

THE

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## Original Communications.

### THE ACTIONS AND USES OF NAPHTHALIN.

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Professor of Materia Medica and Therapeutics,  
McGill College, Montreal.

Read at the Montreal Meeting of the Canada Medical Association,  
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Naphthalin is one of the most recent additions to the already large group of antiseptic agents. It is one of the products of the distillation of coal. When pure it occurs in large, white, glossy crystals. It is, however, often sold in an amorphous condition, and having a greyish colour.

In this impure condition its antiseptic qualities appear to be little, if at all inferior to those possessed by the purest specimens; but as it often causes considerable irritation, it is well to employ the agent in its resublimed state. The odor of naphthalin is very penetrating, but not disagreeable.

#### ACTIONS.

I. *On Micro-Organisms.*—It is one of the most powerful agents that we possess in preventing the decomposition of organic fluids. Urine can be preserved for an almost indefinite length of time by the addition to it of even a small quantity. I was able to preserve eight ounces for three weeks by the addition of twenty grains.

There is no fluid more prone to undergo decomposition than the serum of milk when it

is exposed to a warm atmosphere; if, however, the atmosphere is saturated with naphthalin, no micro-organisms will develop in the fluid.

If fresh pus taken from a recently-opened abscess be exposed to the air for a day or two, it teems with an innumerable number of bacteria and micrococci; but the addition of naphthalin, even in minute quantities, will prevent for weeks the formation of these micro-organisms.

An infusion of pancreas is probably more difficult to keep from undergoing decomposition than any other fluid. From an extensive series of experiments, Fischer, of Strasbourg has shown that naphthalin is even more efficacious than iodoform in effecting this.

Vegetable and animal parasites of all kinds are quickly killed by naphthalin.

II. *On Man and the Higher Animals.*—Animals compelled to breathe an atmosphere saturated with naphthalin for twenty-four hours are not visibly affected in any way.

Even when a strong ointment is well rubbed into the skin of the whole body of a dog the animal does not present any symptoms whatever.

When applied to the unbroken human skin it does not cause any irritation. When applied to a wound it seldom causes more than a sensation of slight and transient pricking. At times, however, it causes a sensation of decided smarting.

When applied to a wound in a state of putrefaction, it is surprising how soon it renders it antiseptic; even wounds of considerable depth are soon made sweet.