

T. Arnold,
Tube Clamp.

No. 111,418.

Patented Jan. 31. 1871.

Fig. 2.

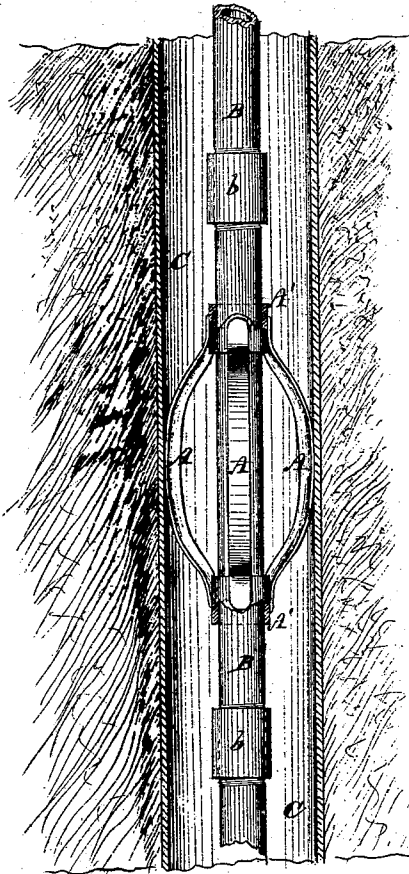
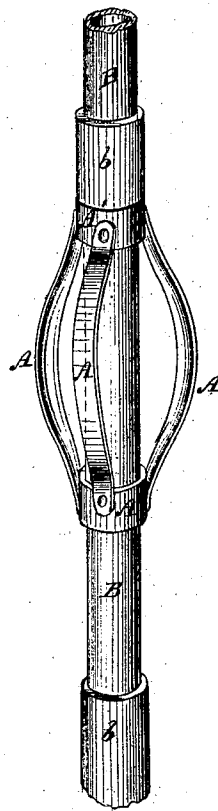


Fig. 1.



Witnesses
J. R. [Signature]
J. A. [Signature]

Inventor:
Thomas Arnold
per Edmund [Signature]
Attorney

United States Patent Office.

THOMAS ARNOLD, OF PETROLEUM CENTRE, PENNSYLVANIA.

Letters Patent No. 111,418, dated January 31, 1871.

IMPROVEMENT IN TUBE-HOLDERS.

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, THOMAS ARNOLD, of Petroleum Centre, in the county of Venango and State of Pennsylvania, have invented a certain new and useful Improvement in Tube-Holders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of the same, and in which—

Figure 1 represents a perspective view of my holder applied to a tube; and

Figure 2 represents a side elevation thereof applied to the tube or pipe when inserted in a well.

It is desirable in the use of tubes or pipes in oil or other wells to keep the former in a steady position, in order to prevent them from wearing, occasioned by their striking against the sides of the well, which is produced by the jostling motion imparted to them while the contents from the well are being removed through them.

To accomplish the above desired result is the object of this invention.

The nature of this invention consists of a series of semi-elliptical or other suitably-shaped metallic plates or springs, which are secured at their ends to rings or bands designed to receive or envelop a tube or pipe, as hereinafter described.

Similar letters of reference in the several figures indicate corresponding parts thereof.

To enable those skilled in the art to which my invention appertains to make and use the same, I will proceed to describe its construction and operation.

In the annexed drawing—

A A designates a series of semi-elliptical springs or plates, which are secured, by means of rivets or otherwise, at their ends to the bands or rings A' A'. These plates or springs may be constructed of any other suitable shape.

The rings or bands A' A' are for the purpose of allowing the holder A A' to be applied to a pipe or tube, B, which tube passes through said rings in such a manner as to allow them to slide up and down thereon, and the upper one to fit against a shoulder or joint, b, screwed or otherwise secured to the said tube.

A series of these holders is used where long pipes or tubing are inserted in deep wells, one holder being applied to each twenty feet or more of pipe, and a joint or shoulder for each holder.

The well, against the walls of which the concave portion of the springs A A rest, and is compressed when the tube or pipe, with the holder A A' thereon, is inserted therein, is designated by letter C.

The plates A A are constructed of metal, the elasticity of which is such as to permit of their being compressed when brought in contact with the walls of the well, as shown in fig. 2, thereby causing them to impinge against the same, which will retain the said plates composing a portion of my holder firmly in contact therewith, and, consequently, the holder the tubing which it embraces or receives.

Having thus described my invention,

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

The springs A, in combination with the rings A', for holding the tube B in position, and allowed to move vertically upon the same, substantially as shown and described.

In testimony that I claim the foregoing as my invention I hereunto set my hand this 20th day of December, 1870, in presence of two subscribing witnesses.

THOMAS ARNOLD.

Witnesses:

J. W. MISTER,
Jos. R. EDSON.