MANCHESTER EYE HOSPITAL.

TOTAL ABSENCE OF THE IRIS IN BOTH EYES.

By A. SAMELSON, M.D., Surgeon to the Hospital.

R. L., of Bradwell, in Derbyshire, born before wedlock, unmarried, 38 years old, six feet high, of swarthy complexion, otherwise healthy, and rather stout, consecutively employed as labourer on farms, railroads, water-works, and as shepherd; was "always considered to have weak eyes, as the cold always flew to them," but could see to thread a needle, holding it as far as a foot distant from the eye, as well as "a sheep half a mile off on the hill side." There had been no marked sensitiveness to light. The patient, very intelligent for his station, had not been taught to read. His parents, brother, and sister, had never anything the matter with their eyes.

In September 1861, whilst almost always working in water, he got one day wet through, and could next morning see nothing but "same as ribs of fire over each eye, from temple to nose, all red." He put himself under medical treatment in February last, and was twice salivated. I saw him first in the month of July. A seton was then placed in his neck; and iodide of potassium ordered him for internal and external use. All this has been continued to the present time. The eyes, most restless before, have since become much more steady; the sun, as well as a flame, are now by the patient seen "in their natural colours," whilst previously they had appeared to him "like blood." The dizziness, formerly much complained of, has abated. The difficulties of ophthalmoscopic examination being also considerably lessened, the symptoms at present observable are as follow.

The eyes present a peculiarly dark aspect, and within the corneal area generally a deep slate colour. A gleam, as from a polished copper plate, is seen to issue from the right eye, especially when looked into from above or sideways; the reflexion from the left eye is of a paler hue. Linear greyish streaks of a fatty appearance appear along the upper margin of each cornea; the corneæ themselves are irregular in outline, acquiring a more elliptical shape with a transverse long diameter. No rudiment of the iris is visible. A milk-white dot of the size of a pin's-head, near the anterior as well as the posterior capsule, is centrally situated in the left lens, apparently higher in the right; and there are five or six equidistant curved striæ resembling the spokes of a wheel nearer the posterior surface in each lens; the rest also of the lenticular mass is not uniformly clear. The right lens is somewhat displaced, its inferior edge being fully three lines distant from and raised above the lower circumference of the cornea; whilst upwards the lens very closely approaches the cornea, and the top of the former is, as it were, hidden behind the limbus. The border of the lens being slightly jagged, this latter appears somewhat reduced in volume; the space for the aqueous humour is likewise diminished in size. Of the ciliary processes no trace can be detected by any method of examination. In the right eye, the optic nerve entrance is seen to be abnormally small, not quite regular in contour, of a chalky hue, frankly excavated; the vessels upon it are thin, scanty, bent over the edge, and almost limited to the outer portion of the disc (inverted image). The vessels and pigment of the choroid appear to be uniformly wasted. In the left eye, nothing can be discerned of the fundus, except occasionally the wavy glare of what resembles a bright fold of detached retina. The size and tension of the eyes are noways abnormal; the sensibility of the corneæ is perfect; no remarkable sclerotic injection is observable; the perception of light is moderate, the flame of an argand burner, raised one inch, being seen at twenty feet distance. There is still some nystagmus, with every now and then a more clonic rotatory jerk in either eye.

The patient states that there is "always a mist like

steam before him, same as if it made him drunk"; that he can see better for an hour in the morning; and that his left eye is by far the best of the two.

HULL GENERAL INFIRMARY.

CASES ILLUSTRATING THE TREATMENT OF JAUNDICE.

Reported by C. J. EVANS, Esq., House-Surgeon.

CASE I. *Organic Disease of the Liver, with Intercurrent Inflammatory Attacks.* W. B., aged 35, by occupation a groom, and of good constitution, was admitted under the care of Sir H. Cooper on January 16th, 1863, with symptoms of jaundice strongly marked. The conjunctive were of a bright yellow colour, the skin possessing rather more of a tawny hue; it was cool and moist, and the adipose tissue was scanty. The urine was dark coloured, like porter, containing a considerable amount of bile-pigment; when tested with sulphuric acid and sugar, scarcely any purple colour was produced. The stools were of a perfectly pipe-clay colour, and had been so for many weeks.

The symptoms had commenced about ten or twelve weeks before admission, and he had been under medical treatment. Immediately before the yellowness of the skin showed itself, he had fasted for some hours, and then had eaten a heavy meal. At the commencement, he had occasional vomiting, with a constant feeling of nausea, and this continued for about three weeks. He also complained, in the early stage, of general pains, not located in any particular part, accompanied with considerable itching of the skin, and this latter symptom existed in some degree at the time of admission. He had had no previous attacks of jaundice. He was ordered to take night and morning a pill containing one-third of a grain of podophyllin and two grains of extract of hops; and three drachms of compound decoction of aloes, with five drachms of camphor mixture, three times a day; and to have common diet.

Jan. 23rd. No improvement having taken place in any of the symptoms, the above treatment was discontinued, and the following prescribed instead:—Benzoic acid ʒss; camphor mixture ʒviij; an ounce to be taken three times a day.

Jan. 30th. Ten additional grains of benzoic acid were added to the mixture.

Feb. 1st. A relapse in the symptoms had now taken place. He complained of severe pain in the region of the liver; the yellow colour of the skin had become intensely bright, and the urine much darker, depositing abundant sediment. Six leeches were ordered to be applied to the region of the liver, and a calomel and antimony pill to be taken three times a day. The benzoic acid mixture was ordered to be omitted. Much relief followed the application of the leeches.

Feb. 7th. Rather more pain was complained of, and six leeches were again applied, and followed in a similar manner by marked relief. The leech-bites bled very freely, and required continued pressure with the fingers to stop the flow. He had no rigors. Considerable improvement was manifest also in the general symptoms about this time. The bright colour of the skin faded to a great degree; the stools became browner; and the urine assumed an almost natural colour. He was ordered to take an ounce of nitrate of potass mixture three times a day; and ten grains of Dover's powder at bedtime.

Feb. 11th. The gums were rather sore; and the calomel and antimony pill was ordered to be taken at night only. He appeared to be progressing favourably, though slowly; and was ordered to take, on the 19th, infusion of quassia with nitromuriatic acid every four hours.

Feb. 21st. Severe pain was again complained of in

the region of the liver; and this part was tender on pressure. It was evident, too, that he was becoming thinner; the skin still retained its tawny hue; and he slept badly at nights. Six leeches were ordered as before; a grain each of calomel and opium to be taken night and morning; and a pint of beef-tea daily.

Feb. 25th. Full diet was ordered.

March 2nd. The mixture was ordered to be omitted.

March 11th. He was ordered to take, three times daily, one ounce of an eight-ounce mixture, containing a drachm of iodide of potassium, an ounce of liquor taraxaci, and water.

March 17th. The compound iodine ointment was directed to be rubbed over the region of the liver twice a day.

No further improvement in the symptoms took place; and the man left the hospital, at his own request, on March 21st.

The following cases were also under the care of Sir Henry Cooper.

CASE II. J. P., male, aged 20, of healthy constitution. The urine had been dark coloured about five days; and the skin yellow, and the stools pipe-clay, somewhat less than that time. There was no sickness nor pain, and the size of the liver was natural. The jaundice had probably come on after exposure to cold. This case was uncomplicated. The skin was of a deep yellow, and the stools very light coloured. The urine was not tested for the bile-acids. He was ordered a third of a grain of podophyllin three times a day. It acted favourably; and he was cured of the disease. There had been no previous attacks of jaundice.

CASE III. P. S., female, aged 26, of healthy constitution, was suckling at the time; and was subject to "sick headaches," but had no pain whatever. The urine had been dark a week, and the skin yellow about the same time. There was no enlargement of the liver. It was a first attack. She took five-grain doses of benzoic acid; and a cure resulted in ten days.

CASE IV. J. B., male, aged 30, of enfeebled constitution. He had been ill about a week; the characteristic symptoms of jaundice showing themselves from the first. He complained of pain in the right side. The size of the liver was natural. He was a soldier, and had been in India; but he had not had a previous attack. The present one was ushered in by shivering. There was only a slight indication of bilic acids in the urine. A grain of podophyllin was given three times a day for ten days, without any good result; then benzoic acid, under which treatment a cure was effected in sixteen days.

The above three cases were out-patients of the Infirmary.

CASE V. — T., male, aged 63, of weakly constitution (a private patient); had been a very active man, and much exposed; was a drinker; and had been ailing many months. He had pain in the right side, and sickness; and the liver was larger than natural. The urine had been dark coloured for nearly a month; and it showed the presence of bile-acids. He was treated with mercurials and decoction of aloes. The case terminated fatally; and the liver was found to be cirrhotic. He had had no previous attacks of jaundice.

The following cases were admitted under the care of Dr. Daly.

CASE VI. C. B., aged 74, a tall, well-built man, was admitted on December 24th, 1862, with symptoms of jaundice. His constitution, he stated to be pretty good. The arteries at the wrist were hard and cord-like. He had always enjoyed good health, and had never had an attack of jaundice before. He had had pain, or rather a feeling of weight, in front of the chest about a month; but it had not been at all severe. He also complained of nausea, with a nasty taste in the mouth. The urine was dark coloured, and had been so about a fortnight;

the skin was yellow, though not of a bright colour; and the stools were like pipe-clay. When the abdomen was examined, the liver was found to be of about the natural size. The urine was tested with sulphuric acid and sugar, and no bile-acids were found to be present. This was a mild case, and there were no complications. He was ordered a grain of podophyllin in a pill twice a day, and ordinary diet, with three ounces of wine daily.

He quickly improved under the above treatment; lest the yellowness of skin, which only remained of a slight tawny colour; the urine and stools regained their natural appearance; and he was discharged cured on Jan. 26th.

CASE VII. J. P., aged 19, a farm-labourer, healthy-looking, was admitted on February 5th, 1863, with symptoms of jaundice of long-standing. The skin and conjunctivæ were of a decidedly yellow tinge, and had been so for the long period of four years, according to the lad's own statement. The urine was high coloured, but had never been very dark; there was not a great amount of bile-pigment in it. The stools had been light coloured some months. The size of the liver could not be well ascertained, on account of the great distension of the abdomen which existed, especially in the seat of the transverse colon. This troubled him much, and had existed some time; he had also suffered pain in that region for a long time past; and he occasionally had a feeling of nausea, but never any vomiting. He had not had any previous attacks of jaundice.

He was ordered to take half a drachm of the compound jalap powder the next morning; and was put on common diet.

Feb. 6th. He was now directed to take a grain of podophyllin and two grains of extract of henbane, in a pill twice a day.

Feb. 9th. The region of the liver was ordered to be well rubbed with the compound iodine ointment night and morning.

Feb. 16th. No perceptible change for the better had at present taken place. He was ordered to continue the above medicines; and to take, in addition, five grains of iodide of potassium and ten drops of liquor potassæ in an ounce and a half of compound decoction of sarsaparilla three times a day. Having no appetite for meat, he was put on milk diet, with a pint of beef-tea daily.

March 18th. The urine and stools were improved; but the colour of the skin remained much the same; and the flatulent distension of the abdomen caused him considerable distress at times. The appetite was better. He was ordered to omit the podophyllin, and take occasionally two pills of colocynth and blue pill. Common diet was ordered.

March 28th. He was ordered to continue the mixture, but omit the use of the ointment; and to take a tablespoonful of cod-liver oil three times a day; and to have full diet.

He was discharged as an out-patient in April.

The exact size of the liver could not be ascertained; but that it was very much enlarged, especially the left lobe, there could be no doubt. Dr. Daly considered the case to be a good example of what Dr. Budd has described under the head of scrofulous enlargement of the liver.

The termination of the case would appear to strengthen this view; for the size of the liver and the enlargement of the abdomen gradually lessened; and the lad recovered, after taking cod-liver oil and iodide of potassium, with ammonio-citrate of iron, for between two and three months. The jaundice was probably caused by pressure upon, and obstruction of, the minute bile-ducts.

CASE VIII. H. S., aged 43, by trade a draper, addicted to drink, and had been laid up with delirium tremens. Four years ago he suffered from abscess in the right loin, which confined him to bed six months. He was admitted under the care of Dr. Daly on May 14th, 1863.

At that time he was in a nervous, tremulous condition, the result of intemperance; besides which, the ordinary symptoms of jaundice were present, though not in a severe form. They had existed about a month or five weeks. The abdomen was full and distended. He had some pain, chiefly marked under the right ribs, and occasionally at the pit of the stomach. There had been much nausea and vomiting when the jaundice first appeared, but they had since subsided. He had had a previous attack, five years before. The stools were rather loose, quite clay-coloured; the urine high coloured, showing the purple colour in a marked degree with the acid test, indicating the presence of bile-acids. He was ordered two compound colocynth pills occasionally, and a dose of a mixture containing solution of acetate of ammonia, tincture of orange-peel, and chloric ether, three times a day; common diet, and half a pint of porter daily.

He quickly improved, lost his yellow colour and trembling condition, and was discharged cured on June 15th.

CASE IX. B. D., aged 50, female, was admitted on May 14th, 1863, with symptoms of jaundice to an extreme degree. The skin was of an intense greenish yellow hue, dry and harsh; urine as black as porter, depositing sediment; bowels costive. She did not complain of any pain, but was in a very low, weak state. The jaundice had been coming on about two months, and had been preceded by an attack of "slow" fever. She had vomited very much at first, but not latterly. She had not had a previous attack of jaundice. The urine, with the sulphuric acid test, showed distinctly the presence of bile-acids. She was ordered to take a grain of podophyllin, and two grains of extract of henbane in a pill, twice a day; and to have milk diet, and three ounces of wine daily.

May 19th. She remained much in the same state. The stools were perfectly clay-coloured. She was ordered a mixture containing chloric ether, tincture of orange-peel, and liquor ammoniæ acetatis. Sago or arrowroot was also ordered.

May 25th. Five grains of iodide of potassium were ordered to be taken three times a day in a decoction of sarsaparilla. The woman was becoming weaker; and the colour of the skin, if anything, darker than ever. There was also some distension of the abdomen. She was ordered four ounces of brandy, in addition to the wine; and a pint of beef-tea daily.

June 4th. The abdomen was more distended; she complained of great pain in it; and there was occasional sickness. A large blister was ordered to be applied to it. She died the next day.

At the autopsy, the abdomen was found full of serum and flaky lymph. The liver was rather contracted, and hobnailed in places; of a dark green colour throughout. The gall-bladder contained extremely viscid bile and a few calculi. The common gall-duct was pervious, but the cystic duct was obstructed in one part.

THE GREEK FIRE BUBBLE. We believe that what people call Greek fire is nothing more than a strong solution of phosphorus in bisulphide of carbon. The employment of this compound in some way or other against any enemy has, we believe, been often suggested to our own War Department; and during the Crimean war Captain Disney invented some sort of shell to enclose the fluid. It does not appear, however, to be so destructive as is generally supposed. The phosphorus, of course, takes fire when the sulphide of carbon has evaporated, but it only ignites very inflammable substances. We are strongly disposed to doubt the spontaneous inflammability of the original Greek fire. It seems to us more probable that "naphtha" was thrown from engines, and was afterwards ignited by the balls of "sulphur and pitch from evergreen fires," projected ready lighted on arrows and javelins. (*Chemical News*.)

Original Communications.

ON ULCERATIVE INFLAMMATION OF THE VALVES OF THE HEART, AS A CAUSE OF PYÆMIA.

By W. S. KIRKES, M.D., Assistant-Physician and Lecturer on Medicine at St. Bartholomew's Hospital.

AMONG the more formidable evils sometimes resulting from that very common disease acute rheumatism, a poisoned state of the blood, analogous to pyæmia, and brought about by suppurative or ulcerative inflammation of the cardiac valves, must certainly be included. There are on record numerous instances of death, with all the signs and *post mortem* proofs of a purulent or contaminated state of the blood, occurring in the course of rheumatic fever, which clearly demonstrate the truth of this statement. But although the fact is well proved, and although most systematic writers on diseases of the heart allude to the occasional vitiation of the blood by the products of endocardial inflammation, yet the association in question is by no means generally recognised; and when a case of the kind occurs it is apt to perplex and mislead even the most practised observers. The following instance furnishes a striking illustration of this.

CASE.* J. W., a picture-frame maker, aged 23, was admitted into St. Bartholomew's Hospital, under the care of Dr. Burrows, on October 15th, 1862, suffering from ordinary rheumatic inflammation of several joints of the upper and lower extremities. He was a fairly nourished, dark-complexioned, man, with a peculiar, anxious, and depressed aspect. The face was flushed; the skin hot and perspiring, free from eruption; tongue much coated with moist yellowish-white fur; pulse 80, of good volume; appetite bad; thirst considerable; bowels relaxed from medicine; urine high coloured, with a sediment of urates. A slight systolic murmur was heard at the base of the heart. These, of course, were ordinary symptoms and signs of rheumatism; yet there was a something in the appearance of the man which was unsatisfactory, and suggestive of failing power. This was the more significant since the patient was a very temperate man, in good circumstances, and had never been laid up with any previous illness. The attack began with pain in one hip eight days before admission, and the symptoms had gradually increased. There had been no rigor. The alkaline treatment for rheumatism was adopted, and a pint of beef-tea added to milk and arrowroot diet. He had no sleep the first night of his being in the hospital, but his condition next day (16th) was not materially altered. The bowels had acted five times, the motions being pale and relaxed; he felt sick occasionally. An aromatic draught with twenty minims of tincture of opium was administered, and the alkaline treatment continued.

On the 17th, he had had another bad night; being frequently disturbed by action of the bowels; the joints were better.

On the 18th, his bowels were still much relaxed. The tongue was more coated and very red. He had frequent nausea and vomiting of greenish fluid. An aromatic draught with half a drachm of aromatic spirits of ammonia, and ten minims of laudanum, three times a day, was now substituted for his alkaline mix-

* I am indebted for several particulars of this case to the daily notes of Mr. Connell Whipple, the clinical clerk in charge of it.