

distended bladder appeared to influence, favourably and almost at once, the spasm and inflammation of the stricture; for, during the night, he passed, by the urethra, over nine ounces of urine, and, day by day, urine passed more freely till, in four or five days, he was passing a good stream at regular intervals, without trouble. His health, which was bad, rapidly improved under dilute nitric acid and belladonna. On several occasions, catheters have been tried, but they never got beyond a certain point, where the point tended to pass, or rather turned, to the right, indicating probably an old false passage; there being a history of a stoppage some years ago, which passed off after a short time without aid. The points in the case appear to be the immediate relief of spasm and inflammation, by removing the distension of bladder; the great ease of affording relief and safety afforded by the use of the "guarded needle;" the total absence of any local symptoms at the seat of puncture; and the rapid improvement in the man's health.

J. W. L. HODDER, Surgeon-Major M.S., Bath.

FRACTURE OF THE STERNUM.

[Communicated by the Director-General of the Medical Department of the Navy.]

J. M., labourer at H.M. Dockyard, Chatham, aged 28, sustained a fracture of the sternum on August 24th, caused by falling from the staging on which he was working on to the sharp edge of a piece of angle iron which was lying on the ground. He struck the iron with the front of his chest, the height of the fall being twelve feet.

On his being brought to the surgery, there was found to be a complete transverse fracture of the sternum on a level with the fourth costo-sternal articulation, and apparently through the point of cartilaginous union of the second and third pieces of the sternum. The upper and lower fragments were freely movable; but there was little or no displacement, the seat of fracture being visible in the form of a slight angular protrusion, the ends of the fragments being tilted slightly forwards. The soft parts over the seat of fracture were much contused, and there was slight emphysema. The crepitus elicited by motion of the fragments was of a soft cartilaginous character, pointing to the evident position of the fracture. The fourth rib on the right side was also found fractured a small distance from its costo-sternal articulation. No other injuries could be detected. There was great dyspnoea, the fragments moving slightly during respiration. The heart's apex-beat could not be detected by digital examination.

WILLIAM EAMES, Surgeon R.N.

CONTUSION OVER THE SACRUM: SUSPECTED INJURY TO THE VESICULÆ SEMINALES.

G. H. came under my care August 23th, 1886. The previous day, while out riding, he had been thrown from his horse on to some hard ground. When I saw him, I found a severe contusion over the sacrum. There was great swelling and ecchymosis, but no signs of any deeper injury. Under rest and warm fomentations these disappeared in about a week; but, for some time afterwards, soreness and stiffness of the adductor muscles of both thighs remained. About ten days after the accident, he began to suffer from priapism, with nocturnal emissions. On the first occasion on which the latter occurred, he was greatly alarmed to find, on getting up in the morning, that his night-clothes were deeply stained with blood. On the second occasion I was able to examine the semen. It was of a deep reddish-brown colour, and appeared to consist of small semi-isolated masses. These showed little tendency to coalesce. Under the microscope, the colour was seen to be due to broken-down blood corpuscles. The emissions continued for about a fortnight, till the semen gradually became normal in colour and appearance; then they ceased. There can be little doubt that these symptoms were due to contusion of, and perhaps to rupture of a small blood-vessel within, the vesiculæ seminales. I believe they were quite independent of any injury to the spinal cord. The only treatment adopted was rest.

G. HARRISON YOUNGE, Surgeon M.S.,
Meean Meer, Punjab.

TREATMENT OF HOUSEMAID'S KNEE.

WITH regard to the treatment of housemaid's knee, in the first two stages of the disease, surgical writers usually advise, after tapping by means of a small trocar or aspirator, the employment of pressure by means of strapping. It has been my practice not to use strapping, but a piece of lead about the size and thickness of a crown piece, wrapt in lint, and placed over the patella, and then firmly and equally to bandage the knee, which should be continued for about a month. Previous to tapping, the part should be painted with iodine, and also

occasionally afterwards. I have not considered it necessary to confine the patient to bed longer than two days. I have treated bursæ on the back of the wrist on the same plan with satisfactory results.

GEO. SAUNDERS, M.D., Christchurch, Hants.

REPORTS

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BOROUGH HOSPITAL, BIRKENHEAD.

CASE OF POISONING BY PHOSPHORUS PASTE: DEATH ON THE FIFTEENTH DAY: NECROPSY.

(Under the care of Dr. HARRIS.)

[Reported by Dr. H. E. RICHARDSON.]

W. S., aged 32, ship's steward, a well-built, muscular man, about 5 feet 10 inches in height, was admitted on June 12th, 1886, about half an hour after swallowing the greater part of half an ounce of phosphorus paste (Roth and Ringelsen's).

The stomach was at once washed out with five or six basinfuls of warm water; three grains of sulphate of copper were mixed in a pint of warm water, and given to him to drink. It was immediately vomited. The fluid with which the stomach had been washed out had a strong smell of phosphorus, and was luminous in the dark. In the subsequent course of the case the most prominent symptoms were vomiting and depression, with for a short time a very slow pulse, 46.

Jaundice was first noticed, on June 16th, in conjunctiva, and the urine was of a dark red-brown colour, due to bile-pigment. It was acid, of specific gravity 1020, and contained no albumen. On the following day the jaundice was more marked, especially on the face and chest; the tongue was furred; there was some tenderness over the liver, but the area of dulness was not diminished. The vomiting continued: he passed 40 ounces of urine, of a brownish-black hue, in the twenty-four hours, and the motion passed, on June 18th, was very foul, and like chalk-and-water. The motions retained this character; the intensity of the jaundice increased, and there was tenderness over the liver. Nocturnal delirium subsequently became marked.

On June 22nd, the respirations had the so-called Cheyne-Stokes characters, and were only eight per minute. The pulse was 50. A round worm (*Ascaris Lumbricoides*), six inches long, was found in the vomited matter.

On June 24th, the temperature rose to 100.6°; the pulse was 120, and the respiration had risen to 26.

On June 25th, the temperature was 102.2°; the pulse 124, full, bounding; and the respiration 28 per minute, stertorous. The stupor in which the patient had previously remained was passing into coma. The motions and urine were passed involuntarily, and the perspiration was profuse. At noon, the temperature was 102° F.; at 3 P.M., 102.4° F.; at 8 P.M., 102.6° F.; at 11 P.M., 103.8° F. The pulse was then 162, and the respiration 44, stertorous. He was in a state of profound coma. At 1.30 A.M. on June 26th, the temperature was 105° F.; the pulse was 150, and the respirations 54. At 2 A.M., the temperature was 105.2° F.; and the pulse could not be counted. The coma continued until death. The temperature at 3 A.M. was 106° F.; at 3.30 A.M., 106.4° F.; at 4 A.M., 107° F.; at 4.30 A.M., 107.4° F.; at 5 A.M., 107.8° F.; at 6 A.M., 108.2° F.; at 6.30 A.M., five minutes after death, 108.6° F.

The necropsy was performed thirty hours after death. The skin, deeply jaundiced, was of a brownish yellow colour. The lungs, on section, had a black tarry appearance; and, on pressure, thick dark, frothy blood, mixed with minute oil globules, oozed out. The heart weighed 13½ ounces, and was very soft and flabby; its outer surface had a pale reddish yellow appearance. The endocardium, and the inner coats of the large arteries were of a mahogany colour, deeper staining being noticed here and there. The liver was much diminished in size, weighing only 42½ ounces, of a drab mottled appearance, very soft and flabby, with thin edges, so that it could almost be rolled up; it was greasy looking. On section, it was found to be of a uniform brownish-yellow colour, bloodless, with abundance of free oil globules. The gall-bladder contained a little thin greenish fluid. The kidneys (weight—right, 8 ounces; left, 7½ ounces) were very soft,

and their capsules loosely attached, so that they were easily peeled off. On section, the organs had a pale and oily appearance. The spleen weighed $5\frac{1}{2}$ ounces: its substance was soft, and of a tarry and oily appearance as the lung. The stomach contained some fluid nourishment mixed with mucus; its coats had the general yellowish altered appearance, but no erosion or congestion could be observed. The brain was not examined.

On microscopical examination, the organs were all found to have undergone fatty degeneration. This was most marked in the liver; its cells had disappeared more or less completely, and in their places separate globules of oil were seen to be studded all over. The muscular fibres of the heart had lost the striated appearance, and were covered with minute molecules of oil. Extensive fatty change was noticed in the granular epithelium of the kidneys. All these sections for the microscope showed the deep brownish-yellow bile staining markedly.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 16TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Vegetable Tumours in Relation to Bud-formation.—A lengthy paper, written from the evolutionary point of view, on vegetable tumours in relation to bud-formation, was read by Mr. ROGER WILLIAMS. Bud-formation in its simplest form, he said, was cell-multiplication by fission or gemination. In the Thallophytes buds were represented by simple proliferous outgrowths of the fronds. The simplest buds consisted either of single lowly organised protoplasmic cells, or of groups of such cells derived from simple cells. In the higher plants a bud normally developed into a branch, but other formations might be due to disturbances of nutrition; adventitious buds had in fact been found upon almost every part of plants; they might arise wherever undifferentiated cells were present. Vegetable tumours were essentially abnormal bud evolutions. The tumours might be classified in three groups, of which specimens were shown. (1) Discontinuous or circumscribed, which first appeared as small globular bodies in the cellular tissue of the bark; (2) Continuous tumours (of hard wood) due to excessive local cell proliferation in the cambian layer; (3) Excrescences thickly studded with shoots and stunted branches, due to a combination of the influences leading to the formation of the two previous classes. The production of these growths of lowly organised proliferating cellular tissue, which subsequently underwent imperfect evolution, constituted the nearest approach in vegetable pathology to the sarcomata and carcinomata of animal pathology. The absence of infectivity was to be attributed to the want of a highly organised lympho-vascular system.—Mr. SHATTOCK thought the theory that these tumours were really abortive buds was generally accepted. The specimens presented by Mr. Stephen Paget to the Museum of the College of Surgeons were of interest because they bore out Cohnheim's view, with regard to the origin of the so-called congenital tumours. These vegetable tumours really arose from embryonic cells at the border of the buds.—Mr. STEPHEN PAGET referred to Mr. Jacobson's paper in the *Guy's Hospital Reports* on certain tumours in the parotid region, in which it was pointed out that they afforded a good example of Cohnheim's theory.

Cerebro-spinal Meningitis causing Oesophageal Abscess.—Dr. HALE WHITE showed this specimen, which was taken from the body of a girl, who was in Guy's Hospital for a month with retracted head, arching of the spine, cephalic and spinal pain, and other symptoms showing the existence of cerebro-spinal meningitis. About eighteen hours before death, a quantity of pus began to pour from the mouth, but no cause for this could be discovered; the pus trickled down into the lungs, and the patient died. At the *post mortem* examination, it was found that the spinal and cranial bones, dura mater, and cerebral vessels were all normal, without any trace of tubercle; there was abundant purulent meningitis of the base of the brain and the posterior surface of the spinal cord. Opposite the cricoid cartilage on its posterior surface was an oval ulcer, with its long vertical diameter measuring $1\frac{1}{4}$ inch. At the bottom of it, the cricoid cartilage was exposed, but was not necrosed. Opposite this ulcer was another on the posterior wall of the pharynx. There was some bronchitis, and the mitral valve was thickened. The rest of the body was healthy. The oesophageal ulcers were probably due to an abscess which had existed at the upper part of the oesophagus at its junction with the pharynx, and this bursting had caused the discharge of pus noticed during life. It appeared that the cause of the abscess was the extreme

retraction of the head throwing the larynx backwards and the spine forwards, so that the friction of the cricoid cartilage against the spine during respiration set up the abscess. The case was also of interest because it was possibly an example of a rheumatic meningitis, for the patient had had rheumatic fever twice, and there was no cause obvious at the *post mortem* examination to account for the inflammation of the meninges.—The PRESIDENT asked whether the amount of pus in the spinal cord was large, for he recalled that he had published a case of suppurative meningitis of the spinal cord in which the pus found its way through the intervertebral foramina, and formed a chain of abscesses in front.—Dr. HALE WHITE said that the chief abscess in his case was on the front of the oesophagus at the cricoid cartilage; the posterior wall of the oesophagus was not perforated, and the spine had been carefully examined without any evidence being found that the pus could have come from the vertebral canal—a suggestion which was further negated by the large quantity of pus which flowed from the mouth during life.

Hour-glass Contraction of Stomach.—Mr. LEOPOLD HUDSON showed a specimen of hour-glass contraction of the stomach from a woman, aged 59, who had been under Mr. Pearce Gould's care for scirrhus tumour of the breast. The constriction in the centre of the stomach was large enough to admit the thumb; on the distal side of the stricture there was a callous ulcer, and on the proximal side a small cicatrix, both on the smaller curvature. The cardiac sac was dilated. Twenty cases of hour-glass contraction were referred to; in nine, the mucous membrane showed no signs of present or previous ulceration. Mr. Hudson considered that the condition was congenital, due to arrest of development at a point where temporary physiological constriction was common, the ulceration being secondary, and caused perhaps by the irritation of the gastric contents when churned about by disordered peristalsis.—Dr. NORMAN MOORE thought that there was so little thickening about the stricture that it could not be due to a foetal band, but was an example of a tendency towards the subdivision of the stomach, seen in some mammals. In one case he had seen a dilatation at the cardia which closely resembled that seen in the ruminants.—Mr. ROGER WILLIAMS observed that the constriction always occurred in one position, where a temporary contraction was seen when a necropsy was made soon after a meal had been taken. There were two other seats—one near the pylorus, and the other separating the great *cul-de-sac* from the rest of the stomach. The first three stomachs of the ruminants were, in fact, oesophageal dilatations, and, therefore, could not be used to explain the occurrence of constriction.—Mr. EVE pointed out, as militating against the theory advanced by Dr. Norman Moore, that congenital strictures occurred in other parts of the intestinal canal.—Mr. HUDSON said, in reply, that he had not meant to assume that there was any lymph-band, but that there was an arrest of development.

Aneurysm of the Undefended Space.—Dr. NORMAN MOORE showed a specimen of aneurysm of the undefended space. The aneurysm projected as a three-lobed tumour into the right auricle just above the attachment of the tricuspid valve. Its external opening was into the sinus of Valsalva, and not into the heart. The specimen was obtained from the body of a man, who died at the age of 21 years after six attacks of rheumatic fever. There was well marked stenosis of the mitral valve, some stenosis of the tricuspid valve, and the aortic valves were partly destroyed and fringed with numerous growths. The aneurysm was clearly an acute one; signs of endocarditis were present: it was partly filled with fibrin, and had a roughened sac.—Dr. SIDNEY COUPLAND thought that the specimen was more properly described as an example of aneurysm of the sinus of Valsalva.—Dr. ANGEL MONEY did not think it necessary that the aneurysm of the undefended space should open directly into the ventricle. There was a specimen of aneurysm of this space in the museum of the Hospital for Sick Children in which the walls of the aneurysm were composed of the opened out laminae of the septal cusp of the tricuspid valve.

Carcinoma of Vesicula Seminalis.—Mr. HURRY FENWICK showed a case of carcinoma of the left vesicula seminalis, which had probably originated in the posterior part of the left lobe of the prostate, and had involved the bladder and the vesicles secondarily. The chief symptoms, which were of nine months duration, were great frequency of micturition, and finally incontinence. Death was due to frequent and profuse attacks of vesical hæmorrhage; no growth was observed in the urine. No secondary deposits were found on *post mortem* examination.

Imperforate Anus.—Two specimens of imperforate anus were shown by Mr. D'ARCY POWER. In the first case, a male infant, who survived twenty-three days, the rectum opened by a small aperture into the prostatic portion of the urethra. In the second case, a newly-born female child, the rectum opened into the posterior wall of the vagina.