Eye Hospital August 24th, 1857. His right eye was closed by the palpebrae being adherent, except a very small chink on the outer side, where they could be slightly separated, so as to expose a very small portion of opaque cornea. The inner half of the superior palpebra was occupied by a projecting tumour, of about the size of a large hazel-nut, and by the touch evidently containing fluid; the skin covering it presented a dull, somewhat livid hue. He had no vision with this eye, but very good with the other. About eleven years since he was struck on the eye by some red-hot cinders, of which three or four portions were almost immediately extracted, but the lids became in a few weeks afterwards adherent, and remained so. About four or five years after the occurrence of the accident the palpebral tumour appeared and gradually enlarged. About eight months before his admission it was seen by a surgeon, who passed in a lancet, and evacuated, the man said, a quantity of bright water; the swelling quite subsided. In five or six weeks it reappeared, and had gradually attained its present bulk. I passed a double thread seton through the tumour, and desired the threads to be moved a little daily. A tolerable quantity of serum, of a grayish colour, issued by the sides of the threads, and consequently the swelling became considerably collapsed. He did not call again.

BIRMINGHAM AND MIDLAND COUNTIES EYE INFIRMARY.

CASES OF SINGLE CATARACT, REPORTED CHIEFLY IN RELATION TO THE EFFECT OF OPERATION ON THE VISION OF THE PATIENT.

Under the care of JAMES VOSE SOLOMON, Esq., F.R.C.S., one of the Surgeons to the Institution.

[Continued from ASSOCIATION MEDICAL JOURNAL, Dec. 27th, 1856.]

CASE XXXIX. A boy, aged 9 years, the son of a Butty collier, at Darlaston, was admitted, on March 30th, 1857, with traumatic cataract of the right eye, caused, in August 1856, by a shot from a toy gun, which was loaded with a deal stick. The accident excited iritis.

At the present time (March 30th), the pupil is adherent at its lower border to a thick patch of brownish white capsule, from which, when the iris is artificially dilated, some of the fibres of the lens of an opaque white shade are seen to radiate in a fan-like manner, the lens in the interspaces being of a bluish grey colour. The cataract when touched by the needle shelled out into the anterior chamber. It was much harder than any traumatic cataract I have before met with, and thinner than the natural lens. Neither confused nor double vision resulted from the operation.

On May 28th, my notes are as follows:—The lad clearly sees persons and furniture in a room when the perfect eye is closed, also shades of colours. His father, who is conversant with the measurement of distances, informs me that, in accordance with my request, he had tested the power of the eye operated upon to distinguish distant objects, and had satisfied himself that the boy can *identify* persons with whom he is familiar at seventy yards, and distinguish men from other objects at five hundred yards.

In reading, the eyes work together, when a two and a half inch cataract-glass is used. For the observation of distant objects, an optician's lens (No. 4, 5, 6) appeared to produce inconvenience, probably because the eyes are focused.

CASE XL. A young gentleman, aged 13 years, residing near Newport, was operated upon by Mr. Solomon in August of the present year (1857) for traumatic cataract of the right eye. Neither confused nor double vision resulted. A two-inch and a five-inch cataract-glass respectively adjusted the eyes for near and distant objects.

CASE XLI. J. S., aged 18 years, of Spon Lane Glass Works, was admitted into the Eye Infirmary, and operated upon for single traumatic cataract in the summer of 1857; after which, he continued to enjoy clear and single vision when both eyes were open, and if the anatomically perfect eye was closed, persons could be identified at a distance of twenty yards, and seen at two hundred. A two-inch cataract-glass adjusted the eyes to a focus for reading, and a six-inch for distant objects.

In two other cases in which I have operated by "linear extraction", of the respective ages of 28 and 44, I am unable at present to give particulars regarding their vision, more than that double or confused vision has never been experienced.

Original Communications.

THE EPIDEMIC DISEASES LATELY PREVAILING IN BIDEFORD, NORTH DEVON.

By T. L. PRIDHAM, Esq., Surgeon, Bideford.

IN the month of July last fever broke out in Bideford, of a somewhat remarkable type, certainly unknown in the locality for the last thirty years. The first cases occurred in the higher and poorer parts of the town, near the cemetery, and in a direct line with the shelf stratum which passes through this depository of the dead.

The symptoms which characterised the disease were for the most part the following:—Sudden rigor; loss of appetite, quickly succeeded by complete prostration; small rapid pulse; dilated pupils; pain at the back of the head; drowsiness almost amounting to coma; frequently delirium; smooth glazy tongue, which did not become coated or dark at any stage of the disease; tenderness in the region of the stomach and bowels; not much thirst; the skin remarkably dry and morbidly hot, with a peculiarly offensive smell, and tinged with bile; a great desire to be kept quiet; the body bent forward, and the head kept depressed. The urine was scanty, high coloured, and acid. The alvine discharges were yellow, and highly offensive. There appeared to be little or no remission of fever, which in some instances ran on to thirty days, whilst, in other instances, the poison which acted on some apparently healthy members of the same family killed in a few hours. To exemplify this, I may state the progress of the disease in two adjoining houses. In one, there were four cases. Three rather delicate children recovered after protracted fever; whilst one, a fine healthy boy, was seized with severe headache, sickness, involuntary discharges from the bowels, and coma, and died in twenty-four hours. In the other house, four children were seized, three of whom lingered and died, whilst one, almost an idiot, recovered, the disease passing lightly over the child, yet there is no doubt that it was the *same poison* which affected all the children.

The disease soon spread amongst the poorer classes, attacking but few grown persons. It prevailed in ill drained localities where there was a bad supply of water, and it followed the exact course of the cholera in this town in 1854. It is remarkable that in the Union Workhouse, which is situated in the midst where this fever reigned, no case occurred, nor was there a case of cholera there, although in both instances the houses adjoining were visited by these epidemics. The Union Workhouse is admirably conducted, well ventilated, well drained, and has an abundant supply of water.

Altogether, I attended one hundred and thirty cases of this fever; and out of this number fourteen died. Under one roof there were as many as nine cases at one time, almost all of them in a state of delirium. In this house one death occurred.

The chief treatment in this fever was mild preparations of mercury, combined with a sedative, with full opiates in the advanced stages; effervescing salines were also given, whilst the skin was freely sponged with a solution of chlorate of lime or zinc.

This epidemic fever had scarcely subsided, when a completely different type of disease made its appearance more generally over the *whole of the town*, attacking not only children, but persons of mature age. It commenced with rigor, followed with a sensation of fullness about the fauces, headache, a morbid tongue, and a quick pulse. Small white spots soon made their appearance on the fauces; swallowing becoming more and more difficult as the tonsils enlarged, and the fauces swelled. The upper part of the œsophagus also became involved; ulceration and destruction of parts followed, and symptoms of a malignant character came on. Generally about the fourth or fifth day a highly offensive muco-purulent discharge came from the mouth, and not unfrequently from the eyes, nose, and ears also. The soft parts underneath the chin and adjacent tissues became swollen and painful. If the patients were not relieved, death took place generally between the fourth and tenth day.

At first I treated the disease with nitrate of silver locally applied, giving at the same time bark, wine, steel, nourishing diet, and every remedy I could think of to support my patient; but this treatment was by no means satisfactory, as most of the

severe cases died. Having seen a paper on the treatment of diphtherite, recommending in strong terms the advantages of chlorate of potass, with powdered gum guaiacum, in that disease, I was induced at once to try their efficacy; and I must admit that I quite agree in the advantages of the remedy given in doses of from three to twenty grains each, in proportion to the age of the patient and the severity of the case. A gargle was employed of a solution of chlorate of soda or zinc, which was also used as a lotion for the eyes, ears, and nose, when the discharge from these parts became offensive. An early emetic was given with advantage; and hot vinegar and bran poultices frequently renewed to the throat externally appeared to afford considerable relief. Where this plan was early adopted and properly carried out, I did not see a fatal case; but there is a difficulty in the treatment of children and infants where nauseous medicines are to be given and gargles used. A generous diet was allowed, and wine and brandy were given in full quantities.

This disease appears to differ from the diphtherite which I see described in some districts, inasmuch as the air-passages have not been attacked in the cases which I have witnessed. In two patients there was a slight croupy sound emitted, but it quickly subsided, and the patients recovered. The type which I have witnessed appears to have confined itself to the fauces, palate, tonsils, upper part of the œsophagus, and the mucous membranes of the nose, eyes, and ears; but I have no doubt the same atmospheric poison has been the exciting cause, varying in effect most probably from local influences.

The first place in Devonshire where, I heard, the throat disease prevailed, was Plymouth. It has subsequently appeared to traverse the whole of Cornwall, coming round by the coast into this the northern part of Devon, producing more fatal results in one place than another. For instance, I was told by a medical man of Launceston, that of those who were attacked with diphtherite, there had been a mortality in that district at the rate of 70 per cent.

At the time the disease prevailed with us in its formidable character, there were many who were attacked in a milder way. In these cases, the chlorate of potass and guaiacum appeared to exercise a specific effect.

Whilst this disease reigned, scarlet fever broke out amongst us. I remarked at the time, that if the two diseases blended, we should have scarlet fever of a most fatal character. It was not long before my fears were verified; for many children and grown persons sickened of scarlatina, and died in a few days, some in a few hours, having the same thick offensive discharges which I have described above. Not a few had malignant scarlet fever quickly established, and death was speedy. Amongst the cases that lingered, fifty-six terminated in abscess of the neck. In four of these, the vessels of the neck became ulcerated; three died a lingering death by a gradual bleeding; and one died almost suddenly, from a large vessel giving way. These cases were most distressing; nothing could be done, as the parts were so diseased. It appeared in every instance that it was *venous blood* which escaped. Sixty terminated in dropsical swellings of the hands, arms, and legs: these cases were treated either with brisk purgatives, or diuretics with digitalis, as the case might be; whilst six had sudden effusion on vital organs, and died almost without warning. One remarkable case of general dropsy may be worthy of record. A boy, aged 12, appeared to pass the scarlatina well; he subsequently exposed himself to cold winds. I was sent for when general dropsy had established itself. The stomach was so irritable that it would retain nothing. In a few days, the boy had swollen to an enormous size. Both feet were punctured at the most depending part; one gallon of fluid was discharged in a few hours. It went on discharging for several days. With the assistance of purgatives and good diet, the boy has recovered. In thirty cases, after scarlet fever had subsided, a secondary fever set in, the symptoms of which were almost without variation; viz., glazy red tongue; dry skin; quick small pulse; constant and very urgent sickness, throwing off a thin green acid secretion; great drowsiness; dilated pupil; with considerable prostration. In this form of disease, however, I did not lose a patient. My treatment was, two grains of calomel placed on the tongue twice a day, and a mixture containing carbonate of magnesia and hydrocyanic acid, until the sickness subsided. Effervescent draughts appeared to add to the sickness. In addition to medical treatment, I ordered nutritious injections to be frequently thrown up the rectum.

My treatment of simple scarlet fever consisted of leeching the temples, if the head symptoms were severe; cold sponging to the surface; an early emetic; open air in the beginning;

salines; in some cases I gave ammonia with advantage, but in all cases which partook of diphtherite or throat disease I found chlorate of potass and guaiacum useful.

It may not be uninteresting to give a statistical account of the number of cases I attended in each form of epidemic, and the different results.

	Cases.	Deaths.	Recoveries.
Epidemic fever	130	14	116
Fever with throat disease . .	66	8	58
Scarlet fever	360	33	327
Total	586	55	531

Deaths from fever in seven months 96

Average number of deaths in a year from all causes . 114

Population last census (1851) 5754

I cannot bring this paper to a close without some few remarks on these epidemics, the character of which has been previously unknown to us, but which have now visited us so severely. The town has ever been considered most healthy, the amount of mortality being less, by the Registrar-General's Report, than almost any town in the kingdom. Typhoid or typhus fever are of rare occurrence here. Still a succession of atmospheric changes appear to have taken place, each change bringing with it a subtle poison, which has had its effect on the human frame, producing disease which has varied in type, it may be, from peculiar and local causes. With us the first epidemic, which greatly resembled what we read of the Lisbon fever, as well as the cholera of 1854, selected for its victims those of the lower orders with whom the drainage, supply of water, ventilation, and supply of food, were defective; whilst the poison which generated scarlet fever was diffused, as it generally is, over the whole district; but I believe it will be admitted that its malignancy and fatal character, both in town and country, were greatly aggravated by filth and bad drainage. To meet these evils of the present day, it is the duty of every one to lend a helping hand in correcting them by means of a good and substantial sanitary reform; but this can never be effected without a judicious supervision by the Government, in order to counteract the local interests that must otherwise prevail.

ON DISEASES OF JOINTS.

By HOLMES COOTE, Esq., F.R.S.C., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital, etc.

VI. THE ANKLE-JOINT.

CONTRACTION of the heel, talipes equinus, is produced by a variety of causes, and occurs at any period of life. First, I will direct attention to those cases in which the deformity is the result of accident.

CASE I. I was requested on November 10th, 1857, to examine the right foot of a gentleman, who five weeks previously had fractured the fibula by a fall. He had been under proper treatment, and the broken bone was firmly united; but he was unable to bring the heel to the ground. The foot was moveable as far as the tendo Achillis would allow, and there was no great amount of thickening of the soft parts; but the patient was unable to walk, save a few steps at a time with the aid of a stick or crutch, the toes just touching the ground. Now, others had seen this case, and it was surmised that there had been a fracture of the tibia, extending into the joint; but careful examination showed that the change consisted solely in an increasing contraction of the muscles of the calf and of the peronei, by which the foot was thrown into that position called talipes equino-valgus, namely, pointing of the toe downwards, with slight eversion of the foot. The application of a Scarpa's shoe enabled me, without division of tendons, to bring the parts to their proper bearing; and early in December this gentleman was able to put the foot well on the ground and walk about with comparative ease. Not having lately heard from him, I have reason to believe he continues well.

It does not follow that time will rectify this state of things. On March 29th, I assisted Mr. Tamplin in an operation on the foot of a lady, who two years and a half ago had fractured both bones of the left leg. Perfect union had taken place, but she had never from that time been able to bring the heel to the ground, and had in consequence been entirely precluded from taking exercise. The loss was to her the more serious, as she was a person of remarkably active habits. No relief had been