J. T. LYNCH.

PICK-UP TABLE FOR MAIL MATTER.

APPLICATION FILED AUG. 19, 1910.

1,035,714.

Patented Aug. 13, 1912.

2 SHEETS—SHEET 1.

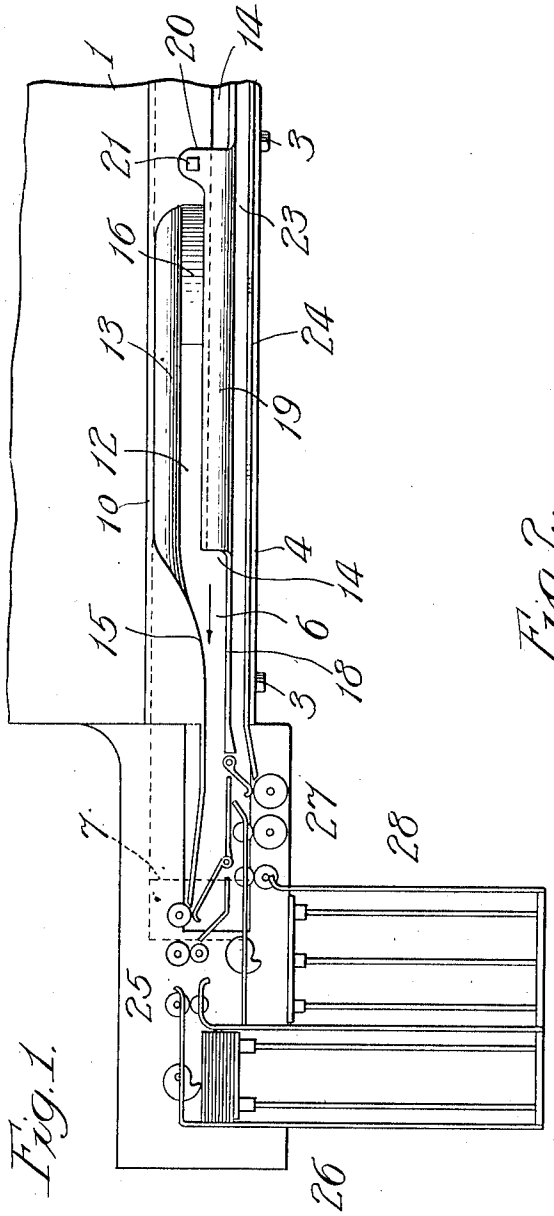


Fig. 1.

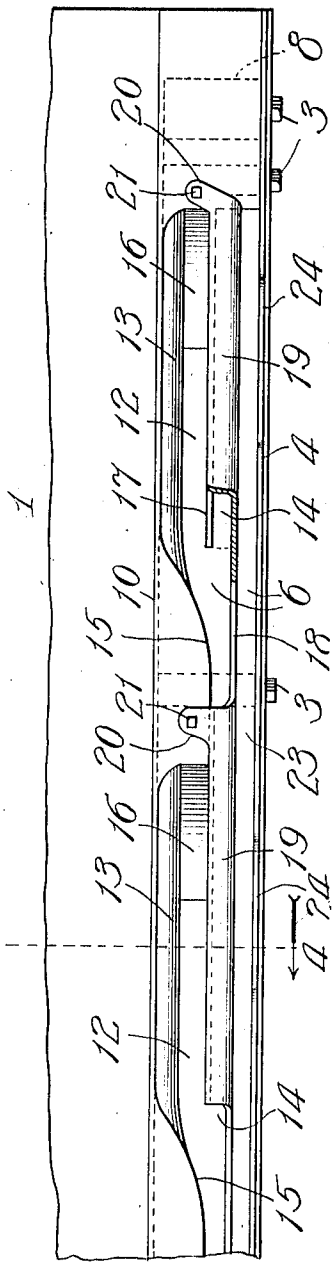


Fig. 2.

Witnesses:
Edw. E. Gaylord.
Chas. H. Buell.

Inventor.
John T. Lynch.
By David S. Fletcher.
Atty.

J. T. LYNCH.

PICK-UP TABLE FOR MAIL MATTER.

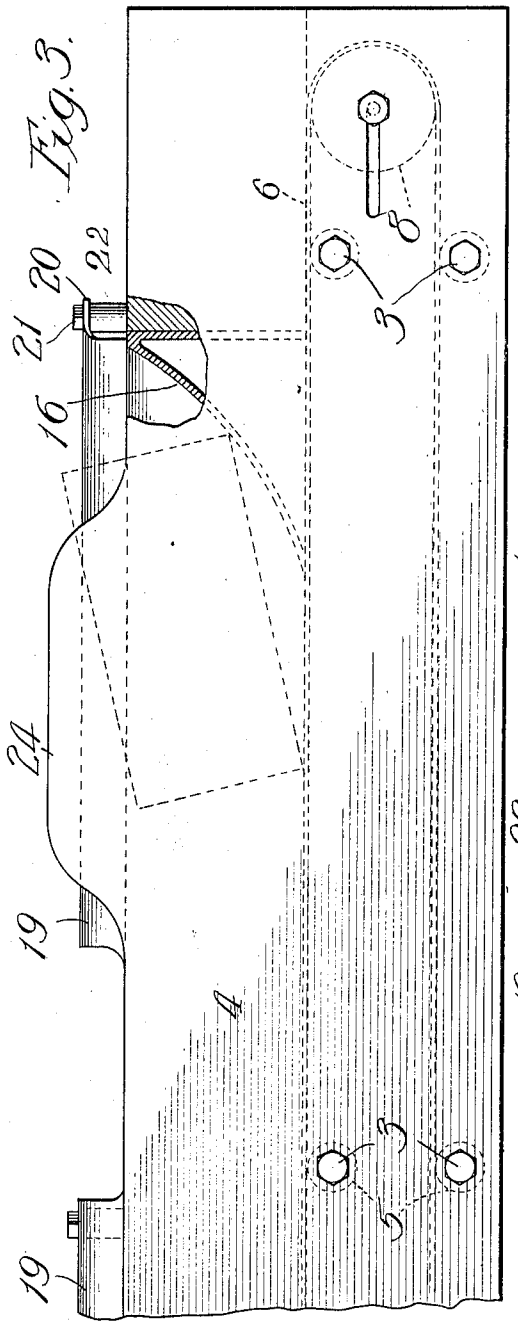
APPLICATION FILED AUG. 19, 1910.

1,035,714.

Patented Aug. 13, 1912.

2 SHEETS—SHEET 2.

Fig. 3.



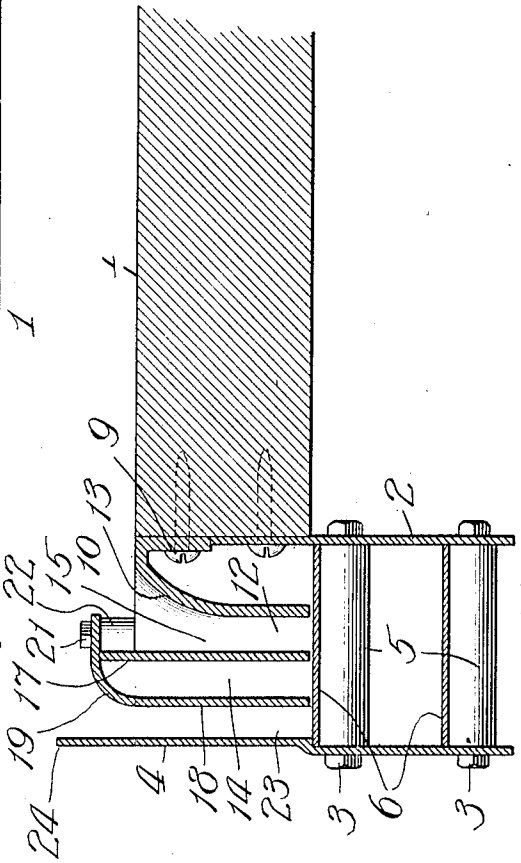


Fig. 4.

Witnesses:

Chas. E. Gaylord.

Chas. H. Bull

Inventor:

John T. Lynch.

By David L. Fletcher.

Atty.

UNITED STATES PATENT OFFICE.

JOHN T. LYNCH, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE B. F. CUMMINS COMPANY, A CORPORATION OF ILLINOIS.

PICK-UP TABLE FOR MAIL-MATTER.

1,035,714. Specification of Letters Patent. Patented Aug. 13, 1912.

Application filed August 19, 1910. Serial No. 577,942.

To all whom it may concern:

Be it known that I, JOHN T. LYNCH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pick-Up Tables for Mail-Matter, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding numerals of reference in the different figures indicate like parts.

My invention has reference to "pick-up-tables" for post office use to enable mail matter to be "faced" and bunched or stacked ready for delivery to a canceling machine.

In dropping the mail pieces upon the usual horizontal conveying-belt of a pick-up-table, which belt is actuated at a high speed, a considerable degree of care is required in order that the forward end of the mail-piece may first be brought into contact with the belt surface or that the entire edge of the mail-piece may contact therewith. Should the rear end first touch the belt the rapid movement of the latter is liable to cause the mail-piece to be so tilted as to result in injury thereto by crumpling it in the pocket or chute.

My invention has for its object to overcome this and other difficulties and it consists in the combination of elements hereinafter more particularly described and definitely pointed out in the claims.

In the drawings, Figure 1, is a plan view of a portion of a pick-up-table showing conveying, separating and stacking mechanism connected therewith, Fig. 2, is a plan view of a continuation of said table showing additional receiving pockets and part of the conveying mechanism, Fig. 3, is an enlarged edge view of a portion of the table partially broken away and sectioned to show one of the pockets and the manner in which a mail-piece is delivered thereto and Fig. 4, is a sectional view taken upon the line 4, Fig. 2, viewed in the direction of the arrow there shown.

Referring to the drawings, 1 represents a portion of an ordinary pick-up-table upon which the mail is deposited indiscriminately in bulk for the purpose of "facing", whereupon the mail pieces are delivered to a conveying mechanism arranged along the front of the table to convey them either to a stacking mechanism for ultimate delivery to a canceling machine or directly to the latter.

Rigidly attached to the front edge of the table is a support 2, Fig. 4, consisting preferably of a metal plate which extends throughout the length of said table and depends below the bottom thereof as shown in said figure.

Connected with said plate by means of suitable bolts or studs 3, is an outer wall or plate 4, the top of which is extended above the level of the top of the table 1, for the purpose hereinafter stated. Journaled upon the studs 3 are rollers or drums 5 which are adapted to lend intermediate support to the usual endless belt 6, which is mounted in a well known way upon end rollers 7 and 8 respectively, the former being indicated in dotted lines in Fig. 1, and the latter in Figs. 2 and 3. Rigidly attached to the edge of the table above the upper edge of the plate 2, as shown at 9 in Fig. 4, is a fitting generally designated by 10 which is preferably formed from sheet metal, so constructed as to provide for a series of pockets 12, extending downwardly to the belt 6, which constitutes the bottom thereof. The upper portion of each pocket is rounded toward the table as indicated at 13, to enable mail pieces which are lying face upwardly upon the table to be rapidly pushed therein without lifting them from the table.

The pockets 12 are intended for the reception of the small mail pieces and each is in communication with a straight channel 14, common to all of said pockets.

The wall leading forwardly from each pocket is curved laterally as shown at 15, to serve as a deflector or shunt for deflecting the mail-pieces which are conveyed by the belt 6 into the channel 14. At the rear of each pocket is a forwardly and downwardly inclined ledge or shield 16, which is preferably extended from at or about the upper level of the pocket to the bottom immediately above the belt surface and far enough forward so that the rear end of any mail-piece deposited in the pocket would fall upon said part in the manner indicated in dotted lines in Fig. 3, while the forward end would contact with the conveyer belt, thereby causing the mail-piece to be drawn forward by the belt until the entire edge is caused to rest thereon. This device prevents

the rear portion of the mail-piece from being first caught by the belt and thrown upwardly into contact with an obstruction, which might cause it to be crumpled and injured or destroyed. The inclined part 16 is attached to a wall 17, better shown in Figs. 2 and 4, which extends from a point somewhat back of the pocket to one near the forward end thereof and serves to separate the pocket from the channel 14.

Between the walls 4 and 17 is a continuous wall 18, preferably formed from sheet-metal, portions 19 of which are located opposite to the pockets 12 and are curved laterally as shown, so as to extend over portions of the raceway 14 onto the top of the wall 17. At the rear end of each of said raised and curved portions is a lug 20 which is rigidly attached by means of a bolt 21 to a projection or part 22 extending upwardly from and attached to the horizontal portion or offset forming a housing at the rear of each pocket. The space between the walls 4 and 18 serves as a continuous channel 23 for the large mail-pieces. The parts 19 are rounded in the manner more clearly shown in Fig. 4, to permit the delivery of the mail-pieces to said channel 23, as well as to prevent the large mail-pieces from being dropped into the channel 14, while a portion 24 of the wall 4 opposite to each of the other parts 19, is raised as shown to prevent mail-pieces from being thrown over the top of said wall in an attempt to deliver them to the channel 23.

It will be seen by reference to Fig. 4 that the rounding of the wall of the pocket as shown at 13, the raising of the partition 17 above the surface of the table and the similar rounding of the part 19 over the chute 14 as well as the elevation of the parts 24 to a still greater height, results in providing a wide throat for each of the pockets 12 as well as for the chute or channel 23. This construction enables the small and large mail pieces to be delivered with great rapidity and certainty into their respective channels while the feature of having the small pockets at a lower level than that of the upper edge of the walls 17 of the main runway into which said pockets lead, is of very great importance in handling the small mail, inasmuch as all of the pieces which face upwardly may, as stated, be "pushed" or slid therein without lifting them at all, said walls serving as stops and deflectors to insure proper delivery. The pockets and channels are necessarily narrow in order to maintain the mail pieces in sufficiently upright positions to avoid clogging, and hence the advantage of the rounded portion 13 which enables the mail pieces, when pushed horizontally against the walls 17, to fall rapidly and with certainty into the pockets. Because of the presence of the raised partitions 17, the feeding motion of the operators may be very rapid without interfering with the certainty of the results. Actual practice has demonstrated that this feature alone, by eliminating the necessity for picking up each mail piece, as would be necessary were the upper edges of the channels upon the same level, has resulted in a very marked saving of time and expense.

The small mail pieces are conveyed upon the belt 6 to the usual separating and stacking mechanism generally designated by 25 and 26 respectively, Fig. 1, while the large mail-pieces are conveyed in like manner to similar separating and stacking mechanism of any well-known type, generally designated by 27 and 28 respectively.

Having thus described my invention, I claim:—

1. The combination with a pick-up-table of a chute or runway, a plurality of adjacent pockets in communication therewith for the reception of articles to be carried, continuously movable means located beneath said chute and pockets for conveying said articles and means for preventing the rear ends of articles when deposited in said pockets from falling into direct contact with said conveying means.

2. The combination with a pick-up-table, of a chute or runway, a plurality of adjacent pockets having their forward ends in communication therewith for the reception of articles to be carried, continuously movable means located beneath said chute and pockets for conveying said articles and forwardly and downwardly inclined stationary means located in the rear of said pockets respectively above said conveying means, to prevent contact between the rear portion of an article when dropped into a pocket and said conveying means.

3. The combination with a pick-up-table of a chute or runway, a plurality of pockets arranged adjacent thereto, each pocket having a lateral opening at its forward end leading to said runway with a laterally curved wall opposite to said opening to deflect articles from said pockets into said runway, an endless belt conveyer located beneath said pockets and runway respectively, and a bottom or floor element in the rear portion of each of said pockets to serve as a temporary support for the rear end of an article deposited therein to cause the forward end to contact with said belt.

4. The combination with a pick-up-table of a chute or runway adjacent to its edge, a series of pockets adjacent to said runway, a conveyer extending beneath said pockets and runway to form a continuous bottom for said runway as well as one for the forward portion of each of said pockets, and a forwardly inclined shield located in the rear of each of said pockets with its forward end

immediately above said conveyer, whereby, when a mail-piece is deposited in said pocket the rear end will rest upon said shield and the forward end upon said conveyer.

5. The combination with a pick-up-table of a chute or runway, a plurality of adjacent pockets in communication therewith for the reception of mail-pieces to be carried, continuously movable means located beneath said chute and pockets for conveying said mail pieces, the wall between said runway and said pockets being extended above the level of said table to form a stop whereby proper delivery of the mail pieces into said pockets when pushed toward them upon the table may be insured.

6. The combination with a pick-up-table of a chute or runway, a plurality of adjacent pockets in communication therewith for the reception of mail-pieces to be carried, continuously movable means located beneath said chute and pockets for conveying said mail-pieces, the wall between said runway and pockets being extended above the level of said table and the upper portion of the walls of said pockets being inclined to permit the mail-pieces to be readily delivered therein.

7. The combination with a pick-up-table, of parallel chutes for small and large mail-pieces respectively, the former being interposed between the latter and the edge of the table, a plurality of pockets adjacent to said first named chute and upon the side thereof next to said table, said pockets being in communication with said chute, continuously movable means located beneath said chutes and pockets for conveying mail-pieces, the walls between said pockets and first named chute being extended above the level of the table and said first named chute being covered opposite to said pockets, whereby small mail-pieces may be pushed into said pockets while large ones may be prevented from entering said first named chute.

8. The combination of a pick-up-table, small and large chutes for small and large mail-pieces respectively, the former being located between the latter and the edge of the table, a plurality of pockets between said first named chute and said table, said pockets being in communication with said chute, which chute is covered opposite to said pockets, continuously movable carrying means located beneath said chutes for conveying mail pieces, the walls between said pockets and first named chute being extended above the level of the table, while the wall of said second chute is extended above the level of the walls of said first named chute.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses, this 16th day of August, 1910.

JOHN T. LYNCH.

Witnesses:
D. H. FLETCHER,
JENNIE L. FISKE.