(No Model.)

J. MANN.

COMBINED GARBAGE HOPPER AND SINK TRAP.

No. 582,214. Patented May 11, 1897.

Fig. 1.

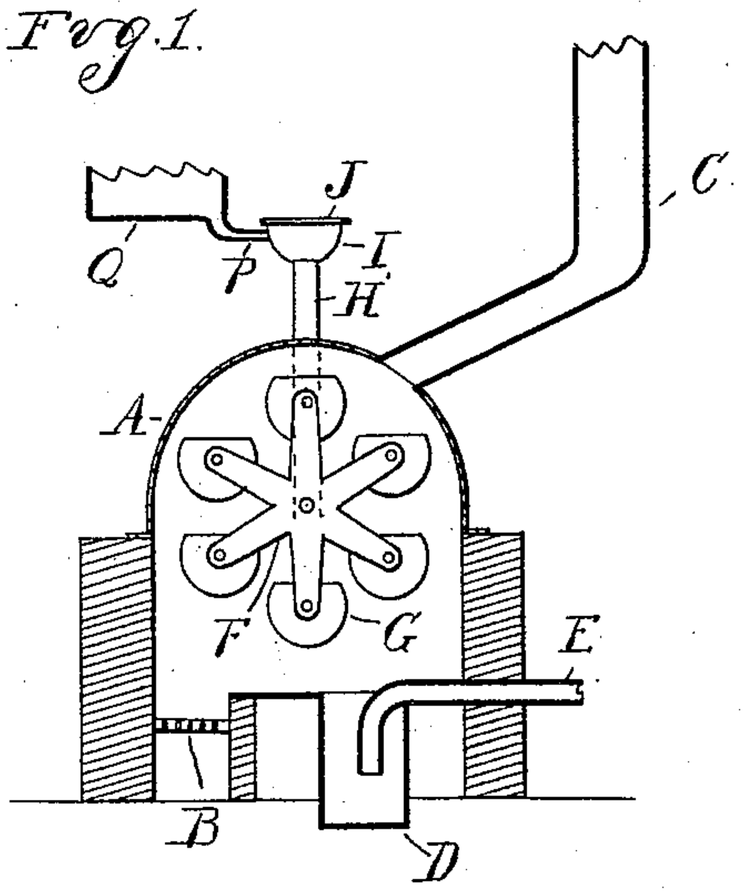


Fig. 3.

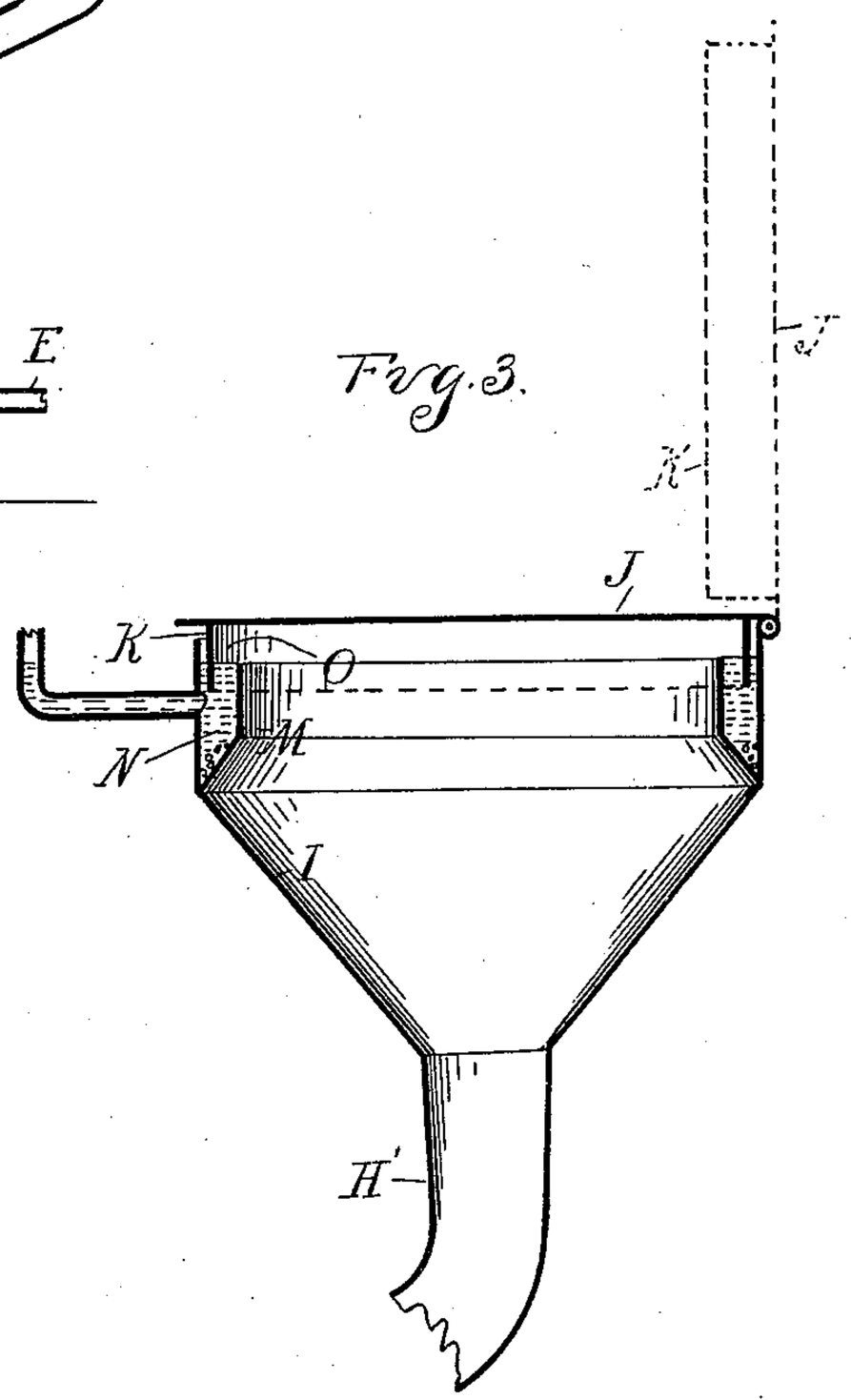
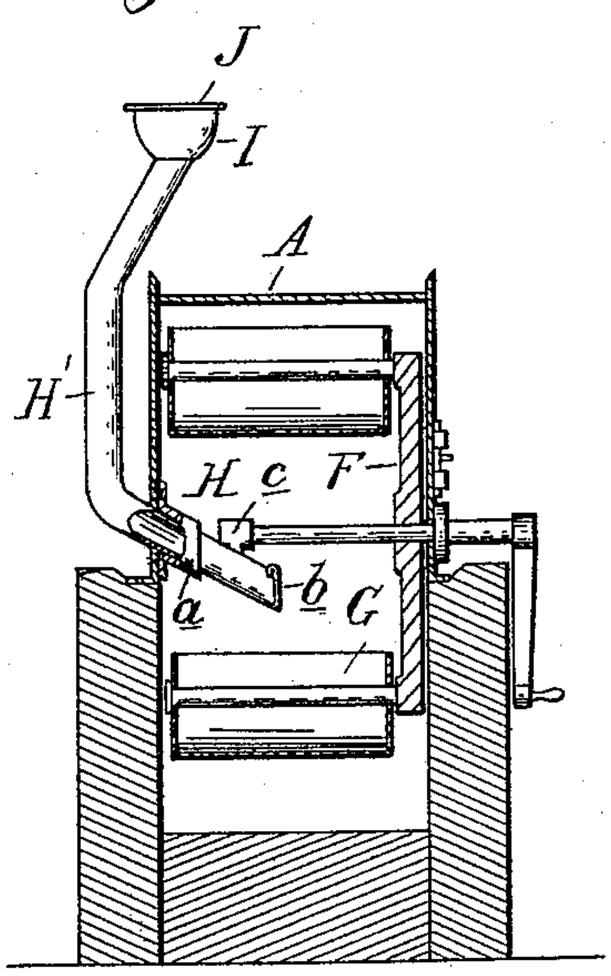


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES MANN, OF DOWAGIAC, MICHIGAN.

COMBINED GARBAGE-HOPPER AND SINK-TRAP.

SPECIFICATION forming part of Letters Patent No. 582,214, dated May 11, 1897.

Application filed November 19, 1895. Serial No. 569,402. (No model.)

To all whom it may concern:

Be it known that I, JAMES MANN, a citizen of the United States, residing at Dowagiac, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in a Combined Garbage-Hopper and Sink-Trap, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a diagram elevation, partly in section, showing my improved apparatus as in use. Fig. 2 is a vertical cross-section thereof. Fig. 3 is an enlarged section through the garbage-hopper and trap.

A is the casing of my improved furnace.

B are the grates for the fire.

C is the exit-pipe for the products of combustion, preferably connected to a chimney.

D is a grease or drip receptacle which has an exit E, connected into a sewer or cesspool.

In the furnace is a frame F, having radial arms, at the ends of which are secured laterally-projecting shafts or rods, on which latter are journaled buckets G. This frame is secured to the shaft F′ and may be turned by any suitable means to bring the lowermost buckets successively in line with and beneath the discharge end H of the supply-pipe H′. The discharge end H′ enters the casing at a point adjacent to its center or substantially in line with the axis of the frame. It is secured to the side of the casing, which latter is provided with the socket end *a*, in which the end of the pipe H′ is secured. A lid *b* is hinged to the end of the pipe, and the bearing *c* is secured on the protruding end of the pipe and in which the inner end of the shaft F′ is journaled. By carrying the pipe H′ into the casing at a point where its discharge end is located immediately above the lowermost bucket, the bucket being thereby filled at its lowermost position, the danger of having the filled buckets remotely removed from the furnace is practically avoided.

In my Patent No. 509,177, dated November 21, 1893, I have shown a construction wherein the buckets were filled at the top of the casing, which necessitated turning the frame until the bucket was at its lowest point of travel. Such turning was often neglected, and consequently longer time was taken for the heat to act on the material, owing to its distance therefrom.

The supply-pipe H′ at its upper end is provided with a hopper I. This hopper has a hinged or detachable cover J, provided with a marginal downwardly-extending flange K, which projects into the hopper in the closed position of the cover, as plainly shown in Fig. 3.

Around the inner edge of the hopper, and preferably parallel with the side walls thereof, is a wall or rim M, which forms between it and the wall of the hopper a recess or chamber N.

The upper edge of the wall M is slightly lower than the edge of the hopper, so as to form over this wall or between this wall and the top of the hopper a discharge-aperture O.

P is a discharge-pipe from the sink, such as Q, leading into the chamber N, as shown in Fig. 1. The lower edge of the wall M is extended a considerable distance below the discharge end of pipe P and thereby forms a receptacle below the inlet. In this chamber N, below the plane of the inlet-pipe P, I may, and preferably do, arrange a soluble disinfectant, like sulfate of copper, which may be placed therein in lumps. This hopper may be placed in the kitchen or in any other place between the sink and the garbage-burner or cesspool.

By forming the receptacle below the inlet of the pipe P, I am enabled to create a circulation of the water through the seal over the disinfectant, and thereby avoid the necessity of an independent supply of disinfecting fluid.

The waste from the sink will pass through the pipe P into the chamber N and fill the same to the top of the wall M, and as the fluid continues to flow it will overflow the wall M, pass into the hopper, and thence into the pipe H′, from which it will be discharged into one of the buckets G.

It will be seen that as the fluid passes into the chamber N it always maintains that chamber full, so as to maintain a water seal for

the top. This prevents the escape of noxious vapors from the inside of the hopper (which connects to the garbage-burner) into the room in which the hopper may be placed.

If it is desired to throw waste paper, swill, or other garbage or rubbish into the hopper I, the cover may be raised, as shown in dotted lines in Fig. 3, and material deposited in the hopper direct. I thus obtain by the construction described a very simple device in which the trap for the sink forms a seal for the cover of the hopper and in which I may provide a constant supply of disinfectant passing into the hopper and into the garbage-receptacle.

What I claim as my invention is—

1. The combination with a casing, of a spider-frame mounted therein, means for rotating the frame, a series of buckets loosely journaled on the frame, a supply-pipe entering the casing below the top thereof, and having its discharge end located below the plane of the upper buckets and immediately above the lower bucket, and a furnace below the casing, substantially as described.

2. In a device of the kind described, the combination with a sealed hopper, of a furnace, a rotatable frame having radial arms and laterally-projecting shafts carried by the arms, buckets on said shafts, a shaft on which the frame is mounted having at one end a bearing in the furnace-casing, a pipe leading from the hopper into the furnace at a point opposite the end of the shaft, and a bearing on the end of the pipe within the furnace in which the other end of the shaft is placed, substantially as described.

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

JAMES MANN.

Witnesses:
JAMES P. BONCE,
A. H. LAIZELEVE.