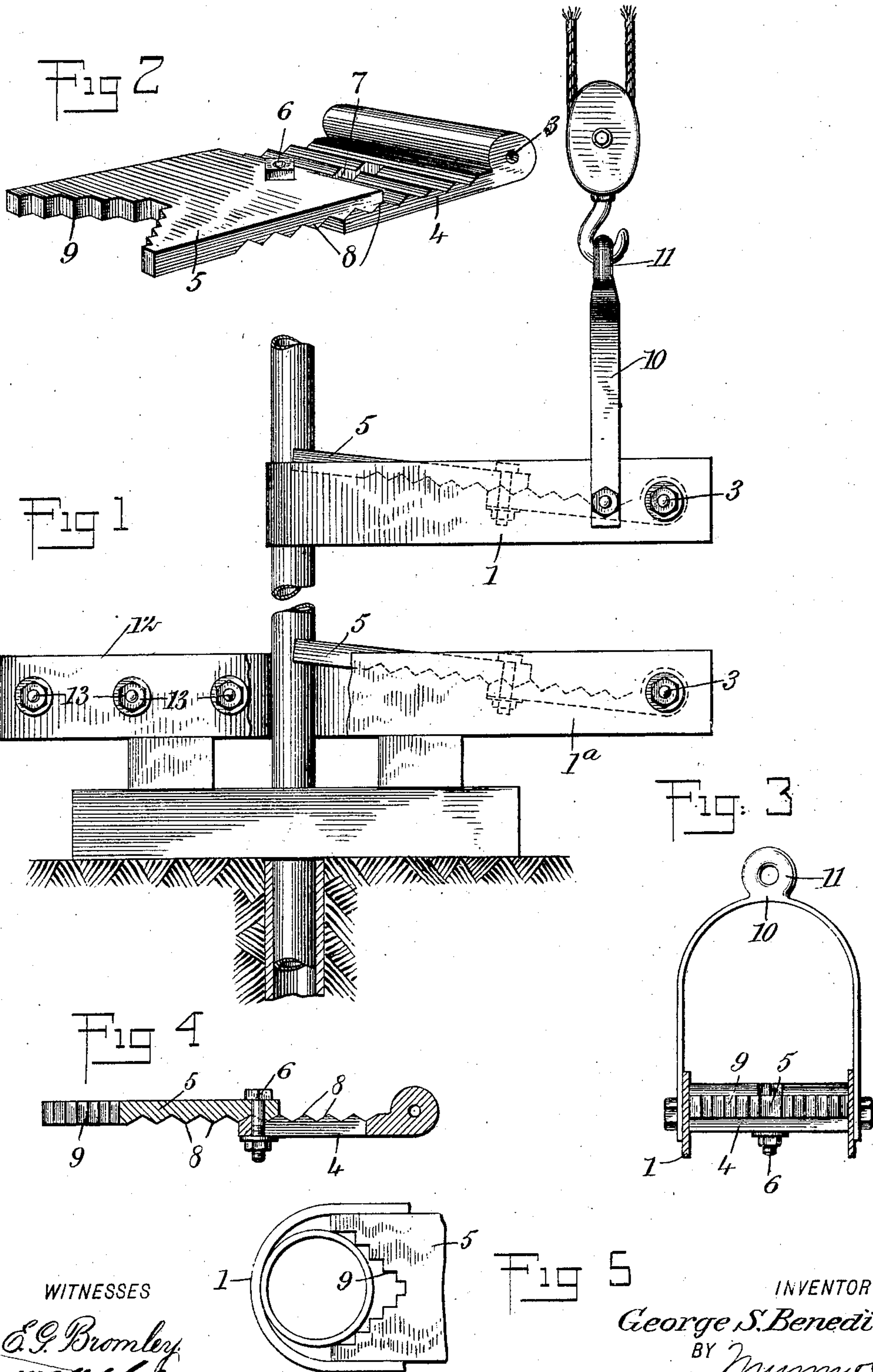


No. 861,078.

PATENTED JULY 23, 1907.

G. S. BENEDICT.
PIPE CLAMP.
APPLICATION FILED APR. 8, 1907.



WITNESSES

E. G. Bromley
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Fig 5

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UNITED STATES PATENT OFFICE.

GEORGE SPENCER BENEDICT, OF KINGSLAND, TEXAS.

PIPE-CLAMP.

No. 861,078.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed April 8, 1907. Serial No. 366,991.

To all whom it may concern:

Be it known that I, GEORGE SPENCER BENEDICT, a citizen of the United States, and a resident of Kingsland, in the county of Llano and State of Texas, have

invented a new and Improved Pipe-Clamp, of which the following is a full, clear, and exact description.

This invention is an improvement in pipe clamps such as are used for withdrawing well casings from wells and other like purposes.

Among the objects of the invention are the provision of a strong and simple device of this character which is adjustable to take pipes of varying sizes, and which will operate to grip the pipe with increasing force as its resistance to being withdrawn is augmented.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of two different forms of my improved clamp applied to a well tube or casing, the upper clamp operating to withdraw the pipe and the lower clamp serving to hold the pipe while the upper clamp is lowered to obtain a new purchase or grip thereon; Fig. 2 is a perspective view of the gripping member; Fig. 3 is a cross section of the device shown in the upper portion of Fig. 1; Fig. 4 is a longitudinal section through the gripping member, and Fig. 5 is a fragmentary plan of the clamp showing the manner in which it engages with the pipe.

The invention as preferably constructed in practice, comprises a strap 1 of bar metal bent into the form of a U, providing spaced arms. Between these arms is pivotally mounted on a bolt or pin 3, a gripping member 4. This gripping member carries an adjustable jaw member 5, which is connected therewith by a bolt 6, the latter passing through a slot 7 formed in the pivotal portion of said member in order that the jaw, when adjusted on the gripping member, will be rigidly held in place. The opposed faces of the pivotal member 4 and jaw 5 are formed with teeth 8 which, when intermeshed and the bolt 6 tightened, prevent any relative movement between these parts, as is obvious. The jaw member 5 is constructed with a V-shaped stepped gripping jaw 9 in its free end, which operates to bite into the well casing in withdrawing it from the well or other like purpose. A bail 10 is pivotally attached to the arms of the U-shaped member near the pivot-bolt 3, said bail being constructed with an eye 11 for receiving the hooked end of a block-and-tackle, as illustrated in Fig. 1.

The clamp shown in the lower portion of Fig. 1 is essentially the same as that just described except that the bail 10 is displaced and the strap is made of two pieces of bar metal and constructed in the form of a yoke, thus providing the strap with a stem 12 disposed at the opposite side of its U portion 1^a. The two pieces of bar iron which form the stem 12 of the strap 1^a are bolted or otherwise secured together by bolts 13.

In the operation of the two forms of my invention, the clamp constructed with the yoke-shaped strap 1^a is blocked up over the well casing, as disclosed in Fig. 1. The clamp constructed with the U-shaped strap 1 is then engaged with the pipe thereabove, the jaw members 5 of both clamps being at this time adjusted on their respective members 4 to assume an inclined position when engaged with the casing, as illustrated in Fig. 1. By now drawing on the upper clamp as by the block-and-tackle shown, its jaw 9 bites into the pipe with a force which is proportional to the resistance of the pipe to be withdrawn, and withdraws the casing from the well. By releasing the pull on the upper clamp for lowering it and obtaining a fresh purchase on the pipe or casing, its clamping member is automatically disengaged, which permits the clamp to drop. The clamping member of the lower clamp, however, as the casing starts to slide back with the release of the upper clamp, automatically engages the casing and holds it until it is again drawn upwardly by the pull on the upper clamp. In this manner of using the clamps, the casing is effectively and speedily removed from the well.

Although the forms of my invention as described are my preferred embodiments thereof, I, nevertheless, regard the precise construction as immaterial and consider that I am entitled to such changes as fall within the scope of the annexed claims.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. A pipe clamp, including a strap consisting of two spaced arms connected together, and a gripping member pivotally mounted between said arms, having an adjustable jaw member opposed to the connecting portion of said arms and operable to clamp a pipe thereto, said gripping member and jaw member having overlapping adjacent ends.

2. A pipe clamp comprising a strap having two spaced arms connected together, a gripping member directly pivoted to and between said arms, and means attached to said strap for withdrawing and operating the clamp.

3. A pipe clamp comprising a U-shaped strap providing two spaced arms connected together at one end, a gripping

member in the form of a flat plate directly pivoted to and at the free ends of said arms, and means attached to said arms for withdrawing the clamp and operating said member.

- 5 4. A pipe clamp, comprising a strap having two spaced arms connected together at one end, a gripping member pivoted to and between the free ends of said arms, a jaw member carried by the gripping member, said jaw member and gripping member being in the form of flat plates hav-

ing their adjacent ends overlapped and provided with 10 teeth on their opposed faces, and means for securing the gripping member and jaw member together.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE SPENCER BENEDICT.

Witnesses:

W. A. STARR,

E. E. BARNETT.