the stomach, are often engaged in this type of fever; to which, amongst other names, he gives that of gastro-enteric. Is it any wonder, I ask, with such a variety of morbid lesions, whether of the slightest on the one hand, or of the most profound and extensive on the other—is it any wonder that the symptoms during life should vary in a very marked way, or exhibit symptoms having the closest resemblance to gastric fever, or even to typhus, as I myself have often seen? And have not the symptoms described as characteristic of enteric fever been too circumscribed? As examples, I may mention bleeding from the nose or bowels, both of which, beyond all question, occur in other types of fever besides the enteric, as I have proved in another place. Were it necessary, it would be easy to pursue this part of my subject much farther; but I must hasten on.

From the tenor of the preceding remarks, it will be understood what my object has been. I wished to show that, while the types of fever may all usually be distinguished the one from the other, yet they are frequently conjoined, or glide the one into the other. I cannot doubt that this is the case as regards gastric and enteric fever; neither can I doubt that the relapsing fever and typhoid may coexist. I believe, too—and here I would wish to speak with much more reserve, on account of the many able physicians who differ from me—that I have often had to treat cases of typhus and typhoid conjoined. When speaking of this subject in former papers, I detailed a number of cases of this kind; but I have purposely avoided doing so now, not because I wanted cases of the kind, for during the past year several of great interest have come under my notice, but because I have given many similar cases in former papers. There are, however, two points which appear to me worthy of a special notice. In two cases within the last year, the treatment adopted to check the diarrhoea of enteric fever proved somewhat too potent; but what was the effect on the patients? It literally changed, as I believe, the very type of fever before my eyes; and what had begun with all the signs of enteric fever ended literally in typhus. In each case, the diarrhoea (and I may state, in passing, the discharges were most characteristic) suddenly ceased, and the brain became seriously engaged. One case was a man of thirty-two years of age. Though he presented no petechia, he had otherwise well-marked typhus; but his life was at no time in danger. The second was a woman, aged twenty-six. She had all the signs of enteric fever, and in a very severe form. The diarrhoea was most profuse; and, what I believe to be most characteristic of the disease, the quantity of fluid passed was out of all proportion greater than what she took. This patient had a few well-marked spots on the chest and abdomen. They were very well defined, but were a shade darker than those usually met in enteric fever. On the cessation of the diarrhoea, the patient's brain became much engaged; the eyes were deeply suffused; she raved constantly, and was scarcely to be kept in bed. In this state, her life was in the balance for many days; but she finally made a good, though an unusually slow recovery. This case was witnessed by Dr. Grimshaw. These two cases open up a new phase of the subject, as showing how one type of fever may be converted into another. Nor are such cases without parallel; and more particularly in acute disease, where the attack, beginning as inflammatory fever, often, and very suddenly, puts on all the characters of typhus. But the subject is too extensive to follow out further in this place.

The second point which appears to me worthy of notice is the fact that, in those cases of fever where, as I believe, typhus and typhoid co-existed, the duration of the attack was much longer than if the disease had been typhus alone, by a period of at least ten days. In other words, the attack, as far as duration went, occupied the number of days which enteric fever usually runs—that is, five- or six-and-twenty days. This fact appears to me one of moment, as showing, as far as the nature of the subject admits, that a something was present in these cases which prevented the attack ending in fourteen or fifteen days, which is the common course of typhus; and that these cases partook of this character, was proved by the presence of a copious petechial rash. I must leave to those who hold different views from my own the explanation of this fact.

In the foregoing remarks, I have purposely avoided going over again old ground. I might, however, have given a number of additional cases where enteric and typhus fevers seemed to me to be conjoined. For the present, however, I will hold these over for another occasion. I shall only observe in reference to them, that they appear to me much more common at one period than at another; and this is quite in keeping with what we might expect, for the phases of fever are ever varying. Each month differs from its fellow, and thus I have met many more cases of conjoined types at one time than another. The same has occurred to others; and Huss states, in the most explicit terms, that he met typhus and typhoid conjoined, and occurring under identical circumstances. On the contrary, it seems to me more than probable that, in some localities, the types are not met conjoined, but present themselves

separately, just as has been described by the London physicians. But that the time will come when the diseases will most probably present themselves under the aspects seen by Huss and myself, I can scarcely doubt. For a long period, it was asserted that enteric fever did not exist in India. Now, it is known to prevail there, and, if I recollect right, has also been described as being met in the conjoined form. This state of things was also met during the Crimean war, and has been particularly described.

The conclusion, then, at which I arrive from these facts, is, that the types of fever are often conjoined; and that, if this be so, if the gastric type and typhus, and the gastric and enteric, be found so mixed up, there is no straining of analogy in supposing that typhus and typhoid may coexist, as I firmly believe I have often seen. With this remark, I leave the matter for the present.

NOTES OF AN AUTUMN HOLIDAY IN AMERICA.

By T. SPENCER WELLS, F.R.C.S.,

Surgeon to Her Majesty's Household, and to the Samaritan Hospital.

I.

A HOLIDAY in August or September is now happily becoming very general amongst us. The town doctor takes his family to the country or to the seaside. He gets some fishing or shooting with country friends in England; perhaps in Wales, Scotland, or Ireland. He tries some French or German watering-place; visits the Alps or Pyrenees; or perhaps does a little yachting. Somehow or another, he gets rest, sunshine, and what a learned friend of mine says is not less valuable than change of air—namely, *change of mind*. Having run through all the more common varieties of a doctor's holiday, I determined last autumn to gratify a long standing desire to see the falls of Niagara, and some of the great lakes and rivers and forests and mountains across the Atlantic, and visit some of the chief cities which have so rapidly grown up, and at the same time to make the personal acquaintance of some of our fellow-workmen known before only by their names and writings. Consulting with various American friends who have visited London—with Sir Henry Holland, who has repeatedly crossed the Atlantic—and by the aid of the American Bradshaw, *Appleton's Railway Guide*—I found that a great deal could be done in six or seven weeks; and such is the perfection of the ocean mail-steamers, and the regularity of the steamboats and railways in Canada and the United States, that the plan marked out before leaving England was followed with scarcely a day's alteration. For the information of any one who may wish to enjoy a similar holiday, I have noted exactly what we did comfortably in seven weeks. I say we, because my wife and one of my daughters accompanied me.

August 15th. Left Liverpool.

August 27th. Arrived at Quebec.

August 29th. On St. Lawrence to Montreal.

August 30th to September 1st. At Montreal.

September 2nd. Up river to Ottawa.

September 3rd. At Ottawa.

Sept. 4th and 5th. By the Thousand Islands and Lake Ontario to

September 6th. Niagara. Stayed there till

September 9th. Travelled by night train to

September 10th. The Catskill Mountains.

September 12th. By Hudson River to New York.

September 13th to 17th. Philadelphia.

September 17th to 20th. New York.

September 21st. New Haven.

September 22nd to 25th. Lowell and Boston.

September 26th. Halifax. Sailed and arrived

October 5th. At Liverpool.

By this arrangement, no part of the country is travelled over twice, except between New York and Philadelphia, and that is varied by choosing different routes in going and returning. By going first to Canada, the cooler country is visited during the hottest part of the holiday, leaving New York and Philadelphia till the latter part of September, when the great heats are over. By making the holiday a fortnight or a month later, the autumnal tints in the American foliage would be seen to greater advantage; but this would not accord so well with London seasons, and the return Atlantic voyage would probably be more

stormy. I shall not attempt any description of the wonderful natural beauties, nor of the most interesting cities, seen during this holiday. Any such description would be out of place here. I will only add, that we travelled everywhere, by sea, river, or on land, with great comfort, with very little fatigue, and not at very much more expense than in European holiday-making. As some may be decided in wavering intention by the money question, I may say that my daughter, being under twelve years of age, travelled at half-price, and that the total expenditure for the party, from leaving London till our return home, amounting to £259.

As we travelled principally to see places and people, many objects of purely professional interest—especially in Canada—were passed over. But, thanks to the unbounded kindness of medical friends wherever we were able to stop, I did see a great deal which, if I could properly describe, would be of great interest here. And, though fully conscious of my inability to convey to others any such impression as was made upon me, I have here written out a few notes which may be of some professional interest, commencing with what I saw in

PHILADELPHIA,

where I arrived on September 13th, as previously arranged with Dr. Atlee and Professor Gross. Dr. Atlee had kindly arranged that I should accompany him on Saturday the 14th to see him perform ovariectomy, and on Monday the 16th to assist his brother, Dr. Atlee of Lancaster, in a similar case; returning to New York to be present on the 18th at a third case by Dr. Atlee himself. I should premise that Dr. Washington Atlee of Philadelphia is the gentleman so well known by repute in this country as one of the earliest and most experienced of American ovariectomists, and for his bold treatment of fibroid tumours of the uterus. His elder brother, Dr. John Atlee of Lancaster, a large town about eighty miles from Philadelphia, though less known here and sometimes mistaken for his brother, is also well known in America as an experienced and very successful ovariectomist. Dr. Washington Atlee told me that his ovariectomy cases amounted to 163. This number included incomplete and exploratory operations. The exact number of these he was not able to tell me without referring to note-books; but he thought about twenty. The general mortality was about thirty-five per cent.; but here, again, the precise figures will only be attainable when Dr. Atlee publishes a work on which he has long been engaged, and which he hopes to complete this year, in which he will collect together records of all his cases. Any one who has gone through such labour, will join with me in wishing the worthy Doctor a happy deliverance. His cases of fibroid tumour of the uterus will not be less interesting than his cases of ovariectomy. In his early practice, he had, in common with myself and others, excised large fibroid tumours, believing them to be ovarian; but had, after more extensive experience, become convinced that they were uterine. The results, however, had not encouraged him to repeat such operations, unless the patient was in imminent danger and not to be saved otherwise. He has also become much less willing than formerly to incise these tumours by the vagina. He has had some cases in which the combined use of ergot and incision has been followed by the death and expulsion of large tumours or of their disintegrated remnants, and by the complete recovery of the patient; but the risk of uterine phlebitis and pyæmic fever has proved to be so great, that he has become gradually less willing to interfere unless driven to do so by hæmorrhage or some other condition endangering life. And he has become more hopeful of these tumours becoming indolent as age advances, and at length undergoing a process of atrophy or spontaneous cure. As I had been led to entertain similar opinions after a much smaller experience than that of Dr. Atlee, I heard this with no common interest. As an internal remedy, he gives muriate of ammonia in ten-grain doses two or three times a day, for many weeks or months consecutively; and thinks he has seen more benefit follow its use, than after iodine, bromine, mercury, or any other medicine which he had tried. He promised to try the chloride of calcium, in the doses which have appeared to me to be so useful, by leading to atheroma or calcification of the nutrient vessels of these growths.

In the treatment of cancer of the uterus, both cancrioid and carcinoma, Dr. Atlee has great faith in the long continued use of arsenic internally, in small doses long continued, combined with the local use of a very strong solution of iodine in glycerine. A drachm of iodine and a drachm of iodide of potassium are dissolved in two drachms of glycerine, and this is applied by a brush or cotton two or three times a week all over the cervix uteri and to any part of the growth which can be seen. I saw one case of undoubted carcinoma where the patient and her husband (a medical man) fully confirmed all that Dr. Atlee said of the remarkable improvement which had followed this treatment in her case.

FIBRO-PLASTIC TUMOUR OF THE RECTUS OCULI IN A CHILD.

By J. VOSE SOLOMON, F.R.C.S.,

Surgeon to the Birmingham and Midland Eye Hospital, etc.

A LITTLE boy, aged 4, was sent to me in May 1867 by Dr. Malins of Cradley. I found a tumour of the size of a small hazel-nut, occupying the site of the external rectus muscle of the left eye, and extending under the outer wall of the orbit. It was hard, painless, smooth, and apparently adherent to the sclera. The mother's attention was first attracted to the eye some two or three months previously to her attendance at the hospital. The child's health was and had been good. Of local injury, there was no history.

On June 3rd, I proceeded to the removal of the growth, chloroform anæsthesia having been efficiently induced by Mr. Henry Denne, our house-surgeon. The tumour now proved to be free from conjunctival and scleral adhesions, yet was only slightly moveable, so tightly was it bound to the globe. It was of greater width than the rectus muscle.

Operation.—An incision was made over the centre and in the direction of the fibres of the abductor down to the surface of the swelling. Failing to discover any muscular fibres, which, had they been present, would have been carefully preserved, I at once detached the anterior insertion of the muscle, and reflected back the tumour which was contained in the sheath of the former. Rather forcible traction and curved scissors were needed to remove the end which lay under the osseous orbit. More than one-third of the rectus was involved in the mischief.

The wound in the conjunctiva having been sutured, the globe was fixed by the same agency to the outer canthus. A portion of the inner rectus was afterwards excised, with a view to balance, if possible, the shortened and enfeebled abductor.

The child returned home in nine days cured; a moderate amount of convergence, and a slight enlargement of the pupil, being the only unfavourable results of treatment. The globe could be brought to the centre, but no farther.

On section, the tumour was found to be of very firm consistence, white, and uniform in structure; near to its centre and ocular side were two cells or cysts, which contained yellow pus.

In six months after the treatment, the appearance of the eye was the same in all respects as on discharge; and the case and specimen were presented for examination to the Birmingham and Midland Counties Branch.

Fibro-plastic tumours occur at all ages, but more frequently between the twentieth and thirtieth years. The features of interest in the present example are the tender age of the subject, the particular muscle selected for the diseased manifestation, and the early period at which a disintegrating process had commenced.

Had the parents of the little patient refused from any cause surgical interference, the probability is great that the pus would have made its way to the surface and have been discharged, a fungus would have protruded, the tissues of the eye in contact with it would have inflamed, and the appearance of the growth have become so much altered as to render its real nature difficult of diagnosis, and the necessity of excision of the globe imminent.

DESTRUCTION OF THE URETHRA IN A WOMAN IN CONSEQUENCE OF A BLOW ON THE PERINEUM.

INCONTINENCE OF URINE: OPERATION THREE YEARS AFTER THE INJURY: SUCCESSFUL RESULT.

By E. L. HUSSEY,

Senior Surgeon to the Radcliffe Infirmary, Oxford.

A MARRIED woman, 33 years of age, a prisoner in one of the large establishments for convicts in London, under sentence of transportation, in good health and of well-proportioned frame, gave the following account of her malady. About three years ago, in returning from a fair, half-drunk, her husband suddenly ran behind her, and kicked her violently in the region of the perineum. The blow was sudden and severe, and she sank to the ground in a fainting fit. She subsequently walked home, a distance of some miles, but with great pain and difficulty. By the time she reached her house, the injured parts were painful and greatly swollen. She went to one of the large hospitals, but came out the next morning, against the remonstrance of the nurse, before the visit of any of the medical officers, being fearful that her husband would get into trouble upon her account. On returning home she went to bed, and