

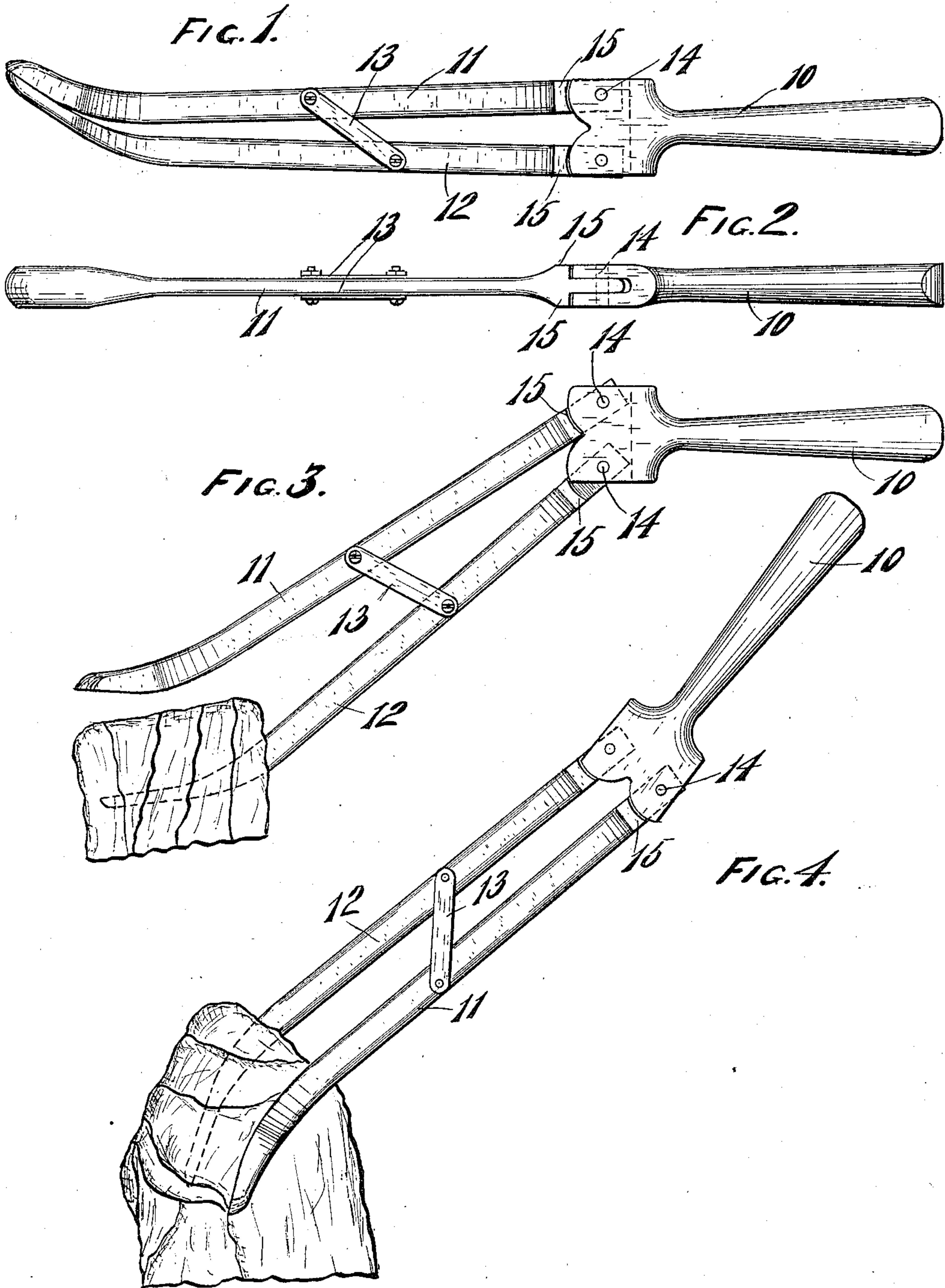
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TONGS.

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999,455.

Patented Aug. 1, 1911.



WITNESSES.

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TONGS.

999,455.

Specification of Letters Patent.

Patented Aug. 1, 1911.

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To all whom it may concern:

Be it known that I, ANDREW B. JENSEN, a citizen of the United States, residing in Racine, in the county of Racine and State of Wisconsin, have invented new and useful Improvements in Tongs, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide tongs of a novel construction wherein the weight of the article lifted by the tongs will serve to force the jaw members together to tightly clamp such article between them.

The invention is capable of any use to which tongs are usually put, but is more particularly adapted for use in lifting clothes from a washboiler or the like without the necessity for placing the hands in the water or the steam arising therefrom.

With the above and other objects in view the invention consists in the tongs as herein claimed and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in the different views, Figure 1 is a side elevation of tongs constructed in accordance with this invention; Fig. 2 is a plan view thereof; Fig. 3 is a side view showing the tongs in the position assumed when engaging material; and, Fig. 4 is a similar view showing the position of parts when the tongs are inverted to clamp the material.

In these drawings the tongs, which may be made of wood or metal or other desirable material, are shown as comprising a handle member 10 having jaw members 11 and 12 pivotally mounted thereon at a grooved enlarged head portion thereof, the pivotal connections of the jaw members with the head of the handle member being spaced apart and being preferably in a plane at right angles to the axis of the handle member. These jaw members 11 and 12 preferably have their outer ends curved upwardly so as to fit together on a plane at an angle to the axis of the handle member, though such construction is not essential to the operation of the device. One or more links 13 connect the two jaw members together at intermediate points and it is desirable that the link connection for the jaw member 11 should be farther from the pivotal connection thereof than the distance between the link connection and the pivotal connection of

jaw member 12, so that when the jaw members are together and the handle member is in a position to extend substantially in a straight line therewith, the link will be oblique with relation to the axis of the handle member. Further it is desired that the distance between the pivotal connections of the link should be greater than the distance between the pivotal connections of the handle member whereby the swinging movement of the handle member out of its position of alinement with the jaw members will tend to draw the rear ends of the jaw members nearer together and will be accompanied by a corresponding spreading apart of the outer ends of the jaw members by the action of the link in assuming a position more nearly at right angles to the jaw members. Thus, the handle member and the link cooperate in spreading the jaws of the tongs apart as the handle member is moved out of alinement with the jaw members. The pivotal connections of the jaw members with the handle member may be conveniently made by forming tenons on the ends of the jaw members fitting in the groove of the head of the handle member, having pivot pins 14 passing therethrough, the shoulders 15 on the jaw members formed by producing the tenons being rounded to conform with rounded edges of the head of the handle member which curve upon the pivotal connections of the handle member as centers, as shown. With this construction the shoulders 15 of jaw member 11 by engaging the rounded edge of the handle head which is concentric with the other jaw connection, serves as a stop for limiting the swing of the handle member away from its position of alinement with the jaw members and thereby determines the extent of opening of the jaw members, as shown in Fig. 3.

In operation the tongs are held by means of the handle member substantially in the position of Fig. 3, when the weight of the jaw members causes them to swing to their full open position. The jaw members may then be advanced by means of the handle member so that member 12 passes beneath the article to be engaged and member 11 passes above the same. In removing clothes from a boiler this engagement may be made beneath the water while the handle is outside. When this engagement is accomplished, the tongs are inverted by turning the handle member so that the jaw member

12 becomes uppermost, and then by swinging the tongs upward to lift the material, the weight of the jaw members and the material engaged between them will serve to swing
5 the jaw members with relation to the handle member to more nearly approach their position of alinement and consequently to more tightly engage the material between the jaw members as said jaw members approach each
10 other. There is no danger of the material slipping from the tongs, for the heavier such material may be, the greater will be the clamping action upon it. When the material is to be disengaged from the tongs,
15 the tongs are again turned to their original position when the jaw members swing open and release the material.

By means of this invention the tongs are made self-clamping, and the weight of the
20 material lifted thereby serves to effect the clamping action upon it. When used for lifting clothes from a washboiler or the like, the device is adapted to perform its work without the necessity for scalding the hands
25 by the water or the steam, the handle being capable of extending over the edge of the boiler while the jaw members are inserted to engage the material, and the operation is completed by merely turning the handle and
30 then lifting the material. In the various other adaptations of the invention the feature of the clamping action of the jaw members produced by inverting the tongs will be of great value as it will not be necessary

for the operator to give his attention to a
35 clamping action of the jaws at the same time that they are being lifted, for such clamping action becomes automatic and dependent in its extent upon the weight of the article
40 being lifted.

What I claim as new and desire to secure by Letters Patent is:

1. Tongs, comprising a handle, clamping jaws pivoted thereto at one end, the free
45 ends of the jaws being adapted to lie in close proximity to each other when the jaws are in alinement with the handle, and a link pivotally connected to the jaws at intermediate points, the free ends of said jaws being
50 separated to admit the entrance therebetween of the article to be clamped when the handle is placed at an angle to the clamping jaws.

2. Tongs, comprising a handle, clamping
55 jaws pivoted thereto, a link pivotally connected to said jaws at intermediate points of said jaws, and a stop on one of said jaws adapted to engage the handle to limit the
60 extent of opening of the free ends of the jaws when the handle is placed at an angle to said jaws.

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

ANDREW B. JENSEN.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents.
Washington, D. C."