(No Model.)

D. E. PAYNTER.

PROCESS OF DRYING OFFAL AND GARBAGE.

No. 387,104. Patented July 31, 1888.

FIG. 1.

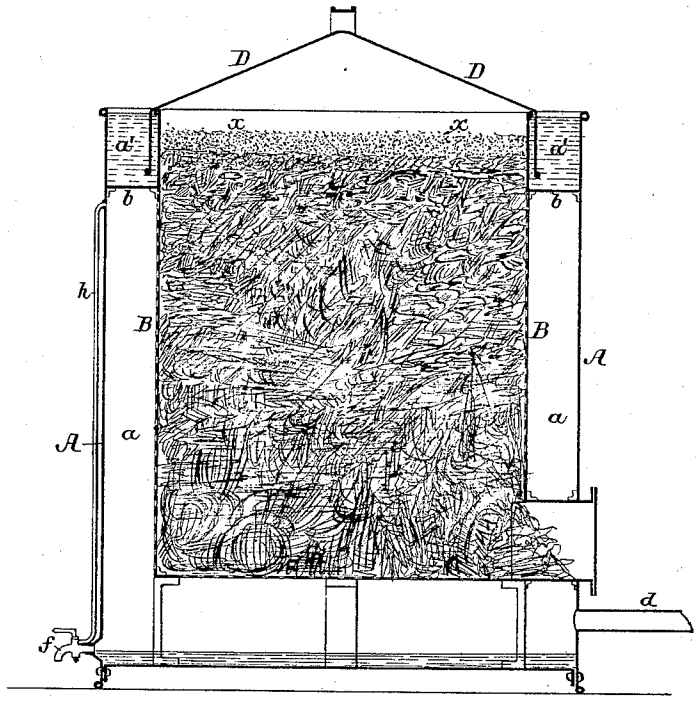
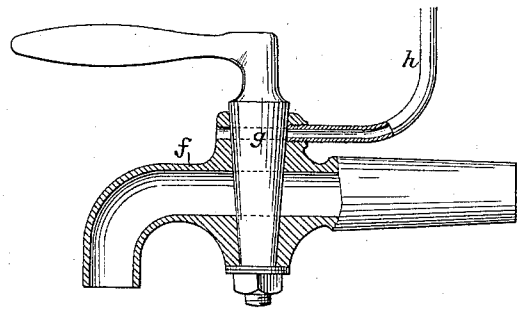


FIG. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID E. PAYNTER, OF PHILADELPHIA, PENNSYLVANIA.

PROCESS OF DRYING OFFAL AND GARBAGE.

SPECIFICATION forming part of Letters Patent No. 387,104, dated July 31, 1888.

Application filed September 5, 1887. Serial No. 248,834. (No model.)

To all whom it may concern:

Be it known that I, DAVID E. PAYNTER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Treating Offal and Garbage, of which the following is a specification.

The object of my invention is to effect the drying of garbage and offal without risk of the escape of offensive odors during the drying operation; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 represents in vertical section apparatus for carrying out my invention, and Fig. 2 shows an enlarged view of the drainage-valve.

A is a casing of any suitable form and dimensions, and within this casing is a perforated receptacle, B, for containing the offal or garbage which is to be dried, this receptacle being somewhat less in diameter than the casing A, so that an annular chamber, *a*, is formed between the two. The upper portion, *a'*, of this chamber is separated from the lower portion by a partition, *b*, and said upper portion of the chamber contains water or other sealing-liquid, into which dips the flange of a cover, D. The offal or garbage being deposited in the receptacle B, a layer, *x*, of sulphate of lime is spread over the same and the cover D is applied. Hot air from any adjacent furnace is then permitted to enter the annular chamber *a* through a pipe, *d*, and this hot air enters the mass in the receptacle B through the perforated walls and bottom of said receptacle, the free liquid in the mass being drained off into the bottom of the casing A, which is some distance below the bottom of the receptacle B.

All vapors which arise from the drying mass in the receptacle B are compelled to pass through the layer of sulphate of lime on said mass, and thence through the liquid seal in the chamber *a'* before they can escape. The ammonia arising from the mass is associated with more or less carbonic acid, so that as the vapors pass through the sulphate of lime a chemical reaction takes place, the resultant product being carbonate of lime and sulphate of ammonia.

The seal for the cover D may be of such liquid that it will deodorize any vapors which pass through the same.

The drainage-liquid is removed from the casing A from time to time through a suitable cock or faucet, *f*; and in order to insure the free flow of the liquid through said faucet the plug of the same has a passage, *g*, which, when the cock is open, provides for the inlet of air to the upper portion of the chamber *a* through a pipe, *h*.

I claim as my invention—

The mode described of drying offal and garbage, said mode consisting in subjecting the mass to the action of heated air, and passing the vapors through sulphate of lime before permitting them to escape, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID E. PAYNTER.

Witnesses:

WILLIAM D. CONNER,

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