expecting the waters to escape ; but only a little blood flowed. He brought away several portions of a solid substance, not unlike placenta after being well washed in water." Having acted thus far under the impression that the case was a placental presentation, the same belief was entertained by both gentlemen present, and turning was agreed upon. "So Mr. H., having removed his coat and bared his arm, introduced it through the mass into the vagina ; and believing he must reach the uterus, could not explain why he did not distinctly feel the child, but thought, at one time, he got the foot of the child : he, however, could not retain it ; he got hold of something else, and no doubt used some force with his hand. On withdrawing his hand, he brought away a firm, whitish substance, which appeared like a bean. Mr. H. likened it to a bile stone. Mr. — next introduced his hand ; he could not detect a fœtus. He, however, felt the spine ; and said he could feel a bag of such stones as the one brought away by his more active and more experienced companion. *Neither of them suspected that the hand had been introduced anywhere but into the uterus.* Numerous portions of the whitish soft mass, resembling, by candle-light, well washed placenta, were brought away. The woman died half an hour after these attempts, though there had not been much loss of blood : there had been a gradual loss, but no rapid flooding."

The third gentleman arrived (like Dr. Crosse) after the woman's death had taken place ; and in the presence of the four, a *post mortem* inspection was made. "The corpse was lying on the bed doubled up, in the usual position for examining during labour, with her clothes on." I (Dr. Crosse) introduced my hand into the vagina, and felt lacerated parts, but could not distinguish fœtus or os uteri. On withdrawing the hand, portions of a substance twice as big as a walnut escaped, of precisely the same appearance and consistence as what had been removed during life. Placing the corpse on the back, I made an incision in the course of the linea alba into the abdomen, extending from the sternum to the pubes ; and as soon as the peritoneal cavity was opened I discovered a quantity of coagulated blood, as much as eight or ten ounces, spread in a thin layer over the intestines. The uterus immediately presented itself : it contained an acephalous fœtus, plump and full grown in its limbs and body, and apparently not less than eight months old. The placenta was cut through. The membranes were entire ; the os uteri was open to the extent of a shilling ; *but it had never been dilated nor meddled with in all the examinations which had taken place during the supposed labour ;* for the uterus lay high above the pubes and forwards, pressing immediately behind the anterior parietes of the abdomen. Pulling aside the uterus, and also the intestines, so as to examine the cavity of the pelvis, I found the whole cavity filled with a morbid mass. Through the most compact part of this morbid mass, in the centre of the pelvis, anterior to the rectum, was a *lacerated opening leading into the vagina ;* and it was clear that the hand of the accoucheur had made its way through this passage into the peritoneum. One inexplicable circumstance was now explained: *the gall bladder was ruptured at its larger end ; several small white biliary calculi were amongst the viscera near it, and numerous others in the cavity ; one big as a nut, others varying in size from a pea to a bean. Altogether I collected fifty-six of these calculi ; not including two or three removed per vaginam during life.** Such a case as this, where the hand was forced through a morbid mass—through the vagina into the peritoneum—up to the gall-bladder—with the result of bursting it and delivering gall-stones, requires no comment.

I have now, sir, to apologize for having so long occupied your attention. I can only plead the vast importance of my subject. I have brought before you a branch of medical science which embraces within the range of its studies the physiology of generation, the laws of our organization,

the development of tissues, the pathology of the ovum (as yet among the arcana of medical science), and the pathology of the uterus : a branch of practice which includes not merely the phenomena of parturition and the management of labour, but also the important but as yet imperfectly understood class of diseases which affect the female generative organs, as well as the disorders of infancy and childhood, scarcely better known. I trust that it will be admitted that midwifery is worthy to be considered one of the medical sciences, and that in a practical point of view it equals in importance general medicine and surgery. I have endeavoured to prove how completely it has been neglected, and to demonstrate the melancholy sacrifice of human life that may be, that has been, the consequence. When such is the case, when an absolute necessity exists for its improvement and protection, I cannot forbear raising my voice against the present system of obstetric education, convinced that it leads to its still further degradation.

I trust that I may be pardoned for so great a trespass on your attention, in my effort to prove the danger to which the public must be exposed, when an obstetric education is totally neglected : and in my desire to show that the very attempt to supply this deficiency will produce precisely opposite results, give encouragement to presumptuous ignorance, and thus become only a delusion and a snare.

Henrietta Street, Cavendish Square, April 1853.

THE RESULTS OF RE-VACCINATION, AS OBSERVED IN 257 CASES.

By W. BIRD HERAPATH, M.D., Surgeon to St. Peter's Hospital, Bristol, etc.

IT may be interesting to the readers of the ASSOCIATION MEDICAL JOURNAL, and to the profession generally, if I communicate the results of re-vaccinating the inmates of two large public schools, with which I am professionally connected—the Red Maids' School, and Queen Elizabeth's Hospital. The former establishment contained, at the time of the experiment, 101 girls, and the latter, 158 boys.

The occasion of this extensive re-vaccination was the occurrence of small-pox. One case having shown itself in each establishment, it was thought desirable to prevent the extension of the disease by isolating the infected children, and to simultaneously destroy or remove the pabulum of the disease, by at once submitting the whole of the inmates to the process of vaccination.

The success of the experiment was perfect : not a single fresh case occurred. The two patients suffering from the disease passed through the stages safely and satisfactorily, without a single bad symptom, although they were both thickly covered with pustules. However, it is but fair to state that from the modified form of the pustules, the slightness of the accessory and secondary fever, and the subsequent progress of the cases, there is no doubt that they were cases of varioloid, rather than of variola : the disease in the girl being varicella umbilicalis ; and in the boy varicella coniformis, two varieties of varioloid, described by Erasmus Wilson in his work on *Skin Diseases*. Both these children had been vaccinated previous to their admission into the school ; and their arms bore the evidence of two distinctly foveolated moderately large cicatrices.

It is a wise regulation of the trustees, that evidence of vaccination, or of having had small-pox, shall be shown by each candidate for admission to these excellent institutions before their election : and it is part of my duty, as their medical officer, to examine each applicant and to report thereon ; and to exclude all who do not satisfactorily prove to have had the small-pox or to have been effectually vaccinated. Of the two hundred and fifty-nine inmates, only one admitted of any doubt on this point. This one case was reported to have been vaccinated, and was admitted by my predecessor ; but upon re-examination, at the date of

* Copeman's "Cases of Midwifery". By the late John Green Crosse, M.D. pp. 49-52.

this experiment, no mark or cicatrix was apparent. Seventeen had had small-pox without previous vaccination; and twelve are reported to have had small-pox subsequently to vaccination.

Of the two hundred and forty who had been vaccinated, there were three cases in whom four cicatrices were apparent; twenty-one in whom three cicatrices, more

or less perfect, were present; one hundred and sixty-three had two cicatrices; and in fifty-two one vaccine mark only was perceptible.

These cases have been arranged in a tabular form, more clearly showing these appearances, and more minutely describing the characters of the cicatrices and the results of re-vaccination. (Vide Table I.)

TABLE I.—Results of Re-Vaccination of 257 Cases, Inmates of the Red Maids' School, and of Queen Elizabeth's Hospital.

CLASS I. VACCINATED, 240.—A. Vaccinated, 230.

						Failures in toto.	Imperfect results.				Successful.	
	No. of Cases.	No. of Cicatrices.	State of Cicatrix.	Cases.	Totals.	Failures in both points.	Failures in single points.	Vesicles slight and abortive.	Vesicles irregular in figure.	Vesicles double and perfect.	Vesicles single and perfect.	
a	48	1	{ a 30 Distinctly foveolated { Large Small b 18 Faintly foveolated { Large Small	23	48	8	7	3	1	3	9	
				7 6 12		0 2 2	2 2 3	1 1 1	2 0 5	1 2 4		
b	158	2	{ a 112 Distinctly foveolated { α Large β 1 Large, 1 small γ Both small b 46 Faintly foveolated { α Both large β 1 Large, 1 small γ Both small	64	158	12	13	7	3	10	16	
				20		14	19	8	3	27	17	
				28		5	3	4	1	10	3	
				14		6	9	4	2	8	4	
				5		2	2	3	1	2	4	
				27		1	3	1	0	1	0	
c	20	3	{ a 3 Large β 2 Large, 1 small γ 3 Small δ 2 Small, 1 large α 3 Faint and large b 1 Faintly foveolated	10	20	6	12	2	4	10	8	
				3		34	48	22	9	58	36	
				3		3	2	2	2	2	5	
				3			1	1			1	
d	3	4	{ a 2 Distinctly foveolated and large b 1 Faintly foveolated and large	2	3	5	5	3	3	5	10	
				1			1			1	1	
						2				1	2	
e	1	0	1 No cicatrix apparent	1	1					1		

B. Varioloid and Variola after Vaccination, 10.

a	4	1	{ a 2 Distinctly foveolated b 2 Faintly foveolated	2		1				2		
b	5	2	{ a 3 Distinctly foveolated and large b 2 Faintly foveolated and small	3			1			1	1	
c	1	3	a 1 Distinct, 1 large, 2 small	2			1			1	1	
				1	10					1		
						1		2		6	2	

CLASS II. UNVACCINATED, 17.—C. Variola, 17.

a	10		a 10 Very much marked by Small-pox	10		2	2	1		5	2	
b	7		b 7 Slightly marked by Small-pox	7		2	3	1		2	2	
					17	4	5	2		7	4	

CLASS III. ILL IN VARIOLA, 2.

	2	2	2 Ill with Variola, and the occasion of the Experimental Investigation	2	2							
	250			250	250	56	73	36	17	88	70	

With respect to the ages of the patients, it should be premised that they all ranged between eight and seventeen and a half years; the one being the age at which the

girls are admissible to the school; the other at which they are discharged. The boys are admitted at from eight to ten years, and go out at from fourteen to fifteen years of age.

The following table shows their ages more clearly :—
2 cases from 8 to 9 years.

27	"	9	10	"
39	"	10	11	"
37	"	11	12	"
61	"	12	13	"
53	"	13	14	"
11	"	14	15	"
13	"	15	16	"
13	"	16	17	"
3	"	17	18	"

259 giving an average age of 12·91 years.

RE-VACCINATION. The lymph employed was obtained from the arms of four healthy children, who, of course, had been previously submitted successfully to the operation. It was taken on ivory points at the eighth day of the vesicle, and before the areola had attained its full development; it was, therefore, in its most active state. In all instances, two punctures were made in the left arm; or at least each spot was slightly scarified by the point of a lancet again and again at right angles. This is certainly the most successful mode of vaccination, when employing lymph dried on points.

The first effect of re-vaccination was the appearance of a vivid efflorescence, gradually extending from the second to the fifth day. This then subsided without the formation of a vesicle, if the system were still efficiently protected by the previous vaccination. Those cases on the eighth day merely appeared as slight, very minute dry scabs, just serving to mark the spots where the incisions had been made. In about fifty-six cases, or 21·4 per cent., this was apparent in both punctures. In seventy-three cases, or about 28·8 per cent., this was the effect in only one point. These have, in the accompanying tables, been registered respectively as failures in two points, and failures in one point.

In thirty-six cases, however, the effects proceeded to a step further. On the eighth day a conical elevated and inflamed base was formed, having an areola more or less

irregular in figure, with a minute vesicle on the apex of the cone; but this vesicle was neither umbilicated nor of any determinate form. These cases did not advance, but either gradually subsided, or at most dried up to a slight and imperfect crust, which invariably fell off at an early date. These were all registered as "abortive vesicles"; and were about 14·0077 per cent.

In seventeen of the cases the vesicles were larger, but had a more or less irregular outline, somewhat oval, with borders ragged from the existence of numerous smaller vesicles at the edges of the primary vesicle. These, probably, arose from the little patients having scratched and more or less rubbed and injured the vaccine vesicle during its formation. These generally became purulent, and dried at the same dates with the next and more perfect class, and the crusts endured the usual period; but as they were not perfect, they were excluded from the correct enumeration. This class is arranged under the head of irregular vesicles; and amounts to 6·61 per cent.

In seventy cases a single perfect vesicle, with a good and more or less evident areola, formed "the real pearl upon the rose". Most of these appeared as usual upon the eighth day; some were later, and not formed until the ninth or tenth day; but these were not a dozen in number. This class, therefore, contained about 27·23 per cent. There were also eighty-eight cases, in which two perfect vesicles were formed on the same arm. This class contained 34·63 per cent. The two last classes went through their subsequent stages of maturation, pustulation, desiccation, and desquamation, or rather dehiscence of the crust, in the usual way, and at the regular periods, as if they had not previously been submitted to vaccination. The perfectly successful class may therefore be said to include both the seventy cases of single vesicles, and the eighty-eight cases of double vesicles; and would therefore amount to 61·96 per cent.

In these per centages, all cases have been taken indiscriminately; they are the general results of the whole experiment. But upon analysing the facts a little more rigorously, some curious results become apparent.

TABLE II.—Results of Re-Vaccination, as shown by preceding Tabulated Experiments.

Cases.		Cases.	Description.	Re-Vaccinated.	Total failures in two points.	Partial failures.			Successful cases.		
						Failing in a single point.	Vesicles only slight and abortive.	Vesicles irregular.	Double perfect vesicles.	Single perfect vesicles.	Total double and single vesicles.
242	Vaccinated	230	Vaccination	230	51*	68	32	15	75	64	139
		12	Varioloid and Variola 2 in bed	10	1		2	2	6	2	8
17	Un-Vaccinated	17	Variola	17	4	5	2		7	4	11
259		259		257	56	73	36	17	88	70	158

* Case 11, vaccinated four months ago; 132, two years and five months ago; 214, six years and four months ago, did not take at all.

In the first place, seventeen cases who had had small-pox were experimented upon; these had not been previously vaccinated, but all more or less presented evidence of having suffered from this ruthless destroyer of human beauty.

(a.) Of these seventeen cases, there were four of perfect failures in both points = 23·53 per cent.

(b.) Of these seventeen cases, there were five in whom single points did not produce vesicles = 29·4 per cent.

(c.) Of these seventeen cases, there were only two in whom the vesicles were "abortive" = 11·765 per cent.

(d.) There were no irregular vesicles.

(e.) There were seven cases in whom double vesicles resulted = 41·2 per cent.

(f.) There were four cases in whom a single vesicle, perfect in shape, etc., made its appearance = 23·53 per cent.

(g.) The two last classes together make a per centage of successful vaccination after small-pox of 64·73.

There is a class of ten cases, in whom vaccination had been successfully performed, as is shown by decided cicatrices. Four of these have one mark; five have two cicatrices; and one case has even three cicatrices. The evidence of small-pox is also pretty strong in all of them: in some, however, the marks are only slight; but these were decided to have had the small-pox, only after a rigorous examination of the parents as to the age at which they had it, and the effects of the same epidemic upon others of their children who had it at the same time.

- (a.) There was one double failure=10 per cent.
 (b.) There was no single point failure.
 (c.) There were two cases of abortive vesicles = 20 per cent.
 (d.) There was one case of irregular vesicles = 10 per cent.
 (e.) There were six cases of double and perfect vesicles 60 per cent.

(f.) There were two of single perfect vesicles=20 per cent.
 Having disposed of the influence which the two minor classes, variola and varioloid (B and C, Table I), have upon vaccination, we may ask whether the distinct evidence of previously successful vaccination has any influence in preventing the reabsorption and constitutional effects of vaccine virus. For this purpose Table III has been compiled.

TABLE III.—*Effect of previous Vaccination upon the present Results, as estimated by the Distinctness or Indistinctness of the Cicatrices.*

CLASS I. CICATRICES DISTINCT.

	No. of cicatrices.	Cases.	Failures in double points. a	Imperfectly successful.			Successful.		Total successful cases. g
				Failing in single points. b	Vesicles abortive. c	Vesicles irregular. d	Double vesicles. e	Single vesicles. f	
a	1	30	8	9	4	2	5	10	15
b	2	112	25	31	16	6	45	24	69
c	3	19	5	5	3	3	4	10	14
d	4	2		1			1	1	2
Total.....163			38	46	23	11	55	45	100
Per cent.			23.313	28.22	14.11	6.742	33.742	27.60	61.350

CLASS II. CICATRICES FAINT.

a	1	18	4	4	3	1	5	4	9
b	2	46	9	17	6	5	13	12	25
c	3	1	0				1		1
d	4	1		1				1	1
			66	13	22	9	6	19	17
			19.70	33.33	13.6	9.09	28.8	25.75	54.54

From this it appears, that upon dividing the vaccine cicatrices into two classes—one distinct and well marked, the other faint and slight—the following results are obtained.

There were one hundred and sixty-three cases in the first class. These cicatrices were in everything all that could be wished as evidence of perfect vaccination. The per centage of entire failures amounted to 23.313.

Comparing this with the second class, in which the cicatrices are slight and indistinct, we find that the failures are about 19.79 per cent. This would appear as if successful and perfect previous vaccination exerted a slightly in-

creased preservative influence over the system, thus rendering its subsequent impregnation more difficult.

However, this view does not appear to be entirely borne out; for upon looking to the column g, or that of total success, we see that there is a per centage of 61.35 for the first class, and 54.54 only for the second. The other columns shew a remarkably close parallel between the two classes, and justify us in coming to the conclusion that the distinctness or indistinctness of the vaccine cicatrix has but little, if anything, to do with the question at issue. We will now examine a careful *resumé* of all the previous per centage results, as collated in Table IV.

TABLE IV.—*Per-Centage Results of the foregoing Experiments on Re-Vaccination.*

	Total Failures. a Per cent.	Imperfectly successful.			Successful in every respect.		Total successful cases. g Per cent.
		Failing in single points. b Per cent.	Vesicles abortive. c Per cent.	Vesicles irregular. d Per cent.	Double vesicles. e Per cent.	Single vesicles. f Per cent.	
Previous Re-Vaccination, 230 Cases	22.174	20.565	15.21	6.521	32.60	27.826	60.435
(a.) Cicatrices distinct, 163	23.313	28.220	14.11	6.742	33.742	27.60	61.350
(b.) Cicatrices faint, 66	19.700	33.33	13.6	9.09	28.800	25.75	54.54
Variola and Varioloid after Vaccination, 10 Cases	10.000	0	20.00	10.000	60.00	20.00	80.00
Variola without Vaccination, 17 Cases	23.53	29.4	11.765	0	41.20	23.53	64.73
Average results of the whole 257 Cases	21.40	28.8	14.0077	6.61	34.63	27.23	61.96

One fact of importance may be noticed in this place: I refer to Table II. It there appears in a note that three cases—No. 11, vaccinated four months ago; No. 132, vaccinated two and a half years ago; and No. 214, vaccinated six years and four months ago—did not again become sensible to vaccine at this short interval.

The inferences to be deduced from a consideration of these experiments are the following:—

I. That three cases re-vaccinated within seven years were not again susceptible to vaccine.

II. That vaccine, after the interval of from eight to seventeen years, does not prevent the reception of vaccine again, except in 22-174 per cent.

III. That the distinctness or imperfection of the vaccine cicatrix does not materially alter these results.

IV. That variola does not prevent the formation of the vaccine vesicle, except in about 23-53 per cent.

V. That the occurrence of small-pox subsequently to vaccination does not destroy the susceptibility of the human system to again receive the vaccine poison, except in about 10 per cent.

VI. That in all the previous cases, whenever the secondary vaccine vesicle assumed its perfect form, its subsequent history was the same as if the system had not previously laboured under vaccine variola or varioloid.

VII. It is probable that the protective influence of vaccination has diminished in consequence of repeated transmission of the vaccine matter through the human body.

VIII. It is desirable that re-vaccination should be extensively followed, as one means of giving additional protection to the masses.

IX. That when possible, the stock of vaccine should be renewed by going back to the original source.

32, Old Market Street, Bristol, March 1853.

CONGENITAL OCCLUSION OF DUODENUM: EXCRETION RESEMBLING MECONIUM PASSED FOR EIGHTEEN DAYS.

By FREDERICK MASON, Esq.

(Read before the Quarterly Meeting of the Bath and Bristol Branch, March 24th, 1853.)

CASE. M. O., born on December 31st, 1852. She was said to have appeared weakly, and to have cried but feebly, and vomited soon after birth. Her mother was attended during labour by a woman. I first saw her on the evening of January 7th, 1853. She appeared to be a small and delicate infant, and was said to have frequently vomited (from the day of birth) a dark brown matter. Besides suckling, she had been fed on gruel, etc. The bowels were not much acted on, but that which passed was said to be quite black. I directed her to be fed only from the breast, and to have a small quantity of hydrargyrum cum cretâ and rhubarb.

January 8th. By daylight she appeared jaundiced, the skin and conjunctiva being very yellow. She winced and showed signs of pain when pressed gently over the right hypochondriac region: the mother had noticed the same when washing her. She had not rejected either medicine or milk; yet there was still frequent vomiting of a dark chocolate-coloured matter, resembling coffee-grounds. The bowels had acted; the evacuations being black, or very dark green, of the colour and appearance of meconium, but somewhat stiffer in consistence. The tongue was clean and red, and constantly thrust out between the lips, rolled round, and drawn in again. She did not appear to have any inclination or sufficient strength for suckling. I prescribed two grains of hydrargyrum cum cretâ three times daily. This treatment, with the addition of a dose of castor oil, was continued for about three days, when the yellowness of the skin disappeared, and it acquired a natural colour; still the coffee-ground vomiting and the dark-coloured motions continued, and she became more and

more emaciated. There was no abatement of these symptoms before her death, which occurred on January 17th.

POST MORTEM EXAMINATION, fifteen hours after death. The body was very much emaciated. On laying open the abdomen, the first things which attracted notice were the stomach and duodenum; they were enormously distended, contrasting strongly with the very empty and shrunken condition of the remaining portion of the intestines. On raising the liver, the rudiments of a gall-bladder were seen lying flat, and like a small membrane, on the liver. On carefully dissecting the bile-ducts, the cystic was found to be impervious and threadlike. The hepatic and common ducts were pervious, and entered into the distended portion of the duodenum. The stomach and duodenum were filled with a dark greyish fluid; and when removed from the body, the duodenum at first appeared to be only a *cul-de-sac*. When the remainder of the intestines was removed, and the duodenal end sought, it was found very transparent and thin, and had inadvertently been separated by the knife from the duodenum. The interior of the stomach and duodenum was now examined, and a complete septum was found stretching across the duodenum, which completely closed it, and prevented the passage of anything into the jejunum. The whole of the intestines below the septum was in a normal condition. The other organs were healthy.

REMARKS. One of the most remarkable symptoms in this case appears to be the fact, that, notwithstanding that all communication between the portion of intestines below the duodenum was cut off from the stomach and duodenum, and also from the liver, by means of the septum in the lower part of the duodenum, yet an excretion, resembling meconium in colour, but differing from it in being thicker and more pasty in consistence, continued to be discharged from the bowels frequently during each day, until the time of the infant's death. On the morning of this day (17th January), there was one evacuation; and this must have completely emptied the bowel, as after death nothing remained in any part below the duodenum.

On referring to the second edition of Müller's *Physiology*, page 165, I find it stated that "it is the excrementitious matter of the bile of the foetus, which collects together with intestinal mucus in the lower part of the canal, forming the meconium."

In this case it would appear that the bile could have had nothing to do with the formation of this excretion, all communication with the liver being cut off by the occlusion of the duodenum below the entrance of the bile-duct.

5, Cleveland Place East, Bath, March 1853.

CASE OF STOMATITIS MATERNA DURING PREGNANCY.

By WILLIAM HENRY CULLEN, M.D.

THE following case seems to bear on others contained in an article in the *Periscope Review* at p. 213 of the *ASSOCIATION JOURNAL* for 11th March, entitled "Stomatitis Materna". I send it for publication, as you therein express a wish to have an account of any similar cases which may have occurred in the experience of members.

CASE. In May 1849, I was called to see Mrs. J., who was suffering severely from salivation, in the sixth month of pregnancy with her sixth child. The discharge was so profuse as to compel her to have always a small basin at hand to receive the stream of saliva which would produce vomiting if she attempted to swallow it. No mercury had been taken, and, with the exception of slight heartburn, the general health was good. I prescribed antacids with some relief. In June, the symptoms all returned with increased severity. The tongue and lining membrane of mouth were unnaturally clean, of a deep red colour, and covered with small ulcers. The sides of the tongue were furrowed with deep cracks or fissures, so that talking produced great pain. Only gruel and arrowroot could be taken, (though the appetite was