vated. In the first group, the deposit appears to be merely pigmentary; in the second, it has a calcareous nature (phosphate and carbonate of lime).

It would seem from Case III that the calcareous deposit has a tendency after a time to chip off, and thus lead to a spontaneous cure. This corresponds with the experience of Messrs. Bowman and Dixon, who found that it easily broke off under the knife, and that the subjacent cornea was smooth and transparent. There is, therefore, in these calcareous cases, much encouragement to operate; or, if the patient decline an operation, we may hold out to him the hope of a spontaneous cure, though it may be long delayed. In neither class of cases does any milder treatment seem to be of any avail; but in one of my cases the use of stenopaic spectacles was attended with great benefit.

It has been supposed that these symmetrical opacities are connected in some way with the gouty or rheumatic diathesis; but the cases which I have related lend no support to this theory.

NOTES OF A CASE OF BILIARY FISTULA.*

By G. H. PHILIPSON, M.A., M.D.Cantab., M.R.C.P.Lond.
Physician to the Newcastle-upon-Tyne Infirmary, etc.

FISTULÆ of the biliary passages may open externally, or communicate with some internal organ. Of the latter, most pass from the gall-bladder or the ductus communis choledochus into the duodenum, stomach, colon, portal vein, or urinary passages of the right side.

As an example of external fistula, the following case may be instanced, which is at the present time under my care in the Newcastle Infirmary, and for the history of which I am indebted to the Senior House-Surgeon, Dr. Page.

Mary L., aged 34, a dress-maker, had been married thirteen years, and had had seven children, all born alive. Up to fifteen years of age, when menstruation first occurred, she had enjoyed good health. From fifteen to twenty-one years of age, when she married, she experienced no illness, with the exception of frequent headache and occasional constipation.

In June 1868, she went to bed feeling quite well, but during the night awoke with violent pain near the umbilicus. At this time she suffered severely from tenderness and distension of the abdomen.

In September 1869, in consequence of the severity of the abdominal pain and a protrusion of the umbilicus, she applied for aid at the Newcastle Dispensary. A few days afterwards, the skin around the umbilicus ulcerated and a quantity of glairy fluid escaped, at first like the white of an egg, afterwards yellow. About a week later she became jaundiced. Subsequently the discharge lessened and the jaundice passed away, and about this time she became pregnant.

On Christmas Day 1869, she was suffering so much pain, that the opening was enlarged and four gall-stones were removed.

In May 1870 she was confined. The sinus, which up to that time had continued to discharge, sometimes a yellowish, at other times a greenish, fluid, closed for about a week, when it recommenced to pour out fluid, and the patient suffered from a recurrence of the abdominal pain and again became jaundiced, and was admitted into the Newcastle Infirmary on the 9th of June, 1870.

June 11th. The skin and conjunctivæ were yellow, the tongue furred and dry, the urine dark porter-coloured, and the fæces pale. At the umbilicus, a fistulous opening existed, about the size of a goose-quill, from which a glairy greenish fluid exuded, easily increased in amount and in rapidity of flow by circumjacent pressure. A silver probe was easily passed for four inches, and could be moved from side to side. The patient was ordered salines and a generous diet, and improved daily in appearance and in strength.

On June 22nd sudden and severe pain occurred in the abdomen and very little fluid passed from the opening. The probe was arrested about an inch from the surface. Three gall-stones, about the size of small hazel-nuts, were extracted by Dr. Page, and the pain abated and the discharge recommenced.

It having been thought that the case might be of service in supplementing the experiments by Professor Hughes Bennett upon the chologogue action of mercury upon the lower animals, a communication was addressed to that gentleman, who answered, that unless it was positively determined that the ductus communis choledochus was impervious, it would be utterly useless to institute any proceedings.

To clear the doubt, active aperients were administered. After free

purgation, the alvine evacuations from being clay-coloured began to give evidence of containing bile, and on July 2nd it was noted that such had become dark brown in colour. The proposed investigation for estimating the amount of bile which passed from the fistulous opening, of necessity, therefore, was abandoned.

In this case, in all probability, in consequence of gall-stones having become impacted in the biliary passages, the gall-bladder became widely distended, and, from consequent inflammation, adherent to the abdominal walls, which subsequently ulcerated. The quantity of bile which flowed from the fistulous opening was never excessive, hence the small effect upon the nutrition.

In contrast, the chief points of a case of fistula of the right pleura, at this time also under my care in the Newcastle Infirmary, will be briefly given.

William W., aged 17, was admitted on the 21st of July, 1870. About twelve months ago, a swelling appeared in the right side, which, after having been poulticed, broke. July 23rd. On the right side, about one inch outside of the nipple and two inches below, was an opening, about the size of a small pea. A probe was easily passed upwards and backwards for fully four inches. About one ounce of thin sanious pus passed in the twenty-four hours. During tranquil respiration, the percussion-note was resonant to the level of the fistulous opening, the liver-dulness commencing at this line. In forced inspiration, the percussion was resonant to a finger's breadth below the opening. Respiration was heard anteriorly fully one inch below the right nipple, posteriorly for two inches below the angle of the scapula. The heart's impulse was in the normal situation; the cardiac dulness was not increased. No account of an acute attack of pleurisy was given. It is presumed, therefore, that the case had been chronic from the first, and the effusion never great in amount.

These cases are both, at present, in the Newcastle Infirmary, and may be visited at any time by any of the members. The coincidence of their being under observation at the same time, together with the interest of and the dissimilarity of the cases, is a sufficient apology, it is trusted, for their being simply recounted.

DEATH FROM THE EXTERNAL APPLICATION OF CARBOLIC ACID ACCIDENTALLY APPLIED.

By EDWARD SANDWELL, L.R.C.P.Ed.,
Medical Officer Westminster Union.

ON August 31st, Emma —, aged twelve months, came under my care suffering from extensive ulceration of the whole of the gluteal region, together with the labia, etc. The mother of the infant is charwoman to the Ragged Schools in this district; and, having on the 29th of August to clean the rooms, took with her the baby and another child twelve years of age to look after her. Just before she commenced working, the superintendent had used his usual disinfectant of one ounce of carbolic acid to a quart of warm water, which he sprinkled about the room, as was his practice. The elder child sat the baby on a block of wood on which some of the disinfectant had been thrown. Nothing was noticed on the day of the occurrence, the child being washed and put to bed as usual. The next morning, blistering had commenced, and rapidly passed into the state of ulceration in which I first saw it. I ordered a dry application of Fuller's earth and French chalk, which seemed to comfort and cause a diminution of the inflammation. On the fifth day after the accident, I gave a lotion of liquor plumbi with glycerine. Several sloughs formed and separated, the child gradually becoming weaker from exhaustion and shock. There were some signs of internal inflammation, for which I applied the usual remedies. The child died on the tenth day.

On making a *post mortem* examination, I found the rectum much inflamed; the intestines had patches of inflammation; the right pleura was also much inflamed.

Before the accident, the child was very healthy, showing no signs of internal inflammation or other disease. It was well forward with dentition, and was a full robust child; but after the injury, emaciation was very rapid.

From inquiries, I find that it is not at all uncommon for people to complain of burning and even blistering of the gluteal region after having used a closet to which carbolic acid had been recently applied. This only tends to show the necessity of caution being used in the administration of this disinfectant, even in a diluted form.

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.