No. 781,003. PATENTED JAN. 31, 1905.

B. HOLMES.

TRUCK.

APPLICATION FILED MAY 31, 1904.

Fig. 1.

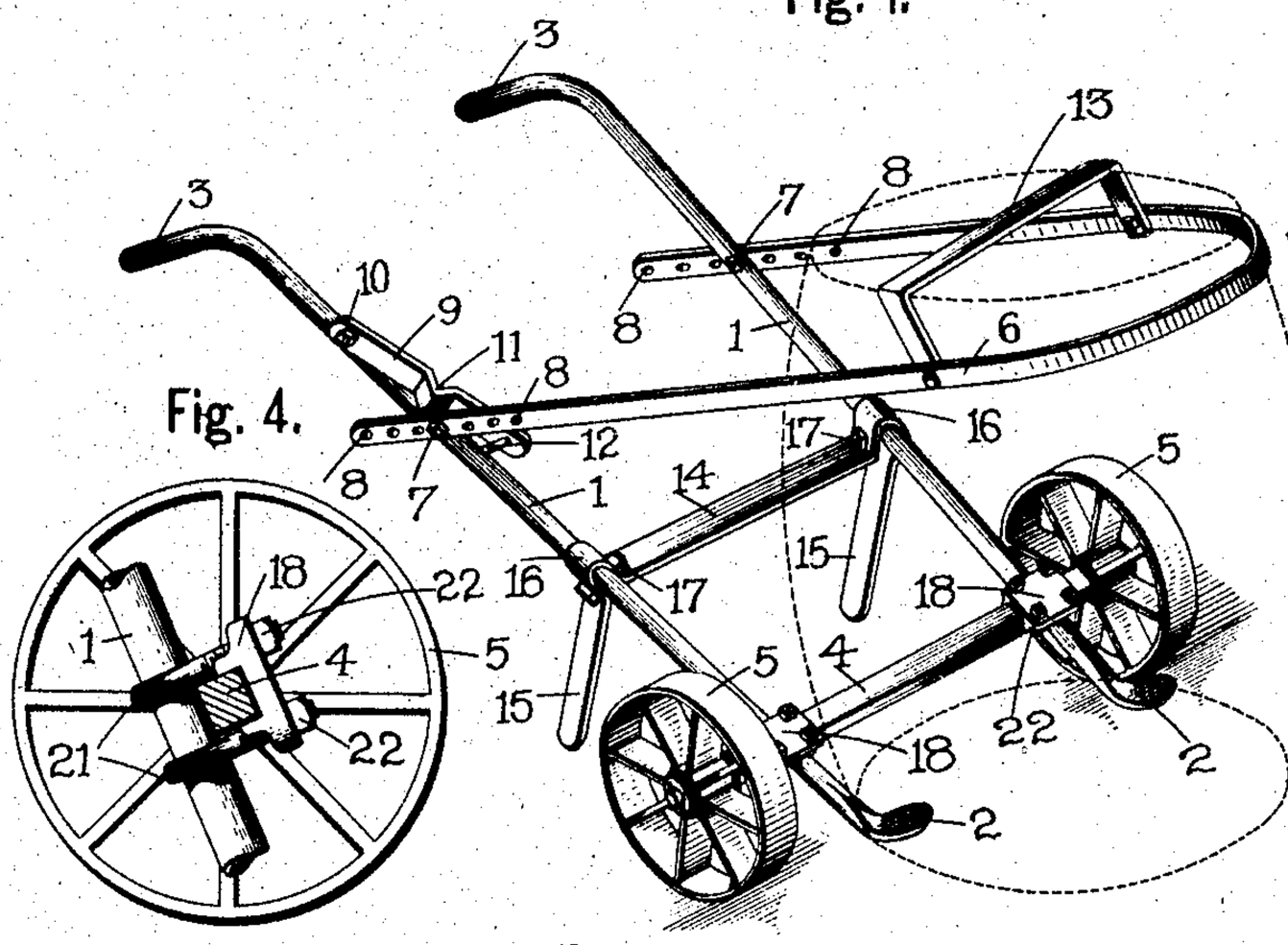

Fig. 4.

Fig. 6.

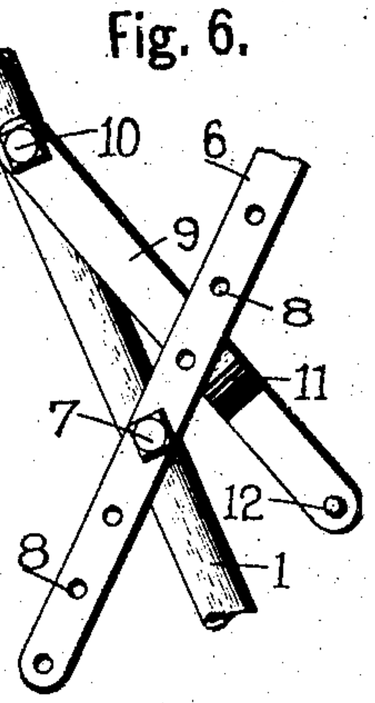

Fig. 5.

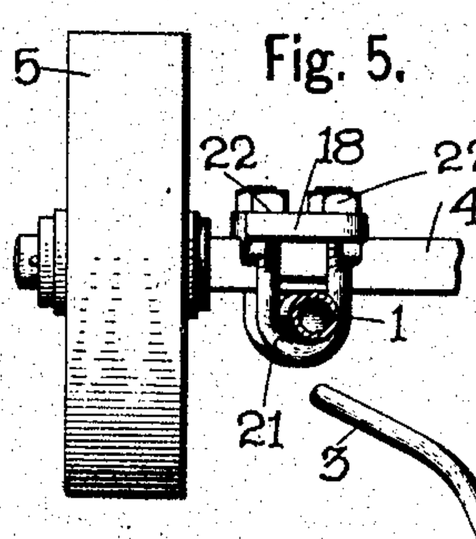

Fig. 3.

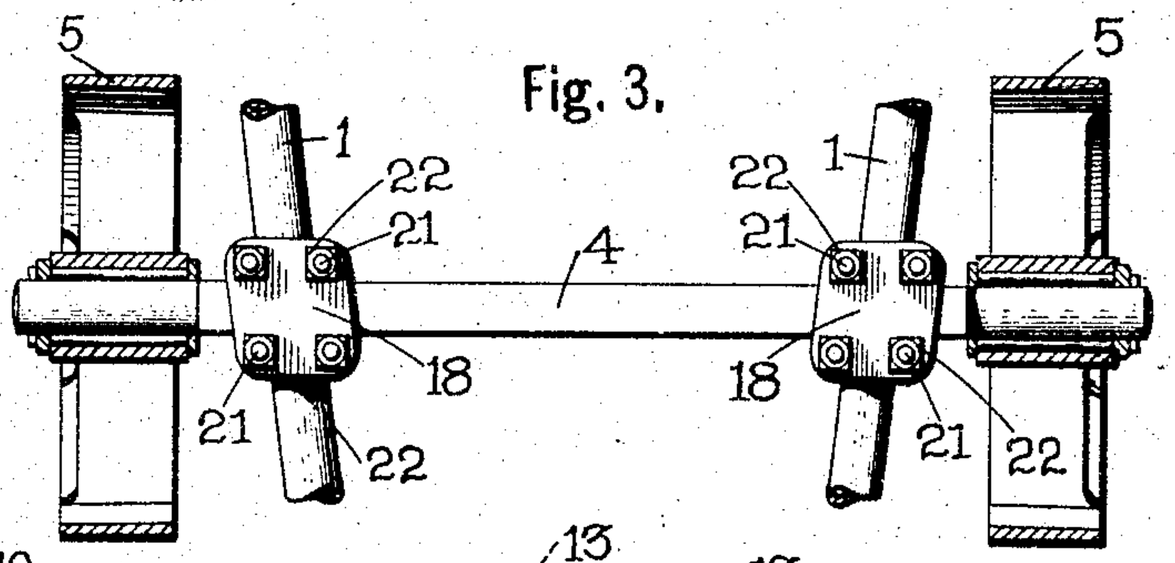

Fig. 2.

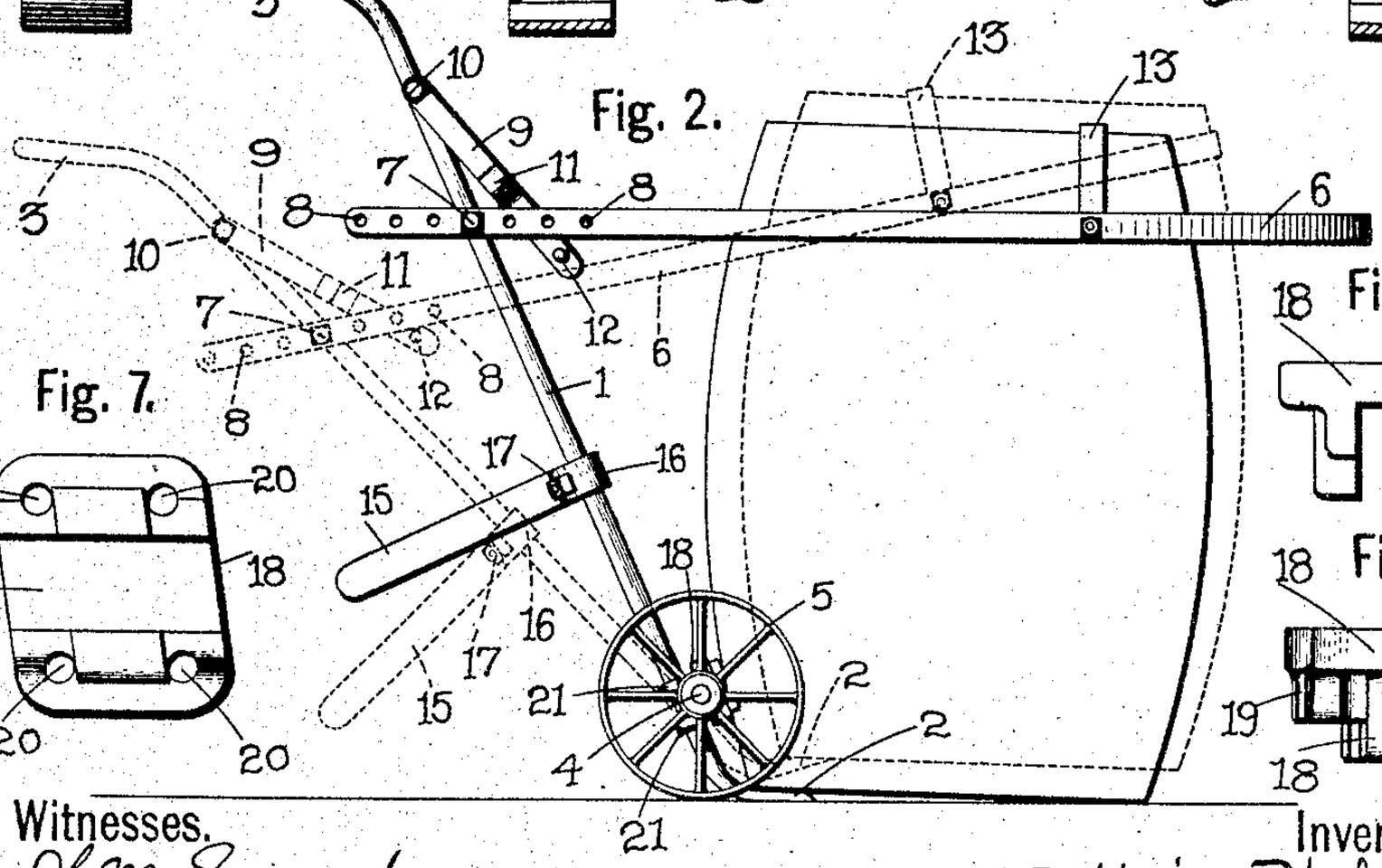

Fig. 8.

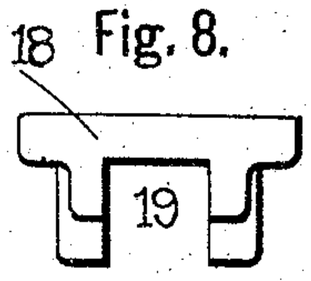

Fig. 9.

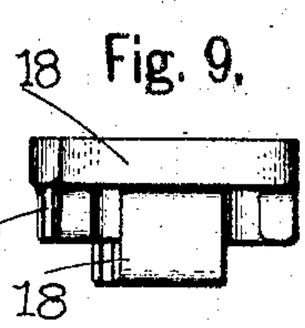

Fig. 7.

Witnesses.

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No. 781,003. Patented January 31, 1905.

UNITED STATES PATENT OFFICE.

BRITAIN HOLMES, OF BUFFALO, NEW YORK.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 781,003, dated January 31, 1905.

Application filed May 31, 1904. Serial No. 210,340.

To all whom it may concern:

Be it known that I, BRITAIN HOLMES, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Trucks, of which the following is a specification.

This invention relates to an improved truck for moving heavy barrels; and it comprises in part two members having their lower extremities shaped to be forced beneath a barrel and a loop adapted to encircle the upper portion of a barrel to hold it in upright position.

The object of the invention is to provide a simple, cheap, comparatively light, and very strong device for quickly and conveniently picking up and moving heavy barrels and the like without tipping or tilting them on their side.

The invention also relates to certain details of construction, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which a preferred adaptation of the invention is illustrated.

Figure 1 is a perspective view of the truck in position for moving a barrel with the barrel shown in dotted lines. Fig. 2 is a side elevation of the truck, showing it placed in lifting position with a barrel in full lines and turned down to elevate the barrel in dotted lines, a barrel also being shown in position to be elevated in full lines and slightly elevated in dotted lines. Fig. 3 is an enlarged fragmentary view of the side members of the truck, the connecting-bar or axle, the clamping device, and a central section through the wheels. Fig. 4 is an enlarged detached side elevation of one of the wheels and one of the clamping devices with a fragment of one of the side members and a section through the connecting-bar or axle. Fig. 5 is an enlarged fragment of the connecting-bar or axle, one of the wheels and clamping devices, and a section through one of the side members. Fig. 6 is an enlarged fragment of one of the side members and one of the ends of the U-loop and the pivotal spring friction locking-arm for the U-loop. Figs. 7, 8, and 9 represent enlarged detached views of one of the clamping-blocks in various positions to generally show the shape of the same.

In referring in detail to the preferred adaptation of the invention shown in the drawings like numerals designate like parts.

This invention, as shown in the accompanying drawings, consists of two angular side members having bent flattened portions at their lower extremities adapted to be forced beneath the bottom edge of a barrel and handles at their upper ends for the convenient grasp of an operator, a cross-bar or axle connecting said members near their lower extremities and having wheels journaled thereon, and a U-shaped loop pivoted at its ends to the members and adapted to be dropped over the top of the barrel to hold it in upright position, means being provided to retain the loop in elevated position and said means being within convenient reach of the operator, so that the loop can be quickly released to drop over and encircle a barrel beneath which the flattened ends of the side members have been forced. The side members are of similar angular form and while extending substantially parallel to each other, as shown in Fig. 2, diverge slightly from each other from their lower extremities upward, as shown in Figs. 1 and 3, in order to bring both the lower extremities sufficiently close to fit beneath and engage a barrel, as shown in Fig. 1, and spread the upper ends far enough for convenient grasp of the operator and to provide proper leverage for the easy handling of the barrel. The side members are preferably formed of steel or other suitable metal tubing of the desired size, as shown in Fig. 5, as that is believed to provide the strongest and lightest form of construction.

The side members are each preferably formed in one piece and consist of an intermediate portion 1, a flattened lower portion 2, which is bent at an angle from the intermediate portion, and a handle portion 3, which is bent at an angle from the opposite or upper end of the intermediate portion and in a direction opposite to the bend of the flattened portion 2. These members are secured to each other by a connecting-bar 4, which is

rigidly clamped to each member a short distance above the flattened portion by a clamping device which will be specifically described farther on. The connecting-bar 4 serves as an axle upon which wheels 5 are journaled, the ends of the bar projecting beyond the side members, so that both wheels are located outside of the side members.

The barrel is supported in upright position when on the truck by a U-shaped loop 6, the ends of which are pivoted to the side members a short distance below the handle portions 3 by pivot-bolts 7. Each end of the loop is provided with a longitudinal row of holes 8, in any one of which the bolts 7 can be fitted to provide means for enlarging or diminishing the size of the loop to fit different sizes of barrels. The U loop is usually held in elevated position by a spring locking-arm 9, which is bolted at one end to one of the side members by a bolt 10. This arm 9 has a V-shaped outwardly-extending intermediate lateral bend 11, which is adapted to project beyond the loop end and to frictionally lock the loop in elevated position, as shown in Fig. 6. The arm 9 is also provided with a lateral outwardly-extending pin 12 near its lower end, which acts as a stop to limit the downward movement of the loop, as shown in Fig. 1. The loop is provided with a substantially ⊏-shaped cross-bar 13, which is bolted at its depending ends to the loop and engages the top of a barrel to limit the downward movement of the loop thereon, as shown in Figs. 1 and 2. To support the truck in convenient position on a floor when not in use, a second connecting-bar 14 is clamped to the side members above the bar 4 and has depending legs 15. The cross-bar 14 and the legs 15 are preferably of integral construction and extend at substantially right angles, and to fasten the same securely to the side members a U-shaped bend 16 is formed at the juncture of each of the legs 15 and bar 14, which partially encircles one of the side members and is rigidly clamped around the side members by a bolt 17, which passes through the opposite extremities of the bend beneath the side member. This forms a very strong and extremely rigid connection.

The bar 4 is fastened to the side members by clamping-blocks 18, which fit upon the bar and have grooves or recesses 19, into which portions of the upper part of said bar projects, as shown in Fig. 5. The blocks are each provided with four bolt-holes 20, through which the ends of U-bolts 21 project. The U-bolts 21 encircle the side members, as shown in Figs. 4 and 5, and are drawn up to rigidly clamp the side members, bar, and clamping-blocks together by lock-nuts 22, fitted on the projecting ends of the U-bolts.

The operation of the device is as follows: The truck is first turned to enable the flattened portions 2 to be forced beneath a barrel, as shown in full lines in Fig. 2. The U-loop is then dropped and the barrel elevated slightly into the position shown in dotted lines in Fig. 2 by downward pressure on the handles.

The operation of the truck is quick and convenient. The parts are arranged so that a very heavy barrel can be easily and quickly moved with but slight exertion, owing to the leverage obtained and the slight distance required to lift the barrel. The barrel is also lifted and maintained in upright position and is deposited in similar position, which avoids tipping or tilting and consequent spilling of the contents of a very full barrel open at the top.

The truck is designed especially for the extremely rapid handling of heavy sugar-barrels and the like.

I claim as my invention—

1. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel, and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the side members and adapted to encircle a barrel to retain it in upright position and a bar extending across the loop and adapted to engage the barrel-top to limit the downward movement of the loop.

2. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel, and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the side members and adapted to encircle a barrel to retain it in upright position and a ⊏-shaped bar extending across the loop and adapted to engage the barrel-top to limit the downward movement of the loop.

3. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the side members and adapted to encircle a barrel to retain it in upright position and a spring locking-arm fastened to one of the side members for normally holding the loop in elevated position, substantially as set forth.

4. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the side members and adapted to encircle a barrel to retain it in upright position and a spring locking-arm fastened to one of the side members for normally holding the loop in elevated position; said locking-arm having a V-shaped bend, substantially as set forth.

5. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the

side members and adapted to encircle a barrel to retain it in upright position and a spring locking-arm fastened to one of the side members for normally holding the loop in elevated position; said locking-arm having a V-shaped bend and a laterally-projecting stop, substantially as set forth.

6. A truck comprising two side members having flattened lower ends adapted to be forced beneath a barrel and bent upper ends constituting handles, a cross-bar, wheels journaled on said cross-bar, a loop pivoted to the side members and adapted to encircle a barrel to retain it in upright position; said loop having a plurality of holes in its ends and bolts passed through any one of said holes for adjustably securing the loop to the side members, substantially as set forth.

7. A truck including two side members, a cross-bar connecting said members, supporting-legs depending from said cross-bar; the cross-bar and supporting-legs being integral, integral U-shaped bends formed at the junction of the cross-bar and supporting-legs which partially encircle the side members and bolts for clamping the U-shaped bends around said side members.

8. A truck including two side members, a cross-bar connecting said members, supporting-legs depending from said cross-bar; the cross-bar and supporting-legs being integral, integral U-shaped bends formed at the junction of the cross-bar and supporting-legs which partially encircle the side members and bolts extending through the extremities of the U-shaped bends and beneath the side members for clamping the U-shaped bends around said side members.

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Witnesses:
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