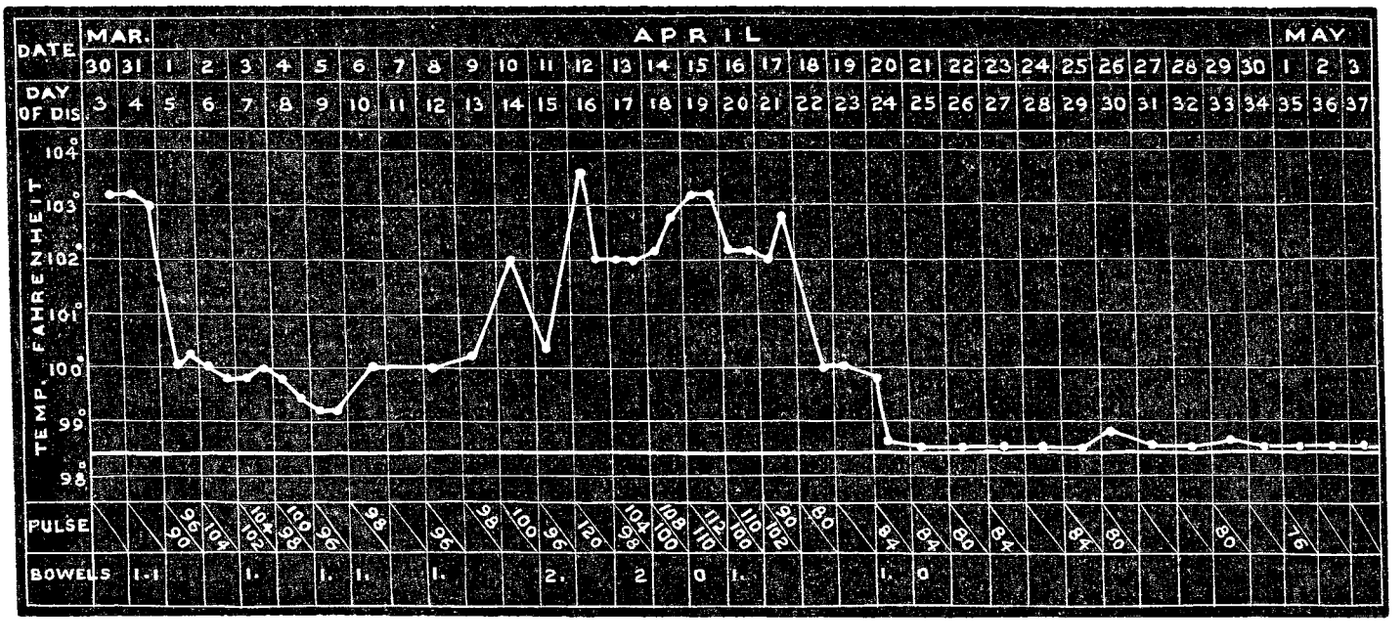
this subject the chief danger in pericardial effusion was thought by some to be myocarditis and by others the mechanical effect of the fluid pressure. Dr. Ashby[4] in 1884 wrote an instructive and suggestive article on "Pericarditis in Children," in which he says: "It is important to remember that the inflammation of the pericardium may precede instead of follow the joint pain, that the swelling and tenderness may be confined to one or two joints, like the fingers or wrist, and that possibly no lesion of the joints may take place." He also adds that "pericarditis, both acute and chronic, may extend beyond the serous membrane lining the pericardial sac and involve the pleural surfaces of the anterior edges of the lungs, the mediastinal glands and other organs in the immediate neighbourhood, though it is by no means clear where the inflammatory troubles originate. To this condition of things the name of 'mediastino-pericarditis' has been given." Dr. Ashby[5] narrates a case of pericarditis which was "essentially rheumatic," the pericarditis being followed by painful swelling of the fingers and wrist, accompanied by an erythematous rash. In 1886 Dr. Finny, before the Royal Academy of Medicine in Ireland, reported a fatal case of pericarditis (history of alcoholism), which occurred in a man aged fifty-two.

Before concluding these few and sparse references to the subject of my paper I cannot but quote a sentence from Dr. Drummond's eloquent Address in Medicine at the meeting of the British Medical Association at Newcastle-on-Tyne on Aug. 2nd. Adverting to the causation of cardiac disease, he says: "An attack of rheumatism may damage a valve and leave behind a permanent legacy, but how innocuous that structural change may be, so far as the health of the patient is concerned, so long as his real enemy—rheumatic poison—remains absent is well known to all practitioners, for there can be no doubt that the injured endocardium is very apt to suffer further damage under the influence of fresh rheumatic attacks, however slight; and it is these intercurrent rheumatic accessions, often subtle and unattended by any outward manifestation beyond fever, that are fraught with so much risk." As La Fontaine once wrote, "En toute chose il faut considérer la fin;" and, though as regards the acute phase of this disease and its complications I have affixed the term "recovery" to my case, the possibility of the "permanent legacy" of a damaged valve precludes the use of that term in the truest and most satisfactory sense—"Victrix causa diis placuit, sed victa Catoni."

Tunbridge Wells.

FIG. 4.



A REPORT ON TWELVE CASES OF INDUCTION OF LABOUR BY CHAMPETIER DE RIBES'S BAG.

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DURING a six months' residence at the General Lying-in Hospital, Lambeth, I had an opportunity on twelve occasions of using Champetier de Ribes's bag for inducing labour. By the kind permission of Dr. Herman and Dr. Cullingworth, under whose charge the patients were, I place on record brief notes of each case as fresh evidence in favour of the value of the new instrument, which I doubt not will shortly become the means generally adopted for use in most cases where it is necessary to terminate labour prematurely, as it is a speedy, safe and reliable method. From my limited experience of its use there is little difficulty in its introduction, though for primiparæ, and occasionally in some other cases, it may be necessary to procure a preliminary dilatation of the os by a bougie, tent or Barnes's bag. In the case of restless and nervous patients it is an advantage to have them placed under an anæsthetic and on their backs. When once the bag is in position there will be, as a rule, no further trouble until it is expelled, and the os will be found to be fully dilated. The objection raised, that it not infrequently displaces the head in vertex presentations, does not appear to be a very serious one; in those cases where it is displaced to an iliac fossa it is easy before the membranes have ruptured to restore it to its original position by external manipulations on the abdomen even when version of the fœtus, complete or incomplete, has occurred from its use; it is but a step towards one of the recognised methods of accomplishing delivery with the greatest prospect of success to mother and child—viz., by turning—and thus unintentionally aids the operator in his manipulations. A full and lucid description of the bag has been given in papers by Dr. Herman and Dr. Spencer.[1]

CASE 1.—The patient was thirty-two years of age and this was her third pregnancy; her first child was born dead at term; the second was born alive, labour being induced at eight months. She was admitted into the hospital on Oct 21st, 1892, being then eight months pregnant. The pelvis was rachitic; the diameter in the true conjugate was $3\frac{3}{8}$ in.; the presentation was vertex. On Oct 21st, at 1 P.M., the patient was anæsthetised and Champetier de Ribes's bag was introduced; regular pains commenced in one hour's time. On the 22nd, at 3 A.M., the bag was spontaneously expelled; at 10 A.M. the os was fully dilated and a large bag of membranes protruded, when it was found

[4] THE LANCET, March 29th, 1884.
[5] THE LANCET, March 29th, 1884.

[1] Brit. Med. Jour., Jan 7th, 1893.

that the head had been pushed aside and occupied the left iliac fossa; bipolar version was performed and the child was born alive; it weighed 5 lb. 12 oz.; the total hæmorrhage amounted to 8 oz. The mother and child did well.

CASE 2.—The patient was thirty-seven years of age; she had had nine children, four being born alive and five dead at full term; the fifth and ninth were delivered after craniotomy. She was admitted on Jan. 1st, 1893, being seven months pregnant. The pelvis was rachitic; the diameter of the conjugata vera was 3⅞ in. At 12 noon Champetier de Ribes's bag was introduced; at 5 P.M., as she had had no pains, two doses of quinine (five grains each) at one hour's interval were given; strong pains followed immediately. Soon afterwards violent retchings and vomiting commenced and continued till the birth of the child. At 11 P.M. the pains were violent and becoming tonic; the patient was very restless and exhausted; the pulse was 120, in consequence of which the bag was emptied and removed. The os was as large as a crown piece; the presentation was a footling; the membranes were artificially ruptured and a foot was brought down and left; the breech was expelled in twenty minutes; there was considerable delay in the birth of the head. The child was dead and weighed 3 lb. 10½ oz. The total hæmorrhage amounted to over two pints. As the uterus was not well contracted an intra-uterine douche of perchloride of mercury solution (1 in 4000, temperature 118°) was given and the uterus supported on the outside for an hour. On Jan. 2nd at 2 A.M. retching recommenced; at 2 30 A.M. it was found that violent flooding had taken place, the bed being saturated with blood; the patient was pale, pulseless and collapsed and in an alarming condition; the uterus quickly responded to the usual stimulants and continued well contracted. After the usual restoratives and an intravenous injection of a pint and a half of normal saline fluid with two teaspoonfuls of brandy added the patient quickly rallied. On Jan. 3rd the temperature was 100° and the pulse 116. She continued to do well with the exception of a rise of temperature to 101·2° on the fifteenth day; she was discharged well but weakly.

CASE 3.—This patient was aged twenty-eight and in her third pregnancy. Her first labour was terminated by craniotomy. Her second labour was induced at six months at the General Lying-in Hospital in November, 1890, by bougie, and took forty-one hours to complete. She was admitted on Jan. 7th and was seven months pregnant; the patient was very rachitic. The diameter of the conjugata vera was 2¾ in. The presentation was vertex. At 12 noon Champetier de Ribes's bag was put in and, owing to the true conjugate diameter being under three inches, two ounces of the fluid were withdrawn after the bag had been filled. Good pains followed every half-hour, gradually increasing; at 9 P.M. there were about six ounces of blood lost; at 9.15 P.M. the bag was spontaneously expelled into the vagina; the os was fully dilated. The patient was rather pallid, the pulse being 130; the membranes ruptured spontaneously. The child was delivered naturally immediately afterwards, but only survived a few hours. The hæmorrhage amounted to 24 oz. The mother did well.

CASE 4.—The patient was aged thirty and in her second pregnancy. One child was born alive at eight months. She was admitted on Jan. 9th, being eight and a half months pregnant. The pelvis was generally contracted; the diameter of the conjugata vera was 4 in. and the os just admitted the tip of the finger; the presentation was the second cranial. On Jan. 12th, at 6 P.M., Champetier de Ribes's bag was introduced. Strong pains at once commenced and the bag was spontaneously expelled in one hour's time, when the pains ceased; there was a large bag of waters. At 8 P.M., after quinine (five grains) had been given, the pains recommenced; at 9 P.M. spontaneous rupture of the membranes took place, when it was found that the breech and a hand presented; chloroform was administered and delivery accomplished with the aid of forceps and blunt hook to the breech. The child was living and weighed 6 lb. 12½ oz.; the hæmorrhage amounted to 8 oz. The mother and child did well.

CASE 5.—The patient was aged twenty-five and in her fifth pregnancy. The previous labours were normal. She was admitted on Jan. 22nd to have labour induced on account of a recent inflammatory swelling to the left side of the uterus and vagina, which it was considered might obstruct labour at term; she was seven months pregnant. On Jan. 22nd, at 6 P.M., a bougie was placed in the uterus; vaginal douches of hot and strong Condy's fluid were given every three hours and three doses of five grains of quinine were administered. On the 23rd, at 7 P.M., as no pains had commenced, the bougie was removed and Champetier de Ribes's bag was introduced; pains followed immediately. At 11.15 P.M. the bag was spontaneously expelled into the vagina. There was a large bag of membranes which was ruptured artificially; the presentation was vertex. At 11.30 P.M. the child was born naturally and living, but died on the following day; its weight was 3 lb. 8 oz. The hæmorrhage amounted to 6 oz. The mother did well.

CASE 6.—The patient was aged twenty-seven and in her fourth pregnancy. In the three previous labours the children had to be destroyed, the first at term and the others at seven months. The mother refused to have Cæsarean section performed. She was admitted on Jan. 25th, being six and a half months pregnant. The patient was a very small and rachitic woman. The diameter of the conjugata vera was 2 in.; the presentation was vertex. On Jan. 26th, at 12 noon, an attempt to place Champetier de Ribes's bag failed, so a small Barnes's bag, followed by a larger one in four hours' time, was introduced. At 6.10 P.M. Barnes's bag was removed and Champetier de Ribes's was substituted and two ounces of fluid were withdrawn, after it was filled. Strong and frequent pains commenced in forty minutes, when the membranes ruptured spontaneously. At 11.45 P.M. Champetier de Ribes's bag was removed; it was then found that the breech presented. Delivery had to be terminated by perforation. The child weighed, after removal of brain matter &c., 2 lb. The hæmorrhage amounted to 7 oz. The mother did well.

CASE 7.—The patient was aged thirty-nine. She had had eight children, all born at full term; only four survived birth, and they died in infancy. With the first and last forceps were used. She was admitted on Jan. 25th at full term. The diameter of the conjugata vera was 3¼ in.; the presentation was transverse. At 12 30 A.M. pains commenced, when the membranes ruptured spontaneously. On the 26th, at 12 P.M., the os admitted the tip of the finger; Champetier de Ribes's bag was introduced, which must have been imperfectly done, as it was found in the vagina after seven hours without the os being dilated. On the 27th, at 12.45 P.M., the bag was reintroduced; at 2 P.M. the bag, previously worn, burst whilst in utero and was removed, the os then being as large as a half-crown piece. At the same time there were about four ounces of hæmorrhage. Examination revealed a shoulder, hand, funis and edge of placenta at the os; bipolar version was accomplished and the left leg was brought down and left there. At 7.10 P.M. the breech was born, but the head was jammed; pulsation in the cord had ceased. The head was delivered after perforation. The weight of the child was 7 lb. The hæmorrhage amounted to 14 oz. The mother did well.

CASE 8.—The patient was aged thirty-five and in her fifth pregnancy. She was admitted on Feb. 4th. The pelvis was generally contracted. The diameter of the conjugate was 3½ in. Her left leg was paralysed from infancy. On the 5th, at 10 30 P.M., on failure to introduce Champetier de Ribes's bag, Barnes's bag was put in, followed after twelve hours by one of larger size. On the 6th, at 11 P.M., the os was as large as a half-crown piece; the presentation was vertex. Barnes's bag was removed and Champetier de Ribes's bag was inserted under chloroform, during which the membranes were accidentally ruptured. On the 7th, at 10.30 P.M., the patient complained so much of constant pain and want of sleep that the bag was removed and Barnes's bag again substituted. On the 8th, at 11 30 A.M., the temperature was 99 2° F. and the pulse 104 and irregular. Barnes's bag was removed and chloral was given. On the 9th, at 5 P.M., the os was as large as a crown piece. Champetier de Ribes's bag was reintroduced, followed by effective pains. On the 11th, at 1.15 A.M., the bag was expelled spontaneously, after 2 oz. of fluid had been withdrawn. Natural delivery followed in fifteen minutes. The child was dead; its weight was 3 lb. 7 oz. The mother did well.

CASE 9.—The patient was aged thirty-seven and in her eighth pregnancy. She was admitted on March 4th on account of hæmorrhage, which commenced a week previously; two days before and on the day of admission the patient stated that she had lost over two pints. She was seven months advanced in pregnancy. She was anæmic; her pulse was fair; the os was patulous; the cervix was soft; the

presentation was vertex. The placenta was not felt per vaginam. On March 4th, at 9.15 P.M., Champetier de Ribes's bag was introduced and strong pains at once commenced. On the 5th, at 4.15 A.M., the bag was spontaneously expelled. At 4 30 A.M. the child was born naturally and alive; its weight was 4 lb. 3 oz. The hæmorrhage amounted to 16 oz. The mother and child did well.

CASE 10.—The patient was aged thirty-seven and had had eleven children; of these five were born dead and one alive at term. Labour was induced five times, in three of which a living child was born, but they died soon after birth. She was admitted on March 9th, being seven months pregnant. The pelvis was rachitic; the diameter of the conjugata vera was 3 in.; the presentation was vertex. On the same day a bougie was introduced, in doing which the membranes were accidentally ruptured; the bougie was expelled after ten hours. On March 9th, at 11.20 A.M., Champetier de Ribes's bag was introduced, followed by pains every twenty minutes. At 9.30 P.M. the bag was spontaneously expelled, when there was slight hæmorrhage. A shoulder and edge of the placenta now presented at the os, the head occupying the left iliac fossa. The child was turned and born alive, but died in a few hours; its weight was 3 lb. 15 oz. The hæmorrhage amounted to 10 oz. The mother did well.

CASE 11.—The patient was aged forty-six and in her first pregnancy. She was admitted on March 14th, being eight and a half months pregnant, for induction of labour on account of several small fibroids in the uterine wall, varying in size from a filbert to an orange. On the same day at 10 P.M. the foot and funis presented; a bougie was introduced and hot douches containing a considerable quantity of Condy's fluid were given three times a day. On the 15th, at 11.30 A.M., pains commenced; at 10 46 P.M. the membranes ruptured spontaneously. The os was the size of a crown piece. The bougie was removed and Champetier de Ribes's bag was inserted. Strong pains at once commenced. At 11.55 P.M. the bag was spontaneously expelled; the os was fully dilated; the feet were brought down and the after-coming head was delivered by forceps. The child was stillborn and weighed 6 lb. 8 oz. The hæmorrhage amounted to 10 oz. On the first day of the puerperium the temperature rose to 101°; on the second day it fell to 100°, after which it fell to and remained at normal. There were some pain and tenderness over the uterus for the first few days after delivery, but this disappeared and the patient was discharged well.

CASE 12.—The patient was aged thirty-seven and in her twelfth pregnancy. She was phthisical and at full term. The membranes had ruptured spontaneously on April 6th, the day before her admission. The presentation was the breech. On the 9th, at 11.30 A.M., Champetier de Ribes's bag was put in; good pains commenced in one hour's time. At 7.30 P.M. the bag was spontaneously expelled; at 7.35 P.M. the breech still presented and a living child was born naturally, its weight being 4 lb. 4 oz. The hæmorrhage amounted to 6 oz. The mother and child did well.

An analysis of the above shows that in eight cases the bag was used to induce labour for contracted pelvis: in one for fibroids of the uterus, in one for an inflammatory swelling around the uterus and vagina, in one for accidental hæmorrhage, and in one for premature rupture of the membranes. In five cases a bougie or Barnes's bag had been previously inserted. In two cases a vertex presentation was converted into a breech; whilst in two others the head was displaced towards an iliac fossa. It will be observed that in every case, with one exception (Case 8), delivery was completed within twelve hours of the introduction of the bag. In Case 3 there was alarming post partum hæmorrhage, but there is no reason to attribute this to the use of the bag. In Case 7 the bag burst whilst in position, but no harm resulted; the bag was distended (as in each case) with perchloride of mercury solution (1 in 4000). Case 8 was the least satisfactory; altogether the bag was in position for forty-four hours before full dilatation of the os was brought about. This is explained by the fact that, although there was considerable continuous pain referred to the abdomen, there was a comparative absence of regular labour pains. The patient's previous labours were tedious. She had had infantile paralysis, which may have had some influence. From the table below will be seen at a glance the time taken between the introduction of the bag and the commencement of pains, the expulsion or removal of the bag and completion of delivery respectively; also the time between the expulsion or removal of the bag and delivery.

Cases.	Pains commenced after introduction of the bag.	Bag expelled.	Delivery after introduction of the bag.	Delivery after expulsion of the bag.
1	1 hour.	5 hours.	12 hours.	7 hours.
2	5 hours.	†11 hours.	11½ hours.	½ hour.
3	½ hour.	9¼ hours.	9¼ hours.	Immediately.
4	Immediately.	1 hour.	3 hours.	2 hours.
5*	Immediately.	4¼ hours.	4½ hours.	¼ hour.
6*	40 minutes.	†5½ hours.	6 hours.	½ hour.
7	Bag burst.	—	—	—
8*	—	First time. 12 hours.†	—	—
,,	—	Second time 32 hours.	32 hours (after second introduction).	¼ hour.
9	Immediately.	7 hours.	7¼ hours.	¼ hour.
10*	20 minutes.	10 hours.	10 hours.	Immediately.
11*	Immediately.	70 minutes.	70 minutes.	Immediately.
12	1 hour.	8 hours.	8 hours.	5 minutes.

* Where an asterisk is used a bougie or Barnes's bag had been previously inserted temporarily.
† Bag removed.

Wokingham.

A CONTRIBUTION TO THE PHYSIOLOGY OF FEVER.

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CASES of definite and sharply defined lesions in important areas of the cerebrum are of so comparatively rare occurrence that the following case is perhaps worthy of note, and more particularly on account of the important bearing the case has on recent researches with regard to heat centres and the physiology of fever.

A female aged two years and eleven months was admitted into the Evelina Hospital under the care of Dr. Nestor Tirard, to whom I am indebted for permission to publish the case. Six months before admission the child had a fall on the back of her head and had not been well since. She was languid and fretful and had considerable constipation. Fourteen days before admission the constipation became worse and had to be treated, no motion having been passed for five days. Six days before admission the patient began to pass urine and fæces involuntarily and had a convulsion the day before admission at 5 P.M. This commenced in the left hand and arm and rapidly spread to the right, being accompanied by convergent strabismus. After this fit the child became unconscious and the head was retracted. There had been a slight amount of vomiting three days before admission. On admission at 4 45 P.M. on Feb. 15th the child was comatose, with irregular breathing, rigid limbs and marked retraction of the head. Convulsive attacks occurred frequently, the arms being most affected and the left more than the right. The face was very flushed, and the skin was dry and hot. The eyes were half closed and no strabismus was present. Ophthalmoscopic examination of the eyes showed no optic neuritis. The temperature was 101°F.; the pulse was 108, good and regular; the respiration was 48. From the appearance of the child and the above symptoms meningitis was diagnosed, probably tuberculous, for negative reasons, as no cause for acute meningitis could be found. The temperature gradually rose: at 9 A.M. it was 103°, at midnight 103·8°, at 1 A.M. 104·2°, and at 2 A.M. 104·8°; at 3 A.M. it fell to 104°. The child became very pale and the pulse was hardly perceptible. After this the temperature rose steadily until 4.45 A.M., when the child died, the temperature in the axilla being 108·2°.

Necropsy, twelve hours after death.—A few scattered tubercles