

majority of medical students in this country, it would be at all events utterly useless.

Of the second part we cannot speak much more favourably; it is certainly not better than the translation of Magendie's formulary, and its utility must necessarily be greatly diminished by the confusion of the old and new French, and the English weights and measures, litre and gramme, livre pinte, and once, pound, ounce, dram, and grain, being used indiscriminately, and sometimes all three denominations occurring even in the same prescription. One or two not very trifling errors also are to be met with in it; for instance, iodine is stated to be, in its natural form, "combined with hydriodic acid," instead of "combined with hydrogen in the form of hydriodic acid," &c.

The third part is very far superior to the other two, especially the general or preliminary observations, every word of which well deserves an attentive perusal; but even here we have to complain of great negligence; two of the classes under which medicines are arranged, and which are enumerated at the beginning, viz., temperants and narcotics, being afterwards entirely omitted, although the latter are certainly of the greatest importance.—Nor is there the least notice taken of the action of mercury, or of those medicines usually termed antispasmodics, which, though tacitly included we presume in the class of "stimulants" or that of tonics, might well have deserved an especial consideration. Independently of these omissions we have not the least fault to find with this part of the work, which, we may repeat, is in other respects most excellent. It appears, however, that little credit is due to Dr. Spillan on this account, for though he states that, in "compiling the work the first authorities have been *consulted*, more particularly the valuable and scientific articles on therapeutics, by M. Barbier, in the *Dictionnaire des Sciences Medicales*," it is pretty evident, both from the style and matter, that he has not done much else than translate from this writer, adding little or nothing of his own.

## ALDERSGATE STREET SCHOOL.

MR. KING.

At a Meeting held this day in the theatre of this establishment, by those pupils now in town, Mr. Joseph May in the Chair, it was resolved unanimously,

Moved by Mr. S. P. Webb, seconded by Mr. Hilliar,

That, in consequence of the much-regretted retirement of our talented, communicative, and highly-respected teacher, Mr. King, this Meeting feel themselves impelled by gratitude for the most weighty obligations, to present that gentleman with their sincere, though humble thanks, for the liberal manner in which, without partiality or reserve, he has imparted his valuable instruction.

Moved by Mr. Law, seconded by Mr. Bidding,

That, as the great majority of those who reaped the benefit of his instructions (and who will envy us the luxury of our feelings in paying even this small tribute to one so justly respected by all) are now at a distance from London, it is expedient that a Meeting be called by advertisement in *THE LANCET*, to be held on Wednesday, the 27th day of October, to take into consideration the means of presenting Mr. King with some more permanent proof of their gratitude and attachment.

Moved by Mr. Law, and seconded by Mr. Barrow,

That Mr. Blair be requested to perform the duties of Secretary, and receive communications from such of the late anatomical students as may not return to town during the ensuing session.

August 16th, 1830.

## ANALYSIS OF A SUSPECTED STAIN BY NITRIC ACID, WITH OBSERVATIONS.

By W. B. O'SHAUGHNESSY, M.D.

On the 14th of July last, I received a letter from a respectable practitioner in the South of Ireland, enclosing me a corroded fragment of drab cloth; he stated, that it was part of an outside coat, which had been folded up during the previous summer months, and which, on being opened out, was found corroded in small patches, in two or three situations. The servant being suspected and accused, attributed its destruction to moths, with which the house was abundantly infested.

The fragment of cloth was about an inch square, and was *unaltered in colour* round the margin of the corrosions; on being moistened with distilled water, it tasted

acid, and reddened litmus paper; it was then agitated in a stoppered phial, with 3ij of distilled water, and a solution of caustic potash added, till litmus paper was no longer reddened. Three drops of this solution were then placed on a bit of glass, apart from each other; one was touched with a thin glass rod moistened with the nitrate of barytes, the second with the nitrate of silver; no precipitate took place in either instance, and thus the absence of sulphuric and muriatic acids or their salts was satisfactorily proved.

After filtering the solution through a small glass funnel, the throat of which was obstructed by a pellet of lint, it was then evaporated to dryness on a watch crystal, when a white saline crust remained which weighed  $1\frac{1}{2}$  of a grain. The lint, when dried and touched with a lighted taper, burnt slowly like match paper or moxa, indicating that the salt which passed through it in solution, was either a chlorate or nitrate of potash. To determine this point, the saline residue was carefully scraped together, and placed in a minute drop of pure diluted sulphuric acid on a fragment of white porcelain; on dropping a particle of morphia into this, a brilliant vermilion stain was immediately produced, which afforded a beautiful contrast with the pale surface of the porcelain beneath. Decisive proof was thus afforded of the corrosions having been produced by nitric acid. The rationale of the last experiment, however, requires explanation: on placing the particle of nitrate of potash in the dilute sulphuric acid, sulphate of potash is formed, and nitrous acid expelled, which immediately produces its beautiful and characteristic effect on the morphia. In repeating this experiment, it is also essentially necessary to use white porcelain, since it is not acted on by the dilute sulphuric acid, and the production of the vermilion stain is thus rendered much more striking than it could be by any other mode of proceeding.

I am induced to publish this case, by the conviction that no other mode of analysis could possibly procure satisfactory evidence of the nitric acid in such extremely minute quantities; in fact, the morphia test, applied in the manner I have just described, will indicate a quantity of nitre, which is barely perceptible to the naked eye, and which would not indicate, in the nicest balance, the two-hundredth part of one grain. The case also affords the best commentary I could apply to the following notice of my first paper (*THE LANCET*, No. 353), which appears in the last Number of the *Ed. Med. and Surgical Journal*.

"Some important observations have been lately made by Dr. O'Shaughnessy on the tests for nitric acid. He finds that Liebig's

test for this acid, in a free or combined state, which has been introduced into almost every chemical work published since his announcement of it, is so open to fallacy, that no reliance can be placed on it in any medico-legal inquiry. - - - He likewise makes some objections to the use of the test derived from the deflagration of combustible substances with the neutralized acid, and even to that derived from the action of the acid on certain metals, such as tin or copper. As to the latter test, we do not exactly see that it is liable either to fallacy or any difficulty in the mode of applying it."

I never supposed that the action of nitric acid on these metals was liable to fallacy, if the experiment were properly conducted, and the properties of the gas evolved submitted to the strict examination necessary for the support of positive testimony; but my principal objection to that test is, that it requires for its demonstration the free and concentrated acid, and of that a quantity which would show the morphia test five hundred times; further, what is of greater importance, it is inapplicable to the nitrate of potash. On the whole, I believe, that no other test than the morphia is necessary, and unless I obtained a quantity of the pure acid, I should not take the trouble of seeking further confirmation; but if the free acid were obtained in *sufficient quantity*, I would then apply to it the tests of the metals, and those I have described in my first communication.

August 16th, 1830.

#### CASE OF AFTER-HÆMORRHAGE

IN COMPOUND FRACTURE OF THE LEG.

By EDWARD MOORE, *M.D., Mem. of the Roy. Med. Soc. of Edin., Surgeon to the Plymouth Eye Infirmary, &c.*

ON perusing Mr. Lawrence's 52nd lecture, in No. 352 of *THE LANCET*, I perceive the following observation regarding compound fractures of the leg. Speaking of hæmorrhage, after accidents of that nature, he says, "You perhaps may not be aware of the occurrence of any injury to the vessel immediately after the accident, but you may have hæmorrhage coming on at some distance of time." It affords me considerable pleasure to be enabled to illustrate any observation of my esteemed preceptor; and you will do me a favour by inserting in your *Journal* the following case, bearing on the above point.

CASE. Oct. 11, 1829. S. B., aged 18, a healthy young man, in attempting to explore a limestone quarry, at a place called Cat-