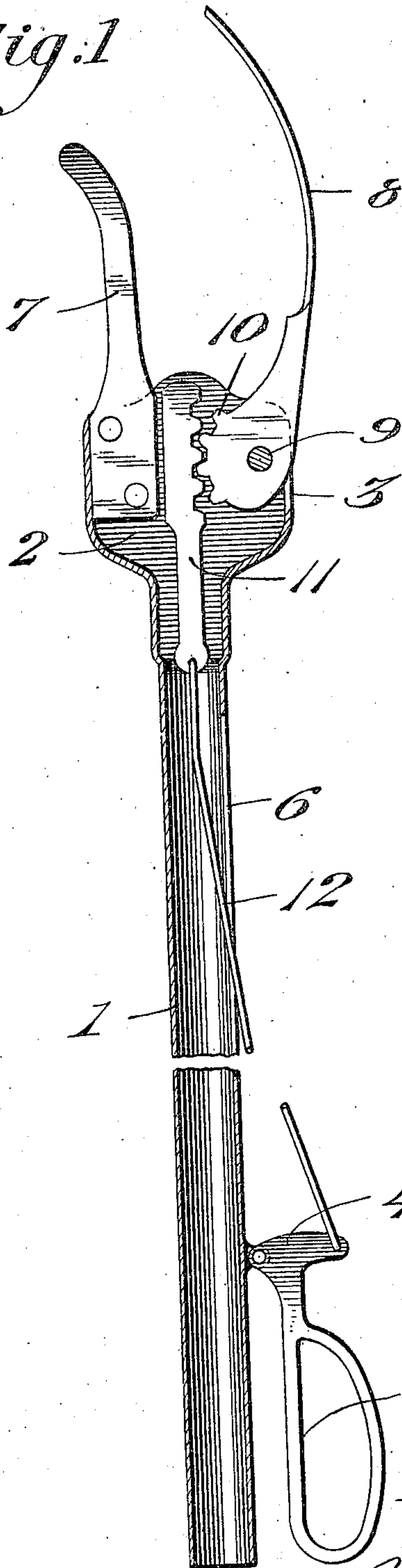


No. 847,200.

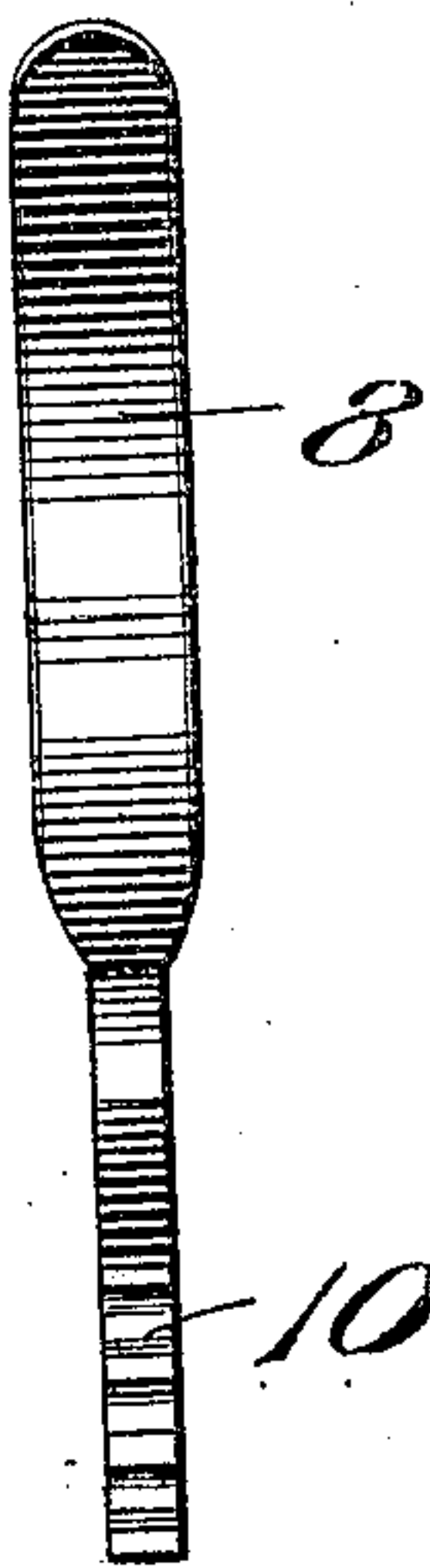
PATENTED MAR. 12, 1907.

P. NEDDO.  
LIFTING TONGS.  
APPLICATION FILED APR. 17, 1906.

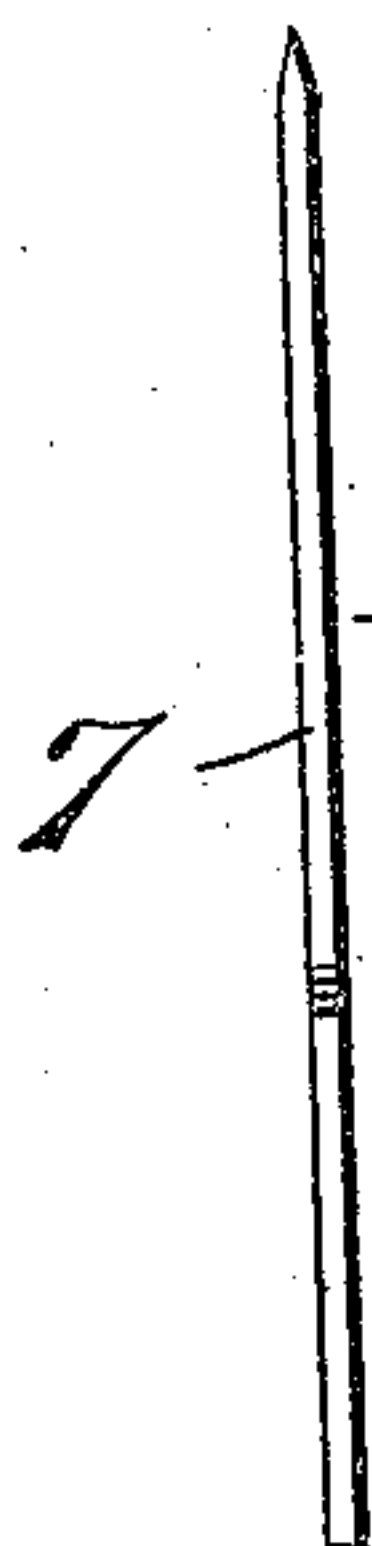
*Fig. 1*



*Fig. 2.*



*Fig. 3.*



Witnesses

*Phil. C. Barnes,*  
*J. J. Arnold.*

By

*Philip Neddo.*  
*Victor J. Evans.*  
Attorney

# UNITED STATES PATENT OFFICE.

PHILIP NEDDO, OF BARRE, VERMONT.

## LIFTING-TONGS.

No. 847,200.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed April 17, 1906. Serial No. 312,203.

*To all whom it may concern:*

Be it known that I, PHILIP NEDDO, a citizen of the United States, residing at Barre, in the county of Washington and State of Vermont, have invented new and useful Improvements in Lifting-Tongs, of which the following is a specification.

This invention relates to lifting-tongs designed especially for use in handling boxes or the like in stores, and has for its objects to produce a comparatively simple inexpensive device of this character which in practice will efficiently perform its functions—one wherein the movable gripping member or jaw will be positively and effectually moved to engaging or non-engaging position and one wherein the said jaw may be readily maintained in gripping position.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a sectional elevation of a device embodying the invention, the section being taken centrally and longitudinally through the tool. Fig. 2 is a detail view of the movable gripping-jaw. Fig. 3 is an edge view of the fixed jaw.

Referring to the drawings, 1 designates a tubular handle or shank provided at its forward end with an enlarged hollow head open at its forward end and slotted at one side, as at 3, there being pivoted to the shank 1 at a point adjacent its rear end an operating member in the form of an elbow-lever 4, having a rearwardly-projecting portion or handle 5, while formed in the shank 1 at a point adjacent its forward end and in rear of the head 2 is a longitudinal opening or slot 6.

Riveted or otherwise secured to the head 2 is a forwardly-projecting rigid gripping member or jaw 7, adapted for coöperation with a second movable gripping member or jaw 8, pivoted at its inner end, as at 9, to the head and adapted to swing on its pivot back and forth in the guide opening or slot 3, there being provided on the pivoted end of the jaw 8 a series of gear-teeth 10 in mesh with the teeth of a longitudinally-movable rack-bar 11, arranged in the head 2 between the inner ends of the jaw and operatively connected

with the lever 4 by means of a rigid connecting rod or element 12, extended through the guide-slot 6. The gripping members 7 and 8 are preferably curved, as shown, to adapt them to securely grip the box or other article to be lifted.

In practice the handle 1, together with the handpiece 5, is grasped by the operator and the rear end of lever swung outward, thus imparting a forward movement to the rack-bar 11 for swinging the jaw 8 outward to non-engaging position, thereby permitting the jaw 7 to be inserted beneath the box or other article to be handled, after which the rear portion 5 of the operating-lever is moved inward, thereby acting, through the medium of rod 12 and bar 11, to swing the member 8 inward to gripping position, it being noted that under this construction the lever 4 may be readily manipulated for operating the jaw 8 and that a positive movement of said jaw is attained through the medium of the pinion-and-rack connection.

Having thus described my invention, what I claim is—

1. In a device of the class described, a handle, a pair of coöperating gripping members carried thereby, one of said members being fixed and the other pivoted for swinging movement toward and from the fixed member and provided with a series of teeth, a longitudinally-movable rack-bar in mesh with said teeth, an operating-lever pivoted to the handle and a rigid element connecting the lever and rack-bar.

2. In a device of the class described, a tubular handle provided with a head of hollow formation, a pair of coöperating gripping members carried by the head, one of said members being fixed and the other pivoted for movement toward and from the fixed member and provided with teeth, a rack-bar movably disposed in the head in mesh with said teeth, an operating-lever pivoted to the handle and operative connections between the lever and rack-bar.

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

PHILIP NEDDO.

Witnesses:

ALBERT A. SARGENT,  
LOUIS S. GATES.