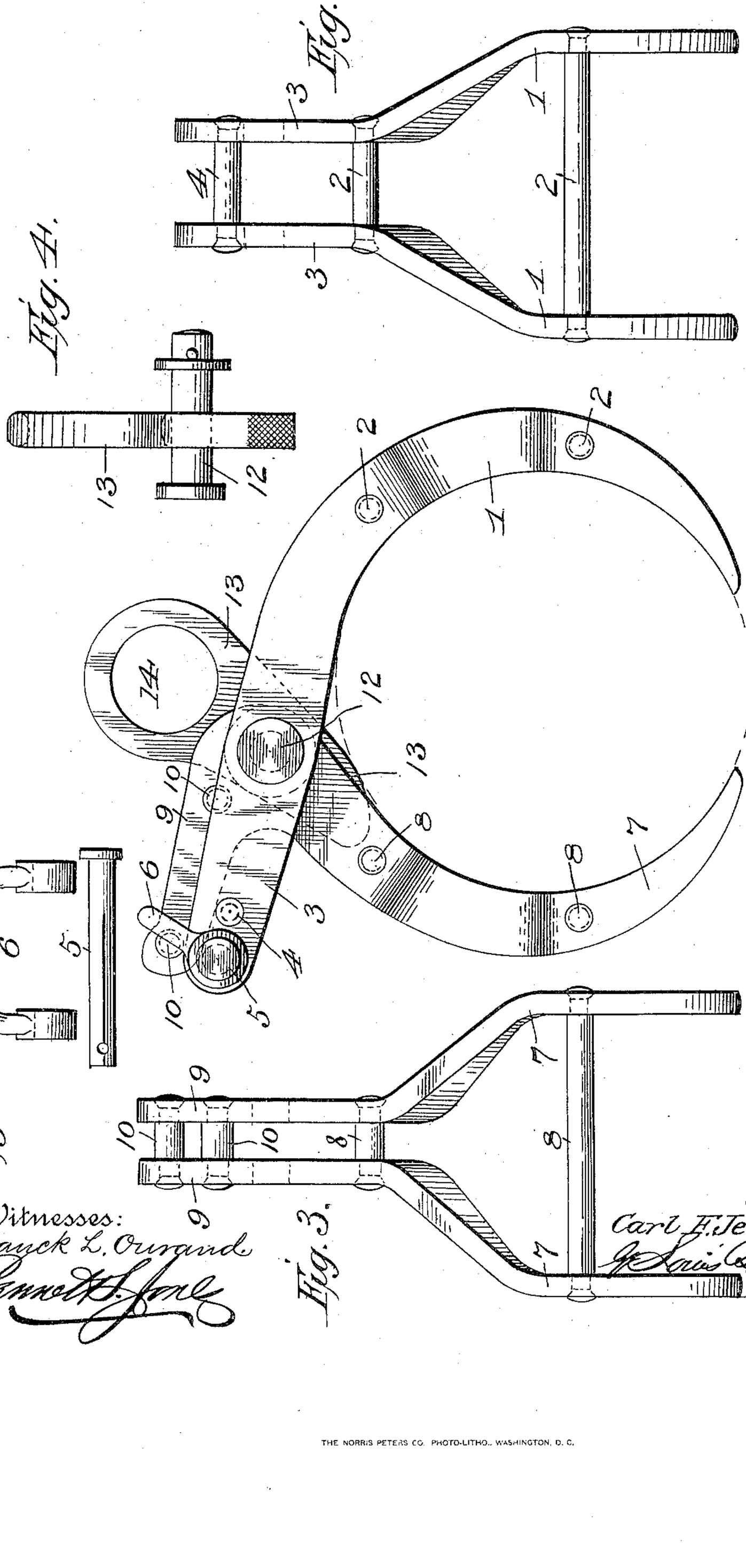
(No Model.)

# C. F. JEANSÉN.

## TONGS FOR HANDLING PROJECTILES.

No. 604,758. Patented May 31, 1898.

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# UNITED STATES PATENT OFFICE.

CARL F. JEANSÉN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## TONGS FOR HANDLING PROJECTILES.

SPECIFICATION forming part of Letters Patent No. 604,758, dated May 31, 1898.

Application filed September 18, 1897. Serial No. 652,153. (No model.)

*To all whom it may concern:*

Be it known that I, CARL F. JEANSÉN, a citizen of the United States, and a resident of Washington, in the District of Columbia, have invented certain new and useful Improvements in Tongs for Handling Projectiles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to tongs for handling projectiles; and its object is to provide an improved construction of the same which shall possess superior advantages with respect to efficiency in use.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a projectile-tongs constructed in accordance with my invention. Fig. 2 is an end view of one pair of the arms or jaws which grasp the shot or projectile. Fig. 3 is a similar view of the other pair of arms or jaws. Fig. 4 is an end view of the finger. Fig. 5 is an elevation of the yoke.

In the said drawings the reference-numeral 1 designates a pair of curved arms or jaws connected with each other by rods or bolts 2. These arms or jaws are formed with extensions 3, connected together by rods or bolts 4. To the ends of these extensions is pivotally connected by a split pin 5 a yoke 6, for a purpose hereinafter described.

The numeral 7 designates a pair of curved arms or jaws connected together by rods or bolts 8 and formed with backward extensions 9, which are located above the extensions 3 of the other pair of arms. These extensions 9 are connected together by rods or bolts 10.

The arms or jaws 7 are located between the arms or jaws 1, and both sets or pairs of arms are pivoted to a common pivot pin or bolt 12, passing through the same. Also pivoted intermediate its ends to this pin or bolt 12 is a curved finger 13, tapering to a point at its inner end and the upper end formed with a large eye 14, with which is adapted to engage one or more hooks or other analogous devices from a crane or cranes by means of which the tongs are elevated. This finger is located between the arms or jaws 7, and its lower or inner end is roughened, as seen in Fig. 4.

The yoke 6 before referred to is for the purpose of holding the jaws together when a shot or other projectile is grasped thereby.

The operation will be readily understood. As shown in Fig. 1, the jaws or arms are shown closed. To open the same, so as to allow them to engage with or grasp a projectile, the yoke 6 is swung back on its pivot, disengaging it from the extensions 9 of the arms 7. The arms or jaws can now be opened, so as to engage with a projectile, when they are again closed and the yoke again engaged with the extensions. The device can be now elevated by a crane or other hoisting mechanism connected with the eye of the finger. The lower or inner end of the finger will now press tightly upon the upper side of the projectile, which will then be held firmly within the jaws or arms. In opening the jaws the rod or bolt 4 serves as a stop to limit the movement thereof.

The device, owing to limited height, will add materially to the storage capacity of the chambers containing the projectiles, as the projectiles may be taken from a position nearing the ceiling of said chamber than by ordinary tongs. The eye in the finger should be of a size sufficient to allow a hook from two cranes to be engaged therewith, so that the tongs may be quickly transferred from one crane to another without losing the grip on the projectile.

A powerful grip will be exerted on the projectile through the medium of the finger, preventing it from slipping and, owing to the grip, the center of gravity need not come under the point of suspension of the tongs, but can come somewhat to the side without interfering with the safe handling of the projectile.

Having thus fully described my invention, what I claim is—

1. As an improved article, a device for handling projectiles, comprising the pivoted grappling-jaws, a pivot therefor and a projectile engaging and suspensory means connected with said pivot, substantially as described.

2. As an improved article, a device for handling projectiles consisting of two pairs of curved arms or jaws, the pivot connecting them with each other, and the finger pivoted intermediate its ends to said pivot whereby its inner end will project between said jaws and bear upon a projectile engaged by said jaws, substantially as described.

3. In a device for handling projectiles, the combination with the curved arms or jaws arranged in pairs, the pivot passing through said jaws, the extensions formed integral with said jaws and projecting outwardly in the same direction and means for connecting them with each other, of the finger pivoted intermediate its ends to said pivot with its inner end projecting between the jaws and adapted to bear against a projectile engaged by the jaws, substantially as described.

4. In a device for handling projectiles, the combination with the curved arms or jaws arranged in pairs and formed with extensions, the yoke pivotally connected with one pair of said extensions and adapted to engage with the other extensions, of the finger formed with an eye at one end and the pivot pin or bolt passing through said finger and arms, substantially as described.

5. In a device for handling projectiles, the combination with the curved arms or jaws, the extensions thereof, the finger, the pivot-pin and the pivoted yoke, of the rod or bolt connecting the extensions of one pair of arms or jaws and serving as a stop, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CARL F. JEANSÉN.

Witnesses:

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