

question. Its influence in supporting the vital powers and obviating shock is now so well established that we cannot but regret that so few attempts have been made to make "the knife follow the ball" during the past campaign. Either the patient has not been seen early enough by a surgeon having the necessary authority and resolution to operate instantaneously, or the surgeon so present has been of a different way of thinking to a very great many of the medical men of largest experience in this army, as very few such operations have been reported. Perhaps the arrangement followed during the siege, by which only assistant-surgeons, who, by the regulations of the service, are not allowed, except under very peculiar circumstances, to operate, were sent into the trenches, where such operations could be alone performed, had most to do with this result. I remember several cases in which such steps were obviously called for. In two instances, officers had their limbs carried away at the knee by round-shot, and so slight was the shock at first, that the one hopped about for some time on the unwounded leg, and the other could hardly be persuaded he had been so severely injured as to have lost both legs. They were sent to the rear unoperated on. One died on being taken off the cacolet which conveyed him to the hospital, and the other arrived so deeply collapsed, that nothing could be done for him. If amputation under chloroform had been practised in both cases, before shock was established, a favourable result might, I think, have been confidently looked for in both cases. These cases are not solitary ones. That the state of the system known as "shock," is not established in some cases so soon as it is in others, appears pretty evident from the observations of most surgeons, so that it is probable that some cases are greatly better adapted for immediate operation than others. The difficulty is always to be sure that no fatal internal lesion has been at the same time sustained, as that more palpable one for which the operation is undertaken.

General Hospital in Camp before Sebastopol,
February 1856.

ARTICLE III.—*Note on the occurrence of Paralysis and Muscular Atrophy in the Horse, in connection with Arterial Obstruction and Obliteration.* By the late JOHN BARLOW, Professor of Anatomy and Physiology in the Veterinary College, Edinburgh.

(Read to the Medico-Chirurgical Society of Edinburgh by Dr W. T. Gairdner.)

[The late John Barlow was known to many of the members of this Society. Although he did not frequent its meetings, nor interest himself directly in the progress of practical medicine (except in his own department), the eminently scientific character of his mind led him to consider all inquiries bearing upon anatomy and physiology, as well as on pathology in its more general sense, as being connected together, and as therefore falling within the range of his studies. He sought, therefore, the society of medical men, not merely because he found

in our profession men with whom his intellectual and moral nature permitted him to sympathise, but because he was able to give to them, and to receive from them, such information as was found to be indispensable to both parties, on the common ground of their scientific pursuits. I may be permitted to take this opportunity of giving expression to my own personal regard for Mr Barlow, derived from somewhat greater opportunities of knowing him than the majority of us. Cut off, as he was, at an early period of his career, and with a great portion of his work unfinished, none but his personal friends can know how great is the blank left by his loss. Mr Barlow was one of those men whose character rises in value to the world with every year of life, but who, to use a common phrase, do not do themselves justice at the outset. It was characteristic of him to do things, not in a showy, but in an exact and conscientious manner. He did not spring forward to generalized conclusions with great rapidity; but he laid hold on the broad and solid masses of attainable truth around him, so firmly and so generally, that there was scarcely a subject to which he had given his attention, on which he did not know more than he was readily brought to profess. And what he knew was known once for all; it did not require the paring down and polishing which is usually the result of discussion; for the simple reason that he performed all this process in his own mind; anxiously looking at everything he studied from all possible points of view, and refraining from giving in his adhesion to any opinion, till he was well assured that it was not merely a stage towards the discovery of truth, but the very truth itself. For this reason, in science, as in private life, Mr Barlow's lightest word was always sure to be a well-considered and true word. He was never seduced by a favourable opportunity of displaying his knowledge into any premature or hasty statement of what he had imperfectly observed. Perhaps he had even too little of the natural and proper desire to gain credit for his own observations; and when he announced what he knew, he did so with a brevity which was scarcely for the advantage of science. Had he lived to complete his projected work on the anatomy and physiology of the horse, to which, and to the teaching of his class, almost all his scientific labours were directed, his great merits would have been duly appreciated.

The following note was one which I received from Mr Barlow, very shortly before his fatal illness. Notwithstanding its brevity, I think it due to the memory of my late friend to bring it under the notice of the Medico-Chirurgical Society; the more so, as I had requested him, and he had consented, to read to the Society a communication on the subject, of which this note, illustrated as it is by the beautiful preparation which he has left in the hands of Professor Dick, are all that can now be placed on record. I have only to add that the subject is, I believe, to some extent, a new one in veterinary medicine,¹ and will, no doubt, prove interesting to those who are acquainted with the numerous observations now existing as to the obturation of arteries in the human subject. W. T. GAIRDNER.]

1, Pilrig Street, Dec. 12, 1855.

MY DEAR SIR,—I have recently met with a few instances in which arteries of considerable size have been almost entirely plugged up with fibrinous clots, firmly adherent to their walls. In these cases during life, there was sometimes visible but unexplained atrophy of certain muscles, in regions specially supplied by such vessels; and sometimes when a main trunk, such as the aorta posterior, became thus plugged, there was palsy of the hind parts (of course I speak

¹ Since the above was read to the Society, my attention has been directed by Professor Simpson to a reference in Romberg (*Syd. Society's Transactions*, vol. ii., p. 247), which shows that cases of this affection in the horse are on record in the German journals. W. T. G.

of the horse). At first I fancied these things to possess no material interest, and did not preserve the vessels. However, this day week, a pony, greatly disabled behind, but not completely paralytic, was brought for dissection. I found a large plug of adherent fibrin in the aorta post., just where this vessel divides into the two iliacs on each side. (In the horse, you will remember, there is no "common iliac," but the aorta post. divides into the internal and external iliacs.) This plug was firmly adherent to the roof of the artery, that is, to that part lying in contact with the vertebræ. It was not sufficiently large to obstruct the stream of blood completely, but it must have caused a material lessening of the stream. The internal iliacs, however, were *completely* plugged up, and the outside of the fibrinous clot was adherent to their walls—in many places all the way round. In one place especially, a calcifying process is taking place in the coagulum. If such things are not already too familiar to you, I wish you would look in at Clyde Street any day before two P.M., for the condition is to me somewhat new.—Yours ever truly,

JOHN BARLOW.

ARTICLE IV.—*Experimental Notes on Glycerine.* By W. LAUDER LINDSAY, M.D., Perth.

SOME time ago, the perusal of various elaborate and interesting papers, by Mr Wilson,¹ the enterprising and able managing director of Price's Patent Candle Company, London, on the products of the manufactures of that company,—and especially on the sweet oily principle, glycerine, and a consideration of the chemical composition and properties of the latter substance, suggested to me the question, Whether glycerine,—then and to a great extent still, a waste product of manufacture, or applied only to subordinate or insignificant uses,—might not be employed dietetically and medicinally in a similar way to cod liver oil, and other animal and vegetable oils? This led me into an experimental investigation on the possible applications of glycerine in medicine: and my results, though limited, are sufficiently favourable to warrant me in, at least, recommending it as a worthy subject of inquiry to the experimentalist, and apparently as a useful addition to the pharmacopœia of the medical practitioner. The subjects of experiment have been, 1st, myself—2d, eight patients, four of either sex, labour-

¹ Especially "On the manufactures of Price's Patent Candle Company," read before the Society of Arts, London, and published in their journal, January 25th, 1856; and "a Paper on a new process of obtaining and purifying Glycerine," read before the Meeting of the British Association at Glasgow, September, 1855.