urinarius, and dilatation employed for a few minutes, when the urethra was slightly divided with a narrow bistoury through its mucous membrane only, upwards and outwards on each side, and the dilatation was then cautiously continued for about a quarter of an hour, until the little finger could be introduced into the urethra. The finger being carried up to the fundus of the bladder, the end of a calculus was felt, apparently suspended pendulously from that part of the organ over the pubes. The finger being withdrawn, and the forceps introduced, the stone, with a little difficulty, was seized; on endeavouring to remove it the forceps slipped off, from the resistance of the stone, it appearing fixed into the bladder. More traction and pressure with the forceps were then had recourse to, which brought away a few fragments of the concretion between its blades, of a light clay colour, showing the stone to consist of the triple phosphate. The index finger of the left hand was introduced into the rectum, and directed as high as possible towards the fundus of the bladder, while the little finger of the right hand was retained within that organ, where the stone could be felt through its parietes. The form and position of the calculus occasioning this embarrassment were then more clearly ascertained, by bringing it thus between the little finger of one hand and the forefinger of the other. There appeared to be at least four-fifths of the stone (the size of a very large gooseberry) lodged in a cyst external to the general cavity of the vesical organ. The projecting portion, apparently peeping into the bladder, was again seized with a strong pair of polypus forceps, while the finger in the bowel was made to bear on the stone in the direction of the urethra, and traction again employed, simultaneously with rotation, as far as was considered prudent, with the hope of loosening its connections, and drawing it through the neck of the cyst. The laceration of this part of the obstruction was fruitlessly attempted. It was then considered prudent to nip off as much calculous matter as could be readily accomplished; this being done, the child was put to bed. She rested better the following night than she had for many weeks, and there has been a mitigation of all the symptoms since the operation, excepting the prolapsus ani, which still causes the child a good deal of inconvenience when its bowels are opened. Partial incontinence of urine still exists; sometimes the bladder retains its contents for the space of two or three hours.

The infrequency of stone in the female bladder, at the age of this little sufferer, with its attendant peculiarities, makes it, I conceive, a case of some interest. A case related in one of the weekly journals—I think the “Lancet”—of stone found lodged in the urethra of a girl about five years of age, which was readily removed, is the only case I have heard of so young. Cysts in the bladder, containing one or more stones, have commonly been attributed to disease of that organ; in this case the bladder was in every respect healthy. Whether the cyst was formed previous to the deposition of the calculous matter into it, or the stone gained during its development a close covering by an extension of the coats of the bladder, must yet be a subject of conjecture; the latter I presume to be the most probable. Various plans have been pro-

posed for the removal of stones from their cysts—dilating the mouth of the cyst with a probe, crushing the neck of the cyst with forceps, dividing the constriction with a shielded bistoury, or a pair of scissors introduced into the bladder, dragging and twisting the stone, when seized, until its connections gave way. Desault, it is said (by Cooper), employed with success a concealed knife, called a *coupe bride*, by which he opened the cyst. The next analagous case to the one above related is mentioned by Sir Benjamin Brodie (with whom I have the honour of corresponding upon this case), in his work on Diseases of the Urinary Organs, of a boy sixteen years of age, where the bladder contained a cyst with a stone in it; by means of a probe-pointed bistoury the orifice was carefully dilated, so as to admit of the removal of the calculus. The difficulties attending this operation on so young a female were the want of space, the natural opening of the urethra being the only way of access to the bladder, the interposed vagina limiting the size of the required opening, so that the finger could not be used in conjunction with any other instrument for the various manipulations in this peculiar case.

TRAUMATIC PNEUMATOSIS.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—If you think the following case of “pneumatosi traumatica” sufficiently interesting, I beg you will insert it in your Journal.

I am, Gentlemen,

Yours obediently,

EDWARD R. JONES.

Colchester, June 20, 1842.

May 15, 1839. J. Armstrong, aged 15, was working at his usual employ in a mining district, when of a sudden the support to the roof of the pit gave way, and covered him with nearly a ton of earth. By prompt assistance, he was extricated, and I was immediately in attendance. I found him sensible; complaining of a grating sensation on the right side of thorax, with occasional vomiting of blood and frothy matter. On examination, I found that the fourth and fifth ribs were fractured; when moved giving an unusual crepitus. Twelve ounces of blood were drawn from the arm; after applying a soap plaster, compress and bandage were also applied in the usual manner; he was ordered to keep the horizontal position, and to have four grains of calomel, with six of jalap, at once.

Nitrate of potass, one drachm;
Spirit of nitrous ether, one drachm and a half;
Tincture of digitalis, one drachm;
Tincture of opium, half a drachm;
Water, to make up eight ounces. Two tablespoonfuls every third hour.

In the evening, six hours from the above, he was visited again. Pulse 90; bowels not open; difficulty of breathing; vomiting of blood in small quantities. He was again bled to ten ounces, and ordered, four grains of Dover's powder, with six of rhubarb, to be taken at night.

16. I called at four, a.m., and found that he was labouring under an emphysematous swelling, about two

inches below the fractured fifth rib, which I was informed had taken place very suddenly; inspiration easier; pulse 80; an evacuation of the bowels, tinged with blood. A bandage was applied over the abdomen, with orders, if the difficulty of breathing became violent, to ease it.

Ten, a.m. The diffusion of air in the cellular substance covered the whole body; bowels not again relieved; pulse 85; very thirsty, and other feverish symptoms; feels easier in an upright position than in the horizontal; complains of pain over the os frontis; slight sediment in urine, but not much coloured. Bled to twelve ounces; continue mixture, with half an ounce of castor oil, in three hours, if the bowels are not open.

Eight, a.m. The emphysema increasing; severe pain in the head; pulse 60; inspiration painful; a cold perspiration at times shows itself; the bowels opened, slightly tinged with blood; vomiting ceased; delirious at times; the patient appeared to be in a sinking state. Continue mixture, with night powder; cold lotions applied to the head.

17. The emphysema not decreased; pulse 70; complains of great tightness across the thorax. The legs were bandaged from the phalanges to the ileum, so that gentle pressure might be applied to nearly the whole body; he experienced great relief in a short time from this plan. Continue mixture.

18. Much relieved; great part of swelling subsided; bowels obstinate; pulse 65; head much better. Ordered

Cathartic mixture, one ounce and a half;

Jalap, two scruples;

Mint water, to make four ounces. A fourth part every four hours.

19 and 21. Rapidly recovering; the emphysema quite disappeared; bowels regular; pulse 64.

28. I saw the boy to-day; he was walking about his room, and does not complain of any uneasiness but at the part where the fractures occurred.

The above case would lead us to imagine that a spicula of the fractured rib had punctured the vesicles of the lung at the moment he was covered with the earth, and that in consequence of his necessary removal a portion of the pleura costalis must have overlapped the puncture, and thus prevented at the moment the diffusion of air in the tissue. I have tried the above plan (recommended by Mr. Abernethy) in many cases since the above, and find it succeed far beyond what one could imagine.

VACCINATION DEFENDED AGAINST THE ATTACKS OF MR. BROWN.

Letter VI.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—The subject of Mr. Brown's 6th letter, re-vaccination, need not detain us long, because it has been already discussed in my paper on that subject, read at York, and published in your Journal for August 28, 1841.

It does, however, surprise me that any philosopher should consider re-vaccination as "evidently an expedient that most naturally occurred to every one who

had met with cases of small-pox succeeding to vaccination." On the contrary, it appears to me to be a most unnatural occurrence; for if the vaccine be, as it is acknowledged to be, a specific malady, it must exert a specific influence upon the constitution, and, according to all sound reasoning, this influence will not cease, nor will it be capable of renewal, except in the small number of cases which form the exception to, and therefore confirm the general rule.

It is truly astonishing to find Dr. Gregory, as quoted by Mr. Brown, giving the authority of his name and influence to the unscientific expedient of re-vaccination, and to find that he considers, where it is successful, the individual has opened a new policy of vaccine insurance. It is very lamentable that such statements should go forth to the world under such sanction, whereas it is impossible to reproduce the vaccine unless as cases of exception to the general rule, and the security is not increased by this recurrence; for if the vaccine do not preserve the constitution from itself, how can it secure that constitution from its analogous and more formidable malady? "If re-vaccination produce a full eight day pox with the areola, it stands *locò primæ vaccinæ* (we conclude the terms here used "*prima vaccina*" must be a typographical error), because, in point of fact, it is a first vaccination, and occurs only where an attempted first vaccination has been imperfect, or in the case of exception to the rule. And where no effect, or a local effect only is produced, the result of an animal poison introduced into a system incapable of receiving a constitutional influence, nothing is gained by re-vaccination. The individual remains in statu quo ante re-vaccination"—that is, re-vaccination, at least, is only a test of the perfection or imperfection of the preceding process, is therefore useless, and tends to unsettle the mind, and destroy confidence in the protective influence of vaccination.

Then comes the question, "Is it desirable to expose children after vaccination to the infection of small-pox rather than to keep them away from it?" This question should be answered on general principles. It is undesirable to expose children, under any circumstances, within the sphere of infectious malady, although they may have been previously the subjects of that malady. Therefore, it is undesirable to expose vaccinated children to the infection of small-pox; in fact, they should neither be wantonly exposed, nor sedulously guarded from exposure. All that should be done is to perfect the vaccine process, and then for children and adults to go about without fear, well assured that they possess the best possible (though not an absolute) security against the malignancy of small-pox.

It is not my intention to enter into the question of the identity of small-pox and cow-pox; but I shall here quote one passage from my communication of last July. "Admitting the force of Mr. Ceely's facts, I am anxious to draw your attention to a series of counter facts, not for the purpose of throwing discredit upon the former, but only in the hope of securing yet more attention to the subject, in the expectation of arriving at the whole truth, the only point on which the scientific mind can rest in peace."

"This series of facts consists in the different periods of incubation required for the two maladies—in the