X.—THE TREATMENT OF DISLOCATION OF THE HEAD OF THE HUMERUS.

By W. Fairbanks, M.D. Edin.

In Sir Astley Cooper's *Treatise on Dislocations and on Fractures* occur the following words:—"It appears from these dissections (dissections of the dislocation into the axilla), that the best direction in which the arm may be extended for reduction is at a right angle with the body, or directly horizontally, rather than obliquely downwards, as the deltoid supra- and infraspinati muscles are, in this position of the limb, thrown into a relaxed state, and these muscles are, as I have explained, the principal sources of the resistance."

After this unequivocal recognition of a fact, how is it possible to explain why Sir Astley himself forthwith teaches as the method of most universal applicability, and first to be tried in all cases, the use of downward extension, with heel in axilla as fulcrum and counter extending power? For, undoubtedly, this procedure ignores the fact he has just admitted.

Dr Neil Macleod has done good service not only by calling attention to right-angle traction as a method of reducing these dislocations, but also by insisting upon those accessory directions which ensure the success of the method.

Sir Astley Cooper in his second method uses right-angle traction, but he fails to place the patient at rest and as free from pain as possible; and hence, perhaps, the need he found for such great extending and counter-extending power.

I would emphasize once more the three essentials of Dr Macleod's treatment, which is something more than right-angle traction. They are—

1*st.* Relaxation of all muscles.

2*nd.* Minimizing of pain.

3*rd.* Traction in a direction at a right-angle with the trunk.

The first indication is fulfilled by placing the patient flat on his back on the floor, and the second, by raising the arm to a right-angle with his body. If the method is to succeed, he will soon feel comfortable, and all spasm will disappear: don't hurry him. The third indication will be fulfilled by applying traction, very steadily and moderate in amount; and often the operator will be surprised by an easy conquest.

Is it too much to ask that, at one of our large hospitals, where so simple a matter could soon be settled, every case should be submitted to this treatment until the treatment is established or discredited, or, at least, has its proper value assigned to it? It would not take long for a house-surgeon to collect and tabulate a sufficiently large group of consecutive cases. Each case should be accurately diagnosed in the first instance, and then the result of

treatment would show in what cases, if in any, the proposed treatment is unsuitable.

I will now make my small contribution to the clinical history of the question.

Case I.—In the temporary absence of the surgeon to the Wells Union Infirmary, I was asked to visit a man who had been admitted with some injury to the left shoulder joint. He had been sent in from a distant parish; but no history was obtainable, as the man was drunk at the time of the accident as well as when seen by the district surgeon. The injury was a sub-coracoid dislocation of the humerus, and I anticipated no difficulty in reducing it. However I failed with abduction and manipulation, fixing the scapula by hand and by towel; I failed with extension of the arm over my knee, and then I failed with my heel as a fulcrum in the axilla. The help of further extension and counter-extension made no difference. The man was glad enough to be put to bed. Next morning I saw him with the medical officer of the hospital, who had returned. Before administering chloroform I asked to be allowed to try the method described by Dr Neil Macleod (*Brit. Med. Jour.*, Jan. 30, 1886).

I placed the man flat on his back on the ward floor, and seating myself beside him, my legs at right angles with his body, I raised his arm to a level with his shoulder, and placing my foot against his chest, as near the armpit as possible, made steady traction on the arm, without causing him any pain. My colleague, whose hand was on the head of the humerus, soon felt the bone slip into its place, though neither the patient nor I was aware of it. The man was most grateful, nor ever asked why he was not so treated at first.

The fact was that, long ago I had read Dr Macleod's paper in the *Edinburgh Medical Journal* (Feb. 1883), more recently I had read several proposed improvements upon his plan, and my recollection of his method had become blurred in consequence. The previous evening I referred to his more recent article in the *British Medical Journal*, and, with a clear conception in my mind of the principles inculcated, I was able on the following morning to put them into practice with the happiest result.

Case II.—A fine Somersetshire yeoman presented himself on 5th December 1886, with a sub-coracoid dislocation of the left humerus. He told me that two or three years ago he put his right shoulder out, and that two surgeons, singly and together, and "with the help of seven men, tugged at him in vain, and that eventually they had to chloroform him and use pulleys to get it in."

I made him lie down flat on his back on the floor, with a small cushion under his head, and stretched his arm out at right-angles. When I began to abduct he flinched, but I raised the limb into the desired position and let it lie, and he soon acknowledged

that it was easy. I began extension by grasping the wrist, but his muscles were so huge that I felt like a child pulling at him, and my hands were soon fatigued with the effort to hold a wrist which I could not clasp. Accordingly I applied a wet bandage round his upper arm, to prevent the laque giving pain rather than to prevent slipping. My left foot against his chest, just below the arm, gave the counter-extending power, and my right foot in contact with the shoulder, apprised me of what was going on. With the advantage of the laque I resumed traction, and in about two minutes I was aware of two slight jerks, one quickly following the other, and on adducting I found that the dislocation was reduced. The patient was deeply impressed with the ease and freedom from pain of the operation, and I was immensely satisfied with the termination of a case which I undertook with some forebodings, and which I regarded beforehand as a crucial test of the method.

By this time many cases have been reported in which this operation has obtained all the benefit claimed for it, and it is perfectly certain that Dr Macleod's method will prove successful in a large proportion of dislocations of the humerus. It is equally certain that, when successful, it will save much pain, much labour, some paralysis, and occasionally a brachial artery. The method may be as old as the hills, but it is not so self evident, and it needs to be insisted upon by our great teachers; or, if they refuse, we country practitioners should be told the reason why.

XI.—A CASE OF RHEUMATIC FEVER FOLLOWED BY ACUTE NECROSIS OF THE TIBIA.

By Andrew Lyall, M.D., F.R.C.P. and S. Ed.

J. A., a boy aged 10, fell into a stream of water, and had to walk home some distance. Two days later he complained of feeling cold and slight pain in some of his joints. His mother, thinking it was a chill, gave him hot drinks and put him to bed with hot bottles to his feet. Next day he was worse, but I was not called in till the day after.

State on Visit.—The patient, a pale, strumous-looking boy, perspiring freely—perspiration of a strongly acid odour; temp. 103° F., pulse rapid, and respiration quick. Tongue coated, and bowels constipated. On examining the joints, the right ankle and left elbow were painful and swollen, and there was also slight pain in left shoulder. Usual treatment by salicylate of potash was adopted, and at night a Dover's powder was given. The fever was higher the following day, and now the right wrist was swollen and painful, and patient complained of oppression over cardiac region, but no friction sounds were made out, and the heart's action was normal. However, hot linseed meal poultices were applied, and the salicylate given