No. 652,094. Patented June 19, 1900.

C. W. DOANE.

JACK.

(Application filed July 12, 1899.)

(No Model.)

Fig. 2

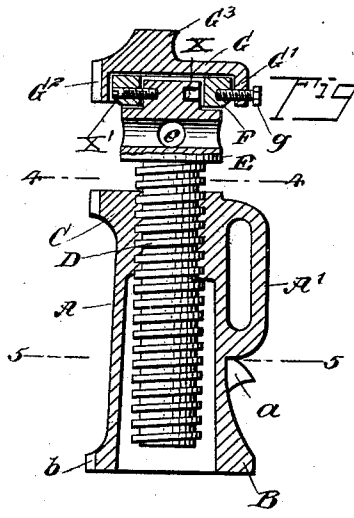


Fig. 1

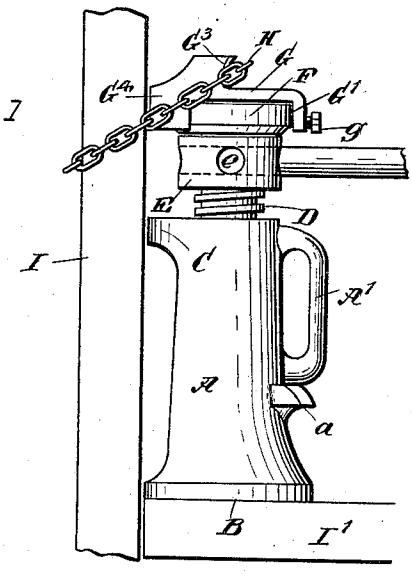


Fig. 3

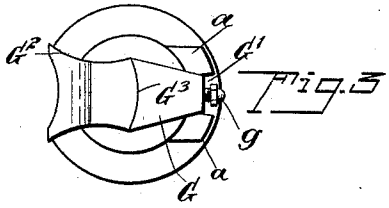


Fig. 4

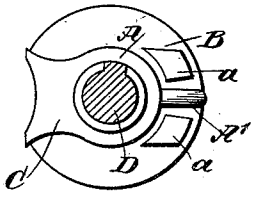


Fig. 5

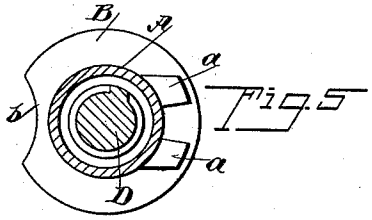
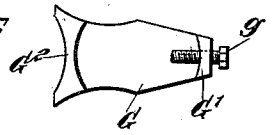


Fig. 6



WITNESSES:

J. A. Brophy

H. L. Reynolds.

INVENTOR

Charles W. Doane

BY Munn & Co.

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES WESTON DOANE, OF WEST LAKE, LOUISIANA.

JACK.

SPECIFICATION forming part of Letters Patent No. 652,094, dated June 19, 1900.

Application filed July 12, 1899. Serial No. 723,584. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WESTON DOANE, of West Lake, in the parish of Calcasieu and State of Louisiana, have invented a new and Improved Jack, of which the following is a full, clear, and exact description.

My invention relates to an improvement in jacks, and comprises the novel features hereinafter described and claimed.

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 the jack shown as in use lifting timbers. Fig. 2 is a vertical sectional elevation of the same. Fig. 3 is a top plan view. Fig. 4 is a section taken on the line 4 4 of Fig. 2. Fig. 5 is a section taken on the line 5 5 of Fig. 2, and Fig. 6 is a bottom plan view of the removable head.

The object of my invention has been to produce a jack which is especially designed for handling timbers in bridgework and other similar places and one which may be clamped to the side of a timber, whether round or square, and used for lifting another timber alongside, or which may be supported upon any convenient base and be clamped to a timber to lift it.

The body A of the jack is provided with a handle A', by which it may be conveniently carried. The base or lower end of the body is provided with a flange B, which upon one side is notched or concaved, forming a recess *b*. At the upper end the body is also provided with a flange or projection C upon one side, similarly provided with a notch which registers with the notch *b* in the base-flange. These notches are preferably made with a curved bottom, so that the device may be fitted closely against the side of a round timber. It may also be fitted against the side of a flat timber, as the points at each end of the notch will firmly bear against the sides of the timber.

The jack as herein shown is a screw-jack, the upper end of the body A being threaded and the ram D, consisting of a threaded bar, screwing into the upper end of the body A. The method of turning said ram may be such as found desirable. I have here shown the ram as having a head E, provided with apertures *e*, extending through the same and adapted to receive an end of a turning-bar, and to the upper end of this head E is secured a head F, which is mounted thereon so as to freely turn by means of a set-screw X' and a groove X, adapted to receive the set-screw. This is the usual head of a jack.

A detachable head G fits over the head F and is provided with means by which it may be fixedly secured thereto. This head G has two flanges G' and G^2, located upon opposite sides or ends, the flange G' having a set screw or bolt *g* passing through the same and adapted to enter an aperture in the head F. The flange G^2 upon the opposite end of the head is concaved similar to the flange B at the bottom of the base A, and this head is thus adapted to be firmly secured against the side of a timber, whether round or square.

Upon the upper surface of the detachable head G is a transversely-extending lug or projection G^3, having the face next to the flange G' rounded, as shown in Fig. 1. This forms a lug or projection adapted to receive a chain H, which may be passed about a timber, such as the timber I, (shown in Fig. 1,) and thus clamp the head and timber together, so that when the head is raised the timber is also raised.

In order to clamp the base of the jack securely to a timber in a similar manner, it is provided with projections *a*, located on the back side of the body or the side opposite the notches *b*. A chain may thus be passed about the jack and bear against the under side of the lugs *a*, the chain extending upwardly in a diagonal direction and about a timber which is bearing against the notched side of the body. It is thus evident that either the head or the body of the jack may be easily secured to the side of a timber, while the other part of the jack may be resting upon either a timber which is to be lifted or a fixed support.

The jack may be used either in a vertical, a horizontal, or an inclined position and will be found of great convenience in repairing trestles, bridges, and similar work. It may also be used as an ordinary jack for lifting weights.

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

1. A detachable head for a jack, provided

with means for securing it in place, and having a spur or shoulder on its upper side adapted to receive a loop of chain, and a concaved end face on the side opposite to that face of the shoulder or spur which is adapted to receive the loop or bight of the chain, said concaved end face being adapted to engage the side of a post or beam, to which it is bound by a chain passing about said shoulder, substantially as described.

2. A jack having a downwardly-facing shoulder or lug upon one side of the body, adapted to receive a diagonally-extending loop of chain, whereby the jack may be supported and bound to the side of a post or beam, substantially as described.

3. A jack-body having flanges provided upon one side with concaved notches, whereby the jack may be securely seated against the side of either a round or square beam or post, and chain-receiving shoulders or lugs upon the opposite side of the jack-body and adapted to receive a supporting and binding chain, substantially as described.

4. A detachable head for jacks, having end flanges adapted to fit over the usual jack-head, the face-flange being shaped to fit against the side of a beam or post, and the tail-flange having a set-screw locking it to the usual head, and a lug projecting above the top of the detachable head and extending transversely thereof, substantially as described.

5. A jack comprising a base having top and bottom flanges provided with longitudinally-alining notches, and a lifting device connected with the base.

CHARLES WESTON DOANE.

Witnesses:
WILL A. STEIDLEY,
E. SHERARD.