the slightest constitutional disturbance followed; and there was no discharge of matter from the cavity, there being merely a slight serous oozing, which gradually disappeared.

Not long ago, I should have declined to open this abscess, from feeling very sure that the effect of doing so would be a profuse discharge of matter, rapid emaciation, hectic irritation, irritative fever, and death; but now, even when there is reason to believe that the matter proceeds from diseased bone, the confidence derived from experience has removed all such fears; and, caries being regarded as the effect instead of the cause of suppuration, patients are no longer left to their fate under circumstances that would formerly have been deemed entirely hopeless.

CASE VI. Chronic Abscess of the Mamma.—C. A., a married woman, aged 25, was admitted on December 2nd, for a deep-seated tumour of the mamma, which, she said, had existed for twelve months. Having ascertained that it was an abscess, I made a free incision, and discharged six or eight ounces of purulent matter. As it then appeared that a considerable arterial branch was bleeding, and could not conveniently be either tied or twisted, a needle was passed through the wall of the cavity so as to convey a thread round the vessel on each side of the wound, which, being tied, prevented any further hæmorrhage. The wound having then been sponged with the carbolic lotion, was covered with the paste. On the 6th—that is, two days afterwards—the ligatures were removed, and neither then nor subsequently was there any discharge whatever, either serous or purulent. On the 9th, the patient was dismissed; and, at the end of a fortnight, she returned to show that the breast remained perfectly well. There are few surgeons who have not encountered great difficulty in treating abscesses of the breast, and who will not be able to appreciate the value of this extraordinary result.

CASE VII. Acute Abscess.—T. D., a man aged 59, was admitted on December 4th, with a very large abscess of the forearm extending from the elbow to the wrist, which, he said, had commenced about a fortnight before, and had been very painful. On the 5th, a free incision was made, under the protection of carbolic oil, and nearly a pint of purulent matter discharged; after which the paste was applied over the wound. On the 8th, there was a little serous oozing; on the 10th, it had nearly ceased; and on the 12th, the cavity was completely consolidated.

From such cases as those which have just been related, it is evident that there has taken place in surgical practice an improvement which promises to produce a great diminution of human suffering and danger. Some attempts have been made, anonymously and otherwise, to filch away from Mr. Lister the credit justly due to him for devising and establishing the antiseptic system, by representing the use of carbolic acid previously for other purposes as an anticipation of his treatment. But, although the agent was not new, the principles of its employment, the modes of its application, and the results of its effects, being so entirely original, I venture to hope that the members of my profession will no longer tacitly sanction such disingenuous and ungenerous conduct.

THE PERMANGANATES AS DISINFECTANTS.—The International Society for Succouring the Wounded in War has recognised the value of Mr. Condry's discovery of the disinfecting properties of the alkaline permanganates, and the great sanitary value of Condry's fluid, proved by the experience of the Prussian army surgeons during the Austro-Prussian campaign, by awarding to the inventor, Mr. Bollman Condry, of Battersea, their honorary medal.

FRENCH HOSPITAL IN LONDON.—A dinner was given on December 20th, at Verrey's Café, Regent Street, in aid of a London hospital open to all foreigners speaking the French language, when the chair was taken by M. Devaux. A French dispensary, established in 1861, has rendered gratuitous medical aid to more than 7,000 sick and indigent persons, and last year it was determined to found a hospital, in order to complete the work commenced in the dispensary, and to offer to those speaking the French tongue the succour which the Germans have for many years provided for persons of that nation. The French Government promised an annual grant, and the appeal to the French in London was so generously responded to that the committee felt justified in beginning operations at once, by hiring a commodious house at the corner of Lisle Street and Leicester Place, in the centre of the French quarter, where patients are attended by two French physicians of eminence. Liberal donations were announced. It appeared from the statement of Mr. Rimmel, the honorary secretary, that the hospital and dispensary are under the same roof, and offer to patients the advantage of a consultation-hall, a pharmacy perfectly organised, fourteen beds, and four chambers allotted to persons who, having some small resources, may be able to pay a moderate weekly sum towards their maintenance.

ON GRANULAR INFLAMMATION OF THE CERVICAL CANAL OF THE UTERUS.*

By FLEETWOOD CHURCHILL, M.D.,
President of the King and Queen's College of Physicians in Ireland.

MR. PRESIDENT,—With your permission, I propose to occupy the attention of this section for a short time with some observations on Granular Inflammation of the Cervical Canal and Uterine Cavity, but particularly the former. Scattered notices on the subject may be gleaned here and there from the writings of different gynaecologists; but the subject has been little noticed by systematic writers.† As the time allotted to each paper is so short, I shall not bring forward these notices; but give you simply the results of my own observations without, in the slightest degree, claiming priority for them.

I think the best illustration of the disease I can give you is the Granular Inflammation of the Conjunctiva—Granular Ophthalmia, as it is called. The disease consists in an inflammation of the mucous membrane of the cervical canal and, it may be, of the uterine cavity also, attended by the development of granulations. When we examine carefully by sunlight, we find the lining membrane generally bright red, or, if much congested, of a purplish red, colour; and can very plainly distinguish a great number of granulations, some very minute, others much larger, though never very large, scattered over or covering the surface.

Sometimes we find a granular condition of the cervix, with or without erosion. I have generally observed more or less vaginitis; it may be general or in patches; but I have rarely seen the vagina perfectly free from inflammation. I am not prepared to say whether this inflamed condition of the cervical canal is always a consequence or continuation of inflammation of the mucous membrane of the vagina, or a portion of it; but I think it very probable. I have, at any rate, seen granular vaginitis along with the same affection in the cervical canal.

Another symptom is, I think, quite characteristic of this disease—viz., a wide open os uteri. Sometimes the finger may be passed as far as it can reach; in other cases only the point can be introduced; but, with very few exceptions indeed, it is much more patulous than natural. Now, in all these cases of patulous os uteri, if you carefully examine the mucous membrane, you will find intense redness and granulations, except at one or two places, it may be, from which the mucous membrane has been stripped.

But you will naturally ask me, how we are to examine the inner surface of the canal. There are two means of doing so.

1. By the speculum with bright sunlight. The cervix uteri is always more voluminous than usual, and can hardly be embraced by the end of the speculum; but, when brought as centrally as possible, the pressure closes the wide os uteri, and it appears simply a prolonged slit. If one lip be separated from the other, by a slight hook—I use the one with which Mr. Spencer Wells raises the peritoneum in the operation of ovariectomy—we can quite easily see into the canal a quarter or half an inch; and, if so much appear inflamed and granular, we may fairly infer that the remaining portion is so likewise.

2. By the endoscope. I am indebted to my friend, Dr. Cruise, for my first view of the cavity of the uterus and for instruction how to use the instrument. He has added to my obligation to him by promising to attend here and give information as to its use to any one who may wish to understand it. I have since repeatedly used the instrument, and by it confirmed the diagnosis I had made from a sunlight examination of the lower portion of the canal.

In most cases, the canal is open enough to admit of the tube being passed with great ease through it into the cavity of the uterus; in some cases, it would admit a much larger tube. If, however, it should be too narrow, nothing is easier than to dilate it with a tangle tent or prepared sponge to any extent we please. Having passed the tube to the fundus uteri, sponged it out, and made our observations, we may turn its orifice to different portions of the cavity, and then, slowly withdrawing it, we can examine each successive portion of the canal, and there will be no difficulty in distinguishing the inflamed from the healthy portions. The amount of information we obtain, or could obtain, through so small a tube (and I have no experience yet with the larger) is not great. I think the plate given by Dr. Cruise of the inflamed mucous membrane of the bladder gives a sufficiently correct idea of this granu-

* Read in the Medical Section at the meeting of the British Medical Association in Dublin, August 1867.

† Since the above was written, I have had the pleasure of reading the fourth edition of Dr. Henry Bennet's work, which is so remarkable an exception, that I feel how little I have added, in this paper, to what he has told us so well.

lar inflammation of which I am speaking. Portions are bright or deep red, and rough; other parts are paler and smooth; except in the severe cases, where we find no healthy portions of mucous membrane.

I have mentioned that I have seen a few cases in which the os uteri was not more open than usual, and in which I ascertained that granular inflammation existed. In such cases, I have observed that the introduction of the sound in the gentlest manner caused some bleeding, or, in other cases, gave actual pain. If, in such cases, the canal be dilated with a tangle tent, its granular condition may at once be ascertained; so that I regard these two symptoms—slight bleeding or pain when the sound is passed very gently—as conclusive. Reasoning *à priori*, I think we should expect to find the canal narrowed or closed, as the ordinary result of granular inflammation; but the opposite is the case in the vast majority of instances. Nor am I able to offer any scientific explanation; all I know is the fact, that of this disease the most unvarying accompaniment is an os uteri unusually patulous.

I have been thus particular in describing the anatomico-pathological peculiarities of the disease, because, as one might expect, the symptoms (properly so-called) are less distinctive, but have much in common with other affections of the uterus. There may be, and generally is, the usual aching pain in the back, with, possibly, some feeling of weight or bearing down. The menstrual flow is almost always increased, sometimes excessive, or recurring at short intervals and from slight causes. I recollect only one case where the opposite extreme was observed. There is always more or less leucorrhoeal discharge, thinner, and white or yellowish, if there be vaginitis; thick and tenacious when the disease is limited to the canal of the cervix. When the speculum is used, we may see this stringy discharge hanging out of the os uteri, and it is sometimes difficult to remove it. When the disease is of long standing, it interferes, more or less, with the general health, giving rise to languor, listlessness, loss of appetite, and imperfect digestion. In addition, it is not less potent than other disorders of the uterus in exciting reflex irritation, of which, perhaps, the most common is ovarian pain and irritability of the bladder; very distressing while they last, but not absolutely requiring any special treatment beyond a vaginal suppository of belladonna or morphia, and which disappear as the cure of the disease progresses.

Upon one uterine function, gestation, the influence of a severe attack of granular inflammation is apt to be disastrous. It does not always prevent conception; but, in a great number of cases, it causes abortion. I have known a succession of miscarriages apparently result from this cause alone; and I think that, in all cases of the disease, no risk of impregnation should be incurred. It will be wise also, in any case of abortion, to examine into the condition of the canal after the lochial discharge has ceased.

DIAGNOSIS. After what I have already said, I need occupy very little time with the diagnosis. Our suspicions will probably be first excited, when making a digital examination, by finding the point of the finger pass more or less freely into the os uteri, and the inference from this will be turned into certainty by a sunlight or endoscopic investigation. A little longer process will be necessary when the os is not patulous; the occurrence of pain when the sound is passed, or a drop of blood escaping afterwards, leave but little doubt, and that may be removed by dilating the os with tangle, and a subsequent careful examination.

TREATMENT. The disease is curable enough, and the course of cure steady but slow. It must be for such cases that the different kinds of curette have been invented, to scrape off the granulations. This does not appear a very scientific procedure, and I am sure you can cure this disease as effectually without it. The endoscope affords us a very nice and precise mode of applying remedies to any part, either of the cavity of the uterus or the canal of the cervix, without the risk of doing more than we intend, so that we may safely use stronger remedies than we dare in any other way. By this means, strong nitric acid, tincture of iodine, or lunar caustic, may be applied when we please, and to a greater or less surface as may be necessary, or if we wish to limit our treatment to the cervical canal, a smooth piece of deal may be dipped in the acid or the tincture, and freely applied. I have found it better to begin with a free application of strong nitric acid, so as to destroy the granular surface, and this may be repeated at intervals of three or four days, until we obtain a smooth surface. The vagina should be syringed with cold water, or camomile tea, once or twice a day. After this, I dip a small twist of cotton-wool in tincture of iodine, and apply it to the entire diseased surface, twice a week, continuing the syringing as before. As the cure progresses, the lining membrane becomes paler and smooth, and the os uteri closes somewhat, but it is not restored to its natural size for some time. I have found a strong astringent applied to the inner surface, in the way I have described, the best aid, and with this view I have used with benefit both the pernitrate and perchloride of iron, at the same time syringing the vagina with a strong astringent.

I should strongly advise "separation" until the treatment is finished, as conception might seriously interfere with our procedure.

There is a disease which I meet with occasionally, which may possibly have some relation to the foregoing, but of this I am not sure. I mean a vascular tumour at the os uteri, exactly like that we find at the meatus urinarius. It varies in size from a pin's head to a raspberry, and, unlike the small polypi found in the same situation, bleeds on the slightest touch. So far as I know, it gives rise to no symptoms but menorrhagia. It can seldom be recognised by the touch, because of its small size and softness, but it is easily detected by the speculum. The cure is simple—excision by scissors, or Dr. Braxton Hicks's small wire *écraseur*, or torsion by Wilde's snare, and, subsequently, repeated cauterisation.

THREE CASES OF SPONTANEOUS FRACTURE OF URINARY CALCULI IN THE BLADDER.

By GEORGE SOUTHAM, F.R.C.S.,
Surgeon to the Manchester Royal Infirmary.

THE rare occurrence of the spontaneous fracture of an urinary calculus has induced me to submit to the members of this Association the following cases, two of which came under my own notice; the other under that of Mr. Luke, to whom I am indebted for the particulars.

The first case is that of a boy named Hilton, aged 15 years, who was admitted a patient of the Manchester Royal Infirmary in 1855, with the usual symptoms of stone, from which he had been suffering for about eighteen months. He had been sounded on one occasion only, but without the detection of a calculus. I ordered him to keep his bed two days, at the expiration of which time, by the introduction of a sound, I readily discovered the existence of a stone. At the end of seven days, I made an attempt to remove it by the lateral operation; but the catheter, which was introduced for the purpose of injecting some fluid into the bladder, could not be passed beyond the prostatic portion of the urethra, as the calculus was firmly fixed in that part. The instrument was, therefore, withdrawn; and, with the finger passed into the rectum, and the calculus being pressed against the perinæum, a portion of it was extracted through an incision which I made into the urethra, of about three-quarters of an inch in extent, in a line with the raphe. The remainder and larger fragment, which was in the bladder, was removed by a pair of long forceps. The case progressed most favourably. The calculus consisted of two portions, one considerably larger than the other. The smaller stone (Fig. 1), which was situated in the urethra,

Fig. 1.

had the appearance of having been recently broken off from the larger, except that the edges had lost their sharpness. The surface of the larger portion (Fig. 2) showed that the fracture was not of recent date; for a quantity of triple phosphate was deposited on its broken side and

Fig. 2.

prevented the two pieces, with the exception of their edges, from corresponding with each other. The calculus was composed principally of lithic acid, coated with so thick a covering of oxalate of lime, that considerable force would have been required to break it. The weight of the entire calculus is 6 drachms, the smaller fragment being 70 grains.

The second case to which I beg to call your attention is that of a boy aged 7 years. He also was under my care as a hospital patient in 1863.