

(No Model.)

J. DOHENY.

FIRE GRATE FOR STOVES.

No. 312,261.

Patented Feb. 17, 1885.

FIG. 1

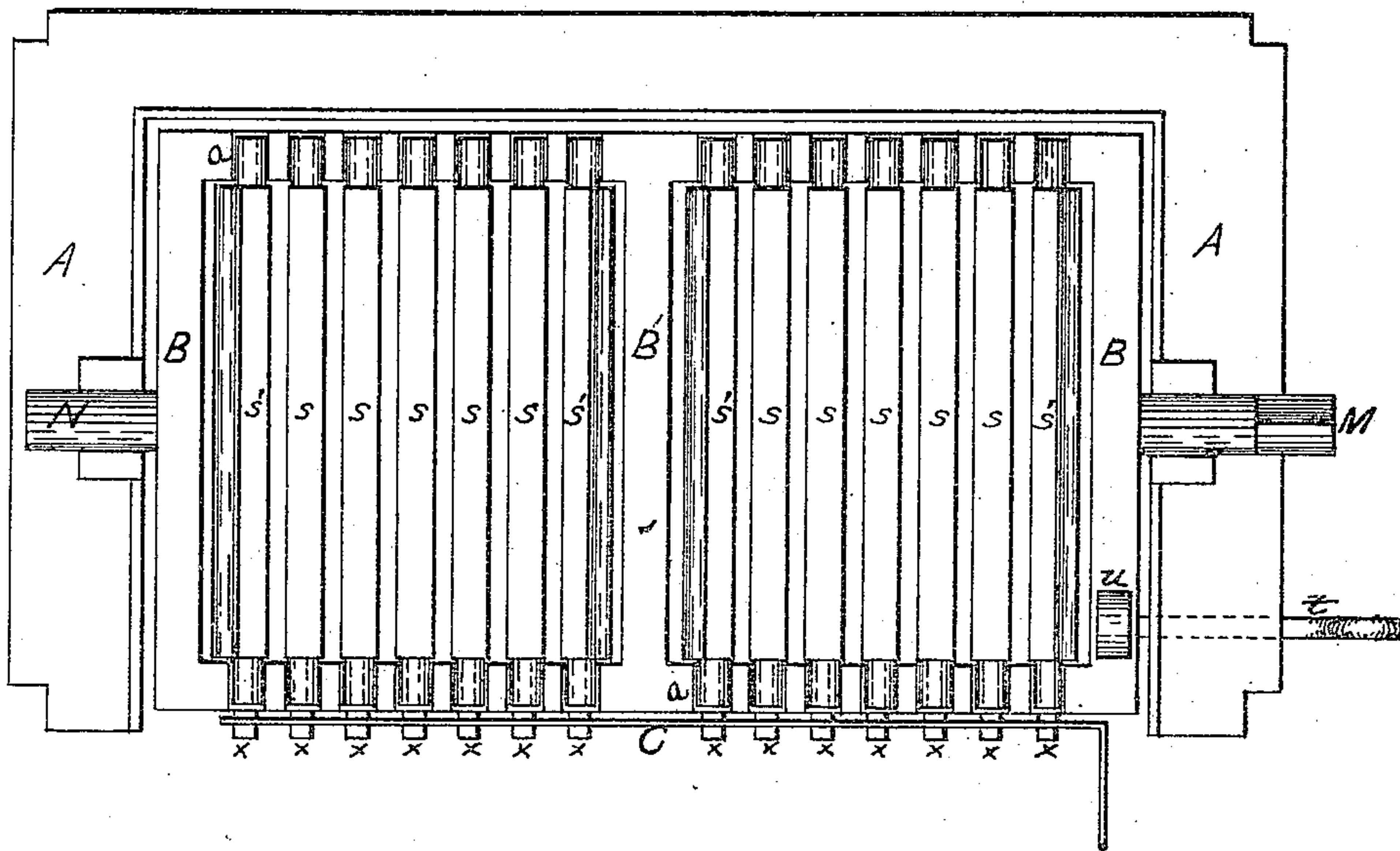


FIG. 2.

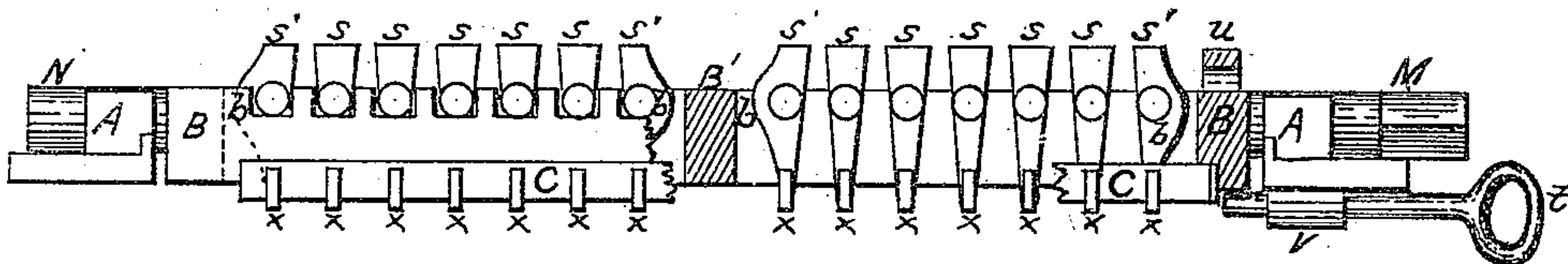
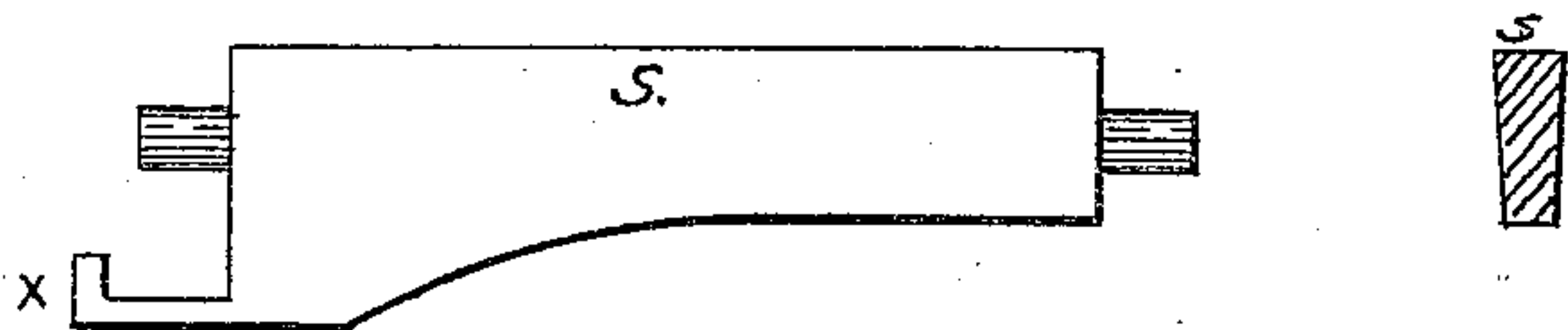


FIG. 3.



WITNESSES.

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FIRE-GRATE FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 312,261, dated February 17, 1885.

Application filed January 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES DOHENY, a citizen of the United States, residing at the city of Geddes, county of Onondaga, and State of New York, have invented a new and useful Improvement in Grates for Stoves, of which the following is a specification.

My invention relates to a grate having independently detachable grate-bars; and it consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

Figure 1 is a plan view of the complete grate with brick rest or foundation, except in front.

Fig. 2 is a front view of the grate with a portion cut away, showing the grate-bars in their sockets and connecting with the shaking-bar. Fig. 3 shows a side view of the grate-bar together with a section of back end thereof.

Similar letters refer to similar parts in the several views.

A A represent the brick-rests; B B, the grate-frame with equidistant sockets *a a*; B', the center piece; *s*, the grate-bars; *s'*, the end and center end grate-bars; C, the shaking-bar; *x*, the arm bent at right angles to enter the mortises in the shaking-bar; *t*, the pin or bolt passing through a loop on the under side of brick frame and entering into loop *v* underneath the grate to hold grate in position; *u*, the loop on top of grate, into which bolt *t* is pushed to hold the grate at an angle for removing cinders.

In Fig. 2, *bb* represent the beveled or rounded outer sides of the end and center end grate-bars.

In Fig. 3, *s* represents a detached grate-bar with round tenons on either end, and *x* the arm bent at right angles and extending forward

from the shoulder. The grate-frame B is provided with journals M N, that are supported in the brick-rests A A.

I remove the ashes from the cinders by attaching a lever or hook to the arm of the shaking-rod C and moving it back and forth. I remove the cinders from the coal by using a wrench upon the projecting end of the journal M, withdrawing the bolt *t* from underneath the grate-frame, and pushing the same into loop *u*, and then raking them out in front. I raise up the rear ends of the grate-bars and detach them from the frame.

It is apparent that by rounding the outward sides of the grate-bars at the ends and center ends I provide an equidistant surface which does not clog when the ashes are shaken from the cinders, that by making my grate-bars separately detachable I render my grate very durable, and that by dividing my grate-frame in the center with a wide center-piece I prevent the center draft, thereby deadening the heat in the center and throwing it directly underneath the stove-openings.

Having thus fully described my invention, what I claim is—

The combination, with the socketed grate-frame B, having a broad central cross-piece, B', of the detachable grate-bars *s s'*, the outer sides of the end bars and center end bars being rounded for the purpose of always preserving the same space between said bars and the grate-frame, and thereby prevent clogging while the grate is being shaken, substantially as described.

JAMES DOHENY.

Witnesses:

HOMER WESTON,
M. F. SHERLOCK.