

(No Model.)

S. BRAZEE.
FRUIT PICKER.

No. 409,907.

Patented Aug. 27, 1889.

Fig. 1.

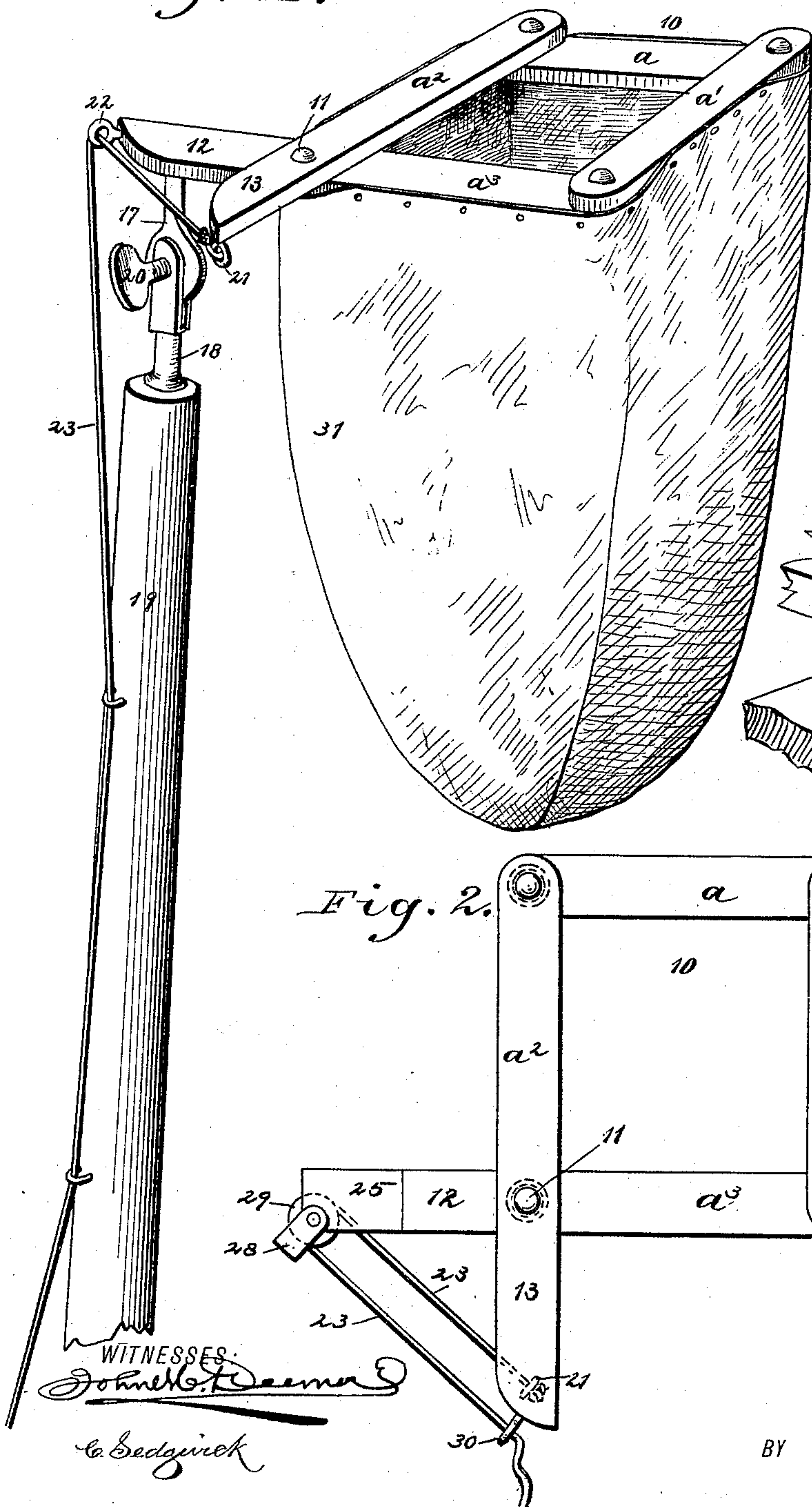


Fig. 2.

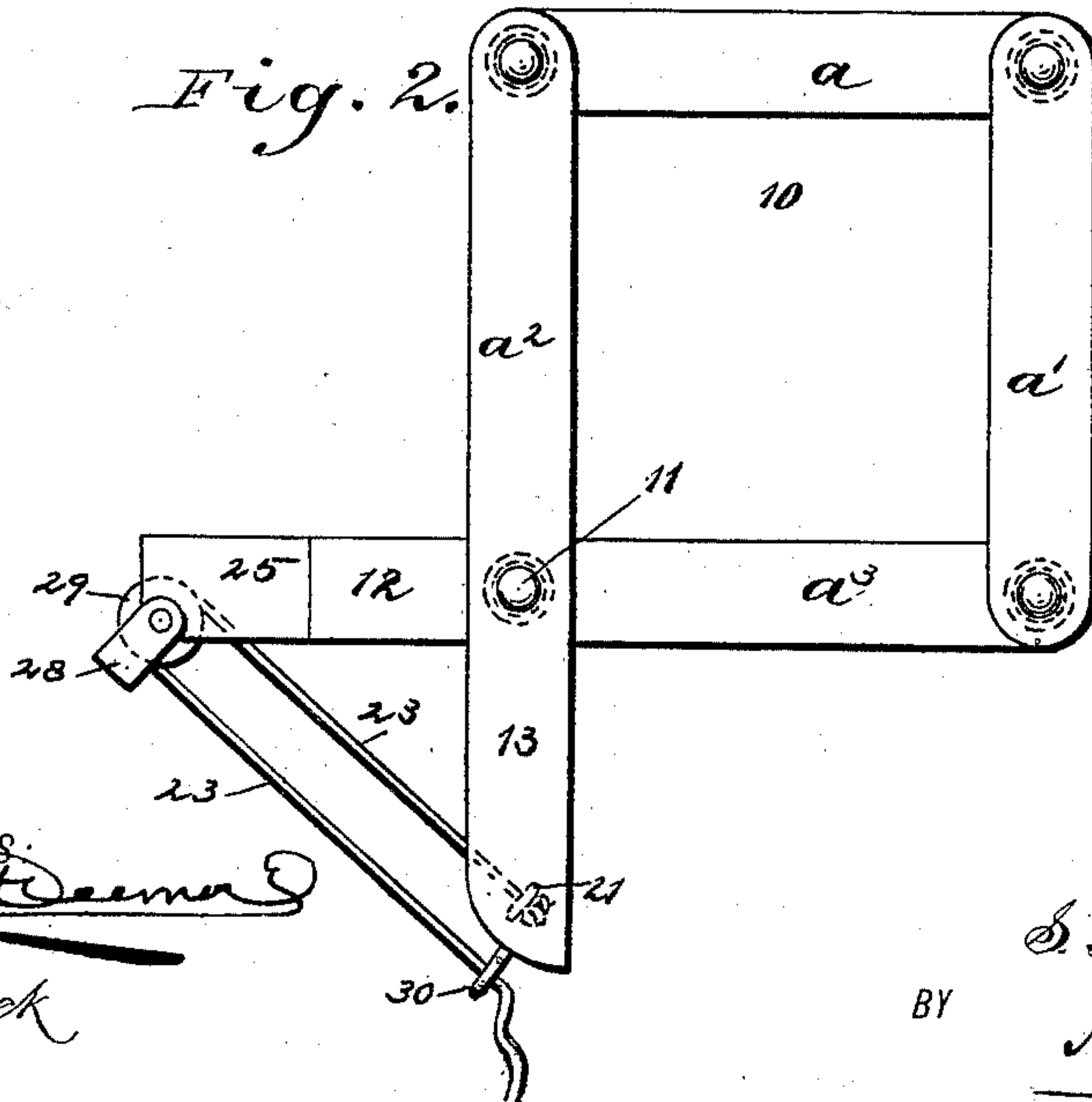


Fig. 4.

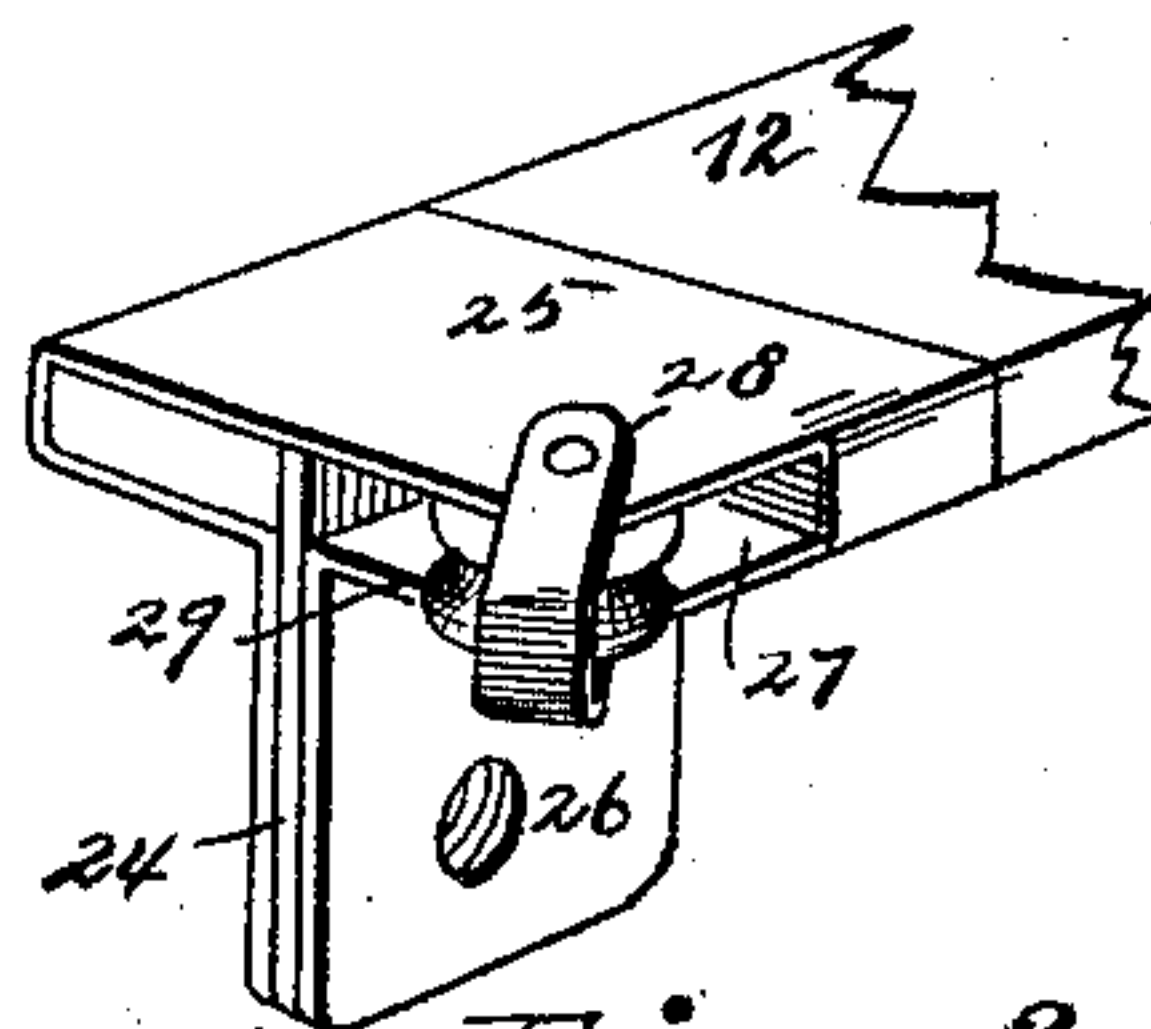
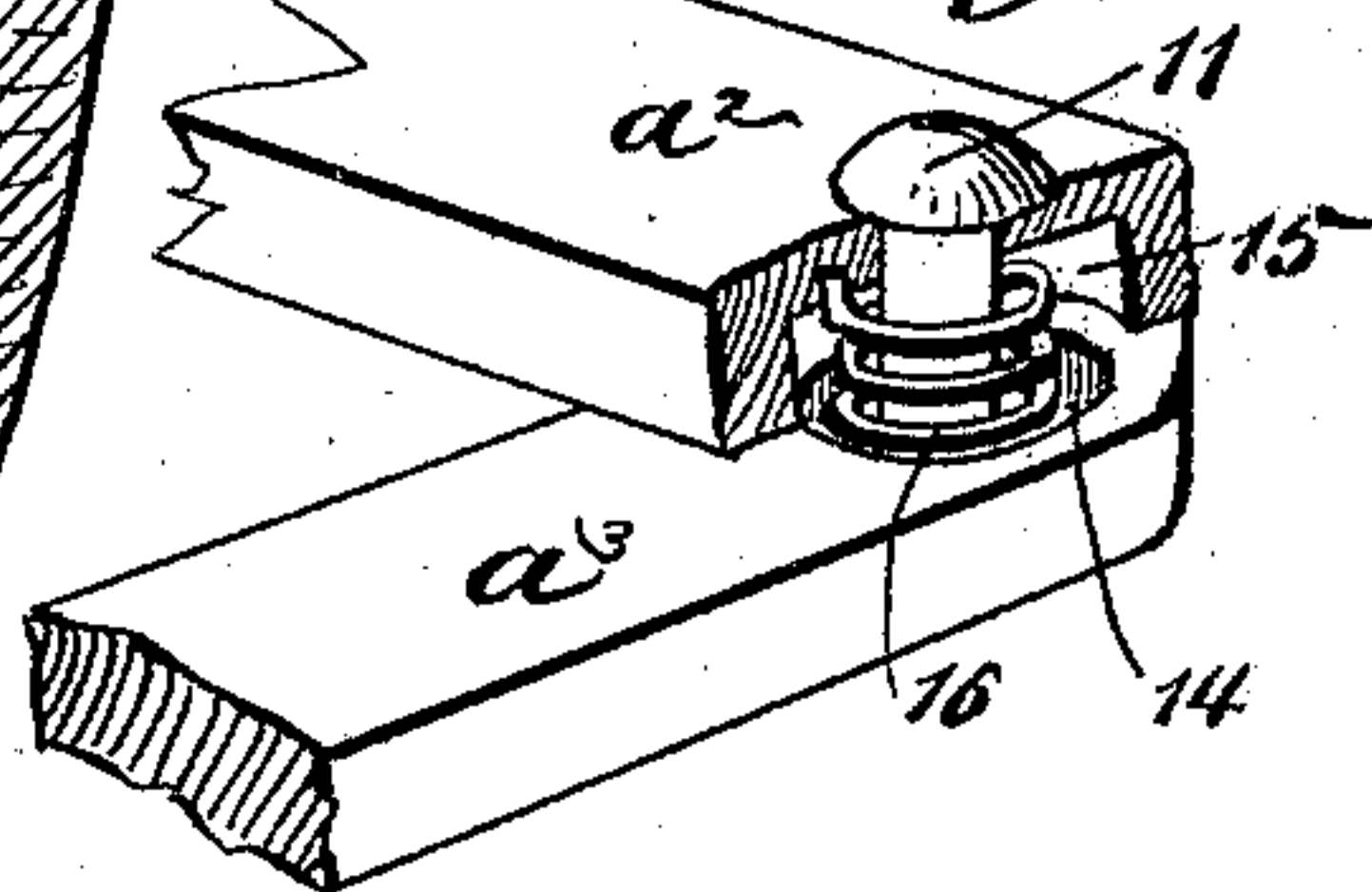


Fig. 3.



WITNESSES:

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STEPHEN BRAZEE, OF PRESTON HOLLOW, NEW YORK.

FRUIT-PICKER.

SPECIFICATION forming part of Letters Patent No. 409,907, dated August 27, 1889.

Application filed March 28, 1889. Serial No. 305,136. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN BRAZEE, of Preston Hollow, in the county of Albany and State of New York, have invented a new and
5 useful Improvement in Fruit-Pickers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in fruit pickers or gatherers, and has for its object to provide a device of simple, durable,
10 and thoroughly practical construction and capable of rapid and convenient manipulation.

The invention consists in the combination
15 of a lazy-tongs frame, a bag attached thereto, a handle, and connections between the handle and the frame, whereby the latter may be opened and closed, and in the novel construction and combination of the several parts, as
20 will be hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in all the
25 views.

Figure 1 is a perspective view of the picker, illustrating the same in position for operation. Fig. 2 is plan view of a slightly-modified and preferred construction of the picker-frame. Fig. 3 is a detail view of the rear
30 members of the frame, partially in perspective and in section, illustrating the application of the spring thereto; and Fig. 4 is a perspective view of a portion of one of the arms of the frame when said frame is constructed as illustrated in Fig. 2.

In carrying out the invention the frame 10 is constructed in the form of a lazy-tongs consisting, preferably, of four members a , a' , a^2 , and a^3 , the members a and a' being pivoted upon each other at one extremity and respectively at the inner end to the members a^2 and a^3 . The members a^2 and a^3 of the frame
45 are pivoted together at a point between their center and outer end by a suitable pin 11, usually partaking of the form of a rivet, whereby the frame is provided at one corner with two oppositely-disposed horizontally-projecting arms 12 and 13.
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In the opposed faces of the members a^2 and a^3 around the pivoted pin 11 recesses 14 and 15 are respectively produced, as shown in Fig. 3, adapted to receive a spring 16, coiled around the pin 11, one end of which spring 55 is secured within the recess 15 and the other in the recess 14, as is also illustrated in Fig. 3. The object of the spring 16 is to normally hold the frame in the open or rectangular position shown in Figs. 1 and 2, and when contracted to automatically restore the frame to said position. 60

In the ordinary construction of the device illustrated in Fig. 1 a post 17 is secured to the under side of the arm 12, having a head 65 flattened to enter a bifurcated stud 18, attached to the upper end of the handle 19. The head of the post 17 is adjustably secured in the bifurcation of the handle-stud, preferably by means of a thumb-bolt 20, provided 70 with a suitable nut. A simple means of closing or contracting the frame consists in securing an eye or staple 21 upon the under face of the frame-arm 13 at or near the end, and a similar eye or staple 22 upon the extreme outer end of the arm 12. 75

A cord or chain 23 is attached to the eye or staple 21, passed through the eye 22, and from thence downward through suitable guides along the handle to a point at or near 80 the bottom thereof. The preferred construction of the device is, however, illustrated in Figs. 2 and 4, from which it will be observed that a strap is bent over the extremity of the arm 12, the ends of which strap are carried 85 downward beneath the arm at the center to a contact with each side of the vertical stay-plate 24, secured within the said arm 12, as best illustrated in Fig. 4. Thus a sleeve 25 is provided for the arm 12, having integral with 90 the under face a downwardly-extending vertical shank 26, which shank is pivoted in the bifurcated stud of the handle by a thumb-bolt, as heretofore described, and as illustrated in Fig. 1. In the outer end of the 95 sleeve and arm 12, and likewise in a portion of the front end thereof, a recess 27 is produced, and at the extreme outer corner of the sleeve a yoke 28 is secured, projecting over the recess 27, adapted to serve in the 100

capacity of a sheave for the pulley 29, horizontally pivoted within the recess 27, as shown in Fig. 4.

When the arm 12 is constructed as illustrated in Fig. 4, the arm 13 is provided with two staples or eyes, the staple or eye 21 being carried back a distance from the extremity, and a second eye 30 is secured in the extreme outer end of the arm, as shown in Fig. 2.

The cord or chain 23 is secured to the eye 21, passed through the recess 27 to the rear of the pulley 29 and in contact therewith, and over the said pulley, through the eye 30, and from thence to the handle.

The device is completed by attaching the upper end of the bag 31, of any suitable or desired length, to the several members of the frame, but not to the arms thereof, the bag at this corner of the frame being left unattached.

In operation, as the frame 10 is held normally open by the action of the spring 16, when said frame is elevated by the handle 19 until the fruit is received within the frame, it is picked from the tree by drawing down upon the rope or chain 23, which contracts the frame over the fruit and essentially in contact with the stem. A slight downward movement of the frame then severs the fruit from the stem and permits it to fall into the bag. Upon releasing the rope or chain 23 the frame is restored to its normal position to receive other fruit.

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

1. In a fruit-picker, the combination of a lazy-tongs frame provided with a spring capable of forcing the tongs open, a bag attached to the body of the frame, and a handle and draw-line secured to the outer members of the said lazy-tongs frame, substantially as and for the purpose specified.

2. In a fruit-picker, the combination, with a spring-actuated lazy-tongs frame having two of the members of said frame projected be-

yond the pivotal point, and a bag attached to the frame, of a handle adjustably secured to one of the arms of the frame, a rope or chain attached to the free projecting member of the frame, and a guide-pulley or eye attached to the fixed projecting member over which the said rope or chain is passed, substantially as shown and described, whereby the frame may be contracted, as and for the purpose specified.

3. In a fruit-picker, the combination, with a spring-actuated lazy-tongs frame consisting of four members pivotally connected, two of the members being carried outward beyond their pivotal point, a bag attached to the frame, and a shank or post projected downward from one of the arms of the frame, of a handle provided with a bifurcated post in the upper end capable of receiving the said shank or post, a thumb-screw adjustably connecting the post and the shank, and a rope or chain or its equivalent secured to the free arm of the frame and passing loosely through an eye or equivalent device secured to the opposite arm, all combined for operation substantially as shown and described.

4. In a fruit-picker, the combination, with a lazy-tongs frame consisting of four members pivotally connected, two of which members are projected beyond their pivotal point at one corner, provided at said pivotal point with a recess in the opposed faces, and a spring coiled around the pivot and secured in the said recesses, of a bag secured to the frame, a handle, a pivotal adjusting connection between the handle and one of the frame-arms, and a rope or its equivalent attached to the free arm of the frame and passing loosely through an eye or equivalent device secured to the opposite frame-arm, substantially as and for the purpose specified.

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Witnesses:

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