No. 713,537. Patented Nov. 11, 1902.

C. E. TREADWELL.

SAFETY CLAMP.

(Application filed Aug. 28, 1901.)

(No Model.)

FIG. 1.

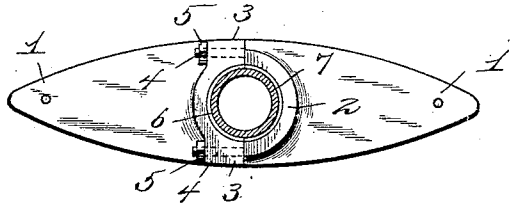


FIG. 2.

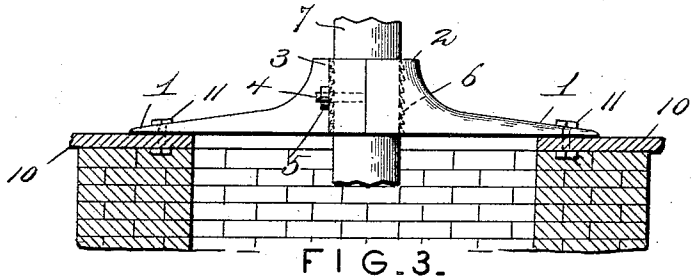


FIG. 3.

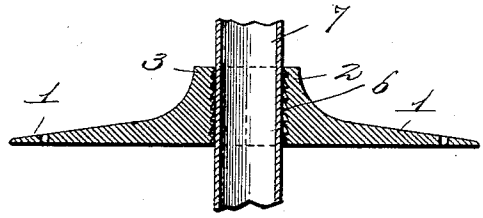
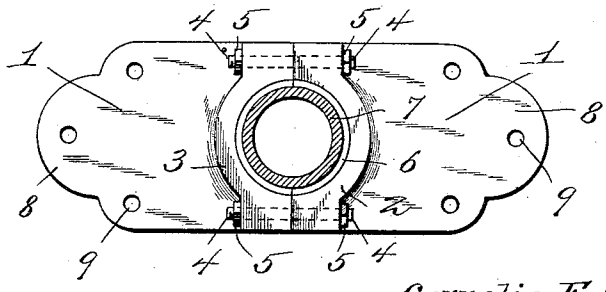


FIG. 4.



Witnesses

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CORNELIA E. TREADWELL, OF FORT McKAVETT, TEXAS.

SAFETY-CLAMP.

SPECIFICATION forming part of Letters Patent No. 713,537, dated November 11, 1902.

Application filed August 28, 1901. Serial No. 73,623. (No model.)

To all whom it may concern:

Be it known that I, CORNELIA E. TREADWELL, a citizen of the United States, residing at Fort McKavett, in the county of Menard and State of Texas, have invented new and useful Improvements in Safety-Clamps, of which the following is a specification.

This invention relates to safety-clamps designed with special reference to supporting well-tubing in place in shallow or deep wells.

The object of the invention is to provide a sectional clamp which may be applied to the well-tube at any point in the length thereof, the said clamp being adapted to rest upon any suitable support or foundation, which may consist of a cross-beam, a projecting rock or ledge, or other shoulder within the well.

As is well understood, well-tubing is generally supported by means of wood clamps, which deteriorate with age and are liable to shrink or give way and allow the tubing to fall. As it is important to support the well-tube above the bottom of the well, it is desirable to provide some efficient device for that purpose which is simple in construction and capable of being quickly and easily applied to the well-tube at any point.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a plan view of a safety-clamp constructed in accordance with the present invention, showing the well-tube in section. Fig. 2 is a side elevation of the clamp with the well-tubing secured therein and the clamp secured to a platform at the top of a well. Fig. 3 is a vertical longitudinal section therethrough. Fig. 4 is an enlarged plan view showing a slightly-modified form of clamp.

Similar numerals of reference denote like parts in the several views of the drawings.

The safety-clamp comprises two sections 1, both of which are provided on their inner connecting ends with upwardly-projecting bearings, each having therein a semicircular portion, as clearly shown in Figs. 2 and 3. The projection on one of the sections is arranged to extend out of line and within its opposite side edges thereof. The projection on the other section is provided with lugs 3, which extend to the edges of its section, and by constructing the two sections as above described I am enabled to form a shoulder-joint between the same. The lugs 3 are provided with parallel openings for the reception of threaded stud-bolts 4, which project from the meeting edge of the opposing section of the clamp, the two sections being finally secured together by means of clamping-nuts 5, screwed upon the ends of the stud-bolts 4. The sections of the clamp are also provided within the half-sleeves with teeth 6, adapted to grip and bite into the outer surface of the well-tube, (represented at 7,) so as to obtain a positive engagement between the clamp and well-tube, which will prevent relative slipping between said parts.

In Fig. 2 I show the clamp and its attached tube secured to a platform 10, mounted on the top or upper surface of a well.

In Fig. 4 I have shown a slightly-modified form of clamp, in which the base portions 8 are provided with holes 9 for the reception of screws or bolts wherewith the clamp as a whole is secured to one or more cross-beams arranged within the well. In the modified form shown in Fig. 4 instead of providing one of the clamp members with stud-bolts each clamp member is provided with oppositely-located pairs of lugs formed with registering openings, and rods or double-ended bolts are passed through said openings and secured by means of one or more nuts placed on each end of each rod or bolt.

In associating the clamp with a well-tube the sections of the clamp are separated by removing the nuts 5. The sections are then brought together on opposite sides of the tube and the stud-bolts inserted through the openings provided therefor in the opposing member. The nuts 5 are then screwed upon the bolts and tightened until the teeth 6 are forced into engagement with the outer surface of the tube, whereupon the tube and clamp are firmly connected, so that when the clamp rests upon a suitable support the tube will be firmly upheld and prevented from slipping downward.

The clamp may be manufactured either with or without the holes 9 and may be made

in different shapes and sizes without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

A clamp for well-tubing comprising two separate sections each having formed on their inner ends upwardly-extending projections with toothed semicircular surfaces therein, and one of the projections being constructed to extend within the opposite side edges of its section, the other section having its projection provided with lugs which extend to the opposite side edges thereof whereby to form a shoulder-joint connection with the first-named section, and parallel bolt-holes in said lugs and bolts in said holes for securing the two sections together, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CORNELIA E. TREADWELL.

Witnesses:

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