

(No Model.)

M. KUEHNLE.

AUTOMATIC SLIDING SHELF FOR COOK STOVES.

No. 355,180.

Patented Dec. 28, 1886.

Fig. 1.

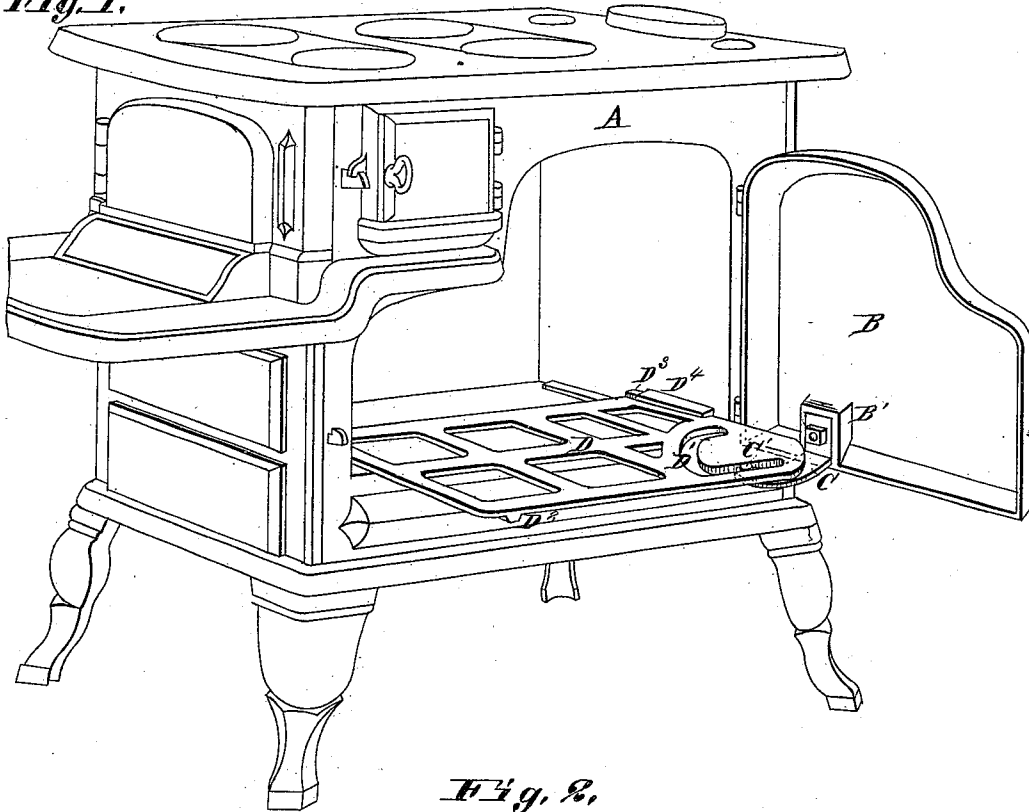
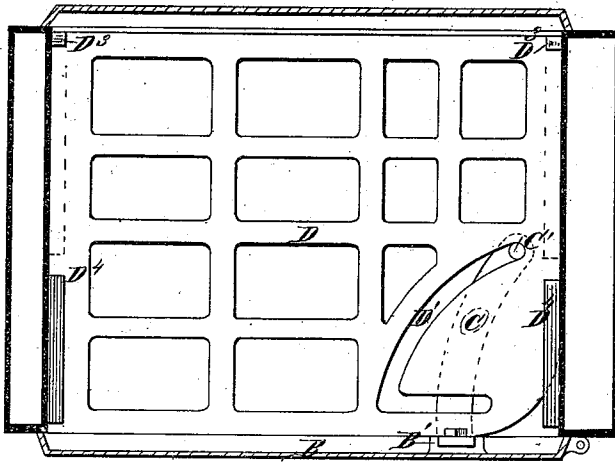


Fig. 2.



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MATTHEW KUEHNLE, OF ST. LOUIS, MISSOURI.

AUTOMATIC SLIDING SHELF FOR COOK-STOVES.

SPECIFICATION forming part of Letters Patent No. 355,180, dated December 28, 1886.

Application filed September 14, 1885. Serial No. 177,030. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW KUEHNLE, of the city of St. Louis, in the State of Missouri, have invented certain new and useful
5 Improvements in Automatic Sliding Shelves for Cook-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in
10 which—

Figure 1 is a perspective view of a stove embodying my invention, showing one of the doors open and the shelf pulled out. Fig. 2 is a horizontal section of the stove just above
15 the shelf, showing the doors closed.

My invention relates to certain improvements in automatic sliding shelves for cook-stoves; and my invention consists in features of novelty, hereinafter fully described, and
20 pointed out in the claims.

Referring to the drawings, similar letters of reference illustrate like parts in both the figures.

My invention as an attachment to cook-
25 stoves presents an easy automatic means of withdrawing the oven-shelf simultaneously and in conjunction with the opening of the door for the inspection of the roast, &c.

A represents an ordinary cook-stove, and
30 B one of the oven-doors to the same.

C is an arm or lever secured to a projection, B', on the door, or attached to the door in any other suitable way. This arm has a
35 teat or lug, C', that works in a slotted way, D', of the sliding shelf D.

It will be seen that as the door B opens, the lug C' on the end of the arm moves freely in the groove until it reaches the sharp curve
40 near the edge of the shelf. It then follows a course parallel thereto, so that the door opens at first free of any action on the shelf sufficiently for inspection, and when it operates the shelf the course of the slot is so nearly
45 that of the lug that engages in it, so that it is operated very steadily—an object of considerable importance—as the contents of the pans are frequently of a liquid nature; and in other cases—as with bread, cakes, and biscuit—any jar is apt to make them sad and
50 heavy.

D² are ridges or runners beneath the shelf on which it slides on the bottom of the oven, although I do not confine myself to that means

of supporting the shelf, for it is evident it may run on the usual ledges or side brackets
55 provided in the ovens of cook-stoves, and may also be thus used for upper shelves as well as lower ones without departing from the essential features of my invention.

D³ are projections or stop-pins on the sliding shelf, which, when it has reached the intended extent of its withdrawal, come in contact with projections or lugs D⁴, that stop its
60 further progress. These projections, which overlap the shelf, also steady its motion as it slides, and when it has reached its limit of withdrawal prevent its tilting. When the
65 shelf is made to slide on the usual supporting-ledges, similar projections are used to steady its movement, stop its entire withdrawal, and
70 prevent its tilting.

It will be seen that the gradual curved way in which the pin of the withdrawing-arm works operates on the shelf without any danger of disturbing the contents of the dishes
75 resting on the same.

My automatic shelf is easily attached to any ordinary cooking-stove.

I claim as my invention—

1. The combination, with a stove, the door
80 having an arm projecting therefrom, and a lug on said arm, of a sliding shelf having a slot, said slot being parallel with the outer edge of the shelf for a short distance and then curved outwardly toward the side of the shelf, substantially
85 as and for the purpose set forth.

2. The combination, with a stove, the door having an arm projecting therefrom, and a lug
90 on said arm, of a sliding shelf having a slot curved outwardly from the outer edge of said shelf and parallel therewith for a sufficient distance, and in which the lug of said arm works, runners on the shelf, stop-pins, and overlapping
95 lugs against which said stop-pins impinge and prevent the withdrawal of the shelf, substantially as and for the purpose set forth.

3. The combination, with a stove, the door having an arm projecting therefrom, and a lug
100 on said arm, of a sliding shelf having a slot, a portion of which is parallel with the outer edge of the shelf, substantially as and for the purpose set forth.

MATTHEW KUEHNLE.

In presence of—

BENJN. A. KNIGHT,
GEO. H. KNIGHT.