

ed of the general affusion as too cold, therefore used it only on half his body. His nights were always restless; his bowels regular; his pulse more full than natural, though not hard. Although the last of these cases was the worst, neither could remain in bed above two or three hours at a time; warmth increased the volume of air. The digitalis was used to increase the action of the absorbents, as in dropsy. Having never seen a case of the kind treated by any other person, I was at a considerable loss how to act. Books gave me little information.

*Sheerness, February 10, 1812.*

## VII.

*Miscellaneous Communications.* By W. SIMMONS, Surgeon,  
Manchester.

### 1. *On an Anomaly in Vaccination.*

IN medicine, as in other experimental sciences, the anomalies which occur in practice may be considered useful, in as much as they tend to establish the general truth contended for, by particularly distinguishing the exceptions to it. This position will especially apply to vaccination, the occurrence of the small-pox after which has recently given much alarm, and produced serious apprehension with many, of the permanent security sought from the vaccine inoculation. It is my wish to contribute my mite towards the removal of this unfavourable impression; and this I hope to do, in some degree, by a plain recital of the following facts:

On the 8th of October 1811, I vaccinated two infants for the second time, after an interval of several weeks from their former vaccination. This repetition was judged expedient, from the disease having passed through its several stages with unusual rapidity, being at the height, in one instance, on the eighth day from the vaccination, and in the other on the ninth—though in each the appearances on the arm were characteristic, and otherwise satisfactory. At this second vaccination, I made a puncture in each arm of my little patients. Next day each puncture exhibited signs of inflammation, which had increased on the day following; but, on the third, the inflammation, instead of advancing, was evidently subsiding, and, in a few days more, had disappeared. I conclude, therefore, that the former vaccination was complete; and

and that the rapidity with which the disease had passed through its several stages, constituted only a variety.

With the point of the lancet charged to vaccinate one of these young subjects the second time, I inadvertently touched my left cheek, but not so deeply as to draw blood, and for near a week I thought no more about it. What I considered to be a pimple, had been a little troublesome for several days, but, expecting it to go away again, I did not particularly notice it; nor did I discover its real nature until the morning of the seventh day from the accident, when its vaccine character was too evident to be mistaken. For two or three days preceding, I was restless and thirsty, my head had ached, and my appetite for animal food was gone; but the cause of this slight indisposition had not once occurred to me.

From this time the vesicle enlarged, and the inflammation spread in the usual manner. On the ninth and tenth days the tumefaction was considerable; the glands, at the angle, and under the lower jaw, on the same side, were swelled and painful; and, on the tenth day, the throbbing pain in the cheek was so violent as to induce me to conclude that an abscess would form. However, on the eleventh, all the symptoms began to abate, and thenceforward gradually subsided; and the crust from the vesicle exfoliated on the 23d of the same month. Wishing the disease to pursue its own course, the only medicine taken was a little sulphate of magnesia to moderate the severity of the pain in the head; but no outward means whatever were employed.

On the 15th of October, or eighth day from receiving the infection, three children were vaccinated from my cheek, at the infirmary, and they all took the cow-pox. On the 23d of October, from a fine vesicle on the arm of one of these children, I vaccinated a private patient, an infant, and she passed through the disease in a satisfactory manner: And here, the experiments ended. On the whole, however, I may be permitted to offer a few remarks.

It is just within my recollection, that, when a child, I had the small-pox in the natural way, and, during the course of my professional life, until the discovery of vaccination, I had been frequently called to attend on persons labouring under the inoculated and natural small-pox. It is highly probable, therefore, that my constitution was shielded against the small-pox contagion. Proof though as it might be against the variolous contagion, it still remained susceptible of the vaccine infection; and from this fact an inference might be drawn unfavourable to the *identity* of the two diseases. Indeed, the phenomena of the small-pox and of the cow-pox are not precisely the same, though, generally

nerally speaking, the system is left in the same state by both; and hence an *identity* of effect on the constitution may be justly inferred. To ascertain this point, so many experiments have been instituted, that it cannot be any longer doubtful. It is equally certain too, that the small-pox may occur twice in the same subject; and we have seen, that a person who has had the small-pox will receive the cow-pox, and, by possibility, the former disease will supervene to the latter. But such exceptions to the general course of experience ought not to influence the conduct of the practitioner, who, on the contrary, will rest his claim to success on the aggregate of facts, and not on the exceptions to it.

### 2. *On the utility of Diuretics in Ulcers situated on the lower Extremities.*

Among the means recommended in the treatment of ulcers situated on the lower extremities, to which weavers, and some other labouring classes are more particularly incident, *diuretics* have obtained a less share of attention than they seem to deserve. In ulcers of this description, which are mostly of long-standing, œdema of the limb is a usual concomitant; and, in this symptom, depending on the loss of tone, bandages give an obviou and efficient support.

In this plan of treatment by bandages, *diuretics* will be found a powerful auxiliary, since they reduce the œdema, check the further deposition of lymph, and facilitate the reacquisition of tone in the parts. If the ulcer should possess a specific character, its appropriate remedy will also form a part of the course.

In ulcers on the legs, attended with callosity, which constitute a great majority of such cases, the compound squill pill, in the dose of three pills, two or three times a-day, is often sufficiently diuretic; in those cases where it is not so, the subcarbonate of potash, and spirit of nitrous æther, taken in a draught of the compound infusion of gentian, will seldom fail to increase the secretion by the kidneys to the extent wished for; and at night, if a still more powerful diuretic be required, the union of mercury with squill and digitalis may be added to the business of the day. But out of this uncertain class of remedies, the judicious surgeon will choose for himself. In the cases described, I have found the production of an increased flow of urine a material improvement in their treatment, and as such I recommend it to the profession.

### 3. *On the property of Arsenic in Cancer.*

The property of arsenic, taken internally, of allaying the pain

of cancer in the ulcerated stage, is already before the public. In the common cancer, and in that variety of cancer to which chimney-sweepers are incident, its effects are nearly similar. In both it improves the quality of the discharge from the ulcer, and alleviates the pain, without inducing stupor or disposition to sleep. Hence it may be considered an *antalgic* rather than an *anodyne* in such cases.

In the year 1810 an elderly gentlewoman took the "liquor arsenicalis" in a case of cancer of the right breast, twice a-day for three months. Her sufferings were extreme before she entered on this course; soon, however, the arsenic gave her ease, and, with a few exceptions, kept her easy during the remainder of her life. These exceptions for the most part took place when the tubercles were about to exfoliate; after the exfoliation, the pain again subsided, the hollow granulated; the granulations were florid, and healthy-looking, and the secretion from them was purulent. By these means, she was kept very tolerably easy, compared with what is usually suffered, as she gradually sunk; nor did she experience any of those unpleasant symptoms, which are said to arise from the continued exhibition of arsenic.

As the pain in the common, and in the chimney-sweepers, or soot-cancer, is alike alleviated by the internal exhibition of arsenic, may we thence infer the *identity* of the poison in these two diseases? If a different cause can produce the same morbid change of structure in a part, there is no difficulty in conceiving a similarity of function in the subsequent action of the part, however dissimilar the original cause might have been.

#### 4. *On the property of Iron in Cancer.*

There is a material difference between curing a disease, and alleviating some of its more distressing symptoms. But this distinction has not always been sufficiently attended to in practice; and hence a medicine, highly extolled at one time, has afterwards sunk into neglect, though by no means destitute of valuable properties. The history of the remedies prescribed in cancer, will supply an exemplification of the validity of this opinion; a disease for which, I believe, no cure is yet known except its excision, in the early stage, while it is yet local, and the system is uncontaminated by absorption.

Among the remedies entitled to attention in combating some of the symptoms of cancer, are the preparations of iron; and to ascertain the extent of their pretensions, I selected two cases of genuine cancer of the mammæ, advanced into the state of ulceration. In each, the treatment was conducted agreeably to the

the suggestions of Mr Carmichael; the ulcerated surface was sprinkled with the carbonate of iron; the edges were washed with the solution of sulphate of iron; and the carbonate of iron was administered internally.

In the first case, the burning sensation on the surface was much alleviated; the discharge became purulent; the indurated lips were much lessened; and the enlarged axillary glands were considerably reduced in bulk. Here the advantage rested, and was of short duration; a slough soon after formed on the surface of the ulcer, the patient's strength sunk rapidly, and, at her own request, she quitted the Infirmary.

In the second case, treated precisely as the first, the only benefit derived from the use of iron, was a mitigation of the sense of burning spread over the ulcerated surface.

In the intervals of my visits, both these cases were treated, at my request, with particular attention to accuracy, by Mr Joseph Duncan, the late very respectable house-surgeon, whose assiduity and humanity to the patients merit every commendation it is in my power to bestow.

In estimating the value of iron as a remedy in cancer, from the above two cases, it would appear, that its assistance might be sought to alleviate the tormenting sense of heat diffused over the ulcer, and as a temporary check to the rapid advancement of the disease. But, according to my experience, the powers of iron, in both these respects, are much inferior to those of arsenic.

##### 5. *A Case of Occult Cancer.*

On the 25th April 1811, I extirpated a cancer from the left breast of a female; it was of six months standing, painful, craggy on the surface, and incompressibly hard. The incision was made nearly *vertical*, a method of operating that I now prefer, as it affords a ready exit to the discharge, and gives more room to follow the disease into the axilla, where the diseased state of the glands, in that part, require extirpation. When the incision is *horizontal*, the discharge will, of necessity, collect in the lower part, and this lodgment will not only hinder union by the first intention, but much retard the healing of the wound.

Nothing unusual occurred in the operation. But, on examining the tumour after extirpation, it appeared to consist of a *homogeneous* substance, of a texture so hard as to resound when scraped with the scalpel; but there were no *white bands*, or *intersections* of any kind.

##### 6. *On the Liquor Ferri Alkalini in Scrofula.*

The multiplicity of remedies recommended in scrofula, rather perplex

perplex than assist the choice. It is, I fear, the lot of scrofula, as well as of cancer, yet to remain unsubdued, and to stand as a reproach to the healing art. Nevertheless, though the power to extinguish them be denied us, we have reason to be thankful that we can do so much in alleviation of the sufferings of our fellow creatures. In pursuance of this object, I shall propose, to the consideration of the Faculty, the employment of the "Liquor Ferri Alkalini" of the London Dispensatory of the year 1809. This preparation I have employed pretty extensively in scrofula for some time past; and, from my present experience, I am led to consider it as a valuable acquisition. In swellings of the conglobate glands, and in scrofulous ulceration, in which two forms of the disease it has been mostly exhibited, the patients have derived more benefit from it, than from any other preparation of iron, or from the cinchona.

In administering the liquor ferr. alk. I have prescribed it in the common dose, *largely diluted with water*, two or three times a-day, according to its sensible effects, increasing or lessening the dose, so as to procure not more than two evacuations from the bowels in the course of the twenty-four hours. Besides its operation on the bowels, the kidneys are stimulated to an increased secretion, and a considerable flow of urine is often the consequence. To these properties of a diuretic, and an aperient, belong those of a tonic, since the appetite and general strength are materially improved by it.

A medicine, possessed of such active qualities as these, is evidently well adapted to scrofula; and also to fulfil the curative intention in some other diseases of debility, in which relief is to be expected from the union of an evacuant and a tonic.

*Manchester, Jan. 21, 1812.*

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## VIII.

*Observations on those Accidents commonly ascribed to the Wind of a Ball.*

By JOHN SPENCE, M. D. Surgeon, Royal Navy.

I HAVE long had doubts respecting the alleged cause of those accidents that happen in battle, particularly on board ship, from what is generally termed the wind of a shot. I was in hopes, on seeing Mr Ellis's observations in your Journal for January, to have had the cause of those accidents more clearly elucidated; but al-