XIII. *The antiseptic Virtues of vegetable Acid and marine Salt combined, in various Disorders accompanied with Putridity; communicated in a Letter to John Morgan, M. D., F. R. S., and Professor of the Theory and Practice of Physic at Philadelphia, by William Wright, M. D., of Trelawney, in Jamaica.*—From the *Transactions of the American Philosophical Society*, Vol. II.

HAVING experienced the virtues of vegetable acid and marine salt, when combined, I beg leave to lay before you a few observations on the use of this simple medicine in several diseases. It is my sincere wish, that it may prove as beneficial to mankind in general, as it has been to many of my patients in this part of the country.

Take of lime juice, or lemon juice, three ounces; of marine salt as much as the acid will dissolve; of any simple distilled cordial water, one pint; and of loaf sugar a sufficient quantity to sweeten it. The dose of this mixture must be proportioned to the age and sex of the patient, and to the violence of the disease. A wine-glassful may be given to adults every two, four, or six hours.

By Geoffroy's table it appears, that the fossil alkali has a greater affinity with the marine, than with the vegetable acid. However, marine salt dissolves readily in the lime juice, throws up a white scum to the surface, and on applying the ear near the vessel where the experiment is made, a small hissing may be heard, similar to that when acids and alcalies are mixed. It would seem probable, that part of the marine salt is hereby decomposed.

That vegetable acids and marine salt are antiseptics, has long been known; but their effects when mixed I apprehend to be but lately discovered.

Without farther preface, I shall proceed to the particular diseases in which they have been administered, prepared as above.

Of the Dysentery.

The dysentery is a very frequent disorder in this and other West-India islands; and sometimes is epidemic, particularly in the rainy seasons, or when provisions are scarce. Amongst other causes of dysenteries, I have often known the eating of yams not arrived at maturity, as also unripe alligator pears, produce a bloody flux.

Dysen-

Dysenteries commonly begin with frequent loose stools for a day or two, attended with gripings: by degrees, the gripes grow more severe; nothing is voided by stool but a small quantity of mucus, mixed with blood; a tenesmus comes on, and is exceedingly troublesome.

The appetite fails, the patients are low spirited, and suffer a great prostration of strength. The mouth and tongue are much furred and slimy, and the taste is like that of rotten butcher's meat. The desire of drink is sometimes excessive, but for the most part very moderate. The pulse is very low, feeble, and undulating; and rarely rises so high, as to indicate the use of a lancet. Such was the dysentery in 1771. It proved fatal to many people, both old and young, though treated according to the most approved methods of cure; and the loss of several patients of mine, convinced me of the necessity of using antiseptics early in this disease.

A vomit seemed necessary to clear the stomach; and some gentle purge, to carry off part of the offending matter by stool. But the action of these, however mild, often increased the prostration of strength, and rendered the

stools sooner bloody. Nor was opium of any real use. A tea made of Simarouba, had, in some, a very salutary effect, whilst, in others, it would by no means remain on the stomach.

From a consideration of the antiseptic quality of both the marine salt and the vegetable acid, I was induced to make trial of their effects united in the manner above mentioned. The medicine acted like a charm; and I have found, that from the use of it, the frequency of the stools, the gripes, and tenesmus, have soon worn off; the stools have gradually become of a natural consistence and quantity; the spirits, strength, and appetite have returned, and the patient has been restored to perfect health in a very few days.

When the dysentery was of long standing, starch clysters, with a small portion of opium, abated the tenesmus.

This medicine was equally serviceable in diarrhoeas.

Diabetes.

As I had succeeded so well in the cure of dysenteries, I was determined to try its effects in the diabetes; several opportunities soon offered: but as these cases were accompanied with

with other complaints, especially with fevers of the remitting kind, it will be proper first to speak of

The Remittent Fever.

This, by far the most common fever within the tropics, is the least understood, and consequently for the most part badly treated. Strangers who walk much, or work hard in the heat of the sun, are more subject to it than seasoned Europeans, or natives of the country.

Dr. Cleghorn's description of this fever is accurate and just; his method of cure, simple and easy. Every physician, who would wish to practise with success, should be well acquainted with his valuable performance, as also with what Dr. Lind has said on the subject.

It is, then, sufficient here to observe, that remittent fevers are often attended with diarrhoeas, diabetes, and sometimes with a copious discharge of saliva, as if mercury had been previously given. In such circumstances I have never found the bark of service; a few glasses of the above mixture have fully answered the intention, not only by removing these symptoms, but the fever at the same time.

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The Peruvian bark afterwards, taken with some of the same mixture, has effectually secured the patient from a return of this dangerous malady.

The mixture rarely acted as an astringent in this or any other disorder : but when this effect took place, the interposition of some lenient purge was deemed necessary.

Belly-ach.

The belly-ach with inflammatory symptoms has frequently occurred in the course of my practice. The inflammatory symptoms yielded with difficulty to bleeding, small doses of emetic tartar, a mercurial pill, repeated doses of castor oil, and diluting drinks, with nitre, fomentations, and clysters. A copious discharge of foetid excrement for the most part gives immediate relief.

I have observed in many cases, after excruciating belly-achs, that the stools were liquid, white, small in quantity, and very foetid. The patients being worn out with pain, grew dispondent, did not care to speak, fell into cold, clammy sweats, and were very restless. They complained of an ill taste in their mouths. Their tongues were much furred. Their breath

was offensive; and they had a great propensity to vomit.]

Formerly I attempted the relief of those threatening symptoms with the bark, in various forms, as well as claret, and often saved my patient; sometimes, however, I have failed of success. When such cases fall now under my care, I have immediate recourse to the antiseptic mixture; nor have I been hitherto disappointed: the stools becoming less frequent on the use of it, and of a better consistence; the cold sweats also disappear, and the spirits soon return, together with an appetite for food.

The Putrid Sore Throat.

In June 1770, the putrid sore throat made considerable havock amongst adults and children. It attacked those of a lax habit, who for a few days had slight head-achs, chilliness and heats alternately, and an uneasiness about their throats, but not so much as to hinder their swallowing.

On examination, the mouth, tongue, and gums were foul and slimy; the tonsils and uvula covered with white specks or sloughs; the breath was hot and offensive; the skin felt hot and pungent to the touch; the pulse low and quick;

quick; a diarrhœa often attended, and the patients were, in general, much dejected.

Antimonial wine with cordials and nourishing diet succeeded best, till the sloughs or spots were removed and separated; then the bark completed the cure. When a diarrhœa accompanied this disorder, I gave the mixture with success.

In all disorders where a gargle is necessary, I make use of the above mixture in preference to any other; and I find it speedily cleanses the tongue, gums, and fauces, and sweetens the breath.

Where lemons or limes cannot be had, vinegar or cream of tartar may be substituted in their room.

From what has been said, it is evident, that the medicine is possessed of considerable antiseptic power; and that its virtue consists in correcting the peccant matter in the stomach and intestinal canal.

All the diseases in which I have given it, had a putrid tendency. I shall be happy to hear of its success in your western hemisphere.

And am, with esteem, SIR,

Your most humble servant,

WILLIAM WRIGHT.

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