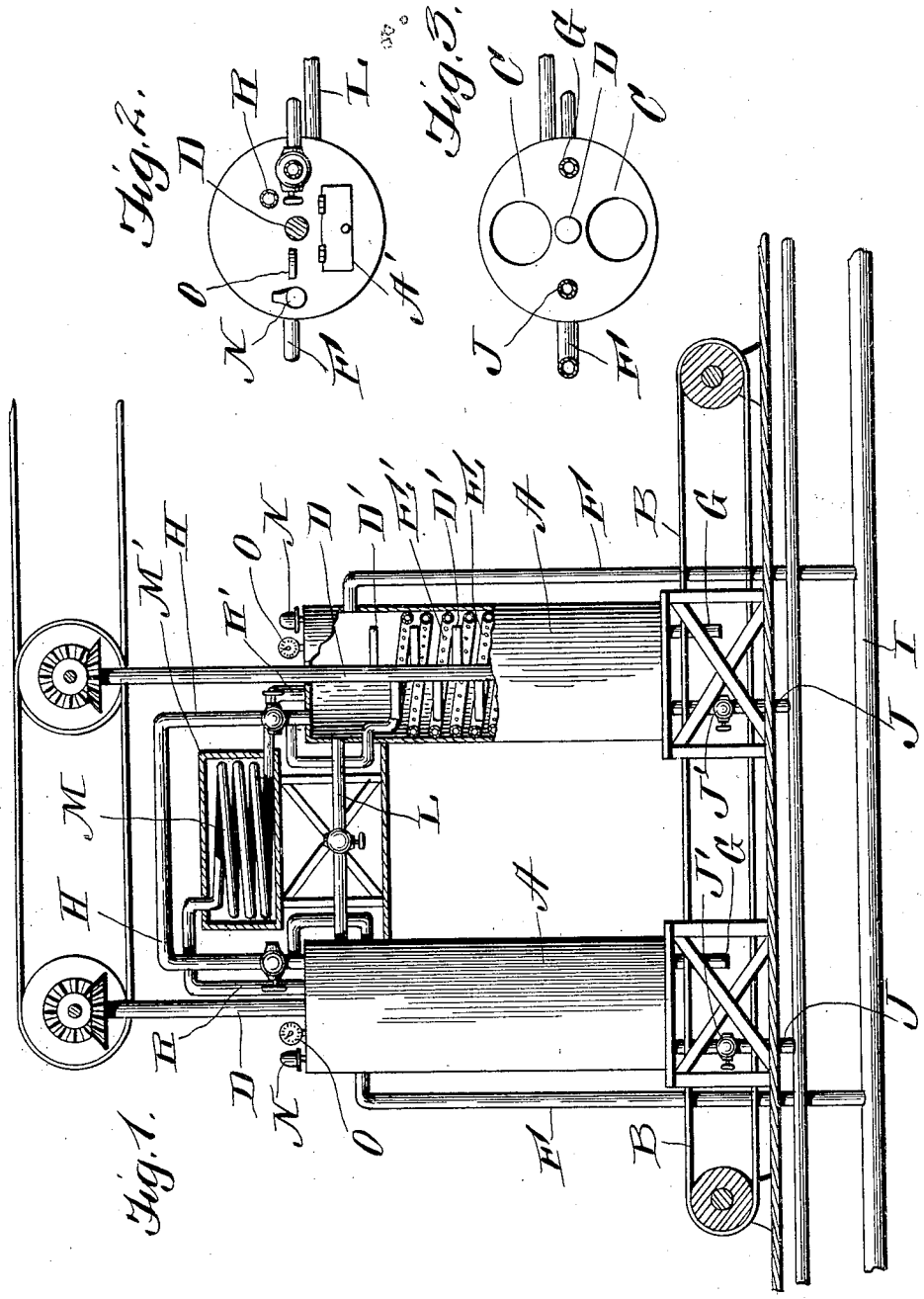
No. 835,689. PATENTED NOV. 13, 1906.

J. W. SEWELL.

PROCESS OF TREATING GARBAGE.

APPLICATION FILED SEPT. 15, 1905.



Witnesses
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PROCESS OF TREATING GARBAGE.

No. 835,689. Specification of Letters Patent. Patented Nov. 13, 1906.

Application filed September 15, 1905. Serial No. 278,690.

To all whom it may concern:

Be it known that I, JOHN WM. SEWELL, a citizen of the United States, residing at Belleview, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in the Process of Treating Garbage; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in the process of treating garbage, whereby the same is acted upon under high pressure of steam, and condensing all of the fumes and leaving a solid residue of tankage suitable for fertilizing purposes.

An apparatus whereby the various steps of my method or process may be carried out is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view through the apparatus. Fig. 2 is a top plan view of one of the tanks or cookers in which the garbage is treated, and Fig. 3 is a bottom view of one of said cookers.

Reference now being had to the details of the drawings by letter, A A designate two tanks or cookers which are adapted to contain garbage to be treated, and each is provided with a manhole A′ at its upper end and exit-apertures C in the bottom thereof, whereby the garbage after being treated may be emptied upon the endless carrier B, which is mounted underneath said cookers. Mounted within each of said cookers is a vertical shaft D, having stirrer-arms D′ thereon, which are provided for the purpose of agitating the garbage, and a coiled pipe E is also positioned within each of the cookers and is provided with perforations E′ at intervals, whereby the steam under high temperature may make exit freely through into the interior of the cooker while the stirrers are in agitation, the stirrers serving to keep the garbage from burning while being treated by the steam under high temperature. F designates a pipe communicating from a water-main I and leading to each of the cookers. Each cooker is provided with a safety-valve N and a steam-pressure gage O. Each of said steam-coils is provided with an exit end J, which is regulated by a valve J′, and G designates a blow-off pipe communicating with the lower portion of the cooker.

M designates a condensing-coil positioned in a cooling-tank M′, in which cold water is adapted to circulate, and R and R′ designate pipes which communicate, respectively, with the two tanks.

L designates a valve-regulated pipe communicating between the two cookers, and H is a valve-regulated pipe through which steam is supplied to the coils.

The operation of the apparatus illustrated in carrying out the steps of my process is as follows: The garbage is placed in the cookers and steam under high temperature is caused to pass through the coil of one of the cookers, and as the steam issues through the perforations of the coil it thoroughly heats up the garbage sufficiently to drive off the fumes, and while the garbage is being acted upon by the steam the stirrers are put in operation, thereby keeping the garbage from burning. The steam which issues from the cooker passing into the condensing-coil laden with the fumes of the garbage is condensed and when the batch of garbage has been sufficiently treated the valve in the passage-way communicating between the two cookers is opened to allow the steam to equalize, after which the valve in the passage-way between the cookers is closed and the garbage which has been treated removed from the cooker, and the second cooker may be started up and its contents treated while the other is being emptied and replenished. By this process very little odor escapes from the apparatus by reason of the fact of the condensing means preventing the fumes from escaping to the atmosphere, the water of condensation from the coils escaping to a sewer through suitable pipes connecting the condensing-coils with the sewer-main.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A method of treating garbage, consisting in subjecting the garbage, while being agitated,

within a closed receptacle, to the action of steam under high pressure introduced into the receptacle in a series of jets, and condensing the fumes, and afterward equalizing the pressure in a second receptacle, by opening communication between the receptacles, as set forth.

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

JOHN WM. SEWELL.

Witnesses:
THOS. C. PARDINGTON,
W. T. V. CRAMER.