the oidium in muguet, and of vegetable parasites on the skin in skin diseases; but it is not so clear that the acid is the *cause* thereof. On the contrary, we know that the production of acid is itself due to fungi, as in the acetous fermentation. Dr. Lowe, of King's Lynn, differs from Gubler and others, as to this acid theory, and I would particularly call Dr. Harley's attention to the account of Dr. Lowe's interesting experimental researches on these parasitic fungi, published last year in the "Transactions of the Botanical Society of Edinburgh." The title of Dr. Lowe's paper is significant of the caution with which microscopic researches should be made. It runs thus: "On the Identity of Achiorion Schönleinii and other Parasites with Aspergillus Glaucus." Dr. Lowe believes he "raised" aspergillus glaucus from the parasitic fungus (the achiorion) of a case of porrigo lupinosa treated in the Royal Infirmary here, and he got good yeast (*torula cerevisiae*) from both the aspergillus and penicillium, which might, therefore, be got from the favus-fungus. Dr. Lowe infers, in fact, from his experiments, that all the fungi which produce skin diseases are referable to these two genera which produce yeast; and conversely, that yeast may, under favourable circumstances, produce skin disease. The *leptothrix*, so common on the foul tongue, is probably to be classed with these variable forms. These statements show, at least, how much is yet to be done in natural history before the true morbid action of these parasitic fungi can be determined. One thing, however, is certain, that the parasites of the potato, vine, apple, and silk-worm—all prevailing simultaneously—are almost identical with the oidium albicans; and considering how readily a slight difference in the form of these minute organisms may be induced by differences in the food or habitat, it is probable that they are really identical in origin; and this coincidence of spread cannot but awaken a strong suspicion as to the relationship of the cause of diphtheria to that of the epidemics of the silkworm, vine, potato, &c.

That these parasites are sometimes powerful irritants of the living tissues is, I think, fully established, both from the history of muguet, and other circumstances. And although French writers speak of *pseudo-diphthérie*, the accuracy of the term may be questioned, for the exudation appears externally on ulcerated or exposed surfaces as well as internally in both muguet and diphtheria alike. An interesting case of vaginal blennorrhœa due probably to oidium albicans introduced from without may be found in Virchow's "Archiv. für Physiologie," vol. ix., p. 466. The case is communicated by Dr. E. Martin, of Jena. The labia were swollen; the vagina of a bright-red, studded with enlarged papillæ, and covered with star-like patches of membrane like those of the mouth in muguet, which were found to contain the *O. albicans*. A patient in the next bed (both were puerperal patients in hospital) had subsequently active fever, abdominal tenderness, and *O. albicans* of the mouth, with muguet. Dr. Jos. Ebert, of Wurtzburg, found the *O. albicans* in the crop, stomach, and intestinal canal of a hen. The upper portion of the latter was intensely red.

It is usual to speak of the characteristic pellicle as if it were peculiar to diphtheria; but this is by no means the case. It is not unfrequently seen in cases of typhus and relapsing fever, sometimes in yellow fever, and, I believe, in all fevers. A series of carefully-conducted experiments made with a thorough knowledge of cryptogamic botany, on lower animals, so as to show the real pathological origin and effects of these parasitic fungi would be very valuable. It would be absolutely necessary, however, that the animals experimented on be first brought as nearly as possible under, and into, the same conditions as persons are in who are attacked by the disease. I am inclined to think that it would probably be shown that these parasites may act either through the blood or locally only.

I may observe, in conclusion, that antiseptics and parasitocides appear to be the most efficient remedies in diphtheria. I can speak very favourably of the value of the tincture of the sesquichloride of iron (an antiseptic) and hydrochlorate of potass. The latter, taken alone, will sweep away the pellicle in a few hours. Hydrochloric acid is also useful. Borax, which is so efficient in muguet, would probably be serviceable in diphtheria. And, I may say, that I have found a concentrated solution of borax as useful a local application in favus as any that I have tried. It is also serviceable in certain forms of lepra, applied externally, and, I believe, from its action as a destructive parasiticide. There are other remedies of this class, as the linimentum æruginis, the chloride of zinc, chloride of lime, &c. Early blood-medication is by far the best treatment, inasmuch as local applications, like the nitrate of silver, cannot have any effect on the air-passages, where the greatest mischief is done. Calomel and blisters seem wholly contra-indicated; indeed, the latter must be considered far

more likely to be hurtful than beneficial. Wine, in moderation, is likely to be useful, and makes an excellent gargle diluted one-half.

I am, Sir, your obedient servant,
Rutland-street, Edinburgh, Jan. 1859. T. LAYCOCK, M.D.

To the Editor of THE LANCET.

SIR,—I find, on reading over my letter of last week, that I omitted to state, what I have always observed—namely, the mucous membrane covered by diphthêrite to be invariably more or less reddened from capillary injection. These enlarged (query, inflamed) capillaries, no doubt, pour out a great part of the exudation, which then coagulates and takes on this membranous character. The exudation is on some parts so thick, that it appears formed of several layers, as is well described by M. Bretonneau, who truly states that it will often re-form on the same part from which, a few hours before, it had been removed.

I am, Sir, your obedient servant,
Jan. 25th, 1859. W. R. ROGERS, M.D.

[LETTER FROM DR. J. M'GRIGOR CROFT.]

To the Editor of THE LANCET.

SIR,—I think the profession generally now conclude, from the writers on the subject, that diphtheria has not been known in the United Kingdom till within the last three years, and then only subsequently to the disease appearing at Boulogne.

In the year 1847, while serving in her Majesty's service, under the direction of the late lamented Sir James Pitcairn, M.D., at Cork, during the period when starvation and disease decimated the green isle of Erin, the General Hospital was rapidly filled with half-starved recruits, suffering from a most malignant epidemic—"typhoid pneumonia." Amidst all this, a corporal of a detachment, stationed in the barrack, was admitted under my care. The case at that time being a peculiar one, I may be permitted to make a short statement.

Lance Corporal —, aged twenty-six, thin, but well-built, of dark, bilious complexion, rather scrofulous diathesis, well-conducted, and temperate. The symptoms, on admission, were great swelling of the throat, externally and internally, (states it came on rapidly;) breathing difficult. The lower jaw became so fixed that it was impossible to obtain a satisfactory view of the fauces; tongue slightly protruded, furred heavily, and pressed up to the palate by the excessive swelling of the integuments beneath. The case was one of an asthenic character, in my opinion, and treatment accordingly induced recovery.

Sir James Pitcairn and my colleagues were in doubt as to what particular name to attach to this new disease; and, for military form's sake, it was included under the head of *cynanche maligna*. Constant and plentiful fomentations with hot water reduced the swelling of the parts; and, on the third day, a satisfactory inspection of the throat and mouth exposed to view an ash or dirty-yellow coloured appearance of the lining membrane beneath the tongue, around the gums, especially the lower, and also the fauces. The breathing, since admission, had been very laborious. The possibility of the necessity for tracheotomy was ever uppermost in my mind, supposing the larynx was involved; but, from the asthenic character of the complaint, I felt it would be a *dernier ressort*, and concluded it would be fatal.

The ash-coloured appearance of the mucous membrane induced a minute inspection, some of my colleagues supposing pus had formed or collected from the elastic feeling; but I was able to detach an adventitious membrane, about an eighth of an inch thick, in three pieces, which made a perfect model of the inferior part of the mouth and fauces. The raw surface of the healthy tissue still continued to secrete this diphtherial substance; and, I have no doubt, would have formed a second membrane, if not partially washed away or otherwise detached. Frequent gargling with strong solution of the chlorinate of soda, alternately with nitric acid wash, and supporting diet, effected a cure.

Microscopical examination of the detached membrane enabled me to confirm my opinion, at the time, of the singularity of the disease,—being an adventitious exudation of a granular and cellular character; and I fully agree with Dr. Rogers' opinion of diphtheria, stated in THE LANCET of Saturday last.

Subsequent experience induces me to be very chary in calling every bad throat-affection "diphtheria;" neither do I hold

with the vaunted success in rubbing every sore-throat with a piece of caustic to the doctor's heart's content. True diphtheria, I humbly observe, cannot, or ought not, to be ever confounded with malignant sore-throat or croupal attacks.

I have found great benefit, in the commencement of the complaint, by constant fomentation of the external parts, and particularly by inhaling the vapour of heated pyroligneous or strong acetic acid. Diphtheria is decidedly a depressing disease, and of a typhoid type. Any treatment, local or general, that tends to debilitate, cannot, upon scientific reasoning, prove successful.

I am, Sir, your obedient servant,

J. M'GRIGOR CROFT, M.D.,

Clevedon, Somerset,
Jan. 24th, 1859.

Late Staff-Surgeon to H. M. Forces.

THE MEDIAN OPERATION OF LITHOTOMY.

[LETTER FROM G. ALLARTON, ESQ., M.R.C.S.]

To the Editor of THE LANCET.

SIR,—I read with much pleasure Dr. F. J. Brown's case of median lithotomy, in THE LANCET of January 15th, and as I am especially desirous just now of drawing attention to the operation, perhaps you will do me the favour to publish the accompanying case.

Four years have elapsed since I brought this operation under the notice of the profession, and as I am now engaged in preparing a second edition of "Lithotomy Simplified," I am anxious to collect, if possible, all the cases operated upon during that time. Many cases have already been reported in the medical journals of this and other countries, but a far greater number are as yet unpublished. I should therefore esteem it a great favour if those medical gentlemen who have done me the honour to practise the operation would also favour me with the results, together with any suggestions they may wish to offer. It is only by statistics collected from all sources that the real merit of the operation can be arrived at, and its superiority over the lateral method established. Success in the hands of any one surgeon argues nothing, for even the lateral operation has been most successful in the hands of some few surgeons. Success, again, is not all; for even granting the recoveries to be equal, the rapidity of the recovery, the power of retaining and passing the urine at will, and the certainty and safety with which the operation can be accomplished, will always be in favour of the median method.

As THE LANCET circulates all over the world, I am induced to hope that my appeal will be responded to by some, if not all, of the surgeons who have performed the operation.

I am, Sir, your obedient servant,

South Molton, Devon, Jan. 17th, 1859.

GEO. ALLARTON.

Operation.—On July 26th, 1858, I was consulted by J. N——, aged eighteen, who had suffered all the symptoms of stone in the bladder from early childhood. Fourteen years ago he was sounded, and a stone detected, but no operation proposed for his relief, and at length his symptoms grew so urgent that he applied to various medical men, and at last became an in-patient of the North Devon Infirmary, where he tells me he was sounded, and underwent a course of treatment, without deriving any benefit, and returned to his home, to linger out a painful existence. At the recommendation of Mr. Edwin Thorne, a farmer in the neighbourhood, he was brought to me, and the man who accompanied him described his condition as most pitiable, observing that "he was in and out of the cart forty times at least, and that his sufferings were dreadful."

After hearing the history of the case, I sounded him, and at once struck a calculus, so hard in nature that it rang loud enough to be heard at some distance. Satisfied of the presence of a stone, and considering the deplorable state of the patient's health, I refrained from sounding him a second time, and enjoined soothing remedies and rest. A day or two before the operation, I sounded him again, with equally satisfactory results; and on the 10th of August, I proceeded to operate, with the assistance of Mr. Tidbould, of Chulmleigh, and Mr. Spicer, of North Molton. I need not detail the steps of the operation. Suffice it to say, that I removed without difficulty a round mulberry calculus, an inch and a quarter in diameter.

August 11th.—I found the patient cheerful, and free from pain. He had retained his urine several hours, and was enabled to pass it at will every six hours, chiefly by the urethra, very little escaping by the wound. There was no

dribbling from the wound, and he could move about freely in bed, and sit up without inconvenience, kneeling when he wanted to pass urine.

12th.—He was doing well, and expressed himself as easier and better than he had been for months, and able to pass urine better than he had "done all his life." He said that he could sit up or go down stairs, but I advised him to remain quiet. He sits up, however, on the side of the bed, dressed.

13th and 14th.—Improving.

15th.—I found him down stairs, anxiously waiting for his dinner, and looking cheerful and well.

16th.—After a hearty meal yesterday, he was seized with severe headache, accompanied with distressing vomiting, which forced his urine through the wound, and kept him wet and uncomfortable, and these symptoms lasted some days, retarding recovery, and irritating the wound; but despite these untoward circumstances, he made a rapid and complete recovery, and never suffered in the slightest degree from the operation. He is now fat, healthy, and cheerful, and very grateful for the relief obtained.

I will not occupy your valuable space with remarks upon this case, as I shall comment upon it in the edition which I am now preparing.

* * We would direct Mr. Allarton's attention to page 503 of the last volume of this journal. He will find that M. Heurteloup, of Paris, has lately proposed the median operation, which he considers as perfectly new. Mr. Allarton will see that we advised him to communicate with the committee which is to report on M. Heurteloup's paper.—SUB-ED. L.

POOR-LAW MEDICAL RELIEF.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if you can make it convenient to insert the following comments on the "Heads of a Scheme" suggested by the President of the Poor-law Board.

I am, Sir, yours respectfully,

FREDK. SMITH GARLICK, M.R.C.S.

To the Poor-law Board.

MY LORDS AND GENTLEMEN,—At a meeting of the medical officers of the Halifax Union the "Heads of a Scheme for a suggested New Arrangement of Medical Relief" were deliberately considered *seriatim*, and I am instructed by the meeting to hand you the comments made upon each clause.

I have the honour to be, my Lords and Gentlemen,

Your obedient servant,

5, Cheapside, Halifax,
Jan. 25th, 1859.

FREDK. SMITH GARLICK,
Chairman.

1. We think it much better that all appointments should be permanent.
2. We think it difficult, if not impossible, to secure the residence of every medical officer in the district assigned to him.
3. This clause we dissent from, *in toto*, for several reasons, as it would not only divide that remuneration which is now too low, but would lead to very little practical good.
4. All appointments should be permanent, with power for the medical officer to resign on giving proper notice.
5. Agreed to.
6. We think division of authority in the issuing of orders unnecessary, though in urgent cases it might save time.
7. If the relieving officer did his duty by visiting the case, either before or as soon after issuing the order as possible, the means of the applicant would be promptly ascertained; and this would only apply to those seeking temporary relief.
8. Many boards of guardians meet only *once in a fortnight*, therefore the medical officer would have little chance of a settlement of the point in question in proper time. He may have to attend the case a fortnight before he can obtain the decision of the guardians.
9. This would be attended with much inconvenience if the medical officer's Relief-book is to be sent. We think boards of guardians take very little interest in medical reports. There is plenty of writing as it is.
10. The medical officer ought to have the power to order both the diet and the *quantity*, when necessary; but it will be well not to have two medical officers in a district, lest a spirit of rivalry in ordering nourishment &c. should be engendered.
11. Agreed to.