

tory paralysis, the very effect we desire to counteract." This he gives as a typical formula :

R. Cocaine Hydrochlorate	grs. x.
Sulphate Atropine	grs. $\frac{1}{16}$.
Carbolic Acid (95% sol)	gtts. viij.
Dist. water	$\frac{3}{4}$ j.—M.

Dissolve carbolic acid and atropine in the water, and to every 25 drops add $\frac{1}{2}$ grain cocaine. In this formula every 25 drops contain $\frac{1}{2}$ gr. cocaine; dose $\frac{1}{2}$ gr.; $\frac{1}{16}$ gr. atropine — very slightly more.

Since cocaine and atropine neutralize each other, 25 drops should be safe, but practically we use much less, 10 to 15 at most. When wanted for use other drugs may be added to this formula to increase or intensify the effect, but in Dr. Hoff's judgment they do not materially increase the power of the formula, while it is quite certain they do cause excessive irritation; in some cases, swelling or even sloughing of the gums.

Fluid extract of belladonna has sometimes been added in addition to atropine, but as it has the same action and is inferior might be left out. Chloral hydrate is often added, as it is a good antiseptic and local anæsthetic, but chloral is irritating.

So by combining different medicines in proper proportions we should be able to secure the best results, but we must be careful to avoid unnecessary complications, for unfavorable symptoms from a simple toxic agent can be counteracted more readily and with greater assurance of success than when many potencies are to be met and overcome. Dr. Rose, of Peterboro', gave me a formula which I found very good :

R. Chloral Hydrate	grs. xx.
Fl. Ext. Belladonna	\mathbb{M} x.
Sulph. atropine	grs. ss.
Carbolic Acid	\mathbb{M} viij.
Cocaine Hydrochlorate	grs. xj.
Boric Acid saturated solution	ad $\frac{3}{4}$ j.—M.

Modified to grs. xv. chloral hydrate; belladonna, none.

To above, add water boiled or distilled $\frac{3}{4}$ i. This contains: Each 25 drops, $\frac{1}{16}$ gr. cocaine, while $\frac{1}{2}$ gr. the dose allowed; $\frac{1}{4}$ \mathbb{M} fl. ext. bell., 1 to 4 \mathbb{M} ; $\frac{1}{16}$ gr. atropine carbolic, dose $\frac{1}{16}$ to $\frac{1}{8}$ gr.; $\frac{1}{2}$ \mathbb{M} —less than 1%; $\frac{1}{16}$ gr. chloral, 15 to 25 years; while boracic acid is a good antiseptic and to help keep from deteriorating. I have modified this formula, and am now using only grs. xv. chloral hydrate. Have discontinued use of fl. ext. belladonna, and am satisfied with the combination, so much so that I have found nothing better for injection.