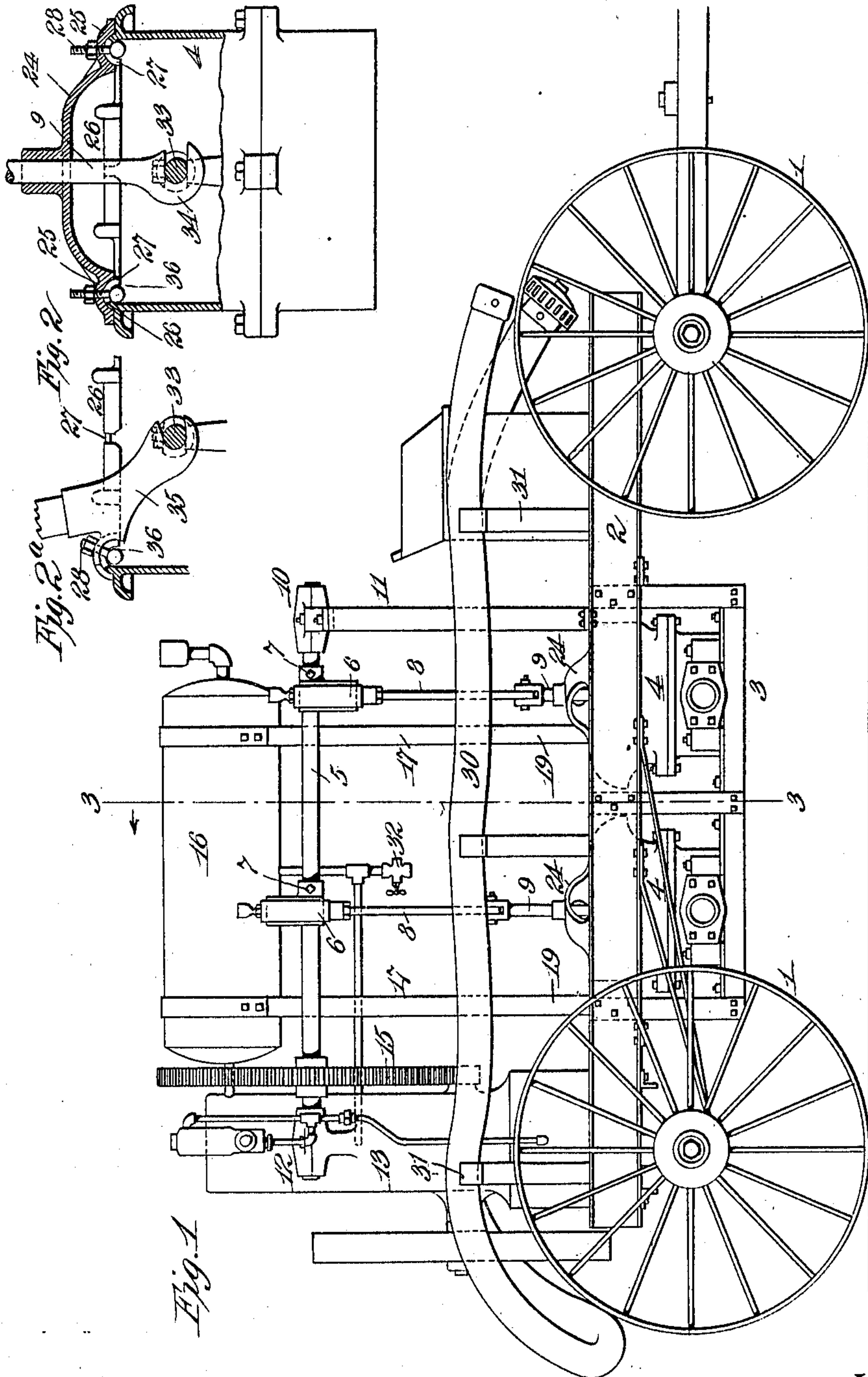


W. H. VAN WINKLE.  
PORTABLE PUMP.  
APPLICATION FILED NOV. 20, 1908.

978,241.

Patented Dec. 13, 1910.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## PORTABLE PUMP.

978,241.

Specification of Letters Patent. Patented Dec. 13, 1910.

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*To all whom it may concern:*

Be it known that I, WALTER H. VAN WINKLE, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented a certain new and useful Portable Pump, of which the following is a description.

The object I have in view is the production of a portable pump in which the pumps will be suspended on a lower plane than the axles of the carriage, and hence the lift will be reduced.

Further objects lie in the production of a power pump which may be utilized in connection with any well-known form of hand pump, without alteration or change in the latter.

These and further objects will appear in the following specification and accompanying drawings, considered together or separately.

In the drawings:—Figure 1 is a side elevation of an apparatus embodying my invention, Fig. 2 is an enlarged view of one of the pump elements showing a portion broken away which illustrates a form of piston rod guide, Fig. 2<sup>a</sup> is a detail of the same.

In all the views, like parts are designated by the same reference characters.

In the carrying out of my invention, I provide a wheeled truck, having wheels 1—1 and a frame 2. To the side members of the frame 2 is attached a depending supplemental frame 3. Upon this supplemental frame are carried the pumps 4—4. Above the frame 2 is a shaft 5, carrying eccentrics 6—6. The eccentrics are secured to the shaft by means of set screws 7—7 and turn therewith. The eccentric straps are secured to connecting rods 8—8, which in turn are pivoted to the pump piston rods 9—9. One end of the shaft 5 is supported in a bearing box 10 carried on a vertical standard 11. The other end of the shaft is supported in a bearing box 12 carried upon the frame of an internal combustion engine 13.

The shaft of the engine carries a pinion 14 which intermeshes with a gear 15 carried on the shaft 5 and of considerably larger size than the pinion. By this means a speed reduction gearing is produced whereby the shaft 5 and the eccentrics 6 are rotated much slower than the shaft of the engine.

The engine illustrated is of a type in

which the gasolene supply is located in its base.

A water tank 16 is for the cooling water of the water jacket of the engine. This tank is supported on standards 17—17 at a proper elevation in relation to the engine so that the circulation of water will properly take place.

The pumps 4 carried by the supplementary frame 3 may be of any form, but the particular kind illustrated are desirable as they form a coöperative combination with a particular portion of my invention which I will hereinafter describe. The pumps illustrated are the well known type of Edson lift pump employed in sewer and trench excavating services which are ordinarily actuated by means of a hand lever which engages with a hook which is fulcrumed over a bearing on the edge of the pump and engages with a cross member on the pump piston.

According to the present invention, I attach the piston rod 9 to a cross head 33 on the pump piston by means of a hook 34. For the purpose of guiding rod 9, owing to the fact that it is actuated by the connecting rod 8, I employ a guide or bridge 24. This guide or bridge has in its center a bearing through which the piston rod 9 plays and has on its ends cupped feet 25 which rest in the bearings 26 on the side of the pump. These bearings ordinarily in this form of pump form a fulcrum for the handle hook 35 and are provided each with a notch 27 through which a T-headed bolt 28 passes. This bolt may be the same bolt which is used in connection with the ordinary manual actuating means and passes through the opening or hole in the cupped foot 25 and is set up in the notch 36 below such cupped foot, as shown.

By the mechanism described, it is possible to use the ordinary form of Edson pump and without in any way injuring or altering it, but simply by the removal of the handle hook 34 and the addition of the bridge 24 and rod 9. By using the bridge and adding the hook 35, and attaching the same to the bearings by means of the bolt 28, the pump may be converted into a manually actuated pump, which may be desirable in the event of the engine becoming disabled.

The discharge from the pumps is through a trough which leads off to one side. The



intakes of the pump are connected to a suction hose 30, which, when the device is in traveling condition, is supported on rests 31, such rests being formed of ribbons secured  
5 to the side members of the frame 2.

By providing rests on each side of the frame, the hose can rest on each side of the frame and be looped up in the back, shown in Figs. 1 and 4.

10 For the purpose of emptying the tank 16, a cock 32 is provided, such cock being located immediately above the trough 29.

It is apparent that by loosening one of the set screws 7, the shaft 5 will turn loosely  
15 in the eccentric and one pump will be disengaged, and the engine will work entirely upon the other. This may be desirable when a smaller amount of pumping is necessary.

In accordance with the provisions of the  
20 patent statutes, I have described the principle of my invention, together with the apparatus which I now consider to represent

the best embodiment thereof; but I desire to have it understood that the apparatus shown is merely illustrative and that the invention 25 can be carried out in other ways.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:

A portable pump having a frame, an 30 open ended pump with bearings on its rim, said bearings having slots therein, in combination with the moving element of the pump, a guide and a hook ended connecting rod, the hook connecting the moving element 35 of the pump, and T-headed bolts which pass through the slots and engage with the bearings, holding the guide in the bearings.

This specification signed and witnessed this eighteenth day of November, 1908.

WALTER H. VAN WINKLE.

Witnesses:

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