

E. B. RODMAN.
 AUTOMATIC CHECKER.
 APPLICATION FILED OCT. 26, 1910.

1,003,295.

Patented Sept. 12, 1911.
 2 SHEETS—SHEET 1.

Fig. 1.

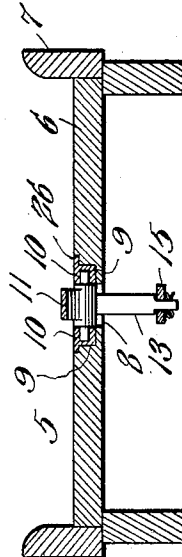
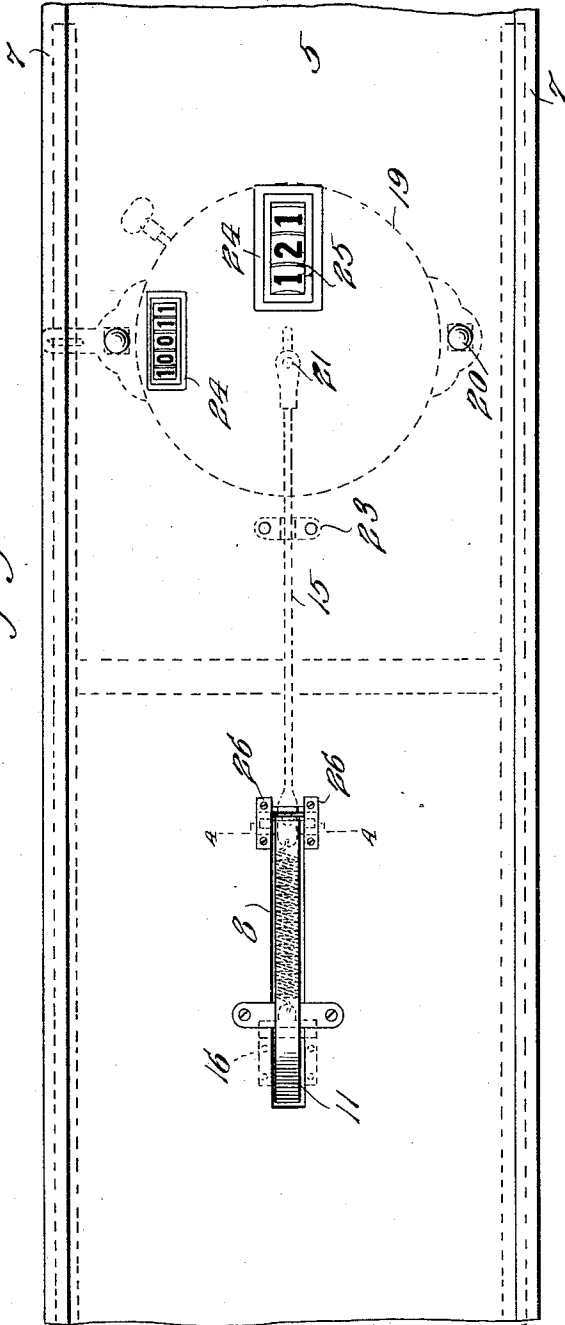


Fig. 2.

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2 SHEETS-SHEET 2.

Fig. 2.

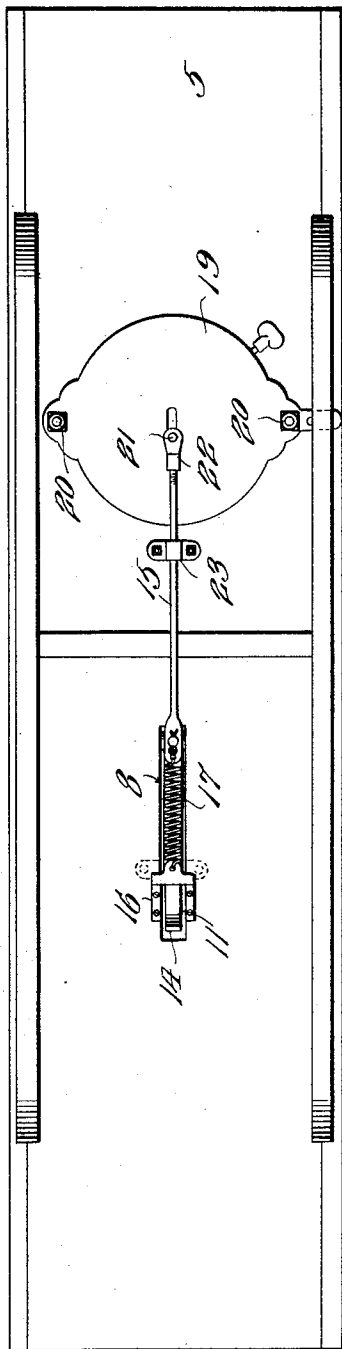
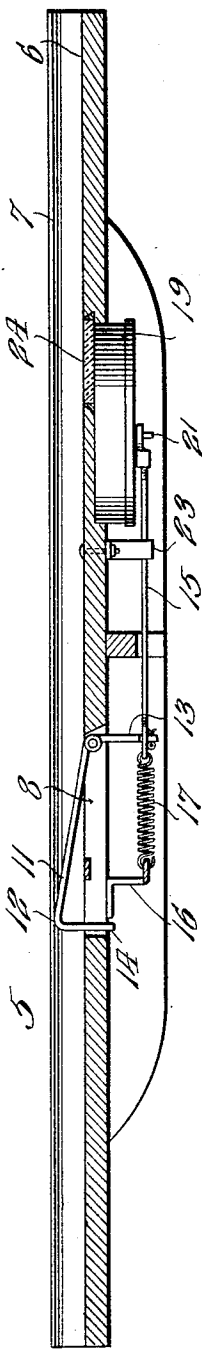


Fig. 3.



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UNITED STATES PATENT OFFICE.

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AUTOMATIC CHECKER.

1,003,295.

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To all whom it may concern:

Be it known that I, EZRA BUDD RODMAN, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Automatic Checkers, of which the following is a specification.

The invention relates to a checking device and more particularly to the class of automatic tallying apparatus.

The primary object of the invention is the provision of a device in which articles may be counted in successive order as the same are being loaded upon a vessel, or a wagon or other like vehicle, thus obviating the necessity of a person keeping tally upon such articles when being loaded.

Another object of the invention is the provision of a device of this character in which an indicator will be automatically operated as the packages or other articles are being conveyed in a chute into a vehicle, vessel or the like, the articles being tallied in successive order, thus obviating the necessity of an attendant for counting the articles being conveyed in the chute.

A further object of the invention is the provision of an apparatus of this character in which a trip device has connection with an indicator so that each article striking or contacting with the trip will actuate the same thereby registering the number of articles being delivered into a vessel, wagon or other transporter.

A still further object of the invention is the provision of an apparatus of this character which is simple in construction, capable of being mounted upon a chute, trough or other like conveyer and that is thoroughly reliable and efficient in operation and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings:—Figure 1 is a fragmentary top plan view of a chute with the invention applied thereto. Fig. 2 is a bottom plan view thereof. Fig. 3 is a vertical longitudinal sectional view through the chute. Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

Similar reference characters are employed

to designate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, 5 designates a chute which may be of any ordinary well known construction, preferably comprising a slide-board 6 having at its opposite longitudinal edges vertical guide walls 7, the chute being of any desirable length and onto which are adapted to be delivered filled bags, boxes or other containers, the latter being adapted to be conveyed into a wagon, vessel or other transporting device.

Formed centrally at any desired point relative to the length of the said chute is provided an elongated slot 8, the same being disposed longitudinally of the said board and near one end of this slot 8 are provided bearing recesses 9, which are engaged by laterally extending trunnions 10 projecting from the opposite sides of a trip lever, as will be hereinafter more fully described. This trip lever comprises a bar 11, the same being bent to provide a rearwardly inclined nose portion 12 and downturned arms 13 and 14, respectively, the same being extended through the slot 8, the arm 13 being connected with one end of a pull-rod or pitman 15, which is connected to an indicator, as will be more fully hereinafter described. The arm 14 is designed to form a guide for the trip lever.

Secured to the underface of the board 6 is a bracket 16, the latter being mounted contiguous the slot 8 therein, and to this bracket 16 is connected one end of a retractile spring 17, the opposite end of which being connected to the rod 15, the spring 17 being adapted to sustain the nose portion 12 of the trip member protruded above the upper face of the chute.

The arm 14 of the trip member is designed to engage in the slot 8 for guiding the said trip member in its movements when a bag, package or the like strikes the said member. It is, of course, to be understood that when a bag, package or the like passes over the nose portion 12 of the trip member, the latter is depressed downwardly within the slot 8 in the chute 5. Bridging the said slot 8 in the chute 5 is a stop bar 27, which latter limits the downward movement of the trip member when being engaged by a bag, package, box or the like.

In the underface of the board 6 of the chute spaced at any desirable distance from

the slot 8 is a suitable recess in which is mounted the casing 19 of a register or recording device of any ordinary well known construction, the latter being bolted, as at 5 20, to the said chute and to its actuating arm 21 is pivotally connected, as at 22, the rod or pitman 15, the same being passed and adapted to work through a guide loop 23 fixed to the underface of the chute. It will 10 be observed that when the trip member is depressed by a package, bag, box or the like the rod or pitman 15 will be pulled, thus moving the actuating arm 21 of the indicator, which latter will tally in successive 15 order each article, namely, box, bag, or package, passing downwardly upon the chute.

The chute 5 is provided with the usual transparent panels 24 which enables the 20 reading of the numbered dial 25 of the indicator, thus the dial may be readily visible so that the total sum of articles passing downwardly upon the chute may be determined at will.

Bridging the recess 9 in the chute 5 are 25 plates 26, the latter being secured to the board 6 and serve to retain the trunnions 10 of the trip member journaled in said recesses.

It will be noted that by reason of the particular formation of the nose portion of the trip member, that is to say, by being rearwardly inclined, the said trip member will not impede or interrupt the travel of the 30 goods upon the chute when being loaded into a wagon, vessel or like transporting medium, however, each package, box or other article passing over the trip member will automatically operate the indicator for 35 tallying such articles.

It is clearly obvious that the device may be utilized for checking freight delivered from a car or cars to a dray, wagon, or the like, or when freight is taken from a car 40 and delivered into a truck, which latter is adapted to transport it from the said car to any desirable point.

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

1. The combination with a chute board 50 having an elongated slot medially disposed longitudinally therein, of a trip device comprising a bar bent to provide an inwardly inclined nose portion and downturned arms, 55 one of said arms being movably engaged in said slot, inset bearings on the upper face of the chute board at opposite sides of the slot and arranged at the rear end of the latter, laterally extending pivot lugs formed 60 on the bar near its rear end and engaging said bearings, an indicator fixed to the under-face of the board, and having a pull rod connected with the rearmost arm on the said bar, and means connected with the 65 board and with said pull rod for normally holding the nose portion of the bar protruded above the upper face of the chute board.

2. The combination with a chute board 70 having an elongated slot medially disposed longitudinally therein, of a trip device comprising a bar bent to provide an inwardly inclined nose portion and downturned arms, one of said arms being movably engaged in said slot, inset bearings on 75 the upper face of the chute board at opposite sides of the slot and arranged at the rear end of the latter, laterally extending pivot lugs formed on the bar near its rear end and engaging said bearings, an indi- 80 cator fixed to the under-face of the board, and having a pull rod connected with the rearmost arm on the said bar, a bracket fixed to the underface of the chute board, and a retractile spring connected with said 85 bracket and a pull rod for normally sustaining the nose portion of the bar elevated above the upper face of the chute board.

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

EZRA BUDD RODMAN.

Witnesses:

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HARRY LEE.