No. 797,092. PATENTED AUG. 15, 1905.

E. D. BELKNAP.

ATTACHMENT FOR ADDRESSING MACHINES.

APPLICATION FILED NOV. 15, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

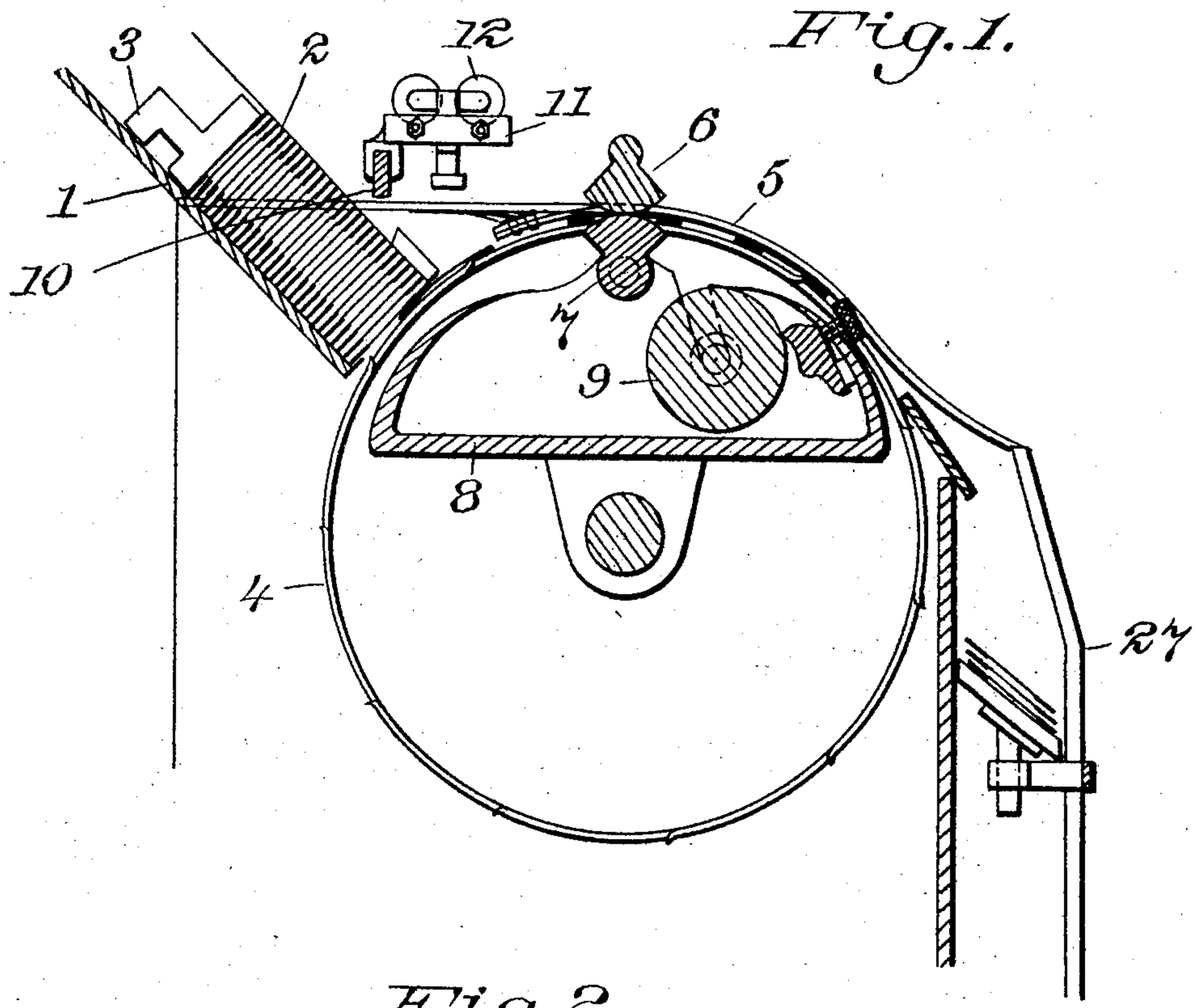
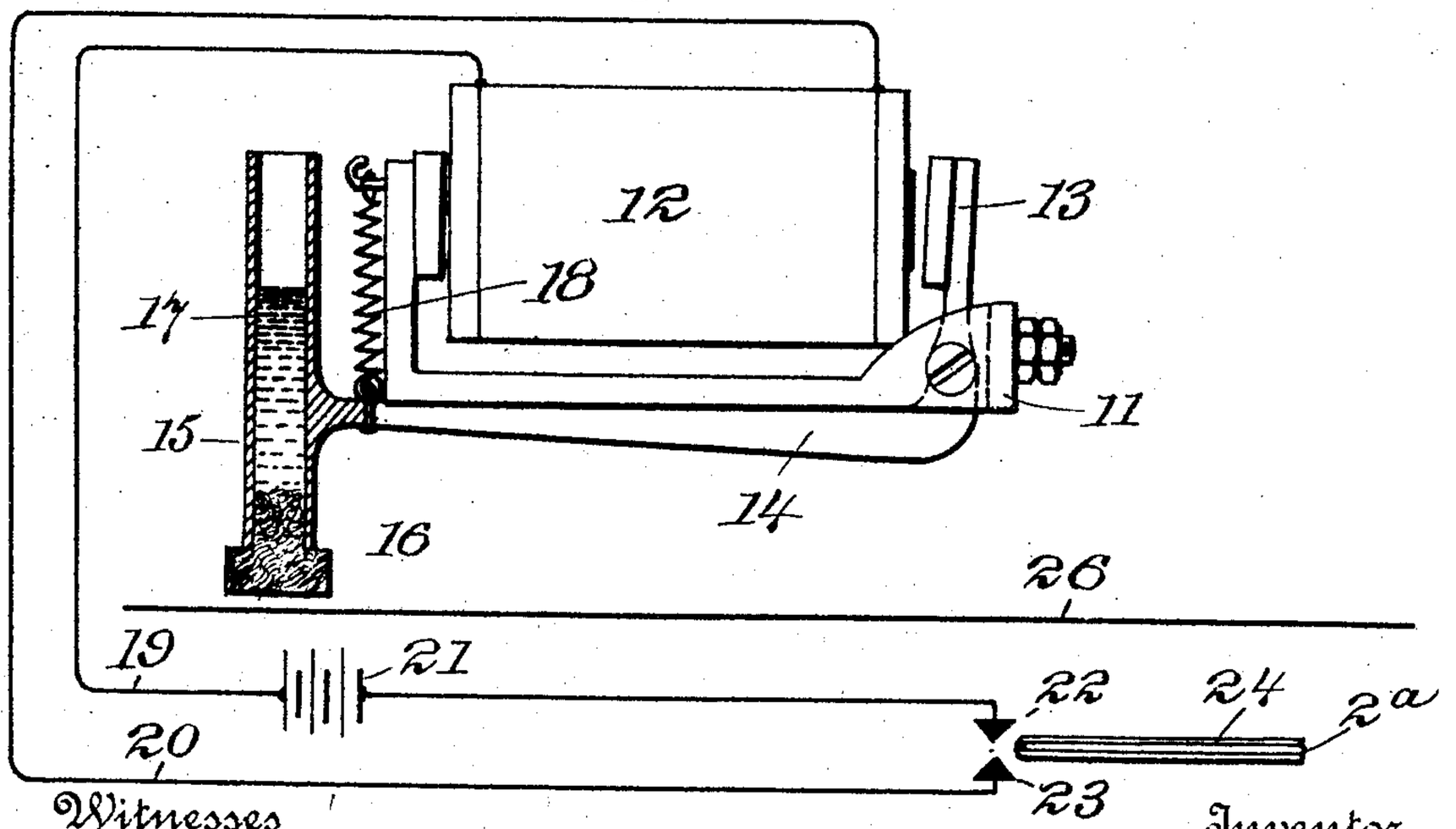


Fig. 2.



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2 SHEETS—SHEET 2.

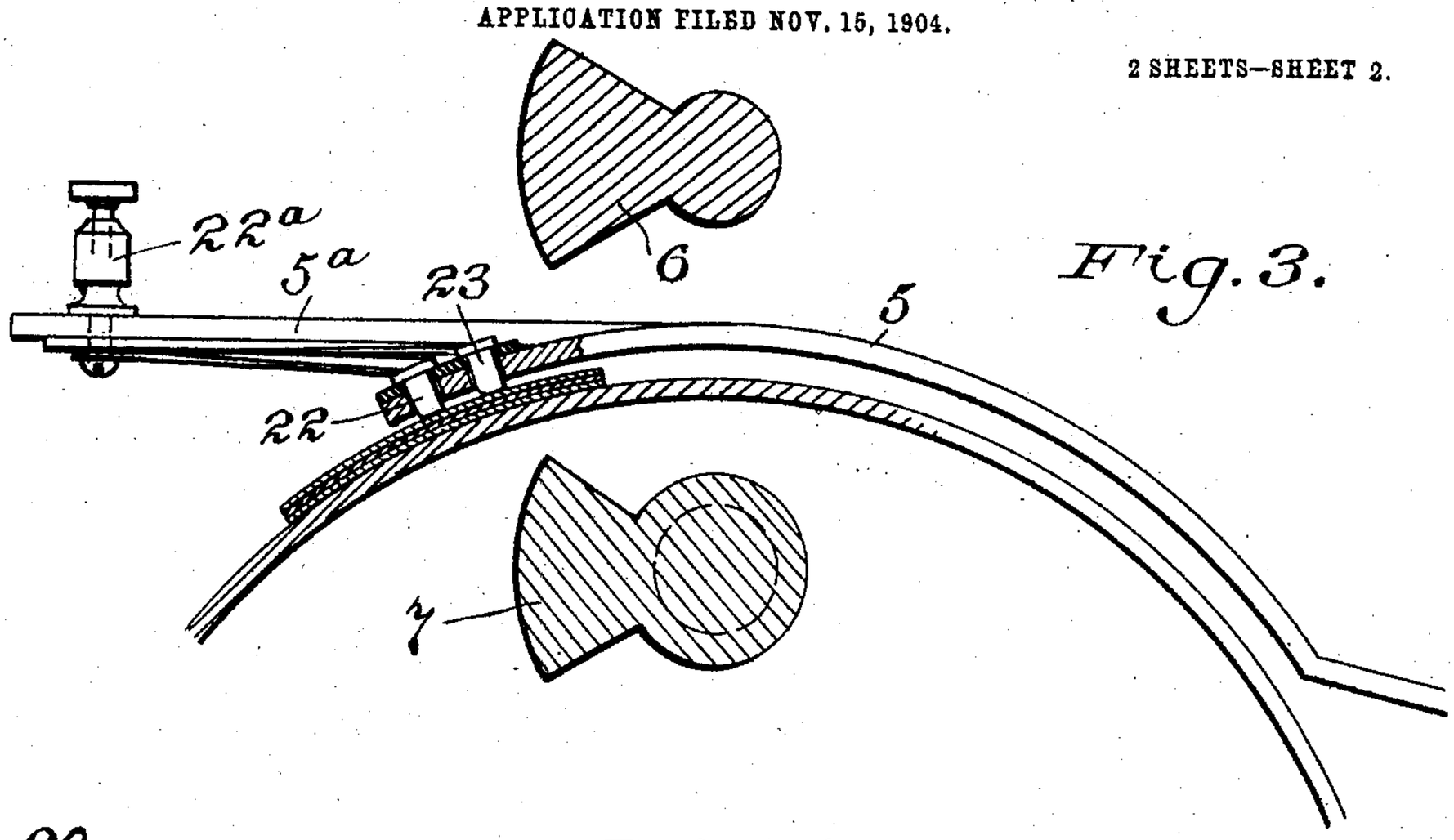

Fig. 3.

Fig. 4.

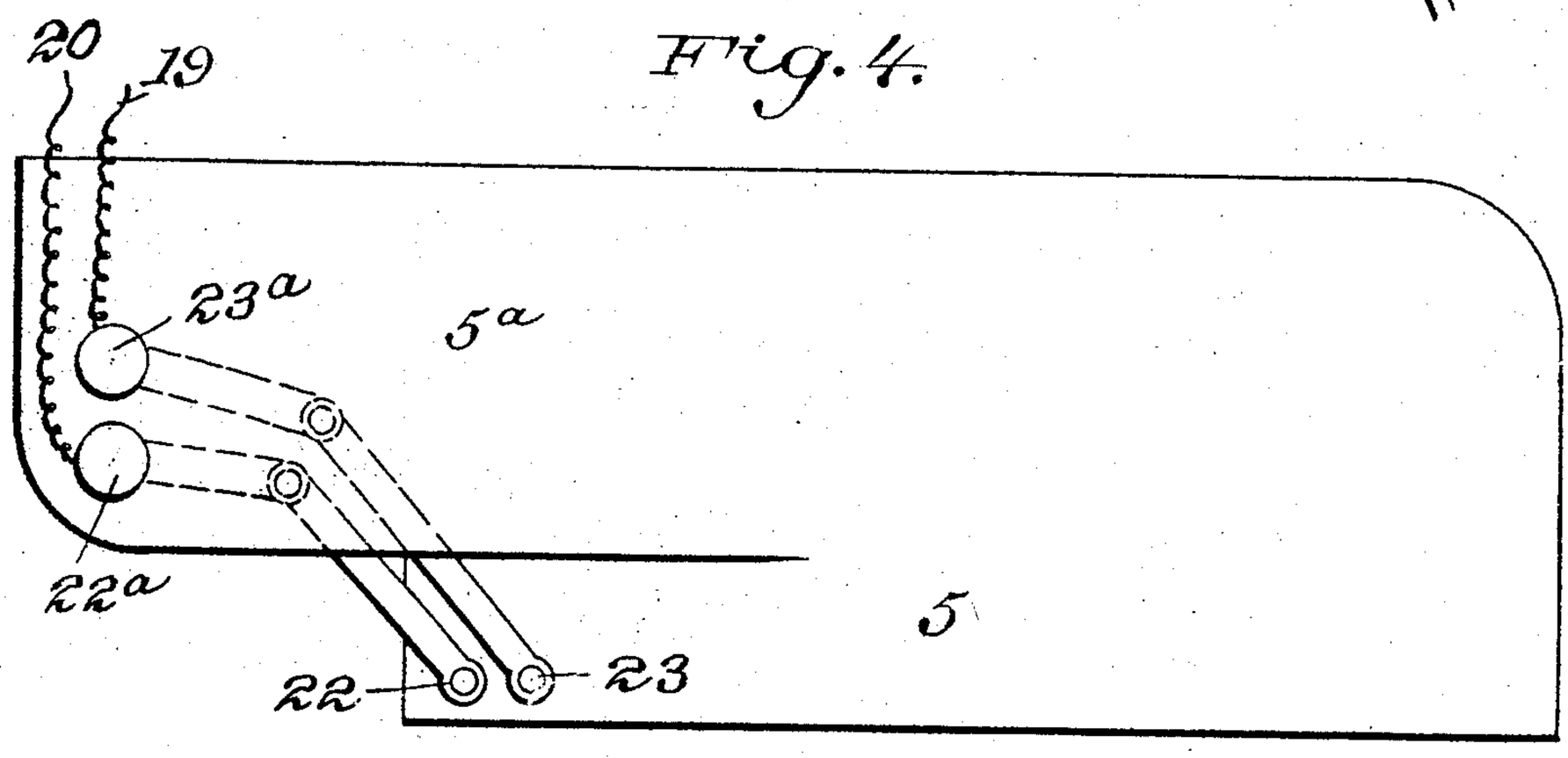

Fig. 5.

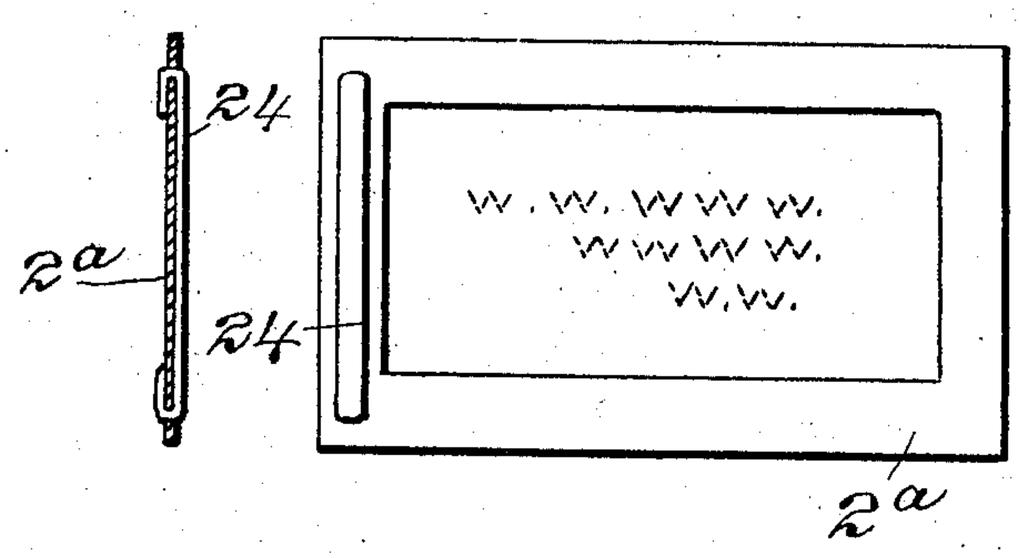

Fig. 6.

Fig. 7.

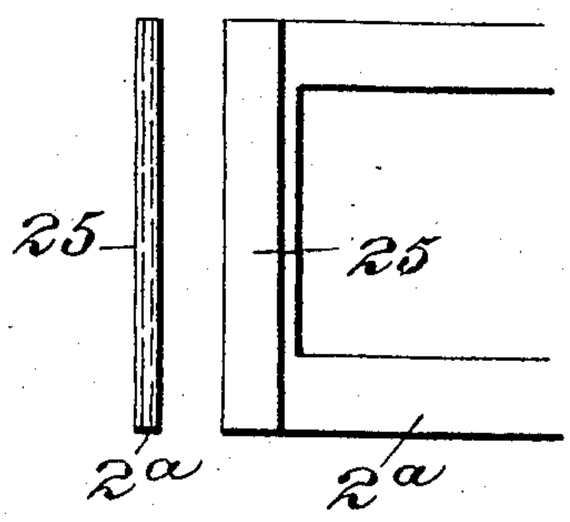

Fig. 8.

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UNITED STATES PATENT OFFICE.

EDWIN DRAYTON BELKNAP, OF EAST ORANGE, NEW JERSEY.

ATTACHMENT FOR ADDRESSING-MACHINES.

No. 797,092. Specification of Letters Patent. Patented Aug. 15, 1905.

Application filed November 15, 1904. Serial No. 232,791.

To all whom it may concern:

Be it known that I, EDWIN DRAYTON BELKNAP, a citizen of the United States of America, and a resident of East Orange, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Attachments for Addressing-Machines, of which the following is a specification.

My invention relates in general to addressing-machines; and it more specifically consists of an improved automatic attachment to such addressing-machines whereby certain of the wrappers or envelops being addressed thereby may be given a distinguishing-mark, said distinguishing-mark being preferably made upon the side of the wrapper or envelop opposite to that on which the address is printed.

In operating addressing-machines of the character, for instance, described in my United States Patent No. 762,609, dated June 14, 1904, the addresses of people reached through the same post-office are usually grouped together, so that as the wrappers or envelops come out of the machine all those addressed to Rochester, New York, would be together and those addressed to Buffalo, New York, together, and so on. Under certain conditions it becomes important to separate the articles addressed to each particular post-office into distinct bundles or packages—as, for instance, in bundling together for mailing purposes all the articles designed for one particular post-office. It is equally important that this classification of the addressed wrappers or envelops shall be done easily and rapidly without interrupting the usual course of the mailing-clerk's work. As the wrappers or envelops are usually stacked up with the address side or face downward and so handled by the mailing-clerk, it is obvious that if a distinguishing-mark can be applied by the machine to the opposite side of the first or last wrapper or envelop of those directed to each particular post-office it will be a simple matter to the mailing-clerk to recognize when he sees a wrapper so marked that he has reached the beginning of a set of wrappers or envelops directed to another post-office and to drop the articles wrapped therein into a separate basket or bundle.

My invention comprises a simple, inexpensive, and automatic attachment for the ordinary addressing-machine most easily applied to the particular type of machine shown in my before-mentioned patent, and the preferred form of apparatus embodying my invention is illustrated in the accompanying two sheets of drawings, in which—

Figure 1 is a detail in cross-section and side elevation of a portion of an addressing-machine with my present invention attached thereto. Fig. 2 is a diagrammatic representation of the electrical circuits. Fig. 3 is an enlarged detail view, partly in section, showing one of the address-slips making the electrical contact which operates the marking attachment. Fig. 4 is a detail plan view of the guide-plate and electrical contacts. Figs. 5, 6, 7, and 8 are detail views of the stencil-cards used in a particular form of addressing-machine with the metallic attachments which coöperate with the other portions of electrical mechanism.

Throughout the drawings like reference-figures indicate like parts.

1 represents a card-magazine containing a series of stencil-cards 2, on which a series of addresses have been stenciled. These cards are forced down by a follower 3 upon the rotating cylinder 4, which feeds them up under the guide 5 between cut-away rollers 6 and 7. The roller 7 is an inking-roller, to which ink is supplied by the ductor-roller 9 in the ink-well 8. Certain of the cards, as 2^a, located at the beginning of the cards addressed to a particular post-office, are each provided with a metal strip or contact-bridge at one end of the card. This bridge-piece may consist of the strip 24, applied as shown in Figs. 5 and 6, or a U-shaped strip 25, applied as shown in Figs. 7 and 8.

Mounted on the bar 10 or otherwise disposed along the path which the wrappers or envelops to be addressed travel is an electromagnet 12, supported on frame 11, arranged to actuate when energized an armature 13, carried by the pivoted bell-crank 14. The other end of this bell-crank lever carries an ink-reservoir 15, terminating at the bottom in an inking-pad 16 and containing a body of ink 17. This end of the bell-crank lever and the marking device are normally held upward out of contact with the strip of paper 26 out of which the wrappers are to be cut or the series of other objects to be addressed by the spring 18 or equivalent device. The coils of the electromagnet 12 are included in an interrupted electric circuit composed of wires 19 and 20, which also includes a source of electric current represented by the battery 21. (See Fig. 2.) This circuit terminates in

contact-pins 22 and 23, which are mounted in the guide-strip 5 along the path traveled by the address-bearing slips or stencil-cards and are so arranged as to be bridged and the circuit completed by the metallic bridge-strip 24 or 25 or the particular stencil-cards so equipped, all as clearly shown in Fig. 3. For convenience the contact-points 22 23 are connected to binding-posts 22^a 23^a, placed in the top plate 5^a of the addressing-machine, to which binding-posts the wires 19 and 20 may be conveniently connected.

27 represents the magazine, into which the stencil-cards are discharged after they have been run through the printing mechanism.

The operation of my invention in handling newspaper-wrappers, for instance, is as follows: The drum or cylinder 4 and the other parts of the machine being set in rotation, the strip of wrapping-paper 26 and the stencil-cards or other address-bearing slips are fed through the printing mechanism in the usual way. When the last card of the set addressed to any particular post-office is fed up to the printing mechanism, its bridge-piece 24 or 25 spans the gap between the contact-points 22 and 23 and the current is sent through the coils of the magnet 12. This attracts the armature 13 and momentarily forces downward the inking-pad 16, which strikes the upper face of the strip of paper 26 and marks the same. This leaves a mark upon the upper face of the last wrapper addressed to that particular post-office, and when the mailing-clerk in wrapping the papers or other articles to be mailed works down through the pile of wrappers until he comes to one which bears this mark on its upper face he knows that he has reached the end of the series of wrappers addressed to one post-office and is about to begin upon a series addressed to another post-office, and accordingly he places all the articles so wrapped in a particular pile or basket until he comes to another wrapper marked in the same way, when he knows that he has reached another post-office and deposits the articles thereafter wrapped in another basket or pile, and so on throughout the entire list.

It is evident, of course, that various changes could be made in the details of construction illustrated and described without departing from the spirit and scope of my invention. The electrical and mechanical features of the device might be modified to suit different machines so long as the necessary magnetic impulse was imparted to the marking mechanism when the proper wrapper or envelop passes through the machine, and said marking impulse might be transmitted by other than electrical devices. The apparatus might be adapted to addressing-machines using other forms of address-bearing slip than the particular stencil-cards herein illustrated; but all these modifications I should still consider within the boundaries of my invention.

Having therefore described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. In an addressing-machine the combination with a series of strips bearing the addresses, and mechanism for feeding and printing from the same, of a marking device arranged along the pathway of the articles on which the addresses are to be printed, and apparatus operated by certain of the address-bearing strips for actuating said marking device whenever one of said strips passes through the printing mechanism.

2. In an addressing-machine the combination with a series of strips bearing the addresses and mechanism for feeding and printing from the same, of an electromagnetically-operated marking device arranged along the pathway of the articles on which the addresses are to be printed, a source of electric current, an interrupted circuit including said source of current and said electromagnetic means and means for closing said circuit operated by certain of said address-bearing slips.

3. In an addressing-machine the combination with a series of strips bearing the addresses and mechanism for feeding and printing from the same, of an electromagnetically-operated marking device arranged along the pathway of the articles on which the addresses are to be printed, a source of electric current, an interrupted circuit including said source of current and said electromagnetic means and means for closing said circuit operated by certain of said address-bearing slips, said operating means comprising a pair of contact-pieces in which the circuit-wires terminate located along the path traversed by the address-bearing slips and conducting bridge-pieces carried by the slips.

4. In an addressing-machine the combination with a series of stencil-cards bearing the addresses to be printed and mechanism for feeding and printing from the same, of metallic bridge-pieces attached to certain of said stencil-cards, a marking device located along the path traveled by the articles on which the addresses are to be printed, an electromagnet arranged to throw said marking device into operation when energized, a source of electric current and a circuit including said source of current and the coils of the electromagnet, and terminating in contact-pins adapted to be bridged by the bridge-pieces carried by the cards as the same pass through the printing mechanism.

5. In an addressing-machine the combination with a series of strips bearing the addresses, and mechanism for feeding and printing from the same, of a marking device arranged along the pathway of the articles on which the addresses are to be printed, and apparatus operated by certain of the address-bearing strips for actuating said marking device whenever one of said strips passes through

the printing mechanism, said marking device being arranged to mark the opposite side of the article from that on which the address is printed.

6. In an addressing-machine the combination with a means for feeding the article to be addressed and printing the address upon one side thereof, of mechanism actuated by the first-mentioned means for affixing a distinguishing-mark to the other side of the article to be addressed.

Signed at New York, N. Y., this 11th day of November, 1904.

EDWIN DRAYTON BELKNAP.

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