

One other point of practice remains to me only to note. In cases where there is much dryness and irritability of the mucous membrane of the pharynx and larynx, the bromides are not commendable, the bromine increases the irritation. This was so marked in a case where there was a small ulcerated surface in the larynx, that I had to stop the administration altogether, the smallest dose producing violent and long continued irritative cough and spasm.

HYDROBROMIC ETHER—Amongst other bromides that have medicinal qualities is hydrobromic ether, bromide of ethyl— C_2H_5Br . This ether is a light volatile liquid made by distilling four parts of powdered bromide of potassium, with five parts of a mixture, consisting of two parts of strong sulphuric acid and one of alcohol, having a boiling point of 104 degrees Fahr., a specific gravity of 1.400, and a vapor density of 5.4, taking hydrogen as unity. It is nearly insoluble in the blood.

This ether is of interest, from the fact that the late Mr. Nunneley, of Leeds, proposed and used it as a general anæsthetic, and came to the conclusion that it was the best and safest of all known anæsthetic substances. A few weeks before his death I had the pleasure of visiting Mr. Nunneley and in the course of our many conversations on scientific subjects, he spoke again of his experience with the bromide and begged me to submit it to a fair and strict investigation. I have carried out his wish, and can report upon hydrobromic ether, that it is, as Mr. Nunneley said of it, one of the safest of general anæsthetics. An atmosphere containing from eight to nine per cent. of the vapor of the bromide of ethyl, causes, when inhaled, entire destruction of common sensibility, rapidly, and safely. The breathing remains tranquil, the pulse quiet, the expression good; the transition from the first to the third degree of narcotism is moreover, so rapid that the second degree—degree of muscular excitement—is scarcely recognizable. There is no sign of apnoea; and when, in animals, the inhalation is carried to the extreme the resistance of the heart to the paralyzing action of the narcotic is good. As might be expected from the low boiling-point of the ether, 104 degrees Fahr., and its insolubility in the blood, it is rapidly eliminated from the body when it has been withdrawn, so that the period of recovery is short, from three to five minutes.

When inferior animals are made to sleep into death by the