The night-cries persisted for nearly two months, though the motion was slowly returning. He was unfortunately lost sight of after discharge.

CASE 14. Boy, five years old. Twelve days before entrance was kicked in the hip, and in a few days developed a high temperature and held hip flexed. The soft parts around this joint were much swollen and very painful on pressure or attempt of motion. It could, however, be put through 18° in flexion and 20° in abduction. The temperature on entrance was 102° F., but fell to normal on the third day. Count taken the day after entrance showed

Erythrocytes	4,336,000
Hemoglobin	63 p. c.
Leucocytes	24,212
Lymphocytes	13 p. c.
Large mononuclear and transitional forms .	4 p. c.
Polynuclear neutrophils	80 p. c.
Eosinophiles	3 p. c.

In three weeks the motions were nearly normal, and there was no pain. The case has continued to do well for eight months.

CASE 15. Girl, five years old. Hip disease dates back over three years. Had been in the hospital about a year ago for pain and malposition of joint, staying two and a half months and having 90° flexion and 20° abduction at the time of discharge. Readmitted three months ago with an acute exacerbation said to have come from taking cold. The hip was very sensitive and admitted no motion. Longitudinal traction gave no relief, and even seemed to increase the pain. Lateral traction increased up to two pounds, finally gave some improvement. After two months' bed treatment, she was gotten up with a combination double splint on. At the time of the count, three months after entrance, there was no motion, and although she was apparently free from pain, she refused all attempts to make her walk. The temperature ranged between 98.4° and 100°, being 99.4° at the time of the count.

Erythrocytes	4,874,660
Hemoglobin	63 p. c.
Leucocytes	30,980
Lymphocytes	12 p. c.
Large mononuclear and transitional forms .	14 p. c.
Polynuclear neutrophils	72 p. c.
Eosinophiles	2 p. c.

Case returned to the house in seven months with a large abscess.

(To be continued.)

Clinical Department.

A CASE OF SEPTICEMIA FROM SEWER-GAS.

BY ARTHUR P. PERRY, M.D.

Mrs. A. B., primipara, age twenty-eight years, was delivered by forceps after a labor of twenty-four hours.

The head was low down when these were applied, and the child was easily extracted, no violence being done to the mother's parts.

The usual precautions were observed as to asepsis in the instruments, hands, etc., and a post-partum douche was given.

Mother and child did well for three days. On the fourth the patient had a chill, with a temperature of 103°. There was, however, no uterine tenderness, and the lochia continued to flow. There was good secre-

tion of milk and no trouble with the nipples. A thorough examination of the other organs failed to show any cause for the rise in temperature.

This had continued for a day or two when a disagreeable odor was noticed in the sick-room, apparently localized about the bed, which was in a corner. Careful inspection of the patient and the bed did not disclose the source of it, however.

Suspecting that the odor might come from a dead rat in the walls or floor, I urged the removal of the mother and child to another room, but to no purpose. The husband thought that "the place was good enough" for his wife, and could not be made to believe that there was any harm in the odor.

Finally, investigation was made in the cellar directly under the room in which the patient lay, and here the cause of the trouble was found. A bath-room was situated across the hall, just outside the sick-room. From this a four-inch soil-pipe ran under the floor and through the underpinning of the house, at a point under the head of the bed. After passing through the wall the iron pipe terminated some two or three feet from the house in an earthen pipe, which ran about twenty-five feet and emptied into a cesspool. This earthen pipe was much larger than the iron pipe, and at the joint the plumbers had merely brought the two to meet each other and run cement around the joint. The frost had "heaved" the pipes and broken the connection, allowing some of the contents to find their way along the outside of the iron one and into the cellar directly under the head of the bed, and even that side of it on which the patient lay most of the time.

As soon as this was discovered, the patient was removed to another room at a safe distance, a trained nurse was engaged, and recovery began to take place, she finally being discharged well.

The pipe-connection having been repaired and disinfectants used the foul odor disappeared. Great care should be taken in building houses to have a trap in the soil-pipe outside the house wall and easily reached.

In Boston the law requires that plumbers shall carry the soil-pipe ten feet out from the building and this is usually the limit of their contract. Earthen pipe is somewhat cheaper than iron, and for this reason connection between the point where the plumber leaves off and the sewer is nearly always made with this. It is unsafe to do so, however, on account of earthen pipe being so easily broken by frost, settling of the ground, etc. The iron soil pipe should be carried completely into the sewer or cesspool, be it as distant as may be.

SUBMUCOUS FIBROID OF UTERUS, OCCASIONING HEMORRHAGE IN A WOMAN OF SIXTY-FOUR YEARS.¹

BY WM. H. BAKER, M.D.

Mrs. S. P. W., American, aged sixty-four years, was admitted to the Free Hospital for Women in January, 1896. She had been married thirty years, and had given birth to thirteen children, the youngest of which was nineteen years of age. She had also had four miscarriages. She had complained of "falling of

¹ Read before the Boston Society for Medical Improvement, February 10, 1896.

the womb," for forty-four years, or before the birth of any children. There was nothing of special interest in regard to her menstrual life except its long continuance. She noted no lessening in its amount, which was always rather abundant, until fifty-six years of age, when it diminished to a slight flow each month until the past year, when she had a violent hemorrhage, from which she recovered in a few months, and entered the hospital complaining of weight and dragging in the pelvis. On examination, laceration of the perineum, cystocele and urethrocele were found, together with a submucous fibroid of the uterus, the lower part of which was presenting through a well-dilated os.

January 30th. Under ether, enucleation was accomplished by traction with the volcellum forceps, stripping the tumor from its capsule with the forefinger. In accomplishing this, however, partial inversion of the uterus occurred, and I was able to demonstrate the separation of the fibroid from the uterine wall, to physicians present most satisfactorily. There was no difficulty in effecting the immediate reposition of the uterus after the removal of the fibroid, after which the cavity of the uterus was packed with sterilized gauze. She made a good recovery; and a week after this operation the cystocele, urethrocele and lacerated perineum were corrected by appropriate operations.

The case is of interest,

(1) As demonstrating a source of uterine hemorrhage in elderly women.

(2) As showing the effect which a uterine fibroma may exert in continuing the menstrual life of a woman many years beyond its allotted time.

(3) As being remarkable that this fibroma should have withstood the destructive influences of repeated labors, she having had thirteen children, the youngest of which was nineteen; for we cannot credit the opinion that this tumor began to grow after the birth of the last child, or when the patient was forty-five years of age.

Medical Progress.

RECENT PROGRESS IN ANATOMY.¹

BY THOMAS DWIGHT, M.D.

FORMALINE IN TOPOGRAPHICAL ANATOMY.²

THE number of papers on the use of this agent is well-nigh endless. We have taken no note of the discussion, as it applied largely to microscopic methods. We make an exception for a part of this paper because it treats of a method of great practical importance. Since His revolutionized our ideas of the true shape of many of the viscera by his hardening *in situ* with chromic acid, much work has been done in the same field, and several variations of his method have been tried besides the process of reconstruction by putting together the parts of organs taken from frozen sections. We take from an elaborate article by Gerota, in which he discusses both the microscopic and macroscopic uses of formaline, what relates to this purpose. The subject is injected with five litres of a five-per-cent. solution and then frozen, after which

the sections are made. They are placed at once in a four-per-cent. solution to complete the hardening, which requires five or ten days. For embryos and infants in which the bones offer no serious resistance, he injects an alcoholic solution of formaline. If we understand it rightly, this is made by substituting alcohol of 90 per cent. for about one-quarter of the preceding solution. The injection being made, the body is immersed in a ten-per-cent. solution of formaline for three or four days, after which it can be cut in any direction. Such sections can be decalcified and used for microscopic work.

VARIATION OF THE MANUBRIUM STERNI OF THE HIGHER PRIMATES.³

Dr. Arthur Keith has collected the observations in human anatomy of cases in which the manubrium, instead of ending at the second costal cartilage, reached to the third; or, in other words, those in which the joint between manubrium and body occurs at the third rib instead of at the second. This is extremely rare in man, there being only some seven cases reported, of which two were recorded by the writer of this report, who has since seen another. Dr. Keith intimates that it is impossible at present to estimate its frequency in man, and provisionally puts it at one in a thousand. He has made many observations on apes and monkeys with interesting results. He finds that this arrangement is normal in the great majority of gibbons, that it is frequent in the chimpanzee and the gorilla, and very rare in the orang. Before giving his percentages we must call attention to one point, namely, that occasionally when the chief joint is at the level of the third cartilage, a smaller suture is found opposite the second. What is this to be considered? Unless we know the age of the subject it is impossible to say whether it is a permanent arrangement or merely an immature stage. Dr. Keith seems to have included such cases with the anomalous ones, and probably justly. He finds that it occurs in about 80 per cent. of the gibbons, in about 30 per cent. of the chimpanzees, and in about 20 per cent. of the gorillas; while among the orangs it is found only once in a hundred. He has apparently found it only once among the lower monkeys. His explanation is rather lame, as indeed, he seems inclined to admit. He writes: "The prevalence of this form of presternum in hylobates (the gibbons) may be taken as evidence that it is for them more advantageous than the ordinary of human form. Its exact advantage is not very evident." He then suggests that it may have to do with the great development of the greater pectoral, but it is not in the least clear that one kind of sternum is more adapted to this than the other. Dr. Keith in his theorizing omits all mention of the fact noted by the writer, that according to Meckel the same condition is found in the hippopotamus.

SOME PROCESSES OF THE OCCIPITAL AND MASTOID REGIONS OF THE SKULL.⁴

Mr. E. M. Conner has written a paper on the process or processes at the junction of the exoccipital and mastoid regions. In man there is very frequently, perhaps we should say always, a rudimentary process in this place, which, when large, is called the paramastoid and paroccipital process indiscriminately. He found in 93 per cent. of 152 skulls a distinct process

¹ This is the writer's fiftieth and last semi-annual report. The first appeared in September, 1871, being the first of the present system of reports on various branches of medicine. In order not to retire in the course of a year, the writer proposes in the second volume to trace the general progress of anatomy during the past twenty-five years.

² Internat. Monatschft. f. Anat. und Phys., Bd. xiii, 1896.

³ Journal of Anatomy and Physiology, vol. xxx, January, 1896.