AZTEC DWARF (MALE).

AZTEC DWARF (FEMALE).

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ART. I.—*An Account of two remarkable Indian Dwarfs exhibited in Boston under the name of Aztec Children.* By J. MASON WARREN, M. D. [With two plates.]

Two children have appeared in Boston so remarkable for their smallness of stature and the peculiarities of their mental faculties, that they seem to merit some public notice. I propose to state, in the following paper, simple matters of fact, without attempting any speculations in regard to them.

The children are a boy and girl, and from the appearance offered by their dentition, hereafter to be given, the former is from seven to eight years of age, the latter from four to six; allowance being made for a retarded condition of these organs, on account of the otherwise abnormal want of development of the whole body. The boy is thirty-three and three-quarters inches in height, and his weight twenty and three-eighths pounds. The girl is twenty-nine and a half inches high, and her weight seventeen pounds. Their skin is of a dark yellowish cast, lighter than what is generally attributed to the Indian in this part of the country, and somewhat darker than that of the mulatto. The hair at the middle parting rises at an inch distant from the root of the nose, but on each side a fine hair descends quite to the edge of the orbit. In the boy, it is black, coarse, and quite stiff—in the girl, wavy and curled. The eyes are large and lustrous. The nose of the boy is quite prominent, and as seen in profile somewhat arched, but seen in front it is a little flattened at the apex; the nostrils are expanded, this feature being less marked in the girl than in the boy. The line of the nostril is oblique, instead of being longitudinal as in the Caucasian race. The separation of the cartilages at the apex is not easily distinguished. The supra-orbitar ridges are very prominent, the head

receding directly behind. There are no superciliary prominences or tubercles. In the boy a ridge, with its convexity towards the median line, extends from the external angular process of the frontal bone along the edge of the parietal bone, and nearly joins the elevated occipital ridge. The occipital bone is much flattened from behind forwards. The continuation of the sagittal suture through the frontal bone to the ossa nasi, corresponding with the fœtal division, is also elevated into a ridge in the male, but not in the female. A circumstance of some interest is the situation of the external auditory foramen, which is much more in a line with the orbit than usual, a fact I have observed in some small heads of low intelligence. There are no indications that artificial compression has ever been used.

In both the children, the upper jaw projects considerably beyond the lower, the mouth remaining partly open in the boy from a dropping of the lower jaw, which leaves the teeth exposed.

The combination of these two circumstances, connected with a slight escape of the saliva, which may be partly attributed to the irritation caused by dentition, gives a more unintelligent expression to the face when at rest than it would otherwise have. The upper lip is large, and appears swollen as in strumous subjects. The chin is receding.

The anatomical proportions of the girl seem to be in most respects as perfect as could be desired; with regard to the boy, the following are worthy of notice. The forearm is generally maintained in a slightly bent position, and in a state of semi-pronation, permitting neither entire extension nor perfect supination, forming laterally an external obtuse angle with the arm. The little finger is malformed, being shorter than usual, its tip extending only a little beyond the middle joint of the adjacent one; the last joint is inflexible, and the natural folds on the back of the phalanges, which denote its position, are wanting. A slightly webbed appearance is given to the fingers by an increased development of the interphalangeal folds of skin. The hand itself is quite short, broad, and thick.

With regard to the organs of generation, there is a slight malformation of the penis, the urethral aperture being more open than usual, thus approximating to hypospadias. The frenum is wanting. The testicles have not descended into the scrotum, and cannot be distinguished in the groin.

The position generally assumed by these children is peculiar, and may well be compared to that of some of the Simian tribe. The head, particularly in the boy, is thrown forward, as if placed more in advance on the spine than usual. This is accompanied with a slight stoop of the shoulders, and bending of the knees, the whole attitude being well delineated in the accompanying graphic sketches by Dr. Dalton. (See Plates I. and II.) The motion is unsteady, as in the tribe of animals already referred to, the boy having a swinging gait, not unlike that of a person slightly intoxicated.

The measurements of some parts of the body and skeleton are as follows:

Boy.—Height - -	33¾ inches.	
Spine - - -	16 "	
Arm (humerus) -	6¾ "	
Forearm - -	5½ "	
Hand, length - -	4 "	Breadth 2¼ inches.
Femur - -	9 "	
Tibia - - -	7½ "	
Left lower extremity -	17½ "	Foot 5 inches.
Circumference of chest -	18½ "	
" waist -	17 "	
" pelvis	17 "	
Head.—Circumference over hair and scalp - -	13 "	
Antero-posterior diameter	4¼ "	
Bi-temporal " not quite	4 "	
From one auditory passage to the other, around the forehead	7½ "	
Do. over top of head -	8 "	
Do. around the occiput -	5½ "	
Fronto-occipital curve -	8 "	
Ear - - -	2 "	
Facial angle - -	60 "	

The measures of the head were taken over the hair, and of course include the scalp, so that, if allowance be made for these, the actual measurement of the bone would be at least an inch less in the circumference of the head, and proportionately in the others.

The following is the state of dentition in the boy, being in part anomalous. The first four permanent molars, which appear between six or seven years of age, are present.

Upper Jaw.—2 Permanent molars.
3 of the deciduous molars—one on the left, two on the right, having lost one since he has been here.
2 Cuspidati, both probably of first set.
2 Lateral incisors, deciduous.

Lower Jaw.—2 Permanent molars.
2 Deciduous molars.
2 Permanent central incisors.
2 Lateral incisors.

On the left side of the lower jaw, in the place of the cuspidatus, is a large worn tooth, similar to a molar of the first set, and which might easily be taken for one; there is no corresponding tooth on the other side, the cuspidatus being wanting, and the first milk molar coming next to the lateral incisor.

The pulse, observed at different times, varied from 80 to 100, irregular in rhythm, much increased on the slightest exertion.

Girl.—Pulse regular, from 80 to 90. Resp. 20.

Height - -	29½	inches.	
Spine - -	15½	"	
Humerus - -	6	"	
Ulna - - -	5	"	
Hand - - -	4	"	
Lower extremity -	15	"	Foot, 4½ inches.
Circumference of chest	19	"	
" waist	16	"	
" pelvis	16	"	
Head - - -	13	"	in circumference.
Antero-posterior diameter	4⅓	"	
Lateral "	3¾	"	
Over top of head, from one auditory passage to the other	8	"	
Ear - - -	1¾	"	
Facial angle - -	65	"	

Teeth, 10 in each jaw, deciduous, normal; all perfectly sound and white.

Third toe short, same length as fourth.

It may not be uninteresting to state that these children were vaccinated, first the boy, and eight days after the girl was vaccinated from her brother. The disease took well, and went through the usual normal stages. About three weeks after the vaccination, both were attacked on the same day with chicken pox, which pursued a perfectly regular course, and was unattended with any strongly-marked constitutional symptoms.

A question naturally arises to an observer first visiting these beings, whether they belong to the human species, and it is only after the eye becomes accustomed to their appearance that the brotherhood is acknowledged.

I will not here enter into a description of their appearance: it is rather agreeable, in a degree intelligent, and with nothing repulsive, as would be expected in the usual abnormal specimens of the human race. They are both quite apt to comprehend what is said to them, particularly if accompanied by appropriate gestures, although any continued conversation evidently could not be understood. They are, in fact, without any language of their own. They seem to acquire words readily, and since their sojourn in Boston, have learned to repeat a number, such as "Papa," "Mamma," "Ellen," "Take care," &c., and evidently are capable of instruction to a limited extent. They are quite imitative, and in this respect nothing escapes them. With regard to any communication by signs or language which they may have with each other, it appears to be at present not much greater than what might be expected from two intelligent individuals of the canine race, although in the expression of their feelings they occasionally make use of an unintelligible jargon of

sounds together, which by some might be interpreted as an attempt at language.

As to their habits, they are those of children of two or three years of age, requiring the care of superiors to feed and clothe them. The propensity to constant feeding may also be considered as remarkable, and although at present under the intelligent management of the person who has them in charge, their diet and regimen have been reduced to a system; yet, if left to their own inclinations, they would undoubtedly keep themselves filled with food. With the exception of a catarrhal affection, which might be expected from their exposure to a cold climate, their health seems good; and their strength, as manifested by an almost incessant movement from morning till night, is not to be complained of.

The most remarkable point of interest in these children is the size of the head, and in this respect, considering the amount of intelligence, they are the smallest which have come under my observation. For the sake of comparison, I propose to give the measurements of some very small heads, those belonging to infants, idiotic children, and also the heads of the quadrumana, who most nearly approximate to man; this method, apparently, being the best adapted to place the present specimens in a striking point of view.

It has already been stated that the heads of these children are about thirteen inches in circumference, and if the hair and scalp be allowed for in the measurement, an inch may be deducted, making them twelve. The antero-posterior diameter is four and one fourth, bi-temporal about four.

The head of an infant at birth was as follows:—

Ant.-post. diameter	$4\frac{3}{4}$ inches.
Bi-temporal	$3\frac{3}{4}$ "
Circumference	$13\frac{1}{4}$ "
Over top of head from ear to ear	8 "
Occipito-frontal	$8\frac{1}{4}$ "

A girl four and a half years old—

Circumference	20 "
Occipito-frontal	13 "
Over head from ear to ear	13 "

A boy nine years old—

Twenty-two inches in circumference.

Head of an idiot child from Spurzheim's collection—

Circumference	14 inches.
Ant.-post. diameter	5 "
Bi-temporal	$3\frac{3}{4}$ "
Over top of head	$7\frac{1}{2}$ "

Head of the remarkable dwarf Babet Schreier, of whom a description will be given below, thirteen inches, four lines, measured over the most prominent parts of the forehead and occiput.

Idiot boy, ten years old, with a small head, forty-eight inches high—
Circumference of head, over hair, 15¾ inches.
Young chimpanzee, twenty-six inches high—
Circumference of head, 13 inches.
Head of adult chimpanzee—

Ant.-post. diameter	4½ inches.
Over top of head from ear to ear	8 "
Occipito-frontal	7½ "
Circumference	13 "

Young orang-outang—

Circumference	13 inches.
Ant.-post. diam.	4½ "
Lateral "	3¾ "
Curve over top of head from ear to ear	8 "
Occipito-frontal curve	7½ "

For the further illustration of this point, we will adduce the instance recorded by Pinel, in his "Treatise on Mental Alienation," as exemplifying "that degree of idiocy which is the extreme limit of human degradation, in which even instinct no longer exists." This sketch is accompanied by "a design of the cranium of the female idiot, who was at the Salpêtrière in 1805." She resembled the sheep both in her tastes, her mode of life, and the form of her head. She had an aversion to meat, and ate with avidity both fruit and roots; drinking nothing but water. Her demonstrations of sensibility, of joy and grief, were limited to the words, imperfectly articulated, "Bé," "Matate." She would alternately flex and extend the head, and rub it against the breast of her nurse. If she desired to resist or express her dissatisfaction, she sought to strike with the crown of the head inclined. She was extremely choleric, and many times I saw her in the bath, making efforts to get out, and repeating, in an acute tone, "Bé, bé, bé." The back, loins, and shoulders were covered with flexible black hair from one to two inches in length. She could never be induced to sit in a chair or upon a bench, even to take her food. No sooner was she seated than she slipped down upon the earth, and was accustomed to sleep with her extremities closely gathered about her after the manner of animals. Pinel examined this case, and furnished us with the dimensions of the head of this idiot compared with those of the cranium of a little girl of seven years.

	Idiot of 11 years.	Girl of 7 years.
Length of cranium	5 in. 11	7.08
Breadth	3 " 53	5.11
Depth	5 " 11	6.29

The resemblance these children bear to some of the lower order of animals, especially those of the Simian tribe, is quite remarkable, and we are reminded of Lamarck's theory of the gradual development of the human being from the

lower created orders, and the transformation of quadrumana into the bimana. In regard to their relation to the quadrumana, we observed in the boy an approximation to the frontal crest of the orang; the supra-orbitar ridges, and the parietal and occipital crests of the adult chimpanzee; the projecting jaws, the elongated forearm and its semi-flexed position; finally, the stoop of the whole body, with the air and appearance, forcibly reminds us of the monkey.

It has been thought that, in connection with the description of these children, it will not be found uninteresting to present brief sketches of two or three of the most celebrated dwarfs of whom history furnishes an authentic account, chiefly with a view to display their intellectual development.

Babet Schreier.—This dwarf was six inches in length at birth, and at the age of upwards of seven years, measured only twenty-three. Her weight at birth was a pound and a half; at the age just mentioned, it was eight and a quarter pounds.

"The intellectual functions of this girl are very little developed for one of her age; she has very little more intelligence than a child four years old. Her disposition is good; she is inquisitive, and has considerable power of imitation. If instructed in the principles of education, she would probably learn with ease. She is much more disposed to mirth, and more docile in the afternoon than in the forenoon, and testifies her satisfaction by a more joyful air, and greater pliancy of character.

"Being unaccustomed to fix her attention or to listen to what is said to her, she comprehends with some difficulty, and her judgment, for want of exercise, is slow and perplexed.

"She did not begin to speak until four years of age; but she understands all that is said to her. She actually endeavours to express her ideas, which seem to flow in rapid succession in a kind of German jargon to which she is accustomed, and accompanies her attempts with many gestures. I am convinced, by careful observation, that this little being enjoys the same natural, moral sensibility as any other individual."

We find, in the "*Histoire des Anomalies*" of Saint Hilaire, an historical account of some remarkable dwarfs, and particularly of the celebrated Jeffrey Hudson, Bébé, and Borwilaski.

Jeffrey Hudson was born about the time of Charles I., at Oakham, England; at the age of seven or eight, he was presented in a pie to the queen, his height then being eighteen inches. This stature he retained till about thirty, when he suddenly increased to three feet nine inches. In his character as a courtier and a man, he seems to contradict the inferences of writers of the following ages, that dwarfs "are beings more degraded in the moral than in the physical capacity." For he finally became a captain in the royal army, and after the Restoration returned to England in 1682, where he died at the age of sixty-three years, accused of treason. Perhaps it may not be uninteresting to medical men, in the present state of medical ethics, to find that about 1636 he was sent *to France to procure a midwife for the queen.*

Bebe.—A sketch of Bébé will be found far more interesting in a scientific point of view.—Nicholas Ferry, commonly called Bébé, was born in Novem-

ber, 1741, of parents of the ordinary stature; he was born at the seventh month, after a very remarkable pregnancy; at birth, he measured seven or eight inches, and weighed less than a pound, yet the labour lasted forty-eight hours. It is said that he was carried to church on a plate covered with tow, and a wooden shoe was his cradle. His mouth was too small for the nipple of his mother, and therefore he sucked a goat; he had the small-pox when six months old; at eighteen months he began to speak, but was more than two years before he could walk. At five years of age, he was carefully examined by the physician of the Duchess of Lorraine; he then weighed nine pounds seven ounces (French), and his height was about twenty-two inches, being formed like a young man.

His intellect is represented as feeble; the utmost that could be taught him being to dance and beat time. Of reading, or religion, he had no conception, and after a separation of a fortnight he did not know his mother. He was susceptible of passions, such as desire, anger, and jealousy, and his discourse was without connection, and his ideas confined. At the age of fifteen, he was still lively, gay, and *débonnair;* but puberty wrought a serious change, his health declined, his features lost their smile, and, with every appearance of premature old age, he died June 9th, 1764, at the age of twenty-two and a half.

Skeleton of Bébé.—Ossification perfect.

Cranium greatly depressed between the two parietal and the occipital projections.

Nose projecting.—Nasal bones very large at their lower extremities.

Great toe much elongated.

The principal dimensions of the skeleton were—

Total height			2 feet, 9 inches, 6 lines.	
Length of upper extremities			1 foot, 2 "	9 "
" humerus - -			7 "	3 "
Hand - - - -			3 "	" "
Lower extremity - -		1 "	4 "	6 "
Femur - - - -			9 "	" "
Foot - - - -			4 "	" "

Borwilaski was a Pole, and, like Bébé, of the court. Born at the full time, he was distinguished for his wit and learning. He could read, write, and speak both French and German. The writers of his time call him a perfect but diminutive, and Bébé an imperfect man. When twenty-two years old, Borwilaski was twenty-eight inches high; at this age he was married, and had afterwards several children, well-formed, and of the usual size. The paternity of Borwilaski was not received by all without credulity, even in his own days, and it sometimes gave rise to pleasantries which were supported with courage and patience.

Other dwarfs are mentioned; but I will only refer to the betrothed of Bébé, Theresa Souvray, of about his own age, but with whom his marriage was prevented by death. At the age of seventy-three, she was exhibited in Paris,

appeared chatty and gay, and danced with her sister, two years older, the height of the latter being only three and a half feet.

How far can these children, judging not only from their general size, but also from the smallness of the head, be supposed idiotic? Esquirol, in his "Treatise on Insanity," Am. ed. p. 466, defines the idiotic character at some length, but in a subsequent page does not consider it to depend upon any particular volume or form of the head, notwithstanding it is proper to observe that the smallest heads appertain to the most degraded class of idiots. And again, Gall, in the "Anatomy and Physiology of the Nervous System," has figured two very small crania, and limits intelligence to crania which are only from fourteen to seventeen inches in circumference.

In the report of Dr. Howe, before the Massachusetts State Legislature in 1850, two idiots are compared; the one with the smallest capacity for brain was decidedly more bright, quick, and intelligent than the other. The instance recorded by Pinel has already been given.

From a careful comparison of the observations of different authors with those we have ourselves made and here recorded upon these children, we are disposed to believe that, although of very low mental organization, they cannot be pronounced idiots of the lowest grade. Their senses of sight, hearing, smell, taste, and touch, as well as that of tact, seem complete. Their degree of intelligence has, in our opinion, decidedly improved since their arrival in Boston; and this capacity for education appears far greater than in the lowest idiots.

We need hardly advert to the idea that these singular creatures belong to any peculiar tribe of dwarfs; for it is a fact universally allowed by physiological writers, and expressly laid down by Geoffroy St. Hilaire, that dwarfs are impotent with individuals of ordinary height, and even among themselves, as proved by the experiments made by Catharine de Medicis and the Electress of Brandenburg: "Les plaisirs de l'amour les énervent promptement, et plus souvent leur deviennent funestes. C'est en partie à cette cause que, d'après quelques auteurs, il faut attribuer la vieillesse anticipée, et la mort de Bébé." And in a note he says, "Borwilaski is, at least to my knowledge, the only dwarf who is an exception to this rule. Is an exception in such a matter sufficient to destroy the rule? I can only refer to what has been said above of the paternity of Borwilaski."

[In order to explain some observations in the preceding paper which would otherwise appear obscure, it should be remarked that the children who are the subjects of it were exhibited in Boston as belonging to a race of dwarfs, the descendants of priests from an hitherto undiscovered city in Central America. The peculiar form of their heads, so exactly represented in the Travels of Mr. Stevens, as carved on some of the monuments in that region, and those on some of the Egyptian relics, seemed to favour this idea, as it was supported by a most ingenious and romantic story, descriptive of their discovery and transportation to America. It is now pretty well understood that they belong to some of the mixed tribes of Indians inhabiting Central America, and we hope hereafter to procure some exact details as to the peculiarities of their parents.]

ART. II.—*Case of Gunshot Wound in Left Axilla—Ligature of Left Subclavian, and subsequent Ligatures of Brachial and Subscapular Arteries.* By JOHN WATSON, M. D., Surgeon to the New York Hospital. Reported by WILLIAM H. MORTON, M. D., of Paterson, N. J.

Nov. 25*th*, 1850. Post Van Pelt, of Paterson, N. J., boy, aged fourteen, of good constitution, was accidentally shot in the left axilla. The shot, to the number of twelve or fifteen, entered the axilla nearly at a right angle with the trunk of the body, and separately made but little external laceration. I first saw the patient three-quarters of an hour after the receipt of injury. There had been profuse arterial hemorrhage, which had ceased spontaneously.

Appearance of patient.—Skin cold, pale, and shrunken; pulse in sound extremity feeble and intermitting, and no perceptible pulse in injured arm.

Treatment.—Cold applications, and an anodyne at night.

26*th*. Patient has passed a comfortable night. Pulse in the sound arm 120; and, if not deceived by the pulsation of my own fingers, I detect a slight pulsation at the wrist of the injured extremity. The whole shoulder, arm, and vicinity of wound are much swollen. Cold dressings continued.

28*th*. Pulse 100; pulsation in the injured arm increasing slightly in regularity and fullness; and the swelling has somewhat subsided. The patient complains of no pain. Continue cold dressings.

29*th*. Much about the same; bowels opened by enema.

Dec. 3*d*. Patient improving. The swelling has nearly subsided. The wound is suppurating. The pulse on sound side soft, and beats at 110. Circulation in injured extremity becoming more regular each day. The patient complains of pain in hand and forearm. Ordered poultice of linseed meal to wound.

4*th*. Having left patient's house but a few steps, I was called back, and found considerable arterial hemorrhage, which was controlled at once by pressure over the subclavian artery. During the next thirty-six hours, the hemorrhage recurred five or six times, some four or five pints of blood being lost; which hemorrhages always yielded to compression on subclavian artery. Cold dressings ordered to be reapplied.

5*th*. Pulse on the sound arm 120, and hard; and faint pulsation in the injured arm. I noticed a small tumor forming in axilla of injured side, which proved to be a false aneurism. Tumor increasing rapidly; by night being as large as a goose's egg. On consultation, it was decided to ligature the subclavian artery.

6*th*. Having requested the aid of Dr. Watson, he proceeded to ligature the subclavian artery beyond the scaleni, while the patient was under the influence of ether. At this time the pulse at the wrist was imperceptible, but the aneurismal swelling in the axilla beat strongly. The steps of the

CASES

OF

OCCLUSION OF THE VAGINA,

WITH

RETENTION OF THE CATAMENIA,

RELIEVED BY AN OPERATION.

BY

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FROM THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

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CASES

OF

OCCLUSION OF THE VAGINA.

The cases of occlusion of the vagina, successfully relieved by an operation, are rare, and the mode to be pursued under the different circumstances in which this occurrence presents itself has not been very fully pointed out by writers on the subject. In the first of the following cases, some embarrassment was therefore felt as to the proper course to be adopted.

The principal authorities for reference were Boyer, Boivin, Amussat, and the case of Professor Mussey. The former of these details two or three very interesting cases, as showing the anatomical peculiarities which are likely to exist, but advises against the operation in nearly these words: "An opening into the bladder and rectum is not the only accident to be dreaded in this operation. Inflammation of the womb and of the neighboring parts has, to my certain knowledge, caused the death of two females, on whom it had been performed." Madame Boivin, after observing that in these cases of atresia the prognosis is worse, the diagnosis more difficult, the treatment more uncertain, and the operations more doubtful and delicate, than

in cases of simple closure, recounts the three instances recorded by Boyer, in one of which the celebrated Dubois was called in consultation. The result of these cases, however, was fatal, as also that of another, in which an eminent surgeon unfolded, as it were, the urethro-rectal septum, punctured the tumor, and thus gave issue to the retained fluid, for the first few days with the prospect of success. The case of Amussat is very instructive, and detailed at considerable length in the number of this Journal for February, 1837. In many respects it corresponds with one of our own cases hereafter given, and was operated upon with perfect success. The case of Professor Mussey is also detailed in vol. xxi. of the same Journal; and in the number for July, 1850, another, with the appearances upon a post-mortem examination, is described by Dr. J. B. S. Jackson. "In regard to an operation," he says, "which seemed to have been so imperatively required, a consultation was held with two or three professed surgeons, when the occlusion was discovered, but the opinions were against it."

Some writers on surgery, Chelius for instance, have given general directions for the management of closure of the vagina, whether from accident or congenital malformation. But sufficient detail is wanting as to the diagnosis in retention of the menstrual secretion, and the mode of giving an external outlet when the anatomical relations of the parts have been altered by inflammation or extensive gangrene. These considerations have led me to offer the following cases, with the hope that they may be of service to any surgeon who should meet with similar instances in the course of his practice. In three, it will be seen that the occlusion was the result of parturition; two were congenital; the last, accidental.

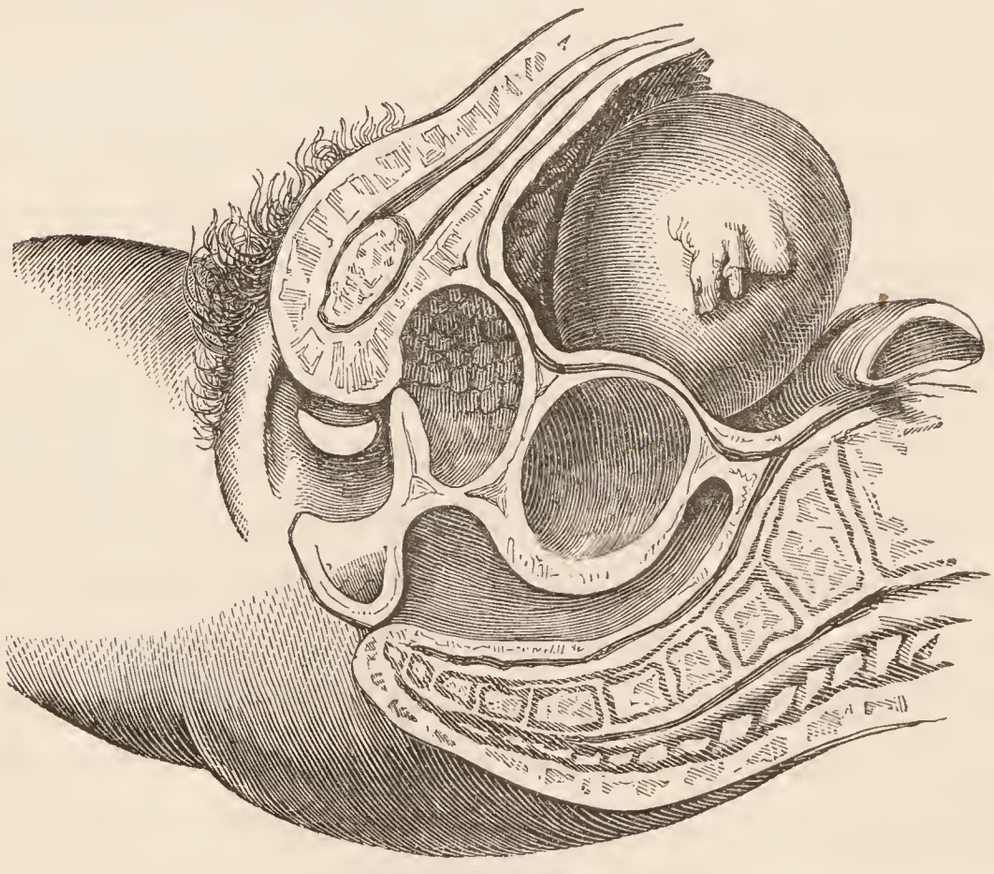
Case I. — This patient was a married woman, twenty years of age. A year before, she had been delivered, by means of instruments, of a dead child, after a labor of four days; very severe inflammation followed, attended with sloughing of a portion of the vesico-vaginal septum, so that the remains of the bladder, falling down, became adherent to the posterior wall of the vagina, and obliterated the passage. The urethra also in part sloughed, the water escaping at a valvular opening between the remains of the neck of the bladder and the os pubis.

The menstrual secretion had been retained from the period of her confinement; at first she suffered at the regular periodical returns of the catamenia from pain and distension of the abdomen, with a sense of bearing down in the rectum. Latterly, the pain has become almost constant, at times amounting to a feeling as if the abdomen would give way, and so acute as only to be relieved by the persistence in large doses of narcotic substances. From these causes she was almost bedridden, and reduced to the lowest degree of emaciation.

The constant dribbling of urine had rendered the orifice of the vagina so extremely sensitive that it was found quite impracticable to make any examination until the patient had been placed under the influence of ether. The cul-de-sac left at the commencement of the vagina was just sufficient to admit the end of the forefinger. From its upper part the urine escaped through a valvular opening, so disposed that a probe could not be made to enter the bladder. On passing the forefinger into the rectum, a hard and slightly elastic tumor could be felt about two inches from the external orifice, pressing backwards and partially obstructing the bowel. The other hand being placed on the

abdomen distinguished a large globular mass rising above the brim of the pelvis, pressure on which communicated a distinct impulse to the finger in the rectum.

The above examination led to the conclusion that the tumor felt in the abdomen and rectum was the uterus and upper part of the vagina distended by the menstrual fluid. The question next arose how was this tumor to be attacked: the most feasible plan seemed to be to puncture it by the rectum. The impossibility of keeping a passage open in this direction was an objection to this course, as affording only a temporary relief. An attempt to dissect the bladder from the vagina, supposing its posterior wall destroyed, and the relation of these organs to be as in the accompanying illustration by Dr. Dalton, would almost inevitably create an opening into its cavity.



NOTE. — The large rounded tumor, in the upper part of this plate, is the distended uterus; immediately below and connected with it, so as to form one cavity, is seen a section of the upper part of the vagina, in front of which lies the bladder; posterior to both of these is the rectum.

In consultation with Dr. Morrill Wyman, the physician of the patient, the plan which was afterwards put in execution was agreed upon; and in the operation, which was performed April 11, 1850, I was assisted by Dr. Wyman, Dr. S. D. Townsend, and Dr. C. G. Adams.

The patient being brought as completely as possible under the anæsthetic influence of sulphuric ether, was placed on the edge of the bed, with the limbs supported, as in the operation for lithotomy, and the labia held apart by silver hooks. The forefinger being now placed in the rectum to serve as a guide, a transverse incision was made across the lower part of the vagina through its parietes, so as to expose the cellular membrane lying between it and the rectum. This dissection, passing under that portion of the vagina which served as a fundus to the bladder, was continued upwards beween these organs for two or three inches, until the distended cul-de-sac could be distinctly felt.

A very large trocar and canula was now plunged into the tumor, and, when withdrawn, a quantity of thick tarry-looking fluid began very slowly to flow through the tube; about a pint was allowed to escape, when the canula was withdrawn, being too short to be left with safety, and a female catheter introduced in its place.

In the afternoon of the day of the operation, the patient was comfortable, and greatly relieved from the previous distressing sense of distension. At intervals, however, there were severe contractile pains in the uterus like those attending the first stages of parturition, and by them the catamenial fluid was forcibly expelled. Spirituous applications were made to the back, and an opiate administered, by which her sufferings were temporarily relieved.

On the following day I learned that she had passed an uneasy night, the pains continuing at intervals, causing a

free evacuation of fluid. Her mother estimated that at least two quarts had passed through the instrument, with the effect of greatly diminishing the tension of the abdomen. Towards evening she had an access of pain and fever, with some obstruction to the discharge; the bowels being constipated, she was ordered a cathartic of castor oil. On the thirteenth, the report was that the medicine had operated with much relief, and the uterus had again resumed its action. This organ could now be felt above the pubes, somewhat tender on pressure, and contracted into a small, well-defined tumor.

For about a week she improved steadily, the discharge continuing at intervals. It was with the utmost difficulty that any instrument could be retained in the opening; and when displaced, as it was once or twice by her restlessness, the aperture was found to have so contracted as to render its replacement almost impracticable; especially as her complaints were very great from the excessive sensibility of the external organs.

After the lapse of this period, she was attacked with a catarrhal affection, during which, from some exposure or error in diet, she was suddenly seized with violent pains in the abdomen, meteorism, great sensibility on pressure, with other symptoms denoting peritoneal inflammation. These were gradually relieved by treatment, the patient barely escaping with her life. During this attack the canula had necessarily been removed, and every measure for maintaining the opening abandoned. It was therefore a subject of interesting speculation, whether, at the next catamenial period, the aperture would be pervious, and also if the uterus, after so great distension, would resume its normal functions. To the great satisfaction both of the patient and myself, the menstrual secretion came on naturally about

four weeks from the date of the operation, and gained an exit without difficulty.

The subsequent improvement was gradual, and only interrupted in the course of the summer by an attack of varioloid, which disease prevailed in the house.

I have recently heard from this lady through her mother, who informs me that from a mere skeleton her daughter has become quite fleshy; that she has regained her health and strength so as to be able to use exercise on horseback; and that the menstrual secretion is natural at the regular periods.

Case II. — On February 4th, 1850, I was applied to by Mrs. B., aged thirty, in consequence of the suffering produced by the retention of the menstrual fluid from an occlusion of the vagina subsequent to parturition.

In the August previous, she had been delivered of her first child after a labor of four days, during a portion of which the head of the infant remained in the pelvis. Instruments were used, but ineffectually, and the delivery was ultimately accomplished without them; very severe inflammatory symptoms, attended with a purulent discharge, followed; and finally it was discovered that the vagina had become entirely obliterated. From that time the return of every catamenial period has been marked by the most distressing pains in the back and abdomen, lasting three or four days, and progressively increasing in violence: this was accompanied with some constitutional disturbance, and these repeated attacks have gradually impaired her health.

An examination showed that the vagina was entirely closed, and hardly a perceptible cicatrix could be detected to indicate the line of union. At the lower part of the

vulva, an orifice was discovered large enough to admit a probe, which, on being introduced, could be passed up a distance of three inches in the direction of the uterus, and was distinctly perceived through the recto-vaginal parietes by the finger introduced into the rectum. At this period, no abdominal or rectal tumor was ascertained to exist. It was determined to etherize her, and attempt to restore the vaginal passage.

After having brought the patient fully under the influence of the anæsthetic agent, a bougie was passed into the fistulous opening. This was followed by the finger; and, by proceeding carefully in this way, by distending and separating the adherent parts, a free opening was made of about three inches and a half or four inches. At this point a regular organized septum precluded any advance, unless by the assistance of cutting instruments. A bit of sponge was therefore introduced and directed to be kept in situ during the night.

On the day following, the sponge was removed and replaced by another. This course was continued for a week, when, no tumor being discovered in the rectum to indicate the situation of the distended uterus, and there being no trace of the os uteri in the vagina, it was determined to suspend any further proceedings, resting contented with what had been gained, and enjoining upon her to use all necessary means for keeping the passage open until the distension caused by the menstrual secretion should be sufficient to serve as a guide to the knife.

A few months after, having rigorously followed up the above directions, she visited me a second time, suffering in the same way as before, and urgently demanding relief. An examination elicited no change in the situation of the

parts. As the pain was very distressing, however, I consented to make an incision at the upper part of the vagina, with the hope of throwing some light upon the direction in which the enlargement of the uterus was taking place. This was done, and the dissection carried as far as was thought safe, but with no good result.

On the 3d of May, I again saw her. She had for four days been in extreme pain. The vagina, so far as it had been dilated, I found to be of its natural dimensions. The finger introduced into the rectum at once detected, about two inches from the anus, a hard tumor, such as might be presented by the enlarged prostate in the male, and with as little sensation of fluctuation. She informed me that for the previous twenty-four hours there had been a bloody discharge from the vagina; and traces of this secretion were perceived when that passage was examined, apparently coming from the mucous membrane. Not the slightest indication of any tumor could be found in this direction, even when the abdomen was strongly pressed upon.

Although the rectal tumor was free from fluctuation, I had no question, from my previous experience, but that it proceeded from an enlargement by distension with fluid of the upper part of the vagina or uterus, and therefore proposed an operation, which was readily acceded to.

On the 3d of July, the operation was performed, with the assistance of Dr. Channing, the patient being first etherized. The upper and back part of the vagina was cut freely through with a round-bladed bistoury, and very soon with a slight dissection the tumor which had been felt by the rectum presented itself, but much softer and more elastic than when examined through the intestinal wall. A large trocar was now plunged into it in a direction obliquely

backward, in order to avoid wounding the os uteri, in case that organ projected into the vagina. A free discharge of the black tarry substance described in the last case at once took place.

About half a pint of fluid having escaped, the canula was withdrawn, and the finger introduced into the opening, which was enlarged in either direction with the probe-pointed bistoury.

On exploring the cavity, no distinct projection answering to the os uteri could be discovered. The whole interior both of the uterus and vagina seemed to form but a single receptacle, a little contracted at one point, like the hour-glass contraction of the uterus, and this apparently answering to the situation of the os tincæ. The mucous membrane appeared much swollen and traversed by large vessels, which stood out in bold relief. A long narrow bit of sponge was passed into the vagina, half of it being allowed to remain within and half without the opening just made. The patient declared herself at once relieved from all her distressing symptoms.

From the difficulty of maintaining the new opening, it was found necessary, a few days after the operation, to introduce a sponge tent, which was removed daily and gradually increased in size. At the end of a week, the patient having exposed herself by going out of doors and washing her person with cold water, immediately after the sponge had been removed, was seized with severe pains in the abdomen and in the lower part of the back, tympanites and all the symptoms denoting inflammation. The treatment consisted in the application of leeches, and the other measures usually adopted. In three or four days the pain and tenderness gradually concentrated at the lower and left

side of the abdomen, where a large hard tumor could be perceived through the parietes. These symptoms were suddenly relieved by the discharge of a quantity of pus from the vagina. The tumor in the abdomen now gradually subsided. The intestinal canal remained for a length of time quite irritable, diarrhœa being produced whenever she took solid food.

She left town on July 31, quite weak, but recovered.

She was advised to have a small rectum bougie passed into the opening in the vagina daily, as the disposition to contraction was still great; and it was thought unsafe, through fear of exciting a fresh attack of inflammation, to maintain any substance constantly in the aperture.

Case III. — *Congenital Occlusion.* — Miss S., seventeen years old, has been suffering for two years with a sense of distension and weight in the lower part of the abdomen and back, attended by a forcible pressure in the vagina, as if for the purpose of expelling some foreign substance. She has also been greatly annoyed with a frequent desire to micturate, and of late has passed water as often as every twenty minutes through the day, but with diminished frequency at night. She suffers much severe pain at the extremity of the urethra, which is aggravated by the passage of the water. She has never menstruated.

Her physician, a person of much intelligence, when applied to, at once suspected the cause, and on making an examination discovered that the vagina was completely imperforate. I saw her on the next day, and found the following appearances: — On separating the external labia, no traces of the vagina were visible. At the central part of the fossa, usually occupied by this outlet, the meatus urina-

rius was perceived surrounded by small vegetations, which, on the slightest touch, elicited the most violent resistance and cries from the patient. A probe being passed into the urethra, its farther progress was resisted at the distance of an inch from the orifice; but finally, by turning it upwards in almost a vertical direction, it entered the bladder, which was contracted to the smallest dimensions.

The finger was now introduced into the rectum, and at once detected a hard tumor two inches from the anus, pressing backwards against the spine. It seemed quite solid, and without the slightest indications of elasticity. On passing the hand over the abdomen at its lower part, a hard projection was felt in the centre just above the pubis, having a prolongation about four inches in length, extending into the right iliac region. Pressure on this swelling caused a movement of the tumor in the rectum, and was attended with much suffering.

No doubt remained in my mind that these tumors were caused by a retention of the menstrual fluid in the uterus and upper part of the vagina, and also the Fallopian tubes, as in the case already referred to, recorded by Dr. J. B. S. Jackson, in the *American Journal of the Medical Sciences*, July, 1850. An operation was therefore at once advised, which was performed on the following day, with the assistance of her physician, Dr. Tyler, Dr. Channing, and Dr. Storer.

The patient being fully etherized with chloric ether, an incision was made transversely across the mucous membrane of the lower part of the vagina. This disclosed muscular fibres, which being carefully divided through the aperture thus made, a delicate membrance of a dark color protruded. It was suggested by one of the gentlemen

present, that this might possibly be the peritoneum, which, in a case of malformation and non-existence of the vagina, had taken an abnormal direction. For the purpose of testing this, I attempted to separate it from the surrounding textures, knowing the loose character of the cellular tissue which attaches the peritoneum to the neighboring organs and the pelvis. This was at once found to be impracticable; and, on a renewal of the effort, the resisting part yielded, and the finger passed through into what appeared at first to be the abdominal cavity, so well defined was the anatomy of the walls of the pelvis. The absence of intestines, and the appearance of a small quantity of dark-colored fluid by the side of the finger, soon made it evident that the vagina had been opened. The size of the cavity occupying the entire pelvis, and the complete absence of os uteri or other boundary between the uterus and vagina, was on examination sufficiently evident to all present.

By the aid of slight pressure on the abdomen, about half a pint of thick, tenacious fluid escaped. As the uterus did not at once take on contractions, no further efforts were made to evacuate the fluid; but a bit of sponge was introduced into the opening to prevent the parietes from adhering. The vegetations at the orifice of the urethra were now removed by the scissors, and the base of the tumors cauterized with nitrate of silver. To show the extreme sensibility of these tumors, it may be observed that, as soon as they were interfered with, the patient, although well etherized and perfectly passive through all the previous operation, immediately drew back as if in extreme pain.

At 7, P.M., she was in good spirits, and expressed herself entirely relieved by the operation. The effects of the ether had passed off, notwithstanding she had been kept for three-

quarters of an hour fully under its influence. I warned her of the great danger she incurred from any irregularity in diet or exposure to cold, as I found her disposed to leave her bed, and she was demanding food.

On the 14th September, the day following the operation, she was reported to have passed a good night. The sponge was removed from the vagina, and a free discharge of the peculiar fluid took place; after a few hours it was again introduced. No urine had been passed since the operation; during the succeeding night, however, a copious evacuation of the bladder took place.

On the 17th, she still continued to improve, and the tumor of the abdomen to diminish. The finger passed into the vagina could distinguish the os uteri, as it were, gradually forming itself. It was about the size of a tumbler, with thick edges, and covered with dilated blood-vessels. The sponge tent, when withdrawn, was very offensive.

As she was urgent to go among her friends, I agreed today, the 20th, that she should do so; being conveyed to the railroad in a carriage with care, and kept in a recumbent position until she arrived at the point of her destination. She was then to remain a few weeks longer in bed, or on a sofa, without attempting to use any exercise. At the period of leaving town, she was quite well; the urine was passed naturally and without pain, the sensitive tumors of the urethra having been destroyed by the operation; the discharge from the vagina had partially ceased, or had been replaced by a serous exudation; her appetite and the state of her digestive organs were natural.

On the 4th of October, the physician of this patient wrote to me as follows: "A case could not proceed more more satisfactorily or more rapidly than that of Miss S.

She has not had a bad or even a troublesome symptom. I could not conveniently use the dilater which you sent, but substituted a glass female syringe, which she was able to wear during the whole day, the discharge passing off through the calibre. She was able to use without pain one of seven-eighths of an inch in diameter. The discharge has ceased, and she yesterday went to her home."

The following cases have occurred since the first were published, and are extracted from the same journal.

Case IV. *Occlusion after Labor.* — Mrs. M., thirty-five years old, applied to me about a year since, with the following statement from her physician: "Mrs. M., some years since, immediately after giving birth to her first infant, was attacked with pleuritic inflammation, which resulted in hydrothorax. Her strength became greatly impaired, and œdema of the cellular membrane was quite general. While laboring under this low state of her general health, it was discovered that the mucous membrane of the vagina had begun to slough. Summoned to see her, I found this so much the case that the separation of the slough was easily effected with the forceps, and I was able to remove it readily by the scissors. The process of casting off the slough having been completed, a copious discharge of thin ill-conditioned pus flowed away, acrid enough to excoriate the labia and surrounding parts. Suitable bougies were provided and introduced, to prevent the contraction and adhesion of the surfaces of the vagina; but so great was the sensitiveness of the parts, that, though warned of the consequences in neglecting their use, they were imperfectly used, or altogether dropped, so that the occlusion became almost complete. A devious and extremely small canal

was found to exist, by which the catamenia have flowed away. In the efforts made to explore it, a very small probe was made to pass a short distance along the canal. No prolonged effort at dilatation has ever been attempted in her case, nor has she for years been subjected to medical examination.

"I should have remarked, that the labor in giving birth to her infant was a very rapid one, and that the child was so small and delicate that it lived but a short time. The labor was conducted by a careful midwife, no physician being near; and no ground existed for believing that any injury whatever was sustained by the vagina in the passage of the child. Nothing unusual transpired to call the attention of her husband or attendants to the organs of generation. In the bad state of her constitution, under the dropsical tendency of her system, the irritation of the vagina, consequent on delivery, passed rapidly into a gangrenous state of the lining membrane."

On examination, I found the vagina, as above stated, almost completely occluded. On one side was a small, tortuous passage, into which a probe penetrated for a short distance, and could be felt for the space of an inch or more through the parietes of the vagina, by means of a finger introduced into the rectum. With this guide, and with a finger kept constantly in the intestine, a careful dissection was made in the direction of the uterus. Very shortly, all assistance from the fistulous passage was lost, and it was necessary to proceed without any guide. This was done with great caution, from fear of penetrating at the side of the uterus into the peritoneal cavity. In the course of two weeks, after a number of dissections, and the constant application of the prepared sponge, cut into a conical shape,

and introduced so as to assist in dilatation, what appeared to be the os uteri was finally reached.

At this period the patient had occasion to leave town. I saw her again at the end of a month. The use of the sponge tent had been persisted in, and, by a slight cutting operation, the vagina was restored to nearly its natural dimensions. Previous to her leaving town, the catamenial discharge came on freely, and with less suffering than for many years. She was advised to persevere in the means which had been used to prevent the contraction of the vagina.

Case V. *Congenital Occlusion of the Vagina.* — Miss P., fourteen years old, began to suffer, two years since, with pains in the lower part of the back and abdomen. These pains gradually assumed a periodical character, coming on at an interval of four weeks, and were so intense as to require alleviation by means of medicine.

A physician, being consulted, suspected an obstruction of the vagina; and an examination confirmed his suspicions, showing this passage to be completely occluded. An incision was made through the solid obstruction which presented at that part, with the hopes of discovering a cavity containing the menstrual fluid; but the operation met with no success. From this time, the sufferings of the patient gradually increased, and, at the menstrual periods, were so severe as to produce a degree of prostration which confined her for some days to her bed, and finally even threatened life.

When I first saw Miss P., the external organs of generation were so sensitive as to cause her to make great complaint on any attempt at an examination. The external

labia were found to be well developed. The orifice of the urethra occupied its normal position, or was a little lower than natural. Below this, not the slightest depression indicated the orifice of the vagina. The finger, being introduced into the rectum, detected, at the distance of about two inches from the anus, a hard, globular tumor, the size of a billiard-ball. Before removing the finger from the rectum, a catheter was passed into the bladder; and this was at once felt by the finger in the rectum, in the median line; the coats of the bladder and rectum only intervening, for a distance of one or two inches, — that is, as far as the above-mentioned tumor. At this point, the catheter could be made to pass on each side of the tumor, but was with difficulty detected in the rectum. I had no doubt, from the result of the examination, that the tumor felt in the rectum was the upper part of the vagina and uterus distended by fluid, and the cause of the serious symptoms under which the patient labored. An operation was therefore proposed, and at once, with the assistance of her physician, performed. Anæsthesia being induced, a transverse incision was made directly below the orifice of the urethra. With much caution, a dissection was now made between the rectum and the bladder, until, by cutting and separating the tissues by the fingers, the tumor described as felt in the rectum was reached, lying very deep, and affording but little opportunity for a fair examination. The depth at which it lay, and its apparent solidity, for a moment caused some embarrassment as to the proper course to be pursued, especially as one of the gentlemen present seemed convinced, from its hardness, that it could not contain a fluid. But, finally, being satisfied in my own mind that the tumor could be nothing else but what had been suspected, I

determined on puncturing it. The escape of the thick tarry fluid, which has been observed in one or two other cases before related to the Society, at once confirmed the truth of the diagnosis. The aperture was now enlarged so as to allow two fingers to pass freely up into the cavity containing the fluid, which was apparently the uterus and upper part of the vagina distended so as to form a single sac.

The patient, on recovering from the effects of etherization, declared herself entirely relieved from her previous state of suffering. The use of the prepared sponge, to prevent the closure of the passage, was advised, as also the occasional introduction of bougies, to maintain, if possible, the normal size of the canal.

Case VI. *Occlusion of the Vagina occurring soon after Marriage.* — The patient was a widow, forty-five years of age. The account she gave was, that she was married at an early age; that *les premières approches du mari* were so violent as to cause a severe inflammation of the vagina, which eventually terminated in the almost complete closure of the upper part of the canal. At the catamenial periods, much difficulty and suffering were experienced in the egress of menstrual fluid, which was discharged slowly, and apparently by a circuitous route. She suffered from this cause until within three years, when that function ceased to be performed, but was replaced by a mucous secretion. Her health latterly has been poor, and she has been more or less troubled with pains in the back and loins, all of which she has attributed to the retention of fluids in the uterus.

On examination, I at once detected an obstruction two inches from the orifice of the vagina, caused apparently

by an adhesion of its parietes. With the aid of the speculum, a small aperture was observed on one side, into which a probe penetrated a short distance.

As the patient insisted on having an operation, I consented to do it, although, at the same time, I informed her that it was very doubtful whether the obstruction was the cause of the symptoms, considering the present state of the functions of the uterus.

A director was forced into the passage, which had at first only admitted a probe. This was followed by a larger instrument; and, by proceeding gradually, it was shortly found possible to use the dressing forceps. By this means, the passage was finally enlarged so as to admit the little finger, when, by tearing and distending the parts, almost the full size of the original passage was restored, and the extremity of the os uteri exposed, buried in the adjacent structures.

The caliber of the canal was maintained by the same means as had been resorted to in the preceding cases. The patient expressed herself much relieved by the operation; and, when seen a month afterwards, there had been no recurrence of the previous bad symptoms under which she had suffered.

The next case, one of great interest, is introduced by permission of Dr. Storer, taken from the records of the Boston Society for Medical Improvement.

Collection of Pus in the cavity of the Uterus; operation for opening Os Uteri, closed by a firm Septum; progressing recovery from uterine disease; subsequent death, after gastric disorder, induced by excess in eating.

Dr. Hyndman first visited the patient on 3d of August last; nine days previously, on the second day of a regular men-

strual period, patient wet her feet; catamenial discharge ceased suddenly. Patient reported having had a *rigor* the day before Dr. H. first saw her; acute pain in left side followed, "extending from the crest of the ilium, upwards, as far as the edge of the floating ribs, and as far forwards, towards the mesial line, as the umbilicus." Calomel and opium were given, and "turpentine stupes" applied over the abdomen. The above-mentioned pain extended, after three days' interval, across mesial line, towards the right side; but little pain was complained of, at any time during the attack, over the pubic region: nothing would have excited suspicion of metritis. The patient improved under the above treatment, and, in a fortnight from the time when she had the *rigor*, was able to be about. Three weeks later (six weeks from time of sudden suppression of menses), patient called to say "that she had not been *unwell* for six weeks:" she was pale and "chlorotic" in appearance. Dr. Hyndman prescribed tonics; a week afterwards, on seeing his patient, Dr. H. was told by her that she had noticed "something of a swelling," just above pubis; on examination, Dr. H. observed "an unusual fulness in that region;" he supposed it might be retained menstrual fluid; swelling, however, was not very marked: *savine*, in conjunction with the other medicines, was ordered. Shortly after, imprudence in eating induced an attack of gastric irritation, accompanied by pain and vomiting. Relief by opiates. Six weeks after this, the abdominal "swelling," before mentioned, had so increased that the appearance was that of a person in the seventh month of utero-gestation. Dr. Storer was now called in consultation.

Dr. S. saw this patient with Dr. Hyndman, on the 11th inst., and found her to be a young woman seventeen years

of age. Her abdomen was as large as that of a woman's far advanced in pregnancy, presenting a peculiar form, however, the enlargement being anteriorly, as if something projected directly forwards — there was but slight fulness laterally. She complained of some tenderness in abdomen, upon pressure. The breasts were not enlarged, and no change in the areolæ could be perceived. Upon examination, *per vaginam*, which produced considerable uneasiness, the body of the uterus was found to be somewhat distended, and upon pressure gave to the finger the sensation of contained fluid. She has had no discharge of any kind from the vagina since the suppression of her catamenia. Dr. S. agreed with Dr. Hyndman in his diagnosis, *that the uterus was distended by fluid;* but, as the menses had been suppressed only about three months, he thought that they alone could not have produced the great tumefaction, but that, acting as an irritating cause, they had probably excited the uterus to pour out an abundant secretion besides. It was proposed to pass an instrument into the os uteri to empty the organ of its contents. Dr. Hyndman consenting, Dr. S. endeavored, the sixth day, to pass a *gum-elastic catheter*, supposing that there would exist only a simple agglutination of the lips together, but was surprised to find that the instrument would pass but a short distance beyond the os uteri, and that only by applying considerable force; and, when withdrawn, its extremity was covered with mucus and blood. *Simpson's sound* could be passed with no more ease. Dr. S. decided that the adhesion of the cervix was so firm as to require a trocar, or some other cutting instrument, to remove it, and suggested that the operation shonld be performed by a surgeon. Dr. J. M. Warren saw patient the following day, and, after a very

minute examination of the case, coincided in the above opinion; and passing a trocar into the os, and then, with considerable force, through the adhesions of the cervix, freed the uterus of *seven pints of offensive pus.* The girl is now (25th) doing well, although more fluid is evidently collecting in the uterus.

It would appear, from the above history, that with the *peritonitis*, produced by the sudden suppression of the catamenia, *metritis* had existed; which united the lips of the os, checked the menstrual function, and caused the lining membrane of the uterus to pour out this great quantity of purulent matter.

It may not be uncommon for *metritis* to exist, and for any secretion to be poured out of the uterus, which may be the result of the inflammation; but from the fact that several writers make no reference to any *collection of pus* in the uterus, and that the translator of Boivin and Dugès's work points to a case of this description by Dr. John Clarke, contained in the third volume of the "Transactions of the Society for the Improvement of Medical and Chirurgical Knowledge," it is inferred that cases of a similar character to that now reported must be of rare occurrence.

Upon looking up Dr. Clarke's case above referred to, Dr. S. found it entitled, "Case of a Collection of Pus in the Cavity of an unimpregnated Uterus." In this case, the patient was sixty-five years of age, and had ceased to menstruate for several years. After having a discharge, for several weeks, from the vagina, which was at first sanguineous, but afterwards became of a brownish color, and offensive to the smell, "the patient was suddenly seized upon waking, during the night, with violent pain in the lower part of the abdomen, and a sensation as if something had

given way there." The next day she died. Upon an examination of the body after death, the uterus was found gangrenous, and perforated at its upper part; through which opening, pressure being made, a quantity of offensive pus issued; seven or eight ounces of similar pus were found in the cavity of the abdomen, which had been poured out of the uterus, and about five ounces were still retained in that organ. The orifice between the cavity of the uterus and its cervix was closely contracted, so as not to have allowed the contents of the uterus to be discharged through it; and the previous discharges which had existed "must have been poured out from the cervix and os uteri, and from the vagina."

Sir Charles Mansfield Clarke, in his "Observations on those Diseases of Females which are attended by Discharges," speaks of two cases of large collections of pus being produced in the uterus by inflammation; in one of them, "the uterus was found to be so much enlarged as to fill the cavity of the pelvis." A spontaneous discharge of the fluid finally occurred from the vagina, and the patient recovered. In the next case, "the pelvis was found completely filled by an enlarged uterus, which was also perceptible above the pubis;" a sudden discharge of offensive pus took place through the rectum, which continued to flow for a time with the feces, and then entirely ceased; the uterus returned to its normal size, menstruation took place, and the patient recovered. * * * * * *

At a subsequent meeting of the Society (Dec. 23), Dr. Storer reported as follows in regard to the patient whose case is above given. Three pints of pus, in addition to the former quantity, had been removed from her uterus, by Dr. J. M. Warren, four weeks after the first operation. About

a week after the second operation, having for weeks lived upon a liquid, farinaceous diet, the patient ate immoderately of potatoes and cabbage; immediately after this meal, she was attacked with bilious vomiting and purging, which resisted all remedies, and she rapidly sank and died. Dr. Hyndman, who had charge of her, says that not the slightest febrile action followed either of the operations, but that she was doing very well, until the above narrated excess in eating was committed. No post-mortem examination was obtained.

In the first of the cases which have been given, the only apparently feasible way of arriving at the distended uterus was adopted, viz. that of penetrating to it by a dissection carried up between the rectum and vagina. The proceeding eventuated more satisfactorily than could have been expected. The greatest obstacle to a rapid recovery was the almost impossibility of maintaining the new opening, on account of the great disposition to contraction; and this was found to be true in all the cases. What appeared to be a large free opening, with no restriction on any side but the bones of the pelvis, in the course of a few days was contracted to a firm unyielding ring, into which it was with difficulty that a small bougie could be introduced. The sponge tent, when it could be borne, at once dilated the aperture again to a size as great as could be wished; but the extreme sensitiveness of the parts prohibited, in the case under consideration, a resort to this powerful agent. In fact, it was finally found necessary, on account of the

great resistance made by the patient, to desist entirely from all applications, and leave the course of it to nature. The subsequent month, the catamenia appeared slightly; and there has as yet, so far as I know, been no obstruction to it.

In the second case, the obliteration of the vagina, which was closed throughout nearly its whole extent from the upper part to the vulva, was also caused by laborious parturition.

It may serve as an example to show the necessity of making inquiries, after a severe case of labor, as to the degree of local inflammation, and of taking measures for preventing, if possible, such adhesion as occurred in the present instance, a matter of difficulty and delicacy; but, as so much is at stake, these considerations must necessarily give way to a correct appreciation of the danger which would ensue from neglecting an examination, when the discharge from the vagina was so offensive as to suggest the possibility of gangrene and subsequent adhesive inflammation.

It may not be useless to call attention to the great resistance, and, in two of the cases, entire want of fluctuation, which existed in the distended sac formed by the uterus and vagina, as felt through the rectum, and which might lead the surgeon to doubt the accuracy of his diagnosis, did not other marks assist in forming it.