The present invention relates to a combined barrel truck and rack, and its primary object is to provide a unit which is designed to facilitate the movement of a heavy barrel from a vertical position into an elevated horizontal position, so that the contents of the barrel may be readily withdrawn therefrom.

A further object of the present invention is to provide such a unit which will present a most stable barrel support for supporting a barrel in an elevated horizontal position, but which, at the same time, is provided with detachable means whereby the unit, along with its barrel, may be readily moved from place to place in the manner of a hand truck.

Yet another object of the present invention is to provide a combined truck and rack unit which may be readily handled by one man.

Still another object of this invention is to provide a unit of the above noted type which, although most efficient in use, is, at the same time, designed to be readily and inexpensively manufactured.

With the above and other objects in view, as will hereinafter appear, the invention comprises the devices, combinations, and arrangements of parts hereinafter set forth and illustrated in the accompanying drawings of a preferred embodiment of the invention, from which the several features of the invention and the advantages attained thereby will readily be understood by those skilled in the art.

In the drawings:

Fig. 1 represents a perspective view of the present invention.

Fig. 2 represents a side view of one of a pair of similar handle members which are adapted to be detachably secured to the rack unit which is disclosed in Fig. 1.

Fig. 3 represents a top plan view of a portion of that handle unit which is disclosed in Fig. 2.

Fig. 4 represents, on a smaller scale, a side elevation of the barrel rack tilted to its barrel-engaging position, the barrel being shown in full lines in its normal vertical position, and being shown in dotted lines as resting against the rack.

Fig. 5 represents the barrel rack in its normal horizontal position, and illustrates the first step involved in placing the handle members in their operative positions upon the rack.

Fig. 6 represents the rack with its two handles secured thereto in a manner such as to convert the rack into a barrel truck.

Fig. 7 represents a fragmentary view of a portion of the rack, disclosing a handle member in association therewith.

Referring particularly to Fig. 1 of the drawings, the present invention is illustrated in a perspective view, from which it will be readily understood that the present barrel rack is made in the form of a simple frame, including laterally spaced bottom frame members 10, 10 having the form of angle bars, with the lower flanges arranged horizontally, and the upright flanges disposed at the respective outer edges of the lower flanges. Projecting upwardly from one end portion of each of the bottom frame members 10, 10 is a vertically disposed leg member 11 which also takes the form of an angle bar. These two legs are, in turn, secured together by means of flat cross braces 12, 12. These braces may be suitably welded to the legs 11, 11, and together at location 13. The opposite end portions of the frame members 10, 10 each has projecting upwardly and outwardly therefrom, a rocker leg 14 which, like the legs 11, 11 takes the form of an angle bar. These rocker legs 14, 14 are also secured together by means of a pair of flat cross braces 15, 15, each of which may be suitably welded at its opposite end portions to a respective one of the legs 14, 14, and to its associated brace at its mid-point.

Connecting the upper portions of the legs 11, 11 and 14, 14 are a pair of upper frame members 16, 16, each of which is suitably welded at its opposite end portions to a respective one of the legs 11 and 14. It is to be particularly noted that these upper frame members each take the form of an angle bar, with its lower flange arranged horizontally, so as to extend inwardly from the vertically arranged flange. It is also to be noted that the upper portions of the rocker legs 14, 14 are connected together by a plane cross plate 17 which is welded, in the usual fashion, at its end portions to the oppositely disposed legs 14, 14.

Extending from an intermediate portion of each of the rocker legs 14, 14 to an intermediate portion of a respective one of the lower frame members 10, 10, is a brace bar 18 which may be suitably welded in position, for the purpose of supporting a horizontally disposed tube 19 which is welded at its opposite end portions to a respective one of the brace bars 18, 18. Secured, as by welding, to the upper portion of each of the vertically disposed legs 14, 14 is a handle socket 20 fabricated from a piece of plate metal, and provided with a substantially rectangular shaped notch, or aperture, 21. The purpose of the tube 19 and the sockets 20, 20 will be hereinafter more fully described.

In the actual use of the above described barrel rack, it normally stands in the positions as shown in Figs. 1 and 5. However, when it is desired to support a barrel on the rack, the latter is tilted upwardly so as to rest on its rocker legs 14, 14, in a manner as is particularly illustrated in Fig. 4. The barrel, herein designated by the numeral 22, may be tilted slightly away from the rack, so that the cross plate 17 may be inserted underneath the chime of the barrel.
The barrel may then be dropped downwardly upon the plate 17, and thereafter the workman may grasp the upper part of the barrel, and tilt it toward the rack, so that it will finally come to rest against the rack, in the position illustrated by the dotted lines of Fig. 4. Finally, the workman may tilt the rack, along with its barrel, downwardly, so that it will come to rest in its normal horizontal position, as is particularly illustrated in Fig. 5. The usual tapping means 23 may then be applied to the barrel, for the purpose of withdrawing the fluid contents therefrom in a conventional manner.

From the above, it is to be particularly understood that the upper frame members 16, 16 are so arranged that the barrel may be supported therebetween in a most stable manner. Obviously, these two frame members are spaced apart a sufficient distance to permit a portion of the barrel to extend below the normal level of the frames, so as to prevent any tendency for the barrel to tilt or shift relative to the rack. Also, it will be appreciated that a rack of the type hereinabove described may be made up in various sizes and shapes as to accommodate the divergent types of barrels now in general use.

As noted hereinabove, the present invention also contemplates the provision of means whereby the present rack may be moved about from place to place, in the manner of a truck. In order to accomplish this objective, there is provided, a pair of wheeled handle units identical in design, one of these units being particularly illustrated in Figs. 2 and 3. More specifically, each of these wheeled handle units comprises an elongated handle member 22 being provided at one end portion thereof, with a frame element 25. As may be particularly noted in Fig. 3, one end of this frame element is welded to the handle member as at 26, and is further secured to the handle member as by means of a cross brace 27. In this manner, it will be noted that the elongated handle member 22 is pivotally and securely secured to a respective one of the said tubes 19, thereby permitting the rack to be moved from place to place, the free end of the handle element being pivotally secured upon a respective one of said fulcrum members so that the free end of each handle bar may be swung up.

The barrel may then be dropped downwardly upon the plate 17, and thereafter the workman may grasp the upper part of the barrel, and tilt it toward the rack, so that it will finally come to rest against the rack, in the position illustrated by the dotted lines of Fig. 4. Finally, the workman may tilt the rack, along with its barrel, downwardly, so that it will come to rest in its normal horizontal position, as is particularly illustrated in Fig. 5. The usual tapping means 23 may then be applied to the barrel, for the purpose of withdrawing the fluid contents therefrom in a conventional manner.

From the above, it is to be particularly understood that the upper frame members 16, 16 are so arranged that the barrel may be supported therebetween in a most stable manner. Obviously, these two frame members are spaced apart a sufficient distance to permit a portion of the barrel to extend below the normal level of the frames, so as to prevent any tendency for the barrel to tilt or shift relative to the rack. Also, it will be appreciated that a rack of the type hereinabove described may be made up in various sizes and shapes as to accommodate the divergent types of barrels now in general use.

As noted hereinabove, the present invention also contemplates the provision of means whereby the present rack may be moved about from place to place, in the manner of a truck. In order to accomplish this objective, there is provided, a pair of wheeled handle units identical in design, one of these units being particularly illustrated in Figs. 2 and 3. More specifically, each of these wheeled handle units comprises an elongated handle member 22 being provided at one end portion thereof, with a frame element 25. As may be particularly noted in Fig. 3, one end of this frame element is welded to the handle member as at 26, and is further secured to the handle member as by means of a cross brace 27. In this manner, it will be noted that the elongated handle member 22 is pivotally and securely secured to a respective one of the said tubes 19, thereby permitting the rack to be moved from place to place, the free end of the handle element being pivotally secured upon a respective one of said fulcrum members so that the free end of each handle bar may be swung up.

ear 31 slopes upwardly so as properly to guide the handle element into the notch 21.

Referring particularly to Fig. 4, it will be understood that as soon as the handles 24, 24 are placed within the sockets 20, 20, the wheels 29, 29 will each engage the floor so that when the rack is in the position as illustrated in Fig. 5, it will be completely mobile, and thereafter, the workman may trundle the rack, along with its barrel, from place to place, in the manner of a truck. In this latter connection, it will also be appreciated by those skilled in the art, that only one pair of wheel handle elements need be provided for association with a plurality of racks, since normally the racks, along with their filled barrels, when once positioned in their normal resting place, would not need to be moved again until the barrels were empty. Since in the normal operation only one barrel need be moved at a time, it is manifest that one pair of wheeled handle elements may be adequate for use with a large number of racks. Furthermore, since the handle elements may be readily removed from the racks, they will present no obstruction to the workman, and therefore the rack, with its barrel, requires less floor space than if handle elements were rigidly secured to the racks proper.

From the above, it will be understood that the present invention provides a most novel and meritorious rack unit which, although highly efficient in use, is, at the same time, adapted for inexpensive manufacture.

I claim:

1. A device of the character described comprising, a pair of front and a pair of rear supporting legs arranged substantially in rectangular formation, upper and lower side rails extending longitudinally between and connected to said front and rear legs, a supporting plate extending transversely between the upper portions of said front legs, a handle socket member secured upon the upper end portion of each of said rear legs, a handle fulcrum member disposed at each side of said device adjacent the juncture of each of said front legs and its associated lower side rail, a pair of handle members each including an elongated handle bar, a wheel rotatably mounted at one end portion of said handle bar, and a mounting element disposed upon said handle bar adjacent said wheel, each of said handle members being detachably secured to a respective one of the sides of said device with its mounting element pivotally supported upon a respective one of said fulcrum members and with the free end portion of its handle bar carried by a respective one of said handle sockets.

2. The combination with a barrel stand having a substantially rectangular shaped skeleton frame including pairs of front and rear supporting legs interconnected by means of upper and lower longitudinally disposed side rails, a fulcrum member disposed at each side of said frame adjacent the juncture of each of said front legs and its associated lower side rail, a pair of handle members each including an elongated handle bar, a wheel rotatably mounted at one end portion of each handle bar, and a mounting element disposed upon each thereof, each of said handle members having its mounting element removably and pivotally secured upon a respective one of said fulcrum members so that the free end of each handle bar may be swung up.
wardly into a locking engagement with a respective one of said socket members.

3. The combination with a barrel stand having a pair of forwardly and upwardly inclined front supporting legs, a pair of upright rear legs, upper and lower side rails extending longitudinally between and connected to said front and rear legs, a barrel supporting plate extending transversely between the upper portions of said front legs, a socket member secured upon the upper end portion of each of said rear legs, and each of said handle members having its stub shaft removable and pivotally received with a respective end portion of said tube so that its wheel will be disposed forwardly of said front legs and with the free end portion of said handle bar removably connected with a respective one of said socket members.

4. The combination with a barrel stand having a substantially rectangular shaped skeleton frame including upright legs and longitudinally disposed upper and lower side rails, said stand being normally adapted to have its lower rails supported directly upon a floor surface, a socket member secured upon the upper end portion of each of the rear legs, and a fulcrum member disposed at each side of the stand adjacent the juncture of each of the front legs and the lower side rails, of a pair of handle members each including an elongated handle bar, a wheel rotatably mounted at one end portion of each handle bar, and a stub shaft disposed upon each of said handle bars adjacent said wheel, each of said handle members being adapted to have its mounting element removable and pivotally secured upon a respective one of said fulcrum members so that its wheel will be disposed forwardly of said front legs and with the free end portion of the handle bar removably connected with a respective one of said socket members.

5. The combination with a barrel stand having a pair of forwardly and upwardly inclined front supporting legs, a pair of upstanding rear legs, pairs of upper and lower side rails extending longitudinally between and connecting said front and rear legs together, a barrel supporting plate transversely disposed across the upper portions of said front legs, a hollow tube disposed crosswise of said stand and adjacent the junctures of said front legs and their associated lower side rails, and a socket member carried upon the upper portion of each of said rear legs, of a pair of handle members each including an elongated handle bar, a wheel rotatably mounted at one end portion of each handle bar, and a stub shaft disposed upon each of said handle bars adjacent said wheel, each of said handle members having its stub shaft removable and pivotally received with a respective end portion of said tube so that its wheel will be disposed forwardly of said front legs and with the free end portion of said handle bar removably connected with a respective one of said socket members.

ROBERT J. STEARNS.

No references cited.