purpose at first, I still use where close adjustment is requisite; but latterly I have been glad to avail myself of the advantages of dryness, lightness, and power of removal at will, which are afforded by Cocking's felt jackets.

I have, however, had to deal with some cases in which, from particular circumstances, the firm and constant support of jackets could not be borne; and with others in which, by early diagnosis and treatment, though they are suitable, their use may be avoided. And it is because I feel sure that many other surgeons must meet with similar cases, and have to devise means for their individual relief, that I venture to bring before this meeting a simple appliance which has proved itself capable of doing good service and of affording much comfort. It is that of adding to an ordinary easy or folding chair, supports for the axillæ, for every patient, and, where needed, a long rod to carry crossbar and straps to support the head also.

The first patient who led me to think of this appliance was a lady, aged 58, a sufferer for several years from increasing lateral curvature, which she had endeavoured, but in vain, to control by wearing an ordinary iron support. She complained principally of severe pain in her right iliac region, caused, I found, by the lower ribs, with every movement, rubbing against the crest of the ilium. When raised by towels passed under the arms, the bones were liberated and the pain was relieved. She could not bear a plaster-of-Paris jacket, and I had axilla-rests fitted to the easy chair which she constantly used. She gladly availed herself of them, and derived so much benefit that she was able to take moderate out-door exercise, and improved in appetite, condition, and appearance. I have adopted the same means in other cases of somewhat similar nature, and with happy results.

In incipient angular curvature, I have found both the axilla-rests and the head-support of great service; and, in illustration of this statement, I will ask your kind attention while I detail the case of the young gentleman to whom the chair now before you belongs.

Master L—, aged 15, came under my care in October 1877. His family history was good; the only fact which could be questioned being that he had lost an uncle by lung-disease, of six months' duration, immediately following a blow on his chest from a cricket-ball. He was a youth of active disposition, fond, as he expressed himself, of jumping from heights and dropping from trees and other eminences. In 1874, in letting himself down from a bank eight feet or more high, he pitched perpendicularly on his head on a soft grassy bank. In the autumn of 1875, after rowing, he complained of severe headaches accompanied by great flushings, and preceded by pain in his neck; and, though he did not mention it till lately, the first thing he noticed wrong was a hot feeling between his shoulders. The same winter he walked three miles to and from skating, and had one severe fall flat on his back, but he thought his head got the worst of that. The headaches and flushings increased, with pallor and exhaustion, so that he lay down during the evenings. His back ached continually; he showed great excitability and general weakness, and was obliged to give up all study for a year, and spend his time lying down flat. He ate but little, slept badly, and had a perpetual cough and deafness. A year's rest did him good, and in 1877 he came to Clifton, and attended an excellent school as day boy, walking slowly a short distance to and from where he resided. He was able to sit up at school, but lay down directly he reached home, and spent his evening on his back, learning his lessons in that position. The slightest fatigue brought on his dreadful headaches, and all the time he patiently endured a hot burning pain in his back.

I saw him in October 1877 on account of a severe sore-throat (the cause of his deafness), and soon heard of his headaches, loss of appetite, cough, which was of a grunting character, and induced by going upstairs or other movement, and asthmatic breathing. He stooped. When I examined his back, I found marked tenderness upon percussion on the first, second, and third dorsal vertebrae, and also slight tenderness in the upper lumbar vertebrae. In both situations he suffered pain, but much more in the upper. Pressure on his head or shoulders intensified the pain, as also did dropping him on his heels when raised from the ground, and pressure laterally on the upper ribs; while raising him by his elbows resting on my hands, or raising him by his head, gave great relief. I subsequently examined his spine with a test-tube containing hot water; this could be borne everywhere except in the parts mentioned, and there acute pain was produced; while a test-tube containing ice and water gave relief in the tender parts. I enjoined strict avoidance of all exercise save the slow walk to and from school, and the prone position all the time he was at home, and prescribed a damp compress covered with oil-silk to the dorsal and lumbar vertebrae, and the syrup of lactophosphate of lime and iron internally. He improved a little for a time, and then began to lose ground. I explained to his aunt, with whom he lived, that he ought to wear a plaster-jacket with a jury-mast. But she asked if I could not suggest a simpler substitute.

To prove my assertion, I suspended him with the proper apparatus, directing him to express exactly the feelings he experienced from it. Directly his heels left the ground, he said, "Now that pain is quite gone from my back"; and when I let him down again, and his feet touched, he said, "Now that pain is come back again". I thought of a long curved iron rod to carry crossbar and head-straps, together with axilla supports to be added to his own folding chair; and his upholsterer fitted them. He immediately took to the chair, finding great comfort from its use, and sitting in it every minute he could during the day. All his symptoms improved forthwith, and, what is very remarkable, from the first day he used it he never had an attack of asthma. His headaches lessened, and for some time he has not had one. Last Christmas, he shot rabbits without any ill result. A few weeks ago, he went for his school outing several miles in a break, and did not suffer at all, though formerly any carriage exercise did him great harm. I lately examined his spine carefully, and could find nothing amiss; and now he is gratifying his long-felt heart's desire to become a doctor, by studying to pass the preliminary examination for the Fellowship of the Royal College of Surgeons of England.

I feel I am justified in saying that this was a case of slow inflammation of the upper dorsal vertebrae; that recovery by resolution has been brought about by the simple and unobservable use of this chair, which has at the same time allowed of the application of a local remedy, which has given comfort and been of service.

The chair explains itself. The points to be observed in constructing one are, that the axilla supports are long enough, slightly curved upwards, narrow, padded well above, and fixed to the wooden frame of the chair at exactly the same distance apart as the patient's axillæ are, and at such a height as to support the patient off the seat; the amount of support being easily regulated by the use of cushions. The strong curved iron rod for the head-support must be long enough to clear the head well, and notched on its upper surface in three places, that the ring of the crossbar may be moved at convenience. The chair is more comfortable when in use if the patient's legs are supported either on a leg-rest or on another chair.

This chair was fitted by Mr. Baker, of Messrs. Laverton, upholsterers, Bristol. The crossbar and head-straps are Mayer and Meltzer's; and the photograph, which shows all the construction, was taken by Mr. Guttenburg of Bristol.

CIRRHOSSIS OF THE LIVER IN AN INFANT THREE MONTHS OLD.

By THOMAS OLIVER, M.D.,

Physician to the Newcastle-upon-Tyne Infirmary.

ON November 13th, 1878, Mrs. M., a well-formed but somewhat cachectic-looking woman, brought her baby, which was three months old, to my house for consultation. The child in question was a well-developed female, with a peculiar sallow but by no means jaundiced appearance. Its belly, which was enlarged, measuring round the navel seventeen and a half inches, contained a little fluid. The child cried when pressure was made over the abdomen. The area of hepatic dullness measured in the line of the right nipple three and a half inches. Her stools were rather pale; and the mother informed me that the child frequently bled at the nose. There was no evidence of alcoholic intemperance on the part of either the father or the mother, nor could any evidence of syphilis be ascertained, either by careful inquiry of the parents or by an examination of the other children.

November 18th. The abdomen measured eighteen and a half inches. The child had bled a great deal from the nose. The superficial veins of the abdomen were prominent. The bowels had acted freely.

November 20th. The abdomen felt softer to-day; it measured seventeen inches. The child did not cry so much when touched. There was slight oedema of the face and feet.

November 23rd. The child had bled very freely at the nose since last report, and is much weaker.

November 30th. The abdomen measured fifteen and a half inches. The child had not bled at the nose for the last three days. The stools were very dark. The mother stated that the child kept crying night and day.

December 2nd. The child died to-day in a convulsion.

I made a *post mortem* examination on the afternoon of the day on which the child died. The fingers of both hands were firmly clenched. The lungs were healthy; the middle lobe of the right lung was congested. The heart, which was healthy, weighed one and a half ounces. The liver was very prominent, occupying about one-third of the abdomen; it weighed fifteen ounces and was pale. The kidneys, which were lobulated, seemed healthy; their capsule was removed with ease;

each kidney was under one ounce in weight. The spleen was enlarged and firm; it was very dark in colour, and weighed more than one ounce. The mesenteric glands were all enlarged, and the peritoneal vessels were hyperæmic. The peritoneum contained a quantity of serum.

Small portions of the liver were removed and set aside for further examination. Sections of the same, when placed under the microscope, were found to present in a well-marked degree the characteristic lesion of cirrhosis. The lobules of the liver were at places separated from each other by strands of a coarse fibrous material, of varying breadth; while, scattered over the supporting framework, many free nuclei were noticed. In addition, many of the hepatic cells contained fat globules. The walls of the various vessels seemed thickened, and at many places the capillaries had ruptured.

The association of cirrhosis of the liver with the immoderate use of ardent spirits is so firmly rooted in the medical mind that, cases occurring in others than tipplers—in those who from age and other circumstances are placed beyond the pale of intemperance as a cause—have attracted a little more than ordinary attention. A few years ago, I reported in the pages of this JOURNAL (1876, vol. ii, page 519), a case of cirrhosis of the liver, which occurred in a girl of twelve years of age. In her, there was the history of an attack of measles, followed by rather a slow convalescence, during which she received a fair quantity of stimulants, but never, it would appear, to a greater extent than that supplied in similar cases. Since then, others have reported the occurrence of cirrhosis of the liver in young people. Dr. Wickham Legg, in a very able *résumé* of the subject (*St. Bartholomew's Hospital Reports*, vol. xiii, page 148 : 1877), has brought before the profession the details of two such cases of cirrhosis of the liver: the first occurring in a boy of twelve, in whom the symptoms at first closely resembled those of typhoid fever; the second, in an infant aged seventeen months, in whom, in the earlier part of the illness, the most prominent symptom was purging, but who ultimately died of tubercular meningitis. In both of these children, the microscopical appearances of the liver were those of genuine cirrhosis.*

As Dr. Legg remarks: "These cases have but little interest from the morbid anatomy point of view." Their etiology, however, is all-important; and, first, in regard to sex. Taking the cases collected by Dr. Legg as seventeen, of whom seven were boys, and adding to these his own cases (both of which were boys), we have up till now nine boys and ten girls—to the latter of which this case may be added—making the proportion of nine boys to eleven girls; from which fact we may infer that there is, after all, very little difference in the predisposition of the sexes.

Taking the age of the patients, it would appear that fifteen were between the ages of seven and thirteen; three were between the ages of five and six; the age of Dr. Legg's youngest patient was seventeen months, while my one was only three. Cirrhosis of the liver, therefore, when it occurs in children, cannot be said to choose the age of infancy. Most of the cases on record, it is noteworthy, occurred after the second dentition; and it is out of this fact, perhaps, that one of the difficulties has arisen of arriving at its cause. The association of cirrhosis of the liver in children, born with the marks of syphilis on their body and living for only a few days, as in the cases reported by Schüppel and Dr. Wilks, seems to me to point very strongly in the direction of syphilis as its cause—the postponement of the event till the later years of childhood being quite in keeping with the nature of congenital syphilis, as evidenced by dentition, wherein congenital syphilis, in its mildest form, seems to overleap the primary and stamp itself indelibly on the permanent teeth. The occurrence of such a case as the one I have reported is, it appears to me, a strong fact in favour of the view of syphilis being a cause. We know that syphilis is a disease which often leads to an increased development of fibrous tissue, as evidenced by the thickened periosteum and the proliferation of nuclei in the walls of blood-vessels. And in making this remark as to the etiology of the disease in question, even in the absence of the usual signs of syphilis in either parent, is it not a fact, that a cachexia may be the only symptom in the mother?—a symptom late on in the disease, it is true, but yet a symptom sufficient to generalise in her child what would in herself only give rise to local areas of manifestation in the shape of gummata. Syphilis, however, will not explain all cases of cirrhosis of the liver, even in the young.

* At the last meeting of the Pathological Society, a specimen of cirrhosis of the liver from a child eight years of age, was exhibited by Dr. F. Taylor. The patient, a boy, is said to have known and liked the taste of brandy and gin.

BENGAL MEDICAL ESTABLISHMENT.—The following promotions have been made. To be Surgeons-Major: Surgeons D. D. Cunningham, H. Whitwell, A. Cameron, M.D., B. Evers, M.D., J. C. G. Carmichael, M.D., A. G. Grant, W. Jackson, G. G. McLaren, J. J. Monteath, M.D.

HÆMORRHAGE IN HERNIOTOMY.

By ANTHONY H. CORLEY, M.D., F.R.C.S.I.,

Surgeon to the Richmond Hospital; Lecturer on Surgery in the Carmichael College of Medicine, Dublin.

IN the number of the BRITISH MEDICAL JOURNAL for May 8th appears an abstract of a paper on the Treatment of Strangulated Hernia, which I had the honour of reading before the Surgical Society of Ireland on the 16th ult. The object of the paper was to urge the necessity of early operation, and to suggest means by which the dangers of such

interference might be reduced to a minimum. Amongst those dangers, I alluded to the possible presence of an anomalous obturator artery; and I introduced to the notice of the Society a hernia-knife which I invented some years ago, a woodcut of which, sent by my friend Mr. Hayes of the Mater Misericordiæ Hospital, appeared in the JOURNAL of June 21st, 1879. Mr. Hayes, being unaware of my invention, was struck by the same idea, and had the instrument constructed and figured.

In the discussion that followed my paper, the comparative frequency of the anomaly was dwelt on by several speakers, but most of them seemed to think that the dangers connected with it were trivial. One speaker considered that, by using the ordinary hernia-knife in a particular manner, the section of the artery might be prevented, although Hesselbach has said that, if the vessel take the dangerous course, it must be cut in the usual operation. I cited a case of my own, published some years ago, and quoted in the last edition of Erichsen's *Surgery*, and also one of Mr. Barker of University College; but the impression left by the discussion was that, in the opinion of the majority the danger was not worth considering, or at least of taking any special means of obviating.

By a remarkable coincidence, in the very number of the JOURNAL in which the abstract of my paper appears, there are recorded from one place, and occurring within eleven months, two cases where the anomaly existed, the artery was wounded, and death supervened. It seems to me very probable that the accident occurs more frequently than is generally supposed, but that the cases are not recognised or not recorded. If the bleeding be internal, or the patient so weak that the jet is feeble, the occurrence of the accident might not be suspected; and, as *post mortem* examinations are the exception rather than the rule in the United Kingdom, fatal results are likely to be attributed to collapse or to exhaustion, which a necropsy would prove due to hæmorrhage. The real exhaustion is often such that a small excess of bleeding will turn the scale against the patient, and we all understand the additional danger of escape of blood into the peritoneal sac. To prevent altogether, or greatly reduce, the risk of this hæmorrhage becomes, therefore, a most important object.

The method of using the knife can be at once understood from the woodcut. The sheath being introduced along the surgeon's finger till the blunt end passes into the constricting ring, the wounded edge with the notch must then be turned in the direction necessary to cut. As the instrument is pushed on, the constricting edge will be felt slipping into the notch, and a slight traction will show that it is caught there. The cutting blade is then to be forced across the notch by pressing forward the thumb-screw, and the portion of the fibrous band will be cut through. That they are so divided may be known by the fact that the knife can now be withdrawn. There is no difficulty in repeating the process two or three times if more of the constriction require to be divided, and it is impossible that the artery could get into the notch or be in danger of division. The instrument can be obtained from Messrs. Fannin, Graf-ton Street, Dublin.

ARMY MEDICAL DEPARTMENT.—The following appointments have been made: Deputy Surgeon-General G. A. F. Shelton, M.B., to be Surgeon-General, *vice* W. G. Watt, granted retired pay; Brigade-Surgeon H. T. Reade, V.C., to be Deputy Surgeon-General, *vice* G. A. F. Shelton, M.B.; Surgeon-Major J. Doran, M.D., is granted retired pay, with the honorary rank of brigade-surgeon.