I rigidly restrict my comparison with homœopathy to common blind routine practice, and do not at all extend it to rational or scientific practice; that I restrict it to the proceedings of the ignorant and ill educated, to the exclusion of those of the scientific, learned and judicious. In like manner I compared Hahnemann and his *system* with other theorists and systems,—with Paracelsus, Stahl, Silvius, Brown, &c., and their visionary theories; not with the men and the doctrines of the modern Hippocratic school of observation. An examination of my paper will shew that such alone was my meaning and intention, and numerous passages might be quoted from it to prove this. If this was not my intention, what could I mean by such passages as the following?—"We hold the great alleged fact from which the doctrine took its rise, to be no fact at all."—Art. p. 234. "We affirm that a large proportion of the experiments performed by Hahnemann and his friends, with the object of ascertaining the therapeutic properties of medicines, are altogether fallacies."—*Ib.* "In making these admissions in respect to the instances of treatment supplied by Drs. Fleischman and Henderson, we wish formally to guard ourselves against being supposed to admit, at the same time, as if it were one and the same thing, or as if one were a corollary of the other, that the result of the homœopathic treatment *generally*, is, and will be, as successful as the result of the ordinary treatment generally."—p. 250. "In doing so, [*i. e.*, adhering to the ordinary medical practice,] we consider that though we are embracing a system extremely imperfect, we are at least embracing one which, with all its faults, contains a considerable amount of truth, and a yet greater amount of good; and which, above all, is, or may be made, in its exercise, consonant with the principles of science, and is capable of indefinite improvement; while, in rejecting homœopathy, we consider that we are discarding what is, at once, false and bad—useless to the sufferer and degrading to the physician." p. 256—"From these our free confessions and bold denunciations of the feebleness and uncertainty of therapeutics, it may possibly be inferred, that we are entirely sceptical of the truth of medicine as a science, and think most meanly of it as a practical art. And yet this is not so; on the contrary, we look upon medicine, regarded in all its parts and bearings, as a noble and glorious profession, even in its present most imperfect state, and we believe it destined to become as truly grand and glorious in actual performance, as it now is in its essence, its aims, and its aspirations."—p. 260. "In the hands of men of scientific education,—men of philosophical views and long experience, and who, from the position they occupy, and the confidence they inspire, are enabled to proceed exactly as they think best, PRACTICAL MEDICINE, we readily admit, is, even now, a rational and wise system, rarely productive of evil, if it fails to benefit, and often benefiting in the highest degree."—*Ib.* "Such as it is, our project of reform is, at the least, as conservative as radical. We are not altogether discontented with the general principles on which medicine, considered as a science, is now studied, by many men

of education; we do not object greatly to the mode in which we know it to be exercised, as an art, by many of its professors; but we cannot shut our eyes to the enormous mass of its defects, &c."—p. 261.

There is only one other statement of Mr. Newnham's to which, before concluding, I must refer; but being one entirely personal, I shall notice it very briefly. Throughout his criticism, Mr. Newnham speaks of my article as if it were a separate work, calling it "the pamphlet," and asks, somewhat indignantly, "Why are the public invited to study this subject? Why are they tempted by alluring newspaper advertisements and a catch title, to dive into these hidden things?" Now, the fact is, that the article in question was never published at all, except in the pages of the *British and Foreign Medical Review*. A few copies were struck off separately, and sent to the author's personal friends, accompanied by a printed note, requesting them to favour him with any remarks that might occur to them; but not one copy was sold, or offered for sale. In all probability I sent a copy to Mr. Newnham, as one of my personal friends, and this he may have taken as evidence of separate publication.

I am, Sir,

Your obedient servant,

JOHN FORBES.

Old Burlington Street,
June 28, 1848.

CASE OF POISONING WITH ARSENITE OF COPPER; WITH REMARKS.

By JOHN M. BRYAN, Esq., Surgeon, Northampton.

On Wednesday, June 7th, at a public dinner, attended by about forty persons, Mr. William Cornfield, aged 62, with six or seven others, partook of some *blancmange*, coloured with emerald-green, among other eatables, at the New Hall at Northampton, the dinner being supplied by Mr. Franklin, confectioner of this town. According to the evidence of the widow, Mrs. Ann Cornfield, the deceased left home about half-past ten in the morning. He appeared quite well when he left. He returned home in an omnibus about half past six in the evening. He was very sick directly he came home; he had a little tea and a little brandy gruel after he was in bed. He also had some tea about one in the morning, and the sickness left him and he went to sleep. About four in the morning he awoke, having been asleep since one or apparently so, and said that although better he was still very bad; she went down stairs to procure him some tea, and was gone about twenty minutes, and on her return he was quite dead. No medical assistance was called in thinking it was only the different articles of food taken at the dinner that had caused his illness. He did not complain of any pain; when he returned home he said that the sickness was caused by some jelly or *blancmange* he had eaten at the dinner. He was perfectly sensible to the last. He had three motions after he came home and vomited five or six times. The first time the matter vomitted appeared very greasy, the second time it was rather yellow, and after the brandy it was darker. He

vomited about a quart, and said that he had vomited at the New Temperance Hall where he had dined. The dinner took place at four p.m.

Mr. John Faircloth stated at the inquest, that having seen deceased since his death, and having heard the evidence of the widow, he was unable without a *post-mortem* examination, to form an opinion as to the cause of death. The coroner then ordered a *post-mortem* examination to be made, and the jury requested Mr. John M. Bryan, surgeon, to assist in the examination.

Post-mortem appearances of Mr. Wm. Cornfield, deceased, seen by Mr. John M. Bryan, June 8th., twelve hours after death:—The membranes of the brain distended with serous and sanguineous fluid; numerous bloody points on slicing through the substance of the brain; the vessels much gorged with blood, and the ventricles full of serous fluid. The heart natural in substance, but containing much blood in a partially fluid state; the arch of the aorta unnaturally distended and granulated at the commencement; the lungs excessively gorged with blood. The liver natural or nearly so, but gorged with black grumous blood; the stomach very much inflamed on the entire internal surface, and some patches almost approaching to ulceration, the inflammation greatest towards the pyloric orifice; the duodenum very much inflamed, also the remaining portion of the intestines more or less, in their entire course, and containing a great deal of greenish pulpy matter; the spleen much gorged with blood; both kidneys extensively diseased, the right one granulated externally in the cortical part and the left one much disorganized; it contained a large calculus, apparently of phosphate of lime, (which was not, however, analysed,) of a crescentic form, nearly filling the pelvis of the kidney, which was otherwise distended with purulent matter; the bladder was small and thickened. Oblique inguinal hernia on both sides, easily reducible and of long standing. Diseased testicle on the left side, of scirrhous hardness.

Mr. Faircloth, in his examination at the adjourned inquest, after the *post-mortem*, said, "I made a *post-mortem* examination of Mr. Cornfield, yesterday, assisted by Mr. Bryan. On opening the head we found the brain very much congested and a great deal of effusion between the membranes; on cutting into its substance there was a great deal of fluid, serum, and blood; there was nothing further in the brain excepting bloody points, which we usually see in this congested state. We next examined the chest: the lungs were healthy but much congested with clotted blood; the heart was natural in size, gorged with fluid blood; evidently an enlarged state of the aorta, indeed very much enlarged; about the usual quantity of fluid in the pericardium or sac which contained the heart. We next examined the abdomen: the liver was natural but gorged with blood; the spleen the same. We then removed the stomach and the whole of the small intestines. The external coat of the stomach and small intestines was very much inflamed. We slit open the stomach and intestines throughout their entire length. The stomach contained a large quantity of fluid of a brownish green

colour; the preponderance of colour being brown, with a tinge of green, the latter (green,) being most apparent in the small intestines, and in them there was a greenish pulp, a pint at least. The internal surface of the stomach was a good deal inflamed; the small intestines, particularly that portion that joins the stomach were highly inflamed indeed. The right kidney was enlarged and granulated; the left was smaller than usually found: on opening this it was full of matter. We also discovered a large calculus in the substance of the left kidney. We saw nothing further with respect to the kidneys. The bladder was smaller than usual; there appeared disease of the prostate gland. It may be right to mention that he was the subject of hernia on both sides, (a double hernia); this was darker and harder than usual, and of a purple colour, which is found after the action of irritating substances in the system after death, in both sexes. All depending parts would appear darker than usual. Authorities on poison say so, but this had nothing to do with his death; it might occur in other cases, on the authority of Christison. We made no further examination. We find all these appearances arise from irritating substances received into the system. The aorta, knotty and enlarged, was a disease of long standing. He had suffered from pains in his chest, and difficulty of breathing. There was no rupture of any vessel that we could discover. The left kidney might in time have caused his death; would not cause immediate death. The internal coat of the stomach appeared to have received some injury. From the general appearances, I think, seeing the extent of disease that existed in the body, it is quite possible that any active or irritating substance received into the stomach might have accelerated death, but I cannot say that it was in consequence."

In answer to questions from the Jury:—

"I am not prepared to say that what he took at this dinner caused his death. I have no further conclusion to arrive at, as in the stomach no poison was found; I am not prepared to say that it was from it. My impression is, that the inflammatory appearance of the stomach might have caused his death; it was excessive. Wine could not have produced it. I did not observe any emerald green, and do not attach much consequence to the green appearance, which appears sometimes when other ingredients are taken. He had been vomiting all the evening. I am not prepared to say what quantity of emerald green would cause these appearances and symptoms. The effects of such a poison would have been very serious, the two ingredients or compound being very active poisons."

Mr. John Morgan Bryan, surgeon, said that he had paid particular attention to the evidence of Mr. Faircloth, with the whole of which he quite agreed, and had nothing to add.

In answer to questions from the Coroner:—The stomach and intestines were handed over to Mr. Greville, chemist, by him. The appearances in them were those which are seen after acrid poisonous substances. Did not think so much inflammation would be occasioned by other than poisonous substances. Considerable inflammation might be occasioned by the

habitual use of spirits, but the inflammation in this case appeared to have been very actively and suddenly produced, such as he has observed in other cases where poison has been detected.

In the examination of the stomach and intestines by Mr. Greville, Mr. Bryan saw the following results, not given in his evidence at the inquest :—

1st. A metallic crust by Marsh's test, and the proof by Guy's test or process, which consists in adding a drop of sulphide of ammonium on the crust which exhibited the yellow indication of sulphide of arsenic, without dissolving the whole of the crust. This would have exhibited very different results, had it been antimony, (the only other metal giving nearly the same appearances,) viz., the metallic crust would have been dissolved in a few seconds, and on drying would have exhibited the characteristic orange colour of the sulphuret of antimony.—(*Vide Pharmaceutical Times*, by Guy.) 2nd. The test for copper in a portion of the coloured part of the *blancmange*, viz., ammonia, giving the characteristic blue colour, forming the ammoniuret of copper, which is considered conclusive by Christison. 3rd. The arsenic sublimed from the emerald green, from a parcel of the same as was furnished to Mr. Franklin, the confectioner, by Mr. Barry, chemist and druggist, and which was tested with nitrate of silver, giving the characteristic yellow colour; and nothing else would have done so but the alkaline phosphates.

Mr. Henry Greville, chemist, examined :—"I was present at the *post-mortem* examination of Mr. Cornfield, and observed the high state of inflammation of the stomach and intestines. I had analysed the green portions of *blancmange*, and a very small portion adhering to the edge of the dish which held the *blancmange*. I was perfectly satisfied of the presence of copper, both in that and a portion of the green, no bigger than a pin's point, in the *blancmange*. I had no time to test so small a portion for arsenic, although I had reason to believe that it constituted a portion of the green colour. In order to satisfy myself as to the nature of the green, I obtained some of the emerald green from Mr. Barry, druggist, (who supplied the confectioner, Franklin,) and separated a considerable portion of white arsenic from it. From these preliminaries I was induced to test both for arsenic and copper in the contents of the stomach. I tested first for arsenic, and obtained, what I conceive to be, an arsenical result, but this was so very slight that I advance this very cautiously. I should be sorry to say that it was positively arsenic, although there is only one other metal which will give the same indications, and I could not test for antimony, the quantity being too small. I was then led to test for copper, but without any result."

In answer to questions by the Jury :—"The stomach had been considerably emptied, (after the dinner.) Arsenic attaches to the stomach, but the copper would be ejected. I tested the stomach for arsenic, and the small intestines only for copper. I had not time to test the stomach for copper. I examined the powder Smith the policeman brought down, (which was scraped off one of the shelves of the cupboard where the emerald green used by the

confectioner was kept,) it was no more than could be scraped with a penknife from the end of the finger; it contained copper. I should think that ten or twelve grains of the powder Smith brought might cause death; and if that is the real arsenite of copper, or Scheele's green as it is called, it contains arsenic. Three grains of arsenic have caused death. In my own mind I have no doubt that the appearance of the stomach was occasioned by an irritant poison. It had all the appearances I have seen in such cases before."

The inquest was then adjourned, in order to afford Mr. Greville time to complete his analysis.

Mr. Henry Greville, chemist, (resumed.) "Since the last enquiry I have made a further analysis, chiefly with a view to ascertain whether there was copper in the stomach. I tested for copper and found no results. I then tested again for arsenic and found conclusive results; that (shewing a metallic stain on the handle of a white earthenware spoon,) produced is one. I again tested a minute portion of the green which I found upon the dish. I obtained arsenical results. At the request of Alderman Sharp I examined the white part of the *blancmange* and also some of the soup; no results from either. No doubt the sickness described by Mr. Cornfield and Mr. Betts, (one who dined at the hall,) would throw off a great portion of both copper and arsenic. In this case I could not detect the slightest trace of copper. It is possible that the whole might have been thrown off, especially as Mr. Cornfield had tea. That would not be the case with the arsenic which adheres to the coats of the stomach. The mineral green contains $47\frac{1}{2}$ per cent. of white arsenic."

Cross-examined by Mr. Markham, attorney :—"It is not thought necessary to caution people in sending out colours."

By the Coroner :—"The green is composed of oxyde of copper and arsenic. The oxyde of copper is not, that I am aware, poisonous of itself, but when in connection with an acid becomes so immediately. In this case it is in combination with an acid,—with arsenious acid. The acidity of the stomach alone would be sufficient to render it poisonous. I cannot form the slightest idea what quantity of arsenic was taken into the stomach."

By the Jury :—"I should be very sorry to take ten grains of arsenic. I never knew emerald green to be used in confectionary until the present case; I have seen accounts of its being used. Christison mentions its being used in France. I should certainly object to supplying any person with emerald green if I knew it was to be used for jellies. Unless I was told I should take it for granted that it was to be used for colour. It would never enter my head that it was to be used for jellies."

By Mr. Pywell, attorney :—"If a confectioner's servant came to me for emerald green, I should be suspicious as to its use; but sending it out in the ordinary way, I should not label it."

Three witnesses, Messrs. Macguire, Groom, and Porter, were present at the dinner, and partook of the coloured *blancmange*, and were all sick about an hour

after, and bad burning sensation in the throat and stomach. They were all told by the confectioner, Franklin, in answer as to what was the colouring matter in the *blancmange*,—"That it was nothing but essence of spinach, or spinach, which was also said by Franklin's assistant, Randall, whose peculiar department was to attend to, and make the sweets.

Charles Woolston, confectioner, (now in business for himself.)—Was in Mr. Franklin's service five years, and used the emerald green during that period; had occasion to fetch a pennyworth from Barry's, chemist, (it having been fetched previously by other individuals,) on his own head, who told him it was poison, and from that time has never used it in eatables. He told Mr. Franklin, and his assistant, Randall, too, that Mr. Barry said it was poison. Was with Mr. Franklin two years after that circumstance, and it was not used in anything whilst he was there but ornaments, which are not eaten, or intended to be eaten.

George Barry, witness, said:—"I am assistant to my father, and have served in the shop nearly seven years. I remember Randall coming several times for emerald green; other persons came as well. I cannot form any idea how often Randall used generally to come for a pennyworth. I have told him the nature of it. I believe I have told him on several occasions that it is of a poisonous nature, and must not be used on anything that is eatable. I don't remember that he made any remark on that. I don't remember cautioning the last witness, (Joseph Fousley, apprentice to Franklin.) I sent Mr. Greville some of the same emerald green from which I served Randall."

Mr. Faircloth, said:—"The appearances which we found on the *post-mortem* examination were such as would follow from arsenic, or some other powerful irritating poison. I cannot say that the inflammation was the sole cause of death. Deceased was greatly diseased; the large stone found in the kidney shows that his constitution was greatly disorganized; but I am unquestionably of opinion that death was accelerated by poison. I don't remember ever seeing so much inflammation where some irritant poison had not been introduced. The inflammation was of that character which satisfied me it had been suddenly produced; and the symptoms described by the other witnesses are such as would follow taking arsenic. Independently of the violent inflammation, the other appearances in the body were not sufficient to cause death at that time and manner, considering that there were no symptoms of illness."

By Mr. Pywell, attorney.—"I was Mr. Cornfield's regular medical attendant. I was not sent for on this occasion; he refused to allow his family to do so, thinking he should be better in the morning. The disease of one of the principal vessels connected with the heart will account for the poison acting so suddenly. Arsenic is known to act in a very direct manner on the blood."

Mr. Bryan, surgeon.—"I have heard the evidence of Messrs. Greville and Faircloth, and agree in the conclusions drawn by the latter as to the cause of death. I have no doubt the inflammation was produced by some irritant poison; I have no doubt of the presence of arsenic. A person so diseased as Mr. Cornfield,

would be much more likely to sink under a smaller quantity of poison than a healthy person. I refer more particularly to the disease of the large vessel connected with the heart. I have no doubt that death was accelerated by the arsenite of copper."

Mr. Pywell, attorney for Mr. Franklin, said that Franklin had no further statement to make than he had already made,—viz., that he was ignorant of the poisonous nature of the green.

The Coroner then summed up. It was their duty first to satisfy themselves whether the deceased died of the poison in the *blancmange*; and, secondly, whether the person making it had used proper care and caution in making it. If they should be of opinion that due caution had not been used, then they would find a verdict of manslaughter.

The following verdict was returned:—"We find Mr. William Cornfield died on the 8th of June, from the effects of a poison called arsenite of copper, or emerald green, carelessly and negligently administered in a *blancmange*, made by Edward Randall, and carelessly and negligently sold by Edmund Franklin, with the full knowledge that it contained a deadly poison."

The Coroner said that was a verdict of manslaughter against both parties. They were committed to prison to await their trial at the next assizes, unless admitted to bail by a judge's order, which has subsequently taken place.

REMARKS.

In this unfortunate case we could not but remark the almost entire freedom from pain, which is, however, observed by Christison to be the case at times after arsenic has been taken; but in the cases that have come under my own notice within these twenty years, there has been invariably constant pain until dissolution took place. There must have been an almost entire remission of symptoms to allow of sleep, for so long a time as from one until four in the morning. This case also tends to confirm what has before been noticed, how extensively the disorganization of such important organs as the kidneys may take place, and formation of large calculus, without manifesting any uneasy symptoms during life. I attended Mr. Cornfield myself some few years since, and have known him intimately up to the present time, and never heard him complain of any pain or uneasiness in the lumbar regions. It appears that some years since he was attended by Dr. Kerr, with symptoms of angina pectoris, which has manifested itself in a slight degree, at intervals, ever since, and which may be accounted for by the granulated state of the first portion or commencement of the aorta, although no osseous appearance of it or of the coronary arteries, was perceived at the *post-mortem*. His outward appearance was that of a robust healthy person, and the adipose tissue was three-quarters of an inch all over the parietes of the chest and abdomen. The omentum also was loaded with it, and the internal organs of the abdominal cavity generally.