

(No Model.)

J. H. FRENCH.
STOVE PIPE SHELF.

No. 360,427.

Patented Apr. 5, 1887.

Fig. 1.

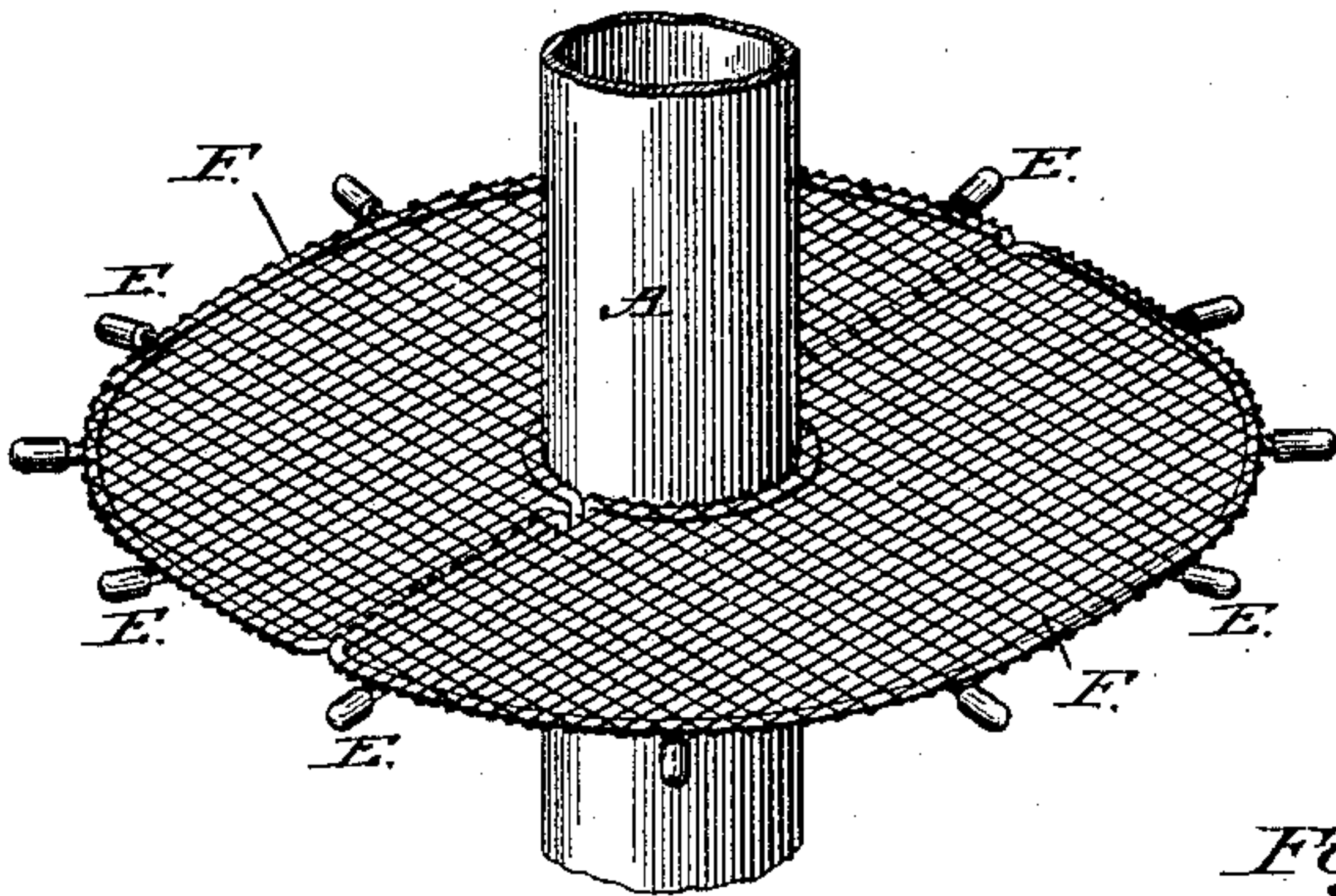


Fig. 6.

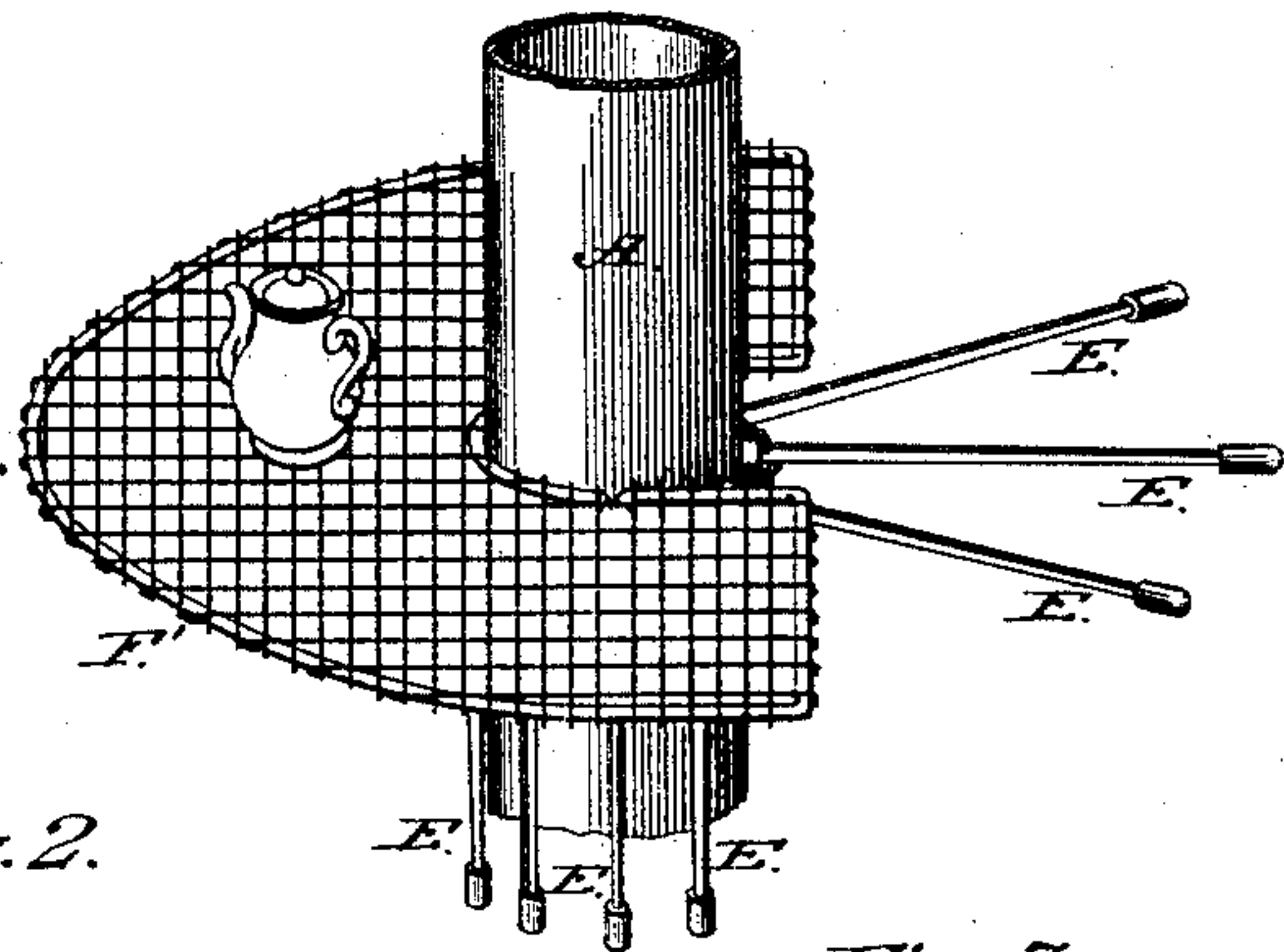


Fig. 2.

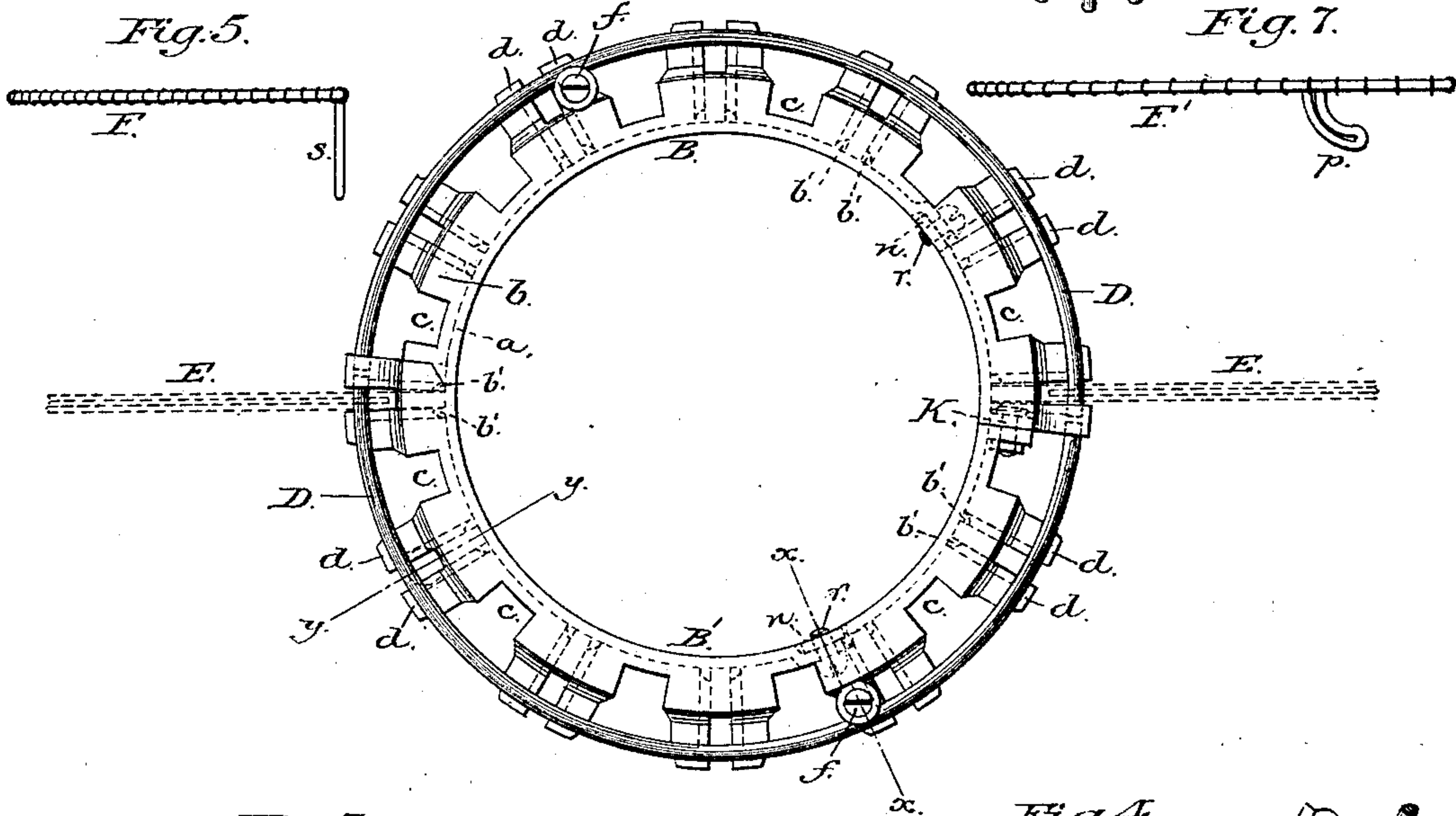


Fig. 5.

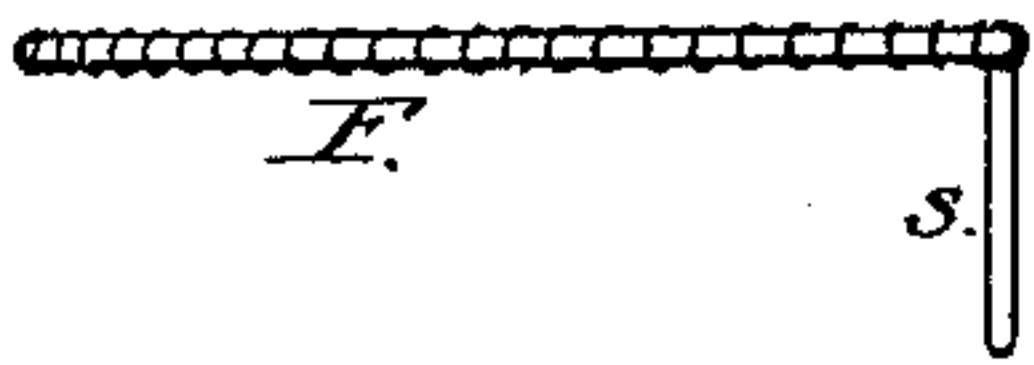


Fig. 7.

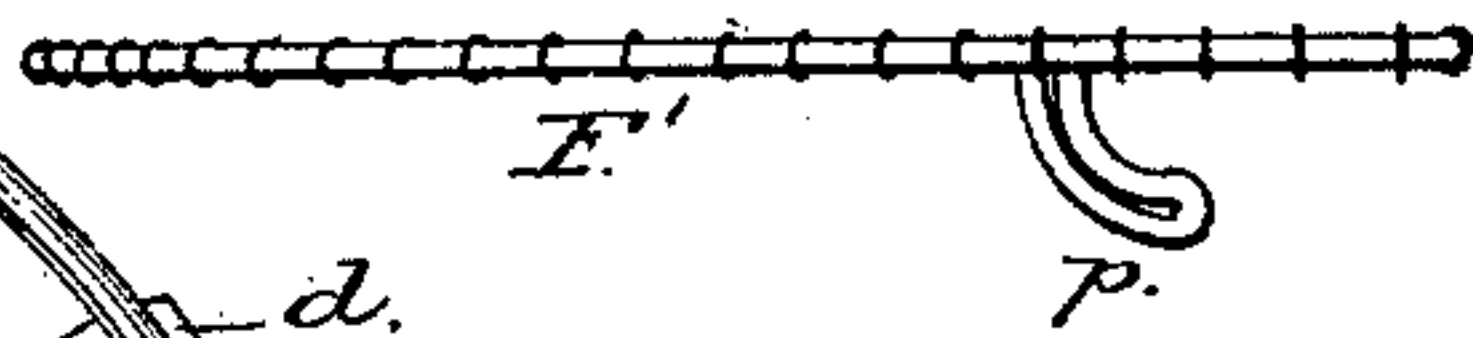


Fig. 3.

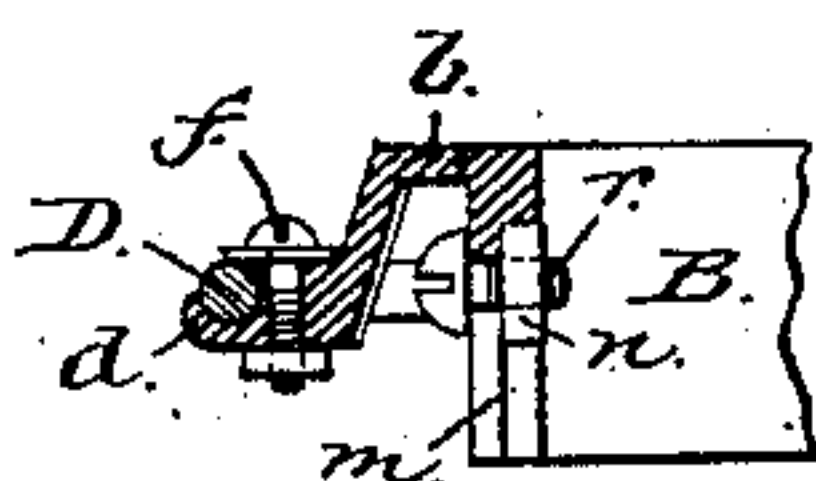


Fig. 8.

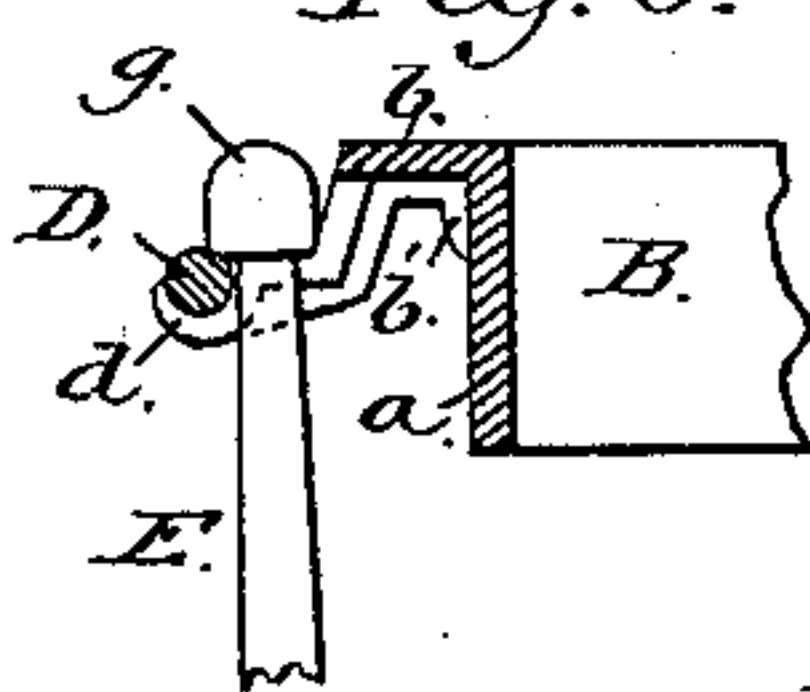


Fig. 4.

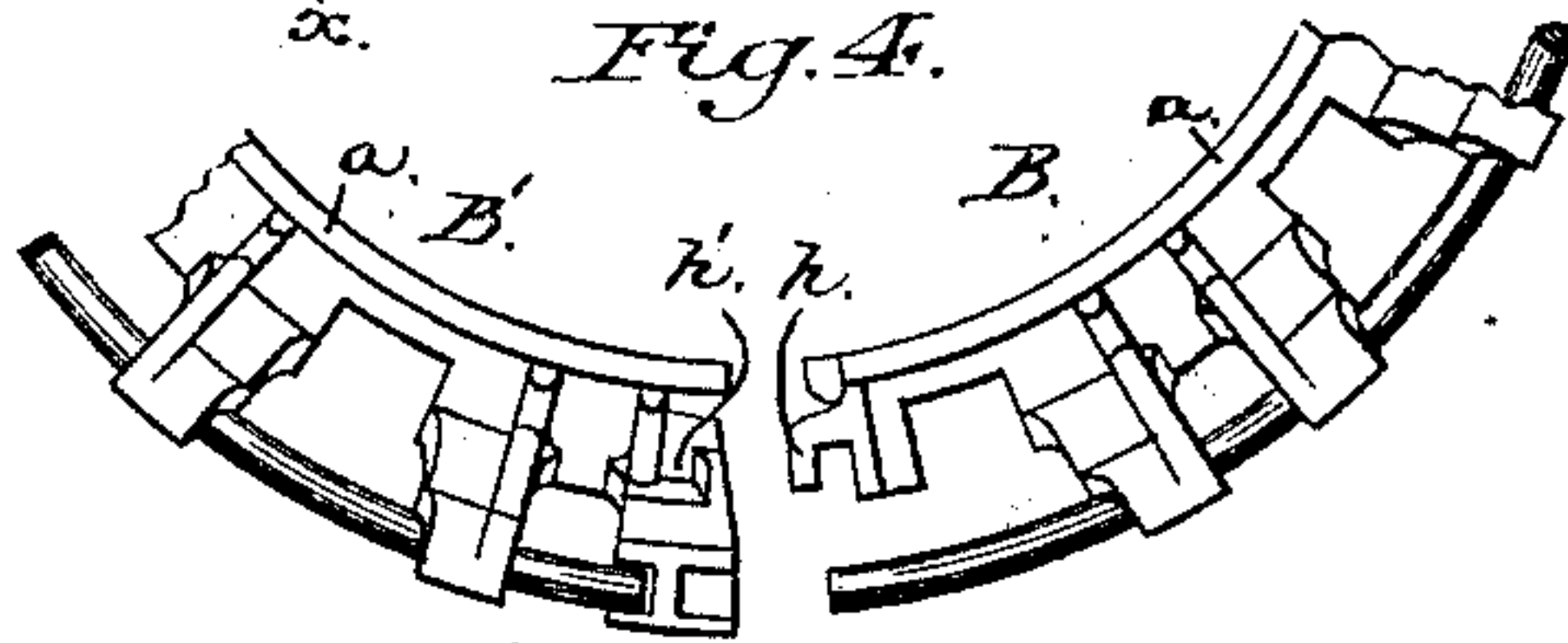
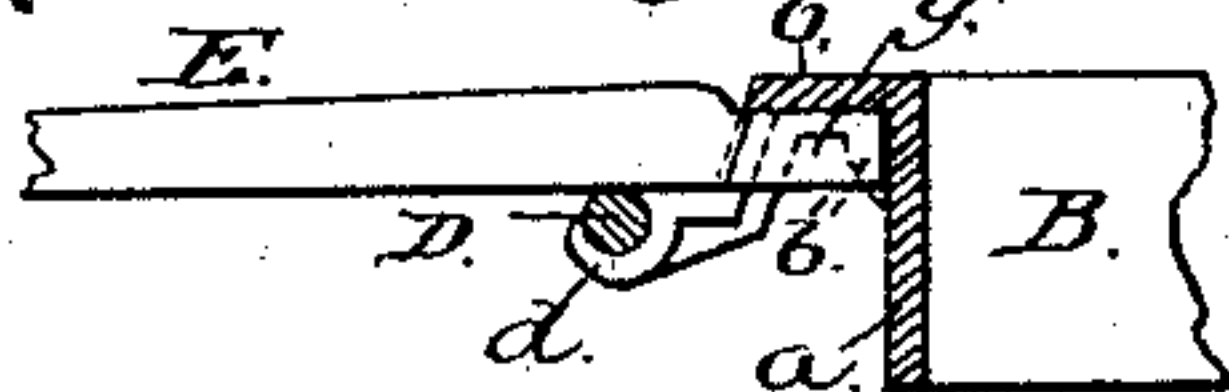


Fig. 9.



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STOVE-PIPE SHELF.

SPECIFICATION forming part of Letters Patent No. 360,427, dated April 5, 1887.

Application filed March 9, 1885. Serial No. 158,152. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. FRENCH, of the city of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Stove-Pipe Shelves; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of stove-pipe shelves in which a divided collar is adapted to be clamped around and made fast to a stove-pipe and to support a series of adjustable radial arms arranged to be extended in a horizontal position when required for use in supporting the shelf and to be dropped parallel with the pipe when not required; and it consists in certain improvements in the construction of the supporting-collar and in the combination therewith of a detachable shelf, as hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of a fruit-drying shelf encircling and supported upon a stove-pipe by means of my improvement; Fig. 2, a plan view of the divided collar by which the shelf is supported, its radial swinging arms being omitted; Fig. 3, a detached sectional view in line *x x* of Fig. 2; Fig. 4, a detached view of a portion of the under side of the collar, illustrating the interlocking joint connecting its two sections; Fig. 5, a side elevation of one section of the fruit-drying shelf; Fig. 6, an elevation in perspective of a modification of the shelf constructed for use as a warming-shelf; Fig. 7, a side elevation thereof, illustrating the device by which the shelf is attached to the supporting-collar independently of its radial arms; and Figs. 8 and 9 are sectional views in line *y y* of Fig. 2, illustrating, first, one of the radial arms of the collar dropped, and, second, the arm extended.

A represents the stove-pipe; B B', Fig. 2, a divided collar or ring adapted to encircle the pipe. This collar is made in two semicircular sections and is constructed of a band, *a*, from whose upper edge projects a flange, *b*, (see Figs. 2, 3, 8, and 9,) which is cut away at regular intervals, *c c*, to admit of the engagement of the

band by the hooks of a detachable warming-shelf. From the outer edge of each projecting piece of the flange two fingers, *d d*, depend, (see Figs. 3 and 8,) and these fingers are recessed on their ends to receive a wire rim, D, adapted to rest therein and be supported thereby. An arm or rod, E, Figs. 1, 6, 8, and 9, is inserted between each pair of fingers, and is confined, with freedom to move longitudinally between them, by means of the rim D, which, laid in its seat on the several fingers, is confined by means of two bolts, *f f*, Figs. 2 and 3, whose heads are made to overlap the rim, as shown in Fig. 2. The longitudinal movement of each rod is arrested by a knob or head, *g*, (see Fig. 8,) on its outer end, and by an enlargement, *g'*, at its inner end, said enlargement *g'* being adapted, when the rod is drawn out to its full extent over the rim D, to fit under the radial flange *b* and between lugs *b' b'*, projecting from the outer side of the band *a*, as shown in Fig. 8.

Thus when not needed each rod hangs between the fingers and the rim by the knob on its outer end, as shown in Fig. 8; but when required for the support of the shelf it is drawn out over the rim and supported in a horizontal position by the engagement of its inner end with the under side of the overhanging flange *b*, as shown in Fig. 9.

The two semicircular divisions or sections of the collar are united at one end to encircle the stove-pipe by an interlocking joint formed of a hook-shaped lug, *h*, Fig. 4, on the end of one section, adapted to engage a counterpart recess, *h'*, in the adjacent end of the other section, as illustrated in Fig. 4, and at the opposite end by means of two radial lugs, which, when brought together face to face by the union of the sections of the collar, are secured by means of clamp-bolt K, as shown in dotted lines in Fig. 2.

One or more recesses, *m*, Fig. 3, are sunken into the inner side of the band *a*, to receive the nut *n* of an ordinary small stove-bolt, *r*, and the edge of the band is notched or slotted in the center of the recess to receive the body of the bolt, its head being left projecting outside the band *a*, as illustrated in Fig. 3. The nut, when thus inserted into the recess *m*, is confined therein between the band of the collar

and the stove-pipe, so that by turning the bolt *r* its inner end may be forced through the nut against the stove-pipe hard enough to firmly clamp and secure the collar upon the pipe.

The collar B B', thus cheaply constructed and easily secured upon the stove-pipe A, affords, when its arms E E are drawn out and extended, a firm wide support for two semicircular shelves, F F', Fig. 1, which may be of light wire-work, with meshes small enough to hold such fruits as are to be dried thereon. The two shelves, when placed upon the arms of the collar, are prevented from slipping off by means of pins *s s*, (see Fig. 5,) projecting downward from the inner end of the straight edges thereof, in position each to enter one of the open spaces or notches in the flange *b* of the collar A on diametrically-opposite sides of the pipe.

A modification in the form of the shelf is illustrated in Figs. 6 and 7. It consists of but a single piece of stout wire-work, F', galvanized, after being woven, to solder its intersecting wires and render it strong and self-supporting, and whose two sides are made to project rearwardly beyond its semicircular recess, as shown in Fig. 6. This form of shelf, F', is secured to the collar A by means of two hooks, *p*, (see Fig. 7,) adapted to slip under the flange *b* of the collar at diametrically-opposite points thereof, and thus obtain a hold which is sufficient to support the shelf when the radial rods E E are dropped, as shown in Fig. 6.

For the purpose of placing the collar in position for use about the pipe, the bolts *ff*, Fig. 2, are detached and the sectional rim D lifted off. The bolt K is then removed, leaving the two sections B B' of the collar free to be separated and fitted around the pipe. They are reunited by means of the interlocking joint *h h* at one end and the bolt K led through the parallel radial offsets at the other. The collar is then made fast upon the pipe by screwing up the bolts *rr*, whose nuts, being inserted in the recesses in the inner side of the band of the collar, are kept thereby from turning as the bolts are screwed through them. The arms E E having then been inserted between the several pairs of fingers, the two semicircular sections of the rim D are each placed to rest in the grooves or recesses at the ends of the fingers, and confined and secured in place by means of the bolts *ff*, a washer being placed under the overlapping head of each screw to afford a wider bearing therefor upon the rim to hold it in place. The collar is now in readiness to receive the shelves F F' or F', which may rest upon the extended arms E E, or, if provided with the hooks *p p*, may be upheld

from the collar alone by the engagement of said hooks with the flange of the collar in manner as described. When the shelves are not required for use, they may be removed, and the extended arms E E will serve as a rack for drying towels, &c.

I am aware that stove-pipe collars have been heretofore constructed having two parallel horizontal flanges for supporting radial arms, and that netting of various descriptions has been stretched upon these radial arms; but my invention differs from the devices heretofore employed, in that a series of radial fingers are substituted for the lower flange and a detachable rim is combined with said fingers for the support of the bars inserted in between them, leaving the bars otherwise free and unconfined, to permit of their ready movement longitudinally as well as vertically, and that a detachable shelf of wire-netting is fitted upon the radial arms in such manner as to receive support therefrom, and is fastened by means of lugs or pins engaging the collar.

I claim as my invention—

1. The combination, with an annular collar B, divided to admit of being fitted and secured around a pipe, and having an outer flange, *b*, and a series of encircling radial fingers, *d d*, projecting from said flange, of a divided detachable confining-rim, D, resting in a groove upon the end of each finger, and a series of loose arms, F F', enlarged at each end and left free to move longitudinally and drop vertically between said fingers and to extend out horizontally over the rim D, substantially in the manner and for the purpose herein set forth.

2. The combination, with the annular collar B, divided to admit of being fitted and secured around a stove-pipe and provided with an outer radial notched flange carrying a series of radial fingers, *d d*, to support arms E E, fitted to move longitudinally between them, and a detachable rim, D, upon which the arms rest when drawn out and extended, and with a detachable shelf resting upon said flange and arms, of the pins or hooks P on the under side of the shelf, entering notches C, formed in the flange to receive them and permit their engagement with the radial fingers *d d*, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN H. FRENCH.

Witnesses:

P. ELBERT NOSTRAND,
A. B. MOORE.