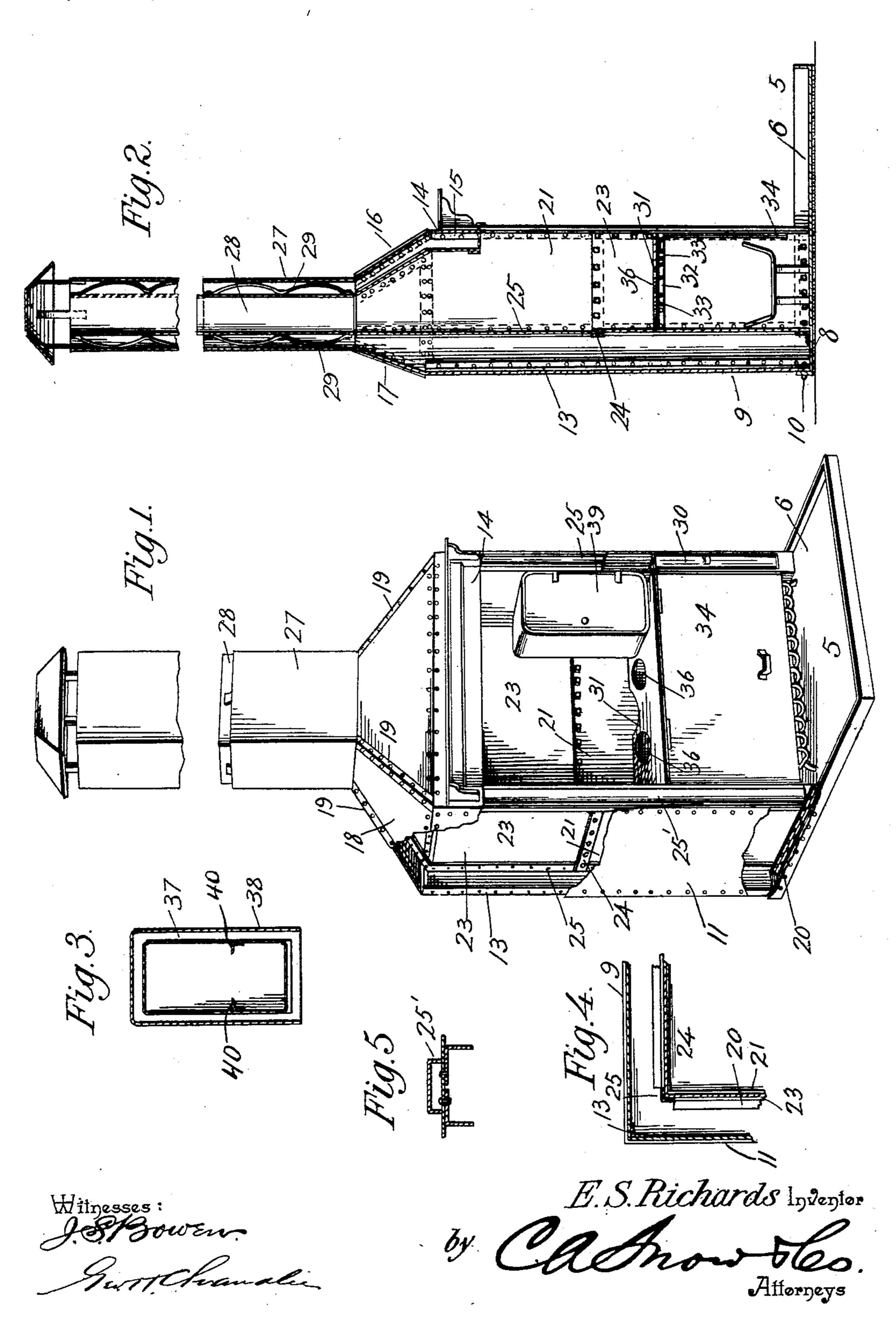
E. S. RICHARDS.

PORTABLE FIREPLACE AND CHIMNEY.

(Application filed Sept. 21, 1901.)

(No Model:)



United States Patent Office.

EPHRAIM S. RICHARDS, OF GRANDLAKE, ARKANSAS.

PORTABLE FIREPLACE AND CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 702,999, dated June 24, 1902.

Application filed September 21, 1901. Serial No. 76,072. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM S. RICHARDS, a citizen of the United States, residing at Grandlake, in the county of Chicot and State of Arkansas, have invented a new and useful Portable Fireplace and Chimney, of which the following is a specification.

This invention relates to fireplaces and chimneys of the portable variety; and it has for its object to provide a simple, cheap, and durable construction which may be readily put up and taken down and which may be used as a stove or open fireplace, as desired.

Further objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view, partly broken away and showing the complete structure set up. Fig. 2 is a central vertical section of the construction, taken from front to back. Fig. 3 is a vertical section through the oven. Fig. 4 is a detail horizontal sectional view illustrating the arrangement of the inner and outer side and back plates. Fig. 5 is a transverse section of one of the jambs.

Referring now to the drawings, the present construction consists of a base-plate 5, having its edges turned upwardly to form a front hearth portion 6 and a rear fireplace portion 8. Against the inner face of the rear upsturned edge is disposed the back plate 9 of the fireplace, which is held to the upturned edge by rivets or bolts 10, and abutting this back plate are the outer side plates 11, which are riveted or bolted to the rear portions of the inner faces of the upturned side edges of the base-plate, the abutting edges of the side and back plates being connected by angle irons or bars 13, disposed against the inner faces thereof, and to which they are bolted.

A front plate 14 is disposed against the upper portions of the front edges of the side plates and held in place by bolts engaged by the with angle-irons 15, which are in turn bolted to the side plates. A front top plate 16, a tween to back top plate 17, and two side top plates 18 are provided and are disposed with their lower edges upon the upper edges of the front, plates.

back, and side plates and are held in place by bolts engaged with angle-plates disposed against the inner faces of the connected 55 plates. Upon the outer faces of the top plates at their meeting edges are disposed other angle plates or bars 19, which are bolted in place, while a chimney-section in the form of a cross-sectionally rectangular box is secured 60 to the upper edges of the top plates, the top plates being all truncated, as shown, so that the space inclosed thereby is tapered up-

wardly to the chimney.

An inner sectional lining is provided for the 65 fireplace, and the plates thereof are attached at their lower edges to an angle bar or plate. The angle bar or plate is shown at 20 and is bolted to the base-plate and is of L shape, so that the leg and web portions thereof are par- 70 allel with the back and side plates of the outer shell of the fireplace. The sides and back of the inner portion of lining of the fireplace consist each of two plates, the lower plates 21 being bolted to the upwardly-projecting 75 portions of the angle-plate 20, which latter lies between the inner and outer walls of the fireplace. The upper edges of the lower plates and the lower edges of the upper plates 23 of the inner lining of the fireplace are bolted to So a plate which is of U shape and is disposed with its web and leg portions against the outer faces of these plates, this plate being shown at 24. To secure the side plates to the back plates, angle-plates 25 are provided and 85 are bolted over the meeting edges, so that they lie between the outer wall or shell and the lining of the fireplace. The upper back plate 23 of the lining is continued upwardly to the upper edges of the top plates of the 90 shell, while upon the upper edges of the side and front plates are disposed the side and front top plates, which terminate in the plane of the upper edges of the top plates of the shell, the inner shell or lining being spaced 95 from the outer shell, as shown, to form an air-space, and the front edges of the side plates of the shell and lining are connected by the jambs 25', which are U shape in crosssection, the legs thereof being disposed be- 100 tween the front edges of the side plate and the webs being projected slightly to limit inward movement of the jamb between the

Within the chimney-section 27 is disposed a lining 28, which is held spaced from the inner face of the section 27 by bowed spring plates 29, carried by the lining and bearing against the chimney-section to hold the lining in place while permitting of easy removal thereof. The remaining outer chimney-sections are likewise provided with linings, and the interspace between the chimney-sections and their linings forms a continuation of the interspace between the inner and outer top plates of the fireplace.

Upon the front portion of the base-plate and also within the fireplace may be placed tiles, bricks, or other suitable material to resist heat, and between such material and the plate may be placed asbestos to prevent burning of a wooden floor upon which the device may be placed.

Within the air-space between the side plates of the fireplace are placed water-tanks 30, resting on suitable supports to moisten the air, the air serving to prevent overheating of the outer shell of the structure.

A removable grate 30 is provided for the fireplace, and in order that cooking may be done over the fire in the grate a stove-top 31 is provided and is adapted to rest on angleplates 32, bolted to the inner faces of the 30 inner lower side plates of the fireplace, this stove-top being stiffened by longitudinallydisposed rails 33 on its under face. At the front of the plate 31 is hinged a plate 34, which hangs down over the front of the grate 35 to aid the draft and prevent the clothing of the cook from catching fire, this front plate having a handle, as shown. Holes 36 are formed in the top plate of the stove, and an oven is provided and consists of an inner 40 shell 37 and an outer shell 38, having an airspace between the sides, back, and top thereof, the air-space being over at the bottom, as shown in Fig. 3, to permit the hot air to rise thereinto. A door 39 is provided for the oven, and beads 40 permit of application of 45 a shelf therein.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various 50 parts without departing from the spirit of the invention.

What is claimed is—

1. A device of the class described comprising a base-plate, inner and outer side and 55 back plates spaced apart and secured together and to the base-plate, the side plates being provided at their front edges with inwardly-extending vertical flanges, top plates, and the approximately **U**-shaped jambs provided 6c at their side edges with longitudinal flanges fitted against the outer faces of the flanges of the side plates and secured to the same, substantially as described.

2. A device of the class described comprising the inner and outer side and back plates spaced apart, the base-plate connected with the said plates and extending in advance of the same to form a hearth, the inner and outer top plates spaced apart and connected with the side and back plates, the inner and outer flue-sections, the stove-top 31 located at a point between the base and top plates and provided at its front with a depending hinged plate, an oven located above the stove-75 top 31 at one side of the device, and the narrow water-tanks located in the spaces between the side plates, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 80 the presence of two witnesses.

the presence of two witnesses.

EPHRAIM S. RICHARDS.

Witnesses:

A. MEYER, A. H. FISCHEL.