

F. B. CARROLL & J. L. RICKS.

MEASURING BIN.

APPLICATION FILED APR. 2, 1910.

975,208.

Patented Nov. 8, 1910.

2 SHEETS—SHEET 1.

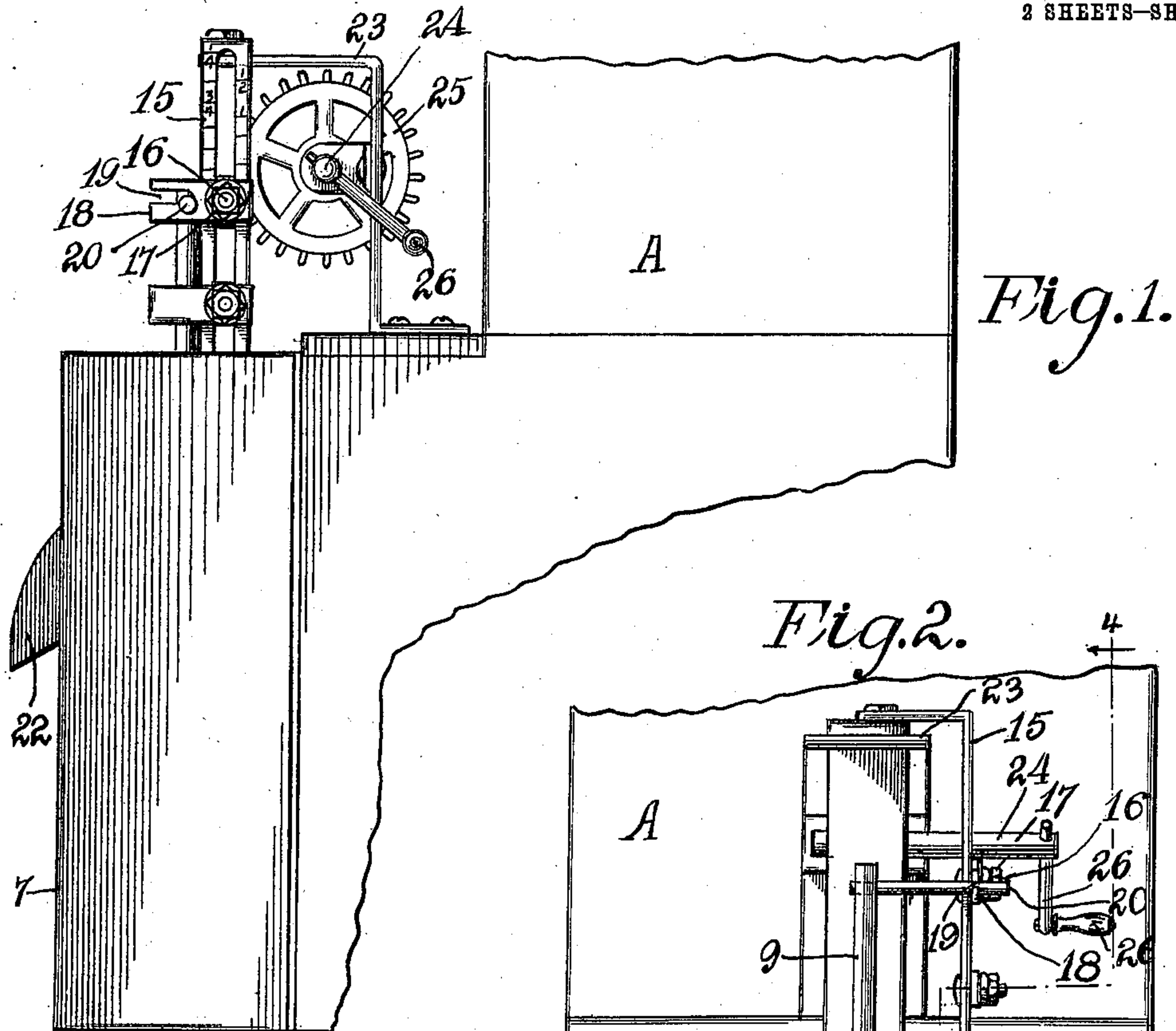


Fig. 1.

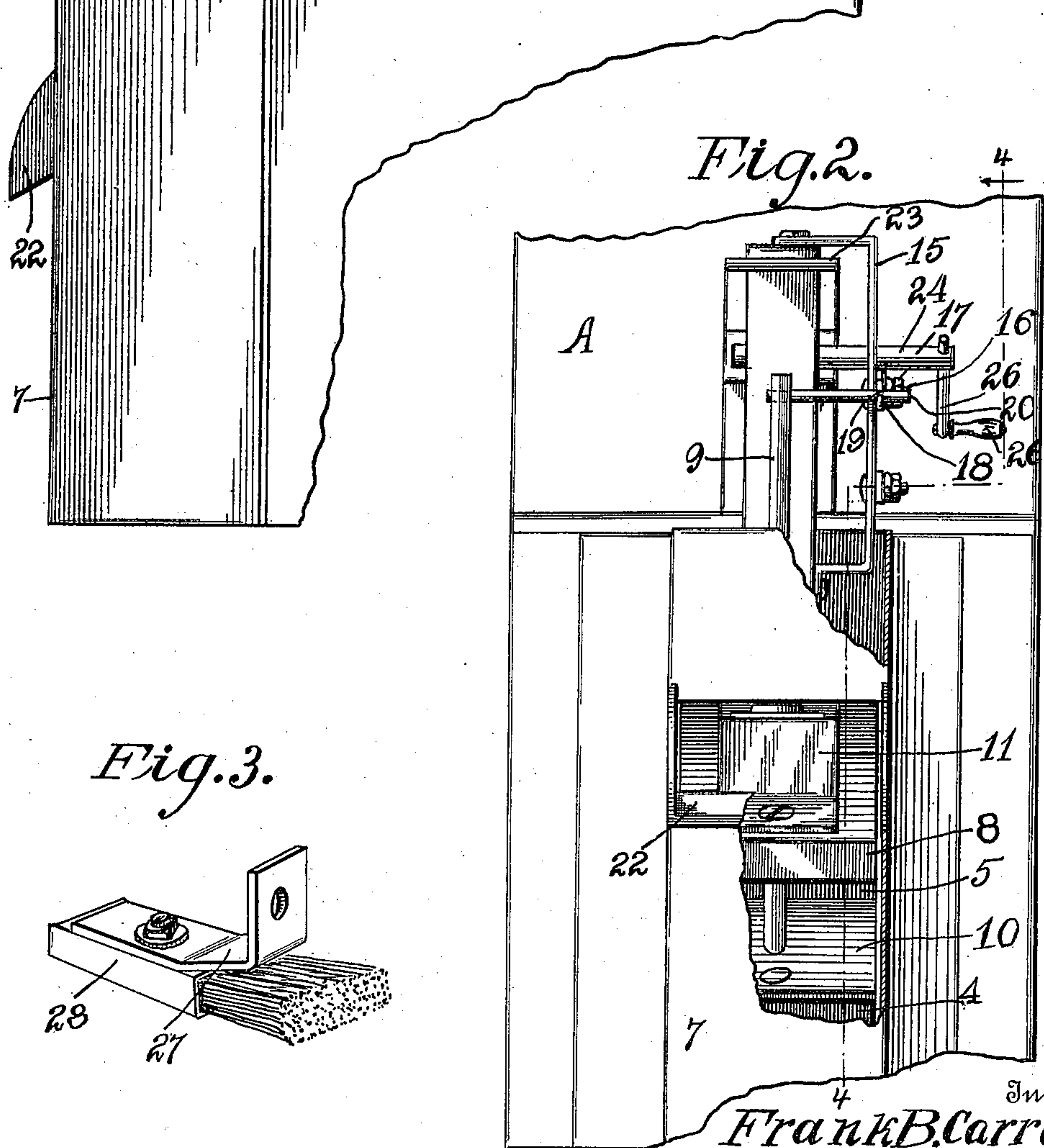
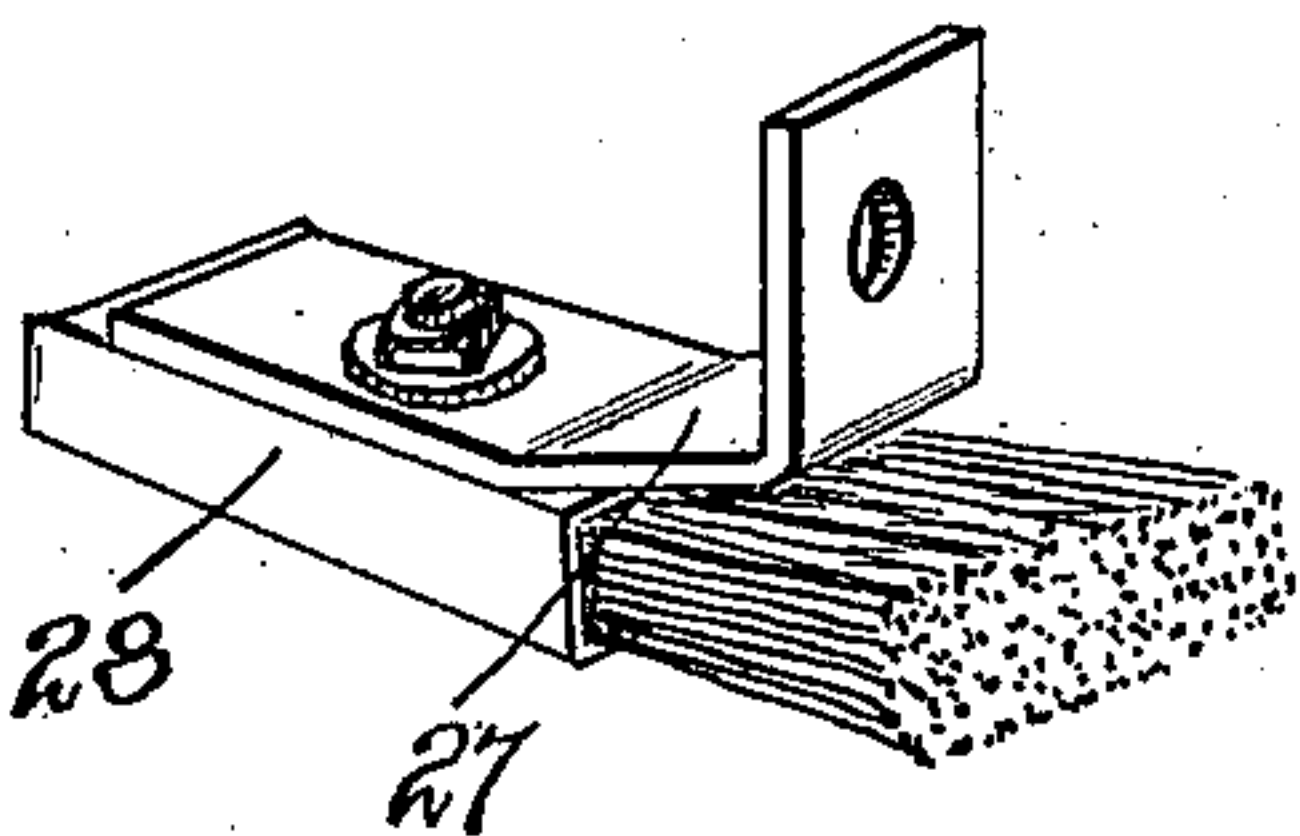


Fig. 2.

Fig. 3.



Witnesses

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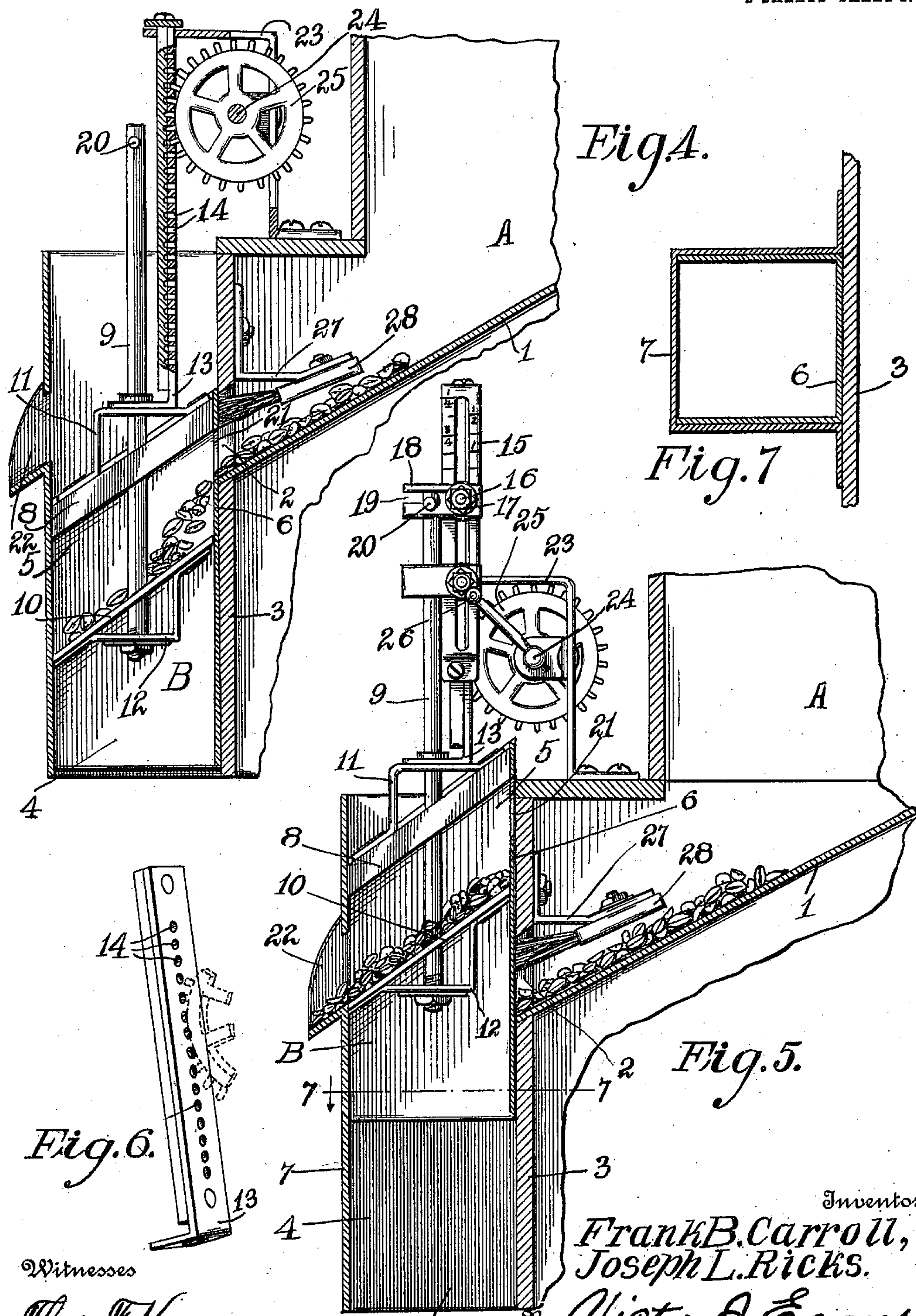
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UNITED STATES PATENT OFFICE.

FRANK B. CARROLL AND JOSEPH L. RICKS, OF WOODLAND, MISSISSIPPI.

MEASURING-BIN.

975,208.

Specification of Letters Patent.

Patented Nov. 8, 1910.

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To all whom it may concern:

Be it known that we, FRANK B. CARROLL and JOSEPH L. RICKS, citizens of the United States of America, residing at Woodland, in the county of Chickasaw and State of Mississippi, have invented new and useful Improvements in Measuring-Bins, of which the following is a specification.

This invention relates to bins for containing coffee and other articles, and it has for its object to provide a bin with a measuring device of simple and efficient construction whereby the contents of said bin may be delivered in predetermined quantities and be discharged into a bag or other receptacle.

A further object of the invention is to so construct the improved device that the measuring receptacle may be regulated or adjusted as to size in a simple and convenient manner.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings,—Figure 1 is a side elevation showing a portion of the bin equipped with a measuring device in accordance with the invention. Fig. 2 is a front view of the same. Fig. 3 is a perspective view of a brush member constituting a cut-off which is used in connection with the invention. Fig. 4 is a vertical sectional view taken on the line 4—4 in Fig. 2, showing the device with the measuring receptacle in receiving position. Fig. 5 is a vertical sectional view similar to Fig. 4, but showing the device with the measuring receptacle in discharging position. Fig. 6 is a perspective detail view of the rack used in connection with the device shown also in dotted lines, a portion of the pinion engaging said rack. Fig. 7

is a sectional detail view taken on the line 7—7 in Fig. 5.

Corresponding parts in the several figures are denoted by like characters of reference.

The bin A has an inclined bottom 1 adjacent to the lower end of which an aperture 2 is formed in the wall 3, said aperture communicating with a tubular casing 4 which is constructed adjacent to the wall 3, said tubular casing being preferably of square or rectangular cross section.

Slidably supported within the tubular casing 4 is the measuring receptacle B which may be described as consisting of a casing composed of side walls 5 and a rear wall 6, the front being left entirely open, but said front being obstructed by the front wall 7 of the tubular casing 4, wherein the measuring receptacle is slidably arranged. The receptacle B is provided with an inclined top member 8 which when said receptacle is in position lies approximately in parallel relation to the bottom 1 of the bin. Extending through the top member 8 is a slidable stem 9 carrying adjacent to its lower end a plate or follower 10 which lies in parallel relation to the top member 8. The latter is provided on its upper side with a bracket 11 affording an additional bearing for the stem 9, and the underside of the follower 10 is equipped with a similar bracket 12 wherein the lower end of the stem is secured.

The bracket 11 of the measuring vessel supports an upright 13 which is formed or provided with a rack 14 and upon which a vertically slotted gage plate 15 is suitably secured, said gage plate being provided with a suitable scale, as will be best seen in Figs. 1 and 5. Slidably mounted upon the gage plate 15 and where it may be secured by means of a bolt 16 having a nut 17 is an indicator 18 having a slot 19 to receive a pin or stud 20 which projects laterally from the stem 9. It will be readily seen that by adjusting the indicator with reference to the scale the stem 9 carrying the follower 10 may be raised or lowered, thus gaging or regulating the distance of said follower from the top member 8 of the measuring receptacle, the capacity of which may thus be increased or diminished. The rear wall 6 of the measuring receptacle has an aperture 21

near its upper edge which may be brought into registry with the aperture 2 in the front wall of the bin, thus permitting a portion of the contents of the bin to pass into the measuring receptacle, the front portion of which will be meanwhile obstructed by the front wall 7 of the tubular casing 4. The said front wall 7 is provided with a suitably located discharge spout 22.

The upright 13 may be guided through a slot in a bracket 23 which is supported upon the top of the bin and which affords a bearing for a shaft 24 having a pinion 25 engaging the rack 14 and a crank 26 whereby it may be rotated.

Suitably secured upon the wall member 3 interiorly of the bin is a bracket 27 carrying a brush member 28 which constitutes a cut-off.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood. The stem 9 carrying the follower 10 may be readily adjusted by moving the indicator 18 to regulate the capacity of the measuring receptacle. By rotating the shaft carrying the pinion 25 the rack connected with the measuring receptacle will be lowered until the aperture 21 in the rear wall of the measuring receptacle is in registry with the aperture 2 in the wall 3 of the bin, the contents of which may now pass into the measuring receptacle until the latter has been filled. The shaft 24 is now manipulated to elevate the rack, thus carrying the measuring receptacle past the brush member 28 until the aperture 2 is obstructed by the rear wall of the measuring receptacle, and the open front portion of the latter above the

follower 10 is in registry with the delivery chute 22 over which the contents of the measuring receptacle will now be discharged.

Having thus described the invention, what is claimed as new, is:—

1. In a device of the character described, a bin having an inclined bottom, a tubular casing adjacent to the bin and communicating with the latter through an aperture in the partition wall adjacent to the lower edge of the bottom, a measuring receptacle slidable in the tubular casing, said receptacle being composed of side walls, a rear wall and an inclined top member, a stem slidable through the top member and carrying an inclined follower and a slotted scale member firmly connected with the measuring receptacle, all of said inclined parts being inclined in the same direction, a slotted indicator adjustable upon the scale member, and a pin extending from the stem of the follower and engaging the slot of the indicator.

2. In a device of the character described, a measuring receptacle consisting of rear and side walls, an inclined top piece and an inclined follower carried by a stem, a rack extending upwardly from the top of the measuring receptacle, a scale member connected with the rack, an indicator adjustable upon the scale member, means connecting the indicator with the follower-carrying stem, and a suitably supported shaft carrying a pinion engaging the rack.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:

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