L. L. FREUND.

CARRIER.

APPLICATION FILED APR. 19, 1920.

1,374,372. Patented Apr. 12, 1921.

Fig. 1

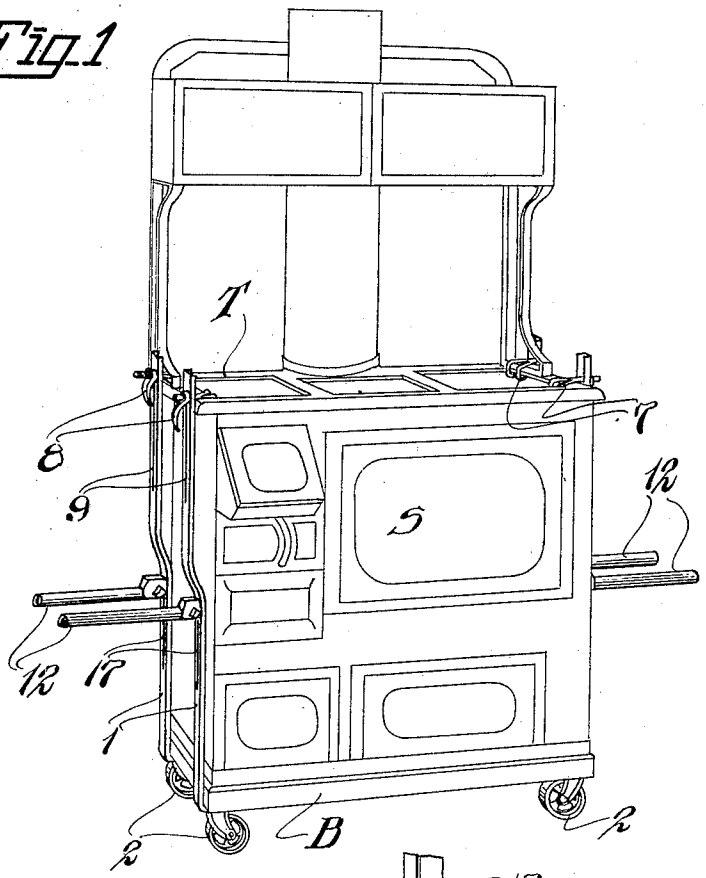


Fig. 2

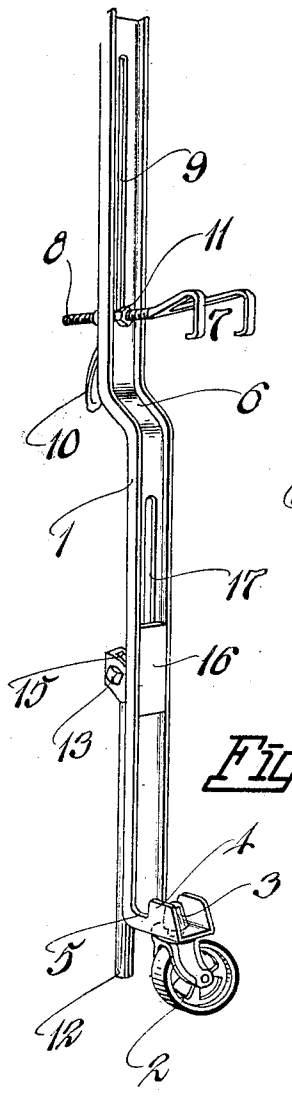
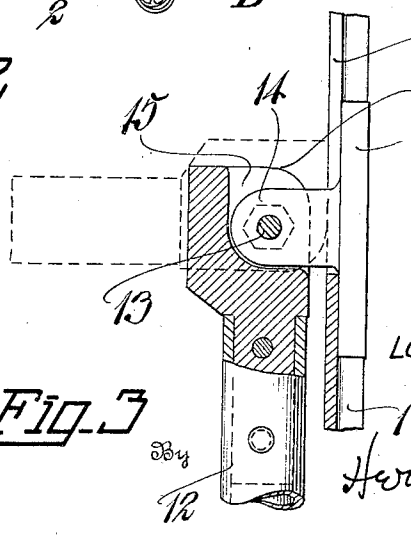


Fig. 3



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CARRIER.

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To all whom it may concern:

Be it known that I, LOUIS L. FREUND, a citizen of the United States, residing at Spokane, in Spokane county and State of Washington, have invented certain new and useful Improvements in Carriers, of which the following is a specification.

My present invention relates to an improved carrier designed especially for the purpose of lifting and transporting stoves, ranges and similar appliances, the device being capable of use with other articles, but particularly applicable for lifting and rolling stoves, ranges and such appliances over floor coverings. To this end the invention contemplates a carrier made up of a plurality of units of identical construction which may be attached to a stove and form a vehicle with wheels or casters for transportation, and at the same time the plurality of devices attached to the stove are adapted for lifting means to elevate the load from the ground and be carried by two or four men.

The invention consists in certain novel combinations and arrangements of these unitary structures as will be hereinafter more fully pointed out and claimed.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention constructed and arranged according to the best mode I have so far devised for the practical application of the principles of my invention.

Figure 1 is a perspective view showing four of the units applied and ready for use in connection with a stove or range.

Fig. 2 is a detail view, in perspective of one of the units of the device or carrier.

Fig. 3 is an enlarged detail view, partly in section, showing the lifting bar and connections.

In the preferred form of the carrier as illustrated in the drawings I have utilized a domestic range or stove indicated by letter S of which the base rim B and the top T are utilized or employed for attaching the units of the carrier, and in Fig. 1 four of these units are attached to the stove, a pair at each end, so that the load may be carried by two men or four men if desired.

The units are constructed and arranged in order that they may be attached or detached with facility, and when in place, are firmly and rigidly held to insure careful manipulation when carrying a load as indicated.

As before stated the units are identical in structure and may be applied in pairs at the ends of the stove, or may be applied singly at the ends of the stove, or other article to be lifted or conveyed, and one of the units is depicted in Figs. 2 and 3 in detail. Here the metallic post 1 is an upright member preferably of channel iron and provided with a caster 2, journaled in the bearing 3 provided therefor in the foot 4 of the post, which is turned at right angles to the bottom of the post to afford a bearing and support for the caster. The foot 4 is fashioned at its upper portion as a hook 5 adapted to fit under the base rim B of the stove as seen in Fig. 1, and the base, resting on these hooks at four points, is afforded a stable support for the stove.

At a point just above the longitudinal center of the post, an offset is provided at 6 to accommodate a forked hook 7, positioned at right angles to the post and designed to project horizontally therefrom and extend over the top of the stove at T in Fig. 1. The lids are removed in Fig. 1 so that the forked hooks may engage over the edge of the top of the stove as shown, and the hook is provided with a screw shank 8, passing through an elongated slot 9 in the post, and equipped with a screw handle 10 and nut 11, the former at the outer side of the post and the latter at the inner side of the post. Thus the forked hooks may be adjusted vertically in the post, through the slot 9, to adapt the post to different heights of loads to be carried, and by means of the screw handle 10 and nut 11 the hook may be clamped securely in place, to form, together with the hook 5 at the lower end of the post, means for rigidly attaching the post to the stove.

When thus attached it will readily be apparent that the four posts with their casters will form a practical and substantial carrier or conveyance for the stove, and it may be rolled or transported with facility and convenience.

Each post is also equipped with means by which the stove, or other article, may be manually lifted, and this lifting means comprises a pivoted handle or handle bar 12, hinged or pivoted on the pin or bolt 13 passed through the perforated ears 14, located in the socket 15 at the head of the lifting handle. The ears are shown as integral with a slide block or plate 16 and pass through a slot 17 in the post in order that

the coupled handle and block or plate may be adjusted vertically with relation to the post to adapt the handle for use by a tall or short person.

When not in use the handle bar hangs, by gravity, in vertical position as indicated in Figs. 2 and 3, but when employed to lift a load the handle is swung to vertical position as indicated in dotted lines Fig. 3, and in this position, the cam edges 18 of the head of the handle, at the sides of the socket 15, are caused to frictionally engage the outer face of the post, at the sides of the slot 17 in the post. Thus, with the handle hanging in the position of Figs. 2 and 3, the handle and its slide block may be elevated with relation to the post, to the desired altitude, then by swinging the handle around to horizontal position, dotted lines Fig. 3, the handle and slide block are clamped to the post, and the handle may be utilized to lift the load. When released the handle will fall to normal position, by its own weight.

In Fig. 1 it will be apparent that the location of the posts, two at the ends of the stove, avoids the objectionable features frequently encountered whereby the narrow dimension or depth of the stove is increased to such a degree as to prevent the passage of the stove through a doorway, but in this instance, the minimum depth of the stove is not altered, and the stove may be passed through the ordinary doorway in a house with a man at the front and a man at the rear. In passing over the smooth floor the rollers may be used for transportation, but by means of the handles, the load may be lifted over door sills, or lifted and carried over floors that might otherwise be marred by the casters.

Having thus fully described my invention, what I claim is—

1. The combination in a carrier as described comprising a plurality of units, each unit including an upright, slotted post having a foot and a caster journaled therein, a hook fashioned at the top of the foot, a screw shank in the slotted post and an integral hook thereon, and means for clamping the shank to the post for the purpose described.

2. The combination in a device as described including a post and means thereon for attachment to a load to be lifted, of a pivoted handle on the post, and means operative when the handle is moved to lifting position whereby the handle and post are rigidly connected together.

3. The combination in a device as described having attaching means and comprising a slotted post, of a slide plate having a perforated ear passed through the slotted post, a handle pivoted in said ear, and a head on the handle to frictionally engage the post when the handle is lifted to operative position.

4. The combination with the slotted post having a hooked foot and a caster, an upper hook on the post, a slide plate having a perforated ear passed through the slotted post, a handle pivoted in the ear, and a head on the handle having a cam member to frictionally engage the post when the handle is swung to operative position.

In testimony whereof I affix my signature.

LOUIS L. FREUND.