valuable. I refer to calculous affections of the kidneys, and certainly their effect in such cases is surprising. They act powerfully upon the kidneys, the small calculous deposits which find a nidus in their structure are mechanically washed away, and by their chemical agency upon the fluids of the body, they tend to remove that acid condition, which leads to such fearful results. As a remarkable proof of their value in such cases, I may mention what was said to me by a lady five or six years ago, whom I had recommended to drink them. "I have been at Vichy," she said, "every year, for six years, and in all that time I did not gain half the benefit which I have derived from the use of these waters for six weeks."

But I fear, gentlemen, I have already trespassed too much upon your time, and I hasten to bring this paper to a close.

I shall pass over the subject of the pure saline waters, with this one observation, that we find them a valuable remedy in delicate constitutions, where we wish to have the effect of a mild laxative produced daily; and I come to notice lastly, the chalybeate, and the saline chalybeate springs. I consider these waters as being of at least as great importance in a therapeutic point of view, as the better known sulphur waters; but I need not occupy your time with any prolonged account of them, because, aware of their existence, you will readily perceive of how great an advantage they must prove to a large class of invalids.

The pure chalybeate springs are strong, containing about two grains and a half of iron in each gallon, which is held in solution by an excess of carbonic acid. I need say nothing of their therapeutic effects, with which you must be perfectly acquainted. But I am desirous of speaking in strong terms of the valuable remedy which we have in the saline chalybeate waters. In these we have, in addition to the iron, a considerable quantity of muriate of soda, and of sulphate of soda. The effect of this is to act gently, but in most cases sufficiently, as an aperient; and we are thus enabled in this form, to administer with great benefit, a chalybeate in cases where it has long been indicated, but where, from a morbid excitability of the nervous system, or from other causes, it has been found impossible to continue its use for any length of time. I may also speak in strong and even unqualified terms, of the value of this water in a class of cases which are constantly met with in practice, where the secretions have become impaired or depraved, the bowels confined, the action of the liver sluggish, and all these symptoms depending upon a want of healthy tone and energy in the system, which, while it produces the symptoms, prevents that persevering continuance in the treatment which they appear to demand. In many other cases, into which your time will not allow me to enter, but which you will readily judge of, this water will be found a most valuable agent.

In the observations which I have had the honour to lay before you, I trust that I may not be thought to have unnecessarily occupied your time; I have been anxious to spread more widely through the country a knowledge of the valuable remedies which Harrogate affords. And to those among you, who know the place, or are in the habit of sending your patients there, I can confidently appeal for a confirmation of every word which I have uttered.

CASE OF ULCERATED STOMACH, CAUSING DEATH BY BEING SUDDENLY DETACHED FROM ITS ADHESION TO THE PERITONEAL LINING OF THE ABDOMEN.

By WILLIAM COLLYNS, Esq., Surgeon, Kenton.

(Read at the Annual Meeting of the South-Western District Branch of the Provincial Medical and Surgical Association.)

"I was requested by a friend to open the body of a female relative, who had died suddenly under circumstances which he could not satisfactorily account for, and I extract from my case-book the following particulars which he gave me, and the result of the autopsy."

E. W., aged 21, a very fine young woman, inclined to be corpulent, with a florid complexion, robust, and of active habits, had occasionally complained of rather acute pain in the left hypochondrium, after taking a full meal, but as it never lasted an hour at a time, and as her digestion was good, nothing was prescribed for her but some aperient pills. Being corpulent she was accustomed to have her stays laced very tight, and used to wear also a broad band round her waist, which was always made excessively tight, and it was thought the pressure might have occasioned the pain. One morning, after having used great exertion dancing all night at a ball, she eat a hearty breakfast, and quickly after walked out with some young friends. Suddenly she was seized with very severe pain in her left side, from which she said there was something tearing away; she shrieked violently, became faint, and fell down in the street; she was immediately removed to the house of her relative, which she had just left, efficient medical aid was instantly obtained, but after suffering intense agony for three hours, she expired.

Twelve hours after death I opened the abdominal cavity, there did not appear to be any omentum, but merely a ragged sort of fringe along the greater curvature of the stomach; there was no appearance of inflammation on the outer coat of the stomach or intestines; but on that portion of the lesser curvature of the stomach anteriorly, which in the erect position of the body would have been in contact with the abdominal parietes on the left side, there was a considerable deposit of coagulable lymph, and a perforation through the coats of the stomach from internal ulceration, there being also a corresponding deposit of lymph on the membranous lining of the abdominal cavity, to which it was apparent the stomach had adhered, and it was opposite this spot she had always complained of pain. The stomach was very large, and contained a good deal of undigested food, but the fluid parts had escaped into the cavity of the abdomen. All the other abdominal viscera were perfectly sound.

The stomach was produced for inspection.

A CASE OF TETANUS SUCCESSFULLY TREATED.

By WILLIAM GILLARD, Esq., Surgeon, Totness.

(Read at the Annual Meeting of the South-Western District Branch of the Provincial Medical and Surgical Association.)

December 28, 1838. R. L.—, aged 20 years, a healthy young man, received the whole charge of a gun in the front of the right thigh, about midway

between the hip and the knee. I saw him within an hour of the accident; the wound was nearly circular, about two inches in diameter, with some shot, portions of wadding, and his cloth trousers protruding from it, but so firm that I did not consider it prudent to remove them by force, the bone being uninjured. I ordered him to bed, to be kept quiet, and have a cold lotion constantly applied.

29th. Had a comfortable night; pulse 90; tongue white. Repeat the lotion. An aperient draught to be taken immediately, and Dover's powder at night.

30th. Did not visit him, but heard he was going on well.

31st. Found him very quiet; pulse 84; wound looking well, and free from pain. The lotion to be repeated. Ten grains of compound ipecacuana powder at bed-time, and the aperient draught in the morning.

January 1st., 1839. Had a good night; bowels relieved; some shot and pieces of wadding coming away, and altogether going on so well, that I did not visit him again until the—

5th. When he was very comfortable; pulse 76; no medicine required. He was ordered a poultice of bread and water to the wound, and to omit the lotion.

10th. Quite easy, and wound going on well.

18th. I was called to him in the afternoon, the messenger saying he had locked jaw. He had trismus, and opisthotonos to a great extent; pulse 80, tense and thrilling. I bled him without regard to quantity, until syncope was produced, and ordered him five grains of calomel and half a grain of tartarised antimony every four hours, with one ounce of aperient mixture; the poultice to be discontinued, and the cold lotion applied as before.

19th. *Mane*.—Had a restless night; pulse 80; bowels moved during the night; spasm continues. Bled him as before; repeat the medicine, and an enema, with two ounces of spirits of turpentine and one ounce of castor oil, was ordered.

Vespere. Altogether a little relieved, and pulse softer.

20th. *Mane*.—Had some sleep; bowels freely opened; pulse 86; but more compressible. Half a grain of tartarised antimony and six grains of camphor, with one ounce of aperient mixture every four hours.

Vespere.—Pulse harder; spasms returned; bled him as before.

21st. *Mane*.—Restless night; spasms continue; pulse 80; wound looking well. Lotion continued; bleeding repeated; and aperient mixture every four hours, with three grains of calomel, half a grain of tartarised antimony, and four grains of powdered scammony.

Vespere.—Quieter and more comfortable; bowels moved.

22nd. *Mane*.—Night restless, with occasional spasms; pulse 80; bowels acted on repeatedly during the night. Bled as before.

Vespere.—He was altogether relieved; pulse 96; soft and compressible; skin moist, having been from the 18th dry and hot; free from spasms, and inclined to sleep. I now ordered him one grain of opium and three grains of camphor in a pill every three hours, with a simple saline draught, in a state of effervescence; and as he continued to improve, I followed the same plan of treatment to the 29th, with very slight occasional

alteration, and now and then an aperient draught. The cold lotion was used to the 29th; on the 27th the last shot, and a large piece of the trousers, came away; on the 31st, I applied a bandage.

February 8th. I ceased my attendance, as he was quite well. He has never since felt the slightest inconvenience.

INSTRUMENT FOR REDUCING DISLOCATIONS, FRACTURES, &c.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I noticed in the *Journal* of August 6th, among the various communications made to the Provincial Medical and Surgical Association, convened at Sheffield on the 31st of July last, that mention is made of an instrument which I had the honour to exhibit to that learned and respectable body; and from the interest which was manifested in all that related to the science of surgery and its improvements, together with the attention which my apparatus received from the gentlemen present, I have thought that perhaps some further account of that instrument might not prove entirely unwelcome to your readers. I therefore beg you will allow this a place in the *Journal*.

I will firstly remark, that the object of this Instrument, (and which has been called the "Adjuster,") is to reduce all dislocations, to adjust all fractures, and to maintain coaptation of all fractured bones where the principle of extension and counter-extension is necessary to accomplish either of those ends; and also, that the surgeon in using it, has entirely at his command, a power equal to that of twelve men, all or any part of which, he can apply at pleasure, with his own hand, in the most gentle and steady manner. This privilege alone, it would seem, secures to the surgeon advantages worthy of his highest consideration, yet this is by no means the whole or even the chief benefits to be derived from the use of this instrument. In dislocations, for example, he is relieved from those embarrassments which the application of power operating from fixed points, over which he can have no control, frequently subjects him, he being able to give the same free motion to a limb during the application of force by this instrument, that he could were it not in use, the benefits of this for relieving the head of the bone, as in some cases of dislocation of the hip and of the shoulder, must be obvious, while it is also of equal importance in many other cases.

In fractures, too, he is enabled to apply extension and counter-extension in any position of the limb he may choose to adopt; by this means he can so relax the muscles of any limb as that the least possible degree of extending and counter-extending force may be required to restore the limb to its full normal length; while the fractured portions are also inclined by the action of the muscles into a normal line of the shaft of that bone. He can also confine the points of extension and counter-extension within the limits of any given bone, thus making the line of extension in the exact line of the shaft of the bone. He is also able with this instrument, in fractures at the neck of the thigh bone, to restore a normal length to that