of eruption, and without any desquamation following; the father, with patches of the rose-coloured rash on his arms, his chest, and his legs, and subsequently the skin peeled in large pieces from his hands.

Now, supposing that these four cases had occurred independently of one another, and unconnected with an epidemic, would they have been recognised as examples of the same disease?

DISLOCATION OF THE SCAPULA.

By W. E. HOME, M.B. Edin., B.Sc., Surgeon, R.N.,
H.M.S. *Alexandra*.

[Communicated by the DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.]

As dislocations of the scapula are not very common, it may be worth while to put the following case on record.

No. 433, aged 32, captain of the maintop, H.M.S. *Alexandra*, when on leave in Valletta on July 1st, 1886, slipped on a piece of orange peel and fell, striking the back of his left shoulder against the kerbstone. On rising he felt pain in and about the shoulder, so much increased by movement that he came off at once to the ship. When I saw him, half an hour after the accident, he was sitting stripped to the waist, and leaning forward so as to support the left elbow on the knee. The anterior axillary fold was lower on the left side than on the right, and the girth round the shoulder through the axilla was also greater on this side than on the other by an inch. The left clavicle was the same length as the right, and, like the left acromion, was smooth in outline and continuous with itself all round; however, between the clavicle and acromion was a deep groove in which the finger could be laid. The scapula had been displaced downwards, outwards, and forwards, the tip of the coracoid being an inch and a quarter below and a little to the inner side of the outer end of the clavicle. On pressing the clavicle down and the shoulder upwards and backwards, the pain (felt along the insertion of the trapezius chiefly) was relieved, and the normal appearance of the shoulder was restored. To retain the parts in position, the outer end of the clavicle was fixed by a piece of strapping (4 inches by 15 inches) passed over it, another strap, folded round the middle third of the arm and drawn tightly across the back, steadied the arm and shoulder, while the elbow was brought forward and pressed upward by a fannel roller, passing round the body and over the right shoulder. The patient was then laid on his back in bed. On July 9th the strapping was reapplied; and on the 17th he was allowed to get up. The strapping was removed on the 22nd (three weeks after the accident), and he was discharged to duty, well, on the 24th.

Seen again on August 21st, 1887, fourteen months after the accident, he declared that the arm was as strong as ever, and that it gave him no inconvenience. The outer end of the clavicle is somewhat thickened; but the relations of the clavicle to the coracoid, acromion, and scapula, generally, are quite normal, and are so maintained during movements, which are all perfectly performed.

The primary treatment was Sayre's for fractured clavicle; but I believe that the fortnight's rest in bed had nearly as much to do with the successful result.

THE TREATMENT OF SEA-SICKNESS.

By W. W. SKINNER, M.D.,

Formerly House-Surgeon of the Hospital of St. Denis; Corresponding Member of the Anatomical Society of Paris.

DURING the course of several long voyages made in 1886 as ship's surgeon, I have investigated sea-sickness, and have devised a method of treatment of this affection at once simple and efficacious.

The nervous symptoms are as follows: Great prostration; indisposition to make the least effort; vertigo; intense frontal or temporal cephalalgia; a sensation of uneasiness, weakness, and discomfort; and insomnia which may extend over several days. All forms of reflex action remain intact. Myosis is often also observed in these cases. The digestive apparatus furnishes the most striking and best known phenomena: anorexia, adipsia, paleness and coldness of the lips, ptialism, nausea, emesis, gastralgia (frequent after three or four days of sickness), and especially constipation. The tongue, liver, and spleen are normal in uncomplicated cases. The disturbance of the circulatory apparatus, including diminished force of the cardiac pulsations with consequent abnormal depressibility of the pulse, decrease in the number of cardiac contractions (constant decrease in men and in one-half of the cases in women; minimum observed, 57, 51, 45 beats; in women there is often increase: maximum observed, 114

without fever; while in children of both sexes there is almost always increase: maximum observed, 120, without fever), the capillary circulation appears diminished, as may be inferred from the coldness of the extremities, lips, ears, and nose, and from the extreme paleness of the skin. The muscles, composed of unstriated fibres which receive their nerves from the sympathetic system, are evidently parietic, as is denoted by the inertia of the intestines and by the myosis. The urine, as is well known, is excreted in exceedingly small quantities. It preserves its normal colour, precipitates no sediment, is acid, clear, and free from albumen and glucose. Finally, sea-sickness is an apyretic affection, and the period of invasion is exceedingly variable, being from a few seconds to several hours.

For all these varied phenomena there is, I think, a simple explanation to be advanced. Sea-sickness, or naupathia, ought to be regarded as the expression and resultant of certain purely functional or dynamic disorders of the organism, which can all be referred, directly or indirectly, to the sympathetic nervous system. Every symptom named above can be explained by invoking a paralysis, or at least a paresis, of this system, and sea-sickness can be cured by the use of those alkaloids which stimulate the great sympathetic and the unstriated muscular fibres to which it is distributed. The constipation, for instance, may be due to defective action of the great sympathetic upon the muscular coat of the intestine; the myosis to its defective action upon the radiated fibres of the iris; the slowness and weakness of the heart's pulsations to the defective action of the cervical portion upon the intracardiac motor ganglia (Brücke and other authors);¹ finally, general paresis of the great sympathetic explains the lowering of the arterial blood-pressure, which is indicated by the oliguria, the abnormal depressibility of the pulse, the coldness of the extremities, the extraordinary pallor of the skin, and the signs of cerebral anæmia. The symptoms of nausea and vomiting are generally attributed to anæmia of the medulla oblongata, which is due, no doubt, to the general lowering of the arterial tension. Moreover, I have demonstrated by actual manometric experiments upon the lower animals that the alkaloids employed in the new method of treatment, and which cure sea-sickness, really possess the property of raising the blood-pressure.

Excitation of the nerve endings in the abdominal organs, or of the senses of vision and olfaction, or of both, causes by reflex action a suspension of the motor functions of the great sympathetic, which in turn results in the general lowering of the blood-pressure, with all its attendant symptoms.

The medicinal substances employed are atropine, strychnine, and caffeine; the two former are administered simultaneously, the latter alone. Sea-sickness may be cured either by atropine associated with strychnine or by caffeine held in concentrated solution by salicylate or benzoate of sodium. These substances are all administered hypodermically. This mode of administration was chosen for the following reasons: the frequent vomiting in naupathia, by which the agents employed would be lost; the difficulty of their absorption from the stomach in this affection; and also the retaining and destructive action of the liver upon these alkaloids when absorbed from the gastro-intestinal tract (Heger, Schiiff, Lantenbach, and others).

The dose of atropine and strychnine for adults is 1 milligramme of each. It would, perhaps, be better to give a little less of atropine and the double or triple of strychnine. The following, however, is the formula I have employed up to the present time: Atropinæ sulph., strychninæ sulph., aa 0.04 gramme; aq. menthæ, 40 grammes. One gramme of this solution contains 1 milligramme of each of the alkaloid salts. In warm climates the solution must be frequently renewed. Although these substances have been employed a great many times for sea-sickness during the last eighteen months, no injurious effect therefrom has been observed. If after two hours the patient is not cured, a second injection of 1 gramme of the mixture may be given, but it would be imprudent to repeat this dose of atropine too frequently.

Children and adolescents are very susceptible to this medication. A girl aged 2½, sick during fourteen hours, was promptly cured by the injection of one-sixth of a gramme of the solution, that is, by about 0.00016 of a gramme of atropine and as much of strychnine. A boy aged 6 was cured by one-fourth of a gramme of the mixture.

In the majority of cases of simple naupathia, the patients cease vomiting immediately after receiving a single injection of one gramme of the solution. A little later they feel no more nausea, headache, nor vertigo. Almost always they fall asleep shortly after receiving the injection, and remain sleeping for half or three-quarters of an

¹ When there is an increase in the number of pulsations it ought to be attributed to a coexisting paresis of the pneumogastries (vagi) due to anæmia of the medulla.

hour. If given late in the evening, the injection ensures a refreshing night's rest.

The following is the formula employed in administering caffeine to adults: Caffeine, 4 grammes; sodii salicyl., 3 grammes; aq. destill., q. s. ad 10 cubic centimètres. Dissolve by gently heating. Each cubic centimètre contains 0.40 of a gramme of caffeine. A single hypodermic injection of 0.30 of a gramme of caffeine completely cured in seven hours a patient who had been suffering intensely from sea-sickness during three days. Another patient was cured in five hours.

Certain disadvantages of the method exist, but are not of great importance. Dryness of the throat is sometimes caused by the atropine, and young children may present an intense redness of the skin; amblyopia caused by this alkaloid is occasionally observed in adults. Exceptionally, the seat of the injection remains somewhat painful, especially in lean individuals, and once in my experience troublesome inflammatory symptoms were caused by an injection under the skin of the outer border of the forearm, which, however, spontaneously subsided in the course of two days.

If this method produces no favourable effect upon a given person affected with naupathia who has not exceeded the age of adult life, it is almost certain that the failure is due to an organic lesion in some part of the circulatory apparatus, especially in the valves of the heart. For example, a patient having well-marked mitral insufficiency received in the space of six hours three injections, each containing 1 milligramme of atropine and 1 milligramme of strychnine, without the slightest favourable result, the only change in the symptoms being an increase in the number (but not in the force) of the cardiac pulsations. It is well to remark that, if these injections produced no amelioration in this case, they did not, on the other hand, occasion any aggravation.

The two alkaloids exhibited in the form of pills, however, have successfully warded off sea-sickness, when taken immediately upon feeling the first approaches of nausea.

ABSTRACTS OF INTRODUCTORY ADDRESSES

DELIVERED AT

THE METROPOLITAN MEDICAL SCHOOLS.

UNIVERSITY COLLEGE HOSPITAL.

DR. RADCLIFFE CROCKER commenced by giving a cordial welcome to the new students, and gave them some advice upon the way in which they should spend their time away from the college, and as to the selection of their companions. In advising them about their work, he began by showing them how not to do it, by describing certain types of students, whose methods did not lead to success, the types selected being the "casual student," the "dilettante student," and the "over-diligent student."

He then proceeded to show how they should do it, and impressed upon them the necessity of being as practical and objective in their work as possible, pointing out that if they neglected their opportunities of learning the use of instruments of diagnosis while students, they could never learn it afterwards, however much they might try, and that thus their stethoscope would become a mere symbol of their profession, "like a portable barber's pole," while, after all, the best equipped student, when he left the hospital, was not a medical man of experience, but a medical man capable of profiting by his experience. He also urged upon them the necessity of thoroughness and accuracy in the examination of their cases, as it was not so much how many cases they saw as how they saw them, pointing out that thus a large hospital might become a disadvantage to a student, unless he was careful not to hurry over his cases. He showed how University College Hospital, for example (which was a hospital of moderate size) had, from making the best use of their materials, and thoroughly training the student, turned out men equal to any in the profession, and instanced among those of the present day Erichsen, Thompson, and Marshall among surgeons;—Walshe, Jenner, Russell Reynolds, and the late Wilson Fox among physicians, as a proof that it was quality not quantity that was essential.

The lecturer then briefly alluded to the necessity of a M.D. degree being accessible to the good average London student, from which he was at present debarred by the high standard and stringent regulations of the London University. He said that the teachers of London

were determined that such a degree should be, ere long, within the student's reach.

Passing on to the time when the student had got through all his examinations, and taking up the case of those who sought to go into consulting practice, he showed them what a long and trying time must elapse before practice came, and urged them not to be led into the error of the day, of advertising themselves directly or indirectly in order to obtain practice by a direct appeal to the public, sooner than they would by addressing themselves to the profession at large, and to look rather to the general practitioner to send them patients. He showed how the advertisers were the least trustworthy men in the profession, and that they, for the most part, belonged to two classes, ignorant, or comparatively ignorant, men, who yet made great pretence of knowledge, and whom he denounced as quacks although they were in the profession; while in the other class were men of ability who were in such haste to be rich, that they could not wait until practice came through legitimate channels, and that though they doubtless cured their patients eventually, they secured as much money out of them as possible.

Further elaborating the subject, he classified the advertising part of the profession on the principle Touchstone used in the gradations of quarrelling, and described humorously the "Advertiser Churlish" as the man who wrote works in which he made out everyone to be wrong but himself, professing to have made discoveries which the blindness and narrow conservatism of the profession prevented them from seeing or adopting, and who when patients had been previously treated, depreciated directly or indirectly their former adviser in order to exalt himself.

The "Advertiser Valiant" was a man who paraded his ability to cure obstinate or incurable diseases, such as consumption, cancer, etc., and ascribed his success partly to the fact that he was always ready to make the more serious diagnosis even in comparatively mild forms of diseases, and thus he was credited with curing phthisis, or whatever the disease might be, without really deserving it; further, even if he failed, he was always having a succession of new patients through his advertisements.

The "Advertiser Quarrelsome" took the form of writing pamphlets against the abuse of various drugs in the treatment of disease or against operative treatment in various surgical affections, and claiming to show how he avoided all such dangerous methods and yet cured his patients more quickly and safely.

The last two were the "Advertiser Direct" and the "Advertiser Circumstantial." Pointing out that very few went so far as to advertise themselves directly, as they ran too much risk of being expelled from the profession, he described the "advertiser Circumstantial," who, while appearing to praise something else, was really putting himself forward. As the most flagrant instances, he mentioned men who lent their aid in puffing sundry trade articles, either directly by writing testimonials to the vendors or indirectly by allowing extracts from their works to be reprinted by the vendors of drugs, foods, or hygienic articles, and sent round as circulars or left in public places. Another plan was to write works known as "bread-and-butter" books, of more or less pretension, on common diseases, such as "gout," or some fashionable or new treatment, such as "massage," to give the impression that they were authorities on the subject; and he urged the public to be more ready to listen to the advice of their family practitioner as to whom they should consult, rather than be led by these plausible writings of whose merits they were not competent judges, to choose for themselves.

He felt, however, that in the face of the support that the public gave to quack nostrums, systems, and unqualified pretenders outside the profession, they did not seem likely of themselves to discriminate as to who were or were not the quacks within it. At the same time he feared that the profession were not as active as they might be in labelling these men as they deserved. He urged that they should refuse to meet them in consultation more than they did, and that they should shun their acquaintance; that men of repute should be more careful how they allowed their names to be on the consulting staff of special hospitals, often started by inferior men to serve their own ends; that medical societies should not only exercise care in admitting men as members, which he acknowledged that they did, but that when men advertised, and in other ways showed themselves unworthy, the offending member should be summoned before the council, and, if necessary, expelled; and gave an instance in which this had not been done in a flagrant offender. Similarly, that licensing bodies should also exercise to the full all the powers they possess to stop those who offended even when the advertisements were not absolutely direct.

He concluded by warning those who sought to do consulting