

the circulation, and general depression of the encephalic system. I thus summarize the grave bromism: The mouth acquires a foul odor, the gums become pale, and an incorrigible salivation is established, which rapidly saps the powers of the patient. The heart acts slowly and weakly; in doses of 15 grams daily its beats are reduced to half the normal number; by prolonging the administration of these doses, the intra-cardiac nerves and the cardiac muscle itself, may suffer a commencement of paralyzation. At the same time the intravascular pressure is weakened, and the temperature may descend. What is still more grave is the deterioration, or general impairment, produced by a well-marked elimination of phosphoric acid and urea. The peripheral circulation feels this loss of the general forces and of that of the heart; the patient acquires an extreme paleness, with brownish tints, or the extremities even assume a livid hue, which indicates sanguineous extases. The respiration is, in its turn, attacked; besides the cough and the bromidic bronchitis, which are frequent and often severe, I have seen a mortal pneumonia, which I attributed to the bromide, three times produced; one of these cases was followed up by my colleague and friend Peter; it was that of a girl, with deformity of the cranium, who was attacked by epilepsy; the second case was also of a girl who was an idiot; she died of pneumonia with grave alterations of the skin; the third patient was a boy of four years, who took five grams of the bromide prescribed by a physician who treated him by correspondence.

It is, finally, necessary to signalize that excessive debility which amounts even to impossibility to walk, and to hold the trunk erect, a sort of drunkenness, with general insensibility, somnolence, expression of horror, depression of memory, involuntary emission of urine. As soon as any of these manifestations are presented, all treatment should be suspended for a longer or shorter time, and the doses that have provoked the bromism in the skin, the respiratory or the nervous system, must not be renewed.

Physiological Rules of Bromidation.

It is not enough that we prescribe the bromide even in regular moderate doses, sufficient to obtain a favorable, and above all a definitive, result; it is important to observe all the rules taught by

physiology, for the diminution of reflex excitability. I described these in 1868; they may be found clearly formulated in those valuable annotations which my friend and co-worker, Labadie-Lagrave, has added to the book of Hammond, of which they constitute the complement, and are at the same time an indispensable commentary. I quote textually thus: "The efficacy of the bromide depends almost exclusively on the depressing action which it exhibits over the reflex power of the medulla oblongata and spinalis. Everything that may counterbalance this action, everything that may awaken the morbid excitability of the nervous centres, must be severely proscribed. Epileptics must be forbidden alcoholic drinks, wine, beer, or gaseous waters; alcohol and carbolic acid singularly arouse the faculties of the excito-motor and bulbo-medullary systems. Coffee and tea usually have the same result. The patients must abstain from smoking; the nicotine, by exaggerating (?) the vascular action of the bromide, and in a certain way tetanising the arterioles of the nervous centres, seems to extinguish the useful effects of the bromide. Violent gymnastics, the various hydropathic practices, particularly sea baths and douches, have a very fatal action, by provoking return of the fits. The same result follows physical pains, moral emotions, and genesic excitations."

I forbid all active medication, such as purgatives, emetics, revulsives, cauteries, etc., which are capable of producing a great disturbance of the organism; with still greater reason is it necessary strongly to prohibit abstractions of blood.

Auxiliary Means.

The auxiliary means which I have been enabled to approve of, are iron, especially the tartrate of potass and iron, one gram daily; arsenic under the form of Fowler's solution, 12 drops daily; quinia in extract and the sulphate of quinine; lastly, cod liver oil, and above all oxygenation by permanent residence in the country; such are the strengthening medicaments destined to combat the dangers of bromism and the weakening of the nervous system.

Bodily exercise in the open air, without fatigue, moderate intellectual work, well directed, constitute the most important auxiliaries—let these be attended to above all in controlling the education