J. B. STELLWAGEN.

Tool for Setting Tubes in Artesian Wells.

No. 167,626. Patented Sept. 14, 1875.

Fig: 1.

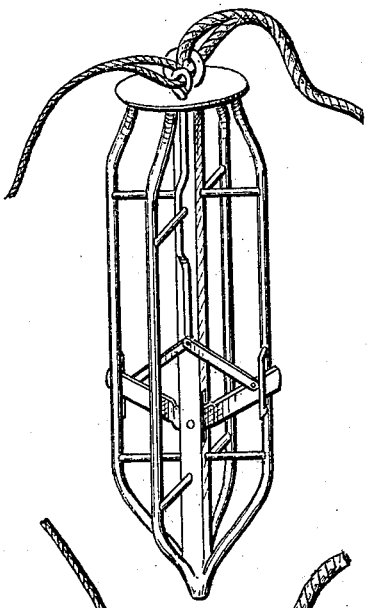
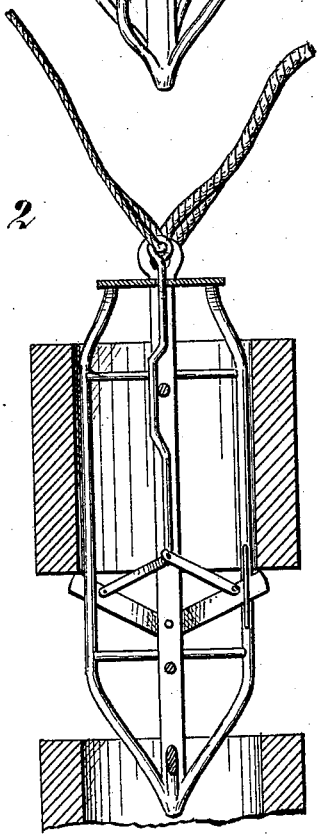


Fig. 2



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UNITED STATES PATENT OFFICE.

JACOB B. STELLWAGEN, OF FRANKFURTH, ILLINOIS.

IMPROVEMENT IN TOOLS FOR SETTING TUBES IN ARTESIAN WELLS.

Specification forming part of Letters Patent No. **167,626**, dated September 14, 1875; application filed August 10, 1875.

To all whom it may concern:

Be it known that I, JACOB B. STELLWAGEN, of Frankfurth, in the county of Will and State of Illinois, have invented an Improved Tool for Setting Tubes in Artesian Wells, of which the following is a specification:

My invention has for its object to provide a device by means of which tubes may be successively lowered into an artesian well and placed fairly on top of the tube below, and which can also be used for lifting the tubes out of the well.

The invention consists in a cage composed of a central bar and four rods fitted to the interior or bore of the tube, the rods forming a cone at the lower end of the cage. Two levers are pivoted at their inner ends to the central shaft, and, by a toggle, each is connected to a trip-rod extending up through the top of the cage, where it is attached to the tripping-cord, the whole being arranged to operate as more fully hereinafter set forth.

Figure 1 is a perspective view. Fig. 2 is a vertical section of the cage and of a section of tubing that is being lowered into the well.

In the drawing, A represents a central iron bar, having a ring, *a*, at its top end, to which is secured the well-rope B. Below the ring is a disk, *b*, to which the upper ends of four vertical rods, C, are attached by welding or otherwise, their lower ends converging to, and are welded onto, the lower end of the bar A. Braces *c* radiate from the bar A to the rods C to keep their straight portions parallel and in position to nearly fill the bore of the tube. To two opposite rods C a yoke, *d*, is welded, in each of which plays the projecting end of a lever, *e*, the inner end of which is pivoted in a recess in the central bar A. Each has pivoted to it a toggle, *f*, the upper ends of both toggles being pivoted to the lower end of a trip-rod, *g*, which extends up through the disk *b*, terminating in a ring, to which is attached the trip-line *h*.

When the line is slack the trip-rod drops of its own weight, which throws out the ends of the levers far enough to catch under the end of a tube down through which it has been dropped. If the tube be lowered in the well by the well-rope, it will be guided fairly onto the section below by the conical end of the cage. To release the cage the trip-rope is pulled up, which retracts the levers from under the edge of the pipe, the outer ends of said levers being rounded off, so as not to lock under the tube end.

This tool can be used in like manner for lifting a tube out of the well by lowering it down until it passes below the lower end, when the levers will drop out and catch under the end.

What I claim as my invention is—

The bar A and rods C, forming a cage with a conical lower end, and the combination therewith of the yokes *d d*, levers *e e*, toggles *f f*, trip-rod *g*, and trip-line *h*, substantially as and for the purpose set forth.

JACOB B. STELLWAGEN.

Witnesses:

LEWIS CLAUS,

HEINRICH HEINICHS.