

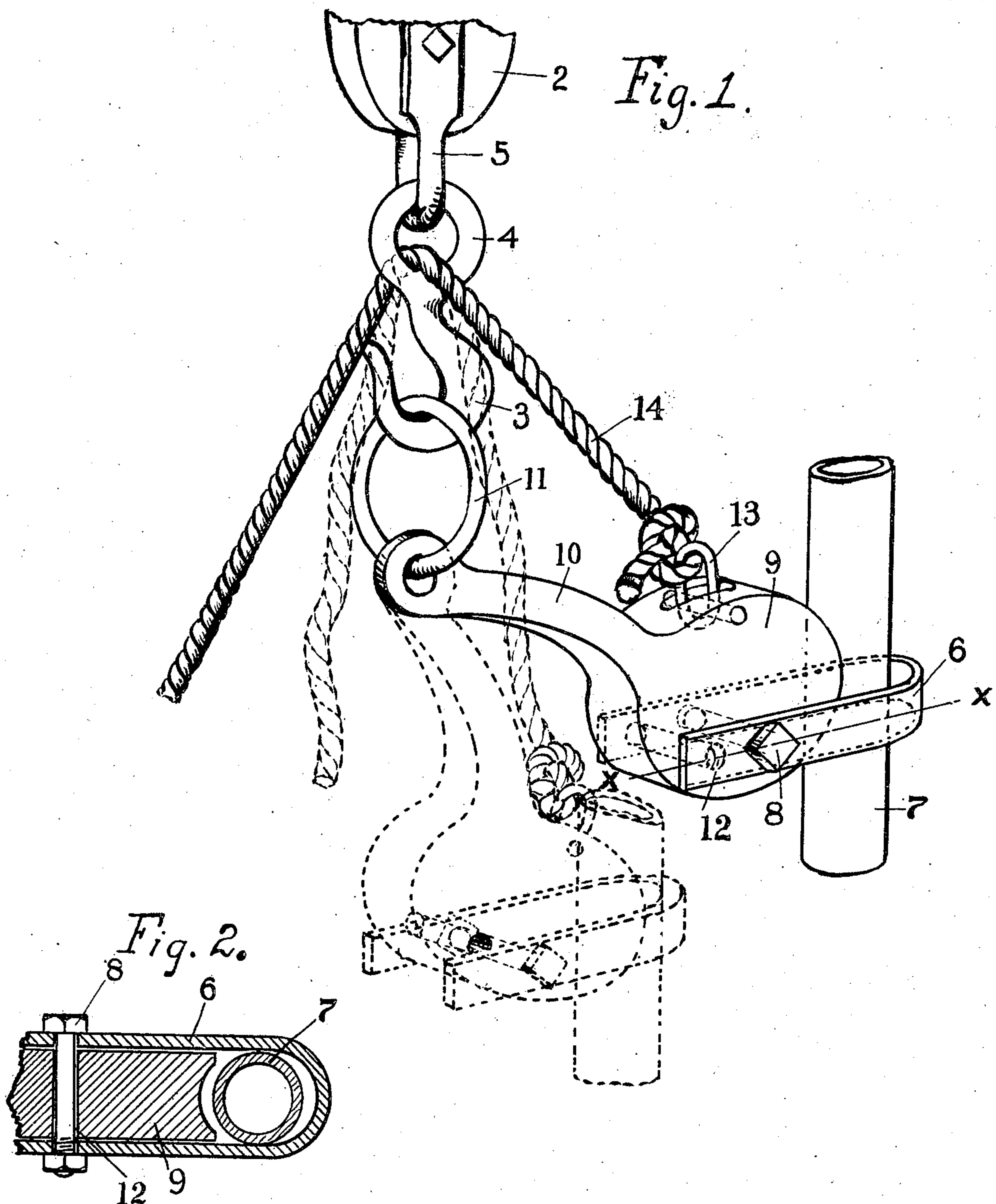
No. 877,282.

PATENTED JAN. 21, 1908.

E. J. ANDERSON & S. HANSON.

PIPE LIFTER.

APPLICATION FILED JUNE 4, 1906.



Witnesses,
George Voelker.
A. J. Madden

Inventors,
Emil J. Anderson.
Seybert Hanson.
by *Robert Johnson*
their Attorneys.

UNITED STATES PATENT OFFICE.

EMIL J. ANDERSON AND SEVERT HANSON, OF HOUSTON, MINNESOTA.

PIPE-LIFTER.

No. 877,282.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed June 4, 1906; Serial No. 320,086.

To all whom it may concern:

Be it known that we, EMIL J. ANDERSON and SEVERT HANSON, citizens of the United States, residing at Houston, in the county of Houston and State of Minnesota, have invented certain new and useful Improvements in Pipe-Lifters, of which the following is a specification.

Our invention relates to improvements in pipe lifters, its object being to provide simple and efficient means for raising and lowering the pipe or pipe-sections in wells and the like. To that end the invention consists in the construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view of the improved pipe lifter, and Fig. 2 is a horizontal section on line $x-x$ of Fig. 1.

In Fig. 1 of the drawings is shown partly broken away the lower or suspended pulley block 2 of a hoisting tackle. From this block is suspended a hook 3, the ring 4 of the hook passing through the strap 5 of the block.

The lifter proper comprises a U-shaped pipe-embracing strap 6, the arms of which are interspaced a sufficient distance to receive between them the pipe 7 to be lifted. Pivotally mounted between the strap-arms upon a pin or pivot 8 passing through these arms is a clamping head 9 having at its rear end an arm 10 to which is connected a link 11 through which may be inserted the hook 3 of the hoisting tackle.

The clamping head 9 is preferably elliptical or elongated in shape and is fulcrumed eccentrically upon the pivot pin 8 which passes through a hole 12 in the clamping head so positioned as to leave sufficient clearance between the front end of the head and the U-bend of the strap 6 to accommodate the pipe to be lifted. The clamping head is formed, preferably, with a plurality of pivot holes 12 whereby the position of the pivot in the head may be adjusted and the amount of clearance regulated, but it has its center of gravity forward of any of the pivot holes. The clearance may also be regulated by pulling or slacking the trip-rope whereby the clamping head will be turned upon the pivot 8 towards or away from the pipe.

Connected with the forward part of the clamping head is a ring 13 to which is secured one end of a trip-cable 14, the other end leading up over the lower block of the hoisting tackle, or some convenient part connected therewith, and down to a point near enough to the ground to be manipulated by the workmen. In the drawings the rope is shown led through the ring 4 of the hook 3.

In operation, when it is desired to raise or lower the lifter without at the same time raising or lowering the pipe, the rope 14 is pulled to raise the clamping-head out of engagement with the pipe, as shown in full lines in the drawings. Then, by hoisting the block 2 and the rear end of the clamping head suspended therefrom as described, and at the same time keeping the trip-rope taut, the entire lifter, including clamping head and U-strap may be moved up or down the pipe without wedging.

When it is desired to raise or lower the pipe, the lifter is first adjusted in the manner above described to the desired position upon the pipe. Then the trip rope is released. The clamping head is formed with its center of gravity forward of its pivotal connection with the strap, so that, when the trip rope is released, the clamping-head will drop down under gravity into engagement with the pipe 7 and clamp the pipe against the U-bend of the strap 6, as shown in the dotted lines in the drawings. The weight of the pipe will tend further to turn the clamping head by reason of its frictional contact therewith, and thus increase the clamping pressure of clamping-head and strap. The pipe and lifter may then be raised or lowered together by operating the hoisting tackle.

It is obvious that modifications may be made in the details of the device without departing from the principle of the invention, the scope of which is defined in the claims.

We claim as our invention:

In a pipe lifter, the combination, with hoisting tackle having a suspended portion adapted to support a cable, of a U-shaped pipe-embracing strap, a clamping head eccentrically pivoted within the arms of the strap, means for connecting the rear end of the clamping head with the hoisting tackle, and a trip-cable connected with the forward part of the clamping head and passing over said

suspended portion of the hoisting tackle, the strap being formed with a plurality of pivot holes whereby the position of the pivot in the head may be adjusted and the amount of
5 clearance for the pipe regulated, and the clamping head having its center of gravity forward of its point of pivotal connection with the strap.

In testimony whereof we affix our signatures in presence of two witnesses.

EMIL J. ANDERSON.
SEVERT HANSON.

Witnesses:

E. CARLSON,
JOHN NELSON.