breathing were gradually relieved; the febrile symptoms subsided; the cough became less and less frequent; the expectoration muco-purulent; and in a few weeks she was discharged cured.

CASE IV. *Rheumatic Gastritis*. A gentleman, aged 40, of pale aspect, hæmorrhagic temperament, and liable to copious bleeding from piles, requested me to see him in consultation for an attack of acute rheumatism, complicated with gastritis and hepatic congestion. The knee joints were principally involved, and were swollen and infiltrated; there was severe pain of the epigastrium, which was tender under slight pressure; he had frequent vomiting of viscid mucus, of a blackish green colour, which adhered to the bottom of the basin; the hæmorrhoidal discharge was deficient; the bowels were torpid; and the urine was very high coloured. It was most important, under these circumstances, to subdue the inflamed condition of the stomach, and to restore the liver to a more healthy action. With this view, the hæmorrhagic temperament not allowing the use of leeches to the hæmorrhoidal veins, a large blister was applied to the epigastric region; a quarter of a grain of morphia was given every four hours; and three grains of calomel, with five grains of the compound extract of colocynth, every night, followed by a mild senna aperient in the morning. By this treatment, the stomach was quieted, the bowels cleared, a healthy secretion of the liver and kidneys gradually restored, and the disease subdued. The hæmorrhoidal veins also were made to bleed freely, and thus probably expedited his recovery.

It now and then happens, when the symptoms of acute rheumatism appear to be speedily yielding to treatment, and we are expecting an easy triumph over the disease, that, without any internal inflammation, our progress is repeatedly interrupted by relapses. Under these circumstances, by examining the alvine excretions, we shall probably find the functions of the liver to blame, and thus be enabled to prevent any further relapse by restoring the healthy action of the organ.

CASE V. A lady of rank, aged 58, and of a spare, delicate habit, whilst residing at Lyndhurst, in the spring of 1847, became affected with acute rheumatism, of which she had had a similar attack a few years previously. As colchicum in every form had always disagreed with her, she was very properly treated by her medical friend with calomel, antimony, and opium, effervescing salines, and occasional purgatives. Under this treatment, the pain and swelling of the joints soon subsided, but not many days had elapsed before the disease returned with obstinacy, and I was requested to visit her in consultation. After seeing her several times, and bringing her, with scarce any variation of the treatment, to the same point of improvement, she was attacked a third time, which still more exhausted her strength, and exceedingly discouraged her. Finding the urine of a decidedly bilious colour, scanty and turbid, with lithates, we directed our attention to the liver alone, requesting that the alvine discharges may be reserved for inspection.

R Hydrargyri chloridi, extracti aloes aquosi, extracti hyoscyami, aa gr. vj. M. Divide in pilulas vj, quarum capiat unam ter die.

On examining the stools, they were found to be slimy, viscid, and of the consistence and colour of tar. This at once explained the cause of the relapses; and, by persisting in this treatment till the liver was restored to a healthy action, and the excretions to a normal condition, she completely recovered, without any further relapse.

In acute rheumatism, whether we look at the bilious colour of the urine, or of the serum of the blood when drawn from the arm, hepatic evacuations will be found profitable from first to last. Indeed, in elderly persons, were it not for the severity of the pain and the want of sleep, the cure of the disease may be generally left to purgatives only. Of these, I greatly prefer castor oil, as it makes the liver disgorge more unmixed bile than perhaps any other purgative. Where the stomach is intolerant of this medicine, the aqueous extract of aloes, with the tartrated antimony and a little extract of henbane, will be the best substitute.

R Extracti aloes aquosi gr. xvij; antimonii potassio-tartratis gr. iss; extracti hyoscyami gr. vj. Misce, et divide in pilulas vj, quarum una sit pro dosi omni nocte.

I remember one case which was speedily cured in this way.

CASE VI. A lady of spare habit, aged 56, was attacked with the ordinary symptoms of acute rheumatism. As her urine was of a very bilious character, I determined on directing my whole attention to the hepatic function for the cure of the

disease. With this view, I gave her half an ounce of castor oil every morning, or as often as it could be borne; and, under this simple treatment alone, she rapidly and completely recovered.

CIRRHOSIS OF THE LIVER, WITH A SMALL SIMPLE ULCER OF THE STOMACH: ENORMOUS LOSS OF BLOOD.

By ROBERT L. BOWLES, Esq., Folkestone.

MR. S., a man of middle stature, 56 years of age, and rather inclined to stoutness, had lived an irregular life, drinking a considerable quantity of spirits, and eating various indigestible articles, such as raw cucumbers and fruits of various kinds; he had also taken carbonate of soda in very large quantities for a length of time. During many years he was subject to vomiting immediately after taking his food, but for eighteen months this symptom had much subsided; though the other dyspeptic symptoms had gradually increased in severity, and jaundice had become more and more decided. A melancholy turn of mind became established; his tongue was contracted, hard, dry, and red at the tip; the feces had continued dark in colour; and the urine was loaded with lithates. For a fortnight he had been treated with alteratives and saline diuretics, but without any marked benefit. There was no anasarca; but the abdomen appeared to contain a small quantity of fluid, not, however, appreciable to the touch.

In this condition, on Saturday, February 21st, in the evening, after a sense of uneasiness and oppression at the pit of the stomach, he vomited a large quantity of dark coloured blood (a quart, at least). In the course of the next three or four hours, the vomiting recurred five times, and each time about a quart of sanguineous fluid of the same appearance as at first was ejected from the stomach, on which he felt relieved, and in every way more comfortable. When I saw him at 10 p.m., he was not wanting in power; his speech was strong, but his pulse soft and quick; he expressed himself as feeling better than he had done for some time previously. A dark coloured evacuation had been passed from the bowels. A cathartic of calomel and colocynth was prescribed, and full doses of tannin should the vomiting of blood recur.

February 22nd. I was sent for in haste this morning; for, on my patient attempting to get out of bed, an enormous quantity of blood was vomited, both in the shape of fluid and clot, from which he was now very weak. Stimulants were administered, and he recovered himself temporarily; but during the day much blood was thrown up at intervals, and at two several times in the preceding night, at least a quart (according to the friends' account) was thrown up. At night, oil of turpentine, in twenty-minim doses, every two hours, was prescribed.

February 23rd. He had vomited but once during the night, and then no blood was thrown up. During the day, feeling much nauseated, he did not take his mixture at the stated times, but allowed five hours to elapse, when he vomited, and this time blood again showed itself, though not in such large quantities as before. The mixture was renewed, and brandy and ice were given *ad libitum*. He had taken nearly a bottle of brandy in the day and night. As the nausea did not permit him to take support, beef-tea was injected into the rectum; it remained some time, and when it came away, a large quantity of black blood was discharged with it.

February 24th. I was again sent for in haste at 7 A.M. It was evident that he was now fast sinking. He had vomited in the night, but the fluid was only partially mixed with blood. At 9 A.M., he died gradually and easily, after having been in a state of coma for half an hour; immediately preceding this, he spoke well and sensibly.

Throughout the attack, he evinced the restlessness and jactitation peculiar to loss of blood, and particularly bemoaned the want of sleep; thirst was also a very prominent symptom.

POST MORTEM EXAMINATION twenty-four hours after death. The general surface was completely blanched. There were about two quarts of serum in the peritoneum. The stomach was nearly full of dark grumous blood; and there was also a large quantity of this in the intestines. The mucous membrane of the stomach was much softened, particularly at the fundus, which was very blood-stained, had a layer of coagulated blood adherent to it, and showed a few large veins ramifying in it, one of which appeared to terminate in a small ulcer of about the size of a threepenny-piece. This ulcer appeared as if a piece of mucous membrane had been cut out and peeled off

the muscular tissue, which was very plainly marked. There was no thickening nor hardness around it, but the corresponding surface of the peritoneum was readily removed by the finger nail. The pyloric orifice of the stomach and the duodenum were natural, with the exception of being much blood-stained and softened. The liver was considerably smaller than natural, very hard, yellow, and hobnailed; the hepatic veins were not marked in the centre of the lobules. The gall-bladder was nearly empty.

The kidneys were natural in size, but they were much embedded in fat, and mottled on the surface. The capsule was adherent, and there were several cysts in the parenchyma, which was very granular.

The heart and lungs were healthy.

REMARKS. The interest of this case consists in the enormous quantity of blood lost, and the slight morbid changes producing such loss; for though there was an ulcer, it was exceedingly superficial; and it would appear from an adhering layer of coagulum in the neighbourhood, that much must have been lost by exudation through the coats of the vessels. From the most careful inquiries, I believe the least quantity of blood that was lost to have been two gallons; and in this belief, Mr. Roscow (who saw the case with me several times) fully coincides. Such a quantity, and continuing without intermission, would raise a suspicion that some vessel of considerable size was opened, or that there must have been an ulcerated surface of large extent; and when the previous history was taken into consideration, it appeared quite possible to have been of a malignant character. But the question of malignancy could make no difference in the treatment; for life was in momentary danger from loss of blood. The indication then clearly was, to arrest this at once if possible, and then to treat symptoms as they might arise. The most reasonable conclusion, however, that we could arrive at from the previous history was, that cirrhosis of the liver existed. Such being the case, we might have been led at first into giving too favourable a prognosis, for it is asserted that in almost all such cases hæmorrhage is merely an effort of nature to relieve the system, and that when the vessels are disgorged, the bleeding would cease of its own accord; and, later, when it was evident that something more formidable than the relief of congestion was going on, we might have lost all hope, and so have been prevented from trying remedies with sufficient perseverance. The result of this case would make it appear judicious that in all instances where life is threatened from hæmorrhage, remedies should be administered to the last, however strong our convictions that it is useless: *we can never be certain.*

The treatment of the case affords some points of interest: full doses of tannin frequently repeated afforded very little, if any, relief; whereas the turpentine evidently arrested it temporarily; and it is possible that, had it been taken regularly at shorter intervals, the bleeding might have been kept in check sufficiently long to have allowed the system to recover itself, so that the patient might have eked out a few more months of miserable existence; for it was clear that when he discontinued the mixture five or six hours, blood again appeared in his vomit; not so, soon after taking his dose. The brandy, doubtless, was of much service; indeed, I believe it was that alone which kept him alive so long. In hæmorrhage occurring with cirrhosis, purgatives are recommended; in fact, are looked upon by good authorities as the *only remedy*; but certainly they require judicious management. In this case they were rejected by the stomach; and further, the very effort of defæcation almost extinguished the only remaining spark of life.

Fourteen days after the decease of Mr. S., one of his sons died of hæmatemesis, caused in this instance by malignant ulceration of the stomach; at least, such was the friends' version of the gentleman's report who performed the *post mortem* examination.

CHLOROFORM, AMYLENE, ETC.: HOW DO THEY KILL?

By WILLIAM WEBBER, ESQ., late of Norwich.

It is not only most important, but just and right, that we should, as promptly as may be convenient, place before the public, as well as the profession, every cause of death with which we become acquainted, more especially those causes with which we have been connected, or to which we have in any way been unfortunately instrumental. This we must do without regard of any obloquy or unmerited consequences which may be visited upon us by virtue of our openness, candour, and sin-

cerity. Thus, in time, will a shortsighted, unwise, and unjust censoriousness be dispelled, and the parasitic hold of quackery will be eventually disavowed.

Where we proceed upon rational premises and sound principles, we can afford to be open. Surely, then, it is better that we should be so, than suffer ignorantly drawn inferences and consequent misrepresentation to take the initiative, and assign the office of truth to a false tongue, and to that evil genius of weakness—prejudice—the bane of progress. "Art", associated with "mystery", wears the semblance of artifice. Secrecy engenders suspicion, and casts a shadow upon the fair features of science; and credulity—the cradle of empiricism—gives to imposture the benefit of the blind-born doubt.

If, in our solicitude and efforts to secure for our patients an immunity from torture (often a cause of death, from the shock it inflicts upon the conservative system of life), we accidentally destroy existence, why need we simulate the murderer's secrecy, and thus, adopting a Cain-covertness, thereby convert a venial, nay, justifiable misadventure into the appearance of a felonious act? Death, under almost any circumstances, will out somehow.

To Mr. Paget and Dr. Snow, therefore, are the profession and the public indebted for having at once placed before them the correct details of the fatal results which have lately obtained to them respectively from the employment of chloroform and amylene. These hapless issues, if left to ooze out, as they unquestionably would have done, would most likely have created erroneous impressions, have done damage to the employers of the anæsthetics and to science, and have established a popular prejudice against a valuable remedy, the use of which, as a rule, is right.

It forms no part of my object here to go into the question whether chloroform, or other anæsthetics of that class, have saved life by counteracting shock to the nervous system, or have enlarged the tables of mortality by their effects either at the moment of operation or in after time. I have ventured to enter upon the subject herein involved, as one anxious for the maintenance of the due status of our calling, to urge that, with life confided to our hands, a profession so eminently calculated to hold a high and honoured position, should never for an instant, through a want of moral courage and lack of openness, be subjected to the chance of its great usefulness and incalculable value being in any way evil spoken of or brought into discredit.

And now, in answer to the question, How do chloroform, amylene, or such like agents, kill? I essay, at the risk of all fair criticism (by which I may get a useful hint, if I fail in giving one), to state that, in my humble judgment, they kill by abolishing the electric or nervous rule of the body, preventing thereby the amalgamation of those elements of the circulating fluid which are essential to function and the sustenance of life, and which no agency, independently of the nervous sovereignty, can secure. It may be asked, Why, then, do these agents kill in some instances, and not in others? Because, I apprehend (apart from an overdose, or want of due care in their administration), some depression or deterioration of nervous power, either from a fear of consequences, or the existence of organic change, or some such antecedent, has predisposed to such fatal effect. In Mr. Paget's case, the young boy was "timid", and "became alarmed at the thought of being put to sleep". In Dr. Snow's case, the patient, of mature age, was evidently very apprehensive of consequences, as was shown by his "not having taken food for several hours", and his "drinking a pint of ale just before the operation", and which, by generating acid, might have helped to render the chloroform more active of mischief. I consider *cordials* not only worse than useless, but very objectionable, in such condition of the nervous system: hence my practice of giving opiates before operations, or where I have had reason to suspect apprehension or misgivings on the part of the patient before using chloroform (as was exemplified in Baldwin's case, mentioned in my letter in the JOURNAL of May 9th, under the head of "Ligature before Amputation"); and of ordering a diet of broth or gruel, with salt and a little Cayenne pepper, for a day beforehand: hence, also, my reason for giving an opiate, with a saline stimulant, in brandy and water, *after* the effects of the anæsthetic have gone off, and *before* giving nourishment, as to me it has appeared, that to put stimulants or food into the stomach, with a view to their assimilation, when the nervous system is all but exhausted, is like expecting a spur to do more than extinguish the well nigh worn out powers of a tired horse. Allow rest and repose first to restore nervous energy, and then recruit strength by food *proportionate* to the power of the digestive organs.