AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PUBLIC MEDICINE,

*At the Annual Meeting of the British Medical Association,
in Birmingham, August 1872.*

BY

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It is my intention to occupy your time as briefly as possible; and it will be in the consideration of two important subjects: the duty of the medical profession and the public in regard to epidemics, and the equally important question as to the mode of taking medical evidence in courts of law in civil and criminal cases. I am relieved of a considerable portion of what I might have considered I should say regarding the town of Birmingham, by the admirable address of the President last night. I think I threw out the suggestion last year at Plymouth, that the friends in Birmingham should tell us how it was that Birmingham possessed the enviable qualification of being almost entirely free from epidemics; and I think our President has thrown out two suggestions which appear to me to hit off the causes of this remarkable immunity from dangerous scourges. The President threw out that this immunity arose from Birmingham being situated in the centre of the great watershed which separates the hydraulic systems of England, being also at a great altitude, ranging from two hundred to six hundred feet above the sea, and resting upon a sandstone—a porous soil; and I agree with him that these were the qualities which medical science looked upon as necessary to constitute a healthy town. And the truth of these estimates will be seen in the fact that, from the earliest time, Birmingham has been free from serious epidemics; and this is shown by reference to the earliest records. During the fearful visitation of the cholera to England in 1832, there was hardly any of it felt here; and during the visitations of 1856 and 1866, it was also singularly free. Then, too, there are eminent physicians in this town—and they are not few—who have not seen a single case of spotted typhus in their lives. Through the courtesy of Mr. Woolley, the sanitary inspector of the town, I am allowed to state that the small-pox, which came here while raging over the other parts of the country, never rose to a greater height of mortality than eleven deaths in a week; while in the city of Dublin, which is a city of about the same size, and with a population of about the same number as Birmingham, the mortality from small-pox rose to seventy-eight in a week. Well now, Ireland affords us remarkable facilities for the study of epidemics. A “melancholy ocean” surrounds us, and separates us from the rest of the world; and we are so afflicted with epidemics, that I believe we should long ago have been destroyed but for the natural vivacity, wit, and love of fun of the Irish. I shall now have to bring before you some remarkable and serious facts regarding the epidemic of small-pox; and the Government of this country cannot wash their hands of serious responsibility in this matter. If the Irish, with their natural vivacity and cheerfulness under misfortunes, which they are ready to call dispensations of God, have borne these troubles uncomplainingly, that is no reason why the means in the hands of our rulers of preventing the spread of disease should not be employed. In 1866, it was proved, beyond the possibility of doubt, that the cholera was imported into Ireland; and we could trace the cases through the ports of Dublin, Belfast, Drogheda, Wexborough; and we could lay our hands on cases, and say that these came through the canals and other ways from Sheffield, Liverpool, or Bristol. Our isolated position gives us peculiar advantages for the study of epidemics, and for the determining whether they are, or are not, the result of contagion. With regard to small-pox, there is less difference of opinion than with regard to other diseases; but no one has undertaken the study of the subjects connected with epidemics who has not become, like myself, an ardent contagionist. One of the advantages of our isolated condition is, that we in Dublin can make Liverpool our medical barometer. We know when there is an epidemic at Liverpool that we shall have it as well. In all cases of an epidemic which affects Dublin and Liverpool, Liverpool has it first. I went to Liverpool when the cholera of 1866 was raging, and made the most minute inquiries; and Dr. Trench, with the greatest kindness and courtesy, placed his tables and all other information in his possession at my disposal. By the means of these tables and the

information which Dr. Trench gave me, I was enabled to mark out the course the disease would take in Dublin, and this before it came to the city. In the mortality of Liverpool, a curve of a remarkable mathematical shape appeared; and, by enlarging the curve, I could predict, in a general way, what would be the mortality of the disease which was coming to Dublin. And this prediction was verified in a remarkable degree; for, afterwards, we found that the total mortality in Dublin was what we said it would be after looking at the mortality in Liverpool, and we were enabled to say when it was at its maximum. So you see that Dublin is as well off, or as badly off, just as you like, as Liverpool in regard to hygienic conditions; and neither town is what it should be in regard to sanitary regulations—in fact, they are upon a par. Now, when I come to small-pox, we have another element to deal with, which we have not in other epidemics; for in this disease we have a means of protection in vaccination, and we can see how well or how ill a town has been protected by the vaccination laws being carried out. We see the small-pox sweeping its way over this island, and its greater or less virulence is a test of our diligence, or of the diligence of those who have gone before us, in protecting the population against this terrible scourge.

Allow me here to say a few words upon vaccination. When I come to England, I am astonished to find intelligent persons in numbers, who, for some reason, come forward publicly to oppose the process of vaccination. Some of these people express a strong doubt—an honest doubt—whether the mortality from small-pox is really as fearful as the doctors say. To get a proper basis of calculations as to the mortality from small-pox among unvaccinated persons, we must go back to the records of past generations in this and other countries; and we find this astonishing result, that from sixty to seventy in every 100 persons attacked by small-pox must die, if not vaccinated. Some people have the idea that this is a bugaboo of the doctors, and that they need not necessarily die if not vaccinated. Of course it is impossible now to get the experience of an immense number of persons who have not been vaccinated, to give them the small-pox, and see how many would die. This experiment could not be easily carried out. Therefore I adopted another method. I took it for granted that the writers and records of the close of the last century were correct. The average which they gave was that 66 per cent. of every class—men, women, and children—must die if they had got the small-pox and were not vaccinated: whereas, of those who were attacked after being well vaccinated, the number of deaths was only 6.6 per cent. This reduction of the mortality from sixty-six to between six and seven per cent. represents what vaccination has done. The value of vaccination is, therefore, established beyond the possibility of a doubt, and I think that this is a subject on which the medical profession should speak out. Should not Birmingham, with her literary men and newspapers, lead the public on this great question? I wrote to my friend Dr. Hayden, of the Mater Misericordiae Hospital in Dublin, to send me the total number of small-pox cases treated there, and of the deaths; and I undertook, from these figures, to calculate the number of those who were vaccinated, and those who were not. This forms a very simple problem in mathematics, of which I will not trouble you with more than the results attained. From the figures sent me, I calculated, though I had never seen a patient, that 120 of the cases treated at the Hospital had not been vaccinated. I wrote to tell Dr. Hayden this; and he wrote back to say that the number recorded as known to be unvaccinated was 119. Since I have come to Birmingham, Mr. Woolley has kindly placed at my disposal all the information he possessed, and I hereby beg to tender him my warmest thanks for his courtesy. Although Birmingham has suffered what I cannot but regard as a most contemptible epidemic, the facts are strikingly illustrative of what, to my mind, is the truth of the principle which I am placing before you. Since the 18th November, 1871, there have been 1,911 cases of small-pox, of which 262 have died. I leave out the cases remaining under treatment. I calculated from those figures that 230 persons in Birmingham who had been attacked with the disease had never been vaccinated. I found in Mr. Woolley's returns that the certainly non-vaccinated were 209, while doubtful cases numbered 44. Well, it was fair in such a case to split the difference and call it 22, and, as that suited my theory very well, I adopted it; and when I added them to the 209 it made 231, which was only one above my calculation. It is like the trick of a conjuror, walking into the town, asking the number of small-pox cases and deaths, never having seen the patients, and yet telling the people of the town how many were vaccinated and how many were not. Dr. Trench tells me that 1,616 cases were treated in the Liverpool hospitals; the deaths were 375; from that I calculated that the non-vaccinated cases numbered 451. The number actually recorded as non-vaccinated was 432, being 19 less; but I am perfectly certain that to those should be added several of those properly set down in

the reports as doubtful. This opens up a problem highly interesting to the profession of medicine. As the mathematician in his closet can direct the astronomer in what part of the heavens and when to look for certain planets, so the progress of science and medicine can tell with certainty when and where certain districts will be attacked with epidemics. The records of the fearful epidemics and the plagues of the Middle Ages have perished; the poor have perished with no man to regard them. Even the writings of Defoe may be searched in vain for any statistics of the Great Plague which would satisfy the demands of modern medical science. But, by examining into the records of our own times, we shall be able to read back the history of the epidemics of the past, the number and percentages of the mortality of those who suffered, who lie forgotten in their graves, and whose history no one has recorded.

I come now to what is the most difficult and painful part of my subject, from which I would gladly have shrunk if I had not been impelled by an imperative sense of duty. I am able to show, I believe conclusively, that unfortunate Ireland is now suffering, has suffered, and probably will suffer, more than her fair share of the epidemic of small-pox. In the case of cholera, I have shown that Liverpool, Dublin, and other towns, have suffered exactly in proportion to their different populations; and therefore, with regard to this disease, Ireland has no reason to complain, as compared with her neighbours. The number of deaths in Liverpool from small-pox, where the plague has now ceased, was 2,093. The calculation of the number of persons who ought to die in Dublin from the epidemic was 1,256, on the supposition that it was equally protected by previous vaccination with Liverpool. The result is, however, far otherwise; for, according to the statistics of Dr. Burke, up to Friday last, 1,581 persons had died in Dublin, showing an excess of 325 preventable deaths. I believe firmly that the number will be increased to 500 or 600. I stand here to ask for the sympathy of my brother medical men in an appeal against the injustice with which the Irish people have been treated.

Now let us look to the case of Cork. While much of the pestilence has passed away from other cities, it has hovered like a black cloud over the city of Cork, and the poor people are dying in numbers, the mere enumeration of the figures of which will convey but a poor idea. You may gather an idea by supposing that, while the pestilence was raging in London, the number of deaths amounted to 1,500 a week. The poor people of Cork have perished in the ratio of 23 per 1,000 a week from small-pox for thirteen weeks. I wish I could think no one was to blame for this. The poor sufferers themselves blame no one. They are attended by their priests, and with their last words express their kindly feeling and gratitude to their doctors and nurses, proclaiming their deaths to be "the will of God". That is a natural and becoming feeling in the poor sufferers; but we know better, and we know that most of those deaths might have been prevented. I have a right to present this as a solemn grievance. In the estimates for the present year, £10,050 was voted for the National Vaccination Institution of England; in addition to which, nearly as much more has been paid out of the public funds in payment for the services rendered by medical men in vaccination. Thus nearly £20,000 has been properly spent in providing the people of England with gratuitous vaccination. In Ireland, only £400 per year is expended on the same object. It is a mystery to me how much good has been done with this amount, and it is a miracle to me how it has been made to go so far, for with that amount we have had to send lymph to the Poor-law guardians. Now is this justice to Ireland? Then lymph is given in England, but it is sold in Ireland; and, when we apply for good lymph, we are told we can have it by paying for it, which is like giving a hungry dog a joint off his own tail for dinner. I appeal to all fair-minded educated Englishmen to help us to get this grievance removed, for we may talk in Ireland until the day of judgment without getting the aid we seek. I appeal also to the public press to help us to get this justice, for which we have been asking in vain for years. In 1852, we made the most humble application which could be conceived—such an one as only Negroes and Irishmen could make—to get £600 more, raising the grant to £1,000, which, it was calculated, by great economy and labour on the part of the officers of the Cow-pox Institution, would furnish lymph to vaccinate the whole population of Ireland; but it was refused by the Poor-law Commissioners, who were themselves a paid Board. They sent the people to live in fool's paradise some years ago; and the officials of the Board published a statement, couched in the language of the stable, to the effect that the small-pox was "stamped out" like the cattle-plague—language which, in the lips of paid officials, was adding blasphemy to insult.

I now come to a more pleasant part of my subject, and one in which I shall have the hearty co-operation of all my audience; and that is, as to the evidence of professional witnesses in the civil

and criminal courts of law. Dr. Davey, at the end of an admirable address delivered at Bristol a few years ago, made a suggestion which met with the approval of the medical and local newspapers and circles, but no steps have since been taken. I allude, of course, to the shameful and degrading manner in which medical and scientific evidence of every kind is taken in courts of justice, and before parliamentary committees. Medical men are peculiarly sensitive on this point. Because of some peculiarities in their organisations, the doctor and the lawyer look at one another as from opposite poles. There is no greater contrast than that between the legal and the medical mind. The medical man is accustomed to see the best features and the best side of society; he stands by the bedside where the best affections of the heart are displayed towards those who are suffering, and he forms a more charitable opinion of his neighbours than the rest of the world. Perhaps he thinks and acts more in accordance with the spirit of Christ than others. On the other hand, the legal man sees his neighbour under the vilest and foulest aspects; he comes into contact with swindling and every kind of knavery, until his mind becomes imbued with it. The lawyer becomes like the chameleon, tinged with the colours of those about him. There is an utter disproportion between such men and those whose lives are spent in doing good. I reckon myself a skilful professional beggar-man; but whether I collect for an orphanage, for building a church, or the Deaf and Dumb Institution, I can never extract money from a lawyer. And that is the experience of others. Where can they expect to go? When a barrister gets a medical man on the table, what does he do? He has the same natural antipathy to him that a terrier has for a rat. I am happy to say, however, that the rat sometimes turns out to be a badger; and sometimes a medical witness proves to be a badger and not a rat. I may mention here a trick which I played upon an eminent lawyer, who was leading counsel on one side in a great case of lunacy which was before the Dublin law courts. This gentleman did me the honour to ask me to dine with him a day or two before the trial. I knew it was for the purpose of getting a "grind". Well, I gave him his lesson; and the learned gentleman, who was one of the greatest bullies at the bar, trotted it out in such a style that we had such a scene as was rarely or never witnessed. In these cases, the doctors on one side swear A B C, while those on the other depose X Y Z; and anything like an impartial statement is carefully excluded. I will not mention the name of the lawyer, as he is now on the bench, and it might be disrespectful in a place where there are coercion laws. I told him a few facts about lunacy, and then added that, when the examination was nearly over, he was to say, "Now, sir, you are on your oath; you are giving your evidence". You know they always keep repeating, "Now, sir, you are on your oath". Well, I told him that all would go on smoothly up to a certain point; and then, just as the witness was about to leave the box, he was to say, "Now, sir, you know you are about to leave that table, and you are upon your oath; and upon your oath, do you not know that *crepitus redux* is the most fearful form of insanity which can afflict man?" I was base enough to ask my lawyer friend to get me a front seat when the case on; and I went to enjoy the fun. I heard him put his questions in his best style, and when he came to this one, just as the witness was going to leave the table, he called him back, threw his wig back—he was a great bully was my friend—then he put up his shoulders, and called out, "Now, sir, mind how you answer: On your oath, sir, is not *crepitus redux* the most fearful form of the affliction of insanity?" He said this in a perfect phrensy of passion; and the witness, startled at the sudden question, the question itself, and the manner in which it was put, became quite frightened, and, turning to the judge, said, "That man's mad, my lord; have him taken up".

It is unnecessary to dwell further upon this subject. The time is come when the medical profession, engineers, chemists, scientific men of every description, must peremptorily take their stand, and refuse to be treated in this fashion any longer. There is the case of the Rev. Mr. Watson, in which the most melancholy statements and counter-statements were pronounced by the medical men, and then an amateur was called in after all; and I must say, judging from what the man has written since he has been in prison, that he was a perfectly sane man, and there has been a gross failure of justice. And there has also been a most painful case in Dublin, in which the medical witnesses were carefully selected on each side, so as not to give an unbiased judgment. They ought to be allowed to give their evidence in a dispassionate manner, without being pledged to one side or the other. The English railway companies have at length taken up the matter; and I believe that before long, in every case in which compensation is demanded in cases of accident from the great companies, a medical man will be selected by each side, as suggested by Dr. Davey, and will meet as a jury, and agree upon an umpire, without allowing any other medical man to be called; and will take down the evidence, which will be

presented as the facts in the case. Why, even in criminal cases, cannot we have such a supplementary jury sworn to examine nothing whatever but the physical facts connected with the case? The witnesses may be examined by the lawyers; for they are clever at that, if at nothing else. And the verdict of the supplementary jury should be handed to the common jury as the only scientific evidence to be admitted. Such a plan would save justice from the uncertainty which is the greatest injury to which it is now exposed. A man now never knows whether he is to be hanged or not, which is a very unpleasant thing.

The duties which the medical profession discharge to the public are at present but very imperfectly understood, and I turn with special pleasure to those which they discharge to the sick, and especially to the poor. The tongue of slander has never been able to say that any large portion of the medical profession has ever neglected or deserted that duty. The blessings of the poor are always their best and sometimes the only reward they get for many hours of lonely toil. It is a consolation to men working in the outskirts of civilisation in many parts of the country, in remote villages and mountainous districts, where they have few companions of equal education around them, and are perhaps neglected by those superior in society to themselves, toiling almost alone—it is always a satisfaction to them to know that they are labouring in a good cause, following the footsteps of Him who not only reclaimed the sinner from his evil ways, but also healed the sick. The records of no profession can show so long a roll of obscure, able, and clever men, making, in quiet, great discoveries in science, in solitude doing much good, whose names are not known during life, and to many of whom statues to perpetuate their memories are now being erected throughout England. Many an humble physician has thus worked, seen by no eye but that of the Great Master, and, at the close of his useful but neglected career, sees the shadow of the evening of life close upon these labours, and may well exclaim, in the words of the great Italian poet who died among us in England, far from his native land, and forgotten by his country—

"Morte me darai fama e riposo."
"Death will give me fame and rest."

This is glorious language; still it is the voice of despair.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF MIDWIFERY.

At the Annual Meeting of the British Medical Association,
in Birmingham, August 1872.*

By EVORY KENNEDY, M.D.,

Late Master of the Dublin Lying-in Hospital; President of the Section.

CASE VIII. *The Whole Circle of the Os Uteri thrown off in Labour.*—A patient in her third labour, which was somewhat violent, had slight hæmorrhage. The head was well engaged in the pelvis, and some fleshy mass was found to protrude from the vulva. The pains increasing, a complete circular ring, about three-eighths of an inch thick by an inch in breadth, escaped, which, on examination, proved to be the detached os uteri in its entirety. The labour proceeded rapidly. There was very little hæmorrhage; and the patient made a favourable recovery, the lochial discharge continuing longer and being more offensive than usual. Of the after-history of this case, and whether she bore more children, I am ignorant.

CASE IX. *Procidencia of Gravid Uterus in the Sixth Month of Pregnancy reduced successfully: Living Child six Weeks after Reduction.*—M. B. was admitted into hospital April 4th, 1838, with the extraordinary displacement of the gravid uterus exhibited in this drawing. She considered herself just entering on the sixth month of pregnancy, and had suffered for some time from bearing down and pelvic distress. The tumour, now perceptible, had protruded suddenly beyond the parts the day before admission. It appeared larger than a pint mug, polished, dry, and red, with the os uteri enlarged, but not patulous; rather puckered, as you perceive; plugged with yellow mucus, and with several ulcers, as if the effect of abrasion, on the most pendulous part surrounding the os. The ulcers were touched with solid nitrate of silver. The patient was placed on her back with the pelvis elevated by pillows. The protrusion was smeared well with hog's lard; and then the protruding tumour was gently but steadily embraced with both my hands, and pressed with the points of the fingers all round at its con-

nexion with the pelvis, whilst it was at the same moment gently forced up with the palms of my hands formed into a cup-shape. This pressure was continued steadily for some minutes in the direction of the outlet of the pelvis, upwards and backwards, and, as it yielded, directly upwards, when I had the gratification of finding it glide safely upwards into the replaced vagina; by following it still up with the fingers, it was pushed high in the pelvis. A full opiate was now administered. An assistant was placed to watch, with the hand on the perineum; and the patient fell into a profound sleep, and awoke, after some hours, free from inconvenience. She was retained for some time perfectly quiet, with the hips slightly elevated, and went home well. At the expiration of six weeks, she was delivered of a healthy living child, which appeared of about seven and a half months' development, and it survived.

CASE X. *Acephalous Fœtus; totally brainless; acutely sensitive.*—A female child, otherwise fully formed and developed, was born acephalous—in fact, totally devoid of brain. It survived its birth one hour and a half, breathing and crying loudly; the expirations were rather convulsive in their character. Its voice was very strong. It was acutely sensitive to impressions made on the surface of the body, and moved its limbs. We could not satisfy ourselves whether it heard or saw. It cried so much on inserting food in its mouth, that it was impossible to ascertain whether it could perform the act of deglutition. In other cases of acephalous fœtuses, we usually found a rudimentary portion of the middle lobe of the brain; and they rarely survived beyond a few gasps, if so much. The malformation is occasionally combined with spina bifida and contortions of the limbs; but some, like this child, are fully developed—indeed, the shoulders were so much so, as to create a difficulty in their extraction. The *post mortem* examination, in which I was assisted by the late Dr. Todd of King's College, presented no feature worth recording, beyond what I have mentioned.

CASE XI. *Spina Bifida.*—In June 1872, I was consulted about a child four months old, reasonably well developed, healthy, and with every prospect of continued vitality and health, save the existence of a head somewhat large, but with tardy development of the parietal and frontal bones, leaving the large fontanelle unossified, congenital dislocation of the ankles forwards, and a spina bifida of the lumbar vertebræ. This measured two inches in diameter, with a projecting polished membranous covering, enclosing an elastic fluctuating sac. In fact, there was a total absence of the integumentary, ligamentous, and bony covering of the spinal chord, the thickened dura mater supplying their place. I exhibit a model of this case. The child, a girl, shows quite as much evidence of mind and powers of observation as four months' children generally do. My directions hitherto have been to take every precaution to prevent the injury or rupture of the cyst. A chambered shield of gutta percha, lined with padded silk, is being adapted to prevent the possibility of accidental injury; and I have it in contemplation to try a plastic operation when the age, promise of enduring life, and condition of the child justify it. It would be extremely gratifying to me to have the suggestions of my *confrères* with reference to the future dealing with this remarkable case; more especially of those who have met with similar cases in their practice. How long have they been known to survive, and how they were treated?

CASE XIII. *Vesico-vaginal Fistula cured by twisted Suture.*—On August 12th, 1837, H. Byrne, aged 25, was sent from the country suffering from vesico-vaginal fistula. The opening was longitudinal, about five lines long, with considerable loss of substance. It was about three inches from the urethral orifice. The bowels were well freed. She was placed on the abdomen on the edge of a table, with a bolster interposed. My four curved beak-tractors were introduced, and, her limbs being held fast by assistants, I pared the edges of the fistula with a scalpel, cutting on an ebony spatula; and, having introduced three short needles into the wounded edges, drew them together with a twisted suture. A perforated shot was now squeezed on the end of each needle, an elastic catheter introduced into the bladder, and the patient was placed lying on her abdomen, on bolsters stitched together longitudinally. She was retained in this position, and closely watched day and night, by a relay of nurses, who never left her. The urine flowed freely from the urethra into a bladder attached to the catheter. Her bowels were washed out by lavement. Not a drop of urine escaped from the vagina. The sutures were cut out on the fifth day, and the needles removed, when the union was complete. She left the hospital in a fortnight perfectly well. I had the advantage of the assistance of my late colleague, the distinguished surgeon Mr. Abraham Collis, in this case; and I cannot easily forget the gratification he evinced when he made a final examination of the bladder before the patient left the hospital, nor the significant manner in which he answered my inquiry whether he could find any hole. "No, doctor; I can't find a hole, unless I make one"; and added, with a peculiarly expressive shrug of his shoulders, with

* Concluded from page 163 of last number.