K. WEISS.

MACHINE FOR FEEDING HEADED BLANKS.

APPLICATION FILED OCT. 23, 1913.

**1,104,029.** **Patented July 21, 1914.**

Fig. 1

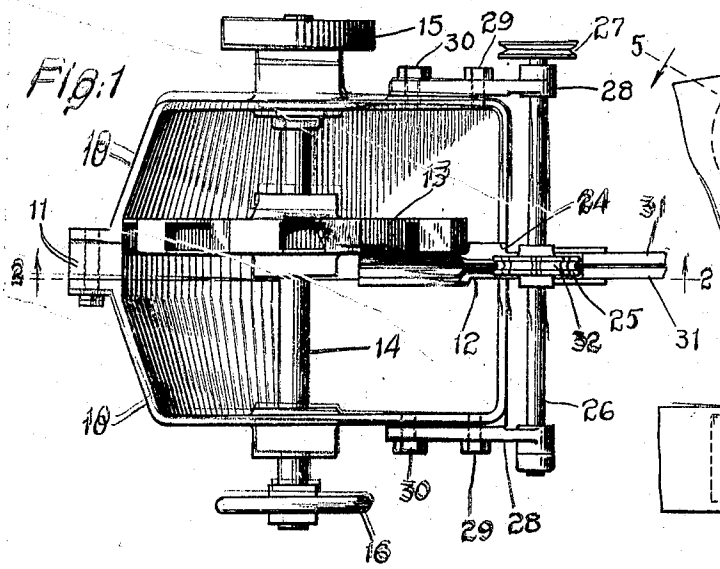



Fig. 3

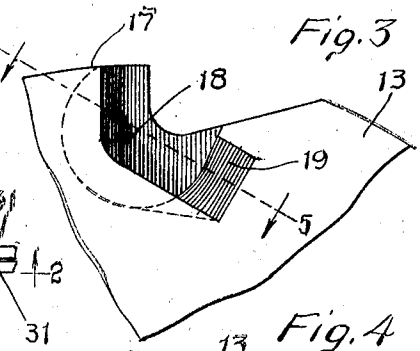



Fig. 4

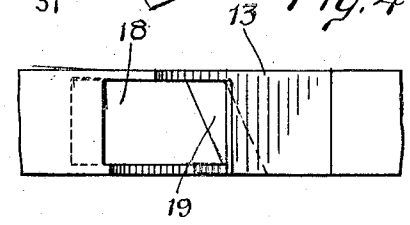



Fig. 2

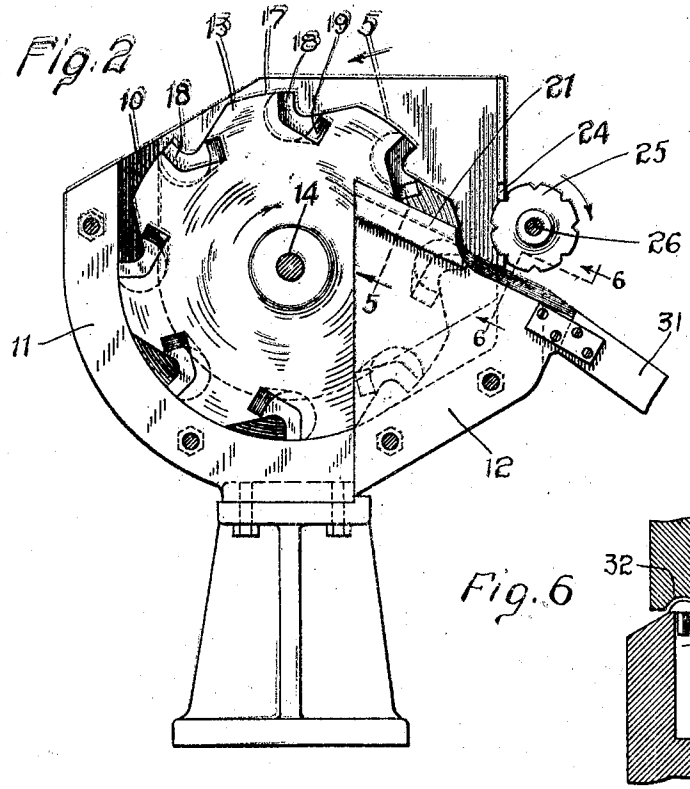



Fig. 5

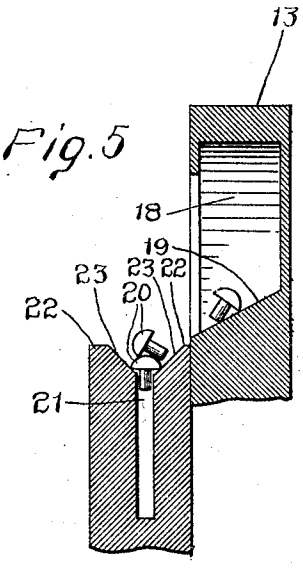
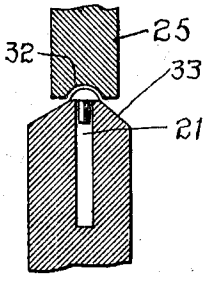



Fig. 6




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# UNITED STATES PATENT OFFICE.

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## MACHINE FOR FEEDING HEADED BLANKS.

1,104,029. Specification of Letters Patent. Patented July 21, 1914.

Application filed October 23, 1913. Serial No. 796,880.

*To all whom it may concern:*

Be it known that I, KARL WEISS, a citizen of the United States, residing at Waterbury, county of New Haven, State of Connecticut, have invented an Improvement in Machines for Feeding Headed Blanks, of which the following is a specification.

This invention has for its object to provide a simple and inexpensive machine for feeding headed blanks with the headed end upward, adapted for general use and in feeding rivets to a riveting machine or in feeding screw blanks to a threading or slotting machine.

With this end in view I have devised the novel blank feeding machine, of which the following description in connection with the accompanying drawing is a specification, reference characters being used to indicate the several parts.

Figure 1 is a plan view of my novel feeding machine; Fig. 2 a section on the line 2—2 in Fig. 1, looking in the direction of the arrows; Fig. 3 a detail view on an enlarged scale illustrating one of the pockets in the feed wheel; Fig. 4 a plan view corresponding with Fig. 3; Fig. 5 a section on the line 5—5 in Fig. 2, looking in the direction of the arrows, and Fig. 6 is a section on the line 6—6 in Fig. 2, looking in the direction of the arrows.

The hopper is shown as consisting of two parts indicated by 10 with bottoms inclined toward the center, the parts of the hopper being secured to a filling piece 11 at the rear and to a head block 12 at the front.

13 denotes the feed wheel which is carried by a shaft 14 journaled in the hopper and provided with a belt pulley 15 and a hand wheel 16 for operating the feed wheel by hand whenever required. This feed wheel rotates vertically within the hopper. The feed wheel is provided with peripheral walls 17 which lie close to the wall of the hopper and in front of the walls 17 with pockets 18, each pocket having at its forward end an incline 19 or a laterally inclined end wall adapted to deflect blanks toward one side of the feed wheel. The pockets pick up the blanks, indicated by 20, and when the pockets are traveling downward deliver the blanks to an inclined chute 21 formed in the head block. The upper portion of the chute (see Fig. 5) is provided with raised side portions 22 having inclines or inclined walls 23 on their inner sides which diverge upwardly, forming a V-shaped catching recess which increases in width upwardly. The lower portions of the walls 23 of the chute are vertical, forming a vertical groove, which receives the blanks from the catching recess, in proper order, that is suspended from their heads. Below the catching recess the sides of the head block are inclined downward and outward away from the top of the chute as at 33, see Fig. 6. In front of the hopper and projecting slightly into the hopper through a slot 24 and lying contiguous to the lower portion of the chute is a notched rejecting wheel 25 carried by a shaft 26 having a belt pulley 27 by means of which rapid rotation is imparted to the shaft and wheel. This wheel is provided with a peripheral groove 32 which just receives the heads of blanks in proper position in the chute and permits them to slide downward freely, but all blanks not in proper position in the chute, as for example the middle blank in Fig. 5, are engaged by the wheel and thrown back into the hopper. The shaft is journaled in arms 28 pivoted on screws 29 engaging the hopper and is locked at any required adjustment, for different sized heads of blanks, by means of screws 30 which pass through elongated holes (not shown) in the arms and engage the hopper.

31 denotes inclined spaced apart guide plates which are secured to the head block and form a continuation of the chute to convey the blanks wherever they may be required to be operated upon.

The operation of the machine has been so fully described as to hardly require further explanation. Briefly, the blanks are thrown loosely into the hopper, are picked up by the pockets in the feed wheel, carried over and slide down the inclines at the forward ends of the pockets into the V-shaped groove at the upper end of the chute, the tendency being for the shanks of the blanks to drop into the chute, leaving the blanks suspended by their heads and free to slide down the incline of the chute. Blanks not in proper position in the chute are engaged by the rejecting wheel and thrown back into the hopper, the groove in the periphery of this wheel receiving the heads of the

blanks and permitting properly placed blanks to slide under it freely but throwing all other blanks out of the chute.

Having thus described my invention I claim:

In a machine of the character described, a hopper, a feed wheel mounted to rotate vertically within the hopper and having in its periphery pockets provided with laterally inclined discharge end walls to deflect the blanks to one side of the feed wheel, and a vertical longitudinally inclined chute projecting into the hopper and arranged upon and contiguous to one side of the feed wheel, said chute having the lower portions of its walls arranged to form a vertical groove and the upper portions of such walls diverging upwardly for providing a substantially V-shaped catching recess, to arrange the blanks to deliver them in proper order into the vertical groove.

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

KARL WEISS.

Witnesses:
LANCASTER P. CLARK,
STEELE WONTYN.

**Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."**