

J. T. WHIPPLE.  
PUMP.

No. 102,634.

Patented May 3, 1870.

Fig 1.

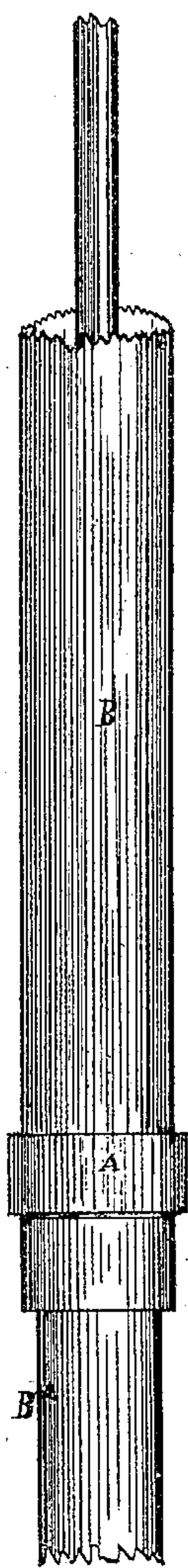


Fig 2.

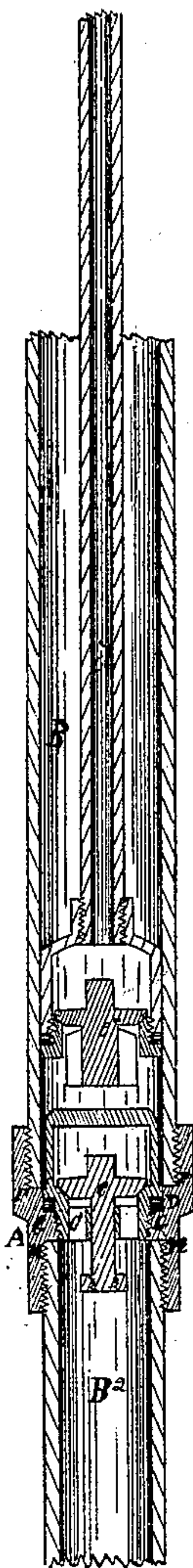
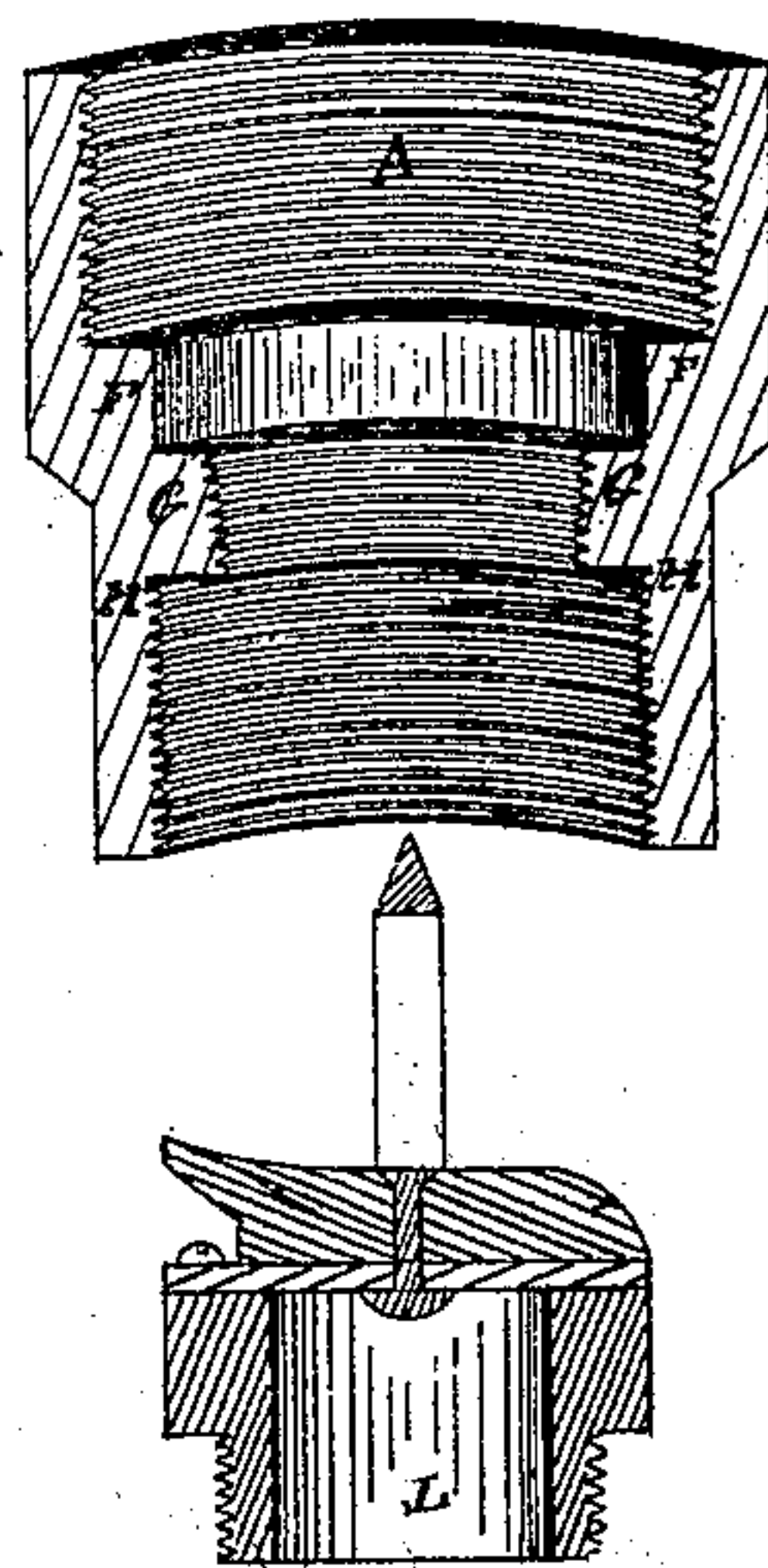


Fig 3.



INVENTOR

*James T. Whipple*

Witnesses.

*C. H. Sherburne*  
*Geo. C. Sinclair*

# United States Patent Office.

JAMES T. WHIPPLE, OF CHICAGO, ILLINOIS.

Letters Patent No. 102,634, dated May 3, 1870.

## IMPROVEMENT IN PUMPS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JAMES T. WHIPPLE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pumps for Deep Wells; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view of a portion of the pump-cylinder or pipe, with my improvement attached.

Figure 2 is a vertical central section of the same.

Figure 3 is a vertical central section of the coupling employed, with valves removed.

Similar letters of reference, where they occur in the separate figures, denote like parts in each of the drawings.

My invention relates more particularly to that class of pumps used in deep driven wells, (but may be used in the common open wells, where the water is to be raised a greater distance than can be done by the ordinary suction-pump;) and

The nature of my improvement consists in a coupling for the pipe, so constructed as to receive a hollow disk, to and within which is attached the lower valve.

Said disk is so arranged as to admit of its being adjusted as will be more fully explained in the description hereinafter given.

To enable others skilled in the art to construct and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the coupling, which is provided on the inner side, at the top and bottom, with a thread, which takes into a like thread on the outer side of pipes B and B<sup>2</sup>.

The inner side of said coupling is provided with shoulders, which come in contact with the lower end of pipe B and the upper end of pipe B<sup>2</sup>, thus giving the same the proper strength to admit of the pipes being driven into the ground.

At or near the middle of said coupling is a third shoulder, the lower portion of which is cut slightly oblique toward the center, and its beveled surface provided with a thread, which takes into a like thread on the outer side of a hollow disk, C.

Said disk has, at or near its upper end, a flange or shoulder, which comes in contact with the upper side of packing D, which is around said disk between its flange and the inner shoulder of said coupling, thus, when properly adjusted, forming a water-tight joint.

Said disk C is provided with a valve, *e*, which operates in connection with valve *e'*, working within the sides of pipe B, and connected to the handle of the pump by means of valve-rod *d*.

Said valve *e* may be a stem-valve, as represented in fig. 2, or a common lip-valve, as shown at L, or may be of any suitable construction that will perform the necessary function.

The objects of this style of coupling, in combination with the disk and valve, are several:

First. When used in driven wells, said coupling may be driven down with the pipe, thus practically overcoming the necessity of excavating the earth when it is found necessary to set the valve below the surface, as the construction of said disk is such as to admit of its being attached to the coupling after said pipe is driven.

Second. When used in deep open wells, should the valves get out of order, they may be readily withdrawn upward through the pipe by means of a suitable wrench, thus overcoming the necessity of removing the pipe from the well to repair them.

Having thus described the nature and object of my invention, I would say that I am aware that couplings for the purpose of connecting the several sections of pipe have been previously known and used; such I do not claim broadly; but

What I do claim as new, and desire to secure by Letters Patent, is—

Coupling A, when constructed with shoulders F, G, and H, shoulder G being oblique and screw-threaded on its inner surface, in combination with valve-seat C, the several parts being so arranged that said valve-seat may be withdrawn through the main pipe, substantially as and for the purpose specified.

JAMES T. WHIPPLE.

Witnesses:

N. H. SHERBURNE,  
JAS. O. SINCLAIR.