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.

UNIVERSITY COLLEGE HOSPITAL.

EXTENSIVE LOCALISED PERITONEAL ABSCESS; ABDOMEN
FLUSHED OUT AND WOUNDS PERMANENTLY CLOSED;
RAPID RECOVERY.

(Under the care of Mr. BILTON POLLARD.)

THE surgical treatment of peritonitis has received much attention during recent years and we are still engaged in analysing and comparing cases in order that a more definite and satisfactory conclusion may be arrived at concerning the varieties of inflammation of the peritoneum which may safely be left alone to recover without operation and the varieties in which it is necessary to operate in order to avert a speedy death. We are indebted to Dr. Cullingworth for a recent and important contribution to the subject of inflammations commencing in the female pelvis, and some agreement has been come to regarding the treatment of inflammations due to perforations of the intestines, tuberculous deposit in the peritoneum and traumatic peritonitis. There are, however, a number of cases which present themselves in which the nature and course of the inflammation are quite unknown, and in which, as in this case before the pointing of the abscess, it may be difficult to say that the fluid is purulent. Mr. Pollard draws attention in his case to the absence of evidence as to cause and the important fact that although of large dimensions the cavity was apparently localised. The statistics collected by Professor Krecke of Moscow with regard to the results of operative treatment in purulent peritonitis are very interesting as the origin of the mischief was determined in all but 18 cases, of which 9 recovered. The majority of the remaining 101 cases resulted from perforation, 36 after perforation of the appendix, 12 during typhoid fever with 5 successes, and 12 from gangrene and other causes implicating the bowel; of the cases with gangrene only one recovered, and of the 8 others only 3 recovered. Operation saved 5 out of 13 cases with puerperal peritonitis. In traumatic cases, 3 of punctured wound and one of gunshot recovered; but of contusions only 3 of 8 cases recovered. Altogether there were 51 recoveries and 68 deaths.

A girl aged six years was admitted to University College Hospital on April 4th of this year in an extremely feeble and emaciated state, with a greatly distended abdomen and discharge of pus from the umbilicus. There was nothing in the family history which appeared to bear on the case. The child herself had always been healthy, her only previous illness having been measles. Five weeks before admission the child returned from school in her usual health and had her tea. She was quite well when she went to bed, but at 1 A.M. on the following morning she awoke suffering from sickness and diarrhoea. The illness was attributed to over-eating. After about ten days the diarrhoea ceased and constipation set in. During her illness the child had kept her legs drawn up. Her vomit had never been stercoraceous. Her abdomen had become much swollen, and on the day before her admission an abscess pointed at her umbilicus and burst. On admission the child appeared to be in great pain. Her face was pale and pinched; her pulse was 120 to the minute, small and compressible; and her tongue was moist and furred. Her abdomen was greatly swollen and was very tender, and pressure upon it caused thin pus to flow from the sinus at the umbilicus. The flanks and the lower half of the abdomen were non-resonant. The child was anaesthetised with gas and ether, and an operation was commenced at 1.15 P.M. on April 4th. A probe was passed into the sinus and it travelled readily on each side towards the linea semilunaris. An incision about three inches long was made in the right linea semilunaris and the abdomen was explored with the finger. A similar incision was then made on the other side. The cavity of the abscess was found to extend on the right side over the liver to the under surface of the diaphragm, and on the left side as far as the spleen. Laterally it reached the flanks and the iliac fossæ and downwards it

extended into the pelvis. In front it was bounded by the anterior abdominal wall and behind by the intestines, which were matted together with moderate firmness, with the exception of one coil, which passed across the pelvis to an attachment to the bladder. The cavity was flushed out with several pints of boric acid lotion. The temperature was 100° F. Several large pieces of lymph were peeled off the walls of the cavity. The latter was then flushed out with a sublimate lotion (1 in 4000) and the cavity was thoroughly dried. The umbilical sinus was scraped and scrubbed and its edges were pared. The operation wounds were closed and a dressing of cyanide gauze and sal alembroth wool was applied. The child was ordered two drachms of brandy every four hours, and milk diluted with an equal volume of barley water was to be given by the mouth every two hours. The temperature rose to 102.8° F. on the day after the operation. By the following day it had fallen to 99.4° F. During the next few days it gradually fell, and on and after the seventh day it was about normal. The child was at once relieved of pain and she made an uninterrupted recovery. On the sixth day three ounces of prepared food were given every six hours; on the thirteenth day pounded boiled sole and "typhoid" bread-and-milk were allowed; on the eighteenth day boiled sole and custard pudding were given; and on the twenty-first day she had minced meat. The deep stitches were removed on the eighth day and the superficial ones on the tenth. No opium was given. The bowels acted regularly. The child rapidly gained flesh and strength. She was allowed to get up on the seventeenth day and on the twenty-second day she was discharged. She came to the hospital to show herself about the end of July, when she was fat and strong. The cicatrices were firm and the abdomen appeared to be in every way normal.

Remarks by Mr. BILTON POLLARD.—The cause of the peritonitis in this case was not discovered. There were no tubercles. The pus was not offensive and there was no other evidence of perforation of the bowel. Whether it had resulted from the rupture of an abscess in a mesenteric gland or whether the peritonitis was really primary there was no evidence upon which to decide. The extent of the abscess cavity, which was almost coextensive with that of the peritoneum, might readily suggest the name "general peritonitis" as being applicable to such a case as this one; but I wish to insist that there is a vast difference between such a case as the one now reported and a real case of general peritonitis. In the latter case the inflammation extends everywhere, between all the coils of the intestine; but in this one, although the pus reached everywhere else, the intestinal coils were not uniformly bathed by it, as they were almost all matted together and formed the posterior boundary of the abscess. I think that it is important to insist upon this point, for I am inclined to believe that many cases of so-called general peritonitis, which have recovered after washing out the peritoneal cavity, have really been extensive, though localised, abscesses in that cavity. I myself have never succeeded and I have never seen anyone else succeed in curing what I consider to be general peritonitis by washing out the abdomen. This case is a good illustration of the completeness with which such a large cavity may be cleansed by one thorough washing, for the entire cavity healed at once without any reaccumulation of pus.

COLNEY HATCH ASYLUM.

FOREIGN BODY IN THE ABDOMEN; PERFORATION OF THE
ABDOMINAL WALL; DEATH; NECROPSY.

(Under the care of Mr. E. ROUSE ROUSE.)

THE records of our lunatic asylums could furnish accounts of many interesting cases in which foreign bodies of different kinds and varied shapes have been swallowed by patients without any serious result following. But when larger articles—such as knives, spoons or forks—are swallowed the consequences are usually fatal from perforation of the stomach or some other part of the alimentary tract and consequent peritonitis. It is, therefore, advisable that an attempt be made to remove such bodies by operation as soon as possible after they have entered the stomach; it is very rare to find them safely making their way out again through the abdominal or thoracic parietes without surgical assistance, and the possibility of such a termination cannot be considered as a plea for non-interference. The risk of such an operation is very slight as compared with the risks due to the presence of the foreign body. We have recently given in THE LANCET examples of the successful removal of these bodies both from

the stomach and intestine. As examples published during recent years of the perforation of the digestive tract by the larger foreign bodies from within and their appearance on the surface of the trunk we may allude to a case under the care of Dr. Witte, who removed a four-pronged spoon-handled fork, seven inches and a half long and one inch wide across the prongs, from the stomach three (?) months after it had been swallowed and when it had commenced to perforate the abdominal wall. Dr. Hashimoto has recorded the case of a woman who swallowed a tooth-brush made of wood and as thick as an ordinary penholder, in May, 1872. In March, 1873, an abscess opened in the epigastrium and the broken end of the brush extruded; as much as possible was cut off by the surgeon in attendance. The wound healed, but in August, 1886, reopened, leaving fistulæ. In October, 1888, the remainder of the brush was removed by Dr. Hashimoto by incision along these fistulæ and the patient recovered. Dr. Bradford has related the case of a child taken to a surgeon with the point of an ordinary shawl-pin which had been swallowed protruding through the wall of the abdomen. The pin was pulled out firmly and cut off close to the skin, and the head was passed per anum two days later. We have also published in THE LANCET¹ the notes of a case, under the care of Dr. Lowson, in which gastrotomy was performed for the removal of a skewer seven inches and a half long, connected transversely with a piece of clay pipe two inches and a half in length. The skewer had penetrated the thoracic wall, projecting some distance, but owing to its connexion with the piece of clay pipe could not be drawn out. The patient recovered.

A woman of fair physique, aged sixty-four, was admitted into the asylum in 1887 suffering from recurrent melan-

FIG. 1.

cholia, with an actively suicidal history, having before and since her admission made several attempts on her life. Her mental and bodily condition had varied from time to time, but she was always much more actively suicidal during her recurrent attacks of depression and especially showed an inclination to strangle herself and to swallow foreign bodies. On May 16th of this year attention was called to a swelling the patient had in her abdomen, which was situated about two inches below and to the left of the umbilicus; the swelling was quite immovable, firm, hard and presented a sharp edge beneath the abdominal wall. As it did not resemble any ordinary tumour, as she had made attempts to swallow foreign bodies previously to this date, and as the swelling itself felt like a foreign body, she was questioned and finally she confessed that about three weeks previously she had swallowed one of the ordinary iron teaspoons which are provided for the patients. This, of course, made the diagnosis fairly clear and then the question arose as to where the foreign body was situated, this being made much more difficult by the patient having no symptoms except of slight pain in the region of the tumour, and that only when the tumour was handled. The diagnosis as to the cause of the tumour being fairly clear, she was put to bed; she was placed on a suitable diet and she was given opium in the form of a pill three times a day. It was for a time determined not to interfere surgically. However, as the foreign body did not move

onward, or seem likely to move, it was suggested to the friends that an operation should be performed, but this they would not allow, and consequently nothing remained but to see what nature would do. The patient herself was in much the same state for the next few weeks, having no symptoms of obstruction or peritonitis, but an alteration took place in the tumour itself, the skin over it becoming red and inflamed and the surrounding tissues hard and brawny, and then she had a slight rise of temperature, owing no doubt to the inflammatory process which was going on. On May 30th the abdominal wall suddenly gave way and the handle of a spoon presented itself and there was at the same time a free discharge of pus. The patient had no serious symptoms after this and her temperature gradually fell to nearly normal (99° 2° F.). On inspection the handle of the spoon was seen to be presenting for about three inches through the abdominal wound and there was a free discharge of pus; but for this she appeared to be in fair health. As the friends still refused to allow any operative interference the patient had to be watched to see what would happen and of course the passage which the spoon had made for itself daily became tougher and more resisting, and thus prevented the spoon from being pulled out as far as in the earlier stage. The case remained much the same for about another three weeks, when it was proposed that, as the friends would not consent to an operation, an attempt should be made to dilate the passage through which the spoon had perforated, and thus to render possible the withdrawal of the whole spoon. Great difficulty was experienced in dilating owing to the thickening which had taken place, and there appeared to be what one might call an internal ring preventing the passage of the bowl of the spoon. As this process was both a painful and a tedious one, and as there now seemed to be little risk of a complication, it was determined to give an anæsthetic and to forcibly dilate the opening and to extract the spoon.

FIG. 2.

Dr. Seward and Mr. Shaw having seen the case with Mr. Rouse, it was agreed that forcible dilatation under an anæsthetic should be tried, which Mr. Rouse did by means of a large pair of dressing forceps, and the spoon was successfully removed. This was effected on July 20th, just ten weeks after the swelling was first noticed. Since the removal of the spoon the patient's mental symptoms had been much more pronounced. She had little sleep without the aid of narcotics and nourishment was taken very sparingly. The wound itself looked healthy and there was a free discharge of fluid contents (partially digested food) through the wound. No complication in the abdomen arose and her temperature gradually fell to normal. On July 26th—that is, exactly six days after the removal of the spoon—she suddenly became collapsed without any apparent cause, and gradually sank and died on the morning of the 27th.

Remarks by Mr. ROUSE.—The necropsy was conducted twenty-four hours after death. The body was found to be fairly well nourished. Post-mortem rigidity was well marked. In the thorax the pleuræ and cavities were normal, as were also the lungs, excepting for slight emphysema. The heart showed dilatation and hypertrophy of the left ventricle, with extensive atheroma of the aortic valves and the first part of the aorta, but otherwise it was healthy. There was no excess of fluid in the abdominal cavity. The liver, spleen, pancreas and kidneys were healthy. The large intestine at the junction of the transverse with the descending colon was firmly adherent to the parietes, and when a probe was passed through the opening in the abdominal wall it could be felt in the gut, and this no doubt was the position which the spoon was in before its removal. There were no signs of peritonitis about any part of the intestine, which itself was quite healthy, with the exception of the perforation through the gut. The case, though terminating disappointingly, has many features of interest, not only from its extreme rarity, but from the patient having had no symptoms except of slight pain throughout the whole case, though in lunatics this is not at all a rare occurrence;

¹ THE LANCET, Jan. 31st, 1891.

also her sudden collapse and death are difficult to explain, unless one falls back on her feeble heart and naturally somewhat exhausted condition. The engravings are from photographs. The length of the spoon was four inches and a half and its width at the bowl one inch. One was taken whilst the spoon was *in situ*, and the other after its removal, by my colleague Mr. Shaw.

Reviews and Notices of Books.

A Text-book of the Theory and Practice of Medicine. By American Teachers. Edited by WILLIAM PEPPER, M.D., LL.D. In 2 Vols. Vol. I. Philadelphia: W. B. Saunders. 1893.

IN point of literary activity and in the production of treatises on medicine and surgery, the American school may claim a foremost place. We owe to them, indeed, a deep debt of gratitude for their enterprise and industry, which have enabled them to publish many works of extended scope. A few years since, under the editorship of Dr. William Pepper, there appeared a "System of Medicine," which may be said to have been the lineal successor to our own Reynolds' "System." It is a work of lasting value and its contributions represented the views of the leaders of American medicine. The handsome volume before us, produced under the same distinguished auspices, is, as its name implies, intended for daily use in the study rather than for the shelves of the reference library. It is a text-book of a high class indeed, and one to which several experienced teachers of medicine have contributed—namely, Dr. John S. Billings, who furnishes the opening article on Hygiene; Dr. W. Pepper and Dr. James T. Whittaker, who between them supply all the articles on the Acute Specific Fevers, the latter also writing on Anthrax, Actinomycosis, Glanders and Hydrophobia; Dr. Gilmour Thompson, who writes on Syphilis, Scrofula and Malaria; and Dr. H. C. Wood and Dr. W. Osler, who share the chapters on Diseases of the Nervous System. These are the writers and their topics in this volume, and so excellent is the whole, so thoroughly practical and useful as well as so highly scientific, that the second volume will be anticipated with pleasure.

Without attempting a full critical analysis of these writings, we may here note some of the features of the work which show how thoroughly it is abreast of modern research. Influenza is defined as being "an acute microbic fever, moderately contagious," Dr. Pepper fully accepting the discovery of a bacillus by Pfeiffer and Canon as being conclusive. The whole article teems with experiences of the late pandemic visitation, showing how much knowledge has been advanced by it, and also how great a scourge the disease has been. There is a brief description of "Mountain Fever," a disease which seems to be infectious, and which has been observed in the Rocky Mountains. Its duration is from two to four weeks, and the writer inclines to the view that it is in fact typhoid fever, presumably modified by the effect of climate and from its being sometimes associated with malarial poisoning. "It is clear," he adds, "that no adequate reason exists to longer continue a separate description of a disease which cannot be shown to possess distinctive features." The article on Small-pox by Dr. Whittaker is excellent, and is followed by one on Vaccination from the same pen, in which the statistical evidence in support of the practice is presented with clearness and precision. In speaking of the nature of cow-pox, Dr. Whittaker points out that "there are but two chief forms of small-pox—namely, human-pox and sheep-pox," and that "cow-pox is in its essence variola vera. It is variola modified in the body of the cow. If vaccinia be but an attenuated or modified variola, its protective action ceases to be a mystery. It protects by the immunity of previous attack. It protects by the immunity of inoculation—i.e., vario-

lation—for vaccination is variolation with virus robbed only of its virulence." Dr. Gilmour Thompson, in the article on Diphtheria, argues that if the Klebs-Loeffler bacillus is to be accepted as the *vera causa* of the disease then membranous croup must be separated from it; but we believe that this organism has been found in cases of primary membranous inflammation of the larynx. The same writer's article on Malarial Fevers gives descriptions and illustrations of the organisms which were discovered by Laveran—the plasmodium malaria—and the various types of intermittent and remittent forms are fully described. Dr. Whittaker's articles on Anthrax and Hydrophobia are fully up to date; and he also gives a far more detailed account of Trichinosis than is usually to be found in the text-books. Of the articles on the Diseases of the Nervous System we can only say that they are such as may be expected from their writers, Dr. Wood dealing with mental and functional disorders and with organic diseases of the spinal cord, and Dr. Osler with organic diseases of the brain, of the nerves and trophic disorders, under which is included a description of acromegaly. The book will doubtless become a favourite with those who are studying for medical degrees; it is compendious and exact, it keeps strictly within the limits prescribed, and it is almost destitute of bibliographical references; still it often lacks that expression of personal experience which causes some of our best text-books to be so much appreciated.

The Climate of Rome and the Roman Malaria. By Professor TOMMASI-CRUDELI. Translated from the Italian by CHARLES CRAMOND DICK. London: J. & A. Churchill. 1892.

REVOLUTIONS in medical doctrine find no apter illustration than the various etiologies of malaria which have been promulgated during the last thirty years. In 1866 an able American physician, Salisbury, traced the disease to minute vegetable cellules of the palmella species, which he had constantly detected in the urine and perspiration of malarious subjects in Ohio and Mississippi. The year after, a German, Binz, discovered bacteria in the blood of such patients, and reproduced the disease in animals by injecting into their veins putrescent matter of vegetable origin. In 1869 a Roman, Balestra, ascribed to an alga found in the Pomptine marshes the pathogenic agent of the fever in question; and a few years later his compatriots Lanzi and Terrigi, after injecting into the circulation of animals some water from the *stagna* at Ostia, connected the etiology of malaria with a brownish bacterium which communicated its peculiar and characteristic colour to the human patient. In 1873 a Swede, Ekelund, gave the name of "limnophysalis hyalina" to a microbe which he had often found in swampy places, and the year following a Prussian, Klebs, and a Tuscan, Tommasi-Crudeli, confirming the conclusions of Lanzi and Terrigi, came upon the bacillus malariae, as they called it, which they announced as being the true *causa causans* of the malarial poison. Their discovery, however, did not long remain unchallenged, and in 1880 Dr. Guido Baccelli, Professor of Clinical Medicine in the University of Rome, stated, as the result of 200 special observations, that the so-called bacilli were only shreds of the red corpuscles of the circulation. Later still came the researches of a Frenchman, Laveran, he discovering the cause of malaria to be a parasite of a rather developed order, and on showing to Baccelli, in the Roman clinique, the proofs of his discovery he found the distinguished consultant fully prepared for them. With the microscopic work of Celli and Marchiafava the parasitic origin of the disease derived fresh confirmation, till, with the further researches of Golgi, the Roman school succeeded, by varied and repeated injections of the parasite, in reproducing all the types and stages of the fever. From that point Baccelli