twelve ounces each; they were swollen and literally black from congestion; beneath their capsules and around their pelves were numerous extravasations of blood; each organ was so softened as nearly to have lost its tubular character, and to resemble a section of spleen rather than of kidney. In the substance of the right kidney was a large fibrinous mass—apparently an embolism of old date. Microscopic examination showed complete disorganisation of the secreting structure; nothing could be seen but small masses of opaque epithelium, blood-corpuscles, and granular debris; no perfect tubes could be distinguished. The stomach contained about half a pint of bloody fluid; its mucous surface was very dark. The intestines were empty, and the large bowel contracted. Numerous specks of blood were scattered over their surfaces. The bladder was empty and firmly contracted with large hæmorrhagic patches beneath its mucous coat, especially at the base.

REMARKS.—The chief features of interest in this case are the history given by the patient of an injury to the back, to which he attributed all his symptoms; and the very insidious manner in which this fatal form of the disease manifested itself. The characteristic pain in the loins certainly was present, but so mitigated as to be readily accounted for by the wrench in the back which the man said he had received; and he throughout asserted that the pain set in after this, although his mother stated that he had complained of aching two days previously. The mildness of the premonitory symptoms was very marked; there was no shivering, no vomiting, and an almost complete absence of fever. The appearance of the eruption was very late—contrary to the rule that the longer the eruption is delayed the less serious is the disease. None was observed until a week after the first evidence of ill-health; and it commenced in a petechial form on the body and limbs, instead of in a papular form in the usual situation—the forehead. This agrees with what is usually observed in cases of small-pox accompanied by purpuric eruption, when it appears first on the trunk and limbs, and is followed by a crop of papules upon the face; but, in the present instance, the latter were never developed beyond the form of minute punctate elevations, limited to the forehead. The absence of the scarlet or violet-coloured suffusion of the skin which usually marks the advent of malignant small-pox, and the small size of the purpuric spots, caused the eruption to simulate very closely that of typhus—from which it could only be distinguished later by the larger ecchymoses found after death, and the slightly elevated eruption upon the face. The low temperature, and ultimately the history of probable contagion, completed the evidence as to its real nature. It seems not improbable, however, that many cases which have been recorded as instances of hæmorrhagic typhus, have been in reality cases of malignant small-pox, in which the papular eruption has been slight or altogether undeveloped. The absence of white corpuscles in the blood, shown by the microscope, is worthy of note, and may possess considerable significance. Three specimens were carefully examined, and compared with others taken from the body of a healthy man accidentally killed on the same day, in which the white cells were found to be present in the proper proportion. The absence of these corpuscles was not due, therefore, to ordinary *post mortem* changes, but would seem to show that, in cases of extreme malignancy, cell-growth is in abeyance some time before death. If this be so, it would perhaps afford an explanation of the abortion of the normal small-pox eruption, in which the abundant formation of cells subsequently developed into pus is a principal feature. The early suppression of urine was an unusual symptom, dependent, no doubt, upon the complete disorganisation of the kidneys; and their extreme congestion, far beyond that of the other viscera, would account for much of the pain and tenderness on pressure over the lumbar region. It further suggests the idea that the ordinary symptom of pain in the back, so characteristic of small-pox, may sometimes be dependent upon a similar condition of these organs, and not, as has been supposed, on affection of the lumbar portion of the spinal cord. The great and rapid nervous prostration which so suddenly set in is well known in this terrible form of the disease; but the large loss of blood from the nose and mouth, amounting to a pint or a pint and a half in little more than twenty-four hours, is a novel complication, or one met with only in the rarest and most intense forms. This extreme hæmorrhagic tendency was further shown by the petechiæ, which were universal, and by the loss of blood from the bowels on the night preceding his death. The embolic clot in the right kidney could be at once assigned to the ulceration on the mitral valve; and the organised condition of the clot gave evidence that the valvular mischief was of some considerable duration. In conclusion, the case shows well how very mild symptoms of invasion may, in exceptional instances, mark the advent of the disease in its most malignant form; and how it may be masked by a reputed history of accident, until the sudden collapsed condition of the patient and an anomalous eruption reveals its real nature.

THORACENTESIS WITH ADMISSION OF AIR.

By W. H. AXFORD, M.B., Southsea.

THE accompanying case, which occurred in my practice at Bridgewater, is an instance of rapid recovery after the free admission of air to the pleural sac.

In the spring of 1871, I was called to see a boy, four years of age, said to have an abscess forming in his side. I found him lying prostrate, gasping for breath, suffering from constant cough; the pulse was so rapid that it could scarcely be counted. On examination, a red prominent swelling was seen over the seventh intercostal space on the left side. Percussion and auscultation showed the left pleura to be distended with fluid, which was pointing at the before-mentioned swelling. The symptoms of cough, pain on the left side, etc., were said to have existed about a fortnight.

The state of the patient was so urgent, that I at once made a free incision with a Syme's knife into the swelling and evacuated a vast quantity of pus. Air at the time was freely pumped in and out by the movements of the chest. I passed a piece of wet lint into the wound, applied a warm linseed-poultice, and ordered the free administration of nourishment and stimulants. The breathing was at once relieved; all went well from this moment; pus continued to be discharged for eight or nine days, when it ceased and the wound closed. On examining the boy some months afterwards, I found the lung expanded, acting well, and the pleura free from fluid.

THORACENTESIS IN EMPYEMA.

By W. S. PLAYFAIR, M.D., Professor of Midwifery in King's College.

IN the JOURNAL of April 27th, Mr. Berkeley Hill discusses the plan of continuous subaqueous drainage in empyema advocated by me, which he pronounces to be futile, because he conceives it to be impossible to prevent the access of air. This, however, is a question that can hardly be decided by theoretical arguments. I maintain that it is possible to prevent the access of air, and still effectually to drain the pleural cavity; and, in proof of my assertion, I do not bring forward theories, but I appeal to my published cases. I claim for this treatment that it enables us to bring cases of empyema to a satisfactory termination in a much shorter space of time than when air is freely admitted, and with much less subsequent deformity.

In the paper to which Mr. Hill alludes, I said of the three consecutive cases treated in the manner I recommend, "One was perfectly convalescent, with a completely expanded lung, in seven days; the other two, in thirteen and twenty-eight days respectively; and in none of them was there any subsequent deformity of the chest." I then also said, "It would be satisfactory to know what was the average time Dr. Fuller's patients were under treatment after the admission of air into the pleural cavity." On this point Dr. Fuller, in his reply, gives no information; but, as a question of this sort is far more satisfactorily settled by an appeal to results than by any amount of theorising, I am still in hopes that either he or Mr. Hill will take any three consecutive cases in their practice in which air was freely admitted, and let us know how long they were under treatment from the first performance of the operation until complete closure of the wound and convalescence, and also what was the amount of chest-deformity remaining. If the results be superior to mine, I will willingly confess myself to be in error. In any case, I hope they will be better than in the case narrated by Mr. Cowell in his paper immediately following Mr. Hill's, as an example of the harmlessness of admitting air, in which the patient is somewhat vaguely said to have recovered "in a few months".

THERAPEUTIC MEMORANDA.

GUARANA AGAINST SICK-HEADACHE.

INDUCED by the favourable testimony of Grisolle (*Pathologie Interne*, 5th edition, 1852, vol. ii, p. 581), I prescribed the *pulvis paulinicus sorbilis* in 1859, for a friend, who had for many years been the subject of severe hemicrania, apparently inherited from his father. The drug was obtained from one of the foremost druggists of Paris. In all, half an ounce of the powder was taken, divided in doses varying from ten to twenty grains. It proved almost entirely inefficacious. However, Grisolle himself describes the medicament only as "frequently but not always" useful. Bouchardat, in the fifth edition of his *Formulaire*, published in 1854, ranks it with the astringents, and only refers to its use in dyspepsia, chronic diarrhoea, and dysentery.

A. SAMELSON, M.D., Manchester.