(No Model.)

E. BARNARD.

PORTABLE STOVE PIPE SHELF.

No. 318,941. Patented June 2, 1885.

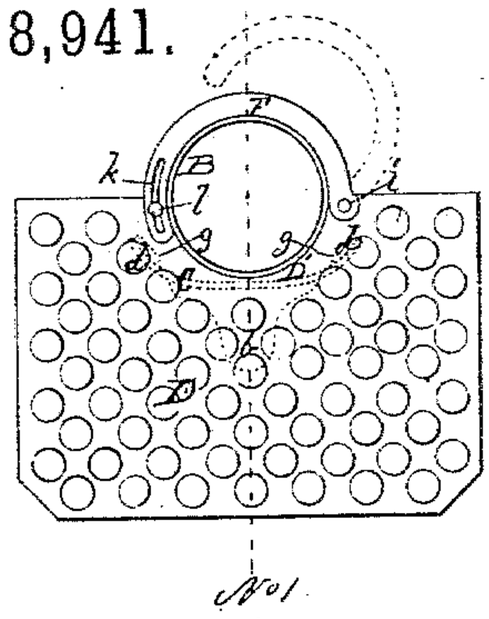

Fig. 1.

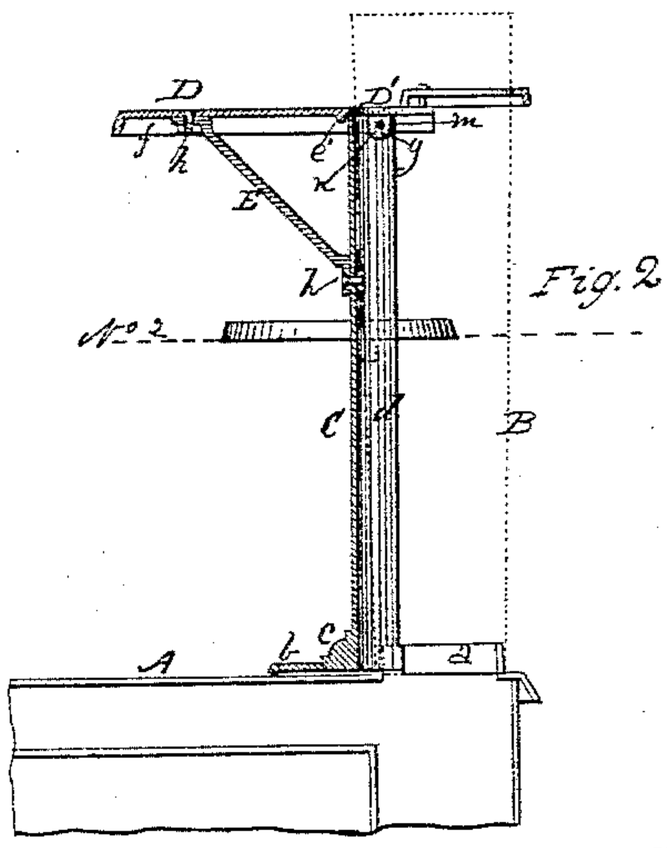

Fig. 2.

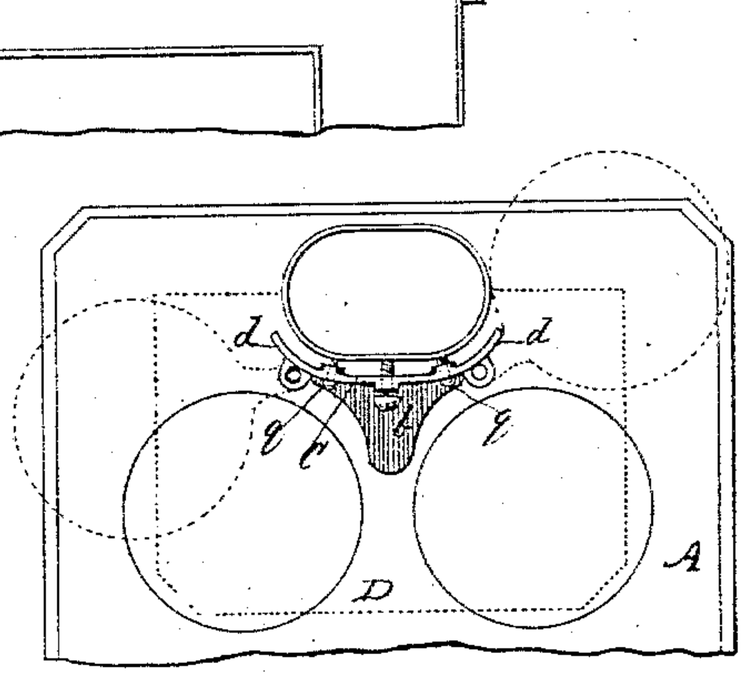

Fig. 3.

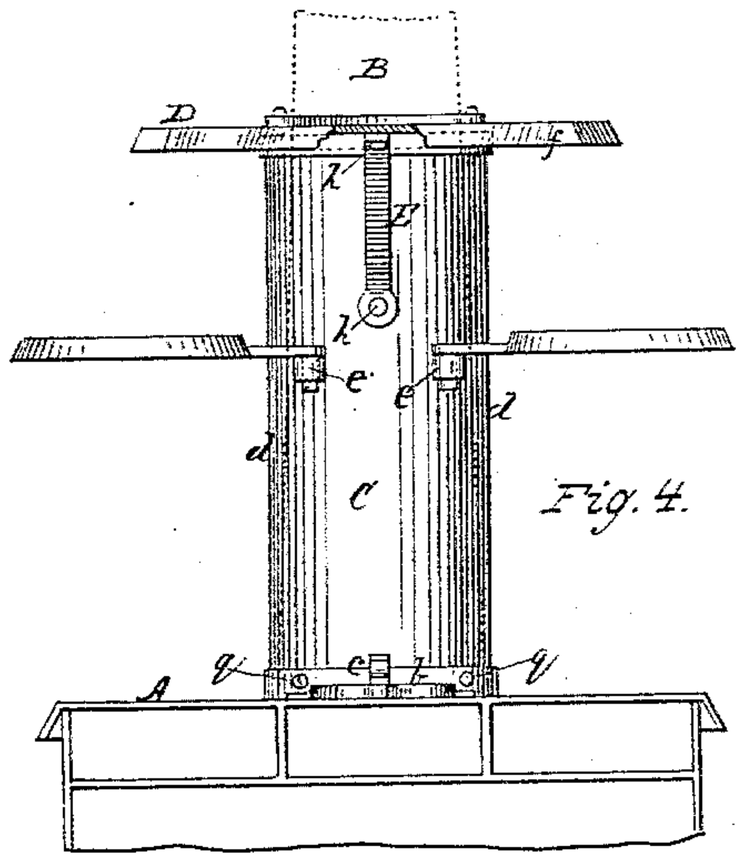

Fig. 4.

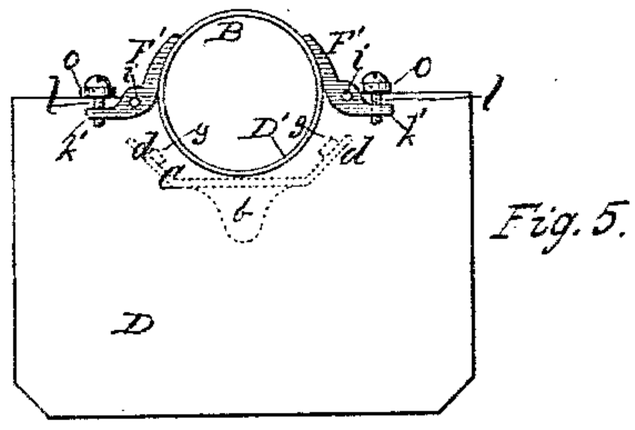

Fig. 5.

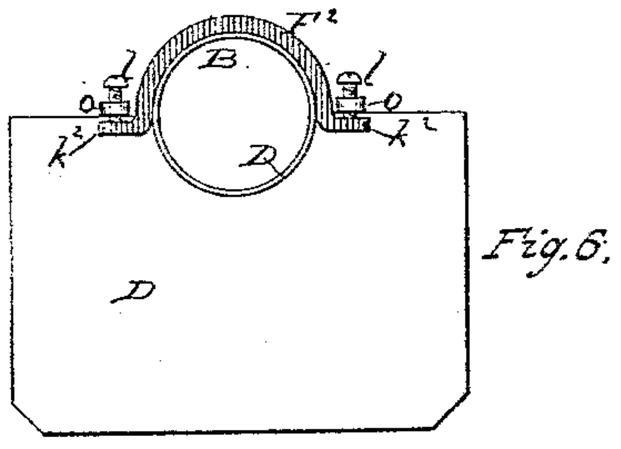

Fig. 6.

Witnesses:
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Louis Selkirk.

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Inventor.
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UNITED STATES PATENT OFFICE.

EVERTON BARNARD, OF ALBANY, NEW YORK.

PORTABLE STOVE-PIPE SHELF.

SPECIFICATION forming part of Letters Patent No. 318,941, dated June 2, 1885.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, EVERTON BARNARD, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Portable Stove-Pipe Shelves, of which the following is a specification.

My invention relates to a portable stove-pipe shelf in which a vertical standard having rearwardly-flaring side portions and forwardly-extended foot at its lower end, and provided with a bracing-piece, sustains a shelf mounted on the upper end of said standard, and the whole is held in place with the stove-pipe by devices connected with the shelf and clamping with the pipe.

The object of my invention is to provide a portable stove-pipe shelf which can be readily applied to any cook stove or range and its pipe without changing or adding to the stove or range any other devices than those used by me, as hereinafter particularly described. I attain this object by means of the mechanism illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan view of the shelf and its clamping device and the vertical standard. Fig. 2 is a sectional elevation of the same, taken at line No. 1 in Fig. 1, showing the invention. Fig. 3 is a horizontal view taken at line No. 2 in Fig. 2. Fig. 4 is a front elevation showing the invention. Figs. 5 and 6 are plan views of the shelf and modifications of the clamping device for holding the shelf in secure connection with the pipe.

The same letters of reference indicate like parts throughout the several views.

In the drawings, A represents the top plate of a stove, and B is the stove-pipe secured to said top plate by means of pipe-collar *a*.

C is the vertical shelf-standard, made, preferably, of cast metal, and with a length of about eighteen inches, (more or less,) as may be preferred. The lower end of this standard is provided with a right-angular portion, *b*, which I term the "foot." This foot projects forward from the vertical plane of the standard to a distance of three inches, (more or less,) and is preferably braced with the standard by brace *c*. The body of this standard is made with a width of about seven inches, preferably, and has its marginal side portions, *d d*, curved rearward, as shown in Figs. 2 and 3, or flared rearwardly, as shown in dotted lines in Fig. 5. This rearward extension of portions *d d*, together with the forward extension of foot *b*, having bearing on the top surface of the top plate of the stove, operates to hold the standard in a vertical position, the lower ends of portions *d d* operating to prevent the standard from tilting backward, while the foot *b* operates to prevent it from tilting forward. This standard may be provided with ears *e*, Fig. 4, for holding supplemental swinging shelves S.

D is the shelf, made of cast metal, with rim *f* at the ends and front side, for stiffening the same. Made into this shelf, from its rear side edge, at about the middle of its length, is the semicircular recession D′, made on a curvature of a circle nearly corresponding with that of the pipe B, of ordinary diameter—say of about five and one-half to six inches. Cast with this shelf, and on its lower side, is spud *e′*, for holding the shelf from shifting in relation to the upper end of standard C. Cast also solid with the shelf, and projecting downward from its lower side, are ears or lugs *g g*. (Shown by dotted lines in Figs. 1 and 5 and full lines in Fig. 2.) These lugs or ears are pierced, and are so situated that they will have bearing against the upper end portion of standard C, as shown. Standard C is pierced to receive the bolts *m m*, passing through ears *g g*. This shelf is placed on the upper end of standard C, with bolt-holes *n* in lugs *g* opposite bolt-holes in the standard, when bolts *m* will be applied and made to hold the shelf in secure attachment with the standard. This shelf is braced with the standard by brace E and bolts *h h*. This brace and the upper end edge of the rearwardly-projected side portions, *d d*, of the standard operate to hold this shelf in position at right angles with the vertical standard. The rearwardly-projected side portions, *d d*, of the standard operate to stiffen that piece, so that it will not be bent or deflected from a true vertical plane when the shelf is loaded.

F is a clamping device, made with such a form of construction as to adapt it to be applied to pipes of varying diameters—as, for

instance, to pipes of five or five and one-half or six inches in diameter. This clamping device may be made in the form shown in Fig. 1, consisting of the semicircular ring-piece, pivoted at one end, as at *i*, to the shelf, and having its opposite end provided with the curved slot *k*, by which this slotted end will be secured to the shelf by a set-bolt, *l*. This form of clamping device may be swung back on its pivot *i* to position of dotted lines shown in Fig. 1, when set-bolt *l* is removed, and will securely clamp the pipe B to the shelf when forced against the latter and secured by bolt *l;* or it may be made in the form shown in Fig. 5, in which the device consists in pieces F′, made with a curvature corresponding about with that of the pipe, and pivoted at *i* to the shelf, with their short limbs *k′* pierced, each with a screw-threaded hole, into which works adjusting-screw *l* after being passed through the pierced lug *o*, cast with shelf D. In this form of clamping device the clamping-pieces F′ will be forced to tightly clamp pipe B, when the adjusting-screws are turned to draw short limbs *k′* toward lugs *o′*. A reverse movement of these screws will release these clamping-pieces from the pipe; or the form shown in Fig. 6 may be employed, in which a semicircular clamping-piece F², made on a curvature corresponding about with pipe B, and provided with horizontally-extended ears *k²*, is employed in connection with lugs *o′*, pierced with a screw-threaded hole, and receiving adjusting-screws *l*, working through said lugs and against ears *k²*, to force the clamping-piece against the pipe.

One or more adjusting-screws (working through screw-threaded holes made in the lower end of standard C, as at *q*, and against the base or lower end of pipe) are provided for holding the lower end of standard C at one given distance from the pipe when the pipe is made to taper in its front and rear sides, as shown in Figs. 2 and 3. By these adjusting-screws *q* the standard C may be readily adjusted in a vertical position in all cases, whether or not the pipe is round or more or less oval and tapering in its front and rear side walls.

By means of my above-described improvements I am enabled to provide with a stove and its pipe a shelf which is readily detachable, and which may be readily attached to pipes which are circular in their walls throughout their entire length from the stove-top, or to pipes which have their lower ends oval in form and tapering in their front and rear side portions of wall.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

The vertical standard C, having its marginal side portions, *d d*, curved or flared rearwardly, and provided with the forwardly-extended foot *b*, in combination with shelf D, resting on the upper end of said standard, and secured by lugs *g g* to said standard, and brace E, connected with both the said standard and shelf, and devices connected with the shelf for clamping the same to the pipe, all substantially as described, for operations and purposes set forth.

EVERTON BARNARD.

Witnesses:
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