

not as an emetic that it (ippecacuanha) acted but as a depressant for the relief took place before the vomiting."

Certain other drugs known to produce muscular relaxation have been found servicable. Opium has its advocates, though I must say I have not seen any benefit follow its use. On the contrary, I think I have seen it do harm, by aggravating the very condition it was intended to relieve. We know that asthma is more prone to occur at night, during the insensibility of sleep, than during the waking hours. Salter explains this fact by supposing that sleep exalts reflex nervous action, through which circuit he thinks the phenomena of asthma are in almost every case excited. Opium he condemns, because it tends to produce lethargy and sleep, and, in this way, increases excito-motory susceptibility.

But I have found chloral hydrate, although a hypnotic, to act very favorably. It will almost always considerably diminish the severity of the paroxysm, and sometimes will cause it to disappear within a few minutes after the dose has been administered. The dose should be large, from twenty to forty grains. Biermer, Liebreich, Lebert, and some other observers, have seen very satisfactory results follow the use of this drug in asthma.

Chloroform and ether, by inhalation, have been recommended on high authority to allay the bronchial spasm. I do not see why they should not very effectually do so, yet I confess that I have never had the courage to try them. Salter says: "One of the most powerful and speediest remedies which we possess for asthma, to which I should, perhaps, give the first place of all, is chloroform." Walshe says he has seen it used in three cases, and with this result: "Total relaxation of the spasm during the continuance of insensibility, with the immediate return of dyspnoea on the restoration of consciousness," etc. The imperfect change of air in the lungs during the paroxysm, as indicated by the blueness of the surface, would certainly contra-indicate the use of chloroform, and I should therefore regard it as an unsafe remedy. The same objection would hold good against ether, though it doubtless would be much less dangerous.

Nitrite of amyl, by inhalation, is a remedy newly introduced into practice, and very favorable results have been reported from its use in the paroxysm by several observers. So far as my personal experience goes, I have tried it in only one case, and in that instance it undoubtedly aggravated the dyspnoea.

The inhalation of fumes emitted by burning saltpetre or stramonium, or by smoking the latter, has long been recognized as possessing a controlling influence over the asthmatic paroxysm. When stramonium is employed, the dried leaves are either smoked in a pipe or in the form of cigarettes. All of the so-called "asthmatic cigarettes" sold in shops doubtless owe what-

ever efficacy they may possess to datura. When saltpetre is used it is almost always in the form of nitre-paper, which is prepared, as is well known, by dipping bibulous paper into a saturated solution of nitrate of potassa. This, when dried, is burned in the apartment of the patient.

Being familiar with the remedial value of stramonium and nitre when thus used separately, it occurred to me that their efficacy might be increased by combining them. During the past few years I have been in the habit of using such a combination, with results so very satisfactory, that I feel justified in recommending the following formula as a convenient and efficient remedy for the relief of the paroxysms of uncomplicated asthma:

℞ Stramonii foliarum, 3 x.
Potassæ nitratis, 3 v.
Sem. fœniculi, 3 ss.
Sacchari, 3 ij. M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve, so as to get rid of the stems or coarser fragments. All the ingredients should then be rubbed together in a mortar, without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head.

This remedy, if not more efficacious, is certainly more agreeable to the patient and more convenient than the inhalation of the fumes of rubbing nitre-paper or the smoking of stramonium. The combustion of paper is always attended by a disagreeable odor, and the fumes, particularly if the paper is not very carefully selected, are apt to be too carbonaceous for inhalation. During an asthmatic paroxysm, when the patient is suffering from a severe dyspnoea, smoking is found to be very difficult: hence stramonium cigarettes cannot be very conveniently used. Therefore, the advantages of this remedy are, (1) that it possesses the combined value of nitre and stramonium; (2) That it is free from the disagreeable odor and irritating smoke of burning paper; and (3) That it can be used without any effort on the part of the patient.

There is no medicinal remedy known that can be depended upon to prevent the recurrence of the paroxysms. As asthmatics are generally dyspeptics, and as the paroxysms are frequently provoked by indigestion, there is perhaps no better prophylactic treatment, with the exception of change of residence, than that which is regimenal. The excito-motory action being exalted by sleep, it is important to an asthmatic person that digestion should be over and the stomach empty before going to bed. With many persons, care-