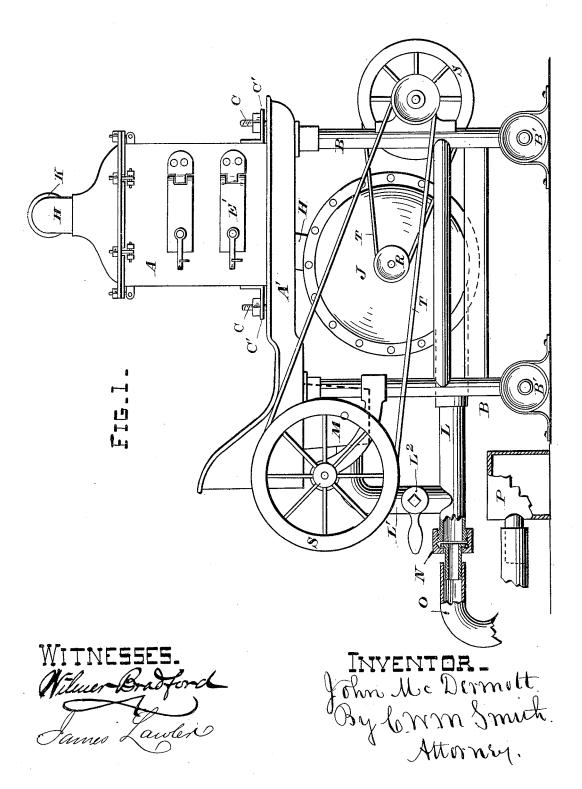
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No. 263,557.

Patented Aug. 29, 1882.

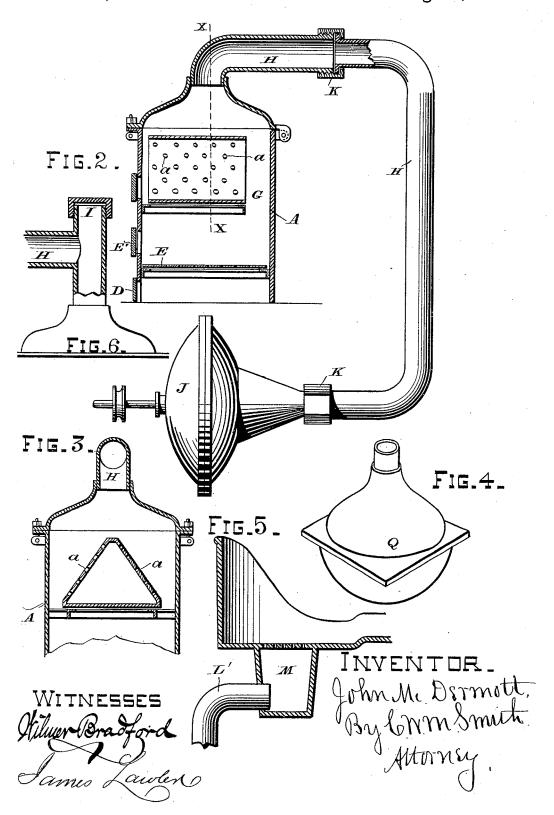


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STATES PATENT OFFICE.

JOHN McDERMOTT, OF SAN FRANCISCO, CALIFORNIA.

FUMIGATING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 263,557, dated August 29, 1882. Application filed May 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN McDERMOTT, a citizen of the United States, and residing at San Francisco, in the county of San Francisco 5 and State of California, have invented a new and useful Fumigating-Machine, of which the following is a specification.

The objects of my invention are to provide a fumigator for the destruction of insects and 10 rodents, and for the better fumigation of dwellings, ships, &c. I accomplish these objects by the mechanism illustrated in the accompany-

ing drawings, in which-

Figure 1 is a side elevation of a machine em-15 bodying my improvements. Fig. 2 is a vertical sectional view of the furnace and connecting-pipe and fan-blower, the latter being shown in side elevation. Fig. 3 is a section on line X X of Fig. 2. Fig. 4 is a perspective view of the 20 retort. Fig. 5 is a sectional detail view, showing the forge-fire grate. Fig. 6 is a sectional view, showing a modification of the pipe I.

Similar letters of reference are used to designate like parts throughout the several views. I mount the furnace A upon a sheet-iron table or platform, A', which is supported by suitable legs, B, provided with wheels or trucks B' for ease in transporting from place to place. The fumigating furnace is held in place upon 30 the table by jointed or pivoted set bolts and nuts C, entering the slotted plates C' at each side of the furnace. The furnace is rectangular in form, and has an ash-pit with a door, D. Above the ash-pit is a combustion-chamber 35 provided with a perforated grate, E, upon which the fuel is placed. This chamber is also provided with a door, E'. Directly above the combustion - chamber is the fume - chamber, which consists of a rectangular iron box having 40 flues G upon three sides, which permits the products of combustion from the furnace below to pass up these flues into the escape-pipe H at the top of the furnace. The fume-chamber is

connected to the roof or dome of the furnace, 45 and is also provided with an inclined or Vshaped roof, which is perforated with holes a a, so that the fumes from the heated chamber will pass up through these holes into the dome to the conducting-pipe Hat the top of the fur-50 nace, and be conveyed into a suction fan wheel

A cap, I, may be connected with the flue or extended from the dome, so that the smoke may be carried away in kindling the fire and bringing the furnace up to a sufficient heat to 55 commence operations with.

The blower J being an ordinary fan-wheel inclosed within a case, I do not deem it necessary to elaborately describe it in this connection. Suffice it to say that it is intended to 60 draw the fumes from the furnace and convey or force them to a distributing-point.

Suitable couplings, K K, are made on the induction pipe or flue which connects the furnace with the blower.

From the mouth of the blower extends a pipe, L, and a branch pipe, L', leads from it into a chamber, M, having a grate over the top thereof and attached to the front of the table, so that by turning the cock L² the fan- 70 blower and the table may be used as a smith's forge by directing air from the fan-blower to coals placed upon the perforated grate above the chamber M.

To the end of the pipe which connects with 75 the fan-blower is attached by a coupling, N, a flexible hose-pipe, O, which conducts the fumes to the holes of rodents, or to a distributingtank, P, which latter consists of an inverted drum provided with a cap at the top thereof 85 and open at the lower end, which latter end is set over the hole or opening made by the animal in the ground, so that when the fumes are drawn from the fume-chamber by the fan-wheel they will be forced through this flexible pipe 85 into the inverted drum, and thence into the animal's burrow.

Where gases are employed, or such disinfectants as do not require heat, or but little heat, to evolve the gases contained therein, I 90 employ a retort or gas-generator, Q, and connect the pipe which leads to the fan-blower with it, so that I am enabled to draw and force the gas to any point, contingent, however, upon the length of the connecting-hose.

Power is applied to the fan-blower in the usual way by drums, pulleys, and belts R S T.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

In a fumigator, the fume-chamber placed or blower placed beneath the table or platform. I above the combustion-chamber, detached from

the walls of the furnace, and provided with a pitched or inclined roof having perforations to admit the fumes and products of combustion to pass up into the dome at the top of the furnace, and from thence into a pipe leading from the dome to the fan wheel or blower, constructed, arranged, and operating substantially in the manner and for the purpose as herein set forth and specified.

In testimony that I claim the foregoing I 10 have hereunto set my hand and seal this 12th day of April, 1882.

JOHN McDERMOTT. [L. S.]

Witnesses: C. W. M. SMITH, CHAS. E. KELLY.