

H. T. KINGSBURY.
TOY DUMPING CART.
APPLICATION FILED APR. 20, 1909.

944,443.

Patented Dec. 28, 1909.
2 SHEETS—SHEET 1.

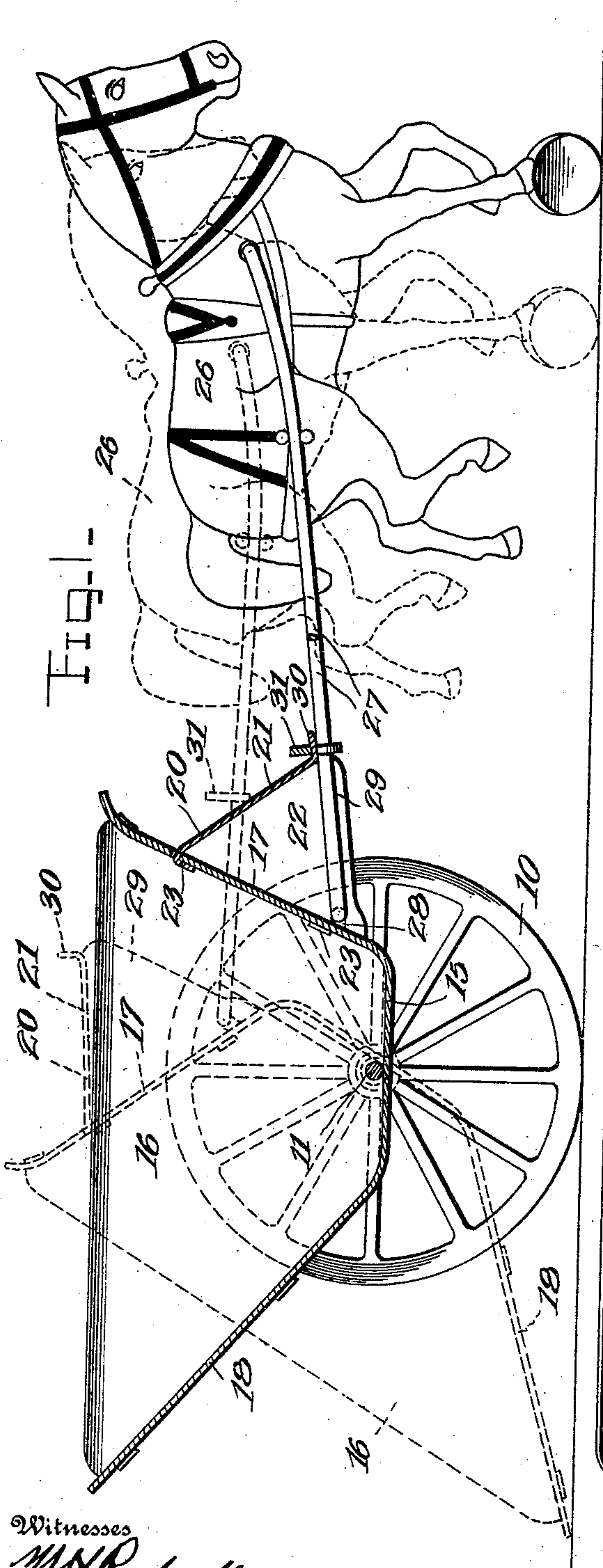
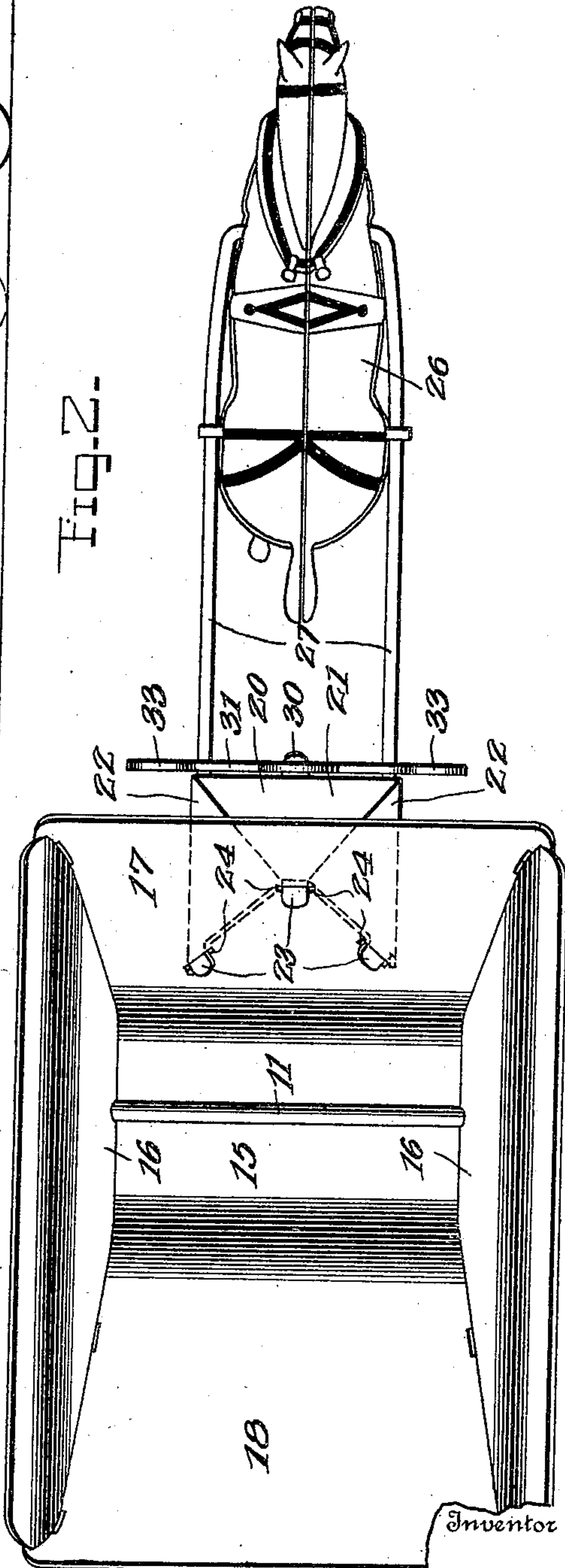


FIG. 2.



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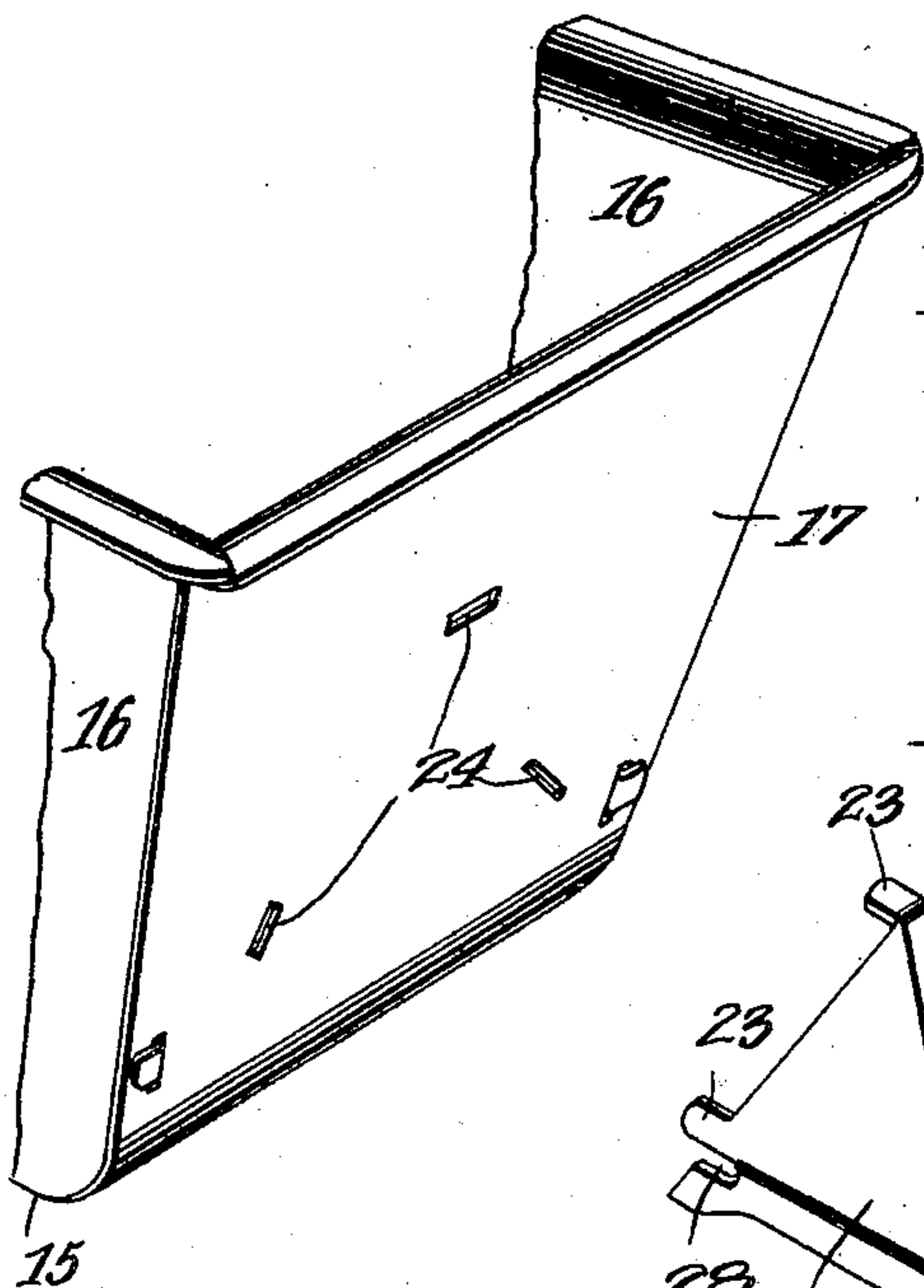


Fig. 3.

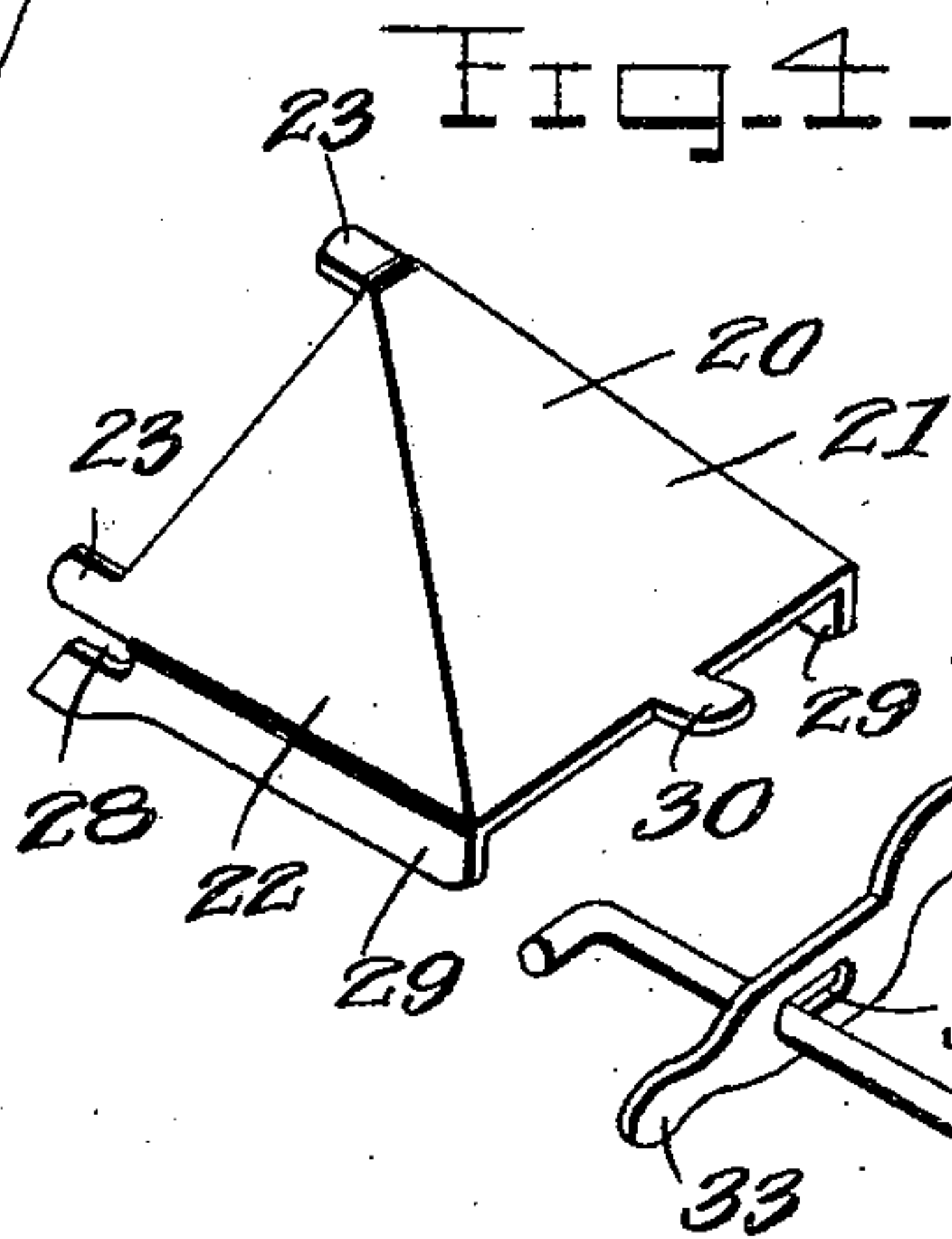


Fig. 4.

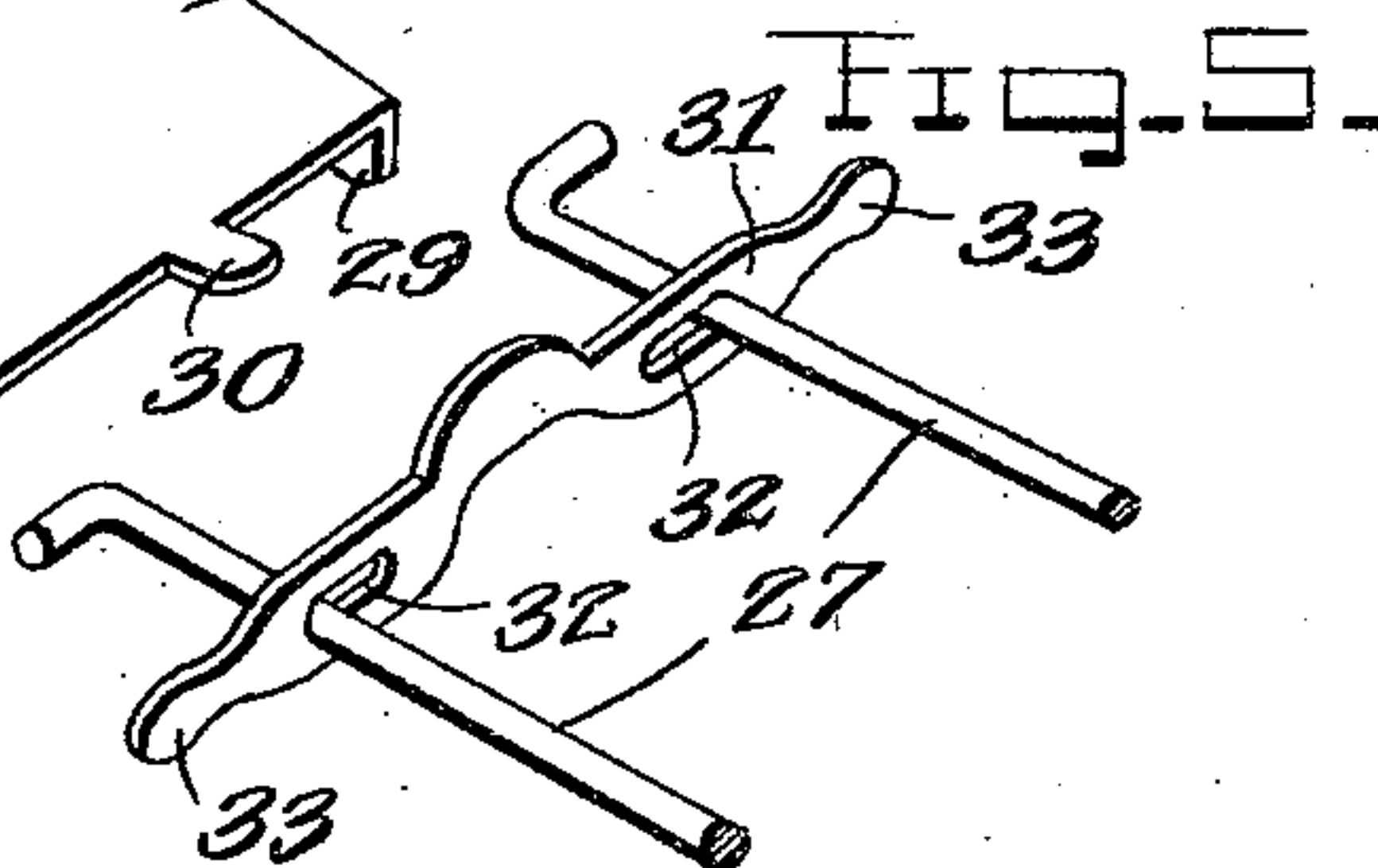


Fig. 5.

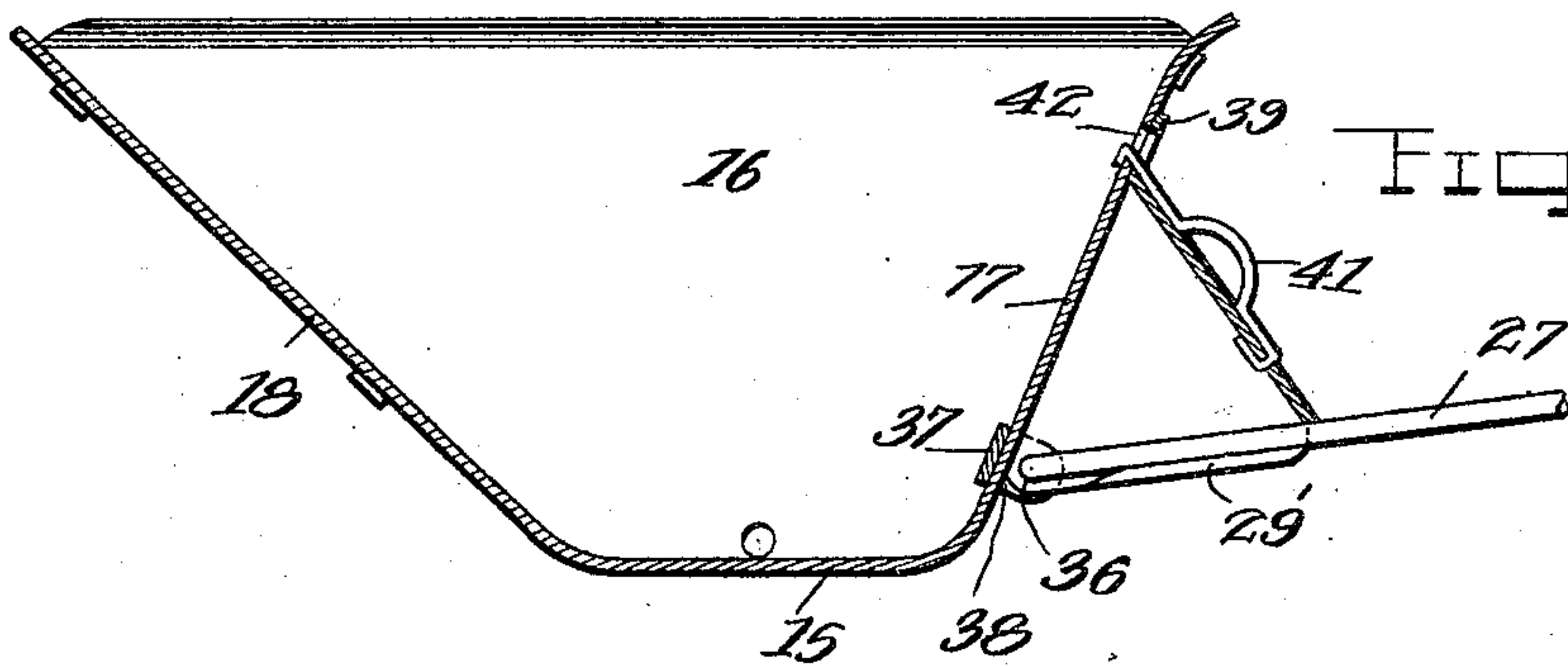


Fig. 6.

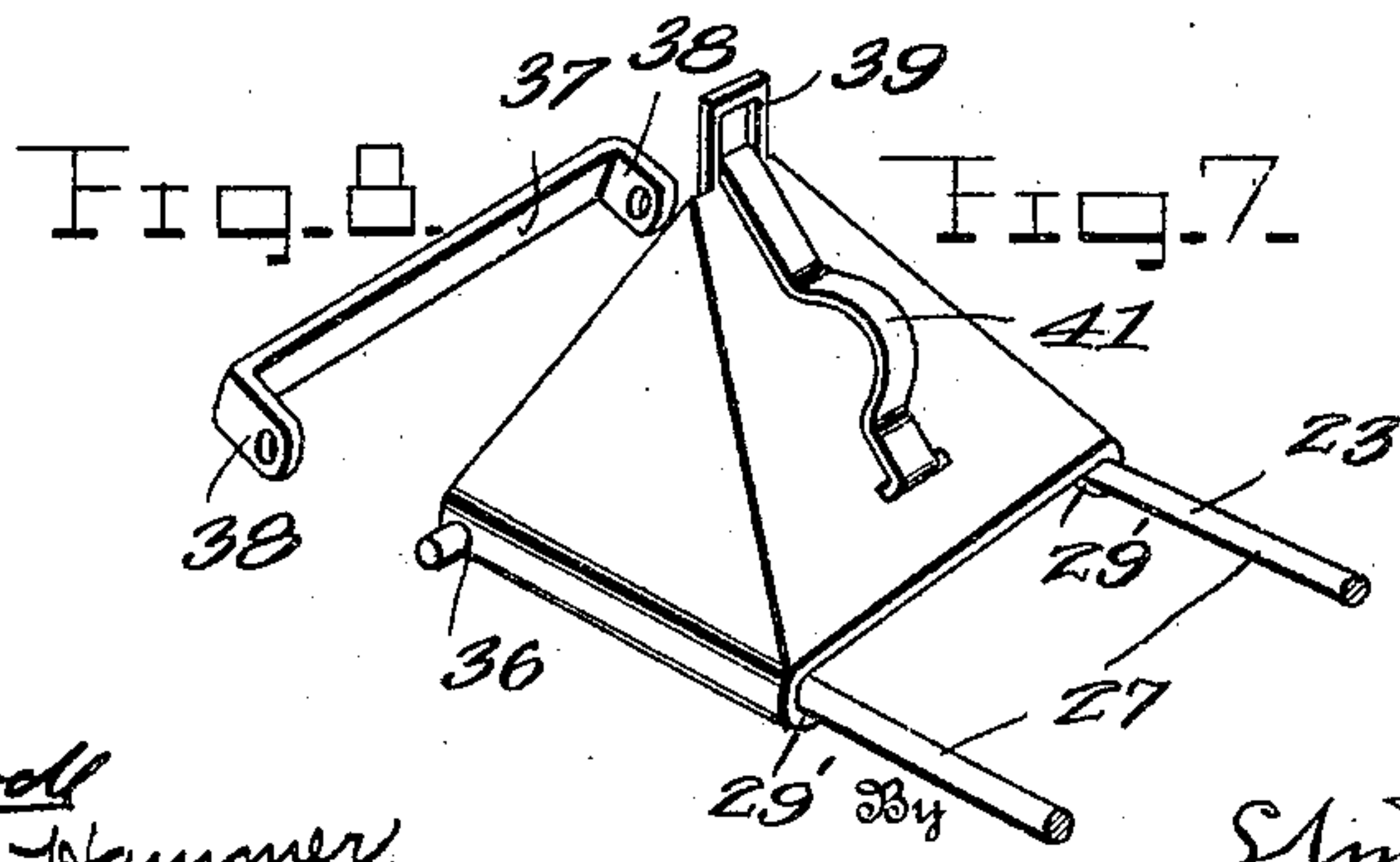


Fig. 7.

Fig. 8.

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UNITED STATES PATENT OFFICE.

HARRY T. KINGSBURY, OF KEENE, NEW HAMPSHIRE.

TOY DUMPING-CART.

944,443.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed April 20, 1909. Serial No. 491,099.

To all whom it may concern:

Be it known that I, HARRY T. KINGSBURY, a citizen of the United States, residing at Keene, in the county of Cheshire, State of New Hampshire, have invented certain new and useful Improvements in Toy Dumping-Carts, of which the following is a description, reference being had to the accompanying drawing and to the figures of reference marked thereon.

This invention relates to dump carts and more especially to that general type of toy dump carts which are constructed chiefly of sheet metal.

The principal object of the invention is to provide a cart which may be constructed at reduced expense while retaining the attractive and advantageous features of somewhat similar devices now on the market.

A further object of the invention is to provide a cart in which the bucket or hopper operates as a link connection between the axle and thills.

A still further object of the invention is to provide a dump cart in which the thills are pivotally connected to the bucket or hopper or a member carried thereby.

A still further object of the invention is to provide a dump cart in which the bucket or hopper may be returned from dumping position by downward pressure on the rear ends of the thills.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings and particularly pointed out in the appended claims, it being understood that various changes in the construction and proportion of parts may be made without departing from the invention.

In the accompanying drawings: Figure 1 is a longitudinal sectional view of a dumping cart constructed in accordance with the invention. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view showing the front end of the bucket or hopper. Fig. 4 is a similar view of the box or frame carried by the bucket or hopper. Fig. 5 is a perspective view of the rear end of the thills. Fig. 6 is a detail longitudinal section of a portion of a cart illustrating a slightly modified construction. Fig. 7 is a detail perspective view of the box or frame forming a part of the modified structure. Fig. 8 is a

similar view of the bucket carried yoke to which the thills are pivoted.

Similar reference characters are employed to designate corresponding parts throughout the several figures of the drawings.

The supporting wheels 10 are carried by a suitable axle 11 on which the bucket or hopper is pivotally mounted. The bucket or hopper is formed of a single piece of sheet metal, the corner portions of the blank being cut out and the four sides being bent up to form a bottom 15, a pair of slightly inclined side walls 16, a front wall 17, and a rear wall 18. The meeting edges of the several walls are connected in a manner well-known in the art; that is, by the employment of interfitting tongues and slots, this forming no part of the present invention.

Secured to the front wall of the bucket or hopper is a box or frame 20 of pyramidal form and having a front wall 21 and a pair of side walls 22. At the apex of the pyramid and at the lower portions of the rear edges of the side walls are formed rearwardly extending integral tongues 23 which pass through suitable slits 24 in the front wall of the bucket or hopper, the end portions of the tongues being then bent down in order to hold the box or frame rigidly in place.

The wheeled horse 26 is of the usual construction and carries a pair of spring wire thills 27 which extend under the box 20 and the rear ends of the thills are turned outward and pass through eyes 28 which are formed in depending vertical flanges 29 that form integral parts of the side walls of the box. As these flanges bear against the outer sides of the thills for a considerable distance they serve to stiffen and strengthen the structure and prevent such independent side play of the box and thills as would tend to disconnect the two.

To retain the bucket or hopper in its initial or load receiving position any suitable means may be employed. In the present instance the central portion of the lower edge of the wall 21 is provided with a forwardly extended lug 30 that is arranged to be engaged by the central arched portion of a locking bar 31 that is slidably mounted on the thills. The bar 31 has two elongated slots 32 for the passage of the thills, these slots serving to permit the compression of the thills when the latter are moved toward

each other for insertion in or removal from the pivot openings 28. From each end of the bar extends a small operating handle 33.

In the operation of the device as thus far described, the bucket or hopper being in load receiving position shown in full lines in Fig. 1, the locking bar is pulled forward in order to disengage it from the lug 30. As the vertical plane of the center of gravity of the bucket or hopper is to the rear of the vertical plane of the axle 11, the cart will immediately move to the dumping position shown by dotted lines in Fig. 1.

It will be observed that the forward end of the bucket or hopper moves upward, carrying with it the pivoted rear ends of the thills, so that the bucket or hopper really acts as a link connection between the axle and the thills.

When in dumping position, the vertical plane of the pivoted ends of the thills is in advance of the vertical plane of the axle so that downward pressure exerted on the thills, or on the box, will restore the bucket or hopper to its initial position, after which the locking bar may be again moved into engagement with the lug 30.

In Figs. 6, 7 and 8 of the drawing is illustrated a slight modification of the structure. In the modified form the lower flanges 29' are bent inward to form receiving pockets for the rear end of the thills and the rear ends of these flanges have openings 36 for the passage of the outturned ends of the thills, the construction of the latter being precisely the same as previously described. Arranged within the bucket or hopper is the central bar of a yoke 37, the two outturned arms 38 of which pass through openings formed in the front wall of the bucket or hopper and these arms have pivot eyes for the reception of the pivot ends of the thills. At the apex of the pyramidal box is an upwardly extending guide 39 through which passes one end of a locking device in the form of a spring latch 41. The lower end of the latch is secured to the box while its upper end is bent downward and is arranged to catch against the lower wall of an opening 42 formed in the front wall of the bucket or hopper.

I claim:—

1. In a dump cart including a running gear, a bucket or hopper pivotally supported thereon and a pair of thills pivotally connected to the forward portion of the bucket or hopper.

2. In a dump cart, a wheeled axle, a bucket or hopper pivotally mounted thereon,

and thills pivotally connected to the bucket or hopper.

3. In a dump cart, a wheeled axle, a bucket or hopper pivotally mounted thereon, and thills, the rear ends of which are pivotally connected to the forward portion of the bucket or hopper.

4. In a dump cart, a wheeled axle, a bucket or hopper pivotally mounted thereon, and a pair of thills pivotally connected to the forward portion of the bucket or hopper, the vertical plane of the thill pivots being in advance of the vertical plane of the axle in both positions of the bucket or hopper.

5. In a dump cart, a wheeled axle, a pivotally mounted bucket or hopper, thills pivoted to the bucket or hopper, and a locking means carried by the thills for maintaining the bucket or hopper in load carrying position.

6. In a dump cart, a wheeled axle, a bucket or hopper, a box or frame extending from the forward end of the bucket or hopper, and pivoted thills, the box or frame having means for engaging with and preventing independent lateral play of the thills.

7. In a dump cart, a wheeled axle, a bucket or hopper pivotally mounted thereon, a box extending forward from the bucket or hopper and provided with depending perforated side flanges, and thills fitting between said flanges, the rear terminals of the thills being bent and extended through said perforations.

8. In a dump cart, a wheeled axle, a bucket or hopper pivotally mounted thereon, a box carried by the forward portion of the bucket or hopper, and provided with a forwardly extended lug, thills pivoted to the box, and a locking bar slidably mounted on the thills and arranged to engage said lug.

9. In a dump cart construction, a wheeled axle, a bucket or hopper pivotally mounted thereon, a forward extending locking lug, a pair of yieldable thills having a detachable pivotal connection with the bucket or hopper, and a locking bar arranged to engage the locking lug, said bar having elongated slots to permit compression and expansion of the thills.

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

HARRY T. KINGSBURY.

Witnesses:

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L. G. LITCHFIELD.