

bromine ; I could cite three unfortunate and convincing examples.

In the skin, as in the bronchii, both a slight and a grave bromism are produced. It is very rare that the bromide, which is eliminated by the integument during life, or, in fatal cases, is found in the sudoriferous glands and likewise in the sebaceous follicles, does not, from the first day, produce a very evident effect on both layers of the skin ; even from the first day, in small doses, it produces acnes, which are seated preferentially on the face or the breasts ; two or three grams suffice to bring this eruption, and it may be generalised and become numerous, so as to prevent the continuation of the treatment. In these cases I have always employed, with good results, arsenic in addition to the bromide ; of late it has been proposed to use the bromide of arsenic, but it offers no advantage over the bromide of potass., with the addition of 10 or 12 drops daily of the solution of Fowler.

The kidneys are not changed either in structure or function in the elimination of the bromide ; they do not secrete a larger quantity of urine than they do in the normal state, consequently the bromide cannot be regarded as a diuretic. Neither does the bromide change the composition of the urine ; we merely know that it contains more chloride of potass, which leads to the supposition that the bromine leaves its base and that it joins with the sodium in the blood, forming the bromide of this substance ; this would be another proof that it is the bromine alone which acts, whatever may be the alkaline base ; we shall see presently whether it acts on the oxidations, and consequently on the quantity of uric acid and urea eliminated in the urine.

The salivary glands eliminate the bromide with less facility than they do the iodide, but if the dose be increased a notable quantity is found mixed in the saliva ; at the same time there is manifested, without doubt from the reflex action produced by the bromine on the maxillary nerves, a salivation which is frequently abundant and dangerous, and contributes not a little to the enfeeblement of the patients.

The gastro-intestinal mucous lining seems to be but little impressed by the bromide ; it causes gastric pains at the moment of its introduction into the stomach, but these may be avoided or calmed by diluting the salt with a sufficient quan-

tity of water ; the majority of patients, especially if they take the medicine in solution in their aliments, experience no change in the gastro-intestinal functions, nor any painful sensation, dyspepsia or constipation. This functional immunity leads us to suppose that the medicine is not eliminated by the digestive mucous linings, as iodine is. The secretory organs most briskly attacked are, as is seen, the respiratory mucous membrane, on the one part, and the integument on the other. This is what constitutes the first degree of bromism, as indicated by Huchard.

*The Bromide is a Vaso-Constrictor-Medicament, that is to say, an Anemiant.*

After having shown the bromine as acting solely by reason of its two constituent elements, and having pointed out the first degree of bromism of the skin and the bronchii, we now come to define the true and useful properties of the bromide. The principal are two ; one proceeds from the vaso-constrictor effects, that is to say, from its anemiant action ; the other consists in its depressing action over the general reflex power, and more still over the excitability of the general cortex (? cerebral).

The faculty possessed by certain energetic medicines, of acting on the vessels through the intervention of the vaso-motor-centre, has long been established ; some provoke contractions of the vascular muscles ; such are the bromide of potassium and the ergot of rye ; others cause active dilatation of the arterioles, as we showed, conjointly with Meuriot, 20 years ago ; others paralyze the vascular tunics, as the nitrates of amyl and soda ; with the last named we may include curare. It is very remarkable that these medicaments are precisely those which have been prized in the treatments of epilepsy, and often for curious reasons ; for example, the bromide to combat the genital excitation ; belladonna to diminish the spasms ; curare to provoke a curative fever, and the nitrates as energetic and rapid sedatives. In reality, if we abandon the false data of empiricism, and seek for the scientific solution of this complex problem, therapeutics and experimentation fall into accord, and we easily comprehend how so important a role is acted by these vascular-medicaments, and why they deserve to be taken into consideration, despite their qualities, most diametrically opposite from the point of view of their vaso-motor action.