

The treatment of hip-joint disease with the straight splint / by J. Cooper Forster.

Contributors

Forster, John Cooper, 1823-1886.
Royal College of Surgeons of England

Publication/Creation

London : Savill & Edwards, printer, 1851.

Persistent URL

<https://wellcomecollection.org/works/as7tzumh>

Provider

Royal College of Surgeons

License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

(11.) With the Author's Consent

THE TREATMENT
OF
HIP-JOINT DISEASE

WITH THE STRAIGHT SPLINT.

BY

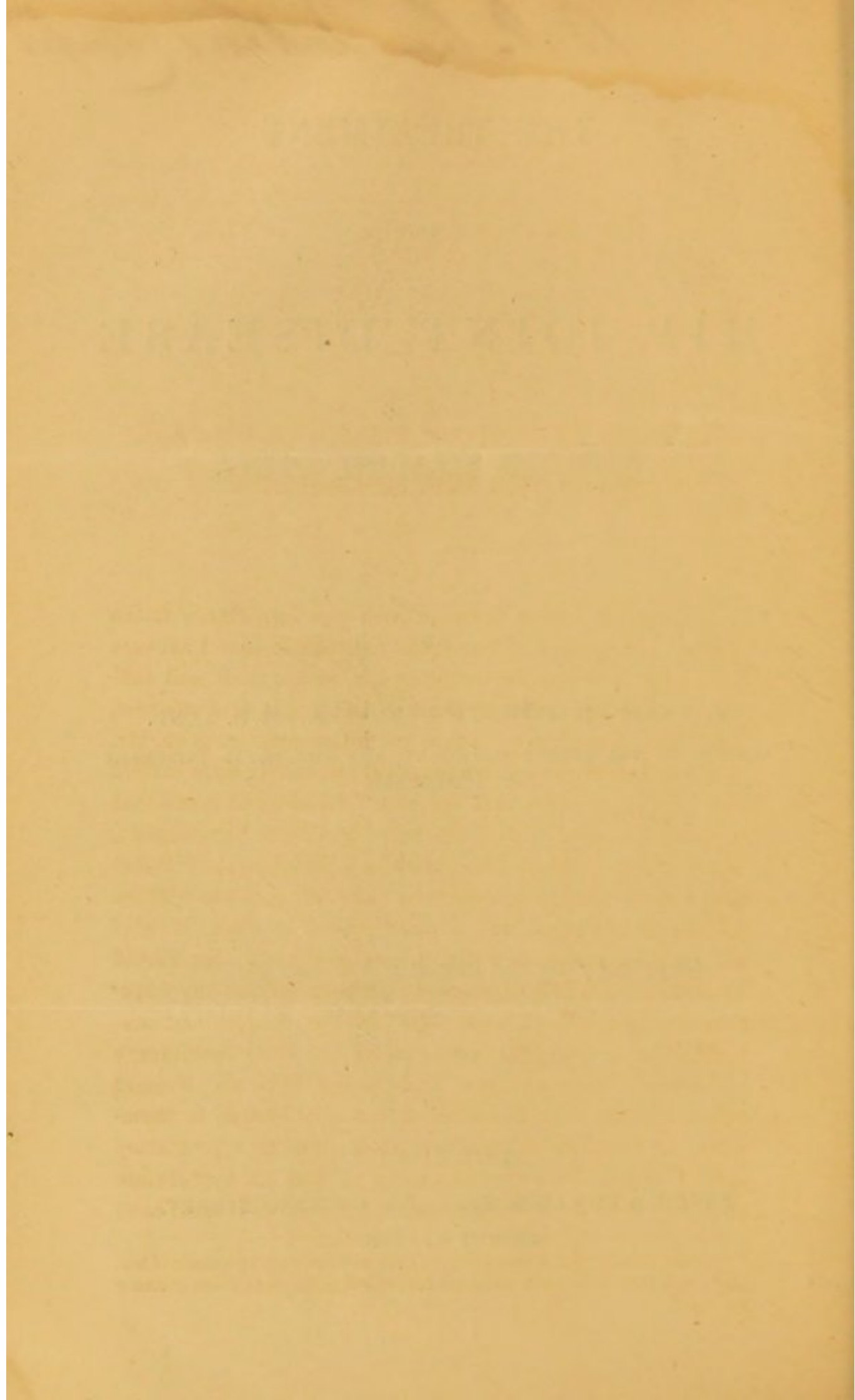
J. COOPER FORSTER, F.R.C.S., M.B. LOND.

SURGEON TO THE SURREY DISPENSARY, AND THE ROYAL INFIRMARY
FOR CHILDREN.

(Reprinted from THE LANCET of November 29, 1851.

LONDON:
SAVILL & EDWARDS, PRINTERS, CHANDOS STREET,
COVENT GARDEN.

1851.



THE TREATMENT OF HIP-JOINT DISEASE
WITH THE STRAIGHT SPLINT.

THE subject named is one of such vast importance to the welfare and comfort of numerous individuals, that I am sure I need not apologize for troubling you with a short and concise account, illustrated by cases, of treating it in a way first, I believe, advocated by a late much-lamented surgeon, Mr. Key,* and which, in my own practice, I have ever since carried out. I freely confess that the plan I recommend is one that is not unattended with some little trouble to the surgeon, and requires constant attendance and watching, and therefore I fear, perhaps a numerous class of patients will be frequently neglected, and a class indeed to whom it is of the greatest importance that a very serviceable leg should be obtained: I allude of course to the poor. From my experience amongst them, what with previous neglect and misapplication of remedial measures, or the total indifference of parents, many children and young lads are doomed either to drag on a miserable existence, a burden to themselves or families, or terminate their lives at a premature age; I should be extremely sorry to cast an opprobrium upon any member of our profession, but I think it must have

* I may remark that it was never applied in more than two cases of Mr. Key's, and they were both under my inspection at the time I was dressing for him.

been the lot of many to have seen disease of the hip-joint in all its stages, often miserably neglected by the surgeon, from a belief that little can be done except to place the patient in a recumbent posture, with perhaps a pillow or pad beneath his knee. Now besides the simple horizontal posture, I believe the greatest amount of good may be accomplished by also applying such local measures as will ensure the patient a useful member, after the subsidence of the inflammatory symptoms, and by not supposing that Nature dictates the proper position in which the limb should be placed for future use, though she undoubtedly fixes it in the most comfortable posture for the present. For example, no one can believe, I should imagine, that the bent position is the most useful one for an ankylosed knee-joint, nor indeed is it, as far as my experience leads me, the most useful for the hip-joint, whether perfectly fixed or not; and yet it is the position which all the cases of disease of the hip-joint would acquire if left to nature; and, indeed, two joints become contracted, inasmuch as the knee always is flexed likewise; and no one, I think, can doubt that the straight would be most useful. The treatment I advocate is not by any means easily applied in what is called the third stage of the disease, where suppuration is established, and an opening or openings formed; but as it is more common to see this complaint in the first two stages, and in either of them the straight position is with very little trouble obtained, the treatment I offer is of course most applicable at those times.

CASE 1.—J. W——, aged fifteen, living at Vauxhall, a pale, strumous-looking lad, has always had good health, came under my care Feb. 1st, 1850. The history he gave was, that five months previously he had received a kick on the upper and fore part of the thigh, which caused considerable pain, and had continued, more or less, until I saw him. At the end of two months after he received the kick, he began to limp, and the pain became more severe; and one month afterwards he was compelled to keep his bed; blisters and poultices were

applied just below the groin, as there appeared, it was said, some swelling. As he had not improved much by the end of two months more, I saw the lad, and then found him lying on the left side, with his right leg flexed, an absence of the fissure in the groin, and a certain amount of fulness in the upper and fore part of the thigh; the trochanter projected considerably, and there was great pain upon pressure behind it; slight pain at the knee, particularly at night; no tender spot anywhere on the spine; the thigh could not be moved in any direction without giving rise to the greatest agony. Leeches were applied in abundance, with Dover's powder, to get slight rest, which soon relieved the most urgent constitutional symptoms induced by the great pain; but rigors then began to appear. I, however, at the end of a week, applied a straight splint, gently bringing down the thigh to as straight a line with the body as possible. So severe did the rigors become, that I was induced to suspect matter had formed, and would quickly come to the surface. I still continued the straight splint, and, without entering into the details of the daily progress of the case, may state that it was continued for a period of eleven weeks, he in the mean time taking the cod-liver oil and Dover's powder. At the end of three months I found almost perfect ankylosis, but he could bear pressure without the slightest pain.

Much mischief had arisen in this case evidently before I saw it, and hence arose, afterwards, the perfectly fixed state of the limb in a straight line with the pelvis; he was unable to walk without the use of crutches for some months, but is now usefully employed, and though walking slightly lame, and unable to sit down as other persons do, is, I conceive, much better off than with a crooked leg, and, possibly, carries of the bone and abscess, which seemed almost the inevitable result of the state in which I found him. This is the worst and most unfavourable case I could find to bring forward, and I think it would be extremely unjust to picture only the brightest side when advocating any plan of treatment different from that usually adopted. For that reason I have first mentioned this.

CASE 2.—W. F——, aged fourteen, living in Lambeth, rather tall for his age, of a florid complexion, had always enjoyed good health, came under my care February 7th, 1850; stated that twelve months ago he first experienced pain in his right hip, said to be a growing-pain, and no notice was taken of it; it continued more or less for eight months, at the end of which time the pain increased considerably, and he began to limp; he then applied for advice: repeated blistering, with medicines, was had recourse to, and rest recommended during a period of four months, without any very decided benefit. At that time he fell under my notice, and the following was the state of the limb when I first saw him:—

The right leg was the one affected; in the erect position it was found to be one inch shorter than the other, the toes slightly inverted, a decided projection of the trochanter major, and a flattening of the nates; upon pressing the bone into the acetabulum, he complained of much pain, also down the inside of the knee, but not of a very marked character; there was also considerable tenderness behind the trochanter; the crista ilii was on a higher level than the opposite side, the spine slightly contorted; he had considerable pain in walking, and limped very much; and every movement of the joint, either backwards or forwards, and particularly upon separating one leg from the other, induced great pain; the degree of actual motion in the joint was very slight; in the recumbent posture the knee was considerably drawn up, as usual, and the thigh flexed upon the pelvis. After keeping the lad on his back for a week, and subduing the more urgent inflammatory symptoms, the next process appeared to be to get the leg in the best position for future usefulness, and I therefore applied a long straight splint. I kept him thus for seven weeks, at the end of which time he began to use slight motion, not, however, bearing his weight upon the limb. He was on his back altogether eleven weeks, and then began to walk, and at the end of June, a period of five months, went to work. There is now no shortening; he sits down on a

chair comfortably, walks with scarcely the slightest limp, and has continued quite well up to the present time.

CASE 3. — E. H——, aged seven, living at Vauxhall, a delicate, pale, strumous-looking child, parents healthy, has never had good health, came under my care January 1st, 1851. Her mother states that ten months ago the child first complained of growing-pains about the right hip, down the thigh, and about the knee, and more especially about the latter, and she limped slightly; of course, as is usual, more pain was experienced about the knee than anywhere else. She was under the care of a very able surgeon for ten weeks preceding the time I first saw her, and the usual remedies were made use of, but no attention seems to have been directed to the commencing contraction of the joint; as might be supposed, she walked now excessively lame, and with great pain. At this time I saw her, and found the little patient in bed with the right thigh drawn upwards and across its fellow, the child lying on her left side. With great difficulty I could induce her to lie on her back, and allow me gently to depress the thigh and straighten the knee, and upon careful measurement, I found there was no difference in the length of the limbs. There was not much motion in the hip-joint, and, consequently, as the thigh was depressed, the spine became tilted upwards. There was great pain about the knee and fulness in the groin, with flattening of the nates as usual; there was not so much pain upon pressing into the joint as in most of these cases, though that characteristic seat of tenderness, the groin, just above Poupart's ligament, upon pressure, elicited the same remark as I have always found in all hip-joint cases. Constitutional symptoms were somewhat urgent here; the child had evidently been much depressed; she looked excessively pale, thin, and worn out with suffering. Leeches behind the trochanter until the pain in the knee was relieved, with Dover's powder at night, and bark, constituted the treatment for the first week, at the end of which time, with some considerable trouble, I got the knee down and the straight splint

applied; the splint has been continued daily until the beginning of April. She is now free from pain, can sit up, and get about on crutches.

CASE 4.—R. P.—, aged seventeen, living in Bankside, never has had any illness, growing fast, a pale, strumous-looking lad, came under my care Feb. 8, 1851. He said that six months ago he first felt what were said to be growing-pains about the left hip, which caused him to limp slightly, and remarked, that he was sure, one leg was longer than the other; continued, however, at his work, sometimes in pain, at others not; and he took no further notice of it until a month ago, when he sought advice; he was then just enabled to walk, and that was all; was ordered blisters and colchicum; at the expiration of one month of that treatment, I saw him. He then complained of his severest and greatest pain being about the left knee; had a few enlarged glands in the groin, occasioned by the irritation of the blister, which caused great uneasiness there; there was a great deal of pain about the thigh generally. Upon examining the upper part of the thigh about the joint, I do not ever remember seeing so much suffering from manipulation, and yet, when not touched, he was quite easy; the nates were flattened and trochanter projecting, and upon pressing behind that point of bone, and also on it, the lad suffered the most excruciating agony of a deep-seated character. Upon attempting to move the thigh upon the pelvis, little or no motion could be detected; as he sat down, and in the erect posture, the leg appeared one inch longer than the other. He could neither sit down nor rise up without the greatest difficulty and the greatest suffering. Upon pressing the whole thigh upwards, there was the same acute agony that one sees in ulceration of cartilage; there was also great tenderness as far down as the lower edge of the gluteus. He had the greatest difficulty in lying down; preferred reclining on the right side, and drawing the opposite leg upwards, as is almost invariably seen in these cases; when on his back he suffered the most acute agony; the painful startings at night and the severe pain prevent his

getting rest. I will not be tedious by giving a long account of the daily treatment, which consisted for fourteen days in the constant application of leeches and administration of Dover's powder, at the end of which time the straight splint was applied, and continued for six weeks. He was then enabled to get about on crutches; both legs are now exactly the same length; he has no pain about the hip, and an extensive amount of motion in the joint. As a proof of the comfort this patient derived from the straight splint, I may mention that one evening I removed it, and on the next day he particularly wished it re-applied, as his leg was going up and hurt him much at night. The greatest uneasiness these patients complain of is the stiffness of the knee. This lad is now going about with a stick, and gaining strength rapidly.

I will not enter into a lengthened account of the usual modes of treating hip-joint disease in its two first stages; when a patient applies for advice, the remark one generally hears, is "Oh, keep the patient lying in bed or on a sofa, at all events in the recumbent posture," the position of the limb for after-use never being thought of; freeing the patient from pain is the only thing attempted: the time present is all that seems to be regarded.

Now the objects I have especially in view, by the plan of treatment with the straight splint, are as follows:—

- 1st. To relieve pain by obtaining the most perfect rest.
- 2nd. To prevent abscess forming, or if matter has formed, to determine the point at which it shall come to the surface.
- 3rd. The greatest advantage which I hold out, and the one to which I more particularly wish to draw the attention of the profession, is the future usefulness of the member.

Rest is of course the first thing to be sought for in an inflamed joint, and the patient will take care to obtain it by some means or other, and in no way is it more effectually obtained than by fixing the body and leg as one piece, and thereby most entirely preventing motion in the great seat of it between the body and extremities—viz. the hip-joint.

Now the straight splint, fixing as it does around the hip, thigh, and leg, is the only means which I can devise whereby that advantage is thoroughly obtained; the usual practice of placing a pillow beneath the knee, or a large piece of mill-board or gutta percha around the joint only, or other contrivances according to the ingenuity of the surgeon, fails to do so in an effectual manner, and never can give that perfect rest which the splint affords.

The second object to be attained by the use of the straight splint is the prevention of suppuration, or if pus has formed, by the perfect rest which is obtained to induce absorption, or at all events to determine the point at which the matter shall come to the surface. During the time I was dressing for Mr. Key, and when he first proposed this plan of treatment, two cases came under my care at Guy's Hospital, in both of which matter had formed previous to admission, the straight splint was applied, and in each case the abscess burst on the fore part of the tensor vaginæ femoris. These cases were alluded to in Mr. Key's remarks, in the *Medical Gazette*, concerning this mode of treatment, and in Case No. 1, mentioned above, matter had apparently formed, and was coming to the same point at the fore part of the limb until absorption took place. I confess that as regards this question, there is some difficulty in deciding, and it is one which must always be open to doubt, as we so frequently see matter point at all parts around a diseased hip-joint, apparently without any reason; at all events the fact that in three cases, in two of which matter came to the surface, and one in which it nearly did so, no tendency to pointing occurred at any other place, is a remarkable coincidence, and one well deserving of notice. Further experience in the subject will, I trust, enable me to say more upon it at a future period.

3rdly, and this is the greatest advantage which the application of the straight splint holds out—viz., the future position of the limb.

When one is called to a patient with hip-joint disease in either of the first two stages, we almost invariably find them lying

on the opposite side to that which is affected, with the diseased thigh bent upon the pelvis, and the leg on the thigh, a position which I cannot imagine any one would say was the most likely to be of permanent usefulness should ankylosis occur, or such an imperfect amount of motion as usually follows acute mischief in any joint; indeed, the miserable objects one constantly sees about the streets with knees drawn up, and high-heeled shoes, sufficiently attest the truth of my remark; and I therefore, whenever called to see a patient labouring under this disease, after copious bleeding by leeches over the joint, place them on their back, and cautiously and carefully bring down the thigh to the level of the bed, and thereby straighten the knee. But one caution is necessary to be given in so doing: so tenacious is the hip-joint when in this state, of any even the slightest motion, so firmly have the muscles round about fixed the head of the bone in the acetabulum, that in doing so the spine frequently becomes arched about the lumbar vertebræ, and in reality the thigh is at the same angle with the pelvis as it was before the leg was touched; this, however, I have generally found relieve itself very shortly. The splint, when placed on for the first time, soon requires re-adjusting, and upon the second application, should the bandage be starched, the whole pelvis and thigh becomes one solid mass, and preserves the most perfect rest. When the patients have the splint removed, and first get up, of course I need hardly mention how excessively careful we should be that they do not use the unsound leg until they have cautiously felt their way; two crutches are absolutely necessary at first, and one must be taken away at a time, lest too much weight should be thrown upon the leg at once.

I doubt not that it will be remarked that I have only presented the bright side of the picture, and have not shown any of the disadvantages resulting from this mode of practice. There is but one objection that I know of; it may be urged as a serious one by many, and it is, that the patient is unable, if perfect ankylosis occurs, as in Case 1, to sit down as comfortably as formerly. It is inconvenient, it is true, to be com-

pelled to sit at the edge of a chair always, or with the leg bent under the seat, in consequence of the hip-joint being fixed, but I cannot conceive that it is a less awkward position than having the thigh fixed at an angle when standing erect, and it is necessary that one of the two evils should occur; besides, for working men, I am confident the former is much the lesser evil. Consequently, this which I have raised as an objection, becomes only a question of evils. There is a minor inconvenience which I may mention, and it is, that when the patient first gets up, from having kept the knee fixed in a position some time, pain is experienced there when it is first moved, and, indeed, more pain is usually spoken of as attending that part than the hip, which pain is easily distinguished from the superficial pain occurring in hip-joint disease. I trust it may not be considered that I have neglected to give sufficiently in detail the reports of the cases; I have been anxious not to be prolix, but the judgment of the surgeon will, and always must be exercised in diseases of joints, perhaps more than in any other class of cases, and therefore I have thought that his discretion should be used as to the time of applying the splint, as well as the length of its continuance on the patient, and numerous minor details, which slight experience will soon bring before his notice. In all the cases I have mentioned, excepting No. 1, I was, I must confess, agreeably astonished to find the great amount of motion which existed in the joint. In Case 2, you would have examined the hip, and scarcely been aware that there had been any mischief whatever, except when attempting to bring the thigh to an acute angle with the pelvis.

Case 4 was very quickly relieved, and there was also great motion, and this immense advantage in all—viz., that both legs, when the patients were standing erect, were of the same length.