M. B. MILLS.

FEED-COOKERS.

No. 194,164. Patented Aug. 14, 1877.

Fig. 1

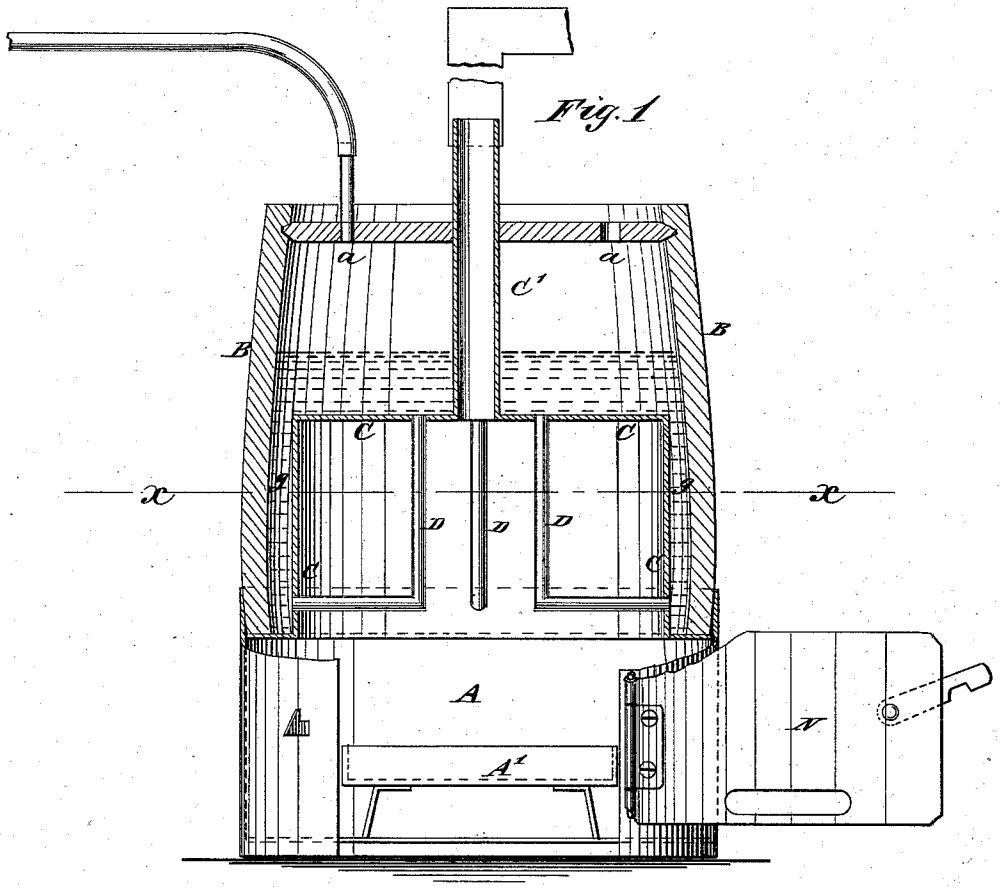
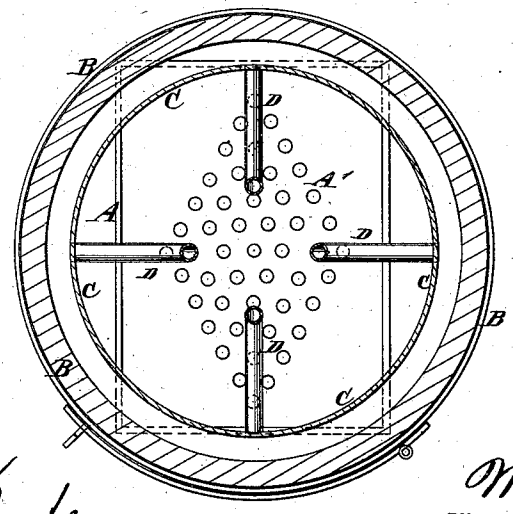


Fig. 2



WITNESSES:

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MORTIMER B. MILLS, OF DE WITT, IOWA.

IMPROVEMENT IN FEED-COOKERS.

Specification forming part of Letters Patent No. **194,164**, dated August 14, 1877; application filed July 9, 1877.

To all whom it may concern:

Be it known that I, MORTIMER B. MILLS, of De Witt, in the county of Clinton and State of Iowa, have invented a new and Improved Feed-Cooker, of which the following is a specification:

This invention has relation to boilers for cooking feed for beasts; and the nature of my invention consists in the combination of a wooden barrel with a furnace, the fire-chamber of which is extended well up in the barrel and surrounded by the water therein, and the smoke-pipe is carried directly up through the top of the barrel.

My object is to have a shell which is a poor conductor of heat, and to obtain as large an amount of heating-surface in a given space as possible.

In the annexed drawings, Figure 1 is a vertical section through my improved feed-cooker. Fig. 2 is a section taken horizontally through the boiler.

Similar letters of reference indicate corresponding parts.

The letter B designates a barrel, which is strongly made, and constructed with openings *a a* through its head, for the purpose of introducing water and conducting off the steam. This barrel is mounted on a cylindrical furnace, A, in which is a grate, A′, raised somewhat to allow the removal of ashes from beneath it. This furnace A is provided with a door, N, to which a register may be applied for regulating the draft.

C designates a fire-chamber, which is a continuation of the furnace, and which is constructed within the barrel B, as shown in Fig. 1. This fire-chamber is cylindrical, and it extends up about half-way of the length of the barrel. From its crown rises a chimney, C′, which is carried up through the head of the barrel.

For the purpose of creating a very rapid circulation of water in the barrel, and also to obtain a large heating-surface, the fire-chamber is of less diameter than the interior of the barrel, so that a water circulating and heating space, *g*, is left.

From this space *g* pipes D are carried into the fire-chamber and out of its crown, which pipes are of an angular shape, as shown.

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

In combination with a wooden barrel, B, the furnace A, fire-chamber C, pipes D, and chimney C′, constructed and arranged substantially in the manner described.

MORTIMER B. MILLS.

Witnesses:
N. A. MERRELL,
ROBERT HOWAT.