

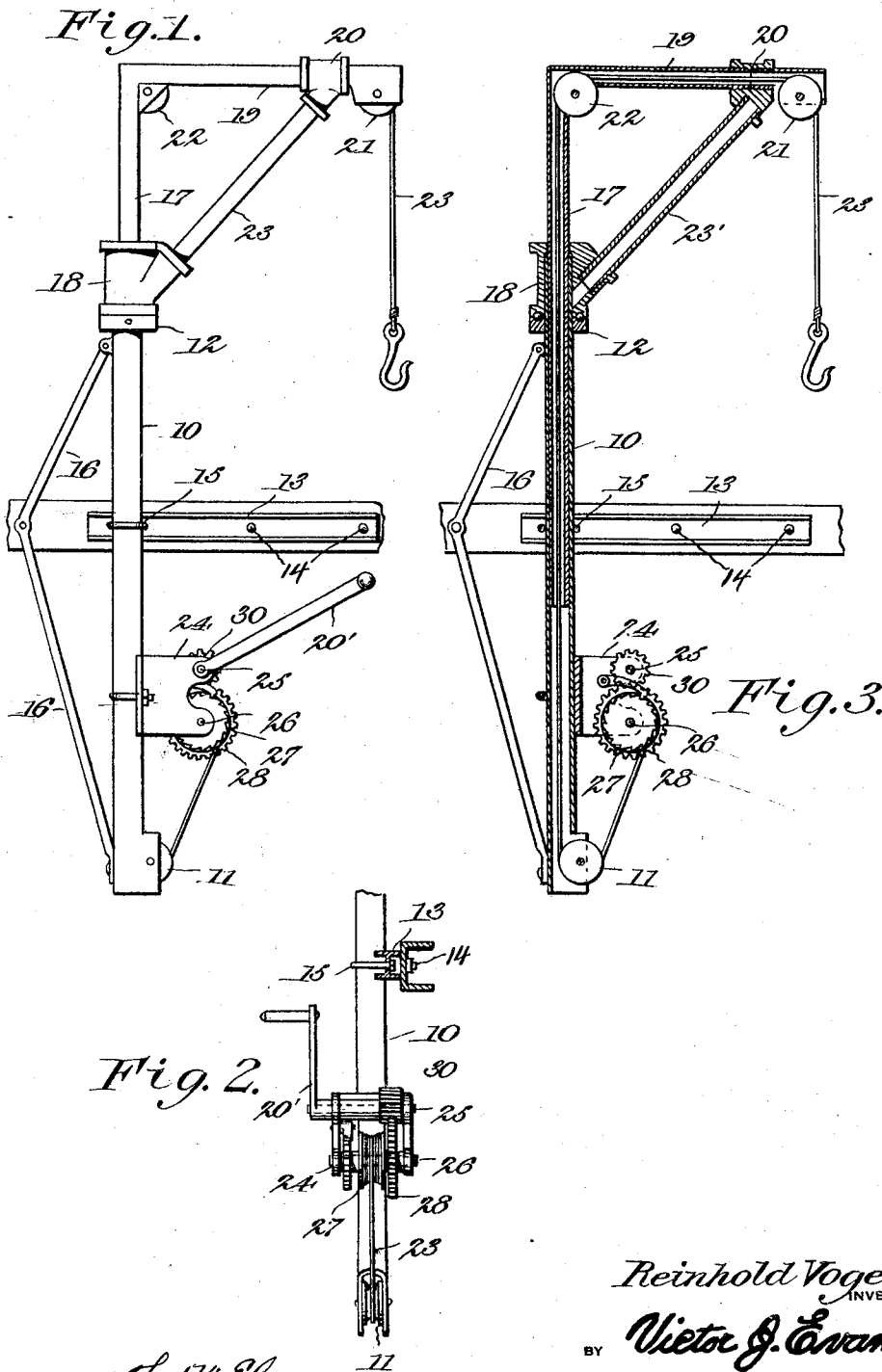
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R. VOGEL

LIFT

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UNITED STATES PATENT OFFICE.

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LIFT.

Application filed April 7, 1922. Serial No. 550,327.

To all whom it may concern:

Be it known that I, REINHOLD VOGEL, a citizen of the United States, residing at Wilton, in the county of Fairfield and State of Connecticut, have invented new and useful Improvements in Lifts, of which the following is a specification.

This invention relates to lifts and particularly to derricks for attachment to vehicles and operable for lifting heavy objects and swinging them into or onto the vehicle.

Another object is to produce a device of this nature in which most of the parts may be constructed from ordinary pipe and standard pipe fittings.

Another object is to produce a device of this nature which shall be simple of construction, cheap to manufacture, and highly efficient for the purpose for which it is designed.

With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claim, and are illustrated in the accompanying drawing, in which:—

Figure 1 is a side elevation of a portion of a vehicle furnished with my improvement.

Figure 2 is a front view of the lower end of my device.

Figure 3 is a vertical section through the same.

Like characters of reference refer to like parts in all views.

Referring to the drawing in detail, 10 represents an upright length of pipe which is provided near its lower end with a sheave 11 and at its upper end with a thrust bearing 12. The member 10 is secured to an I-beam 13 in any suitable manner as by the U-member 15; said I-beam being secured to the chassis of the vehicle as by bolts 14. One or more props 16 may be employed as auxiliary means for holding member 10 firmly in place.

An upright pipe 17 is nested in the pipe 10, and is provided with a Y-fitting 18 of the usual ordinary type, which seats itself on the thrust bearing 12 so that the member 17 is mounted to turn freely in the member 10. Extending at right angles from the top of member 17 is an arm 19 which carries at its

free end a Y-fitting 20 and a sheaf 21. A sheaf 22 is mounted at the junction of members 17 and 19, and a cable 23 passes over sheaves 21, 22 and 11, using pipes 10 and 17 as housings. A brace 23' connects the fittings 18 and 20 so that the arm 19 is firmly supported.

A frame casting or bracket 24 is secured to the upright 10 and supports upper and lower shafts 25 and 26. Shaft 26 carries a drum 27 and operating gear 28; and the shaft 25 is operable by a handle 20' and carries a gear 30 meshing with said gear 28. The end of cable 23 is secured to the drum 27.

While I have described what I deem to be the most desirable embodiment of my invention, it is obvious that many of the details may be varied without in any way departing from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth nor to anything less than the whole of my invention limited only by the appended claim.

What is claimed as new is:—

In a device of the character described, the combination with a chassis frame of a vehicle, a tubular section detachably secured midway its ends to the chassis frame, a prop having converging members secured to the section and frame respectively and being adapted to brace the section in upright position, a thrust bearing formed on the upper end of the tubular section, a Y-shaped fitting forming a portion thereof, an angle shaped tubular section telescopically mounted within the first mentioned tubular section and passing through the Y-shaped fitting in a manner whereby this angle shaped section is rotatably mounted through the medium of the bearing, the Y-shaped fitting formed on the outer end of the angle shaped section, a brace connecting the Y-shaped fittings, a winch mounted on the first tubular section below the chassis frame, sheaves mounted in rotation within the respective sections, and a cable mounted for movement within the sections and being operatively associated with the sheaves and the winch as and for the purpose specified.

In testimony whereof I have affixed my signature.

REINHOLD VOGEL.