On opening the stomach a patch of the villous coat, near the cardiac extremity, presented considerable congestion, and a small quantity of a whitish powder adhered to the membrane at this part, and also at some others where no congestion was manifest. It contained no food, and only a few ounces of fluid, which exhaled a strong spirituous odour. A minute quantity of the contents was then mixed with very dilute sulphuric acid, and boiled in a glass vessel for about half an hour. A portion of the supernatant liquor, when cold, being treated with nitric acid, was changed to a light orange colour, and another portion, upon adding solution of tannin, deposited a pretty copious grayish-white sediment. A small quantity of the powder found in the phial was treated in the same manner, and similar results produced.

The detection of strychnia, so far as my information goes, is at present surrounded with great difficulty and uncertainty. On this account, and also from the fact of very few cases being on record where a thorough and scientific examination has been made by men of authority on the subject, I transmitted the stomach and remainder of its contents to Professor Christison, who kindly undertook to inspect them, and has since furnished the following account of his examination :—

“The contents, and washings obtained with water acidulated with sulphuric acid, were filtered, treated with milk of lime, concentrated to a thin syrup, and filtered again. The insoluble lime-salts and excess of lime would contain strychnia, if there was any. The mixture, dried at 212° , was treated with boiling rectified spirit, and the solution was evaporated to dryness. The extract had the intense persistent bitter taste of strychnia, and was turned bright yellow by nitric acid. Another test mentioned in my Dispensatory did not act characteristically, the colours being altered by organic matter. There is, in fact, a want of positive tests for strychnia when mixed with organic matters, unless the proportion were considerably greater than in this case, so as to admit of some complexity of chemical handling.

“I think there is satisfactory evidence for a case of suicide or accident. It may be doubted whether this chemical evidence, however, would be enough in a charge of murder,—*in which there was no proof of the nature of the symptoms.*”

ARTICLE V.—*On the Remedy of Stricture by External Incision.* By JAMES SYME, Esq., Professor of Clinical Surgery in the University of Edinburgh.

J. H., aged forty-three, late sergeant in the ——— Dragoon Guards, was admitted into the Royal Infirmary on the 19th of June, on account of stricture. He stated that the disease had originated from gonorrhœa, and troubled him for eighteen years,—in the earlier part

of this period being relieved from time to time by the introduction of instruments, but latterly resisting all attempts to accomplish this, so as at length to require his discharge from the army, which had taken place seven months before. During the last eight or nine years, he said, that although under the care of very many practitioners, civil as well as military, some of whom had tried daily for months to introduce instruments, *he never had had one passed through the stricture*. About six years ago an attempt had been made to force a way through the contracted part, which was at the bulb, by means of a lancet-catheter, but without success. Notwithstanding some relief which the patient had derived from passing a flexible bougie down to the obstruction, which he did daily, all the symptoms of stricture existed in a very severe form, the urine frequently escaping only by drops, and not being always under the power of retention.

After repeated ineffectual attempts, but without ever drawing a drop of blood, I succeeded on the 6th of July in passing a No. 1 bougie fairly into the bladder. I then endeavoured to carry on the dilatation, but without success; and in order to obtain room for the introduction of a grooved director, on the 11th tied in a catheter of the smallest size. On the 13th, as the patient began to complain of this instrument, I removed it, and found that the grooved director could be passed with ease. Circumstances induced me to delay the operation until next day, when I found that the canal was again so tightly contracted as to admit only the small catheter, which was therefore retained for other two days. On the 16th I performed the operation as usual,—the patient declining chloroform, and treating the affair as unworthy of complaint. The catheter (No. 7) was removed on the 18th, and the urine then issued in a full stream entirely through the urethra. A few days afterwards, the patient, having got up and walked about, found that a part of the water escaped by the wound, but soon observed the amount of what passed in this way diminish to a few drops, and on the 6th of August reported himself quite well. He was dismissed cured on the 12th.

With regard to this case, it may be remarked, in the first place, that the disease which was the subject of treatment had deprived the army of the finest looking soldier I have ever happened to see. Secondly, it affords an instance of a stricture for nine years reputed impermeable by metropolitan as well as provincial, public as well as private surgeons, but which, nevertheless, proved permeable to the simple bougie, when employed under the impression that there is no true impermeability. Thirdly, the case presents another instance of the ease, safety, and efficiency with which the most obstinate stricture may be remedied by incision upon a grooved instrument passed through the contracted part of the canal.

Mr Acton, in his lately published work on "Diseases of the Urinary and Generative Organs," says (p. 160), with reference to the opera-

tion I have recommended, "I have witnessed this perineal section performed several times in the most able manner, but the patients have all died." A correspondent of the "London Medical Gazette," writing from Cheshire, directed attention to this statement, and expressed his opinion, that Mr Acton should state the particulars of "such appalling mortality;" and in reply to this call, Mr Acton has referred to the cases which were published by Mr H. Smith in the "Medical Times" of May 1850. I have looked into these cases, and find that they are fifteen in number, of which the following are the prominent features:—

1. Treated by Mr Fergusson,—“No instrument whatever could be passed through the stricture.” The *old* operation was performed, and the patient *recovered*.

2. Treated by Mr Fergusson,—“The urethra was impervious to instruments.” The *old* operation was performed, and the patient *recovered*.

3. Treated by Mr Fergusson,—“No instrument could be got into the bladder.” The *old* operation was performed, and the patient *recovered*.

4. Treated by Mr Fergusson,—“A terrible stricture.” “No instrument could be got into the bladder.” The *old* operation was performed, and the patient *recovered*.

5. Treated by Mr Fergusson,—“No instrument could be passed.” The *old* operation was performed, and the patient *recovered*.

6. Treated by Mr Fergusson,—“No instrument whatever could be passed into the bladder.” The *old* operation was performed, and the patient *recovered*.

7. Treated by Mr Bowman, who “endeavoured for about three months to introduce a catheter, but vainly.” The *old* operation was performed, and the patient *recovered*.

8. Treated by Mr Fergusson,—The *old* operation was performed, and the patient *died*.

9. Treated by Mr Partridge,—“No instrument could be passed into the bladder.” The *old* operation was performed, and the patient *died*.

10. Treated by Mr Fergusson,—“An impervious stricture; a fine healthy man about thirty-five years of age.” The *old* operation was performed, and the patient *died*.

11. Treated by Mr Nunn,—“No instrument could be passed into his urethra.” The *old* operation was performed, and the patient *died*.

12. Treated by Mr Fergusson,—The operation recommended by me was performed, and the patient *recovered*.

13. Treated by a surgeon, whose name is not mentioned. The operation recommended by me was performed, and the patient *died*.

14. Treated by Mr Fergusson,—The operation recommended by me was performed, and the patient *recovered*.

15. Treated by Mr Fergusson,—The operation recommended by me was performed, and the patient *recovered*.

It thus appears that of eleven patients upon whom the *old* operation was performed, seven recovered and four died; and that of four patients upon whom the operation which I have advised was performed, three recovered and one died. It also appears that the astounding statement of Mr Acton has no other foundation than the bad result of *one* case, treated by a nameless operator; and, so far as can be learnt from the history, improperly treated, since it is said that during the night after the operation there was a "smartish bleeding." How this insulated and questionable fact can be reconciled with the statement, that he had "witnessed this perineal section performed several times in the most able manner, but the patients have all died," I leave Mr Acton to explain. For my own part, I have now operated, without the loss of a single life, on fifty-one cases of stricture deemed irremediable under ordinary treatment; and I therefore venture to hope that the persuasion which I originally expressed as to the operation, when properly performed, being absolutely and entirely free from danger, will not appear unduly sanguine.

ARTICLE VI.—*On the Pathological States of the Lung connected with Bronchitis and Bronchial Obstruction.* By W. T. GAIRDNER, M.D., Pathologist to the Royal Infirmary of Edinburgh.—(*Continued from p. 19.*)

PART II.—PERMANENT LESIONS OF THE AIR-VESICLES AND BRONCHI DEPENDING ON BRONCHITIS.

Permanent Atrophy of the Lung in relation to Bronchitis.—In the preceding investigation of the causes and mechanism of pulmonary emphysema, the connection of that lesion with all causes leading to partially diminished bulk of the lung has been fully displayed. Among these causes of emphysema, bronchitic collapse of the lung and its sequelæ unquestionably hold the first place in importance and frequency; about 67.5 per cent. of the cases of emphysema in the table, having been manifestly connected with these affections. The forms of condensation here referred to may be divided into the more recent and the more chronic; the former being pure instances of bronchitic collapse, usually capable of easy removal by artificial insufflation of the dead lung, and therefore probably remediable in their character; the latter, on the other hand, having acquired more or less of a permanent type. The latter kind of condensation I distinguish by the name of *pulmonary atrophy*, a condition of the lung, the various forms of which are very imperfectly described by systematic writers, and by no one, so far as I am aware, except by Dr Stokes, ascribed to bronchitis.

The connection of atrophy with bronchitic collapse of the lung, can