

A COURSE OF FIVE LECTURES
ON
FRACTURES AND DISLOCATIONS:

EXPLAINING
NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY, AND THE LAWS
OF MECHANICS.

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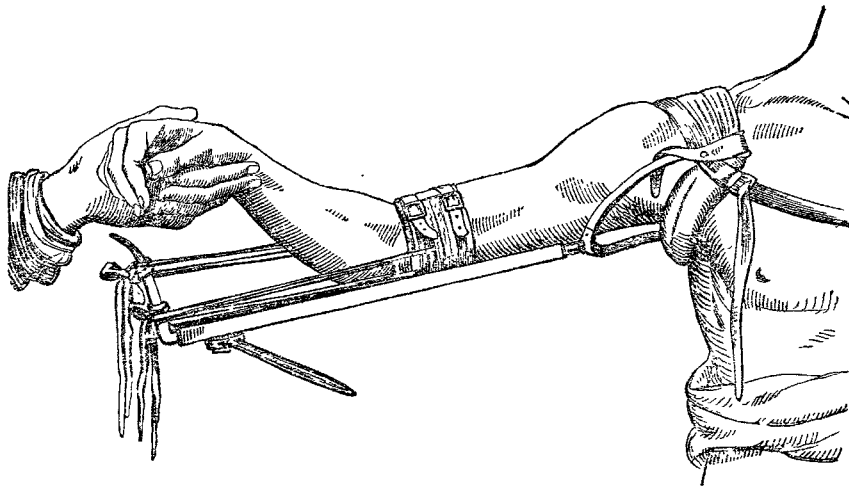
*Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
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Illustrated by Engravings.

Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

WE will this evening call your attention to dislocations of the superior extremities. We will begin with those of the shoulder, and from the manner in which this instrument operates, you will at once perceive that it is not necessary that it should have but one mode of application for luxations of this joint, the line of extension being entirely under the control of the surgeon, to vary it at his will; whether the head of the bone is under the tendon of the triceps, in the axilla, or under the pectoralis muscles, it is equally subject to his direction, and therefore is its one mode of application quite sufficient for every variety. We will now apply the instrument, and describe that mode.

Buckle a belt round the arm, immediately above the elbow, with one loop lying on the upper, and another on the under side of the arm. Through these loops pass strong tapes or cords; and I think it well also, in grave luxation, to cover the whole hand and arm, below the belt, with a common roller, to prevent, in some measure, the congested state of the capillary vessels, which is always certain to attend the application of force, in whatever way applied from this point, and is frequently the cause of the greatest pain to the patient which they have to endure during reduction, especially where the operation must be long continued. Prepare the instrument, by buttoning tensely across the top of the shoulder fork (fig. 5) the roll H. Apply the fork to the counter-extending bar D; apply the roll in the axilla, and tie the tapes closely round the foot of the rack. I would here recommend, in difficult cases, to lay in the axilla, between the roll and the skin, folds of cloth sufficiently thick to prevent the roll from pressing strongly on the tendons of the latissimus dorsi and pectoralis major muscles, the folded cloth being placed between those tendons. By doing this, the surgeon can, if he chooses, make the instrument operate precisely like the heel in the axilla, but much more steadily, and with much greater force than he can ordinarily command, and, moreover, the whole operation is immediately under his control. The instrument being thus applied, buckle the strap across the shoulder; or, which I prefer, pass the strap (which is used on the dorsum of the ilium in fractures at the neck of the thigh-bone) around the roll on each side of the shoulder, crossing the top of the scapula, drawing the strap sufficiently tight to press the roll firmly against the under side of the shoulder, so that the line of extension shall be from the centre of the elbow to near the centre of the glenoid cavity. This being arranged, apply the hollow part of the strap (which accompanies each box of the instrument for that purpose) to the point of the acromion process, and carry the ends on each side, between the fork and the roll, and around the body; let it be drawn tight and



buckled. Thus, as you see, the instrument is now on the patient, and ready for the operation; and by the lever you hold great power in your hand, more than a prudent man would ever think to use on the shoulder. You will, however, soon get so accustomed to its use, that you will know very nearly the amount which you at any time use; indeed, by this instrument, with very little trouble, you may tell to an ounce the amount of power which you have applied. I will not detain you longer with this luxation, but will call your attention to one of the elbow. We will suppose the case, where the coronoid process of the ulna is lodged in the posterior fossæ of the humerus, and an important point in this dislocation, when it presents difficulties, is to be able to flex the arm while extension and counter-extension are operating on the limb, without any abatement of force. There are two ways of applying the force of this instrument in this luxation. Some surgeons have preferred the one, and some the other method. As for myself, I think them both important, according to the case to be treated; and if I had an exceedingly bad case, and one which required my best efforts to reduce, I should apply both modes at the same time, and which may be done very readily. I will show and describe them both; the first one described, however, is the one which I use.

Buckle the belt having a close or leathern loop on it around
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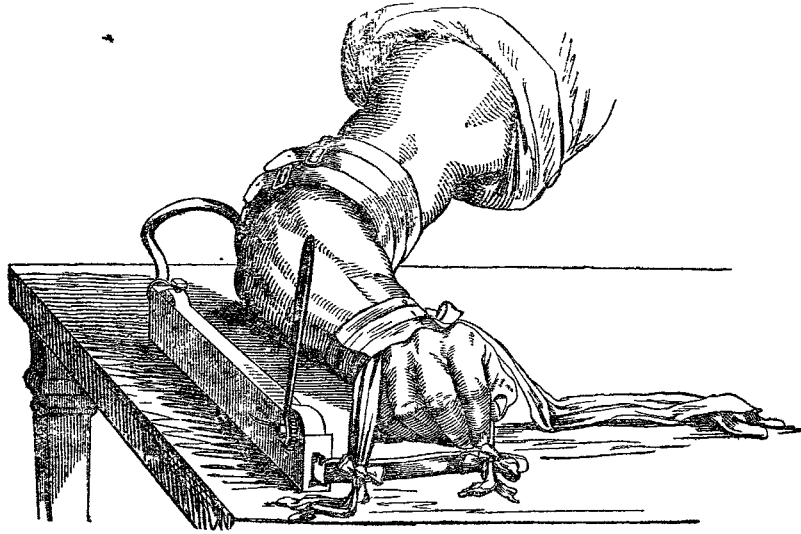
the arm, with the leathern loop low over the olecranon process, and the belt above it; buckle the second belt around the wrist, with a loop on each side of the hand, armed with strong tapes; insert the elbow-fork (fig. 7) into the close or leathern loop, and the counter-extending bar, D, into the socket, K; tie the tapes in the belt around the wrist to the foot of the rack, minding to draw them closely round the foot of the instrument; with the lever make extension, &c. [See the engraving on the next page.]

Second mode.—Buckle a belt round the arm, below the shoulder, with a loop on the back, and another on the front part of the arm, the loops looking towards the elbow; pass the two arms of the jointed fork through the two loops, the joint being on the under side of the arm: on the fore-arm, and close to the elbow, apply a silk handkerchief, in form of a roll, by a dove-hitch, the knot resting on the ulna, immediately below the olecranon process; insert the end of the counter-extending bar into the socket of the fork and tie the handkerchief closely round the foot of the rack; to securely fix the instrument to the limb, let another handkerchief be passed closely round both, near the top of the instrument, and tied; with the lever make extension, &c. Thus you have the two methods explained, and you will readily see that they are both easy of application, and, at the same time, by employing two instru-

ments. The last mode would bring the radius and ulna down, while the arm is in a flex position, thus drawing the coronoid process out from the fossa; the first would press the humerus backward, while the forearm was being flexed on the arm, thus bringing the coronoid process forward of the trochleated surface of the humerus.

We have but one more luxation to which we would call your

attention, trusting that, if you understand those already shown, you will be able to apply this instrument in every case which you may be called upon to reduce; that one is of the thumb; and although this is but a small member, it often makes a grave case for the surgeon, yet with this instrument I am quite sure you need never be defeated; and it is the same too with all the phalanges.



In showing the application of the instrument to reduce this luxation, it is not so easily exemplified as in the other cases in which you have seen it applied, mainly for the want of that peculiar prominence which the luxated bone presents, projecting over the side of the distal extremity of the bone from which it was dislocated, since it is around this prominence of the luxated bone that the force is to be applied. The thumb may be dislocated either backwards or forwards, and whichever way the bone is displaced, the force should be applied against the upper extremity of the distal bone. Suppose the thumb is displaced backwards—apply a broad tape, smoothly doubled, lengthwise, after having been met by a dove-hitch over the projected shoulder on the back of the thumb, letting the knot rest on the inside; apply the jointed fork to the instrument, and by the strap used to cross the dorsum of the ilium, apply it in form of a loop, hanging loosely down between the arms of the fork, being suspended from them; let the hand, between the thumb and index-finger, be made to rest against this strap, the back of the hand resting on this brass case; then tie the tape which is attached to the luxation to the foot of the rack, pass a handkerchief round the wrist and instrument, and tie it so as to confine them together; with

the lever make extension, and as that is being made with one hand, with the other cast the luxated bone directly backwards towards the wrist; when the extremity of the bone to which the tape is applied has reached the edge of the articulating surface from which it was displaced, bring the luxated bone forward again, when the two articulating surfaces will readily be restored to their normal position. When the thumb is luxated inward, apply the tape to the prominent end on the inside—as it was before applied to that on the back of the thumb—and let the thumb be also cast inward, as it was before backward; in all other respects the two operations are alike.

Thus we have now closed our remarks on luxations, and it only remains for me to return you my sincere thanks for the attention I have received while I have been attempting to contribute a small amount to the general stock of surgical knowledge. I can only say that my desire has been to do good, by endeavouring to improve the practice of that profession in which there should be felt one common interest; and in conclusion, I have only to ask for what I have said, that it be judged by the standard of truth.

CLINICAL LECTURES ON THE PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,
PHYSICIAN TO THE ASYLUM.

LECTURE IX.

Melancholia.—The Treatment concluded.

I WISH to pass a few more cases of melancholia in review before you, arranged according to their causes, to illustrate the degree of advantage derived from a knowledge of their probable origin, as respects their treatment.

Instances have been pointed out, in preceding visits, of melancholia in middle-aged women, apparently dependent on the changes taking place in the constitution at their time of life. These cases are of frequent occurrence, and generally characterized by restlessness, anxiety, and a fretfulness long inexplicable by their relatives; a short attack of maniacal excitement then supervenes; delusions arise, and the faculties seem afterward to be oppressed or enfeebled; the patients are sunk in perpetual gloom, and seldom speak; and this state lasts many months, or a year, or two years. A dread of poverty, and much consequent ingenuity in avoiding expense,

together with a needless anxiety concerning the health, or sanity, or personal safety of their children, are not uncommon symptoms in these patients; they imagine that their children are in prison, or are unable to take care of themselves, or are dead. This form of malady, when apparently dependent on the condition of the uterine functions, ensues most frequently, I think, on the abrupt cessation of the catamenia, and less often where the period of cessation is attended with menorrhagia; and some relief may be obtained by the application of leeches to the pubes, by the warm-bath or hip-bath, and by gentle aperients taken daily, as the seidlitz powders, or two drachms of the sulphate of magnesia, or a scruple of the compound powder of jalap; five grains of the extract of henbane, with a few grains of camphor, taken at bed-time, are also useful. Regular exercise, change of scene, the use of the tepid shower-bath, and kind and tranquil management, are important auxiliaries. Whatever treatment is adopted, the depression seldom wears off soon; but if harshness, or reproaches, or violence of any kind are employed, much excitement follows, and the suicidal disposition, which is so incidental to this form of malady, is pretty sure to be developed. It is not an easy task for those about the patient to bear with undeviating good humour what appears to be sullenness, or obstinacy, or ingratitude for all they do; but any resentment is misplaced, unjust, and productive of bad effects. For this, among other reasons, the condition and the prospects of such patients are often better in an asylum than anywhere else. The feelings of the officers and attendants are not wounded by manifestations incompatible with the comfort of the family