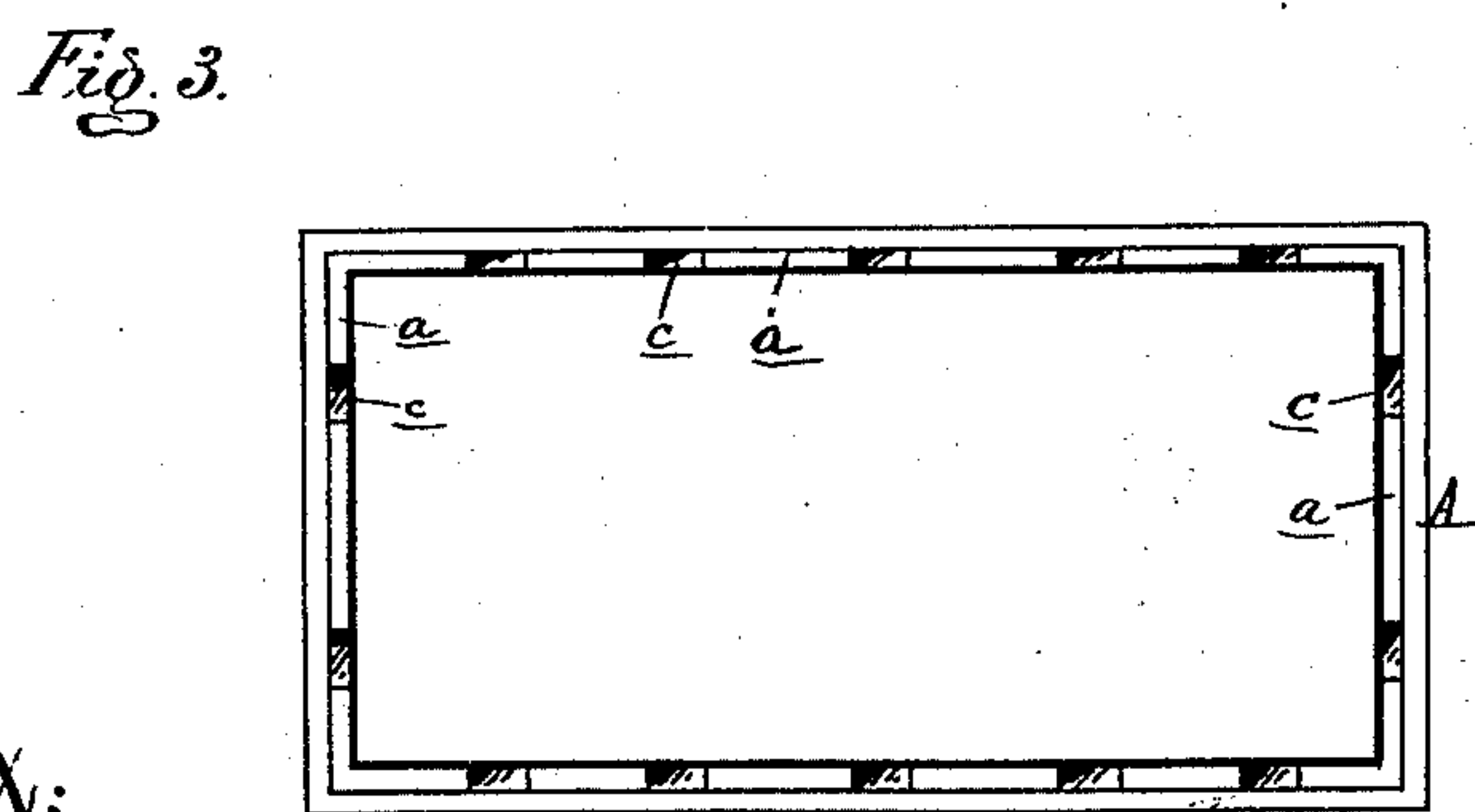
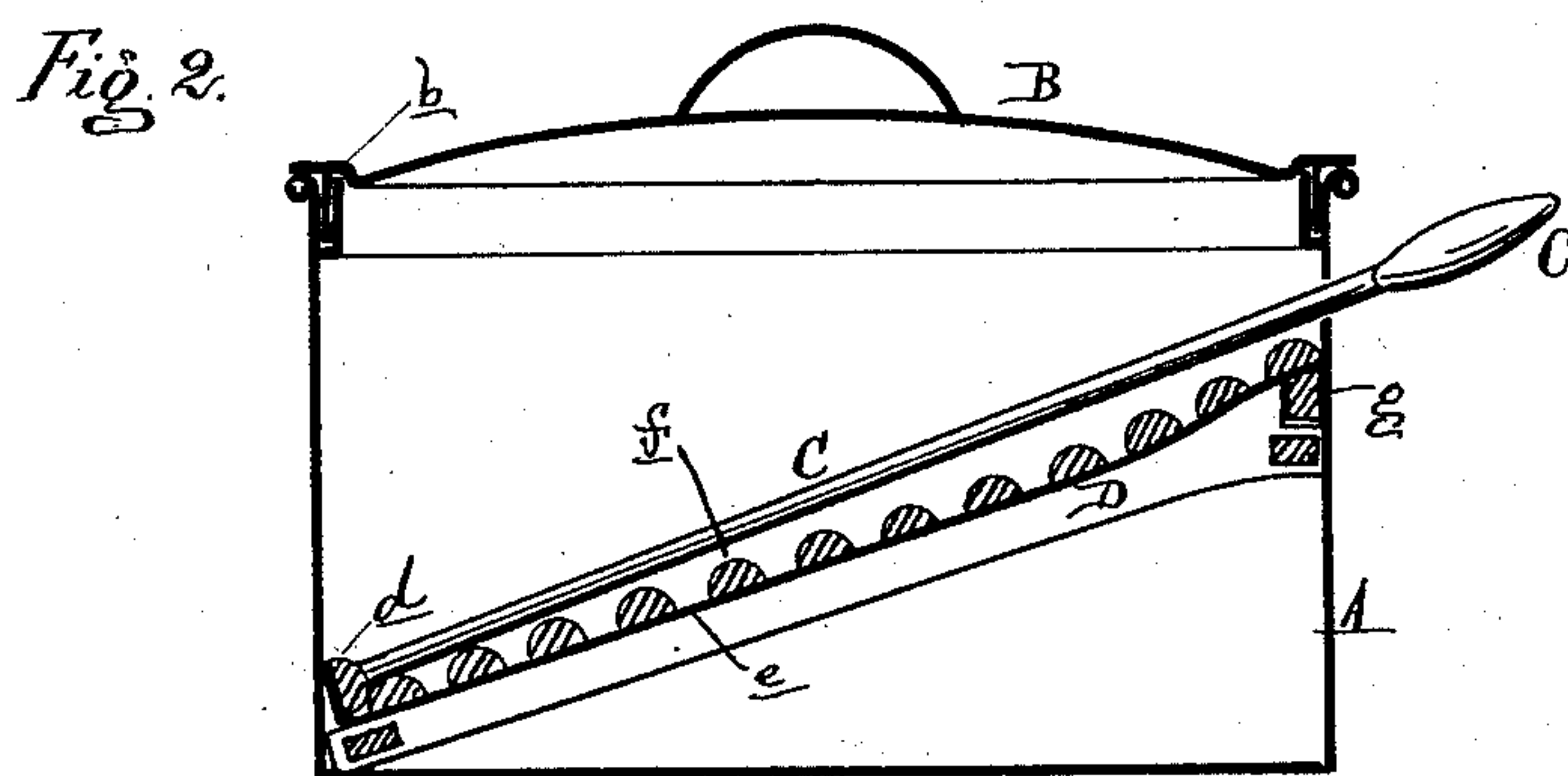
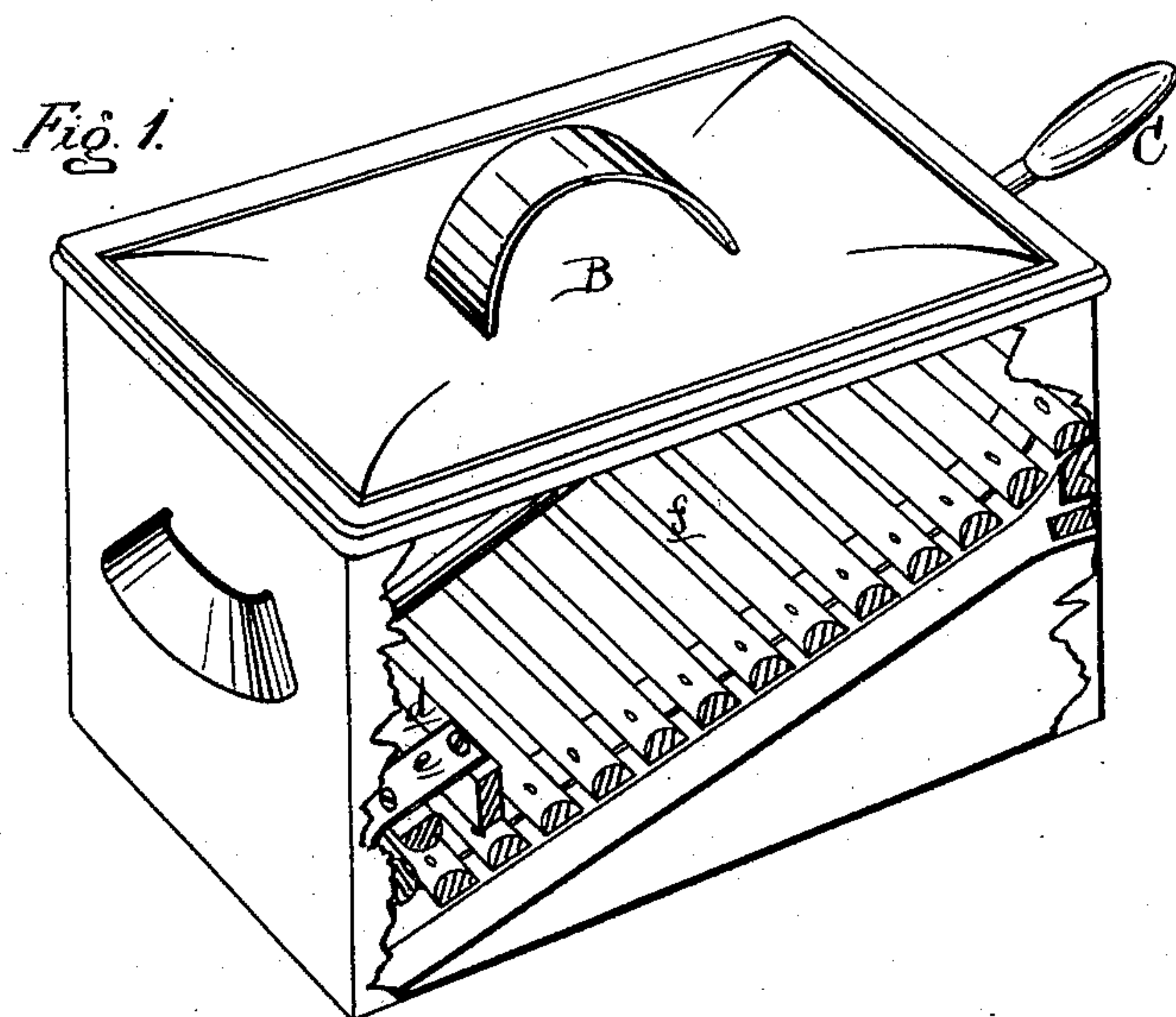


J. HARRIS.
Boiler Washing-Machines.

No. 156,156.

Patented Oct. 20, 1874.



Attest:
W. W. Sprague
Ed. Barthel

Inventor:
John Harris
By Attorney
W. W. Sprague

UNITED STATES PATENT OFFICE.

JOHN HARRIS, OF GRAND LEDGE, MICHIGAN.

IMPROVEMENT IN BOILER WASHING-MACHINES.

Specification forming part of Letters Patent No. **156,156**, dated October 20, 1874; application filed May 22, 1874.

To all whom it may concern:

Be it known that I, JOHN HARRIS, of Grand Ledge, in the county of Eaton and State of Michigan, have invented an Improvement in Boiler Washing-Machines, of which the following is a specification:

The nature of this invention relates to certain improvements in washing-machines and boilers; and the invention consists in the construction of the same in such a manner that the device is a combined washing-machine and boiler, for the purpose of allowing the rubbing of the clothes to be carried on in boiling water; and it also consists in the peculiar construction and arrangement of the various parts, as more fully hereinafter described.

Figure 1 is a perspective view of my boiler and machine with one of the side walls broken out to show the interior mechanism. Fig. 2 is a vertical cross-section. Fig. 3 is a plan of channel around the top, into which the flange of the cover rests.

Like letters refer to like parts in each figure.

In the accompanying drawings, A represents a boiler, made rectangular in form, as shown, provided around its top with a channel, *a*, to receive the flange B of the cover B. This channel has a series of apertures, *c*, in its bottom to allow the condensation of water on the under side of the cover to run through into the boiler, said condensation running down from the cover into the channel. C is a wooden rod or handle, which passes through a hole in the end of the boiler, as shown. The opposite end of this handle is screwed into the head-

block *d*, to which are secured two canvass strips, *e*, which are a trifle larger than the boiler. A series of half round or oval slats, *f*, are fastened to the top of these strips, the other ends of which are fastened to a similar head-block, *g*, which engages with notches in the highest end of the frame D, which stands in an inclined position within the boiler, as shown.

The operation of my machine is as follows: The clothes are put on top of the belt or chain formed by the slats and strips, and the boiler partially filled with water; the rod C being reciprocated moves the slats and strips with it, and thus the clothes can be easily rubbed while being boiled.

This device makes a complete steam-washing boiler.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the boiler-A, of the frame D, strips *e*, slats *f*, and rod C, constructed and arranged as described and shown.

2. The combination, with the cover B, provided with the flange *b*, of the boiler A, provided with the channel *a* and apertures *c*, to allow the condensation of water on the under side of the cover to run through into the boiler, as specified.

JOHN ^{his} × HARRIS.
mark.

Witnesses:

OLIVER BASSETT,
CHAUNCEY L. SCOTT.