G. MORE.

PORTAGE DEVICE.

APPLICATION FILED NOV. 17, 1920.

1,380,073. Patented May 31, 1921.

Fig. 1.

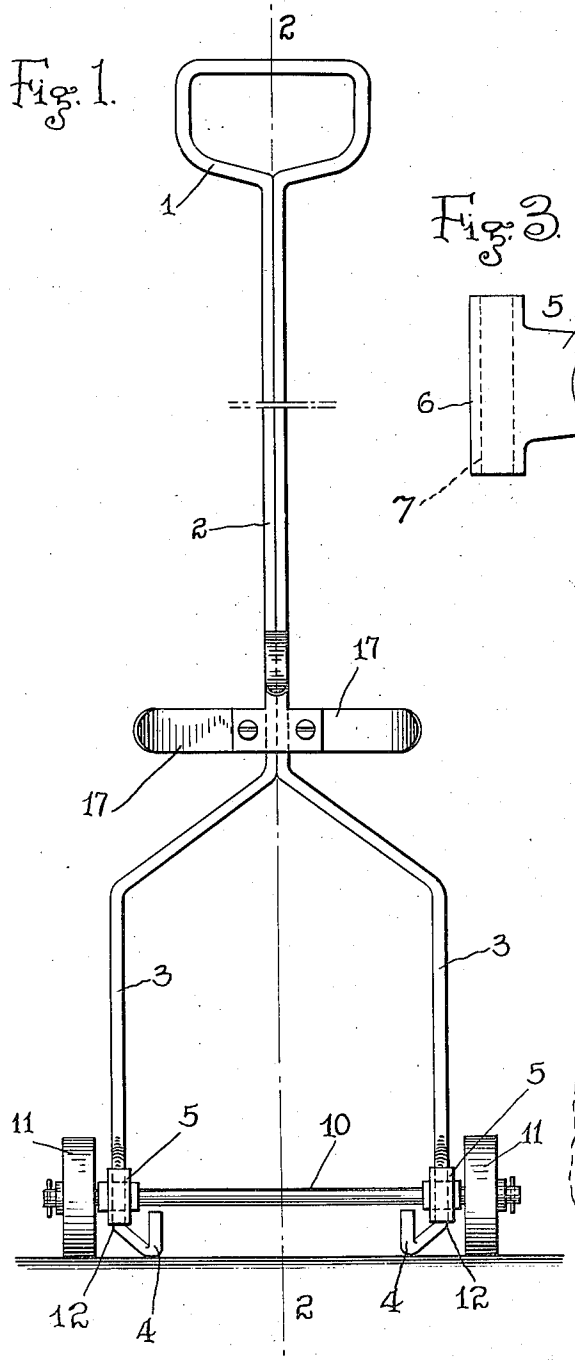
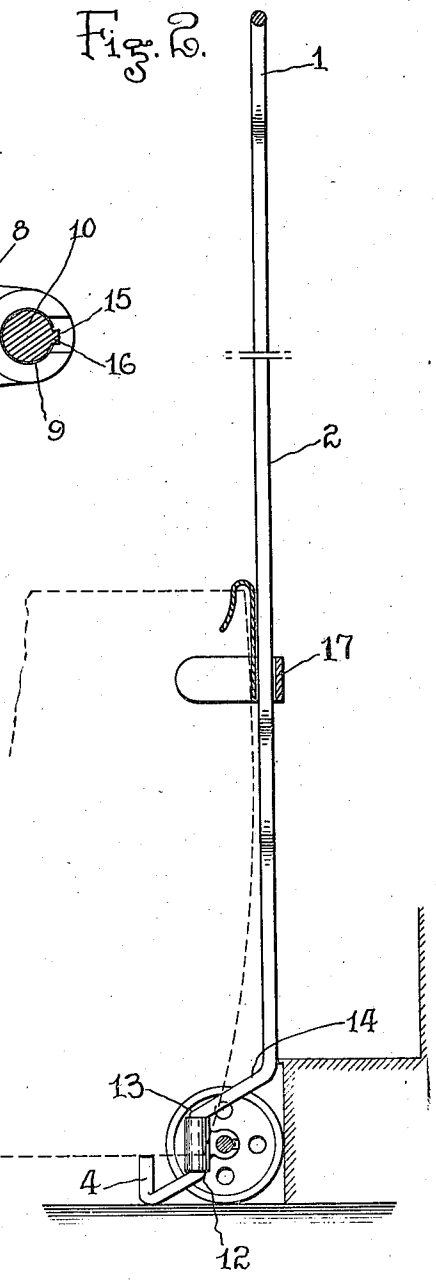


Fig. 3.

Fig. 2.



Inventor

George More

By his Attorney F. W. Parker

UNITED STATES PATENT OFFICE.

GEORGE MORE, OF BROOKLYN, NEW YORK.

PORTAGE DEVICE.

1,380,073. Specification of Letters Patent. Patented May 31, 1921.

Application filed November 17, 1920. Serial No. 424,684.

To all whom it may concern:

Be it known that I, GEORGE MORE, a citizen of the United States, and resident of borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Portage Devices, of which the following is a specification.

This invention relates to hand-trucks or portage devices used for trundling ash cans, barrels and other like articles, and my present improvements are directed to certain novel features of construction and arrangements of parts, based upon the device covered by my earlier Patent No. 1,155,081, whereby said device is rendered more economical of production, and capable of fulfilling its functions in a more highly efficient manner.

In the drawing:—

Figure 1 is a front elevation of my improved portage device.

Fig. 2 is a side elevation thereof, and

Fig. 3 is a detail of the wheel-axle bearing member.

As in my said earlier patent the frame of my improved portage device consists of a rod, which for convenience in manufacture of the device may be in a continuous length, bent to form the handle 1, with the shank 2, and the divergent, parallel, wheel-carrying arms 3, which latter each terminate in an upturned hook 4, for load engaging purposes.

Mounted upon each of the arms 3, near their lower ends, is a wheel-shaft bearing member 5, which I successfully employ in the form of a casting. Thus, the member 5 has the portion 6 with an aperture 7 therethrough to receive an arm 3, and it has a portion 8 with an aperture 9 therethrough, at right angles to aperture 7, to receive the axle 10 that carries wheels 11. Consequently member 5 constitutes a union piece whereby the wheels are associated with the frame of the device.

For the purpose of localizing the members 5 respectively upon the arms 3 in their appropriate, adjusted positions thereon, I cause the material of which said arms are composed to be bent at points in the length of said arms immediately against the opposite ends of portion 6, to thereby provide angles 12, 13 in said arms which crowd upon the opposite perimeters respectively, of apertures 7, thus securing the members 5 in set, localized positions upon arms 3, without the aid of bolts, screws, or other extraneous fastening means.

In the localized positions of members 5 provided by the means just described the wheels 11 are in the same seating plane or base as the under curved surfaces of hooks 4, with the center of mass or weight of the portage device, both with and without load, lying in a vertical plane intermediate the parallel lines occupied respectively by the pairs of wheels 11 and hooks 4 respectively, thereby enabling the device to stand upright, without other support, upon a level surface.

The arms 3, just above portion 8 of member 5, where they emerge from apertures 7, are each bent rearwardly, to comprise the angle 14, thence continuing into the straight main lengths of said arms that comprise the load bearing portion of the frame.

The angles 14, however, extend backwardly to a point behind the wheel centers, thereby enabling the frame to serve as a guard, which, in the act of drawing the portage device up a flight of steps, meets the upper edge of the step risers in advance of the wheels, and in this manner guides the wheels into easy rolling contact with the step edges at the lower peripheral portions of the wheel surfaces.

The members 5, at each end of their portion 8, are each provided with radial slots 15, forming clearances that communicate with apertures 9, and when the axle 10 has been inserted in said apertures, in set position, union between the axle and member 5 is effected, by upsetting a surface portion of said axle at each end of portions 8, within slots 15, as indicated at 16, thereby creating stops upon the axle to prevent relative longitudinal movement between it and members 5.

It will be appreciated that the adjustable means 17 for engaging an ash can, barrel or the like may correspond with the means described in my said earlier patent for the same purposes.

Variations within the spirit and scope of my said invention are equally comprehended herein.

I claim:—

1. In a portage device, in combination, a frame-like handle member, a wheel-axle bearing member having an aperture for the reception of said handle member, means for

localizing said handle member in its engagement with said bearing member, and said localizing means having rearwardly extended means to guide the device in mounting steps.

2. In a portage device, in combination, a frame-like handle member composed of rod material, a wheel-axle bearing member having an aperture lying at right angles to the axis of said axle bearing for the reception of said handle member, and the rod material of said handle member having bends formed in its length at opposite ends of the aperture in said bearing member to localize the position of said bearing member thereon, one of the bends extending in a rearward angle to guide the device in mounting steps.

3. In a portage device, in combination, a frame composed of rod material bent to form a handle and having its opposite ends shaped for engagement with a supported article, wheel-axle bearing members apertured respectively for loose engagement by said rod material end portions, the axes of the bearing portions for the axles and the engaging portions for the rod material lying at right angles to each other, and bends formed in each rod material end portion, at opposite ends of said bearing members, to localize the positions of said bearing members respectively upon said rod material end portions, one of the bends in each rod material end portion extending in a rearward angle to guide the device in mounting steps.

4. In a portage device, in combination, a frame composed of rod material, having a handle, and whose end portions comprise article engaging means, a wheel-axle, axle bearings mounted on said rod material, near said end portions, wheels carried by said axles, and said frame rod material having rearward bends which bring the upward continuing portion of said frame rod material into a vertical plane behind the wheel centers to serve as a guard whereby the wheels are guided to draw the device up a flight of steps.

5. In a portage device, in combination, a frame composed of rod material, having a handle, and whose end portions comprise article engaging means, a wheel axle, axle bearings mounted on said rod material, near said end portions, wheels carried by said axle, and rearward bends in said frame rod material extending just above and to a point behind the wheel centers to enable the portions of said frame rod material continuing above said bends to serve as a guard whereby the wheels are guided in drawing the device up a flight of steps.

6. The combination, in a wheeled device, of a frame, a bearing member mounted thereon having slots formed in its opposite ends, a wheel axle carried by said bearing member, and upset surface portions of said axle, within the compass of said slots, to localize and secure said axle within said bearing member.

Signed at the borough of Manhattan, in the city, county and State of New York this 8th day of November A. D. 1920.

GEORGE MORE.