

Calcium Chloride.

Arnold Netter reports in *Le Bulletin Médical* that while so far no method has been found to prevent the appearance of the urticarial eruption after the injection of a dose of serum, he has found that the use of calcium chloride in the dose of one gram a day on the day of injection and for two days following constituted an efficient prophylactic in a large proportion of the cases. Out of 252 patients who took the remedy as directed there were only a little over 2 per cent. of eruptions, while in 258 cases not receiving it the eruptions were over 15 per cent. The use of calcium chloride does not in any way impair the action of the diphtheria antitoxin, the mortality in the two groups being nearly the same. Instead of the calcium chloride may be used the lactate, which has no taste and is also very soluble.—*Wisconsin Medical Record*.

Ethyl Chloride as an Anesthetic,

Like chloroform ethyl chloride paralyzes the heart-muscle; but it requires nineteen times as much ethyl chloride vapor as chloroform vapor to produce similar results. Like chloroform, ethyl chloride relaxes the arterioles, but the amount required to do it is greater than that of chloroform. Ethyl chloride stimulates the central vasomotor mechanism. When the vapor is present in the air in the proportion of 10 per cent., vagus inhibition of the heart readily occurs, resulting in sudden fall of pressure. When the amount of vapor in the inspired air reaches 30 per cent., the sudden fall of pressure is also due to weakening of the cardiac and arterial musculature. The cardiac inhibition due to ethyl chloride is not so serious as that from chloroform, however, because it appears before the spontaneous excitability of the heart is much depressed. It does not seem possible to arrest the sound heart of a dog permanently under ethyl chloride narcosis by vagus inhibition.

It requires nineteen times as much ethyl chloride as chloroform to produce a given degree of cardiac depression, while it requires only four times as much to produce cardiac arrest by vagus stimulation; hence inhibition sets in with relative rapidity. Herein lies the comparative safety of ethyl chloride. The cardiac inhibition arises from central stimulation; it is not reflex. There is no evidence of paralysis of vagus endings. In ethyl chloride narcosis the integrity of the respiratory mechanism is dependent upon the maintenance of blood-pressure. In the administration of ethyl chloride vapor for anes-