I. PIERCE. CASKET SLING.

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CASKET-SLING.

SPECIFICATION forming part of Letters Patent No. 613,938, dated November 8, 1898.

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To all whom it may concern:

Be it known that I, ISAAC PIERCE, a citizen of the United States, residing at West Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Casket-Slings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its objects, first, to provide a casket-sling which will operate to lower a casket into a grave with an even and regular motion, and, second, to provide a device which can be easily manipulated by one person to lift or lower the casket, as desired, and which can also be of a small and compact dimension and easily handled and stored away or transported.

The invention will be found fully described hereinafter and also be specifically mentioned

20 and set forth in the claims.

In the drawings my invention will be found illustrated, with the same characters of reference indicating the same parts throughout both views.

Figure 1 represents a side view in elevation of my improved casket-sling arranged for operation. Fig. 2 is a transverse vertical section of the same.

1 represents a bed-plate which extends 30 across above the grave and is supported by legs 2 or any other convenient support, which rest upon the planks 3, arranged along the

edges of the grave.

Upon the upper surface of the plate 1 is arranged a cavity or recess 4, into which rests
the lower convex end 5 of a vertical cylindrical reservoir 6, arranged for carrying a
supply of compressed air. The central portion of the plate at the bottom of the recess
40 4 is cut out to form an opening 7, and is also
provided with laterally-extending slots 8,
while 9 is a vertical cylinder extending
through the reservoir 6 and with its lower
end extending through the opening 7 and provided with a closed end and with a centrallylocated packing-box 10, while the upper or
opposite end extends above the reservoir to a
proper distance, as may be desired.

Within the cylinder is arranged an ordi-50 nary air-piston 11 and a piston-rod 12, which, first passing through the packing-box 10, is

provided on its lower end with an eye 13 and connected by a bolt 14 to an attaching device 15, secured to a lifting-piece 16, which extends on each side of the device 15 to a suitable distance and is provided at its end portions with straps 17, one end of each of which is permanently secured to the lifting-piece, while the opposite end is secured detachably thereto, and 18 is a connection for an air- 60 pump for pumping a desired pressure of air into the reservoir.

19 is a pipe provided with a valve 20 and is arranged with one end connected with the air-reservoir 6, while its opposite end is conected with the lower end of the air-cylinder 9 for admitting air from the reservoir to the

cylinder below the piston.

21 is an air-pipe with its lower end connected to the lower end of the air-cylinder 70 and with its upper end connected to the upper or opposite end of the cylinder, and this pipe is also provided with a suitable valve 22, which permits the air from the cylinder below the piston to pass through the pipe to the 75 cylinder above the piston as the piston is moved downwardly.

23 is an escape-valve which is attached to the upper end of the air-cylinder to be opened for the escape of air from above the piston 80 when a pressure is admitted below the piston

for moving the same upwardly.

24 represents a casket resting upon crosssticks 25 in position for lowering into the grave, and the frame or bed-plate is placed 85 in position above the casket with the air-reservoir provided with a desired air-pressure (say fifty or seventy-five pounds) resting upon the bed-plate. The slings or straps 17 are also placed beneath the casket and with their go ends secured to the lifting-piece 16. The valve 22 is then closed and the escape-valve 23 is opened, and then on opening the valve 20 air from the reservoir under pressure is admitted to the cylinder below the piston and 95 moves the same upwardly and lifts the casket to release the cross-sticks, which are then removed, and the valves 20 and 23 are then closed and the valve 22 is opened sufficiently to allow a slow escape of the air from be- 100 neath the piston through the pipe 21 to the cylinder above the piston, which allows the

piston to move slowly downward until the casket has reached its resting-place, and the valve 22 is then closed and the straps are released at one end and the valves 23 and 20 are opened to allow the compressed air from the reservoir to lift the piston to its former position at the upper end of the cylinder, and the

parts can then be removed.

It will be seen that by means of the aircylinder and piston an easy, even, and noiseless movement of the lowering mechanism is
obtained, and by properly manipulating the
valve 22 the movement of lowering the casket can be regulated to any desired speed
without any extra labor or manual labor,
which is very desirable and a great advantage,
and by the use of the air-cylinder as a medium for the lowering operation the liability
of accidents and uneven movement of the casket is utterly avoided.

Of course it will be understood that while I have described the use of compressed air as a medium for operating the piston to lower the casket I am aware that any other fluid or liquid may be used, if desired, or a vacuum in the cylinder above the piston instead of an air-pressure below the same could be used for operating the piston and with the same result, and while I have described certain devices for connecting the slings with the piston-rod the mechanical details of these parts are not entirely essential to the operation of the mechanism, as many well-known substi-

tutes for these parts may be used, and the

general operation will result the same as here- 35 in described.

What I claim as my invention is—

1. In a casket-sling the combination of the lifting-piece provided at its ends with the straps for carrying the casket, with an air-40 cylinder having a piston with a piston-rod extending from one end of the cylinder and connected to said lifting-piece, an air-pipe having its ends connected to opposite ends of said cylinder and provided with a valve 45 and means for supplying air-pressure to one end of said cylinder and for exhausting air from the opposite end, substantially as set forth.

2. In a casket-sling the combination of a 50 lifting-piece having at its ends the straps for carrying the casket, a vertical air-cylinder carrying a piston and a piston-rod with its outer end pivotally attached to said lifting-piece a pipe and valve for exhausting air 55 from the lower end of said cylinder, a compressed-air reservoir surrounding said cylinder and a pipe and valve for admitting compressed air from the reservoir to the lower end of said cylinder for lifting the piston, sub- 60 stantially as set forth and described.

In testimony whereof I affix my signature

in the presence of two witnesses.

ISAAC PIERCE.

Witnesses:
GEO. P. THOMAS,
JAS. E. THOMAS.