

Ordered to have beef-tea, and brandy and egg.

July 14th.—Improving, although very weak, has had occasional vomiting of bile, and has had several bilious evacuations. She was carefully watched, allowed to have nothing but beef-tea and brandy and egg occasionally, and was finally discharged convalescing on the 17th July.

Two other cases were transfused by myself, both immediately after being brought into hospital, and when *in articulo mortis*. the one a man named James Pickles, and the other a female. In the last case it was quite evident that life was ebbing fast, and to complicate her difficulties, the veins were so empty and small, that I was for some time foiled in my endeavours to find one; after some difficulty, I succeeded in getting a pipe into the vein of the arm, and injected two syringes full, equal to 8 oz., the effect was to recall the pulse at the wrist, to enliven the countenance, and restore strength and fulness to the voice. From the lateness of the period at which the operation was performed, and from the disease having nearly done its work ere she was brought into Hospital, her rally was only temporary; for four or five hours she gave promise of amendment, and seemed greatly relieved; but afterwards she again began to sink, without, however, any renewal of the diarrhoea or vomiting, and finally died on the following morning. In reference to this case, I think it right to state that I intended to transfuse a second time, but, being seized with alarming illness, neither in it nor in any case was the operation repeated.

The next cases are kindly furnished me by one of our most industrious medical pupils, Mr. John Mackenzie, whose devotion to the sick during the whole of the cholera visitation was truly praiseworthy, and deserved to be honourably rewarded by the Board of Health. When others refused to lay hands on the dead, this gentleman removed them without any hesitation, to make room for the living.

TRANSFUSED.

1.—*Wm. Fraser*, admitted July 16th, was a very athletic young man, in the employ of Mr. Tuminey, was a carpenter by trade, formerly lived in country, had had Diarrhoea for several days, on Saturday, 15th inst., cut a great many cherries; on Sunday morning early, or on Saturday night, he was taken with violent vomiting and purging; on admission he had violent vomiting of Rice water, together with cramps. Nitrate of silver was tried, together with calomel, brandy and water, beef tea, &c.

On Monday, 17th, pulse scarcely to be felt, cramps less frequent, but vomiting continues; evidently sinking fast; at 10 A.M., median basilic opened, and tube introduced without difficulty; about 10 oz. of milk thrown up. Pulse in 10 minutes could be felt, and voice, which before was scarcely audible, could now be heard; the patient expressed himself far stronger; and though he was greatly revived by transfusion, yet vomiting continued in spite of everything, and he died at about 2 P.M.

2.—*James Conway*, admitted July 12th, an able-bodied labourer, brought to hospital in state of collapse, pulse scarcely perceptible, eyes sunken; mouth open, with that peculiar dropping of jaw, tongue cold as ice. Saw him a few minutes after he was laid on bed. I then thought the man would die before the tube could be introduced, and as his wife was piteously imploring something to be done, I determined to attempt it alone. Introduced the tube, and transfused about 8 oz. milk. Went and got brandy, and made his wife give it to him, and though he remained insensible during the time I was introducing tube, yet he so far recovered as to be able to speak to his wife, but died about 1 P.M.

This man had no vomiting latterly, though his wife stated he had vomited during night. Was taken during previous night.

3.—*Dutch woman*, admitted July 18th, unable to speak English, came in state of collapse; pulse absent, tongue cold; eyes sunken, the fingers wrinkled, and nails blue, having the appearance as if wrinkled by cold,—evidently dying. Brandy and water was given. Transfused about 11 P.M., rallied a little, but died in afternoon, about 2 P.M.

Such is the brief account of the cholera cases which I have the honor to submit to the Institute. In conclusion, I would venture to express a hope that the Corporation of the city will not again permit themselves to be taken by surprise, as we unquestionably were last summer. The pestilence came on us suddenly, and cases poured into the sheds ere the fitting ac-

commodation could be provided. In this way, wards became overcrowded, the sick had neither utensils nor proper bedding, nor food for their accommodation; and much distress arose. By enlarging the Board of Health, and placing it on a better footing, much good would result. Why not empower the Members of the Corporation for each ward to associate with themselves a medical man, resident in their own or in the nearest ward, to act as a health committee. In May let these committees commence their work, visiting first the worst streets, and ordering the removal of all nuisances and filth; and, in case of disease, looking after the sick in their districts. There are many old decaying wooden houses in our lanes and by-streets, which are not even good enough for kennels; surely the owners of such places ought to be compelled to remove them, or, at all events, to cleanse and drain their premises. It is well known that cholera delights in filth and moisture. No allusion is made to the important question of water supply, as the proper authorities have taken up the matter, it may, therefore, be hoped that the detestable liquid quaffed last year, and even at this time, will not be much longer supplied to us. Money ought not to be the sole object when the health of a whole city is concerned, and the guardians of the public health ought to be entrusted with full powers to act for the good of those placed under their care.

I trust that these few remarks, uttered in no captious spirit, but from an earnest desire to prevent a recurrence of perhaps scenes then unavoidable, will not be misconstrued.

Observations on the Colouring Matters of Flowers.

BY E. FILMOL.

WHITE FLOWERS.—If flowers of *Fiburnum opulus*, *Philadelphus coronaria*, *Chrysanthemum vulgare*, white roses, and a number of other flowers, be exposed for a few moments to the action of ammonia, they acquire a yellow tinge of greater or less intensity, which remains for a considerable time. Flowers of *Fiburnum opulus* by this treatment acquire a yellow colour as fine as that of *Cytisus laburnum*. The matter which thus becomes yellow under the influence of alkalies appears to be present in all white flowers, some flowers contain only a small quantity of it, but these are rare.

In variegated flowers of which the corolla is partially white, these portions usually acquire a fine yellow tint under the influence of ammonia. The stamina, the pistils, and in general all the white parts of flowers, act in the same manner. The leaves themselves become yellow when they are accidentally deprived of chlorophylle. I ascertained this fact with a plant of *Cunila polygonatum*, of which the leaves presented alternate green and white bands. The latter became bright yellow from the action of ammonia, exactly like flowers. The tissue of some fruits also becomes yellow, although less distinctly, under the influence of alkalies.

The most convenient mode of converting a white flower into a yellow one is to introduce it into a wide-mouthed flask containing a little liquid ammonia, and to expose it to the action of the alkaline vapour. The change then takes place very rapidly. When the greatest part of the flower has become yellow, it may be taken out of the flask and exposed to the air, when the parts which still remained white will gradually change until the flower acquires a uniform tint. The flower may also be dipped into water, alcohol or æther, mixed with a little ammonia. The latter fluids should be preferred when the flower is covered with a fatty coating, which would prevent their being moistened by a watery fluid. If a white flower that has been rendered yellow be dipped into acidulated water, it gradually recovers its white colour.

These experiments remind one that when dyers wish to employ the colour of woad in dyeing, they add a little carbonate of soda to their vat, which gives considerable brightness to the tint. It is easy to prove also that acids, even when very weak, cause the disappearance of the greater part of the colour of a decoction of woad. From this it seems not improbable that the substance which communicates to white