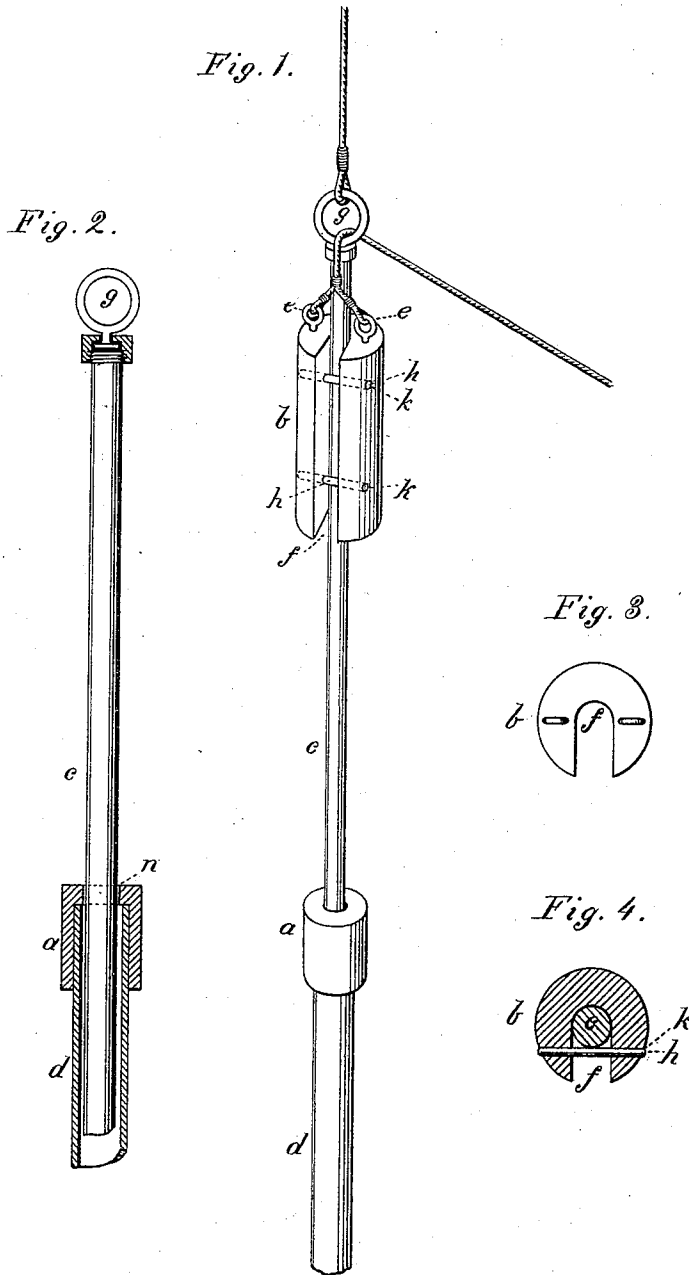


(No Model.)

W. J. SHERMAN.  
DRIVING TUBE WELLS.

No. 267,605.

Patented Nov. 14, 1882.



WITNESSES

*Villette Anderson.*  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. SHERMAN, OF ST. AUGUSTINE, FLORIDA.

## DRIVING TUBE-WELLS.

SPECIFICATION forming part of Letters Patent No. 267,605, dated November 14, 1882.

Application filed May 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. SHERMAN, a citizen of the United States, and a resident of St. Augustine, in the county of St. John's and State of Florida, have invented a new and valuable Improvement in Driving Tube-Wells; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of this invention in perspective. Fig. 2 is a longitudinal section without the weight. Fig. 3 is a plan view of the slide-weight. Fig. 4 is a cross-section of the slide-weight, taken through one set of holes, in which is shown the removable pin.

This invention has relation to means for driving tube-wells; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings, the letter *d* indicates the well-tube, and *a* the anvil-cap, which is recessed on the inside to admit the upper end of the tube. The cap is annular in form, consisting of a ring of iron or steel, and it is made with an internal bearing, *n*, near its upper end, which engages the end of the tube. The cap thus forms an anvil-surface above the end of the tube and protects the same, preventing it from being battered by the impact of the drive-weight. Fitting loosely in the tube *d* is the guide-rod *c*, which extends above the tube, and is provided with a swivel or bearing, *g*, at its upper end. The drive-weight *b* is a heavy casting, having a longitudinal central bearing, *f*, designed to fit loosely on the guide-rod *c*. This bearing *f* is made in slot form, opening laterally, so as to be easily placed on the guide-rod when the latter is in

position. This recess-bearing *f* is designed to be closed in front by means of transverse removable pins *h*, passing through holes *k* in the weight, and serving to keep the weight on the guide-rod *c*. The weight is provided with eyebolts *e* at its upper end, whereby it is lifted.

In operating this device the rod *c*, having been arranged in the tube, is held or hung in vertical position by means of a rope or chain connecting its upper end to a transverse bar supported above it by any suitable framework. By means of a rope connected to the eyebolts of the weight and running through the swivel-eye *g* of the rod, or over a pulley above the same, the weight can be lifted on the rod, and then, being allowed to fall, it will drop forcibly on the anvil-cap *a*, and by its impact will force the tube into the ground a certain distance. By a repetition of the blows of the drive-weight the tube can be easily driven into the ground in vertical position.

A tube provided with a cap at its upper end, said cap having a rod extending upwardly therefrom and provided at its upper end with a disk to disengage a lifting-hook from the driving-weight which slides upon the rod, is old, and a construction of this kind is not claimed herein.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the guide-rod *c*, having the swiveled ring *g*, and the cap *a*, of the slide-weight *b*, having the eyes *e*, lateral slot-bearing *f*, and removable transverse pins *h*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM J. SHERMAN.

Witnesses:

JOHN T. CARR,

BARTOLO F. OLIVEROS.