

No. 670,063.

Patented Mar. 19, 1901.

W. T. SANFORD.
STOVEPIPE THIMBLE.

(Application filed May 29, 1900.)

(No Model.)

Fig. 1.

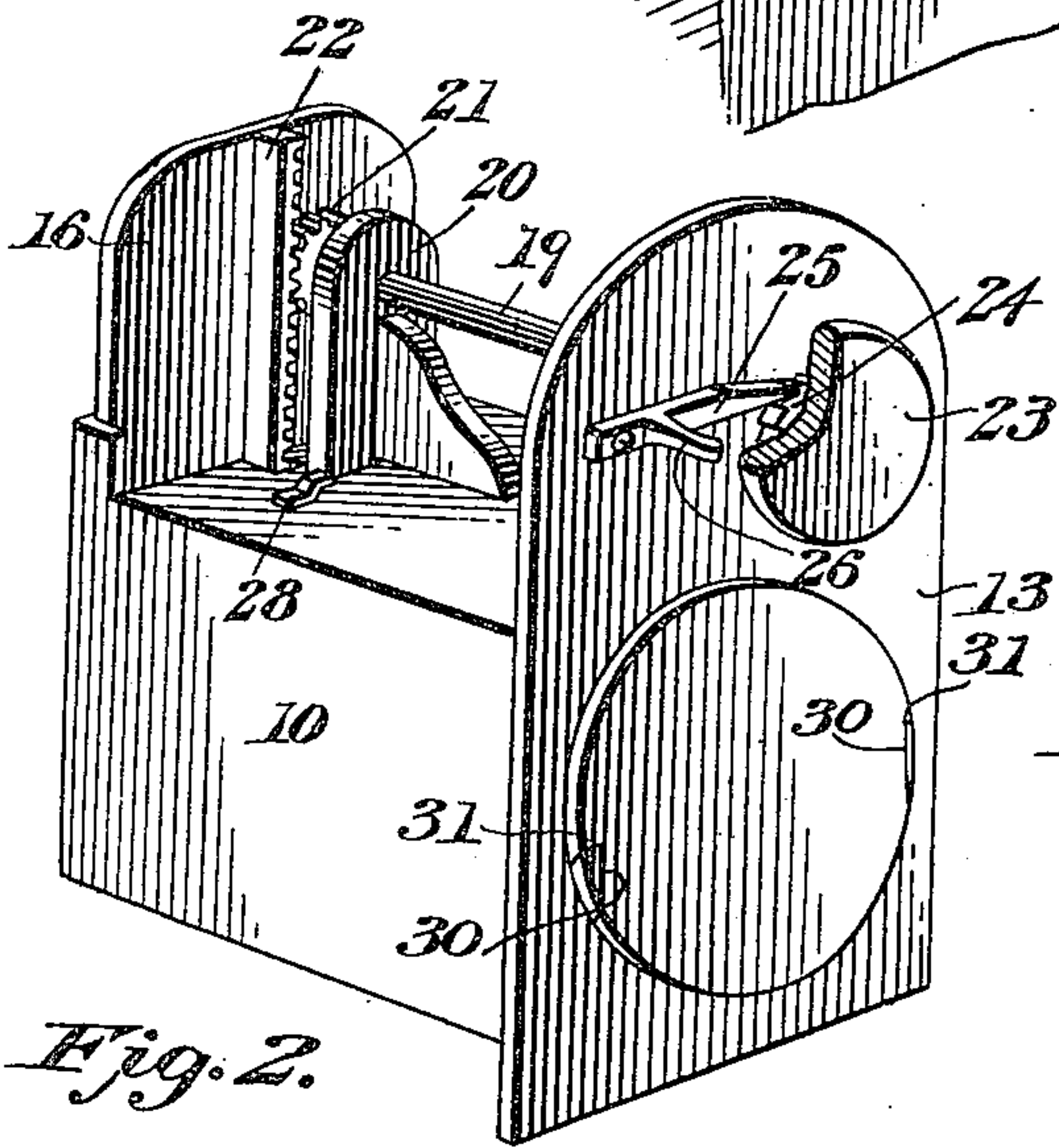
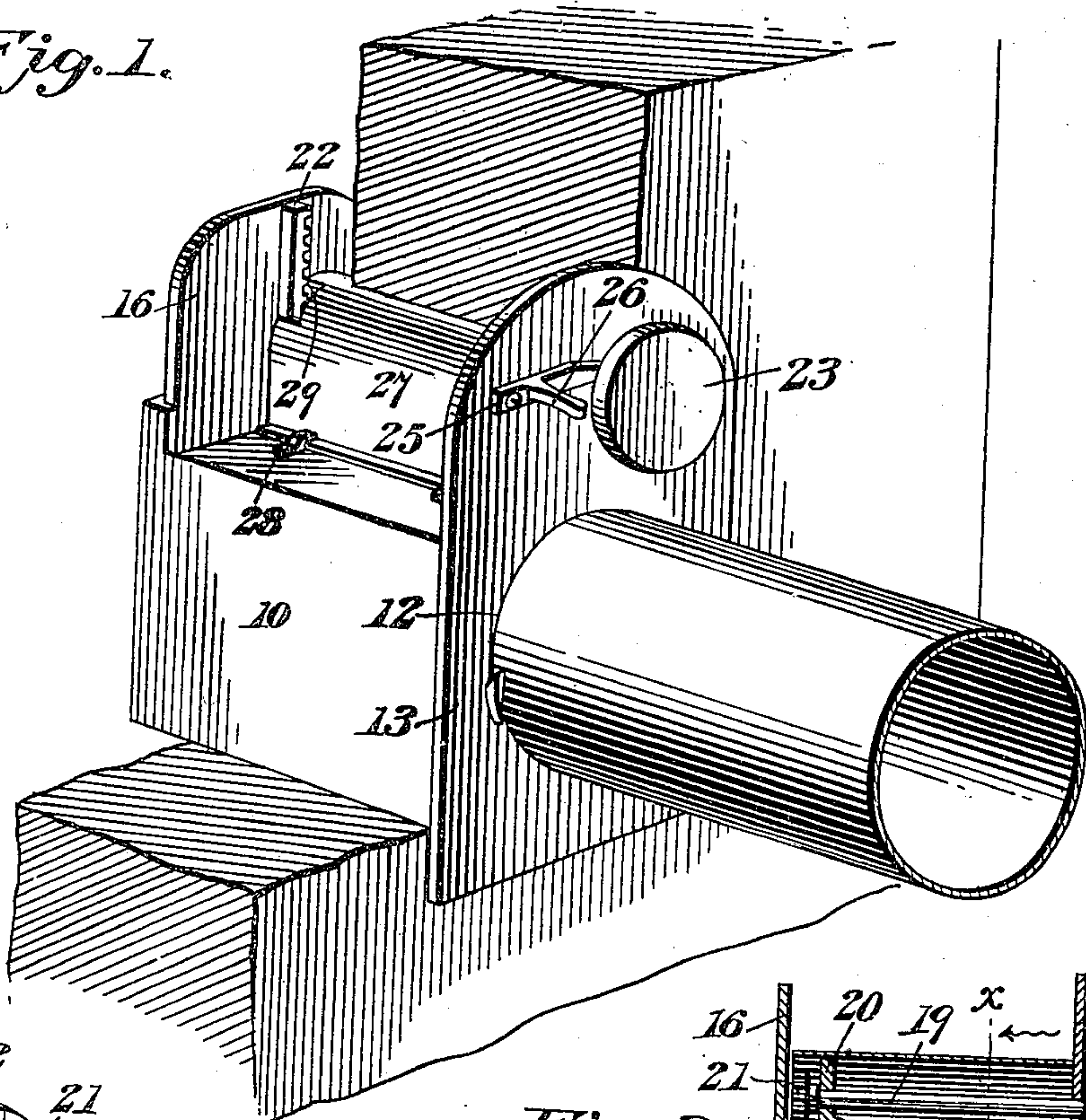


Fig. 2.

Fig. 3.

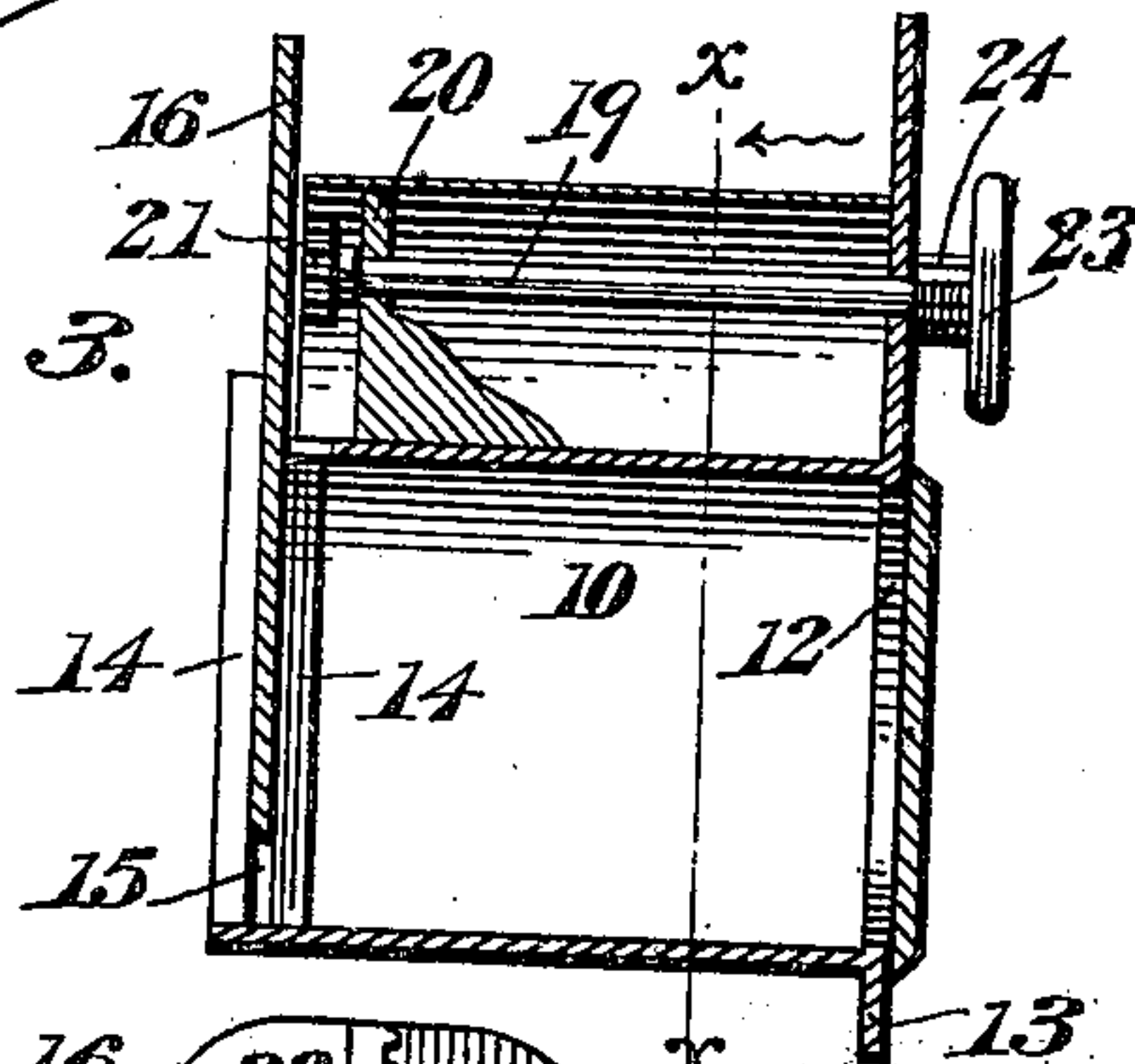
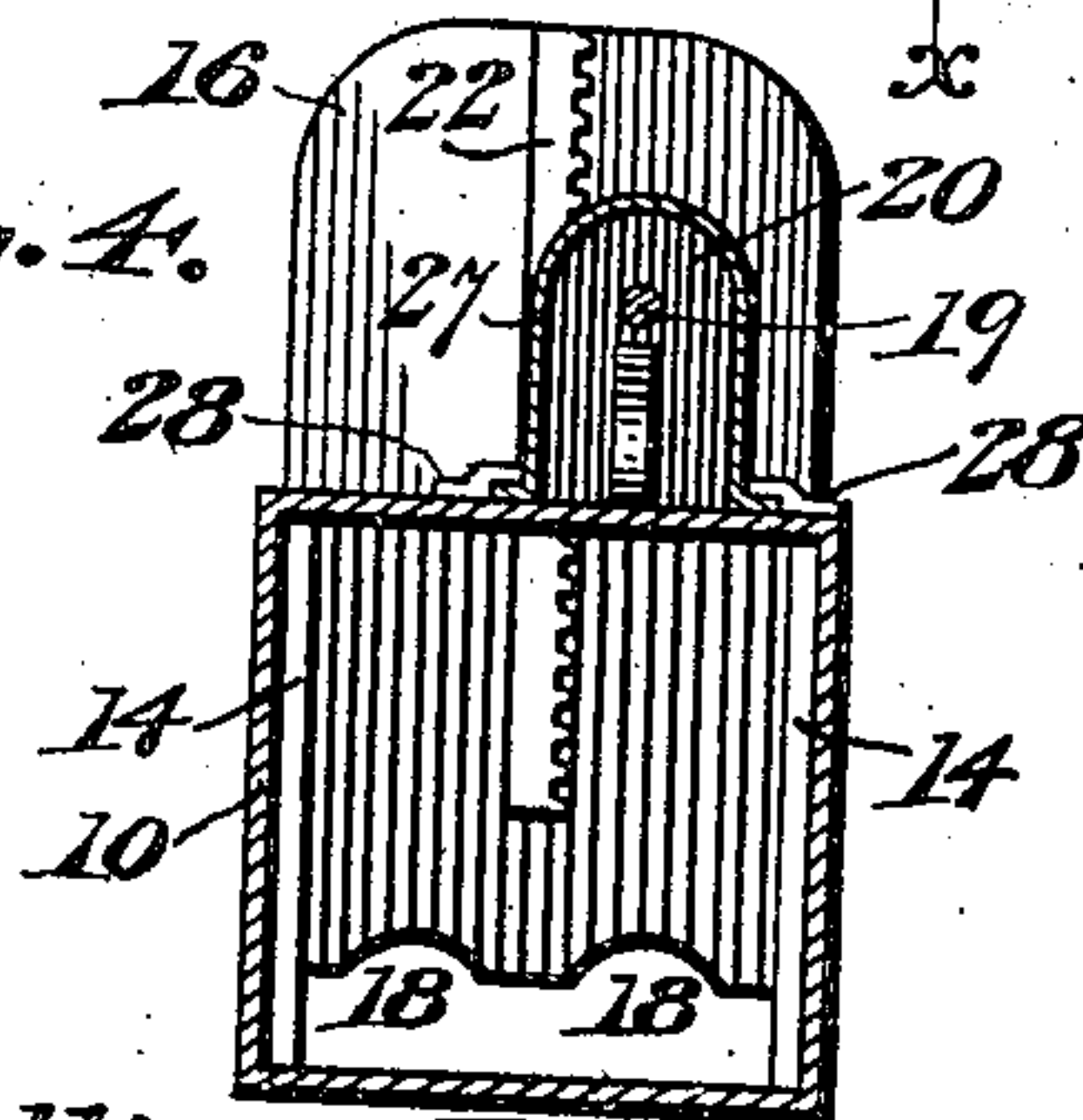


Fig. 4.



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Witnesses

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UNITED STATES PATENT OFFICE

WILLIAM T. SANFORD, OF LAKEVILLE, MASSACHUSETTS.

STOVEPIPE-THIMBLE.

SPECIFICATION forming part of Letters Patent No. 670,063, dated March 19, 1901.

Application filed May 29, 1900. Serial No. 18,475. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. SANFORD, a citizen of the United States, residing at Lakeville, in the county of Plymouth and State of Massachusetts, have invented a new and useful Stovepipe-Thimble, of which the following is a specification.

This invention relates to improvements in stovepipe-thimbles; and the object thereof is to provide a device of this character having means whereby the draft of the stove may be regulated as desired without the necessity of having a damper in the stovepipe.

The preferred form of the invention is described in the following specification and shown in the drawings which accompany the same, and in which—

Figure 1 is a view of a portion of a chimney, showing my invention applied thereto. Fig. 2 is a perspective view of the device detached from the chimney with the casing removed. Fig. 3 is a longitudinal section. Fig. 4 is a cross-section on the line *xx* of Fig. 3.

The invention consists, essentially, of a thimble comprising a boxing, one end of which is provided with a stovepipe-opening, the other end having a damper and operating mechanism arranged upon the boxing and connected with the damper, whereby the latter may be adjusted to regulate the opening into the chimney.

In the drawings, 10 designates the boxing, which is preferably rectangular in cross-section. The front wall of the boxing is provided with the circular stovepipe-opening 12, and this wall preferably extends on all sides beyond the walls of the boxing, forming a facing-plate 13, adapted to rest against the wall of the chimney. The rear end of the boxing is provided along its vertical inner edges with pairs of flanges 14, which form guideways 15 for the damper 16, that is arranged to slide vertically in said guideways, and thereby open and close this end of the boxing. The damper 16 preferably comprises a flat metal plate having cut-away portions in its lower end, forming draft-openings 18.

In order to raise and lower the damper, an operating-shaft 19 is provided, which is arranged above the boxing, being supported at one end by the journal-bracket 20 and the

other end extending through the upper portion of the facing-plate 13. The rear end of this shaft is provided with a pinion 21, that engages the vertical rack 22, arranged on the inner face of the damper 16. The projecting end of the shaft 19 is provided with an operating-wheel 23, and a ratchet-disk 24 is interposed between this wheel and the facing-plate, said ratchet-wheel being engaged by a dog 25, pivotally mounted upon the facing-plate and having an operating-handle 26.

In order to protect the operating mechanism from soot and cinders, a casing 27 is provided. This casing preferably comprises a sheet-metal plate bent to a circular form and covering the shaft 19 and pinion 21. The edges of the casing are provided with outwardly-bent flanges, which are adapted to be sprung under the keepers 28, arranged on the top of the boxing. An opening 29 is arranged at the rear end of the boxing, which allows the rack 22 free movement through the casing.

In order to close the pipe-opening 12 when not in use, a flat metal plate circular in form and slightly larger in diameter than the opening is provided. The opposite side portions are cut away, as at 30, forming the abutments 31, which are preferably beveled at their lower edges and fit in correspondingly-beveled keepers arranged on opposite sides of the openings. It will be evident that when this cover is slipped into place on account of the beveled keepers it will be held in close contact to the face-plate and completely close the opening.

In the operation of the device it will be evident that by rotating the operating-wheel the damper may be raised or lowered as desired and will be held at the proper adjustment by the dog engaging in the ratchet-wheel.

It will thus be seen that a damper is provided directly in the thimble, whereby the necessity of one in the pipe is obviated. Furthermore, the operating mechanism is arranged outside of the thimble and is completely protected from the dirt, smoke, and cinders.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art with-

out further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

10 1. A stovepipe-thimble, comprising a boxing having open ends, a damper slidably mounted upon one end, and an operating-shaft mounted exterior to the boxing and operatively connected with the damper to provide for a sliding movement thereof, whereby the latter may be operated to regulate the draft through the boxing, substantially as described.

20 2. A stovepipe-thimble comprising an open-ended boxing, a damper slidably mounted upon one end of the boxing, an operating-shaft mounted upon the outside of the box-

ing and operatively connected with the damper, and a casing connected to the boxing and arranged to house the operating mechanism for said damper, substantially as described.

3. A stovepipe-thimble comprising an open-ended boxing, a damper slidably mounted upon one end of the boxing and provided with a rack, an operating-shaft journaled upon the boxing, one end of said shaft being provided with a pinion which engages the rack, the other end of said shaft being provided with an operating device, and a casing for said shaft and pinion, substantially as described.

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

WILLIAM T. SANFORD.

Witnesses:

GEORGE W. STETSON,
SARAH B. KINGMAN.