operation, the ravages of that disease on board such ships appears to have been nearly incredible. During the year 1847 and the first half of 1848 typhus attacked every crowded ship between the Clyde and America, the disease breaking out sometimes before land was lost sight of, sometimes not till the American shore was in sight, and at every intermediate point in the 3000 miles intervening between Britain and the new world. Ships carrying a small number of passengers in the same voyage escaped; and ships from the Clyde with a smaller number of better fed passengers for the Cape and Australia, at the same period, were wholly unvisited by this terrible scourge. Mr Fraser suggests that these facts go far to prove that it is occasionally in such circumstances a disease *de novo*. We think there is no sufficient ground to infer that the disease ever sprung up spontaneously in these crowded ships, even in the case where it only appeared at the end of the voyage. Had there been no epidemic on shore at home, and had the disease in general made its attack towards the end of the voyage, the case would have been strong for Mr Fraser's supposition. But even were such the state of the case, several points require consideration before the primary influence of contagion is dispensed with. In the interval between two epidemics of typhus, does that form of fever disappear entirely from our great towns? Most probably not—as we think, certainly not. For a number of years past Edinburgh has never been more free from fever than at present. The number of cases of fever reported for the week ending March 18, in the Royal Infirmary, was no more than five. Nevertheless among these cases there are unequivocal instances of typhus, though of a mild character. Had one or two of these parties, while the disease was still latent, embarked in a crowded emigrant ship, three or four weeks ago, the disease might have escaped attention, as passing for ephemeral fever or febricula till it began to attack numbers in the middle or towards the end of the voyage. The exact latent period of typhus is still unascertained. If the primary effect of contagion be acknowledged in the origin of this disease, it is unphilosophical to assume another essential cause so long as any of the circumstances possibly influencing the operation of the ordinary cause in a particular case remain undiscovered.

The mortality in former times among children and young people in these ships, from smallpox and other exanthematous diseases, sometimes amounted to the frightful extent of 35 per cent. The examination to which the Act now subjects passenger-ships before sailing, and the introduction of steam-vessels for the ordinary service of emigration, will probably put an end to such disastrous consequences for the future.

We have room for only one further fact from Mr Fraser's paper. It appears that such has been the popular persuasion of the suitability of the climate of Australia for the cure of phthisis, that more than one-half of the whole mortality on the passage from the Clyde to Melbourne and Sidney, within the last three years, has arisen from phthisis. Mr Fraser is desirous to call the attention of his medical brethren to this fact, with a view to their dissuading parties far advanced in that disease from undertaking such a voyage under hopeless circumstances.

Affection of the Heart, Thyroid Gland, and Eyeballs. By Drs ROMBERG and HENOCHE of Berlin.

The peculiar disease in which the symptoms of a disturbed circulation and action of the heart are associated with a remarkable enlargement of the thyroid gland, and with a most characteristic prominence of the eyes, has become, of late years, familiar to the profession through the writings of British authors, especially of Graves, Marsh, M'Donell, Begbie, Stokes, White Cooper, Walton, &c., &c. In Germany, too, the disease appears to be well known, and many examples of it have been observed by Pauli, Brueck, Meadow, and lastly by the authors whose interesting paper we

have now before us—Romberg and Henoeh. Though differing in regard to the etiology of the disease as a whole, and disagreeing to a certain extent in the account given of the rise and occasion of its individual symptoms; still, in the descriptions of all the writers now named, there exists so remarkable a uniformity, as to satisfy us of the identity of the disease which each has observed.

We shall, in the first place, make our readers acquainted with some of the cases in an abridged form, and the remarks of Romberg and Henoeh, and then add a few observations of our own, which the perusal of the former have called forth.

Case 1. A. S., aged fourteen,* who had never menstruated, was treated, in the clinical ward, for anæmia, and cured by a preparation of iron. In October 1849 she again became a patient, her former disease having returned. At that time the extraordinary paleness of her skin revealed her anæmic condition. The right lobe of the thyroid was swollen, and the jugular vessels were seen pulsating. The anæmic sound was clearly audible in the neck. There was the evidence of an enlargement of the heart, and its first sound was at the base accompanied by a bellows murmur. The patient suffered from dyspnœa, increased by motion, and from great weariness. The bowels were irregular. On the 12th November she was ordered to take iron, which, with a short interruption, she continued to do till January 1850. At that date a decided improvement in her whole system was visible.

Case 2. A girl of eighteen, who had first menstruated a year previously, began to complain of violent palpitation and uneasiness in the region of the heart, brought on chiefly by exertion, especially in ascending stairs. At the same time a swelling had appeared in the front of the neck, and at times she expectorated blood. The diagnosis, after examination of the heart, was that something more than functional disorder existed, and that valvular disease was present. In this patient, as in the former one, the enlargement of the thyroid and the affection of the heart existed, but the eyes were not implicated. She differed from the former case in not presenting an anæmic appearance.

Case 3. Mrs R., aged forty-seven, subject for many years to numerous hysterical complaints, was admitted into the Clinic May 18, 1849. She complained especially of violent palpitation of the heart, and consequent agitation. During the attacks of palpitation, she experienced a feeling of tightness in the throat, and a glimmering before the eyes. The thyroid was evidently enlarged, particularly in its right lobe, and in it she experienced a sense of pulsation and of pain during the occurrence of the palpitation. Then, also, the eyes became unusually large, and appeared starting from their sockets in such a manner as to expose her to the laughter of bystanders. The catamenia were regular, but scanty. The pulsations of the heart were increased to 100 in the minute, but otherwise there was no change detected. She was hysterical, suffered from weariness and from irritability of temper, with inclination to weep. Although the symptoms had existed for nearly two years, they had considerably increased during the previous four months. In this patient the manifestation of anæmia was very clear. A mixture of digitalis, with phosphoric acid and valerian, were the remedial means employed, and amendment was so speedy, that in July of the same year she was able to take a situation as lady's maid, and went to Dobberan, where she experienced great benefit from the use of the sea baths. In March 1850 she was seen entirely freed from her former ailments.

Case 4. C. L., aged twenty, first menstruated at the age of thirteen, and suffered thereafter from complete amenorrhœa for a whole year. During this period she had a trifling swelling on the front of the neck. Menstruation again returned, but very irregularly, and the girl, from

being blooming and robust, became pale and weak; the thyroïdal swelling increased; palpitation of the heart succeeded, and then followed a strange largeness of the eyes. Considerable benefit was obtained in this case from the steady use of iron.

Case 5. Mrs B., aged twenty-five, presented herself at the Clinic, on July 7, 1848. Always healthy, and having regularly menstruated. She had for three weeks been occasionally exposed to a draught, when washing, with her neck uncovered. She had felt pain in the front of the neck, and had latterly noticed a slight swelling in the situation of the thyroid. On examination at the Clinic, the same remarkable prominence of the eyes as noticed in the other cases was observed, still the sight was not affected. Violent action of the heart existed; and in the thyroïdal tumour, now greatly increased, and very large, as also in the head, the pulsation was inordinate. The pulse was 144. Three cups of blood were taken, and in the following week leeches were applied to the enlarged thyroid; from these measures an evident, though temporary, amelioration followed. Afterwards (early in 1850), from the use of digitalis, and due in great measure to the regular return of the menses, which had been much interrupted, restoration to sound health occurred.

Case 6. A. B., a young girl, aged seventeen, had suffered from violent palpitations for two years; had also an attack of typhus fever, and had been neglected, owing to living in a country village. Was admitted into the Clinic, November 1847, when her appearance was most striking. The eyes were protruded; the sight, however, unaffected. The thyroid was greatly enlarged, and appeared throbbing; a loud systolic murmur was heard, and peculiar thrill felt over it. In this case the occurrence of the palpitation was evidently followed by increase in the size of both thyroid and eyes. Pulse equal and regular—116. Bloodletting was adopted three times in the treatment of this case, and after a little time a leech was applied every fourth day to the enlarged thyroid; as in the former case, a temporary benefit resulted. The girl appears to have ultimately fallen a victim to tubercular disease in the chest, surviving the time of her first illness for nearly three years.

Taking the cases which have occurred in their own experience, and those which have been elsewhere recorded, there are in all twenty-seven which form the subject of the following interesting remarks by Drs Romberg and Henoch. They acknowledge twenty-seven to be too small a number of observations to warrant any very decided opinions being drawn from them, but at the same time believe it sufficiently large to afford the groundwork for much useful study. By far the larger number of the patients were females, only four of the twenty-seven were males. All with one exception were young, the most common age being between twenty and thirty. In the larger number of the cases there existed the combination of the three symptoms of palpitation of the heart,—enlargement of the thyroid, and prominence of the eyes; while in six of the twenty-seven cases one or other of the three was absent. In the two cases first treated by Dr Romberg in the Clinic, the prominence of the eyes was not observable. Undoubtedly of these phenomena the palpitation of the heart is the one best understood, and corresponds most readily with the view taken of the whole disease. Almost always the cardiac symptoms are those first discovered and first complained of; then, after a longer or shorter period, the swelling in the neck commences, and the prominence of the eyes follows. Only a few of the recorded cases lead to the supposition that the three diseased appearances arose at about the same time, certainly in the fifth case treated in the Clinic, the enlarged thyroid was the first symptom noticed. It is well to inquire wherein the original affection of the heart consists. That in some instances there exists organic disease is proved as well by examination during life as by *post-mortem*

examination (Basedow and Marsh) ; but again in others it is equally certain that the cardiac symptoms depend merely on an increased irritability of the organ (Cooper, Begbie, Lubarsch). Cases explicable on both these grounds, and on these only, have been treated by the Clinic. In regard to the thyroidal swelling, it is interesting to note its increase and subsidence after the violence of the cardiac palpitation—this fact is expressly stated by Sir Henry Marsh, and mentioned by Begbie as existing in his third case, and also noticeable at times in the fourth ; this of course points to an intimate relation between the two symptoms. Marsh and Heusinger describe the condition of the thyroid as a true hypertrophy, and it has been noticed by Graves, that after the lapse of years the consistence of the gland has been much increased.

As regards the remarkable prominence of the eyes, this symptom comes on gradually, and so far as vision is concerned it is not of much importance, seeing that only in one case (Lubarsch) was it at all seriously impaired ; but though sight is not much affected, the prominence of the eyes produces a singular disfigurement, causing the sufferer to be not unfrequently avoided in company. Acknowledging the great difficulty of determining upon what peculiar condition the prominence of the eyes depends, our authors set aside the view of the increase of the aqueous humour causing a true enlargement of the eye (Begbie—the theory also adopted by Dr Stokes), also that which attempts a solution by reference to an hypertrophy of the post-ocular cellular tissue (Basedow). They look upon the idea of the prominence being due to a want of tone in the ocular muscles, and an accompanying congestion in the posterior parts of the eye (Cooper, Dalrymple) as more likely ; but they appear to think still more favourably of the view of Heusinger, who found in two cases an extraordinary accumulation of fat in the cellular tissue behind the eyes, and regards it as the probable cause of the exophthalmos.

Again, regarding the disease as a whole, our authors proceed to remark, that certainly the larger number of the individuals so affected exhibited evident symptoms of anæmia, such as a remarkable paleness of the skin, the peculiar sound audible in the bloodvessels of the neck—headaches often very violent—giddiness, especially when in the upright posture—humming sound in the ears—attacks of fainting—small frequent pulse, &c. Irregularity of the catamenia also is commonly present, while fluor albus, and sometimes complete amenorrhœa, have been found. Symptoms of an hysterical nature further distinguished not a few of the cases, the globus hystericus, neuralgic pains in different parts, coldness of the extremities, and strange wanderings of the mind. Basedow describes a remarkable calmness and a great desire for pleasure as characteristic features of the mental condition. In some of the cases it is clear that if the disease was not originated, at all events it was furthered by the occurrence of a severe hemorrhage or flux, which reduced the system (Begbie) ; also a depressed state of both body and mind seemed connected with its first occurrence (Graves). But though anæmia was present in a large number of the cases, there are others whose commencement could not be traced to it, and anæmia cannot therefore be regarded as an essential requisite towards the explanation of the complex phenomena. The irregularity in the uterine system, too, cannot be regarded as altogether explanatory of the disease ; for, independently of males being subject to it, these uterine derangements, though marked, were of very varying nature. Heusinger directs attention to the condition of the spleen, which he found after death much increased in volume and manifestly diseased.—*Klinische Wahrnehmungen und Beobachtungen.*

Remarks.—This peculiar disease is certainly not uncommon. To the twenty-seven cases which formed the groundwork of Drs Romberg and Henoch's observations a large number seen by various medical men could now

be added. So far as our own observation of its whole phenomena goes, we agree in the opinion first suggested by Dr Begbie, of their origin and dependence being due to an altered or impoverished state of the blood,—in short, to anæmia. No doubt the degree of the anæmia in such cases will greatly vary, but we do not know of any case in which it could certainly be said not to exist; and even in those cases in which the anæmic appearance of the patient is least marked, it must not be forgotten that the irritable and excited heart, the peculiar sighing sound heard in the cervical vessels, and many of the other symptoms which accompany these, are just as truly evidences of anæmia, as the paleness of the face and general surface. In regard to the exact cause upon which the enlarged thyroid and protruding eyes depend we shall not here enter, as we still consider this part of the subject to be obscure. We observe that Mr Mackenzie of Glasgow is disposed to attribute the exophthalmos to a varicosity of the ophthalmic veins, and Mr Walton to effusion into the ocular sheath, while Dr Stokes takes the same view as Dr Begbie, and regards the eyes as affected by a true hydrophthalmia.

We beg to refer our readers to an interesting chapter on this subject, in the recently published work of Dr Stokes on diseases of the heart. Curiously, as it appears to us, Dr Stokes never mentions the term anæmia, yet evidently describes the anæmic condition, both in giving his interesting cases, and his remarks upon them. It is of great interest to note the curability of the disease, as exemplified in some of the cases treated by Dr Romberg. Indeed, just as in the instances given by Dr Begbie, cure seems in some cases (chiefly due to iron) to be equally speedy and complete. That in other instances the reverse is the case is too true, and nothing is more certain than that this peculiar disease, commencing as it undoubtedly does in functional derangement of system, is not unapt to end in structural change and irremediable organic lesion. In this way it is that the existence of organic disease of the heart or other important viscera is to be explained.

Successful Treatment of Acute Rheumatism by the Acetate of Potass.
By DR GOLDING BIRD.

In the last number of the Journal, we alluded to Dr Bird's interesting remarks on renal depurants; and here we have merely to present our readers with the same author's experience in regard to the treatment of acute rheumatism by one of that class of remedies, namely, the acetate of potass. On this point Dr Bird uses very strong language, affirming, that he has never seen the disease in question yield with so much facility to any other remedy. In the several cases in hospital practice under his own care, Dr Bird has seen the cure to be more rapid, and the immediate relief to the patient more marked, by the use of acetate of potass in quantities of half an ounce administered, largely diluted, in divided doses in twenty-four hours, than by any other treatment. In three days he has frequently found the exquisite pain of the joints nearly absent, the patient comparatively comfortable, and able to bear with greater ease the helpless state in which the still swollen joints placed him. In no case have any bad consequences succeeded the employment of the remedy, while complete recovery has been more expeditious, and the ill effects of colchicum and mercury have been avoided. The most interesting and no less important fact has been noted by Dr Bird in his experiments with this salt, namely, that the pain of the disease remarkably declines so soon as the urine becomes alkaline and rises in specific gravity; and he further records his impression, that the tendency to affections of the heart is very much lessened after the alkalinity of the urine has been established.

Dr Bird's experience of the efficacy of the acetate of potass in the treatment of acute rheumatism has been derived from a large number of cases,