G. S. ALLYN.

Apparatus for Treating or Drying Scraps of Offal.

No. 163,565. Patented May 25, 1875.

Fig. 1.

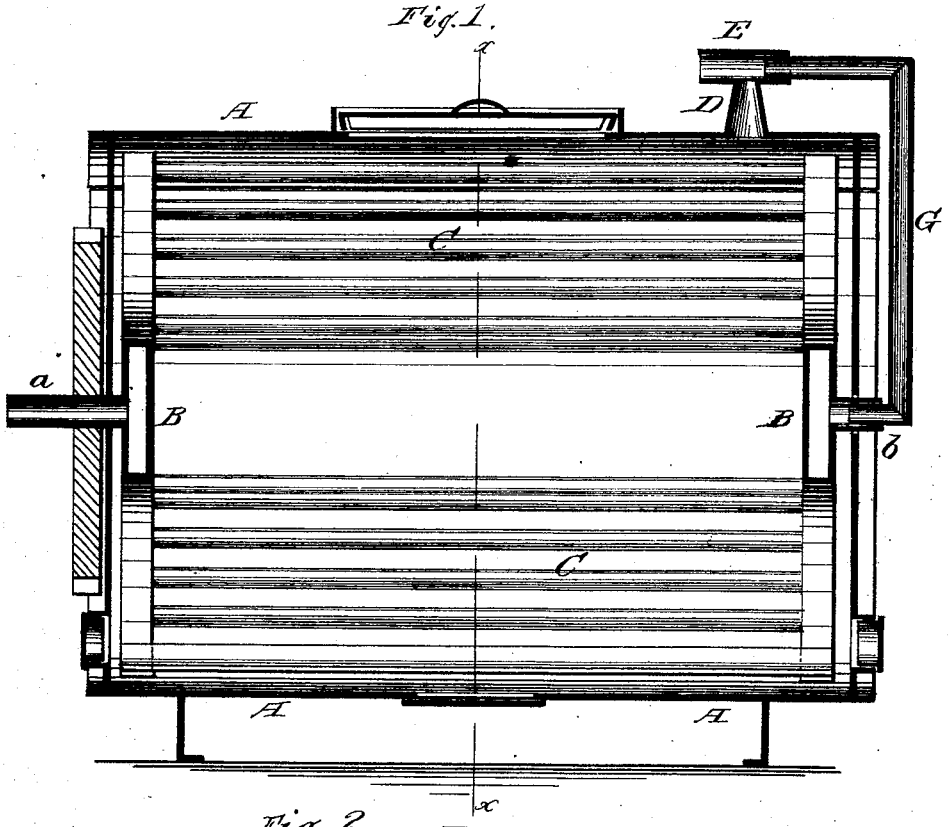
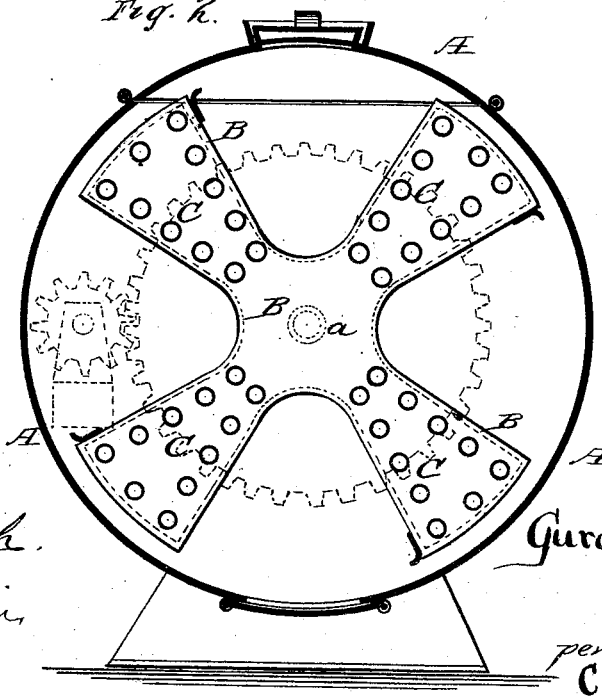


Fig. 2.



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UNITED STATES PATENT OFFICE

GURDON S. ALLYN, OF GROTON, CONNECTICUT.

IMPROVEMENT IN APPARATUS FOR TREATING OR DRYING SCRAPS OR OFFAL.

Specification forming part of Letters Patent No. **163,565**, dated May 25, 1875; application filed April 16, 1875.

To all whom it may concern:

Be it known that I, GURDON S. ALLYN, of town of Groton, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Apparatus for Treating or Drying Scraps or Offal; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains 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.

The nature of this invention consists in the construction and arrangement of an apparatus for treating or drying scraps or offal, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a longitudinal section of a device embodying my invention, and Fig. 2 is a transverse section taken on the line *x x* of Fig. 1.

A represents a cylindrical tank of any suitable dimensions, made, preferably, double or jacketed, so as to retain the heat therein for a longer period, and provided with a suitable lid or door for the insertion and removal of the material to be operated upon. Within this tank is a revolving cylinder, consisting of two hollow heads, B, connected by tubes or pipes C. The hollow heads B may be constructed of two or more arms, as shown, and connected by means of the horizontal pipes C C, running from one head to the other, and placed at suitable regular intervals. The heads B B are provided with hollow journals *a b*, which pass through stuffing-boxes attached in the ends of the tank. The journal *a* is the inlet for the steam or hot air, and the journal *b* is the outlet.

The cylinder is revolved by means of suitable gearing applied to one of the journals, thereby keeping the contents of the tank in constant agitation. Steam or hot air is introduced through the hollow journal *a* into the head B at that end; thence through the pipes C C into the other head B, and out of the exhaust-journal *b*, during its passage warming and drying the contents of the tank while disturbed.

On top of the tank A is secured an inverted funnel, D, opening into the same, and its upper end opening into the center of a pipe, E, as shown. One end of this pipe is, by a pipe, G, connected with the exhaust-journal *b*, so as to conduct the exhaust-steam or hot air through the pipe E, past the communication with the interior of the tank, thereby creating suction to draw out the steam and moisture of the material being dried.

Having thus fully described this invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination of the tank A, hollow cylinder-heads B B, with hollow journals *a b*, and the pipes C C, connecting said heads, and running parallel with the axis of the cylinder, substantially as herein set forth.

2. The combination of the tank A, T-shaped pipe D E, and the pipe G, conducting the exhaust through the horizontal part E of the pipe, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GURDON S. ALLYN.

Witnesses:

A. P. TANNER,

FRED. A. HOLMES.