

and when the stomach, as in the case of J. W., is not in a condition to secrete, its action is tardy or wanting. From these defects tartar emetic is free, and a judicious alteration in the amounts of the doses prescribed by the *Pharmacopœia* would reveal merits now denied to it. Its purgative effect is an additional advantage, and one that is often overlooked in its use.

Before passing from tartar emetic I would draw attention to the benefit which medical men may derive from a study of veterinary practice. Veterinary practice is simply a vast field of pathological experiments untrammelled by Vivisection Acts, and the use of antimony as a tonic, familiar to every groom, is worthy our best attention. Its effects, thus used, are exactly those of arsenic as currently related, upon the Styrian arsenic eaters; improvement of the wind, of the circulation, of the functions of the skin, increase in weight, and plumpness of the muscles, the latter being probably the result of diminished tissue change.

Many preparations, all formed by oxidation of the sulphide of antimony, such as the kermes, the glass of antimony, and the golden sulphide have been official, as also various antimonates and antimonites. All these may be found described in Hooper's Medical Dictionary and similar works. Uncertain by their composition, and by their modes of preparation, they have fallen into disuse. They depend for solution on the acid of the stomach for absorption; whence, as is well-known, violent irritant effects often followed their introduction when accompanied by acid medicines or solid food. The oxide of antimony, which seems to be the active part of all, has superseded them. To this James' powder owes its efficacy, but is reputed, and as far as my experience goes, justly, far superior to the pulvis antimonialis of the *Pharmacopœia*, which is a simple mixture of the oxide with phosphate of lime. This is, I think, due to the physical condition of the ingredients of the proprietary powder, being more apt to excite the flow of solvent fluid, taken as the powder usually is, on an empty stomach, at bedtime.

For the production of diaphoresis this slow absorption of a considerable quantity of antimony is better than a single minute dose of tartar emetic more quickly absorbed. The same object is attained by administering Dover's powder in a solid form, instead of presenting the active ingredients to the stomach in solution. Trousseau and Pidoux point out that the sedative effects of antimony are greatly aided by low diet, and that with full diet its irritative qualities appear. Depletion aids similarly, so that the most favorable results in sedation are to be observed in those on whom depletion can be most safely practiced, namely, male adults. Trousseau believed strongly in alteration of the constitution of diseases, and I will refer to the article quoted for some interesting notes of the consequent alterations which he found necessary in the prescription of antimonials.

I owe to witnessing the practice of my colleague,

Dr. Stocker, at the Western General Dispensary, my first use of the pulvis antimonialis and the James' powder, both of which have been to me the means, alone or combined with other drugs, of conferring many a good night's rest.

Antimony is not an anodyne, and is, therefore, useless against pain. Nor do I anticipate much benefit from it in delirium, from the slightness of its action on the cerebrum; though I am not unmindful of Graves' combination of it with opium for his fever cases. But it possesses a tonic action on the medulla similar to that of zinc, of phosphorus, of atropine, and of picrotoxine; by which it is indicated in cases where wakefulness is due to exhaustion, alone or as an adjunct to alcohol and opium. The sudorific action for which this preparation is noted depends, I think, on the stimulation, mainly of the sweat centres in the medulla, but also, without doubt, of the sweat glands and their distributed nerves. In harmony with this idea is the fact, which I have often noticed, that antimonial powder checks the night sweats of phthisis; which is also a property of Dover's powder and of alcohol. By Dr. Bunton these sweats have been shown to be most probably due to exhaustion of the respiratory centre by coughing, aided by a reduction in the area of functional tissue in the lungs; by which carbonic acid is permitted to accumulate in the blood, and to produce that sweating which is one of its poisonous symptoms. Thus it is that very diverse drugs, all of which possess the power of raising the tone of the nerve centers, may have a common use. I cannot do better than quote an illustrative case:

There came to me at the Western General Dispensary on August 30th last, Eliza H——, unmarried, aged 29, a shirt maker, born in London. All her brothers and sisters died in infancy. She has long been subject to cough, and now complains that it is worse, with much yellow phlegm. She has lost her voice, and has night sweats. Examination showed her chest to be barrel-shaped, with a very limited range of expansion; "breathes with her diaphragm," says my note. The respiratory sounds were very feeble at the apex of the right lung, and the expiratory sound was morbidly prolonged; moist crepitus extended from the apex to the nipple. The heart's action was rapid and feeble. She was ordered a draught containing 1 gr. of sulphate of iron, 10 grs. of sulphate of magnesia, 5 ms. of dilute sulphuric acid, three times a day; at bedtime, a powder of three grains of liquorice with one of pulvis antimonialis. Seen September 6th for me by Dr. Stoker, who noted "much better" and repeated powder mixture. On the 10th I saw her myself, and noted "much better; no night sweats now; very little cough; complains of bad appetite;" that is, the curious absence of the proper sensation at meal time, which I have above noticed. I therefore discontinued the antimonial powder, and repeated the draught with two grains of sulphate of iron, and two grains of sulphate of quinine. She did not come again.