chest; pulse 130, feeble. To take a draught containing chloric ether and aromatic spirit of ammonia every third hour; a blister to be applied to the chest; half an ounce of wine to be taken, with liquid nourishment, every third hour.

7, eight, a.m. Has been much troubled with cough during the night, and has slept but little; pulse 130, weak; countenance anxious; scarcely any fecal discharge.

2, p.m. She has had some rest, and expresses herself as feeling much more comfortable; pulse 115; temperature of skin natural. She takes her wine and liquid nourishment freely; the abdomen is soft and free from tenderness on pressure; the unnatural tumidity has disappeared, except a little on the right side.

At five, p.m., she became suddenly exhausted, and the skin cold and clammy. She did not complain of pain, but rapidly sunk, and died at half-past seven, p.m.

Examination of the Body Four Hours after Death.

On opening the abdomen a considerable quantity of liquid and solid fecal matter was found in the pelvis, and a large ragged opening, through which the feces had escaped, was seen in the cæcum. The coats of the cæcum were extremely thin and softened, and dilated into a large pouch, which adhered to the neighbouring folds of intestine. The mucous membrane of the cæcum was of a deep red colour, and exhibited some small superficial ulcers. These morbid appearances were entirely limited to the cæcum. The ascending, transverse, and descending portions of the colon were empty, and appeared perfectly healthy. The artificial opening had been made at the lower part of the descending colon. The site of the operation could not be detected by examining this portion of intestine from the opened cavity of the abdomen, nor was there the slightest trace of peritoneal inflammation, or lesion of the peritoneum, in the neighbourhood of the descending colon. Immediately below the artificial opening the coats of the intestine were thickened; the mucous membrane had a granulated feel, and there existed at this part a firm, circular stricture, that would only allow of the passage of a full-sized urethra bougie. This stricture was situated eighteen inches above the anus. Below the stricture, as far as within six or seven inches of the anus, the intestine was reduced much below its natural calibre, but its coats did not exhibit any obvious alteration of structure. So great was the contraction of this part of the tube, that the tip of the forefinger was very tightly embraced by it throughout its whole extent, but by using a considerable degree of force the coats of the intestine admitted of being dilated to such a degree as to allow the forefinger to be pushed through successive portions of the tube, until it reached the upper part of the sigmoid flexure, when it was firmly arrested by the unyielding and contracted coats of the bowel; these, however, did not exhibit in the slightest degree the induration or altered structure characteristic of carcinoma.

The left pleura presented numerous recent adhesions. The bronchial mucous membrane was a little injected, particularly in the smaller ramifications. A small portion of the middle lobe of the right lung was hepatized; heart and pericardium healthy.

ON THE EFFECTS OF LOSS OF BLOOD.

By J. TOOGOOD, Esq.,

Senior Surgeon to the Bridgwater Infirmary.

CASE I.—The following case illustrates, in a very striking manner, the great advantages of carrying blood-letting sometimes to a fearful extent, and the state of reaction as an effect of repeated losses of

blood:—Mrs. —, a delicate and most interesting lady, aged 24, a week or ten days after her confinement of a still-born child, was seized with pain at the lower part of the abdomen, extending to the liver; and other symptoms which indicated inflammation of the cervix uteri, together with much constitutional disturbance. The case appeared to have been mistaken in the beginning, so that it was allowed to become somewhat inveterate before the appropriate treatment was adopted. At this stage of the disease she fell under my care, when I found the uterus in so irritable and painful a state, that an examination conducted in the most gentle manner gave exquisite pain, which lasted several hours. It was treated with leeches to the hypogastrium, cupping low in the loins, hip bath, aperient medicines, strict abstinence, &c. The benefit from cupping over the sacrum was observed to be so decided, that recourse was had to this remedy twice or thrice a-week regularly. The disease seemed to be thus yielding in the most favourable manner, when the patient became suddenly, and quite unexpectedly, affected with the effects of loss of blood in a most violent form. The quantity of blood taken by cupping had frequently been twenty ounces; and too exclusive attention had been paid to the disease, the state of the constitution not being sufficiently watched. In this manner the patient became affected all at once, after being cupped, with sudden and alarming syncope; she gasped, and became convulsed, and afterwards slightly delirious. The admission of cold air, and the administration of brandy, gradually restored the patient to sensibility; but she remained exceedingly feeble. On the next morning she complained of extreme pain in the head, violent throbbing of the temples, and had slight delirium and sickness; I found the street covered with straw. During this day the pain of the head, the throbbing, and the intolerance of light and sound, had increased so much, with sickness, feverishness, and a frequent strong pulse, that I apprehended inflammation of the brain had taken place, and had actually tied up the arm for blood-letting; but the remonstrance of the patient, the history of the attack, and the recollection of some remarks on the effects of loss of blood, read some years before, happily led to the abandonment of this measure. Fortunately, both for my patient and myself, her repugnance to general bleeding prevented me from using the lancet, and so saved her life. I prescribed leeches to the temples, a blister to the nape of the neck, and a cold lotion to the head; opiates and the effervescent medicines were immediately rejected. She became much better, and earnestly requested to be allowed a little brandy, which I gave her; it obviously afforded much relief, and I began to see clearly the nature of the case. From this time light cordials, a mild diet, rest, quietude, a strict attention to the state of the bowels, constituted the treatment; and were followed by a gradual and progressive amendment. Some of the symptoms remained, however, for a considerable time. The pain in the head continued troublesome for many weeks, and a pulsatory movement in the side of the neck harassed the patient for several years. In this case the effects of the loss of blood stole on me almost imperceptibly, and I was not then aware that such symptoms, as experience has convinced me, would arise. This case has also made me attend very much to the prejudices of a patient ever since, and carefully examine whether they be well founded. In this instance I really believe my yielding to them saved the life of my patient.

I watched this case with the most intense solicitude, during this period of imminent danger, for many days and nights. Her complete recovery rewarded all my pains; and I had, moreover, the satisfaction of finding that not a vestige of the original disease remained. She soon became pregnant, and bore several children afterwards. Some years after I was called to visit her, at a distance of one hundred and fifty miles, and

found her in a sinking state, having been attacked with acute pain in the abdomen, for which she had been copiously and repeatedly bled, and she sunk under the disease and remedies.

CASE II.—Dr. Cole, aged 34, became affected with inflammation of the larynx. Having previously suffered from the same disease whilst employed on the staff in the Peninsula, he was bled freely on two successive mornings, at his own instance, by one of my pupils. In the afternoon of the second day, the disease being unsubdued, he was bled a third time, and placed in a rather inclined position on a sofa. The blood was allowed to flow until thirty-four ounces were taken. He then suddenly fell upon the floor violently convulsed, and remained for some time afterwards in such a state of syncope, as to render his recovery doubtful; being carried to bed, however, he slowly recovered under the administration of cordials. He did not suffer afterwards from the secondary effects of loss of blood.

CASE III.—*Syncope from Venesection.*—A gentleman, aged 84, robust, and unusually active for his period of life, with great energy of mind, had suffered from repeated slight attacks in the head, threatening paralysis, for which he had often been bled locally, and once or twice from the arm, and had worn a seton in the back part of the neck for several years. In December, 1841, these symptoms increased to such a degree that he fell down, and partially lost the use of his left side. Leeches were applied to the head; he was cupped, took active medicine, and lived very sparingly. No relief was obtained by these means, and as the pulse was exceedingly full, strong, and labouring, ten ounces of blood were drawn from the arm; but as this produced no change in the pulse, after an interval of half an hour, the arm was again tied up, and the blood suffered to flow until the fullness of the pulse was somewhat diminished. He was placed in a semi-erect posture, and showed no sign of faintness until after the arm was secured, and he was laid down in bed, when, after yawning twice, he had a violent convulsion, gasped two or three times, the pulse ceased, and he fell back covered with a cold sweat, and to all appearance dead. Some brandy was quickly poured down his throat, and after a short time he appeared to revive a little, but soon relapsed into an alarming state of weakness and faintness, which required the constant administration of powerful stimulants and application of warmth to keep him alive, and the event was even then very doubtful for many hours, for the pulse fluttered, the countenance remained blanched, and the surface cold and clammy, with constant restlessness extremely difficult to control, sickness, and disposition to evacuate the bowels. Notwithstanding the free use of stimulants and opium in large doses, he was only so far recovered, at the expiration of six hours, as to assure me that he would not die from the immediate loss of blood.

This case strongly illustrates the truth of the position laid down by that able physician and accurate observer, Dr. Marshall Hall, in his excellent work on the Effects of Loss of Blood. He says, "Convulsion, as an immediate effect of loss of blood, occurs when blood-letting has been inappropriately or unduly employed, and from excessive hæmorrhage. It is apt to occur in cases in which the patient has been bled in a more or less recumbent position, in which the blood has flowed slowly, or in which time has been lost during the operation. In such cases much blood flows before syncope is induced—too much to be safe. When the blood flows slowly, we should be cautious how we bleed to deliquium, even in the erect posture; in the recumbent posture it is always attended with danger."

In this case the blood was drawn from the patient in a semi-erect posture; it trickled slowly down the arm, and a much larger quantity was abstracted than

I was aware of. Altogether it weighed thirty-two ounces. I have often witnessed alarming syncope, but never so frightful a case as this which did not terminate fatally. It was surprising to observe how soon the constitution accommodated itself to so great a loss, which could not have been less than fifty ounces, the patient in three days having been bled by leeches, and cupping on the two preceding ones. On the morning after the last bleeding the pulse was firm and steady, and two days afterwards he walked about his room with slight assistance.

March, 1842. Although depletion was carried to a fearful extent in this case, and much farther than was intended, it has been attended hitherto with the best effect. There has been no muffling of the speech or threatening of paralysis since. An issue has been placed in the nape of the neck, and the patient is now able to take his accustomed exercise, and return to his usual habits, observing a moderate diet, and avoiding all exciting causes.

I have always felt that, of all the remedies we employ, the lancet requires the greatest discrimination. I have witnessed the happiest effects from early and copious bleeding again totally fail when pushed to a fearful extreme, and I have often regretted its too frequent employment.

Bridgwater, March, 1842.

ANTIDOTE TO ARSENIC.

TO THE EDITORS OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

GENTLEMEN,—I beg to send you the annexed case for insertion in your excellent publication. I have inquired most minutely into every circumstance connected with it, and feel fully justified in vouching for their accuracy.

The arsenic that was taken had been lying in a paper for about a year; but I have no doubt of its being genuine, as it was obtained at the shop of Mr. Steward, of this town, and was duly labelled.

I am, Gentlemen,

Your obedient servant,
RICHARD CHAMBERS, M.D.

Upton-on-Severn,
March 15, 1842.

I was hastily summoned on the morning of the 12th instant, to visit Walter Hortland, a strong, healthy boy, aged four years, who, about ten minutes previously, had eaten some bread and butter, on which had been spread (as near as I can estimate it) five grains of the white oxide of arsenic the previous evening.

He did not complain of the least suffering; and merely said that he had eaten some nice bread and sugar.

I immediately gave him the following—

Oxide of iron, three drachms;
Soft sugar, theriaca, of each four drachms;
Water, three drachms. To take milk to drink.

He continued quite easy till about ten o'clock, when he suffered from slight griping pains in the bowels, and was rather thirsty.

To have tepid milk and flour boiled into a thick mucilage.

Six, p.m. Continues quite comfortable.

13. Nine, a.m. Feels rather languid. To take

Castor oil, six drachms;
Compound tincture of cardamoms, one drachm;
Peppermint-water, five drachms.

15. No complaint.