the brain, and no great amount of vascular turgescence, and, moreover, the fluid seemed to have confined itself simply by its own rapid local exudation pressing on the surrounding parts, for, with very slight pressure, when the calvarium was removed, it disseminated itself in the surrounding sinuses. Was this the direct consequence of the poison taken or not? I am inclined to think so, if the state of the circulating system generally, that is, the emptiness of the heart and arteries, and the general venous congestion, be owing to this cause, and was suddenly produced. The state of the follicular glands of the stomach must have existed for some time previously, and to this condition was probably owing the pain and uneasy sensations she had suffered from, more or less, for some time before.

The jury asked if such a condition might not produce such painful sensations as would induce her to take the essential oil by way of relieving herself? I thought not; the pain would not be violent, although from the empty state of the stomach I thought such uneasy dyspeptic sensations might be produced as would occasion extreme depression of spirits. From the circumstances of the case there can scarcely be a doubt but that she took it as a poison, with a view of destroying life.

The interval which elapsed between the time of her swallowing it and that of her becoming insensible, is well worthy of notice, though not uncommon. She was able to cork the bottle, put it in the bag, pull the strings, and hang it on the chair, before it took much effect, though it is necessary to remark that all this could be done without the necessity of her getting out of bed.

At the close of my examination at the inquest, (before Peter Warburton, Esq., coroner for the city,) I gave it as my opinion "that death was occasioned by the essential oil of bitter almonds, taken on an empty stomach, and that the deceased did not take more than fifteen or twenty drops." This opinion was grounded on the symptoms being such as would be produced from a like cause; on the presence of the morbid signs which the inspection of the body usually shews in such cases; on the absence of any other evident disease capable of producing death; on the state of the system at the time being most favourable for the operation of this poison; on the presence of the poison in the stomach; and on the authority of cases which have previously occurred. I then read to them the case which occurred to Mr. Chavasse, of Birmingham, where a druggist took half an ounce of "almond flavour," containing about 30 drops of the essential oil, which is detailed in Taylor's work on Medical Jurisprudence, recently published. It was taken on a full stomach too, but though it did not terminate fatally, the man had a very narrow escape with his life.

The essential oil has every appearance of being very good, and if it really is so, it will not excite much surprise that fifteen or twenty drops should have produced fatal effects, since it contains, according to Christison, from 8 to 14 per cent. of pure anhydrous prussic acid, whilst the official prussic acid does not contain more than from 1 to 6 per cent. of the pure acid. It is therefore nearly four times as strong, and if we suppose the oil to be only of moderate strength, say 10 per cent., the dose of fifteen drops will contain

a much larger quantity of pure prussic acid than has ever been taken by man without proving fatal, whilst numbers of cases are on record where a smaller dose has produced death. It is not uncommon for druggists to sell it to ordinary customers in this concentrated form, or in one but slightly diluted under the name of "peach-nut oil," but they surely should never be allowed to do so. Even the different preparations from it, as the "essence of almonds," "almond flavour," "ratafia," &c., which are sold every day for domestic purposes, are much stronger than is generally supposed. The dilution is seldom greater than one part of the oil to seven or eight parts of the diluent, and in this form they are very nearly as strong as the prussic acid of the London Pharmacopœia. The druggist on the present occasion used every other caution, and only erred, as most of his brethren err, in selling it in so condensed a form, which should never be permitted. That so deadly a poison as this should be allowed to be sold for the purpose of flavouring pastry, liqueurs, and other articles of diet, has already been pointed out by Professor Taylor as a glaring instance of the disgraceful state of medical police in this country; and it is to be hoped, ere long, that some check will be given to prevent the unrestrained sale of this and other powerful poisons which may now be everywhere procured, and by every body. Such a restraint, although perhaps it might not lessen very much the number of cases of self-destruction, would at any rate prevent the occurrence of such fatal accidents, as must otherwise take place from time to time; and the sooner it is established, the better.

EXTRAORDINARY CASE OF GUN-SHOT WOUND, WHERE THE CHARGE PASSED FROM THE NAVEL TO THE BACK, WITHOUT FATAL CONSEQUENCES.

By EDWARD DANIELL, Esq., Newport Pagnel.

(Read at the Anniversary Meeting of the Provincial Medical and Surgical Association, August 8, 1844.)

The following case will perhaps be interesting more from its novelty than for its value in a surgical point of view.

John Smith, a fisherman, aged about 25 years, went out on a Sunday morning, in the winter of 1837, with two companions. One of these persons possessed a gun, which was so constructed that it could be taken to pieces and stowed in the pocket. I am not prepared to say whether these gentlemen designed a trespass on the game-laws, or whether their predatory excursions had only reference to those minor bipeds, which the legislature have considered too insignificant for their especial protection. I opine, however, that any wild animal capable of yielding a Sunday's dinner, would have been in great jeopardy had it have been luckless enough to cross their path at that time. Certain it is they themselves felt their pursuit was lawless, for they hastily took their weapon to pieces, on observing the owner of the fields approaching them. In re-adjusting it a second time the stock was not in perfect apposition, and the *wiseacre*, whose business it was to render the weapon *fireworthy*, observing this defect, sought to remedy it by striking the butt end sharply upon the

ground. The result may be anticipated, for the gun went off, lodging its contents in the body of John Smith, who stood about three yards from its muzzle.

I was sent for immediately, and arrived just as the poor fellow was brought home. The contents of the gun had entered about half an inch below the navel, on the right side, and had passed out about two inches above the hip, and three from the vertebral column; the distance from wound to wound was about six inches. I could not decide at the moment whether the charge had passed directly through the body, or whether by the resistance of the abdominal muscles, it had been diverted in its course, and had made a semicircular transit immediately under the integuments. Such a thing struck me as being possible, although not very probable. Under the circumstances I thought it right to give a very unfavourable prognosis, and the family of the poor man were prepared for a fatal issue. The ignited wadding or cartridge passed through the wound unextinguished, and set fire to the shirt, opposite the posterior opening.

The public prints gave a detail of the accident at the time, but the public were never informed of the result.

Perhaps it may be in the recollection of many gentlemen present, at any rate it must be familiar to those who are in the habit of reading and treasuring remarkable surgical cases, that in the year 1811 or 1812, a gentleman in the act of taking his horse from his gig, was in consequence of the impatience of the animal, suddenly pinned to the wall, the end of the shaft coming in contact with his side, penetrated the thorax, making its way completely through the chest, and passing out under the opposite axilla. My memory will not serve me to mention the name of the surgeon who attended, and afterwards published a narrative of the case. Sir William Blizard, I know, was called in. I had an opportunity of examining this case after the patient's wonderful recovery. He was brought to Mr. Brookes's amphitheatre, at the time I was a pupil there; the pamphlet was read, and the gentleman submitted himself to be freely examined by all the students. The case made a great noise at the time. I quote it simply to justify my own practice in the manner I treated John Smith. The surgeons looked upon the case as hopeless; so did I. They merely defended the wound; I did no more. There was neither probing nor poking, no endeavours to remove extraneous substances. Nature was left to her own operations, and nature in each case did her business, far better than we, her assistants, could. In the case of John Smith, the wounds digested properly, portions of garment, and other extraneous matter passed out at the posterior opening, and about 40 shot passed with them. There still remains under the integuments perhaps 15 or 20 of the shot, but he suffers no inconvenience from them, and is scarcely aware of their existence. The man continues in excellent health.

I am quite aware that this case has nothing to recommend it to your notice, except as exhibiting one of those extraordinary events, which show either the marvellous interposition of Divine Providence, or a concatenation of opposing influences, whereby what would appear to human judgment as mortal injuries, are, after all, without human aid, rendered harmless.

To account for these anomalies is out of the reach

of mortal speculation, for who is capable of pointing out the idiosyncrasy which succumbs in one case, and resists in another; or can tell by what extraordinary process the most formidable weapons shall enter the great magazine of human existence, and in the rudest manner interfere with the most delicate structures, and the functions of animal life be yet preserved.

There is one practical inference which I think may be drawn from this case, and that is, in deep and dangerous injuries, where vital parts may be involved in the mischief, the less we interfere with the processes of nature the better, and I am convinced that much evil is often inflicted by our readiness to anticipate the beautiful workings of the *vis medicatrix nature*.

INFLUENCE OF MALARIA IN THE PRODUCTION OF INTERMITTENTS AT SOME DISTANCE FROM ITS SOURCE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have received by this day's post, from an early friend of mine, and a man of first-rate attainments in his profession, — Henry Parkin, M.D., lately principal medical officer of the Royal Marine Infirmary at Woolwich, — a letter containing some remarks which, perhaps, you will think with me, are of sufficient importance to be submitted to the world through the medium of your pages. They relate to the fact adverted to in the address which I had the honour of reading to the members of the Provincial Medical Association, assembled at Northampton, on August 7th that fevers of an intermittent and remittent type not unfrequently appear at a considerable distance from the source of the malaria that causes them. To make the subject perfectly intelligible to your readers, I shall subjoin, first, the extract from my address; and then Dr. Parkin's interesting commentary upon it.

Believe me to be, Sir,

Yours faithfully,

A. ROBERTSON, M.D.

Northampton, Aug. 24, 1844.

Extract from Dr. Robertson's Address, read before the Provincial Medical and Surgical Association, at Northampton, on the 7th instant:—

"In 1828, ague was epidemic hereabouts. In that instance, it was surprising to see how it smote higher elevations, even more than villages on a much lower level. The reason of this curious and unexpected fact probably is, that the miasmata producing ague, though generated in low grounds, or swamps, are sure to rise in the atmosphere by their levity, and are apt to impinge against the neighbouring heights. What the miasmata precisely are, in their chemical properties, we know not; but it is certain they attach themselves to the hydrogen gas usually evolved in situations where there is stagnant water, or decaying vegetable matter. With the hydrogen they rise into the atmosphere, and often become more manifest, as I have just said, at a distance than nearer to their source, as causes of disease."