terminology is not in touch with the ascertained facts. It would be preferable to put aside the ambiguous term "croupous" and to classify cases into mild or severe, or even to adopt the anatomical basis of certain continental writers who recognise (1) the interstitial cases, (2) the superficial membranous cases, and (3) the catarrhal cases. Since it has been shown that diphtheria of the conjunctiva need not of necessity coincide with a membranous exudation, there is good ground for belief in the existence of the so-called "catarrhal" cases. The remaining forms of conjunctivitis with membrane would naturally be classed with reference to the micro-organisms present, such as the pneumococcus, &c.

Our practice with regard to treatment is to inject an adequate dose of antitoxin if we suspect diphtheria, without losing valuable time by awaiting the results of a bacteriological investigation. We do not hesitate to allow the patient to be taken home after the injection, but should the specific microbe be subsequently found, we detain the child in the diphtheria ward until cured. As to local means we generally employ a strong solution (15 per cent.) of potassium permanganate to paint over the exposed conjunctiva once a day and a weak antiseptic lotion, such as corrosive sublimate 1 in 5000, for cleansing the mucous membrane at frequent intervals. Should the cornea be involved atropine drops (two grains to the ounce) are used from three to six times a day.

The following case, besides presenting one or two points of special interest, is fairly typical of the milder type of conjunctival diphtheria.

A boy, aged two and a half years, was brought to the eye department of the North-Eastern Hospital for Children on Sept. 28th, 1899, with the statement that his left eye had been inflamed since the 23rd. He was well nourished and did not look particularly ill. The lids of the left eye were markedly swollen and of a violaceous hue, and there was abundant muco-purulent discharge from the palpebral fissure. On evertng the palpebræ (which could be done without much difficulty) a membrane was observed on the conjunctiva, upper and lower. Although thicker upon the lower lid than elsewhere it could be easily peeled away. The swollen ocular conjunctiva was free from false membrane. The cornea was cloudy without actual ulceration. The scalp showed several impetiginous areas, one of which had been freed from scab at home and was covered, when examined at the hospital, with an adherent grey membrane. A serous discharge was present from the nostrils, but no signs of diphtheria could be made out either there or in the throat. The pre-auricular and angular glands were enlarged. Albumin was present in the urine. The temperature was 98° F., the pulse was 104, and the respirations were 24.

The child was admitted to the diphtheria ward, and 2000 units of the Royal Colleges of Surgeons and Physicians' antitoxin were injected. The conjunctiva was painted thrice a day with potassium permanganate (15 per cent.) and the eyes were kept clean with a saturated aqueous solution of boric acid. The scalp was treated with ammoniated mercury ointment (five grains to the ounce). Cover-glasses were smeared with particles of false membrane, which was also rubbed over the surface of blood-serum and agar-agar slants. The film-preparations, when stained and examined with the microscope, showed many long bacilli, often curved and grouped side by side. They stained with Gram's method. They seemed to be the specific organism of diphtheria. On the media, after incubation for 24 hours, fine cultures were obtained not only of Klebs-Löffler bacillus but also of staphylococcus albus and staphylococcus aureus. Further cultivations were made from the membranous patch on the scalp and staphylococci and (?) diphtheria bacilli obtained. On Oct. 6th it was found that the corneal haze which was present on admission had given way during the previous four days to a circular ulcer of that structure. Atropine drops ($\frac{1}{2}$ per cent.) were prescribed thrice a day. On the 11th the membrane was absent from the red and thickened conjunctiva. The ulcer on the cornea was neither infiltrated nor were its edges undermined. The patch of diphtheria on the scalp had healed. On the 20th the palpebral conjunctiva, although congested, was not markedly affected. There was a slight discharge from the eye. The corneal ulcer had healed with the production of a nebula. The child was discharged on the 20th, after a stay in the hospital of 22 days. For the greater part of that time the temperature remained about normal, but a slight rise took place on the seventeenth day, probably as the result of the injection of antitoxin.

Welbeck-street, W.

A SUCCESSFUL CASE OF CÆLIOTOMY FOR INTESTINAL OBSTRUCTION DUE TO PERSISTENT MECKEL'S DIVERTICULUM.¹

BY CHARLES A. MORTON, F.R.C.S. ENG.,

PROFESSOR OF SURGERY IN UNIVERSITY COLLEGE, BRISTOL; SURGEON TO THE BRISTOL GENERAL HOSPITAL AND TO THE BRISTOL ROYAL HOSPITAL FOR SICK CHILDREN AND WOMEN.

THE case which I am about to describe seems to me to be of special interest for two reasons: first, the onset of the disease was quite unlike that of acute intestinal obstruction, and, secondly, the way in which the diverticulum caused obstruction was an unusual one.

The patient was a girl, nine years of age, and was sent to me by Mr. F. E. Peake. The illness began without complaint of any abdominal pain. On July 31st, 1899, the child began to suffer from headache and vomiting, and she was kept in bed. On the following day, although the vomiting persisted, she was up and about. It was not until August 2nd—the third day of her illness—that abdominal pain situated in the umbilical region was first complained of. The patient continued to vomit frequently and got much worse on the 4th, and when seen by me on admission to the hospital at 3 P.M. on the 5th she was obviously very ill with a distended abdomen and dry, brown tongue. The pulse, however, was only 100, and the temperature was between 99° and 100° F. She cried out every now and again with pain in the abdomen but did not vomit at that time. Three visible coils could be seen in the distended tympanitic abdomen, but they did not contract or dilate with peristalsis. There was some general tenderness but the abdominal walls were not rigid. There had been no passage of blood or mucus from the bowel. No reliable information could be obtained as to when the bowels had acted last or as to the passage of flatus. There was a history that 18 months before she had had an attack of abdominal pain and vomiting lasting for two days but she had not been laid up by it.

The onset of the illness was certainly not like that of acute intestinal obstruction. It was more suggestive of an attack of appendicitis, but the general distension of the abdomen and the evidently serious condition of the child were such that one could not help suspecting that if the disease had begun as a localised appendicitis it had, at any rate at the time of her admission to the hospital, become complicated with a general peritonitis; and yet the abdominal wall was not so rigid as it is usually found in a condition of general peritonitis, nor is visible distension of a few separate coils seen, as a rule, in such a condition. But these coils were not observed to harden from peristalsis, as they so often do in mechanical obstruction. If I had observed this condition in the distended coils I should have felt sure that it was not paralytic distension from peritonitis but some form of mechanical obstruction. The temperature is, I think, of little guide in such cases. It may not be raised at all in the severest forms of septic peritonitis, and, as in this case, may be slightly raised in mechanical obstruction. Whatever the exact condition might be, however, it was clear that there was an acute abdominal condition which demanded immediate operation, and at 5.30 P.M. on the day of admission I operated. On opening the abdomen a considerable quantity of clear serous fluid poured out of the pelvis. A large extent of the small intestine was found to be considerably distended, but some empty coils were at once discovered, and on tracing one of them it was found to pass within a ring of what felt like bowel, and when drawing this to the surface by traction on the empty coil the latter slipped out of the constriction together with a distended portion of bowel, and between the two was seen the groove of constriction. After the liberation of the strangulated bowel it was found that the constricting ring into which the bowel had slipped was formed by a persistent Meckel's diverticulum. The bowel had been strangulated beneath the diverticulum which passed from the ileum at the usual spot to the umbilicus.

Mr. Treves,² who has fully investigated the various forms

¹ A paper read before a meeting of the Bristol Medico-Chirurgical Society on Dec. 13th, 1899.

² Intest'nal Obstruction, 1899, p. 47.

which the diverticulum persists and the mode in which it causes strangulation, says that it is difficult to understand how the bowel can be strangulated under the diverticulum when it extends from the ileum to the umbilicus, and that in nearly all cases in which the strangulation has occurred beneath the diverticulum it has been adherent to some structure other than the umbilicus, usually the mesentery; and he suggests that when the bowel has been said to be strangulated beneath the diverticulum, passing from the ileum to the umbilicus, the condition has probably been one of volvulus in a coil caught under the diverticulum. Therefore, it is interesting that in this case the strangulation did take place beneath a diverticulum passing from the ileum to the umbilicus, and that the groove of constriction on the bowel showed that the obstruction had been caused by strangulation and not by volvulus. I cannot deny that a loop in the diverticulum may possibly have snared the gut and that in drawing out the constricted bowel I may have destroyed the loop. All I can say is that I saw no evidence of such a loop and I think that had there been one I should have observed it.

I excised the diverticulum. It began as a funnel-shaped projection from the ileum of an inch and a half in length and terminated in a round cord attached to the umbilicus. Before excision I applied a clamp to the diverticulum at its attachment to the duodenum, for it had a diameter here of three-quarters of an inch, and then united the margin with Czerny-Lembert sutures. The umbilical end I simply ligated before division. The region of the peritoneal cavity in which the stump of the diverticulum lay was drained for a few days to guard against any risk of peritonitis from leakage, which did not, however, occur. The child made an uneventful recovery.

Clifton, Bristol.

A HEPATIC MUCOID CYST.

By W. CAMPBELL M'DONNELL, M.R.C.S. ENG.,
L.R.C.P. LOND.

THE following case seems to be worthy of record by reason of the rarity of hepatic single cysts, not hydatid. The patient was a man, aged 53 years, giving a history of severe, sudden, recurrent epigastric pain extending over several years, and I saw him in what was apparently one of these attacks. Tenderness of the whole abdomen developed with pyrexia and the pain increased till death. At the post-mortem examination there was general purulent peritonitis resulting from an old ulcer situated at the pyloric under-surface of the stomach, adherent to the pancreas. Some gastric contents had extravasated and set up the peritonitis. Mr. C. H. Jackman kindly saw the patient with me, and it is owing to his courtesy that I am able to reproduce the appearances of the microscopical section shown below.

On the mid-upper surface of the liver there was a spherical tumour, 9.5 centimetres in diameter, firmly adherent to the diaphragm, less adherent to the inferior vena cava, removable from the liver without tearing the cyst but exposing an irregular liver surface similar to that of a kidney markedly affected by chronic Bright's disease. There was no renal cyst. The cyst wall was smooth, tough, fibrous, white on section, and 1.5 millimetres thick. The main bulk of the cyst was a firm, pale apple-green jelly, of specific gravity 1029, which was found to be mucin. Through the mucin were sparsely scattered red, brown, or yellow seed-like bodies which in some instances were accumulations of hæmin crystals; in others small masses of shrivelled red blood cells with a few hæmin crystals cemented together by a bright yellow mucin. At one spot there was a small opening in the interior of the cyst wall connected indirectly with a dilated vein of the exterior cyst wall by a long oblique piercing of the wall. At that place there was seen a layer of old blood and of dark seed-like bodies in their greatest accumulations. The mucin had in it many tufts and clusters of tyrosin and a large number of variously-sized cholesterol plates; it contained a small amount of albumin and was devoid of cells; it did not give Pettenkoffer's bile acid reaction or the iodine colour reaction of bile pigments. A solution of the jelly in strong nitric acid reduced Fehling's solution very readily. From the slowly evaporated solution and re-solution of the residual paste in distilled water chlorides and sulphates were precipitated, the former in large, the latter in much less,

quantity; from this solution urea was prepared in crystals. The insoluble deposit was found to consist of calcium oxalate in crystals of large and small octahedrals. Sections of the underlying liver presented no macroscopic abnormality; microscopic specimens taken some three weeks after standing in glycerine formalin showed vacuolation of the hepatic cells beginning in the nucleus, thought by Mr. S. G. Shattock,

Illustration showing a field of a transverse section of the liver closely underlying the cyst. It shows some of the vacuoles formed in the hepatic cells.

who kindly examined the microscopic section, not to be merely a post-mortem change; there was also some small cell infiltration of the connective tissue. The vacuoles were not seen anywhere to form microscopic cysts by coalescing. There was therefore a wide difference between this cyst and the multiple cysts of the liver with vacuolation of the hepatic cells described by Eugène Courbis and others in this particular, as also in the appearance and composition of the contents of the cyst.

Park-lane, Stoke Newington, N.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

NORTHAMPTON GENERAL INFIRMARY.

A CASE OF ADDISON'S DISEASE WITH ASSOCIATED
LEUCODERMA AND TUBERCULOUS PERITONITIS.

(Under the care of Dr. F. BUSZARD.)

THERE are probably several distinct morbid conditions which agree in being characterised by the formation of whitish patches on the skin, though the same name, "leucoderma," is applied to them all. The alterations in pigmentation in Addison's disease chiefly take the form of marked increase in depth of colour in certain situations, but occasionally, as in the very interesting case recorded below, patches of paler skin appear. These may reasonably be called cases of leucoderma in spite of the association with Addison's disease. Our knowledge of the mechanism by which disease of the suprarenal capsules may lead to alterations in the pigmentation of the skin is at present very indefinite, but it is not improbable that an increase of our knowledge in this direction may assist us in the pathology of true leucoderma. For the notes of the case we are indebted to Dr. Horace Colman, late assistant house surgeon.

A man, aged 40 years, was admitted into the Northampton General Infirmary on August 20th, 1898. He complained of general weakness of some long standing and of changes in