Aug. 2, 1927. 1,637,388

J. A. NELSON

TONGS

Filed April 21, 1926

Fig. 1

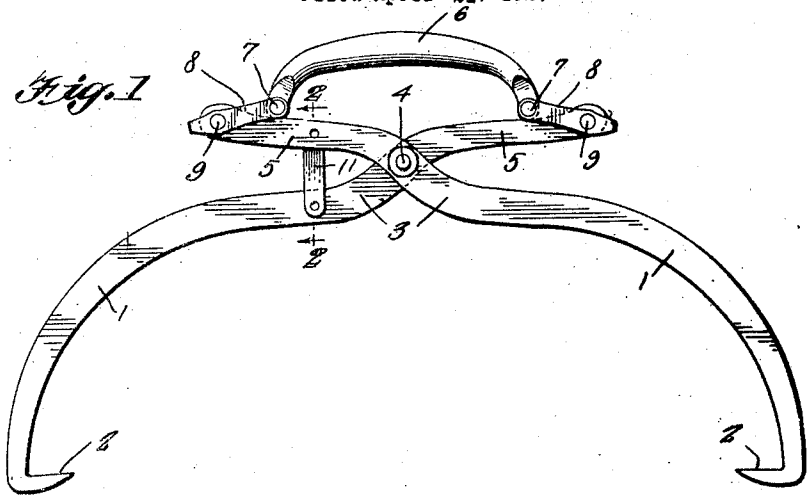


Fig. 2.

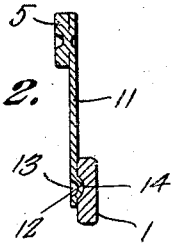


Fig. 3.

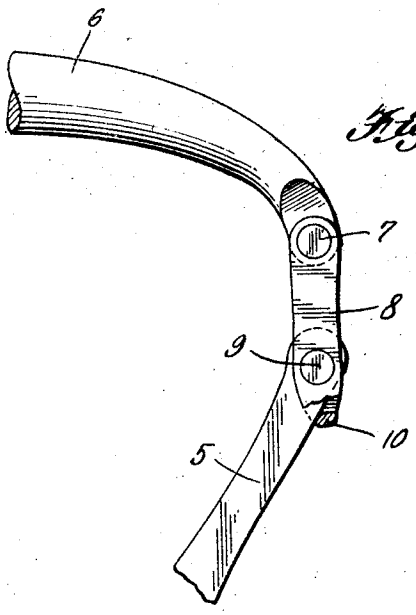
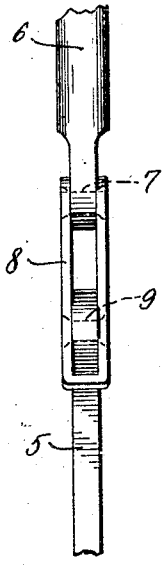


Fig. 4.



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WITNESS:

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UNITED STATES PATENT OFFICE.

JOHN ANTON NELSON, OF BERTRAND, NEBRASKA.

TONGS.

Application filed April 21, 1926. Serial No. 103,577.

My present invention has reference to an improved tongs for gripping and carrying ice, blocks or rock salt, boxes or in fact any other article which can be impinged without inflicting injury thereto and my object is the provision of a tongs for this purpose in which the greater strain upon the handle portion thereof will result in a more effective gripping of the jaws of the device with the object engaged therebetween and further wherein the handle, when moved to one position, will latch the jaws open.

To the attainment of the above broadly stated objects and others which will present themselves as the nature of the invention is better understood, the improvement further resides in certain novel features of construction, combination and operative association of parts, a satisfactory embodiment of which is illustrated by the accompanying drawings.

In the drawings:

Figure 1 is a face view of a pair of tongs in accordance with this invention, the jaws being latched in open position.

Figure 2 is a sectional view on the line 2—2 of Figure 1.

Figure 3 is a fragmentary elevation to better illustrate the connection between the handle and the arm end of the jaws, parts being in section.

Figure 4 is an edge view of the construction disclosed in Figure 3.

The jaws each comprise an arched body 1, that has its outer end extended inwardly to provide the same with a prong 2. The arched bodies are, of course, directed toward each other and merge into angle portions 3 which are in lapping relation and which are pivotally connected, as at 4. From the angle portions 3, each jaw merges into what may be termed an outwardly extending straight arm 5.

The handle of the improvement comprises an arched member 6, to whose ends there are pivoted, as at 7, yokes 8. These yokes receive therethrough the outer ends of the arms 5, a pivot 9 connecting the said yokes to the said ends of the arms. The connecting portion for the arms of each of the substantially U-shaped yokes is not in contact with the arms 5 when the jaws are in spread condition, and these portions of the yokes, indicated by the numeral 10, being reduced and to accomplish this the sides of the yokes, from points opposite the pivots 9, are cut at inward angles.

Fixedly secured on the inner face of one of the arms 5 there is a spring plate 11. Preferably this plate is welded to the said arm. The spring plate has its outer end formed with an inwardly extending lug 12, the same being preferably formed by indenting the plate from its outer face, as indicated by the numeral 13. The lug 12 is designed to be received in a rounded depression or pocket 14 in one of the jaws 1, at a point a suitable distance from the pivot 4.

With my improvement it will be noted that when the handle 6 is moved toward the jaws, as disclosed by Figure 1 of the drawings, the spring plate 11 will move over one of the jaws to bring its lug into the pocket 14 and thereby lock both of the jaws in open position. When the prong 2 of either of the jaws is inserted in an article to be raised and carried, an outward pull on the handle 6 by the operator will cause the spring latch 11 to move out of the pocket 14 and away from the jaws. Such movement swings the yokes to the positions illustrated in Figures 3 and 4 of the drawings, causing the ends 10 of the said yokes to contact with the inner edges of the arms 5 of the jaws, thus swinging the jaws toward each other to cause their prongs to effectively engage an article therebetween, and it will be apparent that the greater the weight and consequent strain caused by such article will only effect in causing the jaws to be swung into tighter gripping engagement therewith, this, of course, when the handle is pulled outwardly from such article.

While my improvement is primarily devised for use for lifting and conveying blocks of ice it has been found equally as successful in other employments, such for instance, in handling rock salt, boxes and like articles.

Having described the invention, I claim:—

1. A pair of tongs, comprising arched jaws having their outer ends formed with inwardly extending prongs and their opposite ends arranged at different angles and disposed in lapping relation and pivotally connected, said angle portions merging into oppositely directed straight arms, a substantially U-shaped yoke arranged around and pivoted to the end of each arm, a substantially U-shaped handle having its ends piv-

oted to the yokes and a spring catch fixed to one of the arms and adapted for interlatching engagement with one of the jaws when the handle is moved in the direction of the jaws.

2. A pair of tongs, comprising arched jaws having their outer ends formed with inwardly extending prongs and their opposite ends arranged at different angles and disposed in lapping relation and pivotally connected, said angle portions merging into oppositely directed straight arms, a substantially U-shaped yoke arranged around and pivoted to the end of each arm, a substantially U-shaped handle having its ends pivoted to the yokes, a spring plate fixedly secured to one of the arms and directed toward one of the jaws, said plate having a rounded lug on the inner face thereof, and the jaw adjacent the plate having a rounded pocket to receive the lug therein when the handle is moved toward the jaws, as and for the purpose set forth.

In testimony whereof I affix my signature.

JOHN ANTON NELSON.