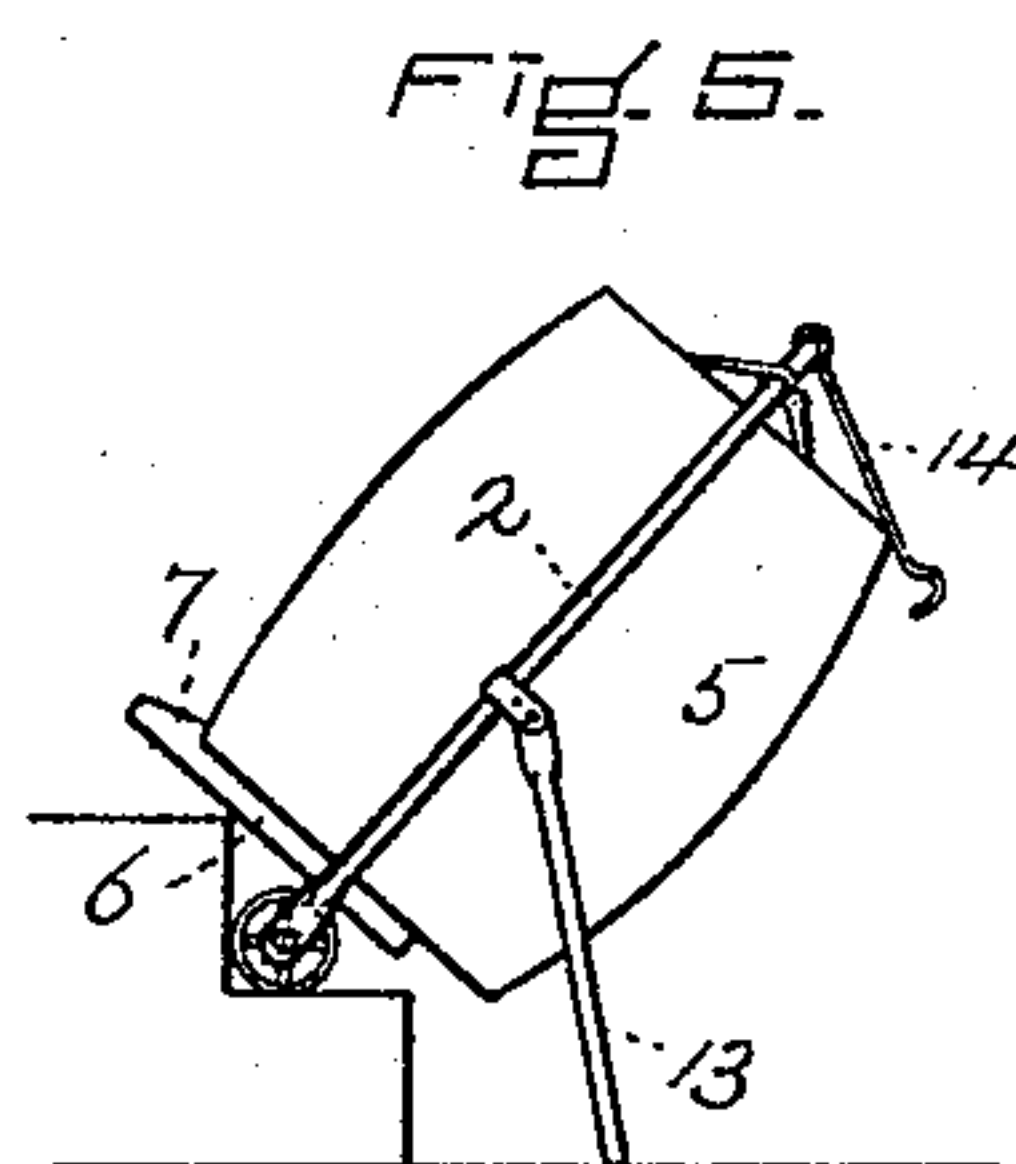
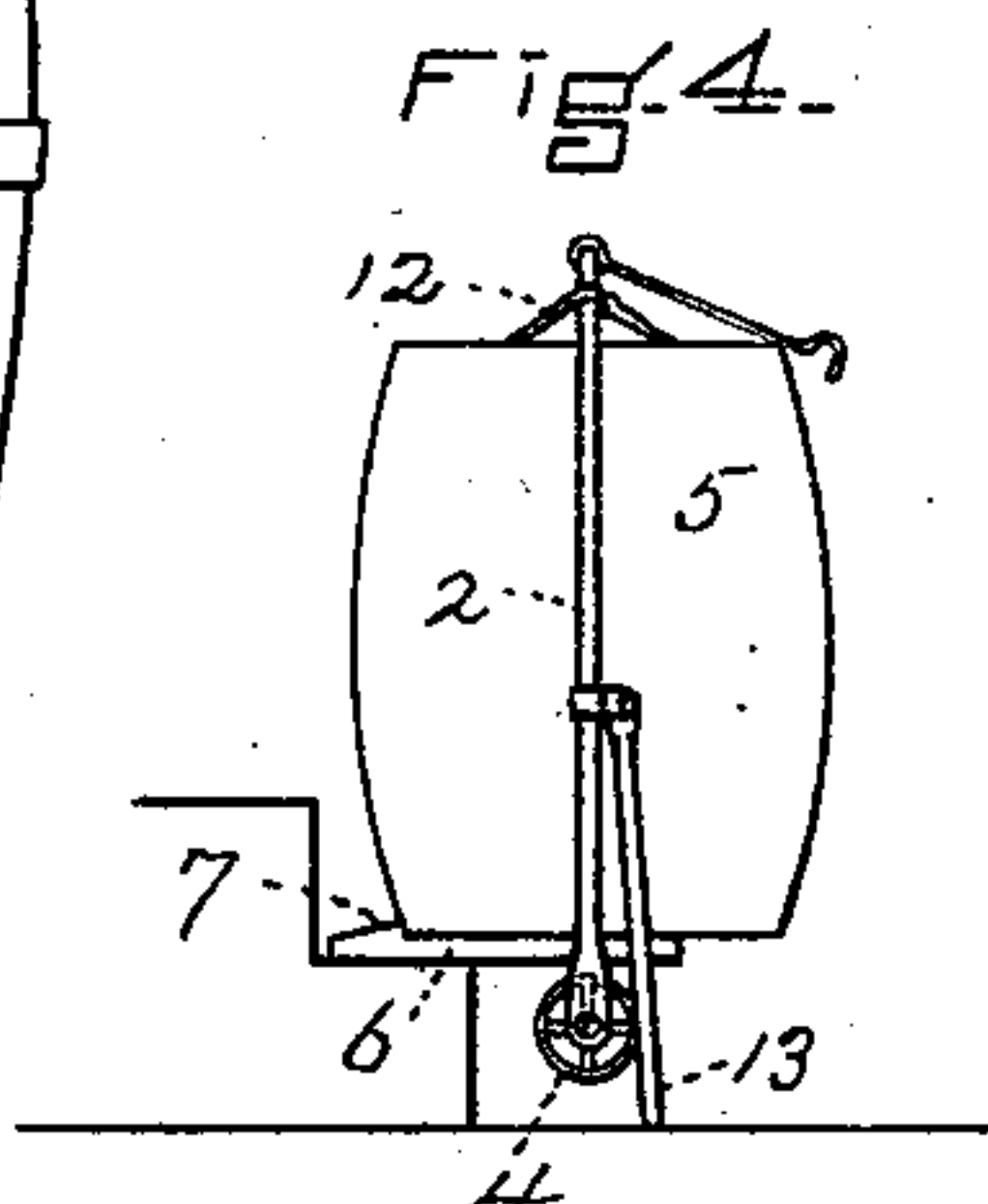
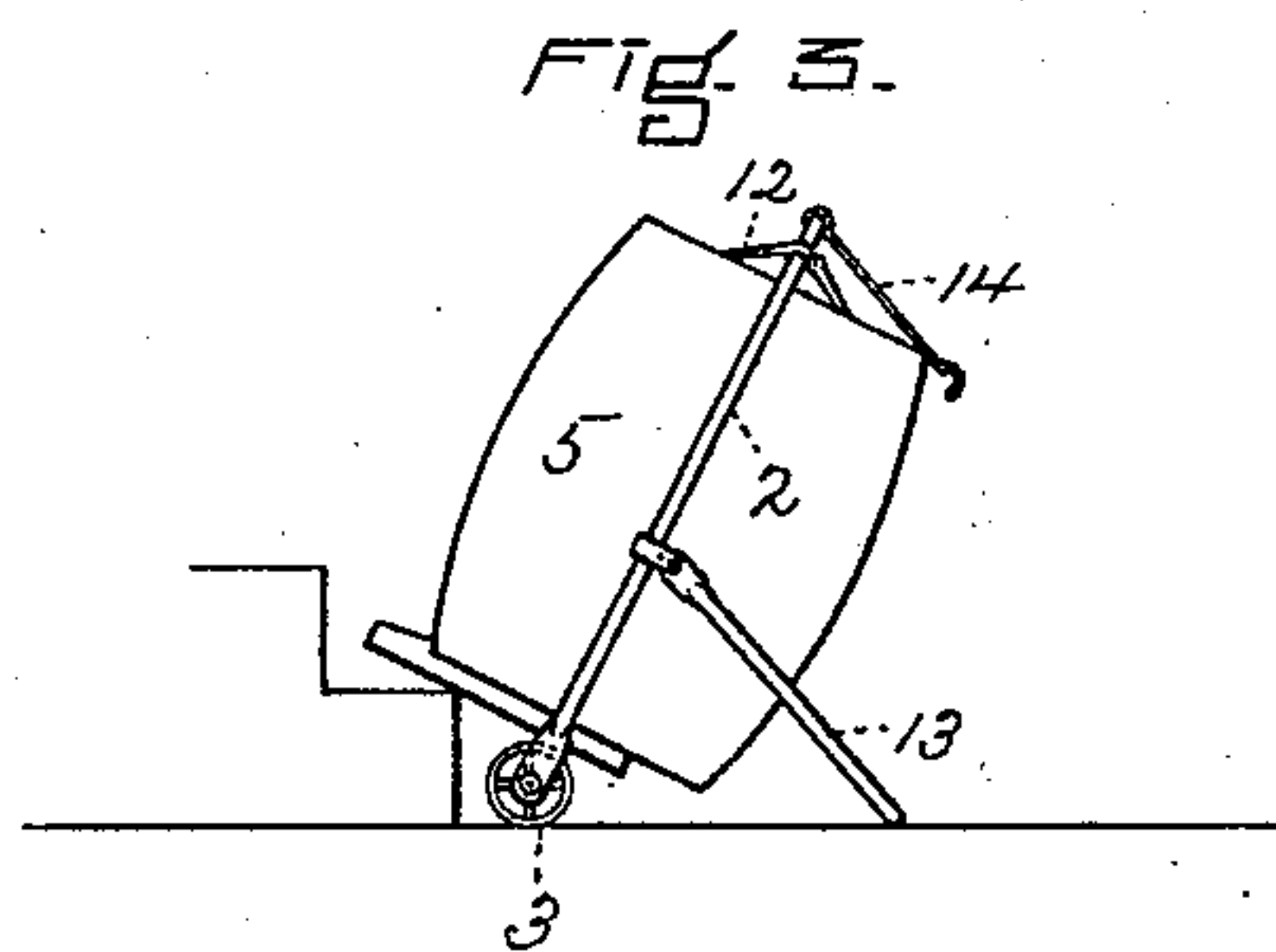
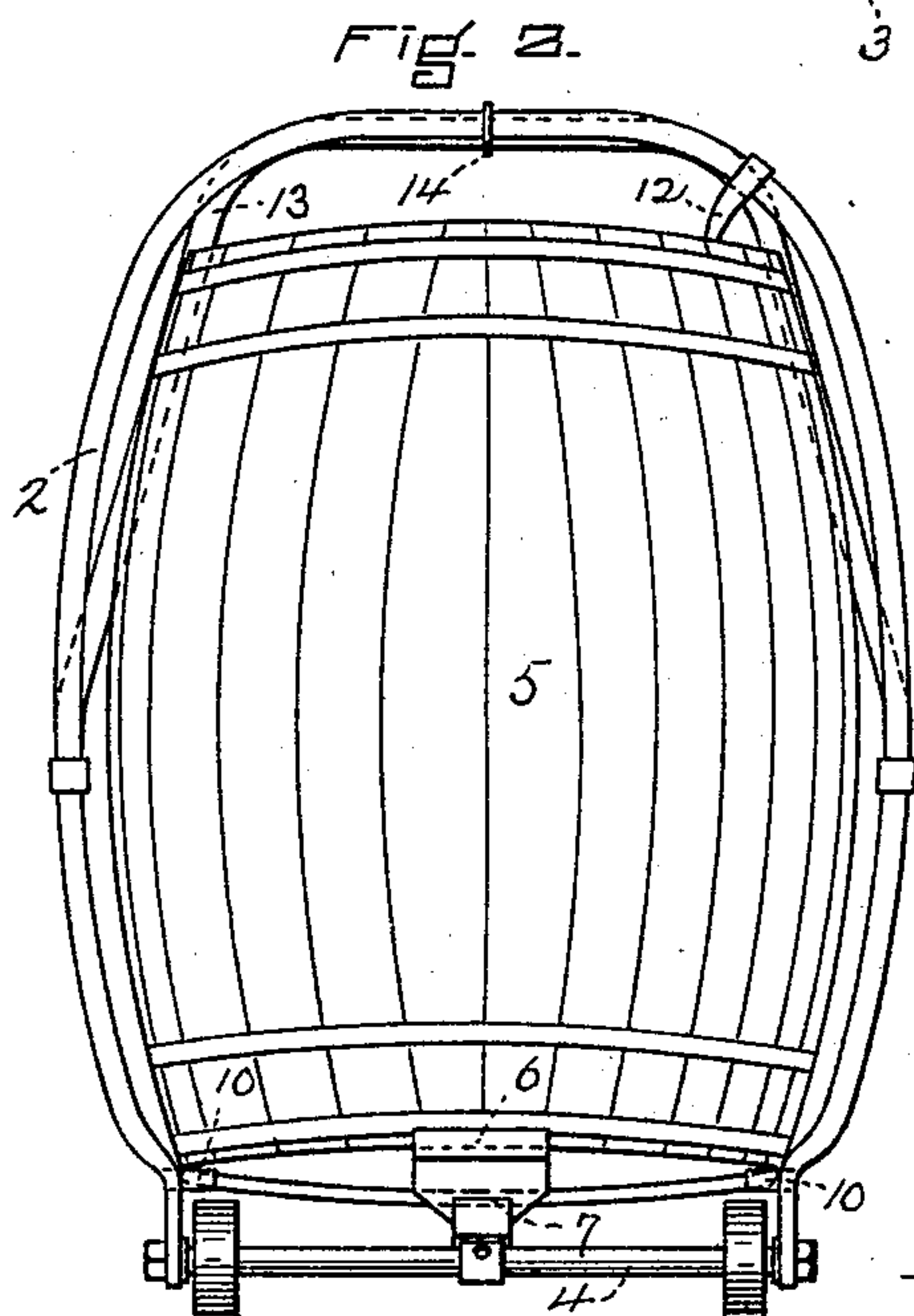
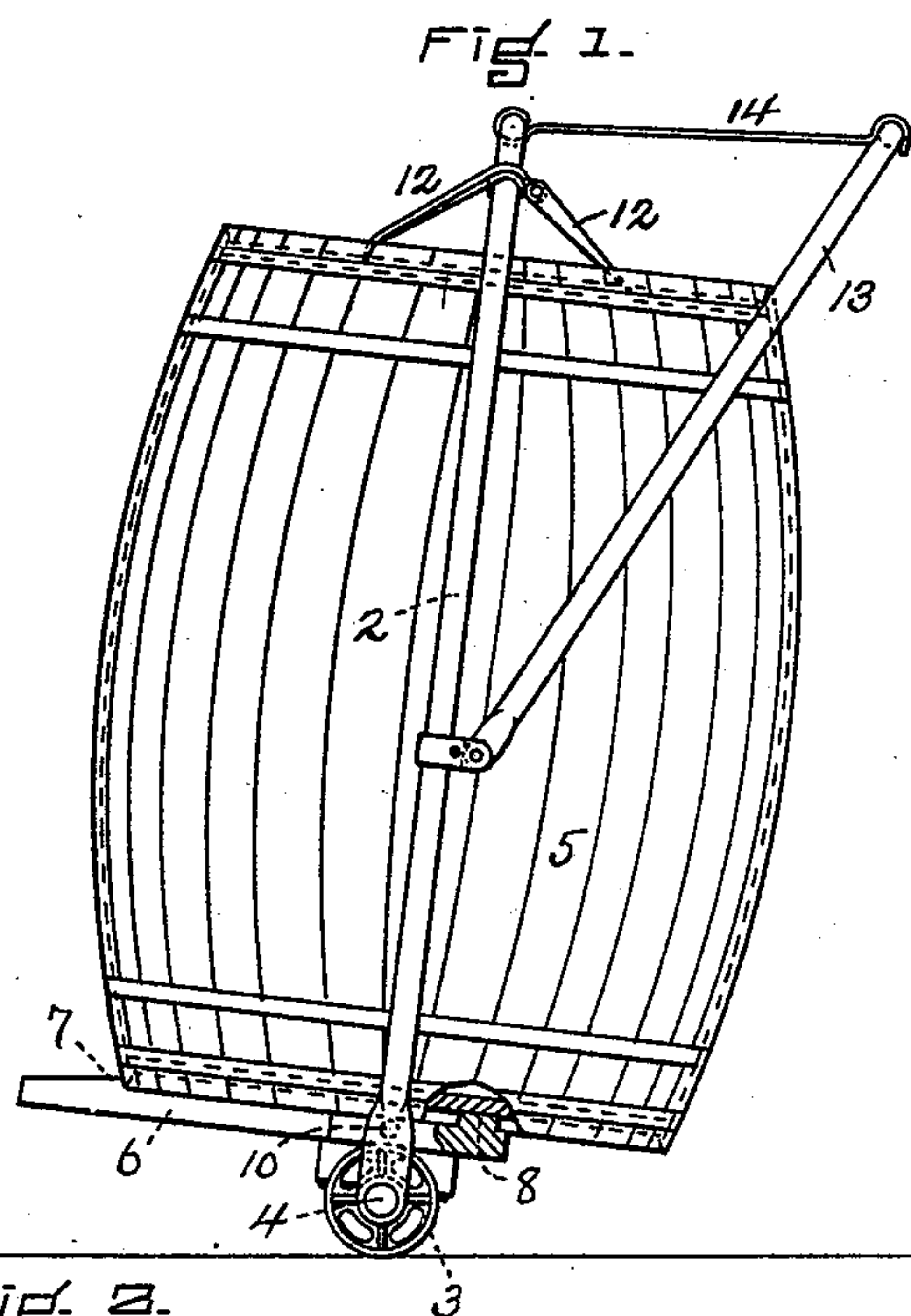


(No Model.)

J. A. KILBURN.
BARREL TRUCK.

No. 583,535.

Patented June 1, 1897.



WITNESSES.

Finnis C. Hammond
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UNITED STATES PATENT OFFICE.

JAMES A. KILBURN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO ELBRIDGE A. PICKARD, OF SAME PLACE.

BARREL-TRUCK.

SPECIFICATION forming part of Letters Patent No. 583,535, dated June 1, 1897.

Application filed July 15, 1896. Serial No. 599,260. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. KILBURN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Barrel Carrying and Lifting Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to apparatus termed "trucks," more particularly that class employed in handling barrels.

My invention is embodied in a barrel carrying and lifting truck, since it is as well adapted for conveying a barrel from place to place as it is capable of ascending or descending stairways with the barrel secured to it.

Briefly described, my invention comprises a frame, approximating somewhat to the shape of a barrel, mounted upon rollers, together with a swinging arm adapted for two positions. When in a raised position, this arm serves as a handle or means by which to control the truck. When in a lowered position, it serves as a fulcrum whereby the truck, together with the barrel, may be raised or lowered from stair to stair. One prominent feature in this apparatus consists in the adjustment of weights, whereby an individual can readily handle a barrel and take it up or down stairs alone and without trouble or danger of injury or strain.

The drawings represent in Figure 1 a side elevation of a barrel mounted in a truck embodying my invention, the several parts being arranged for employment of the apparatus as a truck. Fig. 2 is a front elevation of the same apparatus. Figs. 3, 4, and 5 are reduced views illustrating my invention as a lifting apparatus, the several progressive steps or movements being indicated which are necessary to elevate the barrel from the tread of one stair to the tread of the next stair above.

In the carrying out of my invention and in the construction of a truck as hereinabove alluded to I preferably take a piece of round

iron and bend it in the shape to approximate to the side contour of a barrel. This frame is shown at 2, with the ends or extremities suitably mounted in rollers 3 3, which are journaled upon a shaft 4, thereby interconnecting and stiffening the frame. Centrally of and loosely secured on said shaft is a platform 6, on which the barrel 5 rests, the chime abutting against a shoulder 7 at the front end portion, while the rear of said platform is furnished with a block 8 the thickness of the depth of the chime above the head in order to give the barrel a firm bearing. The length of this platform is such that the front extremity projects some distance beyond the barrel. To further steady and support the barrel, two opposite inwardly-projecting pins 10 10 are located just above the wheels, while a pair of dogs or holding-fingers 12 are affixed to the frame and engage in the head or the chime of the barrel, as shown in Fig. 1, when the latter is positioned in the truck. By means of these dogs and their swinging movements various sizes of barrels can be handled, since a difference in the heights of the barrels is easily compensated for by the angle of the dogs or fingers with the frame of the truck to which they are attached.

Pivotally secured to the sides of the frame 2 is a U-shaped swinging arm 13, of a shape or proportions preferably as illustrated in the drawings. When these various parts are to be employed merely as a truck or for conveying a barrel or barrels to different points in a storehouse or otherwise, the arm 13 is raised and held in a fixed rigid position, as in Fig. 1, by means of the hooked rod 14, loosely attached to said frame. When the barrel is secured in the position as shown in Fig. 1, the apparatus is in readiness to serve as a truck and is especially adapted for the conveyance or shifting of barrels from place to place. The projecting end of the platform may be tapered after the manner of the wedge-shaped ends of ordinary trucks. Its function is the same, however, and serves to raise or lift the barrel slightly preparatory to placing it on said truck.

As before premised, my invention includes not only a truck peculiarly adapted for the shifting of barrels from place to place, but

is especially constructed in order to enable a barrel to be handled readily by one individual and taken up or down stairs with great facility. It is well known that a barrel is a difficult form of package to handle, and generally two persons are required to take a heavy barrel up or down stairs. To enable a barrel to be handled as stated, I will instance the employment of my truck in taking a barrel upstairs.

Assuming that the truck arranged as shown in Figs. 1 and 2 has been used to convey the barrel to the foot of the stairs, it is further understood that the arm 13 exercises no function in holding the barrel in the truck. The hooked rod 14 is disengaged from said arm or lever 13, and the latter is allowed to drop and is now free to swing and rests on the floor. (See Fig. 3.) The operator then grasps the top of the frame 2 and tilts the barrel back, thereby raising the nose of the platform above the tread of the stair, the diameter of the wheels being such that for ordinary style of stairs said wheels are allowed to approach quite closely to said rise. The position of weight is now such that the barrel is easily tilted forward, (see Fig. 4,) thereby allowing the lever-arm 13 to swing forward until it is very nearly upright and centrally beneath the barrel. The same operation is again repeated as before, only now the barrel is tilted upon the lever-arm 13, which acts as a fulcrum. The nose of the platform is lifted above the tread of the second stair and the entire truck and barrel are tilted forward until the wheels rest upon the tread of the first stair. The forward tilting is again repeated and with the result that the swinging movement of the lever-arm brings it up where it bears upon the tread of the first stair.

As I have before stated, the barrel is held firmly in the truck and no twisting or turning is permitted, since the width of the wheels apart affords a firm support. The adjustment of the barrel is such that the operator can easily control a barrel, and hence take

it up or down stairs, as may be required. It will be understood that in descending stairs the reverse action ensues from that described—that is, the lever-arm precedes and is first used as a fulcrum to allow the platform to be lifted and then removed from the tread of the stair.

What I claim is—

1. A frame to span a barrel and movably mounted, a platform to support the barrel and project therebeyond, and a pivotal arm to serve as a lever, when free to swing, substantially as explained.

2. A barrel-truck comprising a frame movably mounted, a platform carried thereby, and a swinging arm secured to said frame and adapted when raised and locked to span the barrel and serve as the truck-handle as specified.

3. A barrel-truck consisting of a frame movably mounted, a platform carried thereby, and two lateral studs upon the frame to act conjointly with the platform, combined with a swinging lever-arm secured to the frame, a rod to hold said arm in a fixed position, and fingers secured to the frame to engage the barrel at the top, substantially as stated and set forth.

4. In combination with a U-frame, a roller-equipped shaft to unite the ends of the frame, a platform free to swing upon the shaft, and lateral studs from the frame to support the barrel, a swinging U-shaped arm mounted upon the frame, a rod to hold said arm in a fixed position, and fingers to engage the barrel-top, said arm serving as a handle for the truck, when in a raised, fixed position, and as a lever to lift the truck when free to swing in its lowered position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES A. KILBURN.

Witnesses:

FRANCIS C. STANWOOD,
H. E. LODGE.