

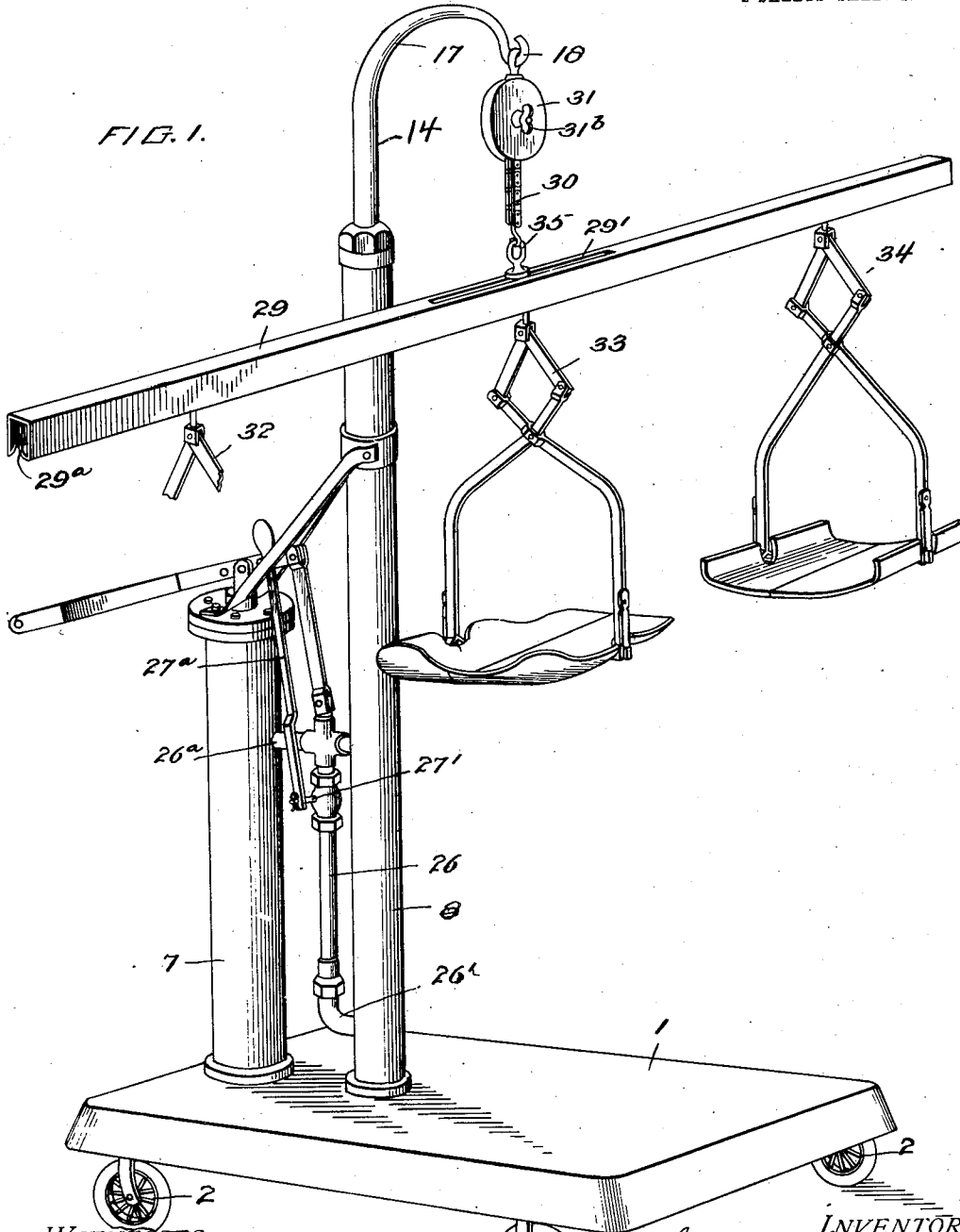
G. W. SEASHOLE.
 BODY LIFTER AND CONVEYER.
 APPLICATION FILED DEC. 1, 1911.

1,033,277.

Patented July 23, 1912.

2 SHEETS-SHEET 1.

FIG. 1.



WITNESSES:

W. F. Kayle.
H. Bailey

INVENTOR

BY

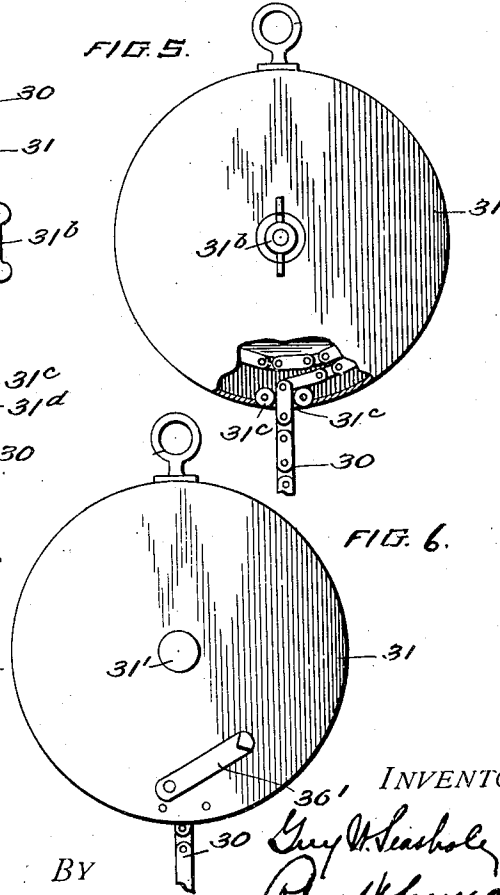
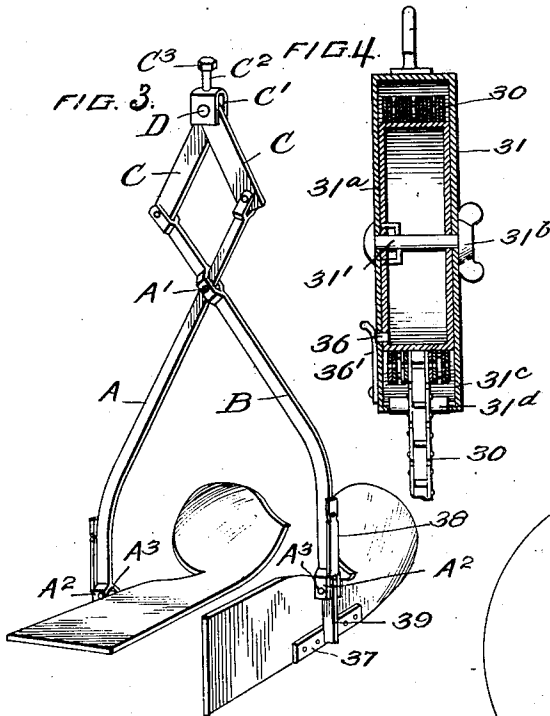
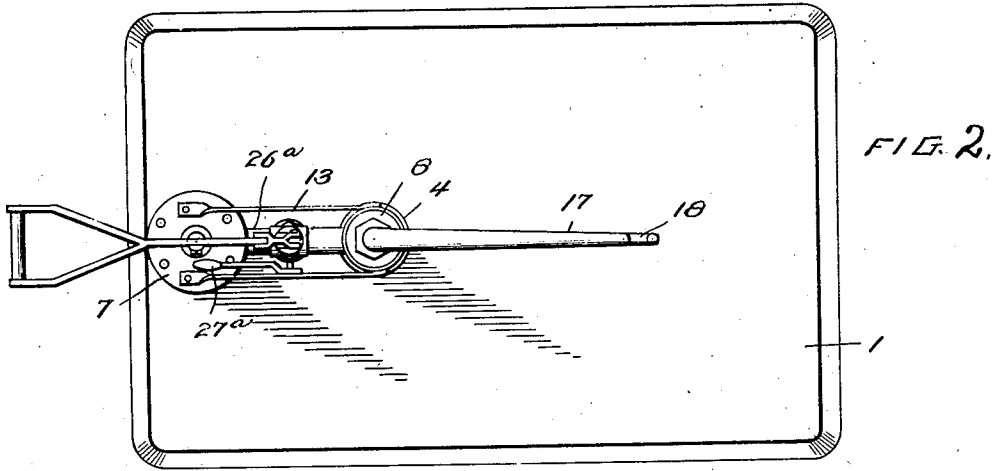
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2 SHEETS—SHEET 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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BODY LIFTER AND CONVEYER.

1,033,277.

Specification of Letters Patent.

Patented July 23, 1912.

Application filed December 1, 1911. Serial No. 683,241.

To all whom it may concern:

Be it known that I, GUY W. SEASHOLE, a citizen of the United States, residing at Clifton Forge, in the county of Alleghany and State of Virginia, have invented new and useful Improvements in Body Lifters and Conveyers, of which the following is a specification.

My invention relates to body lifters and conveyers.

The object of my invention is to produce a portable device for lifting and conveying the bodies of sick or injured persons or of those from which life is extinct.

A further object thereof is to produce a movable platform on which is erected a hydraulic or pneumatically operated lifting crane adapted to raise and transport the body of a person.

Another object thereof is to provide a slotted beam longitudinally adjustably carried on said crane and adapted to be vertically adjusted thereon.

Another object of my invention is to produce toggle-jointed and collapsible slings adjustably carried on said slotted beam adapted to suspend a human body thereon, and a still further object thereof is to provide a more simple, cheap and efficient device of said character than has heretofore been provided.

To these ends, my invention includes the combinations and arrangement of component parts to be hereinafter described and more particularly pointed out in the claims.

In the accompanying drawings, in which like reference characters indicate similar parts, Figure 1 is a perspective view of my invention; Fig. 2 is a ground plan view thereof; Fig. 3 is a detail perspective view of the toggle-jointed body hangers, and Fig. 4 is a detail sectional view of the drum by which the slotted beam carrying the slings is adjustably supported from the crane. Fig. 5 is a side view of the drum case with parts broken away, and Fig. 6 is an elevation of the opposite side thereof.

Referring now to the drawings, 1 indicates the base of my elevator and carrier, which preferably comprises a rectangular plate which is mounted at its corners on wheels or casters 2, preferably carried in ball bearing stems to facilitate the travel

thereof. Upon the upper face of said plate 1, I secure at predetermined positions, the elevating cylinders 8 and the cylindrical reservoir 7, within the latter of which is provided a pump mechanism, which forms no part of my present invention.

Within the elevating cylinder 8 is carried the piston rod 14, the outer end of which extends beyond the top of the cylinder and terminates in the curved crane 17 and eyelet 18 upon which is adjustably swiveled the beam 29. Said piston rod and crane are adapted to be elevated to a preferred position by the operation of the pump mechanism.

My apparatus for supporting a human body on the crane in a prone or supine position comprises a beam 29, adjustably carried on the crane by the chain 30 and adjustable drum 31, and the slings 32, 33 and 34 longitudinally carried on said beam. As shown in the drawings, the beam 29 comprises an elongated hollow bar having a slot 29^a in its upper face intermediate of its ends in which is secured the swivel 35 by which it is hung upon the end of the chain 30, and through the longitudinal adjustment of which the same may be balanced when suspended on the crane. Said beam is also provided with a longitudinal slot 29^a on its under face running the entire length thereof in which are adjustably carried the slings 32, 33, and 34, hereinafter described. The drum 31 is rigidly mounted on the shaft 31¹ which is rotatably mounted in the cylindrical case 31^a. The outer end of the shaft is provided with a winged head 31^b by which it may be turned to wind the chain 30 on the drum. At each end of the opening 31^c in the drum through which the chain extends, small idle rollers 31^d are mounted to provide bearings for the chain in its passage into and out of the cylindrical case. One end of the chain 30 is secured upon the periphery of the drum, and the opposite or free end is provided with a hook to engage the eyelet on the swivel 35 on the beam. It is therefore apparent that the height of the beam may be adjusted on the crane through the medium of the block and chain, thus described, and the extension of the chain may be adjusted and held in desired position by the spur 36 on the spring 36¹ pivotally secured on the case 31. Said spur is adapted to project

through an orifice in the side of said case and engage one of a plurality of orifices in the side of the drum, and thus secure the drum against rotation.

5 Longitudinally adjustable upon the beam 29, are carried the toggle-jointed slings 32, 33, and 34. These are substantially of identical construction with the exception of the leaves, which are specially molded or
10 shaped to conform to the parts of the body they support. As shown in the drawings, they each comprise the arms A and B which are pivoted on each other at A¹ and are pivotally suspended on the hangers C by the toggle joints D. Said hanger C comprises the frame C¹ and the bolt C² provided with an enlarged head C³ adapted to be carried in the slot 29^a on the beam 29 and adjusted longitudinally thereon as desired
15 in use. Three of said slings are usually employed to suspend a body, one to support the head, another embracing the hips or thighs and the other below the knees, and each is provided with a pair of leaves hinged on the lower or free ends of the arms A and B, as hereinafter described.

The lower ends of each of the arms A and B are bifurcated or forked at A² and transversely pierced to receive the pins A³. A
30 leaf 37 is hinged on the bifurcated end of each of said arms, adapted to be held in horizontal positions by the latch 38, and released therefrom upon the disengagement to release the body when desired. Each of
35 said leaves are substantially oblong-shaped, although modified somewhat to fit their use, and are supported on transverse bars 39 intermediate of their ends, which adjacent to their outer ends are pivoted between the bifurcated ends of the arms A and B on the
40 pins A³. The outer ends of said leaf bars project beyond the vertical edges of the arms A and B, and may be engaged or disengaged by the end of the latch 38 to hold the leaves in or release them from horizontal
45 positions. As shown in the drawings, the outer horizontal edge of each of said leaves 37 is cut away around the outer ends of each of said bars and the ends of the bars are recessed or confined inside of the longitudinal
50 edge of the leaves, to permit them to be raised or lowered inside the space occupied by the contour of the leaves. The inner edge of each leaf abuts that of its companion on the sling when held in horizontal position. As is also shown in the drawings, the leaves of the sling 32, carried at one end of the beam 29, are curved upwardly and molded to support the head of a human
55 body in normal position, and those of the intermediate sling 33 are curved upwardly on the ends to conform to the shape of the hips and thighs of the body, while those of the sling 34 are straight to support the legs

thereof. It will therefore be apparent from 65 the foregoing description and by reference to the accompanying drawings, that the folding slings may be adjusted to the height of a recumbent body and the leaves inserted beneath it and latched in horizontal position 70 to support it. By the operation of the pump the crane on which said slings are suspended may be elevated to the desired height and transported on its base and casters, swung to either side, and again lowered by opening the intermediate valve which permits the return of the liquid or air from the elevating cylinder to the reservoir. The body may then be released by disengaging the latches on the slings which will open on 80 their hinges, and by reason of their construction unfold within the space occupied by the horizontal contour thereof. And it will further be appreciated that the parts and combinations of my invention may be 85 modified within a wide range from the specific exemplification shown, without departing from the spirit and scope thereof.

Having thus described my invention, what I claim as new, and desire to be secured by 90 Letters Patent, is—

1. The combination with a portable base, and an elevating cylinder and crane mounted thereon, of a horizontally disposed slotted beam adjustably suspended on said crane, 95 and a plurality of collapsible toggle-jointed slings adjustably carried on said beam, substantially as described.

2. The combination with a portable base and an elevating cylinder and crane mounted 100 thereon, of an adjustable drum having a flexible chain secured thereon, a horizontally disposed slotted beam suspended on said chain and drum, and a plurality of collapsible toggle-jointed slings adjustably carried 105 on said beam, substantially as described.

3. The combination with a portable base and an elevating cylinder and crane mounted thereon, of a horizontally disposed beam suspended on said crane, a plurality of toggle- 110 jointed slings adjustably carried on said beam, having hinged leaves adapted to be held in a horizontal plane and released therefrom to drop the load thereon, substantially as described. 115

4. A collapsible sling for supporting a human body, comprising a swiveled hanger, a toggle-joint suspended thereon, a pair of pivoted arms suspended on said toggle-joint, a leaf hinged on the free end of each arm, 120 a latch adjacent to the end of each arm adapted to secure the leaves on a horizontal position to support a load and to release same to drop the load, substantially as described. 125

5. A collapsible sling for supporting a human body, comprising a swiveled hanger, a toggle-joint suspended thereon, a pair of

pivoted arms suspended on said toggle-joint, a leaf hinged on the free end of each arm in a recess on the outer edge thereof by a lateral supporting bar, which projects beyond the vertical edge of the arms, and a pivoted latch adapted to engage said bar and hold or release said leaves in or from a horizontal position, substantially as described.

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Witnesses:

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