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reciprocating motion of the shutter 7a in the left and right directions, as shown in Fig. 10, which is a cross-sectional enlarged view of the major portion in Fig. 1.

5 This crank mechanism 81 comprises a worm gear 83 secured at the tip of the driving shaft 82 of the motor 80, a pair of worm wheels 84 and 85 which are rotatably disposed on both sides of the worm gear 83 and which engage with the worm gear 83, and guide pins 84a and 85a protruding from the upper surface of the pair of worm wheels 84 and 85 respectively, as shown in Fig. 11, which is a top view of Fig. 10.

10 These guide pins 84a and 85a are inserted into the corresponding guide holes 86a and 86b formed on a slider piece 86. This slider piece 86 is disposed at the rear end of the shutter 7a, and the guide holes 86a and 86b are formed at symmetrical positions along the width direction of the slider piece 86.

15 Now the function of the shutter means 7 in accordance with the third aspect of the present invention will be explained.

As Fig. 10 shows, when a driving shaft 82 of the motor 80 rotates in one direction, the pair of worm wheels 84 and 85 engaging with the worm gear 83 rotate in directions which are opposite from each other, as shown by the arrow marks, via the worm gear 83.

20 Then each guide pin 84a and 85a disposed on the top face of the pair of worm wheels 84 and 85 also rotate in opposite directions interlocking with the rotation of the pair of worm wheels 84 and 85, and by the guide holes 86a and 86b engaging with the rotating guide pins 84a and 85a, the shutter 7a performs reciprocating motions to the left and right via the slider piece 86a, moving from the initial position in Fig. 11, that is, the right end position in Fig. 11 closing the bank-note transporting route 6, to the left end position in Fig. 12,



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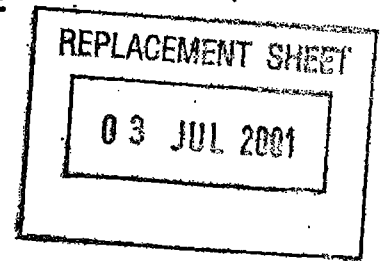
3. A bank-note processing device comprising: bank-note shifting means for temporarily inserting a bank-note inserted from a bank-note slot and then parallel shifting the bank-note so as to store the bank-note in a stacker, having a pair of rotary drums which rotate in directions opposite from each other at a same phase, bank-note guide slits which are formed in the longitudinal direction of each cylindrical surface of the pair of rotary drums for temporarily inserting the inserted bank-note, and a stacker chute which interlocks with the rotation of the pair of rotary drums for pushing the roughly center area of the bank-note inserted in the bank-note guide slits toward the stacker side; and bank-note transporting means for transporting the bank-note inserted from the bank-note slot along the bank-note guiding slots of the pair of rotary drums, characterized in that the bank-note transporting means further comprises:

a shaft disposed adjacent to the free end of the stacker chute, a pair of pulleys supported by both ends of the shaft; and

a pair of bank-note transporting belts which loop the pair of pulleys respectively, and the pair of bank-note transporting belts are stretched along the bank-note guide slits from the leading ends of the bank-note guide slits so as to transport the inserted bank-note along the bank-note guide slits from the leading ends of the bank-note guide slits when the bank-note transporting belts are driven and rotated.

BANK-NOTE PROCESSING DEVICE

ABSTRACT



A bank-note processing device wherein disposed between a pair of rotary drums (22, 23) is a stacker lever (53) that presses that portion of the bank-note (31) inserted in bank-note guide slits (22b, 23b) which is positioned on the side of a bank-note reverse-flowing-preventive lever (32) toward a stacker (20) in operative association with the movement of a stacker chute (51), whereby even if a large number of wrinkled bank-notes are received in the stacker, jamming of bank-notes is minimized.

FIG. 5