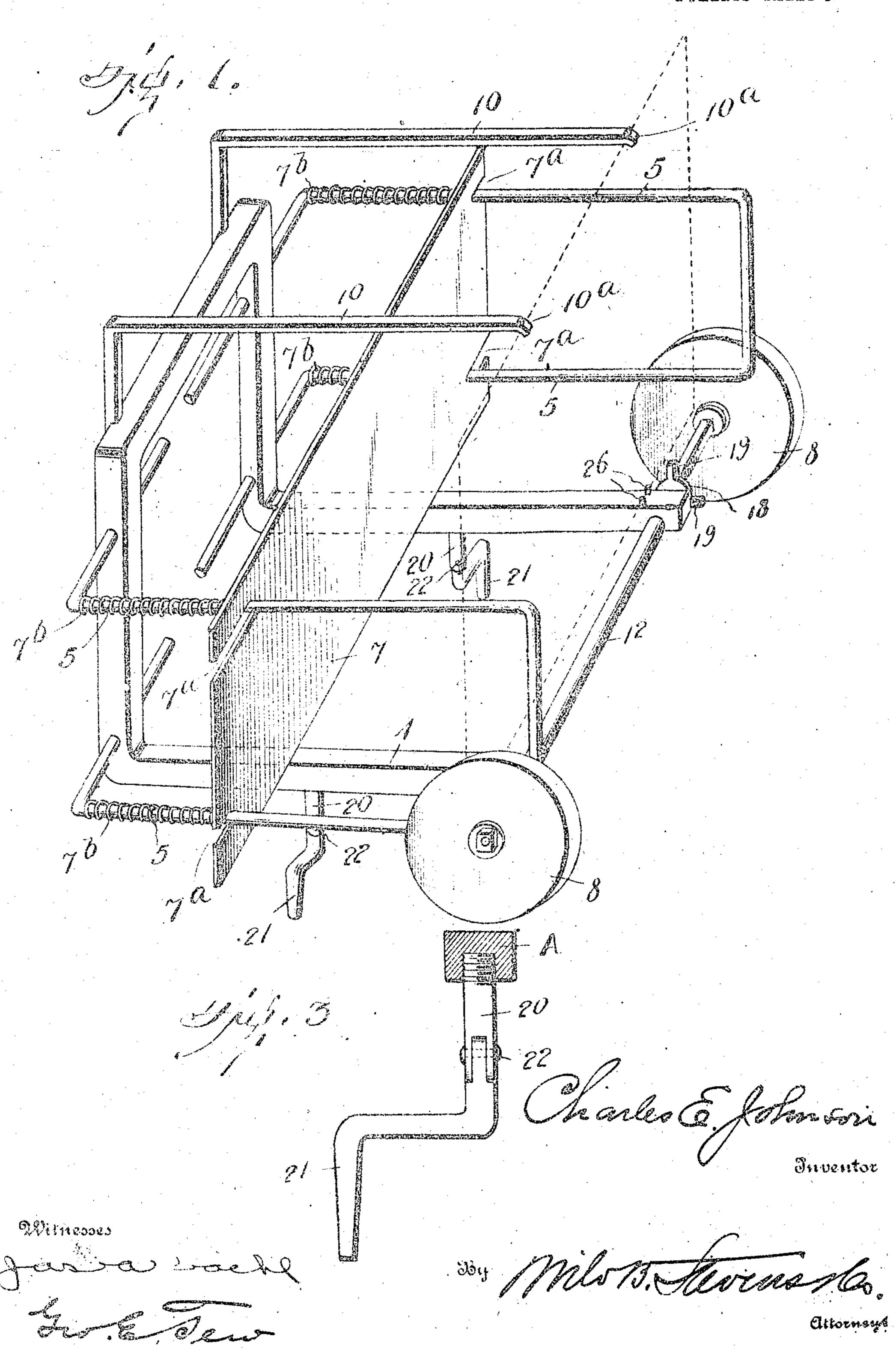
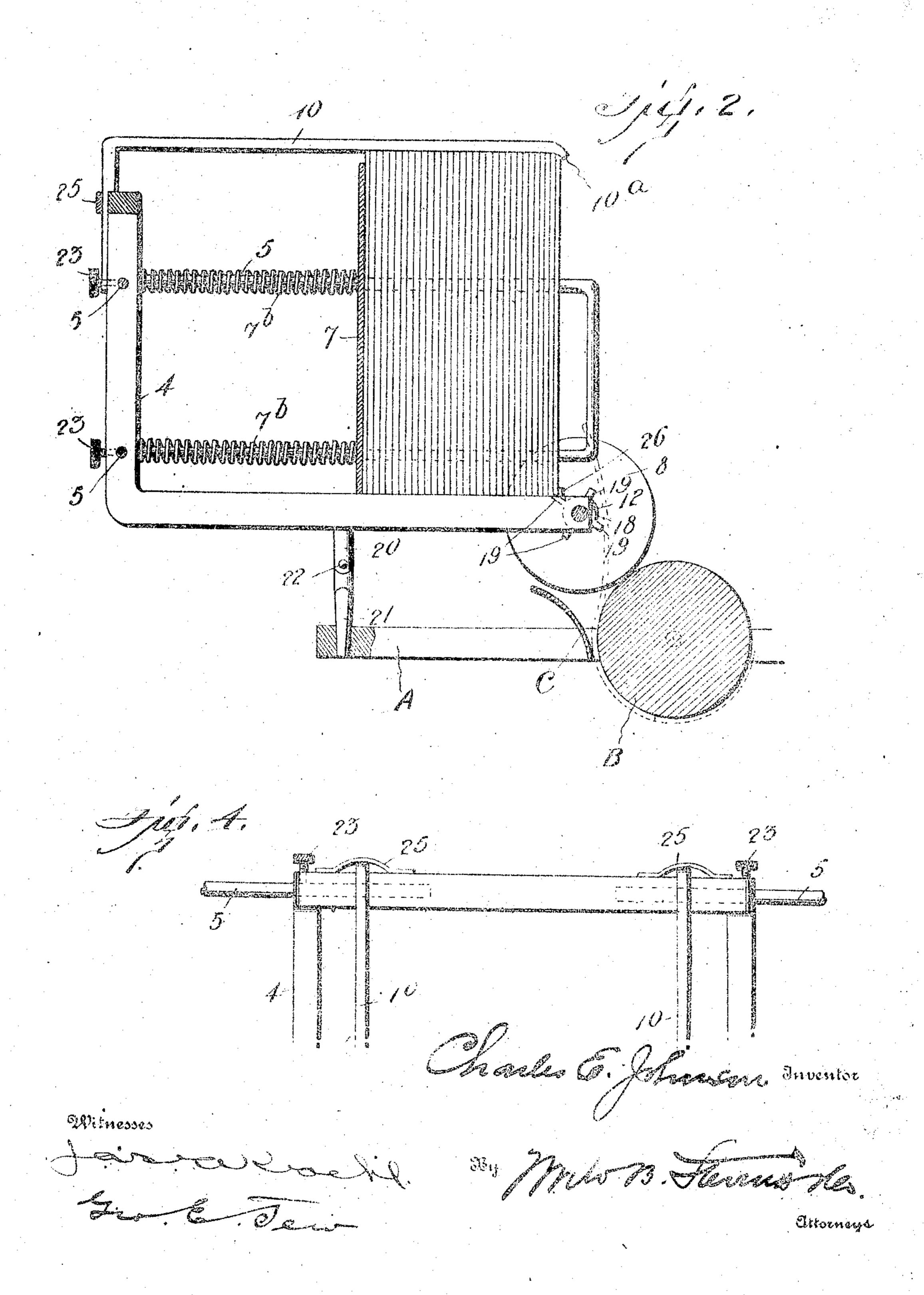
## C. E. JOHNSON. ENVELOP FEEDER. APPLICATION FILED JULY 8, 1908.

2 SHEETS-SHEET 1.



C. E. JOHNSON,
ENVELOP FEEDER.
APPLICATION FILED JULY 6, 1906.

2 SHEETS-SHEET 2.



## UNITED STATES PATENT OFFICE.

CHARLES E. JOHNSON, OF CLEVELAND, OHIO.

## ENVELOP-FEEDER.

No. 854,826.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed July 6, 1906. Serial No. 325,005.

To all whom it may concern:

Be it known that I, CHARLES E. JOHNSON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Envelop-Feeders, of which the following is a specification.

This invention is a feeding attachment for typewriters, particularly adapted and constructed for feeding envelops successively to

the machine.

It embodies a rack or holding device mounted upon the carriage and having devices which are actuated by the rotation of the platen to feed envelops one by one into position for writing. Means are provided for quickly and easily throwing the attachment in or out of operation. The holder is adjustable to receive envelops of various sizes.

The invention is illustrated in the accompanying drawings, in which Figure 1 is a perspective view thereof removed from the typewriting machine. Fig. 2 is a vertical cross section showing the attachment applied to the carriage of the machine. Fig. 3 is a detail of one of the brackets which support the device on the carriage. Fig. 4 is a detail in top plan of the rear part of the device.

Referring specifically to the drawings, A indicates the carriage of the typewriting machine, B the platen, and C the paper guide. The device forming the subject of this invention is mounted upon the carriage and is

35 movable therewith.

The main frame of the envelop holder is indicated at 4, comprising parallel bars having upright pórtions at the rear end connected by a cross bar, forming an angular 40 frame on which the other parts are mounted. This frame is supported by hinged brackets consisting of upper portions 20 screwed into the under side of the bars, 4, and lower angular portions 21 which are hinged to the upper . 45 portions, as at 22. The lower ends of the parts 21 are arranged to fit in holes in the side bars of the carriage, to support the attachment upon the same. The hinges 22 allow the frame to rock to a limited extent, 50 the hinges being sumiciently tight so that the attachment will stay as set. The rocking referred to throws the attachment in or out of operation as will be hereinafter described.

At 5 are indicated angular side bars the | 7<sup>b</sup> advance the pack so that another envelop 11c.

55 free ends of which extend inwardly through takes the place of the one released in readiholes in the upright portions of the bars 4, ness for the next operation.

where they are fixed by set screws 23, so that said side bars can be adjusted in or out and set to hold envelops of any length.

Top bars are indicated at 10, having at the 60 rear ends downwardly-extending portions which are yieldingly clasped under spring strips 25 secured to the cross piece of the frame 4, and said bars can be raised or lowered to accommodate envelops of various 65 heights. At their front ends the bars are provided with stops 10° which act to engage and hold the first envelop at the upper edge thereof.

Mounted in bearings in the front ends of 70 the bars 4 is a shaft 12 which has at its ends friction rollers 8 which, when the device is in operation, bear upon and are rotated by contact with the platen of the machine. The shaft also carries releasing devices, each of 75 which consists of a disk 18 having radial fingers 19, and the releasing devices are preferably located on the shaft adjacent to the ends of the bars 4. The ends of said bars have on their upper side projections 26 80 against which the first envelop stops.

To advance the envelops toward the releasing devices at the front of the arms, a plate 7 is provided, resting upon the horizontal portions of the bars 4 and supported at 85 the ends by the side rods 5 which fit in slots 7a in the ends of the plate. On the rods, between the plate and the inwardly-extending rear ends of the rods, are coiled springs 7b, which press against the plate, and tend to 90

force the same forwardly.

The envelops are placed in the frame formed by the bars 4, 5 and 10, with the first envelop, that is, the one at the front, bearing against the projection 26 and the stops 10a, 95 and with the plate 7 pressing against the bunch. The length of the fingers 19 is such that they will just reach the lower edge of the first envelop, that is, the one against the projections 26. The wheels 8 being in fric- 100 tional contact with the platen, turn of the latter causes the wheels and shaft 12 to turn, and the fingers 19 engage the first envelop and lift the same, carrying its lower edge over the projections 26 and beyond the ends 105 of the bars 4, thereby releasing said envelop and allowing it to drop between the platen and the paper guide, whence it may be fed to the machine in the usual way. The springs 7<sup>b</sup> advance the pack so that another envelop 11c takes the place of the one released in readi-

As stated, the attachment as a whole rocks | or tilts on the hinges 22, and when tilted forward the wheels 8 are in contact with the platen, in readiness for the operation above 5 described. When the attachment is tilted back on said hinges, the wheels 8 are lifted from the platen, and consequently do not operate while the attachment remains in that condition. A simple movement of the hand 10 is sufficient to tilt the attachment up or down to throw it in or out of operation. The size of the wheels is made so that the normal rotation of the platen will cause the envelops to be fed successively. The attachment, be-15 ing supported upon the carriage, does not prevent it from being lifted or otherwise manipulat 1.

I claim:

1. An envelop feeder for typewriting machines, comprising an envelop holder mounted on the carriage of the machine and having an open front end over the platen thereof and stops in the bottom, at said end, a rotary shaft extending across below the bottom of the holder and under said open end, having projections extending above the bottom and adapted to successively engage and lift envelops over the stops when it is turned, and connections between the shaft and the platen, to turn the former when the latter is turned.

2. An envelop feeder for typewriting machines, comprising a holder having top and bottom bars and open at the front end, said bars being provided with stops at said end to engage and hold envelops between the bars, 35 means to force the envelops against said stops, a rotary shaft located at the front end of the lower bars under the bottom of the holder and having fingers projecting therefrom arranged to lift the envelops successively over the stops on the lower bars and over the shaft, and means to turn the shaft.

3. An envelop holder for typewriting machines, including parallel bottom bars mounted on the frame of the machine and having 45 uprights at the rear connected by a cross bar, and stops at the front, angular side bars having ends extending inwardly through holes in said uprights and adjustable therein, and top bars having downwardly extending portions 50 at their rear ends adjustably connected to said cross bar, and having stops at their front ends.

In testimony whereof I have signed my name to this specification in the presence of 55 two subscribing witnesses.

CHARLES E. JOHNSON.

Witnesses:
JOHN A. BOMMHARDT,
SHIRLEY J. BOMMHARDT.