## 288 GASOLINE AS A SURGICAL DETERGENT.

Gasoline consists of the lighter boiling liquid members of the  $C_n$  H<sub>2n</sub> + 2 or paraffin series. It dissolves fats and oils. Its principal use is as a cleansing agent.

I have been using gasoline for the past four years in cleansing the field of operation, in cleansing traumatic wounds, and in the subsequent dressings of all classes of wounds—not using water or other lotions or solutions—and can now recommend to the members of this Association a trial of this common detergent in their ordinary surgical work.

I was led to use gasoline first for the purpose of cleansing from injured parts what railway employees call black oil. We all know how black and grimy are the hands of railway employees engaged in shop work and about locomotives. While working in their ordinary occupation an accident occurs fingers are crushed, for instance. The injured person comes under the surgeon's care. The surgeon's first duty is to see that the injured parts and the surrounding tissues are thoroughly and surgically deterged or made surgically clean.

Soap and warm water with a brush has been the usual means employed, also ether, alcohol, etc. I found the process to be slow, painful, and not always thorough, as we understand surgical cleanliness, and the idea of using gasoline as a detergent readily suggested itself, as this substance has been used for years to cleanse grease stains from clothing, gloves, etc.

I find that it does not irritate fresh wounds or granulating surfaces any more than water does. It is best applied by taking an ordinary wipe, made of cotton batting or sterilized gauze, and wiping the parts which it is desired to cleanse. The gasoline immediately evaporates and leaves the surface dry and perfectly free from grease. This will be found an advantage where sectional strapping by adhesive plaster is to be used, as the plaster adheres much more firmly when the skin is free from any oily substance.

My results, as far as early healing and absence of infection are concerned, have been most satisfactory, and include the treatment of all classes of wounds, and I cannot too strongly recommend to the members of this Association gasoline as the best surgical detergent.

I am indebted to my friend, Dr. Goldie, of Toronto, who is a practical bacteriologist, for the following notes on gasoline as a detergent and antiseptic. He says: "I have carried out in part the experiments in regard to the detergent and antiseptic properties of commercial gasoline. Weighed scrapings from the same arm from areas roughly two square inches were plated out, after washing with soap and water for five minutes and after scrubbing with gasoline for two minutes, also without any preparation.