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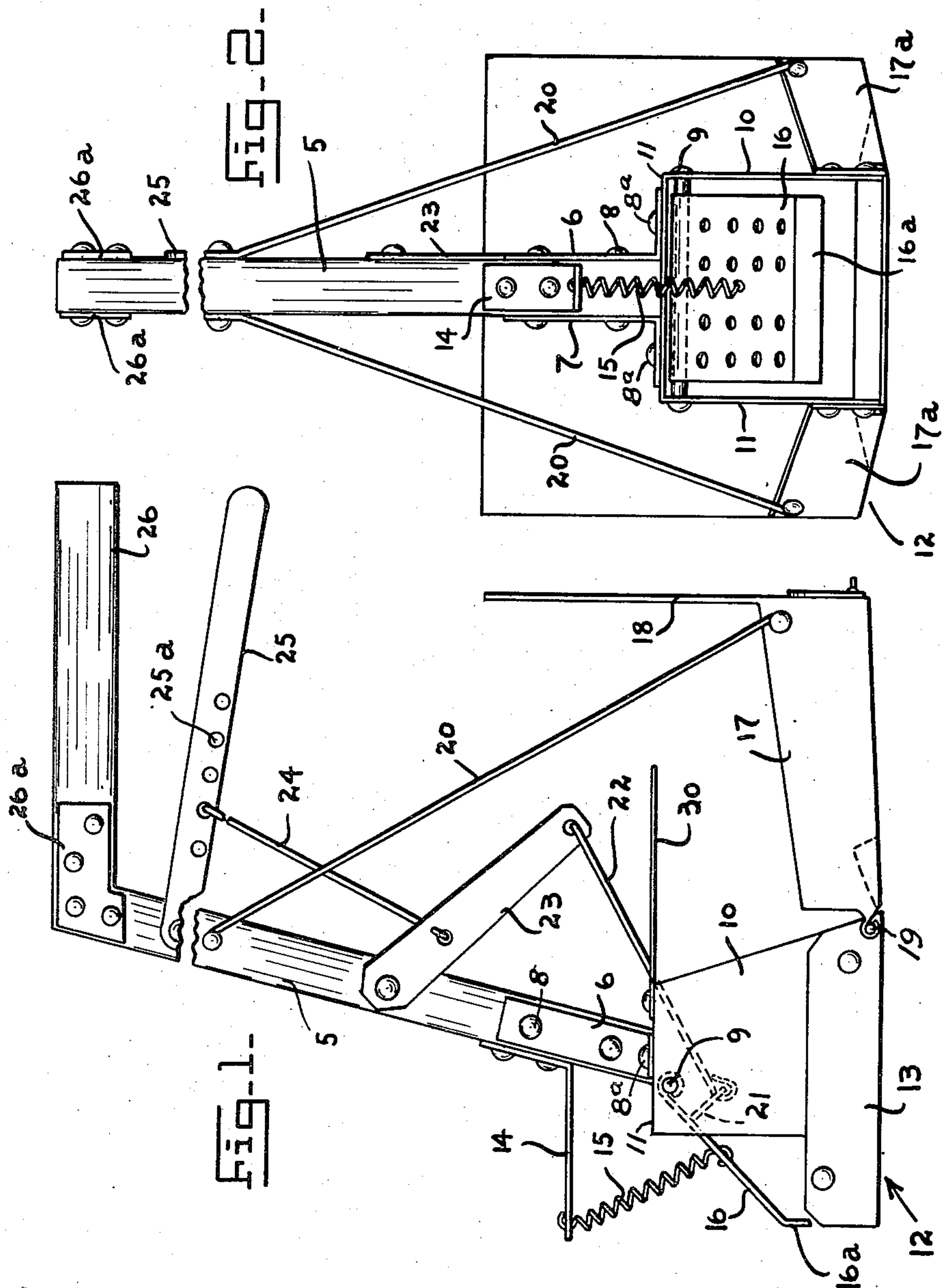
J. D. WYLAND

2,427,486

NUT AND SMALL OBJECT COLLECTOR

Filed May 29, 1945

3 Sheets-Sheet 1



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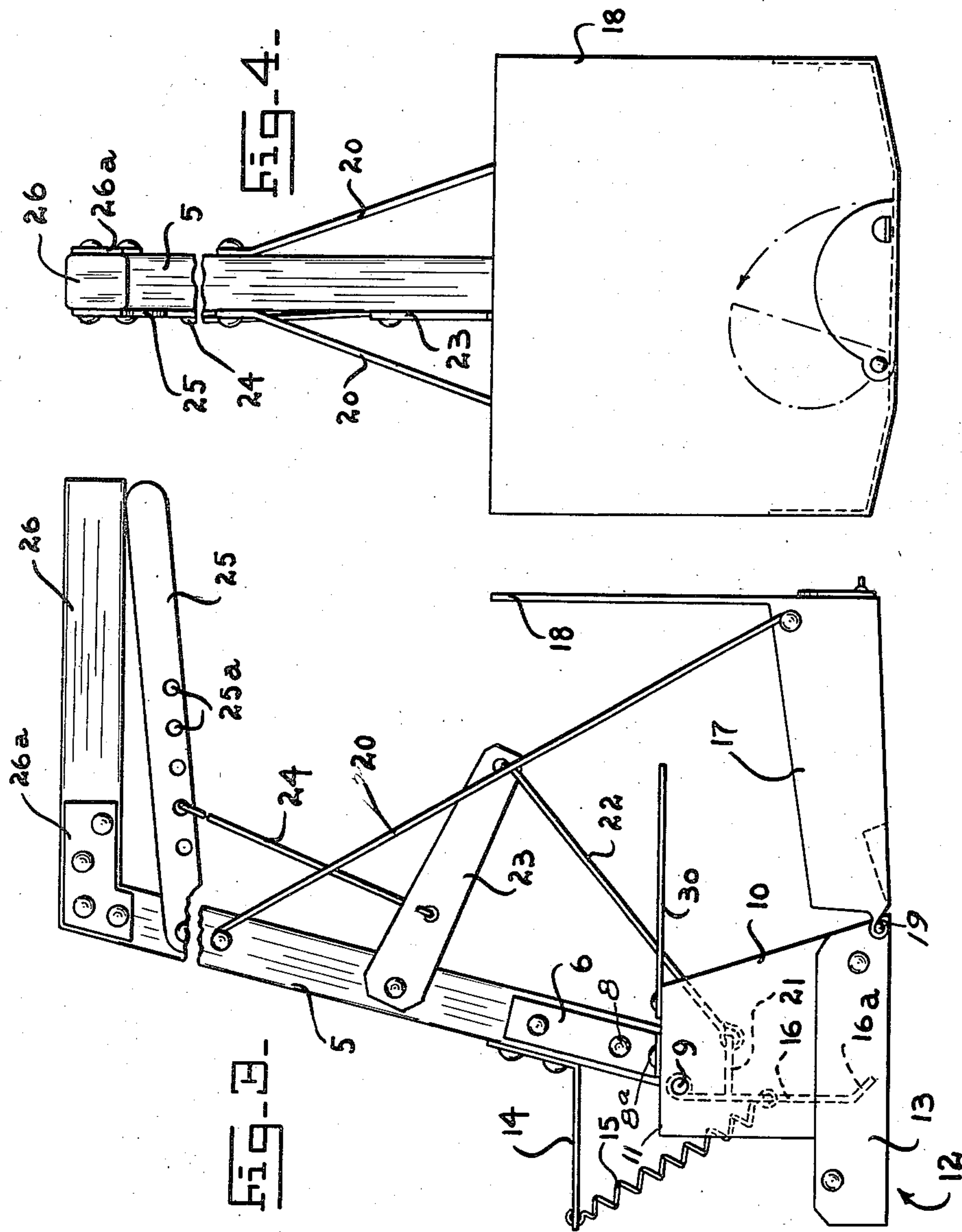
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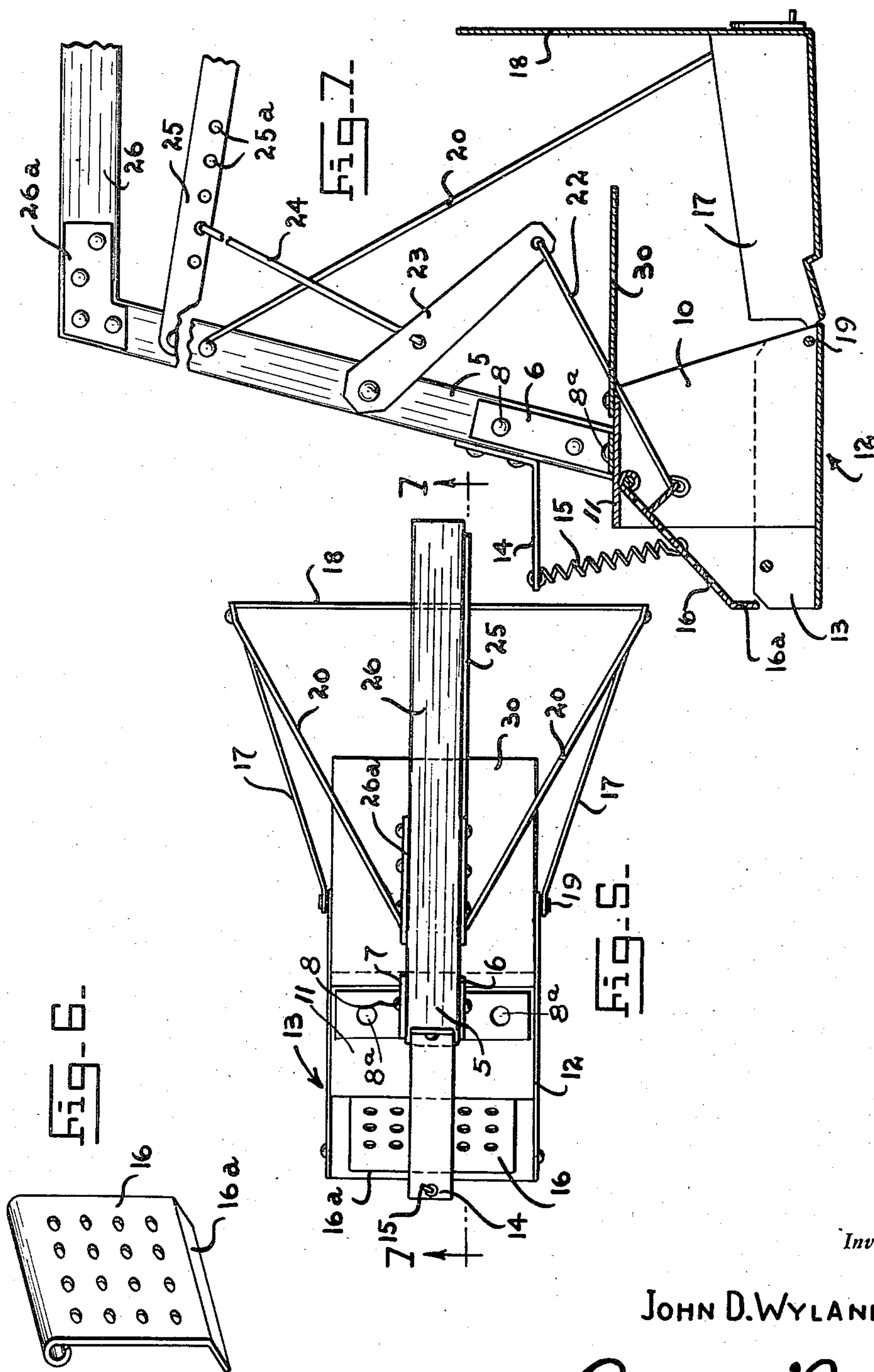
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UNITED STATES PATENT OFFICE

2,427,486

NUT AND SMALL OBJECT COLLECTOR

John D. Wyland, Fresno, Calif.

Application May 29, 1945, Serial No. 596,501

1 Claim. (Cl. 294—55)

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This invention relates to a hand operated device for picking edible nuts and other objects from the ground, and one of the objects of the invention is to provide a scoop and a handle for supporting the same, and a movable plate arranged to push objects into the scoop, under the manual control of a lever system operated from the handle.

Another object of the invention is to provide a lever system for operating the pusher plate or member, which includes an upper lever arranged immediately below the handle to be grasped by the operating hand of the user, a second lever pivoted to the upright post of the device below the first lever, and a link connecting the two levers and another link connecting the lower lever to the pusher plate, so that a downwardly swinging motion may be imparted to the pusher plate, by the raising of the upper lever.

With the above and other objects in view the invention consists in certain new and useful constructions, combinations, and arrangements of parts, clearly described in the following specification, and fully illustrated in the accompanying drawings, in which—

Fig. 1 is a side elevation, showing the pusher plate in its normal raised position.

Fig. 2 is a front elevation thereof.

Fig. 3 is a side elevation, showing the pusher plate in its lowered position.

Fig. 4 is a rear elevation.

Fig. 5 is a top plan view.

Fig. 6 is a detail perspective view, showing the perforated pusher plate.

Fig. 7 is a detail vertical sectional view, taken on line 7—7 of Fig. 5, looking in the direction of the arrows.

Referring to the accompanying drawings, which illustrate the practical embodiment of my invention, 5 designates an upright post, which may be constructed of wood or other suitable material. On the lower end of this post the metal side plates 6 and 7 are attached by the bolts or rivets 8. The plates 6, 7 are attached by rivets 8a to the top 11 of a forward intake scoop 12 having side plates 10. These side plates 10 are connected to a channel base member 13 forming a flat bottom for the intake scoop. A horizontal shaft 9 extends between the side plates 10 in the upper forward portion of the intake scoop 12.

A bracket arm 14 is attached to the lower forward side of the post 5, and a pull spring 15 is connected at its upper end to the forward end of the bracket arm. On the shaft 9 the upper edge of the pusher plate 16 is mounted to swing,

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and the lower edge of this pusher plate is formed with a rearward bent portion 16a, which occupies when the pusher plate is in a raised position, a location adjacent the forward end of the channel base member 13. The pull spring 15 normally holds the pusher plate in its raised position.

A receiving scoop 17, which includes the side walls 17a and the vertically extended rear wall 18, is pivotally connected at 19 to the discharge end of the channel base member 13. The receiving scoop increases in depth rearwardly from the rear end of the intake scoop, so that its holding capacity will increase rearwardly toward the extended rear end plate or wall 18. A brace rod 20 is pivotally connected at its lower end to each side of the receiving scoop, and at its upper end to the side of the post 5. In this way the post is maintained in an upright, but slightly inclined position.

The pusher plate is equipped with an arm 21, which extends rearwardly and to the rear end of this arm the lower end of the pull and push link 22 is pivotally connected, and the upper end of this push and pull link is pivotally connected with the rear end of the lower lever 23, the forward end of which is pivotally connected with the side of the upright 5.

The lever 23 is pivotally connected by the push and pull link 24 with the upper lever 25, the forward end of which is pivoted on the side of the post 5. The upper lever 25 is provided with longitudinally spaced holes 25a to receive the upper end of the push and pull link 24, so that the lever ratio may be varied within certain limits.

A handle 26 is fixed by the side angle plates 26a to the upper end of the post 5, and projects rearwardly from the post, at a level above that of the upper lever 25.

By pulling the upper lever toward the handle, the upper link 24 will lift the lower lever, and this lever will then exert an upward pull upon the lower link 22, and the pusher plate will be swung downwardly and rearwardly in a descending arc, thus pushing any nuts or small objects being collected into the intake scoop.

When the intake scoop has been filled it may be raised upon the hinge connection with the rear or receiving scoop, and the material in the intake scoop dumped into the receiving scoop.

The intake scoop is equipped with a deflector plate 30, which extends rearwardly above the receiving or rear scoop, and serves to limit the vertical accumulation of objects forced into the

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receiving scoop, and to thereby aid in the movement of these objects to the rear part of the receiving scoop.

The upper ends of the brace rods 20 are pivotally connected to the sides of the upright or post, so that the rods may be temporarily disconnected, to permit of the raising of the intake scoop on the receiving scoop, so that objects or material accumulated in the intake scoop may be quickly dumped into the receiving scoop.

The invention may be used for collecting nuts or fruit which have dropped from trees, and may also be used for collecting small objects in shops. The device does not require that the user constantly bend to pick up each object, or a group of related objects, but permits the user to continue collecting in an upright position, the manually operated pusher plate relieving the user of the tedious work of constantly bending.

It is understood that various changes in the use of material required, and in the construction of details, their combination, and arrangement, may be resorted to, within the scope of the invention, as defined by the claim.

Having described my invention, I claim as new:

A collecting device comprising a flat bottom intake scoop for sliding forwardly over the ground and having side walls, a top and an open back, an upright arising from said top and rigid therewith for sliding said scoop, a pusher blade in the

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front of the intake scoop swingable downwardly and rearwardly between said side walls for forcing material rearwardly in the scoop over the bottom thereof, manipulative means for swinging said pusher plate operative from the upper end of the upright, a receiving scoop adapted to be pulled forwardly over the ground by the intake scoop and having a bottom front edge to which the intake scoop is pivoted for vertical tilting of the intake scoop upwardly and rearwardly by rearward tilting of said upright relative to the receiving scoop, whereby matter in the intake scoop may be discharged into the receiving scoop, and means to rigidly connect and to disconnect said upright and receiving scoop to prevent and permit rearward tilting of said upright respectively.

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The following references are of record in the file of this patent:

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