(No Model.) 2 Sheets—Sheet 1.

C. BERZDORF.

COIN CONTROLLED TICKET STAMPING AND SUPPLYING APPARATUS.

No. 563,734. Patented July 14, 1896.

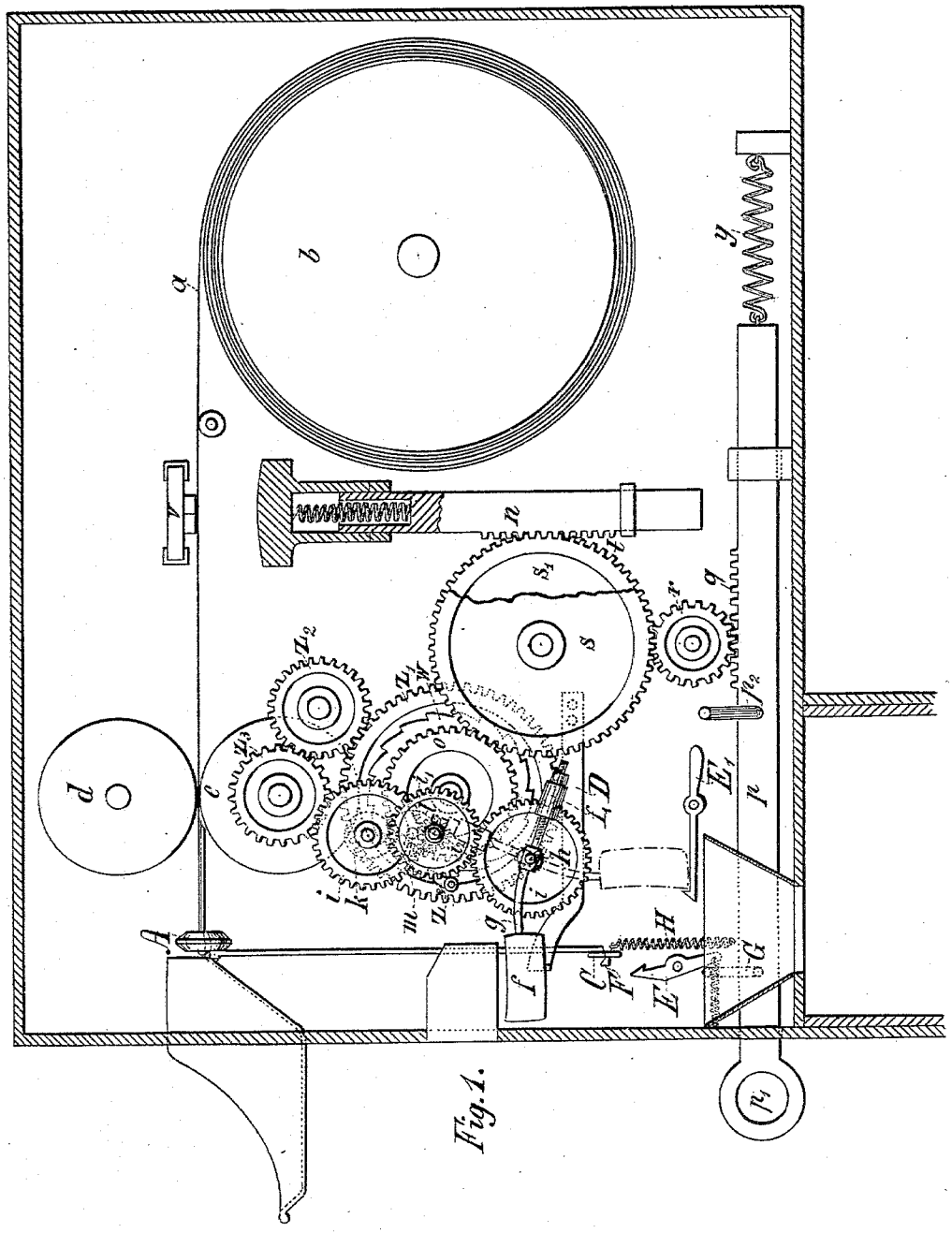

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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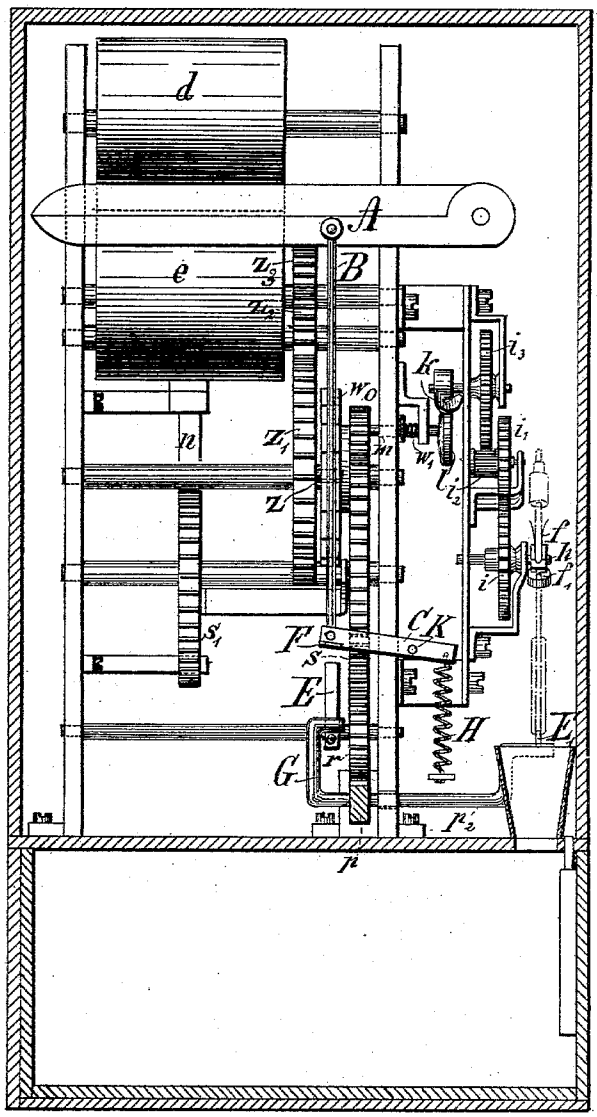
Fig. 2.



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UNITED STATES PATENT OFFICE.

CARL BERZDORF, OF COLOGNE, GERMANY.

COIN-CONTROLLED TICKET STAMPING AND SUPPLYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 563,734, dated July 14, 1896.

Application filed October 26, 1895. Serial No. 567,042. (No model.) Patented in Germany January 22, 1895, No. 82,663.

To all whom it may concern:

Be it known that I, CARL BERZDORF, a citizen of Germany, residing at Cologne, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Coin-Controlled Ticket Stamping and Supplying Apparatus, (for which I have obtained a patent in Germany, No. 82,663, bearing date January 22, 1895,) of which the following is a specification.

My invention relates to coin-controlled ticket stamping and supplying apparatus.

This apparatus is illustrated in the accompanying drawings, wherein—

Figure 1 is a diagrammatic side elevation of the internal mechanism of the apparatus. Fig. 2 is an end elevation of this mechanism as viewed at right angles to Fig. 1.

It serves for the automatic delivery of tickets and the like, and is set in motion by the introduction of a specific coin in such manner that it first causes the ticket to be stamped with the date or other authoritative and distinguishing mark, and then delivers the same.

The tickets are, as strips *a*, enrolled on a drum or cylinder *b*, Fig. 1. The first of them lies opposite the point of delivery between the feed-rollers *d* and *e*, Figs. 1 and 2. When the operative coin is inserted in the apparatus, it falls into the shovel or scoop *f*, Figs. 1 and 2, carried by one end of a rocking lever *g*, which in the unloaded position is balanced by the counterpoise weight *f*, secured so as to be adjustable on its other arm. As soon as the coin drops into the scoop *f* the latter falls, together with the lever *g*, which is secured to the rotary spindle *h*, into the position indicated in dotted lines in Fig. 2, and is automatically arrested by the balanced lever-catch E, while the coin drops into a collecting-box. By the movement of the scoop-lever *g* and by means of the train of gear-wheels *i i' i² i³* the cam-disk *k*, secured on the spindle of the last-named wheel *i³* and having an inclined contact-surface normally situated immediately behind the button *l*, is thrown into contact with the said button, whereby the latter is displaced and its pin withdrawn from an opening in the side of a toothed wheel S, (wherein it was previously lodged,) and the latter is at once released from its check. As soon as this release takes place the draw-bar *p*, Figs. 1 and 2, can, by means of the handle *p'* on the outside of the case of the apparatus, be drawn forward. Thereby by means of the rack *q* on the draw-bar *p* the toothed wheels *r*, S, and S' (the two latter being coaxial) are set in motion, so as, by means of the rack *t* on the side of the impression-stamp *n*, to raise the latter and press the ticket against a type-block *v* and provide the said ticket with the necessary impression. Moreover, the lever D, secured at one end to the wheel S, has depressed the lever C, pivoting on the pivot-pin K, Fig. 2, and by means of the tension-bar B drawn down the lower blade of the shears A, thus opening the latter. At the same time the projection F on the lever C has been depressed against and held fast by the pivoted spring-catch E, so that the shears A remain open.

Simultaneously with the movements just detailed set up by the drawing out of the bar *p* the toothed wheel S, together with the ratchet-wheel, which forms integrally one piece therewith, ordinarily disconnected from the wheel *z'*, has been rotating idly, so that the feed-rollers *d* and *e* have remained motionless. As soon as the draw-bar *p* is let go, being drawn back to its original position by the controlling-spring *y*, the train-gear *r*, S, and S' and the impression-stamp head *n*, as well as the toothed wheel S, with its ratchet-wheel W, all return to their primary position; but the pawl Z engages with the teeth of the ratchet-wheel W, and, being secured on the toothed wheel Z', which forms part of the train-gear Z' Z² Z³, which actuates the feed-rollers *d* and *e*, these latter are caused to rotate in such manner as to bring the ticket (just stamped) in front of the delivery-opening. At the moment, however, when the ticket is sufficiently advanced and reaches the point at which the severance by the shears is to be effected the backward or return movement of the draw-bar *p* brings the pin G, fixed on that bar, into contact with the catch E, which releases the lever C and bar B, so that the shears A, under the influence of the controlling-spring H, close and sever the ticket. Simultaneously with the drawing out of the bar *p* the lateral projection or pin *p²* sets free the catch-lever E', so that the lever *g*, together with its associated mechanism, (as set in operation by the introduced coin,) is

released and returns to its pristine position, while the pin *m*, as soon as the opening of the toothed wheel S is brought back to it, enters into it again by the action of the controlling-spring W′, and fixes once more the entire mechanism above described.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A coin-controlled ticket stamping and supplying apparatus, comprising in its construction a balanced scoop-lever, a train of gear-wheels, a device for unlocking a toothed wheel and a draw-bar with a rack, adapted to raise by means of gear-wheels another rack, provided with a stamp at its upper end, a type-block, lying over the said stamp, two feed-rollers, a train of gear-wheels actuating them, and a drum, containing the tickets enrolled as strips on its external surface; substantially as and for the purpose set forth and shown.

2. A coin-controlled ticket stamping and supplying apparatus, comprising in its construction a balanced scoop-lever, a train of gear-wheels, a device for unlocking a toothed wheel and a draw-bar with a rack, adapted to raise by means of gear-wheels another rack, provided with a stamp at its upper end, a type-block lying over the said stamp, two feed-rollers, a train of gear-wheels actuating them, a drum containing the tickets enrolled as strips on its external surface, a lever combination, connected at the one end with a spiral spring, attached to the main frame of the apparatus and connected at the other end by means of a rod with shears adapted to cut off each individual ticket; substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CARL BERZDORF.

Witnesses:

GEORGE COHEN,

WILLIAM H. MADDEN.