The next time I visited Mr. Harris was a day or two before the trial. I saw him at the residence of a friend of his in Whitechapel, November 8th, 1875. Mr. Erichsen, Dr. Sterling, and Mr. Maunder, met Dr. Radcliffe, Mr. Skelding, Mr. Jonathan Hutchinson, myself, and others at the house. The plaintiff said, "I am better in health, but not so well in the use of my legs and feeling". He appeared to me looking better than when I saw him in June. The bladder was distended, and I suggested to Mr. Erichsen that a catheter should be sent for. This was placed on the table. He said, "I will try". He was placed upon the edge of the couch. He passed a large quantity of pale-coloured urine freely, and with force. He said he had no sensation down to a certain part of each thigh, which was marked by him with a pen and ink. The battery brought by Dr. Radcliffe having been broken in removing it from his carriage to the house, we agreed to meet again in consultation the next day.

November 9th. Mr. Erichsen was not present with us to-day, but Dr. Ramskill attended on the part of Mr. Harris for the first time. The power of motion and sensation was tested by Dr. Radcliffe; the continuous and induced current (Faradic) being employed. The test fully proved that the muscles had not lost the power of moving, nor had he lost sensation, whatever amount of spinal anæmia may or may not have been present. The battery applied, the feet, which had been everted, were drawn together, and the heels raised from the couch; the current removed, one would naturally have supposed, with such an asserted loss of muscular power, that the feet would again have fallen outward. They did not do so. The experiment repeated, a sharp cry indicative of pain proved the existence of sensation—I ought to say, the current applied was very weak. May we take it for granted that the excitation of contractions, when the induced magneto-electric current (Faradic) is passed through healthy muscle, as was the case here, proves that at any rate, to some degree, it was susceptible to the electric current, and possessed electro-muscular contractility, or irritability; and that the cry of pain indicated electro-muscular sensibility?

There are many other points in this case that it is to be regretted for the present, from want of time, I must pass over. But to me, in any man it does appear in the highest possible degree unaccountable, that with an alleged paralytic condition of the lower extremities, there should continue to be enjoyed perfect control over the bladder and rectum. The absence of all objective symptoms in all such cases is matter for the most grave and serious consideration before forming an opinion. When, therefore, I am called to see a patient who has been in a collision on a railway, and who is seeking compensation, who has remained in bed for months apparently without the power of turning over or moving his lower limbs, in which it is stated he has lost sensation, who has a healthy aspect, no difference of temperature between the parts said to be paralysed and the rest of the body, perfect command over the rectum and bladder, pulse natural, temperature normal, no bed-sores, no marked lesion of nutrition, no flattening of the nates, no wasting of the calves of the legs; I venture to say, and that, too, without wishing in any way to dogmatise, that there is the total absence of those objective symptoms which we expect to find, and do find, in injuries to the spine of a severe nature, in patients who have not recovered months after accidents of this nature.

Let us hope, however, that the railway spine, if not already so, will soon become a thing of the past, and that the views I expressed in this JOURNAL so long ago as in the year 1867, will be now generally held to be correct by the profession, confirmed as I am again by Mr. Erichsen, in his work *On Concussion of the Spine and Nervous Shock*.

MR. ERICHSEN, 1875.

"Injuries to the spine and spinal chord occur not unfrequently in the ordinary accidents of civil life. If, in these lectures, I speak more frequently of the injuries of the spine arising from this" (railway collisions) "than from any other class of accidents, it is not because I wish to make a distinction of injuries of the spine according to their causes, and still less to establish anything like a speciality of railway surgery" (p. 2). Again, he says, "I do not consider that these injuries stand in a different category from accidents occurring from other causes in civil life" (p. 5). He speaks of "railway injuries as peculiar, not different."

DR. J. C. HALL, 1867.

"The railway spine, as it is termed, I confidently submit, has no right to the peculiar place assigned to it. An injury to the spine, whether occasioned by a collision on a railway, or by a fall from a scaffold, can only be dangerous in proportion to the extent in which, at the time of the accident, or subsequently, the spinal chord or its membranes are affected."

It is quite impossible for a moment to associate the case of Mr. Harris with one of permanent injury to the brain or chord. At the time of the accident, there was no evidence of concussion, and, to use a homely proverb, at the worst, he was far more frightened than hurt. At the most, his could be, this November, but a case of hysterical paralysis, the traces of which must rapidly pass away. I find, after many railway accidents—which hardly deserve the name—patients give themselves up to despair, they lie in bed or on the sofa, take no exercise, and voluntarily resign themselves to an emotional condition, painful alike to themselves and to their friends.

Speaking of those who suffer from hysterical manifestations after comparatively slight injuries, in his recent very able work, to which attention is directed in the article in the JOURNAL, Mr. Erichsen writes, p. 203, "My experience of these cases leads me to consider the prognosis as much more favourable than might have been anticipated; or, than I was at one time disposed to consider it".

That they recover—rapidly recover—is certain; but, without a wish in any way to insinuate deception or feigning on the part of any who have been in a railway collision, every-day experience goes to prove that in such cases—and I have such a one under my care now—there is no modification of symptoms, no entire restoration to health and peace of mind, until the trial is over, and all the bitter fears and miseries of impending litigation have passed away. So far as I know, railway companies are ever ready to deal with all who may have suffered, fairly and most liberally. How much, then, of pain, sorrow, and anxiety would be saved, if the claimants would at once grasp the friendly hand held out to them, instead of enduring for months the anguish inseparable from the anticipation of the day on which they will have to appear as witnesses in a court of law: the trial over, then only to discover beyond doubt that, had they accepted the offer made to them, in every sense, pecuniary included, they would indeed have been gainers.

THE WHITECHAPEL TRAGEDY:

REPORT OF THE POST MORTEM EXAMINATION OF THE REMAINS.

By F. G. LARKIN, M.R.C.S.Eng.

ON Saturday, September 11th, 1875, I was called to the Stones End Police Station, about 5.30 P.M., where I was shown two parcels wrapped in American cloth. On opening them, I found one parcel to contain the trunk, and the other bundle the remaining portions, which collectively were the remains, beyond doubt, of a human female about five feet high, and about twenty-five years of age, and those of a thin person. The body had been very recently and most unscientifically dissected. It was in a very stinking and decomposed condition; some parts were more or less "mummified", whilst other portions were in a state tending to "adipocere". I have examined the remains several times, at first by myself, and subsequently assisted by Mr. Bond of Westminster Hospital. The body was, roughly speaking, divided into ten parts, as follows: two hands; two arms; two legs and feet connected (the left leg included part of the patella); two thighs, including portions of the pelvis (the right thigh included the patella, the left thigh included part of the patella); one trunk, excepting the front of the pelvis; one head and neck.

Hands.—The left hand (or rather the bone) had been broken off just above the wrist-joint; the right hand had been removed more carefully *through* the same joint; otherwise, both hands were entire. There were no signs of a ring having been worn, the decomposition having advanced so far as to prevent the possibility of such evidence (moreover, it is a known fact that these rings had been in pawn some months before death). The nails were easily removed.

Arms.—The head of the left humerus had been cut through. The limb was entire, excepting a small portion which was attached to the hand. The right arm was broken off just above the middle of the humerus, the upper part of which was still connected with the trunk; the remainder of the limb was entire down to the wrist-joint.

Legs and Feet.—The knees were smashed about, especially the right. A wedge-shaped piece had been cut out of the back of the left knee-joint. The left great toe was broken at the extreme joint. The nails were easily removed. A pair of boots proved to have been worn by the missing woman, I found to correspond to, and they could have been worn by the feet of the deceased. The length of the feet was 8½ inches, and that of the boot 9 inches. There was an oblique scar from a burn, about one inch long, and three-quarters of an inch wide, very

much puckered, thickened, and fibrous, on the outer side of the right leg, somewhat in front, and about four inches below the centre of the knee-joint.

Thighs.—These were very much hacked about in severing them from the pelvis, fragments of which were attached; together with portions of the labia vaginae, which, with much difficulty, I managed to place *in situ*.

Trunk.—The upper part was more or less mummified; at other places, tending to adipocere. The mammae were quite invisible, the regions being flattened level with the remaining surface of the body. The head and neck had been separated between the sixth and seventh cervical vertebrae. The cartilages of the ribs were easily cut with a knife. The ossification of the sternum had advanced to such a degree that the third and fourth pieces were nearly united. The pelvis had been smashed up into innumerable pieces, especially in front; the sacro-iliac synchondroses were dislocated on both sides. The labia vaginae were lacerated in all directions, and very little hair was to be seen; it had the appearance of having been shaven off, but was probably removed by the lapse of time, etc.

Head and Neck.—The colour of the hair was light auburn; it was tied up with a piece of black velvet, half a yard long, and one and three-quarter inches wide, which was rotten. All features of the face were quite gone, a considerable portion of the flesh having been removed; there was, however, some remaining, on the right cheek more especially, but too decomposed to be of any use in identification. The cheek-bones were rather prominent. The eyeballs were in a very shrivelled-up condition, and retracted into the back of the orbits. The scalp was all torn off, excepting at the posterior and left side of the head. The ears were all gone, with the exception of a small portion of the left, which gave evident signs of having worn an ear-ring. The teeth were perfect, excepting the two central incisors and left canine of the upper, and the central incisors of the lower, jaw, which had been removed since death. The left upper and the right lower incisors, together with the left upper canine, having been found and replaced, the only missing teeth were the right upper and left lower incisors. All the wisdom-teeth were perfect, excepting the left upper, which was being cut. The front right upper bicuspid was decayed down to the gum, and it was the only decayed tooth, so far as it was possible to say in the absence of the two missing incisors. There were large quantities of congealed blood and dirt about the head generally, but more especially in the neighbourhood of the wounds, one of which, that of the cut throat, was a wound two inches in length, which extended from the right side of the median line, just above the thyroid cartilage backwards, and slightly upwards to opposite the angle of the lower jaw on the left side, and had divided all the structures in front of the third cervical vertebra. This wound must have been inflicted during life or immediately after death, as evidenced by the congealed blood on its surface, and also in the immediate neighbourhood, especially in the direction of the ear on the same side. This wound appeared to have been continued into the body of the third cervical vertebra, and extended in a straight line across the same, including the transverse processes, cutting it nearly half through. This injury to the bone appeared to have been more recent: its surface was fresher: which fact might be accounted for by the comparative absence of atmospheric influence by the closing of the incision into the vertebra, thus pointing to the probability of its having been done at the same time as the division of the softer structures. The frontal suture was absent, all others perfect. On the right temporo-parietal suture, posteriorly, there was a fracture about three-quarters of an inch long, and three-eighths of an inch wide, with its posterior part more depressed than its anterior; its direction was obliquely backwards and upwards. On the inner surface of the scalp in the immediate neighbourhood, there was a smooth layer of congealed blood, about two inches in diameter, and about one-sixteenth of an inch in thickness. On removing the skull-cap, I found a wound in the dura mater corresponding to the above fracture, in which were imbedded spicula of bone and slight hæmorrhage. Finding the brain in a fluid and pulpy condition, I deemed it prudent to desist from any further interference in removing it; for, had I done otherwise, my evidence would have been unconfirmed in reference to the finding of any bullet; but subsequently, with the assistance of Mr. Bond of Westminster Hospital, I found two bullets at the base of the brain; one, which had entered by the fracture already described, had lodged itself (after having struck the posterior portion of the occipital bone) in the base of the cerebellum on the opposite side; the other bullet found within the skull was lodged in the sella Turcica, the clinoid processes of which had been broken by it; then, in following its course outwards, we found it had entered by an opening or fracture, just above and in front of the root of the right zygomatic arch. Here, also, there

was a considerable quantity of congealed blood and dirt. I also found, in the padding at the back of the head, a third bullet, very flattened, and which had evidently not entered the skull, its progress having been arrested by the innumerable hair-pins and padding. These hair-pins were bent and broken in all directions, some having been broken a long time, as evidenced by the rust.

Viscera.—These were in a very decomposed condition, with the exception of the uterus, which was very thin and wasted in substance, like all the other organs, but in a good state of preservation. The lungs were in a very small shrivelled-up state, almost as if they had never been inflated. The heart, also, was shrunken up into a very small mass, enclosed in a fair-sized pericardium. The liver was very distinct; likewise the stomach, which, on being opened, was found to be empty, with the exception of its surface being covered with what appeared to be decomposed blood, but which gave very doubtful evidence under the microscope: indeed, the time that must have elapsed, together with the action of the gastric juice, would go far to disintegrate the corpuscles; the colour, however, was very marked to the naked eye. The intestines were in a very different condition—viz., a confused mass, glued, as it were, together, so that it was perfectly impossible to separate one coil from another. I placed each viscus (with the exception of the brain, for the reason above stated), for subsequent inspection, in a separate glass jar of the purest quality, specially washed out with distilled water. The general appearance of the uterus was most inconsistent with virginity, which fact, also, was to a great extent borne out by the appearance of the skin of the lower part of the abdomen, which here and there amidst the decomposition showed one or two white lines in the hypogastric region, and other marks nearer to and in the inguinal region, of a darker colour, apparently the remains of the peculiar violet lines which, together with the above-mentioned *lineæ albicantes*, are peculiarly characteristic when taken in conjunction with other evidence of delivery having taken place at some more or less remote period; and what seems to bear out this idea in my mind more strongly, is the fact that the decomposition had progressed more rapidly with the little raised portions of integument between the cicatrix-like lines than at any other part of the whole trunk, or upper part of thighs, where the surface of the skin is even. The dimensions of the uterus were in every way enlarged; its measurements, as near as possible, were: extreme length, 3 inches; width at fundus, $2\frac{1}{2}$ inches; cervix, upper part, $1\frac{3}{4}$ inches; lower part, $1\frac{1}{2}$ inches; thickness, $\frac{3}{4}$ inch; cavity: length, $2\frac{1}{2}$ inches; breadth between Fallopian tubes, $1\frac{1}{2}$ inches; centre, 1 inch; lower orifice, $\frac{1}{2}$ inch; cervix thickness, $\frac{3}{4}$ inch; width, $\frac{1}{2}$ inch; weight of uterus, 12 drachms.

This subject of pregnancy constituted the only point of difference in the medical evidence given by myself on behalf of the prosecution, and that given by Dr. Meadows for the defence. Dr. Meadows spoke of two things which guided him more especially in coming to an opposite opinion to that given by myself. In the first place, he commented on the *shape* of the uterus. Now, it is a singular thing that, when I first examined the organ, I was struck by the very opposite shape to that which he described in the witness-box; the uterus was so flaccid that, by the most trivial ingenuity, it might be altered in this respect; and I confess I did not think it worthy of any reliance whatever in this case. Next, he spoke of the thinness of the walls. He said "the walls were unusually thin"; I agree with him, as will be seen by my measurement, which coincides with what Dr. Meadows said ($\frac{3}{8}$ inch). Now, this "thinness", I will show, goes very far to prove, in this unparalleled case (and taken in conjunction with the other evidence, on which I rely as a whole, the appearance of the abdomen, the uterine measurements, and weight as given above), will suffice to convince any reasonable mind that this uterus was not nulliparous.

I cannot do better than quote from a letter which I wrote to Sir John Holker, the Attorney-General, on behalf of the prosecution.

"Dr. Meadows gave as one reason that the walls were very thin. We agree; but calm reflection reminds me of a most remarkable fact in reference to the walls of the bladder, which was as thin as or thinner than this paper (foolscap). Now, the bladder has been subject to the same influence as the uterus; and I should like to know why the muscular walls of the one organ should not follow the same rule of atrophy as the other. The stomach, too, and the other viscera, had also wasted in thickness; and why should the uterus be the only exception? True it is, that the uterus lasts longer than any other viscus; but that does not alter the possible fact of getting thinner in proportion with other organs; and, if my argument be sound, such a fact strengthens my undisputed evidence as to weight. Of course, the uterus would be heavier; and it now is inconsistent with virginity, as are the measurements; and I certainly observed the converse as to the shape of the uterine cavity as stated by Dr. Meadows; but this point, I confess, might vary in the present case."