

For experiments showing the antiseptic action of drugs frequently used in intratracheal injections we are indebted to Dr. A. H. Peck of Chicago. His experiments are particularly valuable to us because they were conducted with the fact in mind that "an antiseptic must be regarded as a poison to the vegetable cell ; and many of them act also as poisons to the animal cell." The following is a summary of his results with drugs that are of interest to use in connection with our subject :

	Antiseptic Value.	Poisonous to Tissues.		Antiseptic Value.	Poisonous to Tissues.
Oil cassia	1—2233	Yes	Carbolic acid 95 per cent.	1— 338	Yes
Oil cinnamon (Ceylon)	1—2100	Yes	Oil myrtol	1— 357	Yes
Oil cinnamon (synthetic)	1—2133	Yes	Oil cajuput	1— 120	No
Oreosote (beechwood)	1—1230	No	Eucalyptol	1— 116	No
Oil cloves	1—1150	No	Oil gaultheria	useless	No
Oil bay	1—1028	No	Eugenol	useless	No
Oil sassafras	1—1000	No	Formalin	—	Yes
Oil peppermint	1— 875	No			

Koch's statistics derived from experience with anthrax spores are :

	Growth Checked:	Growth Ceased.		Growth Checked.	Growth Ceased.
Bichloride of mercury	1—1,600,000	1—300,000	Eucalyptol	1—2,500	1—1,000
Thymol	1— 80,000		Boracic acid	1—1,250	1—1,800
Oil cloves	1— 5,000		Carbolic acid	1—1,250	1— 850
Camphor	1— 2,500	1— 1,250			

The bacteriological experiments of Blaxall have shown the inefficiency of the essential oils in controlling the growth of tubercle bacilli. Inhalations of 6 per cent. solution of formaldehyde seemed to be attended with favorable results.

How to introduce these various medicaments is the next question of importance. For some years occasional mention has been made of injections into the diseased portions of the lungs ; this procedure has been followed in some instances by an attempt to increase the influence of the drug by electrolysis. This method is apt to cause inflammatory changes with resultant fibrinous exudation ; and from a theoretical standpoint may be regarded as a valuable procedure. However, it has not succeeded in gaining the confidence of the profession.

For the purpose of influencing the pulmonary tissues by local remedies, the tracheal route is the one employed, the medicines being introduced in a state of minute subdivision by means of inhalers, vaporizers, nebulizers and spray apparatus ; or in its fluid condition by means of a tracheal syringe. The experiments cited in the early part of the paper will prove the futility of endeavoring to influence diseased portions of the lungs by means of medicines in the form of sprays, vapors or gases if the lesion is situated beyond the second subdivision