H. M. TUCKER.

CAN HANDLING DEVICE.

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1,277,782.

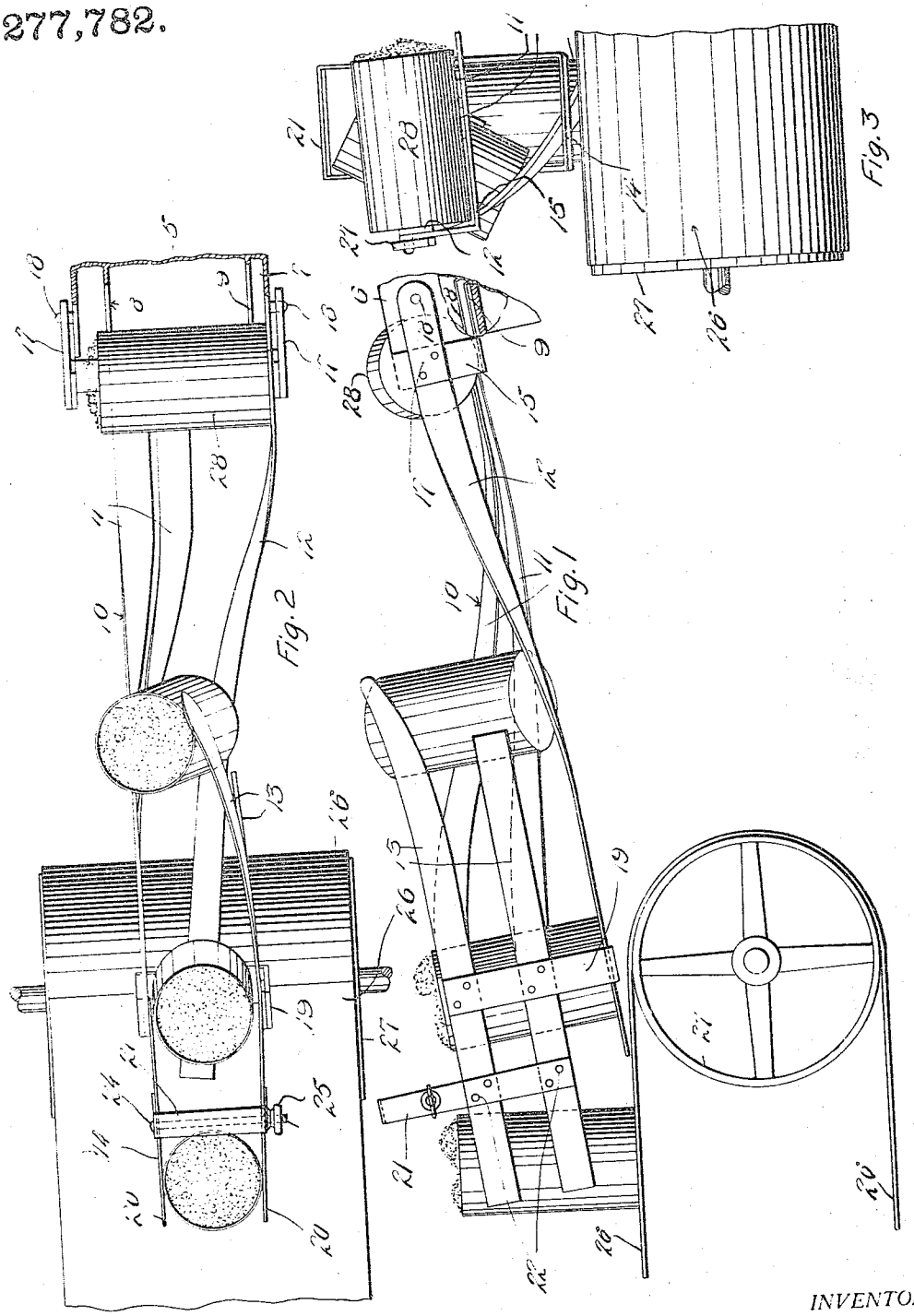


Fig. 3

Fig. 2

Fig. 1

WITNESSES:

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HOBERT M. TUCKER, OF PORTLAND, OREGON.

CAN-HANDLING DEVICE.

1,277,782. Specification of Letters Patent. Patented Sept. 3, 1918.

Application filed December 3, 1917. Serial No. 205,089.

To all whom it may concern:

Be it known that I, HOBERT M. TUCKER, a citizen of the United States, residing in the city of Portland, the county of Multnomah, and State of Oregon, have invented certain new and useful Improvements in Can-Handling Devices, and do hereby declare that the following is a full, clear, and exact description of same, reference being had to the accompanying drawing, forming part of the specification, and to the letters and figures of reference marked thereon.

My invention relates to improvements in apparatus for receiving, turning, delivering and conveying cans, after being filled, on a can filling machine, while not necessarily restricted to this use.

An important object of the invention is to provide an apparatus of the above mentioned character, adapted to handle the cans in a highly expeditious and reliable manner.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of the apparatus,

Fig. 2 is a plan view of the same, and

Fig. 3 is an end elevation of the same.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates the inclined chute of a can filling machine. This chute has sides 6 and 7. Arranged upon the floor or bottom of the chute are tracks or flanges 8 and 9, the track 8 being the higher.

The numeral 10 designates a spiral trough as a whole, comprising longitudinal strips or bars 11, 12, and 13. The strips 11 are twisted or bent to elevate the cans, and the forward or lower portions 14 of the strips 11 are vertically disposed to provide a vertical side wall. The rear or upper end of the strip 12 is vertically arranged, as shown. The strips 13 are vertically arranged and form a vertical side wall for the lower end of the trough.

The trough is inclined, and at its upper end is located a U-shaped transverse member 15. The strips 11 and 12 are arranged inwardly of the member 15 and are attached thereto. Secured to the sides of the U-shaped member 15 are ears 17, apertured for the reception of lugs 18, fixed to the sides of the chute 5. By this means the U-shaped member is attached to the chute 5.

Arranged near the lower end of the trough 10 is a U-shaped member 19, attached to the strips 11, 12 and 13, as shown.

The end portions 20 of the strips 11 and 13 are suitably resilient and serve as retarding fingers or elements, and the tension of these fingers is regulated or adjusted by an inverted U-shaped member 21, attached thereto, as shown at 22. The member 21 has its longitudinal arms apertured for receiving a bolt 24, carrying a nut 25, as shown. This bolt is arranged beneath the transverse portion of the U-shaped member 21.

The numeral 26 designates a horizontal conveyer, operating near and beneath the discharge end of the trough 10. This conveyer passes about a pulley 27.

The operation of the apparatus is as follows:

The cans 28 gravitate downwardly through the chute 5, and being supported by the tracks 8 and 9, are slightly inclined, with their open ends elevated. As these cans travel downwardly through the spiral trough they are turned, until they assume the upright position. In this upright position, the cans pass between and in contact with the retarding fingers 22, and are discharged upon the conveyer 26, and conducted thereby to a suitable point.

It is to be understood that the form of of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts, may be resorted to, without departing from the spirit of my invention, or the scope of the subjoined claim.

Having thus described my invention what I claim is:

Apparatus of the character described, comprising a spiral inclined trough formed of upper and lower U-shaped members and pairs of longitudinal strips secured to the U-shaped members, each side of the inclined trough being formed by a pair of said longitudinal strips, the strips in each pair projecting downwardly beyond the lower U-

shaped member and being vertically spaced to form upper and lower resilient retarding fingers, an inverted U-shaped member secured to the pairs of upper and lower resilient fingers to shift them laterally, a transverse adjusting bolt engaging the sides of the inverted U-shaped member at a point arranged near and above the upper resilient fingers, a substantially horizontal endless belt arranged near and beneath said resilient fingers, and means to feed the cans to the upper end of the trough.

HOBERT M. TUCKER.