

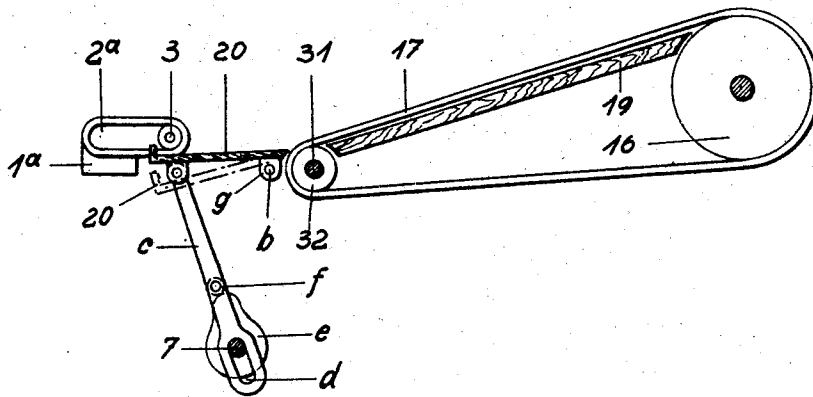
Dec. 18, 1928.

1,695,648

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APPARATUS FOR FEEDING PAPER SHEETS

Filed Sept. 24, 1927



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APPARATUS FOR FEEDING PAPER SHEETS.

Application filed September 24, 1927, Serial No. 221,834, and in Germany November 8, 1926.

This invention relates to an improvement in or modification of the apparatus for feeding paper sheets as described in our prior U. S. Patent, No. 1,649,401. In said apparatus, angular slots are provided in the lateral frame parts thereof wherein the suction-rod of the suction contrivance executes first a vertical and then a horizontal movement. This combined movement in two directions of the suction-rod has proved to be disadvantageous, particularly if the apparatus runs at high speed.

The present invention provides means for overcoming said drawback. According to the same, the trunnions of the suction-rod are guided in horizontal elongated slots only while the vertical movement is executed by the table plate of the apparatus located underneath the suction contrivance, which plate to this end is turnably arranged on a fixed fulcrum and linked to a bar receiving a reciprocating movement from a cam-disc.

The accompanying drawing shows the improvement in a side view.

The lateral frame parts 1^a of the apparatus are provided with horizontal elongated slots 2^a, in which the trunnions of the suction-rod 3 are slidably guided, so that the latter can execute a to-and-fro movement in horizontal directions only. The feeding of the sheets from the table 19, that is mounted below the upper part of the conveyor 17 guided over rolls 16 and 32 and driven from a shaft 31, to the suction contrivance takes place by means of a table plate 20, that is located underneath the suction contrivance and turnably mounted, by means of a lug *g* thereon, on a fixed fulcrum *b* and at its free end linked to a bar *c*. The slotted end

d of the latter is mounted over the driving shaft 7, on which a cam-disc *e* is keyed, that is in circumferential contact with a loose roller *f* on the bar *c*. The rotating cam-disc *e* imparts thus a reciprocating movement of the bar *c* and an up and down movement to the table plate 20 about its fulcrum *b*. The cam on the cam-disc is of short length only, so that the table plate 20, with a sheet thereon, can be quickly brought for a short moment on to the suction contrivance and, after the removal of the sheet by the latter, again be lowered (see dotted lines), in which lowered position it remains for about the whole turn of the cam-disc.

Of course, instead of providing a separate fixed fulcrum *b* for the table plate 20, the latter can also be fulcrumed directly on the driving shaft 31.

What we claim, is:—

1. In an apparatus for feeding paper sheets, the combination of lateral frame parts having horizontal elongated slots therein, a suction-rod having trunnions slidably mounted in said slots, a table plate located underneath said suction-rod and turnably mounted on a fixed fulcrum, substantially as set forth.

2. In an apparatus as specified in claim 1, a positively guided reciprocating bar linked to the free end of said table plate, a loose roller on said bar, and a driving cam-disc in circumferential contact with said roller and having a cam of short length only.

In testimony whereof we have hereunto set our hands.

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