F. KUMBER & H. & E. HAENZE. STOVE DOOR.

APPLICATION FILED NOV. 18, 1902. NO MODEL. Fig. 1. Hig. 5. Hig. 6. Frederick Humber;
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94,600018

United States Patent Office.

FREDERICK KUMBER, HENRY HAENZE, AND EMIL HAENZE, OF PITTSBURG, PENNSYLVANIA.

STOVE-DOOR.

SPECIFICATION forming part of Letters Patent No. 747,731, dated December 22, 1903.

Application filed November 18, 1902. Serial No. 131,850. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK KUMBER, HENRY HAENZE, and EMIL HAENZE, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Stove-Doors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in attachments for stoves, latrobes, and furnaces, and has for its object the provision of novel means where
by the draft may be regulated to any desired

degree.

The present invention is particularly applicable for stove-doors having a rotary movement wherein it is desired to automatically lock the door at any desired point, providing means for regulating the heat and economizing in the use of fuel.

A still further object of our invention is to construct a device of the above-described character that will be extremely simple, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

Our invention still further consists in the novel construction, combination, and arrangement of parts, as will be hereinafter more specifically described and then particularly pointed out in the claim.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will indicate like parts throughout the several views, in which—

Figure 1 is a vertical cross-section through
the stove provided with our improvement.
Fig. 2 is a fragmentary cross-sectional view
taken at right angles to Fig. 1. Fig. 3 is a
detail plan view of the hinge disassembled.
Fig. 4 is an elevation of the crank. Fig. 5
is a similar view of the gravity-pawl. Fig. 6
is a detail view of the ratchet-wheel. Fig. 7
is a side elevation of the stove, partly broken

away and being provided with our improvement.

In the drawings the reference-numeral 1 50 represents the body of the stove, in which is secured a shaft 2. Upon this shaft is rigidly secured a segmental door 3. The shaft 2 extends through the walls of the stove 1 and has secured thereto a ratchet-wheel 4, carry- 55 ing a boss 5, in which is arranged a set-screw 6, providing means for securely attaching said ratchet - wheel to the shaft. The shaft 2 carries a square end 7 to receive the crankhandle 8, which is retained in proper po- 60 sition by means of the split key 9. To the rear face of the front wall of the stove is secured a hinge 10, in which is pivotally secured a gravity-pawl 11, carrying a handle 12, the latter being provided at its lower end 65 with a hook portion 14, which is adapted to engage the teeth of the ratchet-wheel 4.

The operation of our improved device is as follows: The crank 8 is operated until the door has reached the desired position, when 70 the hook portion 14 of the gravity-pawl 11 will engage one of the teeth of the ratchet-wheel, which will tend to lock the shaft 2, carrying the door 3, in the desired position. When it is desired to again adjust the door, the handle 12 of the gravity-pawl is operated, thereby releasing the engagement of the gravity-pawl and permitting the readjustment of the door.

It will be noted that the parts may be 80 easily assembled and removed when desired; furthermore, that in case any of the parts should become broken new parts may be readily substituted. It is further to be noted that slight changes may be made in the details of 85 construction without departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with the body of the stove provided in its front wall with an opening, a shaft journaled in the stove, a door carried by said shaft for closing said opening, a

ratchet-wheel secured to the shaft exterior of the stove, said shaft extending beyond said ratchet-wheel and having a squared end, with a crank adapted to be engaged over said end, a hinge secured to the rear face of the front wall of the stove, and a pawl connected to the hinge and engaging said ratchet-wheel.

In testimony whereof we affix our signatures in the presence of two witnesses.

FREDERICK KUMBER.

HENRY HAENZE.
EMIL HAENZE.

Witnesses:

H. C. EVERT, JOHN GROETZINGER.