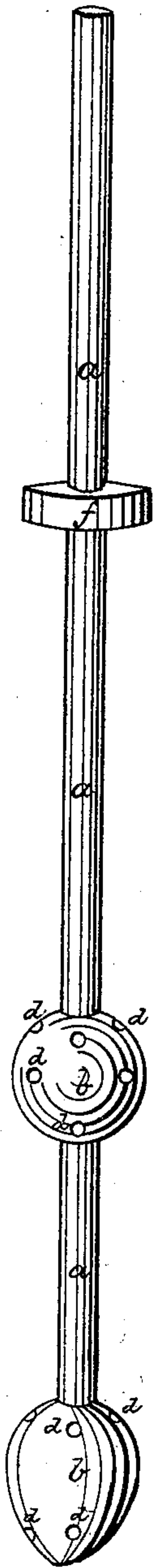


*T. Rose,*

*Oil Pump.*

*N<sup>o</sup> 50,846.*

*Patented Nov. 7, 1865.*



*Witnesses*  
*Chas. Foster*  
*L. D. Garrison*

*Inventor:*  
*Timothy Rose*

# UNITED STATES PATENT OFFICE.

TIMOTHY ROSE, OF CORTLANDVILLE, NEW YORK.

## IMPROVEMENT IN PUMPS FOR OIL-WELLS.

Specification forming part of Letters Patent No. 50,846, dated November 7, 1865.

*To all whom it may concern:*

Be it known that I, TIMOTHY ROSE, of Cortlandville, in the county of Cortland and State of New York, have invented a new and useful Improvement in Pumps for Bored or Sunk Wells; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and the letters of reference marked thereon.

My invention is intended more particularly for oil-wells; but I do not intend to limit it thereto.

In oil-wells a difficulty is usually experienced in this respect, viz., that there is in the crude oil a gummy substance called "paraffine," which is of less specific gravity than the other elements found in and with the oil, and of course it rises and collects on the surface of the oil. In the working-barrels of the pumps a seed-bag or other device is used near the lower end of the barrel or pipe to keep the water and dirt from above descending and mixing with oil at the bottom of the pipe. The paraffine rises on the outside of the pipe, and between it and the walls of the well, often as high as the seed-bag, and, as it keeps collecting, eventually fills up the space between the pipe and the outer walls of the well from the seed-bag to the lower end of the pipe. At that point, of course, it is kept clear by the direct action or suction of the pump. The paraffine, being gummy and viscid, adheres to the walls of the well and fills the crevices in such walls, and thus prevents the flow of any oil into the well above the lower end of the pipe. Various methods and devices have been resorted to to obviate or get rid of this paraffine and open the crevices thus closed up, such as boring the wells larger, forcing air into the wells, and igniting powder at the bottom thereof.

My invention is intended to obviate this difficulty by a pipe so constructed as to carry off

the paraffine as it collects, or, rather, before it collects.

*a a* in the drawing represent the lower end of an ordinary working-barrel to a pump. *f* is the seed-bag. Below the seed-bag, and also below the sucker of the pump or piston, are hollow globes *b b*, connected by the pipe *a* and forming a portion of such pipe, and as much larger than the ordinary pipe as the well will admit. In this globular portion of the pipe holes *d d* are drilled in the direction of the center of the globes, but not so many nor so large but that the interior area of the working-pipe shall nearly equal the area of all the holes in the globes, so that at each stroke or lift of the piston a strong current will be drawn or forced through each of these holes in the globes, thus keeping up a continual agitation of the contents of the well below the seed-bag and drawing from all the crevices in the walls of the well in the neighborhood of the globes, and also carrying off in the oil all paraffine or other elements in the oil. The lower globe has a hole at its bottom slightly larger than the other holes, to allow any stones or dirt to drop through, if any should be drawn in above.

The globes are made of sufficient thickness to give a direction to the current drawn through them from the outer portion or walls of the well.

What I claim as my invention, and desire to secure by Letters Patent, is—

The attaching or connecting to the lower end of the pipe or working-barrel of pumps in oil or bored wells one or more globes with holes in the same in the direction of the center thereof, as above described, and for the purposes set forth.

TIMOTHY ROSE.

Witnesses:

CHAS. FOSTER,  
L. D. GARRISON.