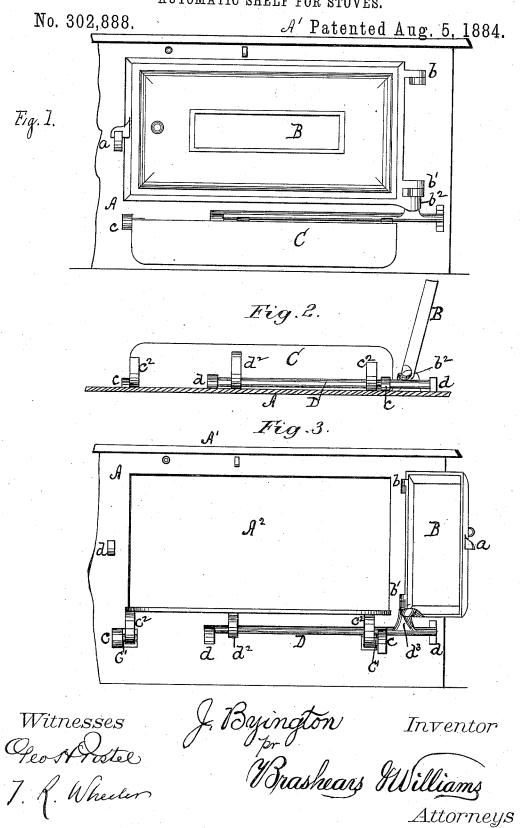
J. BYINGTON.

AUTOMATIC SHELF FOR STOVES.



UNITED STATES PATENT OFFICE.

JUSTIN BYINGTON, OF COLUMBIA, PENNSYLVANIA, ASSIGNOR TO THE KEELEY STOVE COMPANY, OF SAME PLACE.

AUTOMATIC SHELF FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 302,888, dated August 5, 1884.

Application filed August 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, Justin Byington, residing at Columbia, Lancaster county, Pennsylvania, have invented certain new and useful Improvements in Automatic Shelves for Stoves, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a front view of a stove, partly broken away, showing my improvements, the door being closed and the shelf hanging vertically. Fig. 2 is a bottom view of the shelf and door, the shelf being horizontal and the door open, the front wall of the stove being shown in section; and Fig. 3 is a front view of the parts in the same position as shown in Fig. 2.

Like letters of reference mark the same

parts in all the figures.

A is the front, and A' the top, of any ordinary stove or range provided with an oven, A², having a door, B, mounted at one side on hinges b b', and held closed by an ordinary latch, a. The hinge b is of ordinary construc-25 tion, and the door is of a hollow or box form, as shown. The front A is provided with bearings c, to receive pins c', projecting laterally from lugs c^2 , attached to the lower side or bottom of a shelf, C, whereby said shelf is 30 hinged to the outside of the stove. The front is further provided with lugs d, to receive a bar, D, which has attached to it an arm, d^2 , and a cam-shaped arm, d^3 , the latter of which engages with a cam-shaped projection, b2, attached to and forming part of the door B and hinge b'. The arm d^2 and cam-piece d^3 are set on the bar D at an angle of about one hundred and twenty degrees to each other. When the oven-door is closed, as in Fig. 1, the shelf 40 hangs vertically outside the stove, the capacity of the oven being increased by reason of the hollow formation of the door. When the door is opened, however, the cam projection b^2 engages with the cam-arm piece d^3 , causing the bar D to turn on its axis, thus bringing the arm d' into a horizontal position, and raising the shelf to a horizontal position, the top being on a level with the floor of the oven. When the door is closed, the shelf falls by gravity to its vertical position.

These improvements can be applied to the door in front of the fire-box or the ash-box.

I am aware that stoves have been fitted with doors and shelves in front of the oven, to be automatically raised and lowered by said doors 55 in opening and closing, and I do not, therefore, broadly claim such construction.

Having thus fully described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Pat- 60

ent, is-

1. The combination of a door hinged to the front of a stove, a shelf located outside of and hinged to the stove, and a bar supported in lugs attached to the front of the stove, said 65 bar having an arm to engage with the shelf and a cam-piece to engage a corresponding projection on the door, whereby the opening and closing of the door automatically raises and lowers the shelf through the medium of 70 said bar, as set forth.

2. The combination of the stove-front, the door B, hinged thereto, the shelf C, also hinged thereto, the bar D, supported on lugs d, and having arm d^2 and cam-piece d^3 , and the cam 75 projection b^2 on the door, as set forth.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

JUSTIN BYINGTON.

Witnesses:

J. W. YOCUM, FRED. W. HECKEL,