

UNITED STATES PATENT OFFICE.

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DISINFECTANT AND CLEANSING-LIQUID FOR ANIMALS, &c.

SPECIFICATION forming part of Letters Patent No. 331,190, dated November 24, 1885.

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To all whom it may concern:

Be it known that I, HERMAN ENDEMANN, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Disinfectants and Cleansing-Liquids for Animals, &c., of which the following is a specification.

My invention relates to improvements in disinfecting compounds.

The object of my invention is to provide a liquid disinfectant which can be readily mixed with water and used for disinfecting purposes generally, and is specially useful for cleansing and freeing animals of vermin.

In carrying out my invention I proceed as follows:

First. The ordinary heavy oil of coal-tar of commerce is freed from the naphthaline it contains by allowing it to stand in the cold for some time, or by subjecting it to a refrigerating process which tends to crystallize or solidify the naphthaline, thus allowing it to be separated from the oil, the oil thus produced being of a specific gravity varying from 1.04 to 1.05.

Second. I take a substance known in commerce as "spirits of tar," which is obtained from wood in the manufacture of charcoal. This substance varies considerably in specific gravity, some of the varieties being heavier than water, while others are much lighter, and by mixing them a substance can be easily obtained of any specific gravity between the highest and lowest attainable points; but by preference I produce a mixture of a specific gravity of 0.930, which I combine with the lightest heavy oil of coal-tar mentioned above, or still lighter when the heavier oil of coal-tar is to be used.

Third. I prepare an oleic-acid soap by combining oleic acid of commerce with the proper quantity of caustic potash dissolved in water, the proportion of water being such that one hundred parts of the ready soap shall contain forty-three parts of oleic acid.

Fourth. I next prepare a solution of caustic potash by weighing off six parts of caustic

potash and adding thereto forty-six parts, by weight, of water.

In order to produce from the materials first described the liquid disinfectant, I proceed as follows: I mix and heat together three hundred gallons of heavy oil of coal-tar of 1.04 specific gravity, and one hundred gallons of the spirits of wood-tar of 0.930 specific gravity, which will produce a liquid compound of about the specific gravity of water. I then remove three hundred (300) gallons of the mixture and set it to one side. In the one hundred gallons of the mixture remaining in the vessel I place two hundred pounds of oleic soap, and heat and stir the same until the soap is dissolved. The three hundred gallons of the mixture of heavy oil of coal-tar and spirits of tar which had been set aside are then added to the one hundred gallons containing the soap, and the whole is well mixed by agitation and allowed to cool. When cool, I add thereto four hundred and thirty-five pounds of the potash solution, prepared as directed above. This is well stirred in, and a sample of the liquid is tested from time to time in order to ascertain whether the combination of the substances is perfect.

If the combination has lost some of its water during the heating of the mixture of heavy oil of coal-tar and spirits of wood-tar for the purpose of dissolving the soap, it may become necessary at the end of the operation to add water in small quantities from time to time until a perfect compound is produced.

Having thus described my invention, what I claim is—

A compound for disinfecting purposes and for destroying vermin, consisting of heavy oil of coal-tar, spirits of wood-tar, potash soap, and potash solution, combined in the manner and in the proportions specified.

In testimony whereof I affix my signature in presence of two witnesses.

HERMAN ENDEMANN.

Witnesses:

W. HAUFF,

A. FABER DU FAUR, Jr.