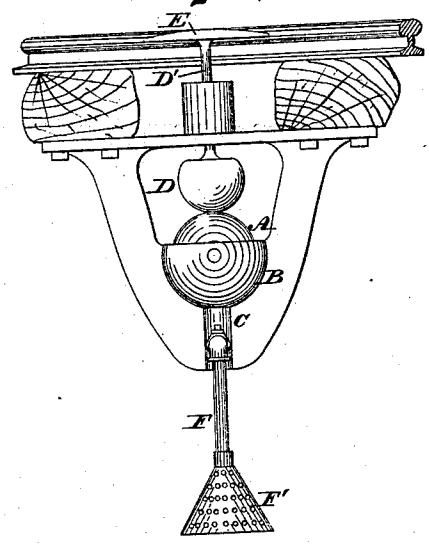
(No Model.)

R. P. GARSED.

PUMPING MECHANISM FOR SUPPLYING RAILWAY TANKS.

No. 282,070. Patented July 31, 1883.

Fig. 1.



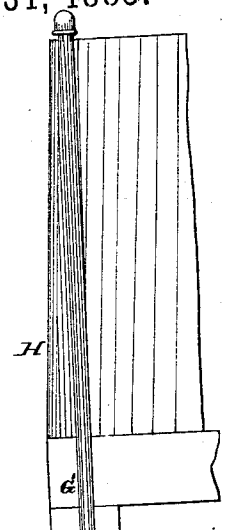
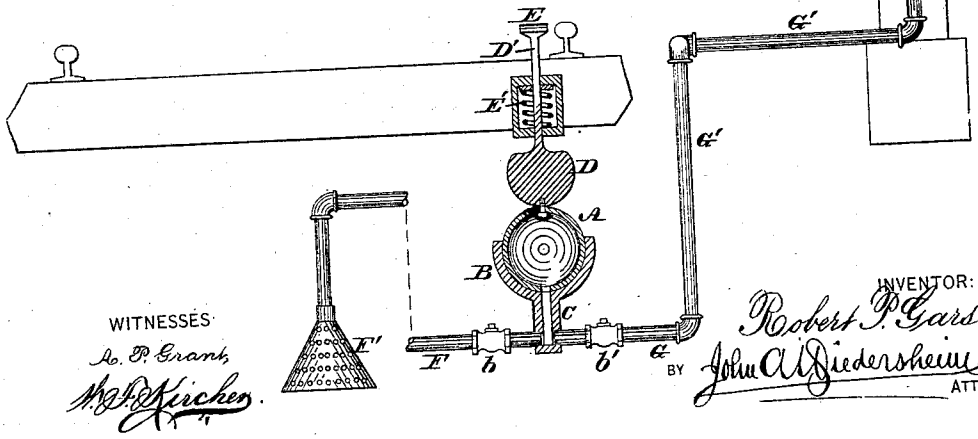


Fig. 2.



WITNESSES:

A. P. Grant,

W. P. Kirchen.

INVENTOR:

Robert P. Garsed,

BY John A. Diedersheim

ATTORNEY.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ROBERT P. GARSED, OF NORRISTOWN, PENNSYLVANIA.

PUMPING MECHANISM FOR SUPPLYING RAILWAY-TANKS.

SPECIFICATION forming part of Letters Patent No. 282,070, dated July 31, 1883.

Application filed March 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. GARSED, a citizen of the United States, residing at Norristown, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Improvement in Pumping Mechanism for Supplying Railway-Tanks, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the pumping mechanism embodying my invention. Fig. 2 is a transverse section thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention relates to mechanism for supplying railway-tanks and similar purposes; and it consists of a hollow body communicating with a source of water-supply, in combination with a plunger and its stem, a shoe, a returning-spring for said plunger, and hangers suspended from the road-bed of a railway-track to form a support for the other devices above named.

It also consists of a hollow elastic sphere, used as the body aforesaid, in combination with a protecting-jacket, pipes leading to said sphere from a source of water-supply, a plunger provided with a stem which extends upward to the bed of the railway-track, and a shoe on the upper end of said stem, for the purpose set forth.

Referring to the drawings, A represents the body or barrel of the pump, formed of a hollow sphere of rubber or other suitable elastic material, which is inclosed in a supporting and protecting jacket, B, and has at its bottom an opening, *a*, which communicates with a vertical pipe, C, connected to said jacket B, the latter being properly sustained below the bed of a railroad.

D represents a plunger or head which is connected to the top of the body, and its stem D′ extends vertically through the road-bed, so that its upper end is adapted to be struck or engaged by the wheels or other parts of a passing train, whereby the plunger will be depressed, said upper end having secured to it a horizontal shoe, E, whose upper face is inclined, in order to cause gradual operation of the weight or power superimposed thereon.

In order to return the plunger to its normal position, I provide a spring, E′, which bears upwardly against a shoulder or cross-piece of the stem D′, and rests on the bottom of a box or other inclosure, which is supported on the road-bed, and its top and bottom walls serve to guide said stem D′, it now being noticed that the action of the passing train and the spring E′ cause the plunger to alternately compress the body A and restore it to its normal position, or, in other words, to work the body after the manner of a pump.

F represents a pipe, which at one end is secured to and communicates with the pipe C, and at the other end is provided with a strainer, F′, the latter being inserted in a stream, spring, well, or other source of supply of water. To the pipe C is also secured a communicating pipe, G, which, by means of branches G′, leads to the tank H, the pipes F G being provided with check-valves *b b′*. It will be seen that when the body A is worked water is drawn through the pipe F and forced into the pipe G, and thereby directed to the tank, the invention providing simple, inexpensive, convenient, and easily-operated means of supplying said tank for the requirements of the road and other purposes.

It is evident that the tank H may be supplied with air instead of water, in which case the strainer or rose F′ is not inserted or immersed in the water, but the operation of the pump is not affected.

The pump is shown firmly attached to a hanger which is rigidly secured to the cross-ties; but it is evident that it may be pivoted to said hanger, so that it will turn or move radially when the shoe receives the impact of the wheels, thus avoiding abruptness of depression of the shoe and consequent concussion to connected parts.

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

1. The mechanism for supplying railway-tanks, consisting of a pump formed of a hollow compressible body and its operating-plunger, the stem whereof is provided with a shoe at its upper end, and a spring for returning said plunger, said compressible body communicat-

ing by pipes F with a source of water-supply, substantially as set forth.

2. The hollow elastic sphere or body provided with a protecting-jacket and communicating by pipes F with a source of water-supply, in combination with the plunger provided with an upwardly-extending stem which extends through the road-bed of a railway-track and is provided with a shoe at its upper end, substantially as set forth.

3. The hollow elastic body, in combination with the plunger and its stem, a shoe at the upper end of said stem, and a spring encircling said stem and arranged in a box in the road-bed of a railway-track, substantially as set forth.

4. The mechanism for supplying railway-tanks, consisting of the hollow body communicating by pipes with a source of water-supply, the plunger and its stem, the shoe, and the returning-spring for said plunger, in combination with hangers suspended from the road-bed of a railway-track and forming a support for the said mechanism.

R. P. GARSED.

Witnesses:
JOHN A. WIEDERSHEIM,
W. F. KIRCHER.