

Joseph A. Grefset Dec'd. Imp'd Oven.

2 sheets

72194

PATENTED
DEC 17 1867

Fig. 1.

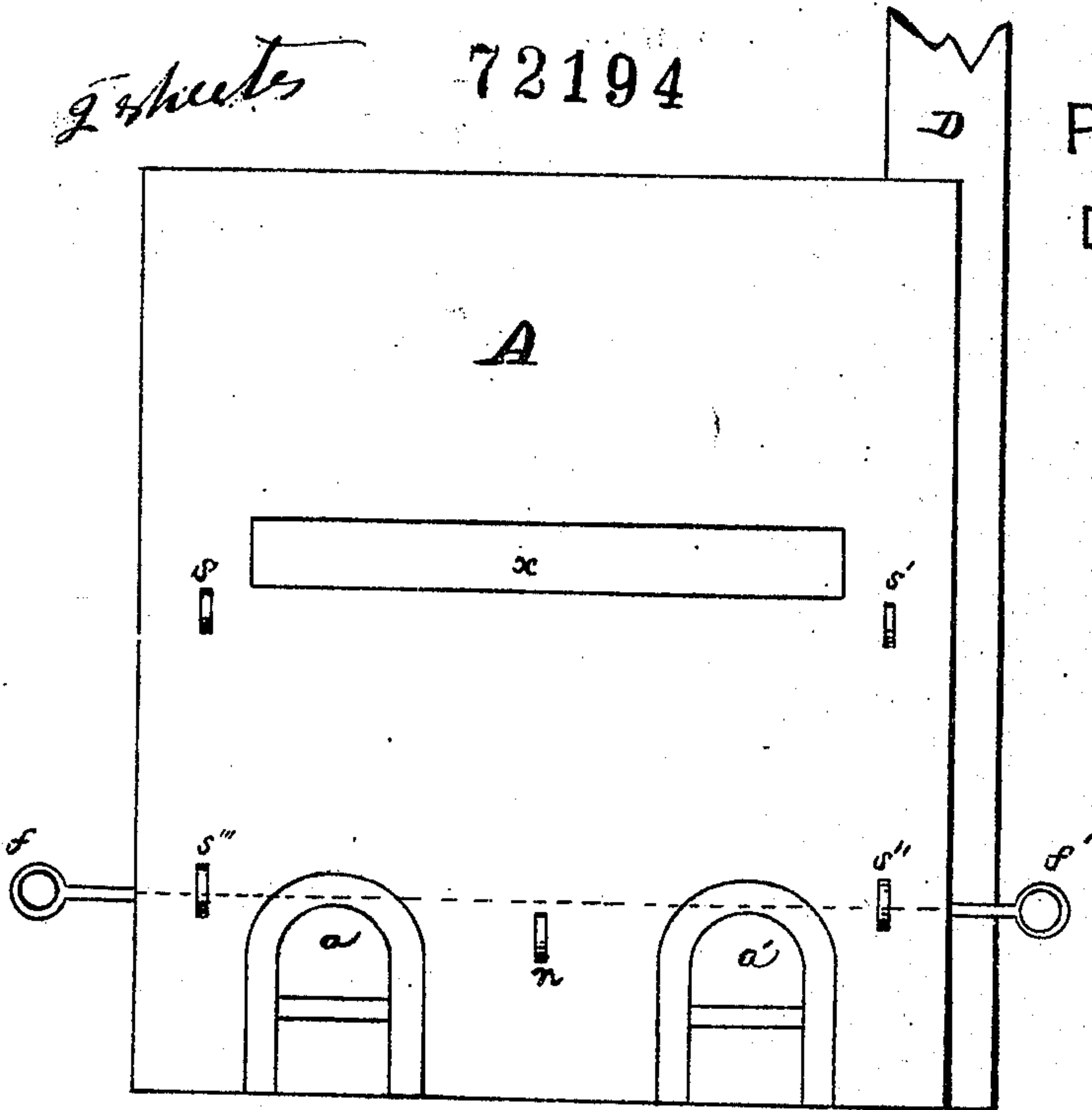
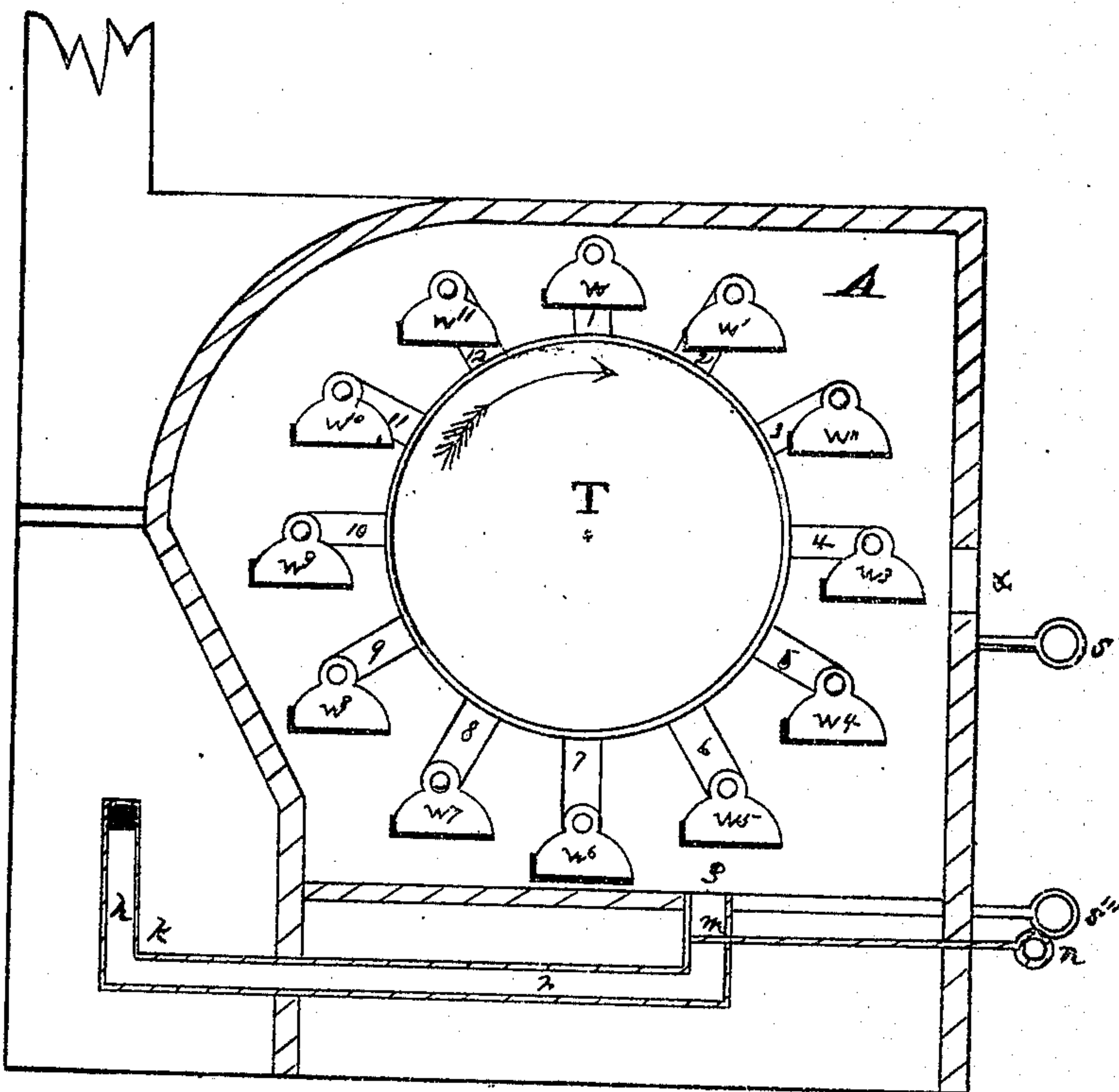


Fig. 2.



Witnesses:

Daniel B. Boyd

Henry E. Carter

Inventor:

Joseph A. Grefset

2,194

Joseph A. Greffet ^{Deed.} *2 sheets* ^{Spect. 2.} *Imp'd. Oven.*

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Fig. 1.

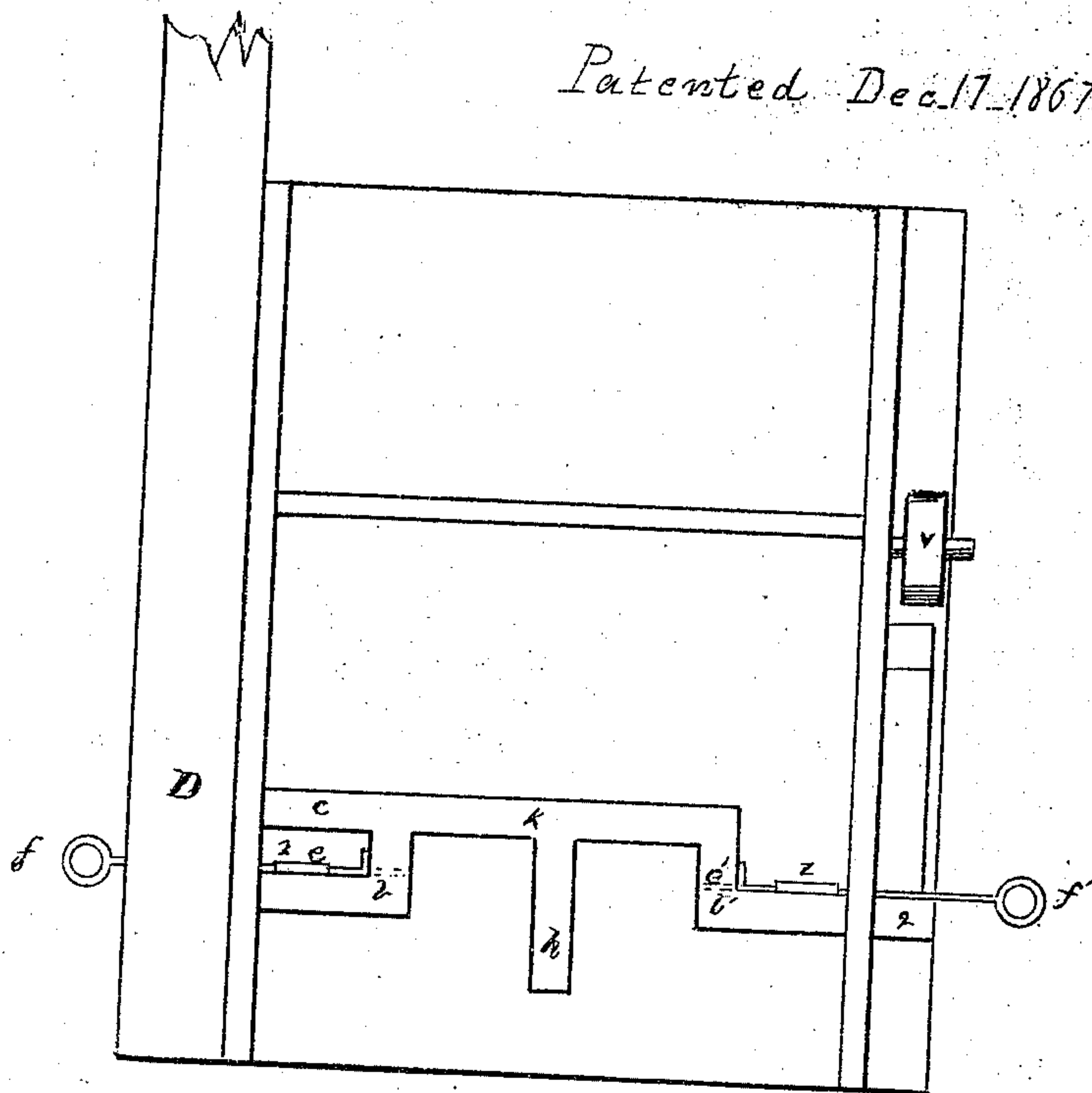
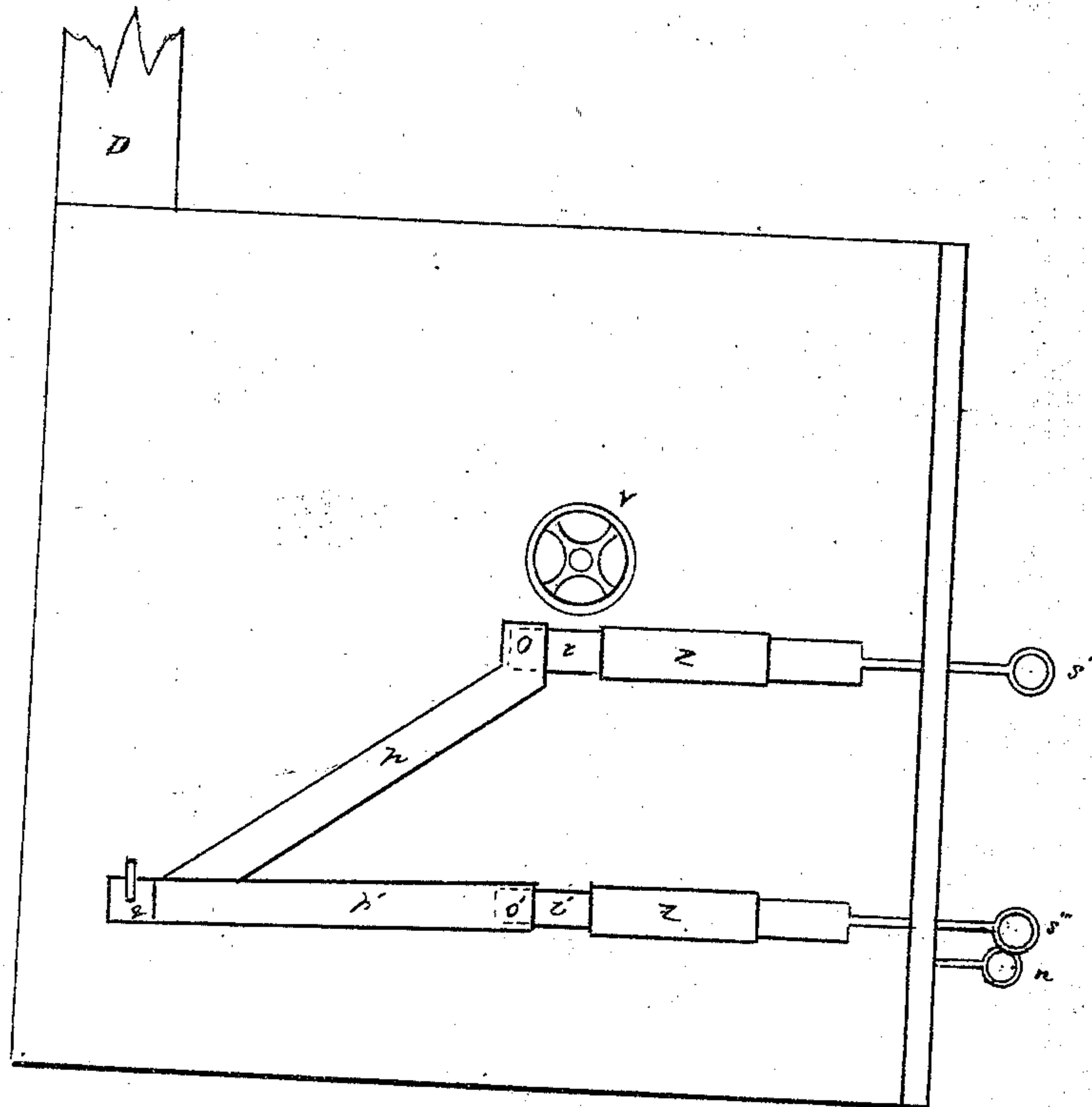


Fig. 2.



Witnesses:

Samuel S. Boyd

Henry J. Carter

Inventor:

Joseph A. Greffet

United States Patent Office.

EMILY S. GREFFET, OF ST. LOUIS, MISSOURI, ADMINISTRATRIX OF THE
ESTATE OF JOSEPH A. GREFFET, DECEASED.

Letters Patent No. 72,194, dated December 17, 1867.

IMPROVEMENT IN REEL-OVENS FOR BAKERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that JOSEPH A. GREFFET, deceased, late of the city and county of St. Louis, State of Missouri, did in his lifetime invent a new and useful Improved Oven, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, plate 1, represents a front view of said oven.

Figure 2 represents a longitudinal sectional elevation of same.

Figure 1, plate 2, represents a rear elevation of said oven.

Figure 2 represents a side elevation of same.

Similar letters indicate like parts.

This invention is designed to produce an oven more particularly adapted to the baking of crackers on a large scale.

The oven A is built in the ordinary manner, lined with fire-brick, its sides arching and forming a dome, and having two furnaces, *a a'*, fig. 1, plate 1, beneath, with arched roofs extending nearly the whole length of the oven, but having a considerable space between them. From the back end of each extends a flue, one passing out of the rear of the oven at *b*, and one at *b'*, fig. 1, plate 2, and both connecting with the flue *c* opening into the chimney D, built in the corner of the oven. Two dampers, *e e'*, fig. 1, plate 2, attached to the rods *f f'*, fig. 1, plates 1 and 2, serve to regulate the draught of the flues *b b'*. In the centre of the oven, and between the furnaces, is an opening, *g*, from which a flue, *h*, fig. 2, plate 1, extends to the rear of the oven, and there connects by an elbow, *k*, with the flue *c*, fig. 1, plate 2. By this the oven is freed from the ashes that are apt to accumulate, and its operations are controlled by the damper *m*, connected with the rod *n*, figs. 1 and 2, plate 1, and fig. 2, plate 2. On either side of the oven are two openings, of which two are seen at *o o*, fig. 2, plate 2, connecting with four flues, two of which are shown at *p p'*. These four flues connect with the flue *c*, two of them at *q*, figs. 1 and 2, plate 2, and the other two with the same flue, on the other side of the oven in the rear of the chimney D. Four dampers control these flues, two of them being shown at *r r'*, fig. 2, plate 2, and to the dampers are attached four rods *s s' s'' s'''*, fig. 1, and *s' s''*, fig. 2, plate 2, and *s' s''*, fig. 2, plate 1, by means of which they are operated. All these rods pass through guiding straps as at *z z'*, figs. 1 and 2, plate 2. A sheet-iron drum, T, fig. 2, plate 1, supported upon a shaft having its bearings in the sides of the oven, is made to revolve in the oven by means of a belt passing around the driving-pulley *v*, figs. 1 and 2, plate 2, on the outside of the oven. From each end of the drum extend radial arms, 1 2 3 4 5 6 7 8 9 10 11 12, to which are attached pans, *w w¹ w² w³ w⁴ w⁵ w⁶ w⁷ w⁸ w⁹ w¹⁰ w¹¹*, swinging freely upon pivots in such a manner that when the drum revolves, they will retain their horizontal position. The drum and the pans extend from one side of the oven to the other, just space enough being left at either end to allow the same to revolve. There is a door, *x*, figs. 1 and 2, plate 1, in the face of the oven, by means of which the crackers are placed on the pans from the "peel" and removed therefrom. The fires having been started, when the oven is sufficiently hot, the drum being made to revolve in the direction indicated by the arrow, the pans, as they come in succession before the door are supplied with the articles to be baked, and relieved of them as they are done. When it is desired to cool the oven for the purpose, for instance, of baking crackers requiring a less degree of heat, the dampers *r r'* shown in the drawing, and the corresponding ones on the opposite side of the oven, not shown, are opened, and the draught of the chimney soon carries off the surplus heat. When the oven is sufficiently cooled, the dampers are closed and the pans filled as before.

The peculiarity of this invention consists in attaching the pans to a drum instead of a frame, as has been the method heretofore followed. The advantage of this is in the more equal distribution of the heat throughout the oven, by the radiation from the drum, and in keeping a heated surface continually in contact with the pans. Another great advantage is the perfect control the operator has over the temperature of the oven, by means of the flues *p p' p'' p'''*, by which the heat can be almost instantaneously reduced to the desired intensity—a very desirable thing in baking different kinds of crackers, requiring, as they do, various degrees of heat. The flues *p p'* alone are shown in the drawing, but *p'' p'''* are on the opposite side of the oven in the same relative position, and of exactly the same construction as *p p'*.

It is not claimed that the deceased was the first inventor of the arrangement of the revolving pans in an oven, nor of the use of the ash-flue; but

What is claimed as the invention of the deceased, and for which Letters Patent are desired, is—

1. The combination of a drum with the revolving pans of an oven, when constructed and arranged substantially as shown and specified.
2. The arrangement of the regulating-flues *p p' p'' p'''* of an oven, with their respective dampers and operating-rods, when constructed and arranged substantially as shown and specified.

EMILY S. GREFFET,
Administratrix.

Witnesses:

SAM'L. S. BOYD,
HENRY T. CARTER.