hasty resort to the knife is injudicious and unsurgical. When, however, there exists no direct impediment to the removal of one or more diseased glands placed near large vessels and nerves, the greatest skill is necessary. I have known extensive injury done to these structures in attempting to take away a cluster of tuberculous glands; and it is by no means unusual for the surgeon to find increasing difficulties presenting, the further he proceeds with his dissection; and instances are recorded in which the number, size, and position of the glands, which had become fused into a mass, compelled an abrupt discontinuance of the operation.

In a former chapter I have alluded to one such occurrence; but, fortunately, cases of this description are comparatively rare in the hands of practical surgeons. When, however, nothing short of operative measures will succeed, they must be proceeded with in the same way as is recommended for the removal of non-glandular tumours which are deeply seated, and in relation with important structures.

No matter to what size the glandular swelling may have attained, it is seldom or never necessary to take away any portion of the skin, provided it be healthy. A single straight incision through the covering integument will, should no very severe inflammatory changes have ensued, generally enable the operator satisfactorily to expose the tumour, and subsequently to free it from its connexions with adjacent parts by using the handle of the scalpel rather than its blade.

Not only should the line of incision, especially if the operation be called for in a region exposed to observation, such as the neck, be chosen with due regard to the prevention of future deformity, but the lips of the wound should be joined in such a way as to render the surgeon's handiwork difficult of detection.

When the glands involved in disease are more superficially situated, less surgical skill is required; for there is not so much danger of wounding large arterial and venous tracts and important nerves. The same tact is, however, necessary in endeavouring to obtain a cure with the least possible subsequent disfigurement.

I have frequently met with the most satisfactory results in removing tuberculous glands situated near the surface of the neck; but then I have been careful to select only those cases which appeared favourable for operation.

I cannot close these observations relating to the removal of enlarged and diseased glands situated in the neck, without again enforcing the necessity of a most careful inquiry into the local and general symptoms exhibited in every case which may be submitted to operation; for unless this be done there is every probability of failure, and the occurrence of similar disease in glands which were previously healthy.

A case illustrating these remarks is recorded in the *Medical Times and Gazette* for February 1859. A girl, about sixteen years of age, had removed, by Mr. Hilton, of Guy's Hospital, upwards of twenty glands from the left side of the neck. "The case did well; but, after the girl had left the hospital, other glands in the same side of the neck enlarged, and we saw her in another hospital about a year afterwards with a swelling nearly as large as her original one."

Although it is most commonly in diseased conditions of the cervical glands that direct surgical interference is called for, still it is sometimes expedient to take away the glands situated in the arm-pit and other parts. Only those surgeons who have undertaken the removal of the axillary glands can be fully aware of the difficulty experienced on account of the near proximity of highly important blood-vessels and nerves; with care, however, the operation may be safely accomplished. I have already quoted an instance in which I assisted to clear the axilla of tuberculous glands; and Mr. Hillman, of the Westminster Hospital, records a case in which he successfully took away all the glands of the arm-pit in a boy four years of age.

[*To be continued.*]

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

DIPHTHERIA.

By W. NEWMAN, M.D., Fulbeck, near Grantham.

[Read Jan. 25th, 1861.]

THERE seems not much doubt that diphtheria was first observed in the fen districts of Lincolnshire; some time, however, occurred before it reached this immediate neighbourhood, and, for some months after their first appearance, the cases that fell under my own notice were so mild in character that I could hardly believe them to be true diphtheria, from the absence of severe symptoms and the less duration of the whole attack.

I had soon afterwards full reason to know the true disease; and since Midsummer 1858 I have had almost a succession of cases varying in character.

In filling up a report for the committee of the Epidemiological Society, in the early part of 1859, I stated that there appeared reason to speak of two distinct forms of the disease. The *one* occurred in persons of all ages; it was marked by exudation-points, with comparatively slight redness of throat and fauces; these points of exudation not spreading, and the whole clearing off in two or three days. The *other* was marked by deep redness of fauces, thicker and more extensive exudation, first appearing in separate patches, but rapidly coalescing into one large mass; the symptoms were much more severe; and convalescence was tedious.

Further experience inclines me to the belief that these are simply allied forms of the same affection. The one will merge into the other insensibly; one member of a family shall have the severe form; two or three others only the slighter condition.

There cannot be doubt as to existence of direct contagion from one to another. More than once it has been imported into a row of houses by some relative coming from a distance; thence travelling to those families in direct intercourse with the house just affected; and so on through the village. I took the disease myself, in August of the last year, from a girl to whose throat I had applied the usual escharotic. That cases do happen without history of infection is certain, and these are most probably due to transmission of the fomites somehow or other by the atmosphere; as seen, *e.g.*, in the ordinary exanthemata. I do not know that there is anything to add to the disease as described in systematic treatises. Some minor points may, however, be touched on. There is, I think, in almost every case I have seen, a peculiar change in the voice even before the exudation or swelling of the tonsil declares itself: the sounds are husky and unnatural. There is, coincident with the first appearance of redness on the fauces, a sort of yellowish mottling usually over the central portion; and when this is to be seen, after the lapse of a very short time there is the characteristic exudation. More than once I have been led to believe the affection would result in pure diphtheria, when other symptoms and the prior history of the patient would rather lead to the opinion of acute tonsillitis. There are early and extreme prostration, and not merely the muscular pain of catarrh in the limbs, but often severe gnawing pains.

I have examined the fibrinous deposit repeatedly, but never discovered any cryptogamic growth therein.

Scarlatina has been said to be allied to diphtheria, and the two to be mutually prophylactic of the other;

Nothing has occurred to make me believe this to be true. In one of the worst cases, (a girl aged 7 years) scarlatina under my own superintendence had run its usual course not many months before.

The existence of albumen in the urine is simply common to diphtheria with almost every acute affection. So far as I have seen, the presence is transitory, and the quantity small.

Death results either from exhaustion or from suffocation, the result of extension of disease to the air passages in the form of croupy affection. The former is the most common. Two children, aged respectively 9 and 4 years, died from the latter cause under my own care. In neither instance would the parents consent to the performance of tracheotomy.

The treatment should be supporting from the very first.

Local applications with a glass brush or stick, of strong hydrochloric acid, once or twice a day at first, seem to be of most service. The nitrate of silver proves inefficient; and the resulting white tinge obscures the original affection. I can speak from personal experience of the very great relief that followed the free use of the acid.

Gargles of dilute hydrochloric acid (℥ij to ℥vi) seem of material service.

Internally I have given chlorate of potash (gr. x) with tincture of sesquichloride of iron (♏xx) every four or six hours; or cinchona in full doses (the compound tincture is preferable); or quinine with or without steel. If aperients be necessary, I give some few grains of rhubarb or some castor oil; but not a single dose of mercurials in any form. Beef-tea in such quantities as can be taken, wine *ad libitum*, and meat so soon as it can be swallowed, are most to be relied on.

Out of some 70 or 80 cases, I have lost 4 or 5 from the disease; and 2 or 3 more from the sequelæ of the affection.

The above is a bare sketch of the plan I have followed and found most satisfactory. There is much of interest in the sequelæ of the disease in the form of anomalous nervous affections; and these I hope at some future time to bring before the notice of the Branch.

Reviews and Notices.

On Diseases and Deformities of the Spine, Chest, and Limbs. Part I. Disease of the Spine causing Posterior Angular Projection, Abscess, and Paralysis. By Richard Hughes, M.R.C.S., L.R.C.P.Ed.(Exam.), Surgeon to the Brighton Orthopædic Hospital. Pp. 40. London: John Churchill. 1861.

Our author has chosen for himself a wide field, and one open to research. We regret to have only Part I of this work before us. In publishing a work of this nature in pamphlets, the author does himself injustice. In its present form, it will certainly not be read. In his preface, he excuses himself for his precipitancy thus:

"I could wish", he says, "to have deferred any publication on this subject until wider research and larger experience had enabled me to offer to the profession an exhaustive work, in which all the points of interest should be fully discussed, and new light thrown upon such of them as needed it. But as day by day the conviction is more keenly forced upon my mind how utterly inadequate is the treatment, or rather absence of treatment, which is ordinarily afforded in cases of this disease; and, on the other hand, how great and sure is the success attainable by the means advocated in the following pages,—I can no longer delay to communicate to the profession and the public the benefit these means afford."

The object of all this hot haste is to describe an instrument, the benefit accruing from which he illustrates by four cases, which occupy eight of his forty pages, and which, to say the least, are most unfortunately selected, and only tend to exhibit the inutility of the means employed either to arrest disease or to remove distortion. Further, these four cases were not under our author's care, but under that of Mr. Amesbury, with whom he saw them from time to time; nor is there evidence in these pages of more experience than is to be gathered from an occasional visit to another surgeon's patient.

"The success attainable" depends in these cases, unfortunately, very little upon the surgeon, but rather on the nature of the disease and on the period at which it comes under treatment. It is well known that in the commencement it is an inflammatory affection, arising for the most part from accident; and that caries of the bodies of the vertebræ results, followed by abscess. It is the surgeon's aim to remove inflammation; and to this end he adopts complete rest of the affected parts. But also when suppuration has taken place, rest is essential, both to prevent the irritation which is occasioned by motion, and to diminish the secretion of pus, as well as to promote absorption. Now, absolute rest of diseased parts is not to be obtained without mechanical control; without it, the muscles are thrown into action, and they tend by their involutary contractions to keep up irritation, notwithstanding that the recumbent position is constantly maintained. The form of instrument, therefore, which affords the most efficient support without impeding respiration, accomplishes in the most direct manner the object in view. Mr. Hughes has great faith in the superiority of the instrument he recommends. When, however, he has allowed himself time for "wider research", he will acknowledge that the principles of treatment which he supports have been advocated by others, and he will find that the instrument itself is known both "to the profession and the public".

When his book comes before us in a more complete form, we hope that the author will give us his own well digested opinions, and the results of his own experience.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., late Professor of Chemistry in University College, London. Eighth edition, revised and corrected. Pp. 771. London: John Churchill. 1861.

The eighth edition of this excellent Manual has been issued under the auspices of Dr. Bence Jones and Dr. Hofmann. Few alterations have been required, by reason of the short time which has elapsed since the publication of the last edition. There has been added, however, to prepare chemists for coming events, the substance of Gerhardt's views on chemical notation. These views, we are told, are gaining ground; but the scientific world is hardly yet prepared for their general adoption; consequently, they have not been adopted in the text of the work. Whatever additions the advances of chemistry have required, we need hardly say, have been duly made in the Manual.