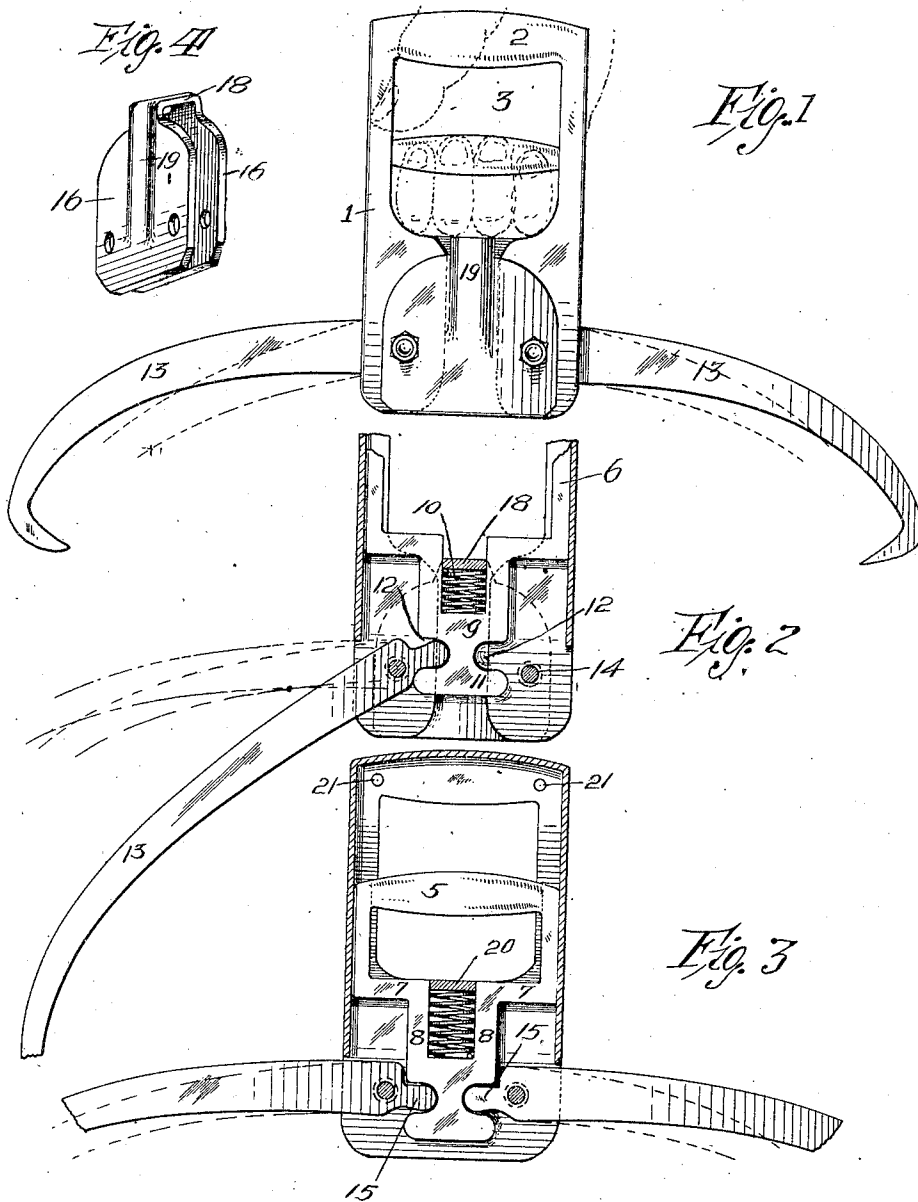


G. S. WESTFIELD.
GRAPPLE OR TONGS.
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1,056,478.

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GEORGE S. WESTFIELD, OF KEYSER, WEST VIRGINIA.

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To all whom it may concern:

Be it known that I, GEORGE SHARON WESTFIELD, a citizen of the United States of America, residing at Keyser, in the county of Mineral and State of West Virginia, have invented certain new and useful Improvements in Grapples or Tongs, of which the following is a specification.

My invention relates to a new and useful improvement in grapples or tongs, and more particularly to tongs that are devised to be operated by one hand, leaving the other hand of the operator free.

An object of my invention is to provide a pair of grapples or tongs wherein after the first or initial fastening of the arms in the object to be grasped, the greater the weight of the article or the tighter the grip on the handles, the more securely will the article be held.

Another object of my invention is to provide grapples or tongs wherein that, after the article is placed at rest; the arms will automatically disengage themselves and release their hold on the object.

Still another object is to provide a pair of tongs that will be simple in construction, cheap to manufacture and of few parts.

With these and other ends in view, my invention consists in certain new and novel features of construction and combination of parts as will be hereinafter more fully described and pointed out in the claims.

In the drawings:—Figure 1 represents a view in elevation of my tongs. Fig. 2 represents a similar view but having a portion of the cover removed. Fig. 3 shows a somewhat modified form of my invention, and Fig. 4 shows a view in elevation of the face plates.

Referring now to the drawings, I have shown the body portion 1 provided with a handle or grip 2 at its upper end, and a portion of the body is cut away at 3 for the insertion of the operator's hand. It will be seen that the said body portion is a casing or shell-like in construction, and adapted to receive a movable member 4. This movable member, clearly illustrated in Fig. 3, comprises a horizontal bar or handle 5, to be gripped by the operator. Two oppositely located side bars 6 are connected with said handle and at their lower portion are bent inwardly as at 7, downwardly as at 8, and joining at 9, thereby forming a vertical receptacle in which is located a spring 10.

The portion 9 is enlarged as at 11, and two oppositely arranged recesses 12, 12 are provided. The gripping arms of the tongs 13 are shown pivoted at their upper extremity by the bolts 14, and the upper extremity of the said arms are formed with extensions 15 which are adapted to extend within the recesses 12, 12, and are engaged by the sides thereof.

The member illustrated in Fig. 4, which I term face plates, is composed of two parallel plates or faces 16, 16, and are connected at their upper end by means of the transverse portion 18; the said transverse portion acting as the impinging member of the spring 10. The said plates 16, 16 are shown with oppositely arranged grooves or channel portions 19, thereby forming side walls of the spring-retaining receptacle.

A somewhat modified form of my construction is shown in Fig. 3, wherein the body portion is formed of two separate side faces or plates which tend to form a casing, and are provided with lugs 12 which extend inwardly and meet as shown. These plates are clamped together or held in their relative positions either by bolts or rivets 21. By using this construction, I dispense with the face plates as shown in Fig. 4. One of the functions of this casing is to retain the movable member 4 in its correct position during its vertical movement.

The operation of my device is as follows: The spring 10, impinging upon the portion 9 of the movable member and against the transverse portion 18 of the face plates, holds the arms of the tongs normally in an open position as is shown in Fig. 1. By grasping the handle 2 and drawing the handle or bar 5 upwardly the enlarged portion 11, acting against the extensions 15 of the grasping arms 7, tends to force them downwardly into a closed position, as shown in Fig. 2, and to firmly grasp the desired object; and to release the object, all that is necessary is to place the article grasped in a resting position and the action of the spring 10 acting downwardly on the movable member 4 forces the arms upwardly and out of engagement with the object that has been carried.

From the foregoing, it will be readily seen that my improved tongs are simple to operate, and that not only the greater the weight of the object but also the tighter the grip on the handle, the more securely will

the object be held. It will also be seen that to operate my tongs only one hand is at any time necessary, leaving the other hand of the operator free. It will also be seen that the body portion of my improved tongs may be of cast or stamped metal, according to the will of the manufacturer.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a gripping tong, a body portion, gripping arms pivotally connected thereto, a movable member located wholly within said body portion and consisting of a handle provided with depending guide arms, said arms bent inwardly and downwardly to form a spring containing receptacle, the lower portion of said movable member provided with oppositely arranged recesses to engage and actuate said gripping arms and a spring within said recess to normally hold said gripping arms in an open position.

2. In a gripping tong, a body portion, gripping arms pivotally connected thereto, a movable member located wholly within said body portion and consisting of a handle provided with depending guide arms, said arms bent inwardly and downwardly to form a spring containing receptacle, the lower portion of said movable member provided with oppositely arranged recesses to engage and actuate said gripping arms, face plates connected by a transverse portion secured to said body portion, and a spring within said recess and impinging against the transverse portion to normally hold said gripping arms in an open position.

This specification signed and witnessed this 13th day of September, A. D. 1912.

GEORGE S. WESTFIELD.

Signed in the presence of—

JOHN COOK,
BENNETT S. JONES.