fifteen — they could be seen in full figure, plain and distinct; and then they would disappear entirely, leaving the skin pale and somewhat dusky for about the same length of time, and then reappear, and so on repeatedly until the time of his death. The pupil of the left eye still continued dilated. During the intervals while the child was rational, his eyes and entire physiognomy wore a peculiar apathetic, mingled with a surprised and dumfounded expression difficult to describe and never to be observed in any other disease. At other times he was very delirious. He was exceedingly restless and wanted to be moved from one bed to another, and from one room to another frequently. His skin was exceedingly hyperæsthetic, and to be fanned was unbearable. Any breeze or gust of wind blowing on to the bare skin would cause him to make complaint.

During the thirty-six hours preceding death he grew emaciated to a marked degree. Sunday, as the day advanced, the difficulty in swallowing increased. He was very thirsty; and, craving water, would seize a cupful with great eagerness; but the attempt to drink was invariably prevented by severe spasms in the throat. So he became hydrophobic, not because he did not want water, but because he did not dare to try to drink it. Another symptom noticed was a peculiar sound occasionally coming from his throat of a croaking character almost like a prolonged hiccup. It undoubtedly was produced by a synchronal spasm of both glottis and diaphragm.

Throughout the day, on Sunday, a thick viscid phlegm or saliva was continually collecting in the mouth and throat, and frequently had to be removed so the patient might breathe. As night approached, this secretion increased rapidly in quantity. About sunset a frothiness was continually appearing from the corners of the mouth and had to be wiped away almost continually. It was not noticed that his legs were paralyzed, as they sometimes are in the last stages of this disease. By seven o'clock P. M. he was weakening rapidly, and his throat filled with its secretions in such quantity, that it seemed impossible to keep this passage clear. He was continually delirious from eight o'clock until ten, when he passed into a comatose state. The twisting of his mouth and hands increased. He had no general convulsions, as is sometimes the case in this disease, but undoubtedly would have had, if he had lived a day longer. The patient died at quarter-past eleven Sunday night, partly from exhaustion, but more especially from asphyxia caused by spasm and the viscid secretions in the throat.

In the clinical history of this case the two most noteworthy symptoms were the hydrophobia and the ærophobia. These two characters are competent to prove in this patient's sickness, without the shadow of a doubt, the diagnosis of hydrophobia. Dr. James Boynton, of South Framingham, was called in to see the patient Sunday afternoon, and agreed that the case was one of hydrophobia.

The question now arises among the laity of this neighborhood, and very reasonably among physicians also, what cause, in this particular case, produced the hydrophobia, — the bite of the dog or the Pasteur treatment.

No physicians hereabout claim to be experts in rabic lore; but, if Pasteur had been here, he perhaps would have inoculated rabbits in the usual way with the virus taken from the medulla or spinal cord of this child,

and then if they developed rabies after a period of incubation of *seven* days, it would have proved that the *treatment* caused the boy's death; but if the disease supervened after an incubation of *fifteen* days, it would have shown that the *dog-bite* killed him. The trouble hanging about this attempt to prove causes, involves the fallacy, that in coming to the crucial, practical test, Pasteur substitutes a *boy* for a *rabbit*; and, as a result, the incubatory conditions may be much changed by having the virus pass through the human subject.² So the above test is not conclusive or satisfactory.

With the existing limitations to our knowledge in this direction, for the present, our decision as to the safety and advantages of the Pasteur treatment must rest on the results given by thoroughly tabulated and well attested statistics. Statistics seem to prove that the death-rate under Pasteur's treatment is a little less than one per cent.; while the mortality in people bitten by rabid animals and not inoculated, amounts to fifteen per cent. at least.³ The above statistics were made by a physician in Paris, who is not in any way connected with the Pasteur Institute. Other investigators have given non-treated cases a much higher mortality rate.

Now, if the Pasteur treatment is liable to *produce* rabies, then this fifteen per cent. of deaths among non-treated cases inevitably will be increased by the alleged dangers of the treatment *itself*; so that the statistics would, under this supposition, show a larger percentage of deaths *under* treatment, than it would *without it*; which is, we well know, not the case. Furthermore, it is claimed, that nearly all the physicians and attendants connected with the Pasteur Institute in Paris have been inoculated, and none of them ever suffered any harm from the procedure.

The all important question arises: What will you do, if there is brought to you a person, who has just been bitten by a rabid animal? The writer of this paper would send him to the Pasteur Institute immediately. But in the face of this assertion, at a medical meeting held somewhere here in New England, there was put to vote this question: Will you send your cases bitten by rabid dogs to the Pasteur Institute for treatment? A very few physicians voted "Yes"; a very few voted "No"; and quite a majority did not vote at all. The result of this vote shows that this question is far from being settled in the minds of our medical men even at the present time, and is still a subject worthy of much further consideration.

EXTRA-UTERINE PREGNANCY; CÆLIOTOMY; RECOVERY.

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G. F., married, aged twenty-eight, consulted me, Tuesday, September 29, 1891. A diagnosis of extra-uterine pregnancy was made, and I operated on her the next day at the Carney Hospital. The following is the history of the case and the result of the examination:

Dysmenorrhœa since puberty. The pain, situated in front and low down in the abdomen, comes on several days before the flow and lasts throughout menstruation. For the past year has had quite severe pain in

² Boston Medical and Surgical Journal, April 1, 1886, p. 299.

³ Brathwalte's Retrospect, page 20, January, 1890.

the right ovarian region when unwell. Flows five days. Flows quite freely. Leucorrhœa for years. Always been regular to the day until August 9th. Instead of menstruating at this time, she went to August 16th, just one week over her time. August 16th flowing begun and continued, at times profusely, for two weeks. In two weeks the flowing again begun, and has continued up to the present time. Since August 16th, when the flowing began, until September 20th has had a dull pain in right ovarian region. The breasts have enlarged. Sunday, September 20th, was suddenly seized with severe cutting pain in right ovarian region. This pain lasted one hour, and produced fainting. This severe pain was repeated September 28th, and lasted two hours. Formerly the pain in the right ovarian region was dull in character, but since the severe attack of pain it has been more cutting in character. From August 9th to August 16th, the week following the date of expected menstruation, there was dull, heavy dragging-down in lower abdomen.

Examination. — From half-way between umbilicus and pubes, extending over the whole of the lower part of the abdomen, there was marked sensitiveness on pressure. By vagina, a soft mass, the size of the fist, excessively sensitive, was found in Douglas's pouch, and on this the uterus rested in a position of retroversion. Bright red blood flowed from the cervix. Uterus measured three inches in depth. Temperature 99°; pulse 110.

Operation. — Dr. Holder assisted. Drs. Conant, McQueeney and Storer were present. On opening the peritoneal cavity, dark-colored blood welled up through the incision. The abdominal cavity below the incision contained fluid and clotted blood of a dark color, and no bright blood was found until the right tube and ovary were brought into view. A portion of the right tube towards the ovary was found dilated. This dilatation was about the size of a small English walnut. and from the upper part of it fresh blood oozed out through an opening the size of a pin's head. The right tube and ovary were ligated and removed. On the left side a cystoma of the ovary was found, and it, with the tube, was ligated and removed. The peritoneal cavity was thoroughly washed out five times with a saline solution, and the abdominal wound closed with silk. Silk was used, as my supply of silver wire had been exhausted on a laparotomy done two hours before. About a quart of fluid and coagulated blood was removed. The mass in Douglas's pouch was composed of coagulated blood, and was dug out with the fingers. Sutures removed on the eighth day. Convalescence was uninterrupted.

Twenty-three days after the operation she was discharged well. December 2d, she reported that she felt perfectly well.

My first case of extra-uterine pregnancy was operated on November 26, 1877. Rupture took place at the Globe Theatre. The patient gave a "loud scream, and fell to the floor unconscious." She was carried home in a carriage, and after a few weeks' stay in bed was able to be about. Though an old patient of mine, I had not seen her until she got about. On examination, a mass as large as a cocoanut was found posterior to the uterus. This mass felt hard, somewhat elastic and non-fluctuating. Cœliotomy was done, and an intra-peritoneal hæmatocœle found. The coagulated blood was walled off by adhesions between intestines, omentum, tubes and broad ligaments. On the right

side the appendix helped to make part of the wall. Both tubes and ovaries were removed and the abdominal cavity cleansed of blood. Drainage-tube inserted. The pathologist was unable to find anything in the mass of blood and *débris* that would point to a rupture of an extra-uterine pregnancy as the source of the intra-peritoneal hæmorrhage.

Dr. Whitney's Report. — "The following is the description of the ovaries and tubes from the case of Mrs. G. F., received from you, October 1, 1891:

"(1) Ovary and Tube. The portion of the tube measured about six and one-half centimetres. About two centimetres from the fimbriated end, which was normal, was a rounded enlargement measuring about two and one-half centimetres by two centimetres, dark red in color and covered with shaggy, thin adhesions. About the middle of the nodule opposite the side of the ligament was a very small rent with a hæmorrhagic infiltrated edge. The remainder of the tube, about two centimetres, was of normal size and calibre. Sections made through the nodule, and examined microscopically, showed the greater part to be made up of blood clotted among small villous projections, fibrous in character, and covered with a low epithelium, similar in every way to the villi of an immature placenta. Just beneath the outer surface were large and very thin-walled vascular sinuses. The cavity of the tube was dilated, and its lining membrane was apparently reflected up on to the mass of blood and villi: but whether it was continuous entirely over it, could not be determined. Apparently, however, it was not. From the distal end of the nodule there opened a distinct diverticulum from the tube, which could be followed almost to the fimbriated end, where it stopped. The relations were such as to show that the nodule had developed entirely in the main tube, and not in the diverticulum. In none of the sections was there any evidence of a fœtus found. The ovary attached to this tube measured two by two and one-half centimetres, was irregularly shaped, and from one place a reddish nodule projected, which, on section, showed an irregularly festooned outline enclosing a yellow mass of large cells (*corpus luteum*).

"(2) Tube and Ovary. The piece of tube measured about six centimetres, and was of normal size and structure. The ovary measured about three by four centimetres, and was mostly made up of a cyst, filled with thin fluid, extending deeply into the hilus, where there was a layer of ovarian tissue gradually thinning out over the cyst.

"The case is one of tubal pregnancy, with rupture. There are no positive data as to the length of time, but from its size it is probably within two months."

THE TITLE OF M.D. IN ENGLAND. — A case of interest to the medical profession in England has recently been decided by the court of Queen's Bench. The defendant having the right to practise in England by the degree of L.S.A. only, publicly described himself as an M.D. on the strength of a degree issued by the Beach Medical Institute of Indianapolis. It has been decided that the possession of a degree not registrable in England is not sufficient to justify the holder in describing himself by the title of the degree for the purpose of obtaining practice, even if he has already the right to practise by virtue of some other degree.