuable unit of the National life during my lifetime. As has been well said, the Hospital is the outcome of the innate tenderness, which marks all noble souls, in whatever land they dwell, and in whatever creed they are received. The reason that we have little record of the Hospitals of ancient times is clear; -

Histories are written only on subjects that have attained certain maturity. A little over 200 years ago London possessed only two great general hospitals, St Bartholomew's and St Thomas's – a fact which is not generally known.

In ancient times in Persia, Egypt, Greece and Rome the sick were housed in Temples, or buildings close to the Temples, and dispensaries existed in which the poor were treated.

In pre-Islamic Persia about 500 B.C. there were three classes of Healers: -

1. Those who used prayers and religious observances
2. Those who employed drugs and diet for treatment, and
3. Those who used instruments

In other words there were priests, physicians and surgeons, who were devoted to the healing of the sick. As regards the Surgeons it was ordained "that the tyro most operate successfully on 3 unbelievers, before he may attempt an operation on one of the true religion".

In the 5th century B.C. the adventures of Demokedes afford evidence of the skill and intelligence of the Greek Surgeons.

Darius, king of Persia, in leaping from his horse while following the chase, injured his foot. He was in violent pain for seven days, and the Egyptian physicians failed to relieve him. Demokedes, who was then a prisoner and a slave, succeeded in curing the patient. Being asked whether he understood surgery he affected ignorance; but Darius suspecting this to be a ruse, ordered out the scourge and the pricking instrument. Thus encouraged, he succeeded in alleviating the pain, procured sleep for the exhausted patient, and ultimately restored the foot to a sound state. Demokedes showed a kindly consideration for his discomfited Egyptian colleagues; for he interceded for them, when Darius proposed to crucify them.

In ancient Egypt not much is known of the practice of Medicine and Surgery – Egyptologists have been so eager to dig up Pharaohs, that no Surgeon or Surgical abode has as yet been dug up. When this happens perhaps our Medical knowledge of these times will be increased. The culture of the Valley of the Nile remains vivid on account of its intimate association with the civilisation of the Mediterranean Nations. The Egyptian pharmacopoeia was very extensive, wounds and fractures were treated, and some operations were performed. When I was in Egypt two years ago I found that poultices of figs, the remedy prescribed for King Hezekiah, were still in common use in Egypt and Palestine. Again in Proverbs we read "The blueness of a wound cleanseth away Evil". Bier's congestion method for the treatment of unhealthy wounds of the extremities is not, as many of us thought, a modern discovery; but has been practised in Egypt for thousands of years.

In ancient Greece Medicine and Surgery reached a high level. The story of Aesculapius has no doubt some facts for a basis. It dates from about 1250B.C. He had two sons who became famous as Army Surgeons, and there was probably a continuous tradition of Surgical knowledge from the time of AEsculapius to that of Hippocrates. After his death Aesculapius was worshipped as a divinity all over

Greece; his temples, built for the most part on wooded mountain slopes near Mineral springs, became popular Sanatoria.

Among the Hebrews it seems to have been the custom for the sick to be brought to the temple and the Synagogues, near some of which were springs of healing waters. In the Gospels, for example, we read of the pool of Bethesda, and that of Siloam; where miracles of healing occurred.

Fifty years ago the history of Greece began with Homer, but we now know that Greek civilisation dates back thousands of years before Homer. About 4 centuries after Homer Hippocrates lived and worked. He lived in a great age, and had many famous contemporaries. The prophecy of Daniel "Many shall run to and from and knowledge shall be increased" was little more than 50 years old at the time of his birth. The titles of Father of Medicine and Father of Surgery given to Hippocrates are probably no longer true, though we know not what sources of information from bygone generations were at his disposal. It is still true however that it is the spirit of Hippocrates, which energises all that is best in the Modern Hospital. It is not the personality, or the personal details of the Medical and Surgical life of Hippocrates, which are the Supreme legacy which this great Grecian left to Mankind. It is rather the moral perfection of his teaching, which is a beacon light in every age to the student pilgrim of Medicine and Surgery.

The Surgery of Homer, about 900 B.C. is naturally the Surgery of the wounds of war. Homer describes how an officer in the Greek army, Eurypylos by name, received a big flesh wound from an arrow in the thigh. The sweat ran down streaming from his head and shoulders, and from the cruel wound the black blood was welling. He was limping out of the battle when the Surgeon Patrokles came to the rescue:

"There stretched at length the wounded hero lay;
Patroklos cut the forky steel away.
Then in his hand a bitter root he brus'd;
The wound he washed, the styptic juice infused.
The closing flesh that instant ceas'd to glow,
The wound to torture and the blood to flow."

The modern Greeks still use the same bitter remedy in the treatment of wounds, which is obtained from the red peony or from one of the cactus group.

It appears to me that the Ancients knew more than we usually give them credit for. The natural outcome of the Alexandrian studies (300 B.C.) was the ligature of arteries for wounds and aneurysm. Is it conceivable that the great men, Galen and Celsus, were wholly ignorant of the physiology of the vascular system/ All the knowledge garnered in the Alexandrian Schools seems to have been lost in the successive burnings of the city's Libraries; and in the wars and tumults of the early centuries after Christ. A charge of wanton destruction appears to have been also rightly brought against the Crusaders. The library of Tripoli, alleged to number 3,000,000 volumes, was burnt by order of Count Berram of St Gilles, because the first room he entered contained nothing but copies of the Koran.

Certain it is that from the date when the learning of Alexandria was lost, till the rise of the famous 16th Century School of Anatomists, a period of 1000 years passed by, during which the spirit of man was content without anatomical and surgical enquiry. With the complete destruction of the Greek and Roman civilisations, the whole state of the known world, (wrote Dean Milman), seems to offer no more secure footing to an historical adventurer than the chaos of Milton – to be in a state of irreclaimable disorder: best described in the language of the poet:-

“A dark
Illimitable ocean, without bound,
Without dimension, where length, breadth, height
And time, and place are lost; where eldest night
And chaos, ancestors of nature hold
Eternal Anarchy, amidst the noise
Of endless wars, and by confusion stand.”

Thus after the fall of the Roman Empire and the devastations wrought by the barbarians, long centuries of barbarism and ignorance fell upon Europe. Medicine and Surgery suffered the common fate, and the more so as its principle literature was in Greek, a language then no longer understood.

Virgil in a fine passage, described the results of decay and degeneration. The following is a translation of this passage:-

“Thus all things by destiny hasten to decay and slipping away are driven backwards. Not otherwise than he, who with labour rows his barque against the stream. If by chance he relaxes his arms, the tide hurries him headlong down the river.”

From these long centuries of anarchy and chaos the civilisation in which we now live very gradually emerged and developed.

Such Greek Surgical learning as survived the general wreck of knowledge was preserved in Asia and Africa by the Arabs; and in Europe, in the Monasteries.

During the Golden Age of Arabian learning between A.D. 750 and A.D. 850, the muhammedan Empire extended from Baghdad on the Euphrates to Andalusia in Spain on the banks of the Guadal-quiver. In all the great cities occupied by the Arabs hospitals were founded. A patient leaving the hospital at Cairo was presented with a piece of gold. (Our whole population would be crowding into the Hospitals if that custom now obtained). The Caliphs by purchase, conquest and exchange possessed themselves of countless previous manuscripts which they caused to be translated. The conquest of the Arabs were followed by an intellectual activity hardly less wonderful. A Byzantine Emperor was astonished to find that the right of collecting Greek Manuscripts was among the terms dictated by a victorious barbarian. The Moslems were the faithful transmitters of Greek Surgery, but it is doubtful whether they added anything to it. The vast collection of manuscripts made by the Arabs seem to have been almost entirely destroyed by the burning of the library of Wisdom at Baghdad 9A.D. 1258). The Mongols, “that detestable nation of Satan”, as one writer calls them, poured forth like devils from Tartarus, and did their work only too thoroughly.

In our own country, and in other provinces of the Roman Empire, such learning, as survived, was preserved in the monasteries. The learned order of Benedictines seems to hold the chief place in monastic medicine. Benedict, the Saint of Subiaco, founded the monastery and hospital of Monte Cassino in 542 A.D.; and from this, the Medical School of Salerno, is said to have originated. In the dark centuries which immediately followed, surgery, in Europe at all events, came to be regarded as an occupation unworthy of a scholar and a gentleman.

In 1198 Pope Innocent III started a crusade having for its object the establishment of hospitals of the Holy Spirit in all the great towns of Europe. Many were established on the continent, and four such are known to have existed in England.

Hospitals were attached to many monasteries; and for some centuries in this country the sick poor received simultaneous spiritual and bodily care. All the hospitals were deprived of their revenues under King Henry VIII. Great distress was caused and even riot. In response to the most urgent appeals by the London citizens, who promised to find the revenue, if the buildings were returned to them, Henry re-established St Bartholomew's for the relief of "the poor, aged, sick, low and impotent people, who were annoying his Grace's loving subjects, by begging and by infecting them with divers great and horrible sicknesses and diseases." St Thomas's and the Hospital of St Mary at Bethlem were re-established in the succeeding reign.

The Hotel Dieu at Paris dates from 650 A.D. It was first administered by twelve citizens of Paris under the direction of the Bishop. Every Canon who died or changed his residence was required to leave his bed for the use of the sick.

Like all other hospitals it became a hotbed of sepsis, and it was remarked that the inscription over its door, "This is the house of God and the gate of Heaven" was more literally true than its founder appreciated. The evils resulting from the want of air-space, and accumulation of buildings, made themselves felt; so that, on the occasion of a fire, it was said "let the hospital burn and save the sick".

In the 13th century two Continental Surgeons, Theodoric and Henri de Mondeville, lived and worked. They were forerunners of the late Lord Lister. Henri do Mondeville wrote "If treated on Theodoric and my instructions any simple wound will heal without any notable quantity of pus. Many more surgeons know how to cause suppuration than how to heal a wound". It was 600 years before the sound of doctrine of Theodoric and Henri de Mondeville became current practice.

Some writers state that the idea of sewing together and thereby restoring the continuity of the bowel when ruptured is to be attributed to four surgeons of Paris; who, having united their efforts for the relief of the sick poor in that city in the 13th Century, procured a portion of the tracheas of an animal, one end of which was introduced into the upper end of the divided bowel, and the remaining piece into the lower end. They then brought the divided ends into contact, and retained them by as many stitches as appeared to be necessary. One must not, however, forget that Celsus (B.C. 50) sutured perforations of the intestine, probably in his capacity as surgeon attending gladiatorial fights in the Arena.

The surgical treatment of abscess of the lung appears to be of very ancient origin. It is recorded that Phaleraeus, Jason and Prometheus, being expected to die of abscess of the lung declared to be incurable, went into battle for the purpose of being killed; but each, being fortunately run through the body, they all recovered, in consequence of the escape of the purulent matter through the holes thus made.

In the period lasting from the 13th to the middle of the 19th century no improvement occurred or could have been expected to take place in the hospital: but certain great discoveries or re-discoveries such as the circulation of the blood, and the use of the ligature for the arrest of bleeding were made; and the knowledge of human anatomy and gross morbid anatomy was greatly extended.

Everyone will remember Gil Blas's description of Dr Sangrado. Dr Sangrado, combined a glib tongue with very active methods of treatment. No one can say of him as we can of the Charlatans of the present day that "mere prattle without practice was all his soldiership".

In appearance Dr Sangrado was tall and withered. He is described as the learned forerunner of the undertaker. His routine diagnosis was obstructed perspiration. His staple remedies were drenching and bleeding. He believed that it was a mere vulgar error, that the blood was of any use in the system – the faster you draw it off the better! To life he said was merely not to die – a patient has no more occasion for blood than a man in a trance. It is recorded that Dr Sangrado despatched business so fast, that the confraternity of Notaries who made wills in his time in Valladolid, found half their jobs spoiled, as they could not keep pace with him.

If we study records of cases of the first 70 years of the 19th century, we cannot but be struck with the great prevalence of sepsis.

We have a much clearer picture of the surgery of this epoch than that of Greek and Roman times; but possibly the Greek and Roman surgeons may have been equally skilful, and not much less successful, for though septic diseases were known they do not appear to have been so prevalent. Perhaps the use of wine as a dressing for wounds was helpful. The use of wine as a dressing is familiar to you all, as it is referred to in the story of the good Samaritan.

However great the change from Celsus to Fergusson may have been, the change from Fergusson to the present day is incomparably greater.

During the first half of the 19th century pre-Listerian Surgery reached its zenith, in the hands of the great civil hospital Surgeons, such as Astley 'Cooper, Dupuytren, Fergusson, Brodie and Syme; and in the hands of the great Army Surgeons of the Napoleonic Wars – Larrey and Guthrie, - Sepsis and other wound diseases marred much of their work especially their hospital work.

Baron Larrey was a prominent surgeon before Napoleon rose to power. In 1788, before the war with England, he visited Newfoundland as surgeon to a French man-of-war. In order to reach his ship he walked from Paris to Brest. When at Newfoundland he made his first acquaintance with the English of whom he wrote, "We were astonished at the beauty of the English women whom we met in the course

of our walk, almost all were of good stature, well developed, with good figures, pretty hair, pleasant faces, bright eyes and surprisingly white teeth. In some, chestnut hair and eyelashes contrasted agreeably with large blue eyes". On visiting an English man-of-war, and witnessing a display of drill and gunnery given in honour of the visitors, he wrote, "All these manoeuvres were remarkable for their precision and rapidity I derived great pleasure from visiting this ship, where the most perfect order and the most scrupulous cleanliness prevailed. We sat down to table at noon with the officers, and midnight found us still united!".

Larrey accompanied Napoleon on most of his campaigns including that of Egypt and the retreat from Moscow. He fully appreciated the dangers of sepsis in hospitals as they then were, and whenever he could, he sent his patients right away at first, however bad they were, the same day, or the day after, even severe operations, for he found that in spite of rough transport they did better, whether in the heat of Egypt, or during the rigours of a Polish winter, when out on the road then when shut up in churches or hospitals. He was so popular among the soldiers, that on being recognised in the struggling mass of men on the bridge over the Beresina, he was handed on from soldier to soldier until he reached the other side.

"Like his chief the Emperor Napoleon, Larrey performed wonders. He got his patients well in the most difficult circumstances. But just as where Napoleon was not present, military affairs went to the bad; so where Larrey was absent the medical service was but indifferently carried on. The hospitals were ill-kept, the wounded often lacked everything; and the officials, who no longer had to fear his rigid devotion, his indefatigable care, and the influence he had with the Emperor, drifted into carelessness and indifference to the fate of the patients, and even criminally dissipated the resources which should have been reserved for their use. Thus the state of the hospitals on the line of evacuation from Valladolid to the frontier, which did not come under his supervision was deplorable. These establishments were veritable cloacae, in which there existed neither hygiene, nor cleanliness, nor bedding, nor regular rations the French wounded were indiscriminately mingled with Spanish and English prisoners. Diseases were not better classified than patients; - the febrile, the infectious and the wounded were huddled together. The surgeons, animated by the best goodwill, in desperation agitated and made complaints and requisitions; but their humanity and energy broke in vain against official inertia".

Larrey was taken prisoner by the Prussians after Waterloo. The Prussians shot their prisoners; but Larrey was rescued, when about to be executed, by a Prussian surgeon, who, in former years, had received instruction from him.

Guthrie was an historian of the battles and of the Surgery of the Peninsular War. He served also in Egypt and attended many wounded after the battle of Waterloo.

Guthrie relates, that when the Army landed at Mondego Bay in Portugal in August 1808 under Sir Arthur Wellesley, only two carts drawn by bullocks were supplied for carrying Medical stores and for the transport of the wounded; and it was only when the army attained the summit of the Pyrenees, more than 5 years later, that the British Surgeon in Chief was satisfied that the Medical arrangements in the field and in the Hospitals in the rear, were efficient.

Guthrie's volumes contain humorous anecdotes of war and notes of hundreds of cases seen during active service. The notes are brief, terse and to the point.

“Lt Col Harcourt and Major Jellies of the 40th Regiment were both shot through the chest at the assault of Badajos. They were taken to the same tent. Inflammatory symptoms ran high in both. In Major Jellies, a tough old Scotchman, they could not be subdued, but Lt Col Harcourt slowly recovered”. Guthrie was never wounded, but he had many narrow escapes. He writes, “During the battle of Talavera I found myself under fire from a battery of 12 guns, and just at the distance the balls began to bounce like cricket balls. The position was not desirable, and I tried to change it as quickly as possible, by carefully guiding my horse between the canon-balls”.

Guthrie set his face against the medieval practice of frequently trepanning patients suffering from fracture of the skull, and gives the following story as an example of what should not be done. “Philip of Navarre having been thrown from his horse, fractured his skull by striking his head against the stump of a tree. His surgeon trepanned him 27 times. Philip gave a certificate of this, and as proof of his complete recovery, drank three of his companions to death”.

When I was a student the Hospitals in this country and abroad were still pest-houses of sepsis, tetanus and other wound diseases. The risk of surgical intervention was still so great that few surgical operations were performed. These were chiefly emergencies, and they were often delayed longer than was safe.

Milton's terrible description of a Lazar-house was alas still true:- especially on the continent

“Despair
Tended the sick, busiest from couch to couch;
And over them triumphant Death his dart
Shook, but delayed to strike, though oft invoked
With vows, as their chief good and final hope.”

I have lived through the most glorious period in the history of hospitals, and in the history of the Art and Science of Surgery. Surgery in my lifetime has achieved what in my student days would have been looked upon as the most magnificent promises of impossibilities. In the hospitals the example set by Miss Nightingale in the Crimean War has borne abundant fruit. The discovery of anaesthesia by Morton and Simpson, and the immortal labours of Pasteur and of Lister, paved the way for the wonderful activities of the modern hospital, and the immense progress which has been made in the Sciences of Medicine and Surgery.

A distinguished French surgeon thus describes the change:-

“By what miracle has the slender seedling full of sap become the vigorous tree beneath the shade of which works our restless activity, ever in search of new triumphs? You know it too well for me to tell it again after so many others. But far less well can you know the impressions produced on the mind of a surgeon, who entering upon his career at the epoch of limited surgery, the surgery of erysipelas and purulent infection, has marched on with quite an army of followers of the new

doctrine to the conquest of the immense progress promised by its gifted initiators, and largely realised by the logical sequence of facts. But I am one of the men of that privileged generation, the witness of a marvellous revolution. I have known that deceptive surgery with more grave disasters than successes, that surgery from which safety was banished, even in its smallest undertakings, that surgery which had always at its side the danger of death, and poisoned with heavy cares the mind of the operator, that surgery, in fine, which saw itself reduced to laying down the knife as mortal complications fell with impartial fatality on all the operation cases in a ward. This striking contrast between that which is and that which was, a contrast which within the last ten years has become even sharper, has thrown more and more into the background the conditions under which were passed the earlier years of my medical studies”.

It is to the experimental method, no less than to the discoveries of anaesthesia, and of the microbic origin of disease, that both Medicine and Surgery owe so much.

Let me give you a few examples:-

Till the discovery of an antitoxic serum for diphtheria the death rate of Diphtheria in children in this country was appalling; and is only comparable to the death rate of smallpox in Egypt before the introduction of vaccination. It is said that the year before Clot Bey introduced vaccination into Egypt 60,000 children died of smallpox.

During the great War the use of antitetanic serum practically abolished tetanus amongst the wounded of our armies.

Again Sir Ronald Ross’s demonstration, that the mosquito was an essential link in the cycle of the “million murdering” malaria, was of unparalleled importance to the human race. Let me quote you the lines which Ross wrote on the eve of his great discovery.

“this day relenting God
Hath placed within my hand
A wondrous thing: and God
Be praised At His command.

Seeking His secret deeds
With tears and toiling breath,
I find thy cunning seeds,
O Million-murdering Death.

I know this little thing,
A myriad men will save,
O Death where is thy sting,
Thy victory, O grave?”

For surgeons the labours of Pasteur and Lister have a value which are beyond all estimation. These greatest benefactors of mankind, both of whom I had the high privilege of knowing, were curiously alike in simplicity of life, in modesty, in the shunning of publicity, and in their never-ceasing unobtrusive and fruitful endeavours

to relieve suffering and to cure disease. They have passed into the silent world and have heard the answer of the King.

“Amen dico vobis, quamdiu fecistis uni ex his
fratribus meis minimis, mihi fecistis”.

In the beautiful story of “Rab and his Friends”, there is painted by a master hand, an operation by Syme in the pre-chloroform and pre-antiseptic days. The Reaper, whose name is Death, would still be reaping a harvest of countless deaths, by means of the million-murdering sepsis, had not Lister, the peerless knight of Surgery vanquished the terror of the Surgeon.

“We hold him for another Heracles
Battling with custom, prejudice, disease,
As once the son of Zeus with death and Hell”.

But I must now finish.

I have tried to place before you the pre-eminent advantages of the voluntary system of Hospital maintenance, such as obtains in this great Metropolis; and mingled with a few anecdotes from the history of medicine and Surgery, I have endeavoured to sketch briefly the evolution of the Modern Hospital from very small beginnings in the dawn of time.

Though I have a clear remembrance in my student days of the paralysis of Surgery in the Wards in the presence of erysipelas, cellulitis, septicaemia, pyaemia and secondary haemorrhage, for which there were as yet no means of prevention and no remedy; such conditions must be almost past belief, to those who know only the Hospital wards, as we view them now, with their constant and ever increasing procession of surgical operations performed successfully on every part of the body.

We are by no means content with the present splendour either of the Hospital, or of the Science and Art of Surgery. As year by year passes, new discoveries appear, and further advance is registered. We seem to be slowly, but surely, gaining in the strife for clearer knowledge in the mysterious world of disease and death. Our hospital work, and the vivid life of the Surgeon, move on in a succession of dreams and their fulfilment, and the wild imaginings of one age become the splendid realities of the next. There are many events in the womb of time which have yet to be delivered.

“For these things tend still upward, progress is
The law of life; Man is not man as yet.”

Kindled by the past we may look forward with confidence. The succession cannot break. The further evolution must go on – first the blade, where we are today; then the ear where we shall be tomorrow; then the full corn in the ear, which awaits our children’s children, and which we live to hasten.

It is this marvellous progress which your Fund supports; and I wish you very heartily God Speed, in your splendid labours.

