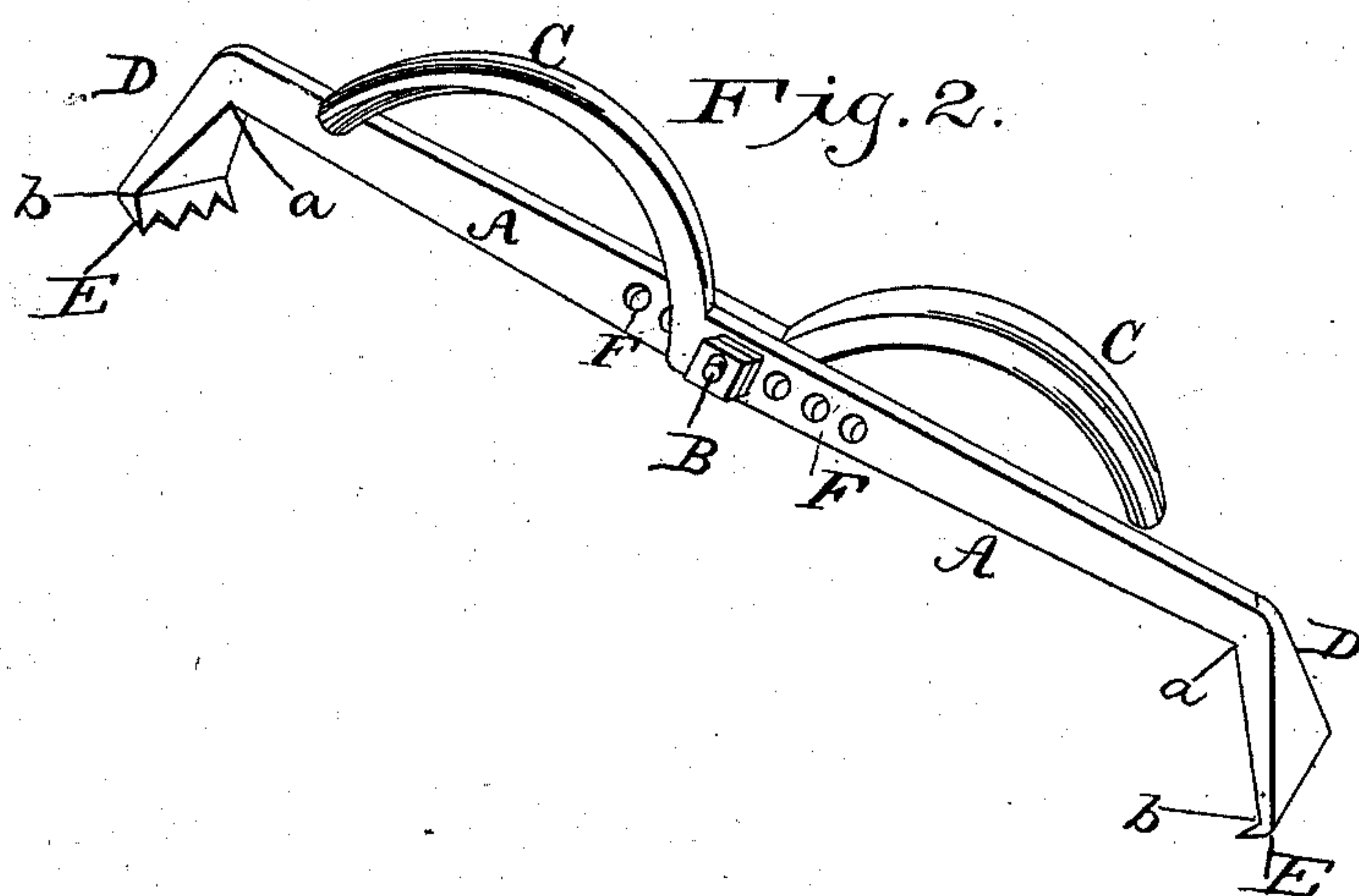
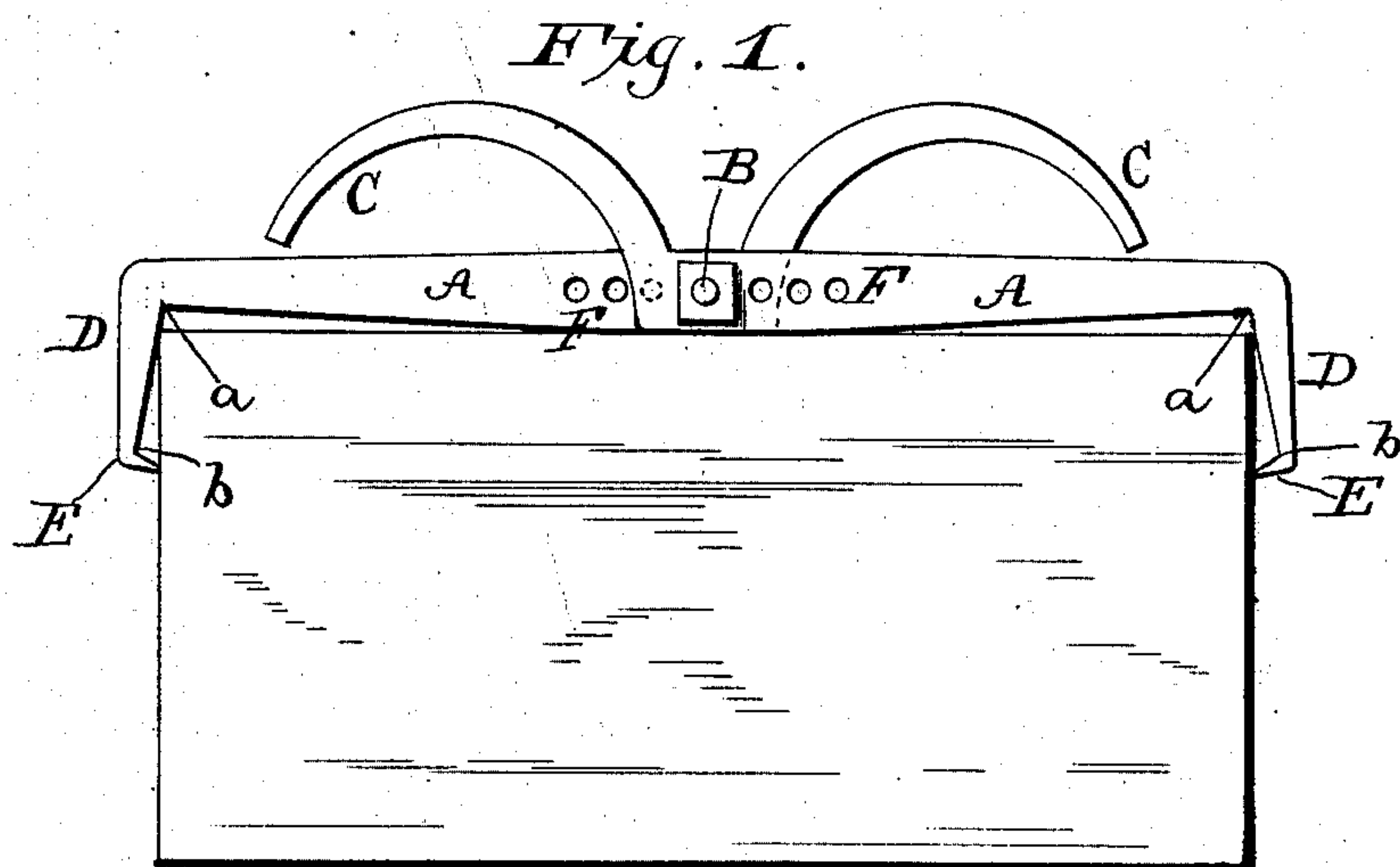


(No Model.)

M. C. WARD.
LIFTING TONGS.

No. 282,134.

Patented July 31, 1883.



Witnesses:

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UNITED STATES PATENT OFFICE.

MILTON CLEGG WARD, OF FARMINGTON, NORTH CAROLINA.

LIFTING-TONGS.

SPECIFICATION forming part of Letters Patent No. 282,134, dated July 31, 1882.

Application filed September 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, MILTON CLEGG WARD, a citizen of the United States, residing at Farmington, in the county of Davis and State of North Carolina, have invented certain new and useful Improvements in Lifting-Tongs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of lifting-tongs; and my said invention consists in forming the biting end or jaws of the arms or shanks of the tongs at an obtuse angle with the shanks and with a wide serrated and sharp edge which has only a slight inward inclination to adapt the jaws for insertion in the narrow interstices between packed boxes and obtain a broad and secure hold or grip upon the same, the instrument acting in the same manner and on the same principle as the old ice-tongs—that is, by drawing upon the handles the jaws are caused to clamp the article and hold the same securely between them.

The object of this invention is to provide a simple implement by which boxes may be handled more effectually than by hand. The particular use for which the device is intended is that of inserting and withdrawing boxes of tobacco from the “clamps” where said boxes are filled and packed; and in order to adapt the tongs for this particular work the jaws thereof form an obtuse angle with their shanks and decrease in thickness but increase in width from the shank to the biting-edge, the latter consisting of a broad, serrated, and sharp edge, made to incline slightly inward and downward from the body of the jaws, whereby the jaws may be used between closely-packed boxes where the usual tongs would not be available, and at the same time injury to the boxes is prevented because of the extended bearing obtained by the jaws, owing to the particular construction of the same.

Boxes for holding plug-tobacco are, when to be filled, placed in clamps—that is, an apparatus or machine made with adjustable sides, which encompass said box or boxes on all sides and prevent the box bursting as the to-

bacco is pressed into said boxes. These clamps, because of the pressure necessary to be exerted upon the tobacco in the box to compact the same therein and exclude all air, are made very strong and powerful in their action, and they closely hold the boxes in their embrace. In inserting the boxes within the clamps, and particularly when withdrawing the heavy filled boxes, great difficulty is experienced to get a proper hold of them, there being little or no space between the boxes or the sides of the clamp. The removal and handling of these boxes to and from the clamp and press has heretofore been done by hand, and attended with considerable difficulty.

The object of this invention is to overcome this difficulty and handling of the boxes by hand and to facilitate this work. This is accomplished by the invention forming the subject-matter of the within application.

Referring to the drawings forming a part of this application, and in which similar letters of reference indicate like parts, Figure 1 will be found to represent a side elevation of a box-lifter, the jaws of which are constructed according to my invention in position upon a box to be lifted; Fig. 2, a perspective view of the same, showing more clearly the construction of the ends of the jaws.

A A are the arms or shanks of the box-lifter, each formed alike and pivoted together near one end by bolt B. These arms or shanks A are made of a straight portion, A, a curved end, C, forming the handle, and an end, D, extending at an obtuse angle with the part A, and terminating in a slightly inward and downwardly-inclined serrated broad and sharp end E. The width of the part A decreases from the pivot to the top of the angled part D, and said angled part decreases in thickness from the angle *a* to the angle *b*, and then from the angle *b* to the point of the teeth E. The object of thus forming the jaws or gripping ends of the tongs is to give them the requisite strength for handling heavy boxes, and to permit the insertion of the ends of the jaws within the narrow interstices between closely-packed boxes, and at the same time that provision is made for the insertion of the jaws in narrow spaces, because of the broad and only

slightly angular biting-edges given to said jaws. No injury to the boxes can result from the use of these tongs, which would not be the case were the jaws of the usual form—that is, 5 with a right-angled end and sharp-pointed biting end also extending at a right angle from the body of the jaws. Through the body of the straight part A are made several holes F, by reason of which provision the size of the 10 jaws may be adjusted for large or small boxes.

As is evident, by reason of this implement the handling of boxes is greatly facilitated, and the packing of the same may be better effected and in less space than by hand.

15 The position of the tongs is represented in Fig. 1 of the drawings, wherein it will be seen that the straight portion or body of the instrument rests about flush against the box. The clamping ends are made of the shape shown— 20 that is, broad at the biting-edge but narrow in the opposite direction, with slightly downwardly-extending teeth, so as to permit the insertion of the edge of the jaws in a very small crack or space.

25 Instead of the holes for adjustment, ratchet-teeth may be provided at top and bottom within a central longitudinal slot in the jaws where-

by the adjustment of the jaws may be accomplished without entirely removing the bolt or loosening its nuts.

I am aware that tongs of a somewhat similar 30 construction have before been made; no broad claim thereto is therefore made herein, the gist of my invention consisting in details of construction to adapt the tongs to be used 35 between close-packed boxes and in narrow spaces.

Having thus fully described my invention, its nature, operation, and advantages, what I claim as new, and desire to secure by Letters 40 Patent of the United States, is—

A box-lifter having its jaws D forming an obtuse angle with their shanks, and decreasing in thickness but increasing in width from *a* to *b*, and then from the point *b* to the biting 45 edges, the latter consisting of a broad serrated and sharp edge, E, made to incline slightly inward and downward from the point *b*, substantially as and for the purposes set forth.

MILTON CLEGG WARD.

In presence of—

R. C. BROWN,

W. FRANK SWAIM.