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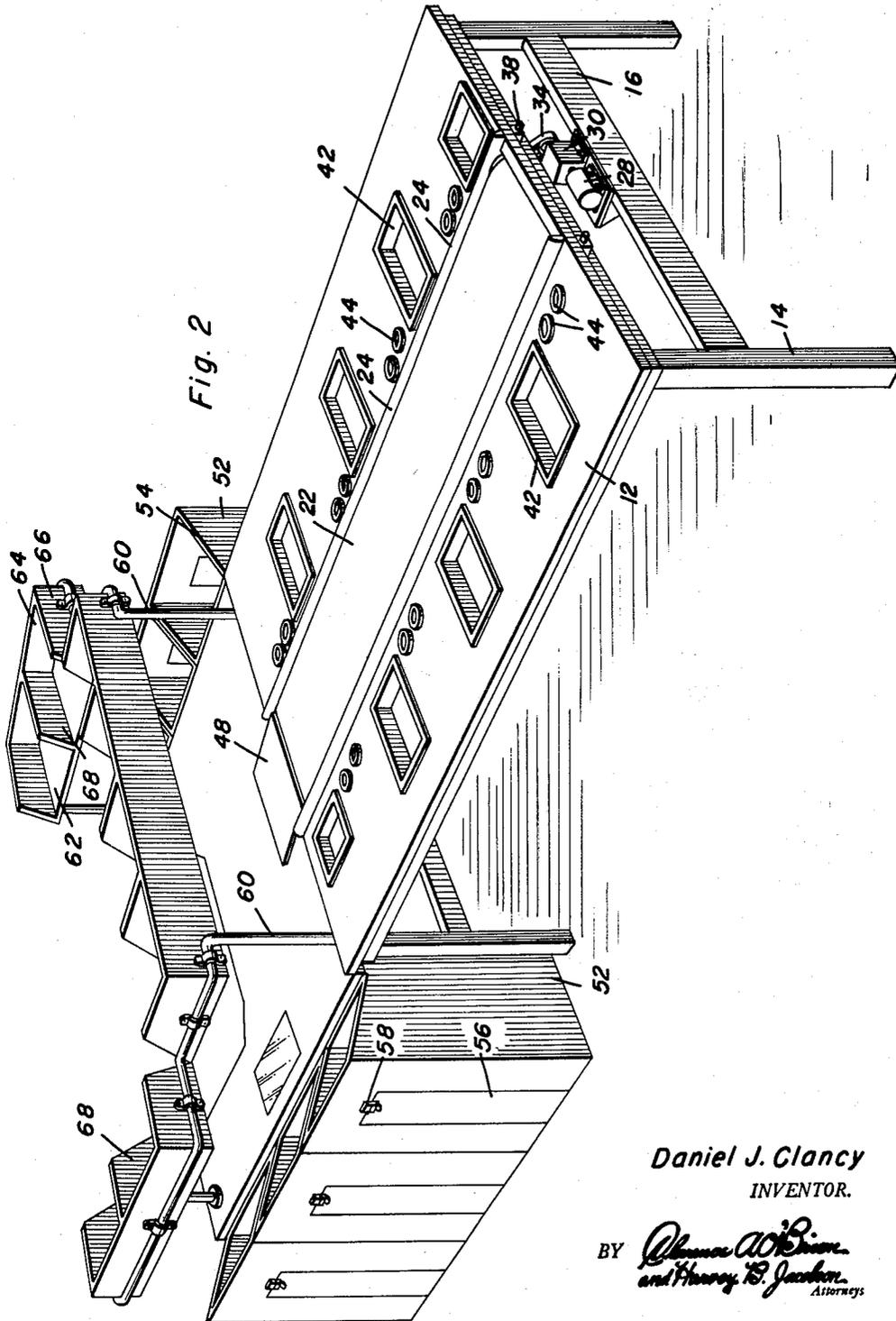
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MAIL PROCESSING TABLE

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## MAIL PROCESSING TABLE

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2 Claims. (Cl. 198—19)

This invention relates to a mail processing table and more specifically provides an improved device for improving the method of processing mail.

An object of this invention is to provide a mail processing table which is simple in construction, easy to use, efficient in operation, well adapted for its intended purposes and relatively inexpensive to manufacture and maintain.

Another object of this invention is to provide a mail processing table having a plurality of mail opening positions together with an elongated endless conveyor for transporting the opened mail to a sorting area and also providing a plurality of separated compartments and receptacles for receiving the various classifications of mail and providing a candling device for inspecting the empty envelopes for residual contents.

Yet another object of this invention is to provide a mail processing table which is provided with an endless conveyor having a control switch adjacent a sorting area wherein a sorter may control the flow of opened mail onto the sorting area.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the mail processing table of the present invention showing the sorting area and other details thereof;

Figure 2 is a perspective view of the table taken from the opposite corner from Figure 1;

Figure 3 is a longitudinal vertical section taken substantially along section line 3—3 of Figure 1 showing the details of construction of the elements of the mail processing table of the present invention; and

Figure 4 is a transverse, vertical section taken substantially along section line 4—4 of Figure 1 showing the positioning of the endless conveyor on the table.

Referring now specifically to the drawings, it will be seen that the mail processing table of the present invention is generally indicated by the numeral 10 and includes a generally horizontally disposed and elongated table top 12 having a depending supporting leg 14 at each corner thereof and suitable cross braces 16 interconnecting the legs 14. The table top 12 is provided with a centrally located slot 18 adjacent each end thereof for receiving a roller 20 which carries an endless conveyor belt 22. The conveyor belt 22 encircles the rollers 20 and its upper run rests on the upper surface of the table top 12 between slots 18. Upstanding guide members 24 are positioned along the table top 12 at both sides of the conveyor belt 22 for the purpose of guiding the belt. A bracket 26 is secured to the cross brace 16 at one end of the table 12 for supporting an electric motor 28 and a reduction gear mechanism 30 that drives a pulley 32 which is provided with a V-belt 34 passing over

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a pulley secured to the shaft 36 which carries one of the rollers 20. Suitable screw threaded members 38 are provided in a crosspiece 40 and engage the shaft 36 for moving the roller 20 thereby tightening the conveyor belt 22 in an obvious manner.

Referring now specifically to Figures 1 and 2, it will be seen that the table top 12 is provided with a plurality of openings accommodating trays or bins 42 which are generally rectangular for receiving a plurality of unopened envelopes. Also suitable apertures are provided for receiving circular trays or bins 44 for paper clips and the like. It will be seen that a suitable envelope opener (not shown) may be provided and also a stapling device (not shown) for ease of opening the envelopes and staple or securing the papers therein together. Normally, the papers are retained in assembled position by suitable paper clips, or the like. A sorting area or sorting table 46 is provided as an extension of the table top 12 and is positioned below the upper surface of the table top 12 substantially as illustrated in Figure 3. A ramp 48 is positioned for providing a passageway for the papers from the conveyor belt 22 onto the sorting area 46. The sorting area 46 is provided with a cut-out portion 50 and a plurality of removable receptacles 52 are provided on each side of the sorting area 46. The receptacles 52 are vertically elongated having a bevelled upper end 54 with the lowermost edge of the bevelled end 54 being positioned under the sorting table 46. The outer or higher sides of the receptacles 52 are each provided with a vertically swinging door 56 that is hinged at the bottom and secured in closed position by a suitable latch member 58. It will be seen that the doors 56 provide easy access to the interior of the receptacles 52 thereby permitting easy removal of the sorted papers deposited therein. The sorting table 46 is supported by a pair of vertically arranged pipe members 60 which continue upwardly above the sorting table 46 for a purpose described hereinafter. A plurality of shelves 62 having vertically extending back edges 64 and side edges 66 are positioned above the sorting area 46 and a plurality of partitions 68 are provided between the end walls 66 for dividing the shelves 62 into a plurality of individual compartments. It will be seen that the shelves 62 are arranged in generally U-shaped formation surrounding the recess 50 in the sorting area 46. The upper end of each pipe 60 is bent at right angles and then into a U-shaped formation for extending behind the shelf 62 at each side of the sorting area 46. The other ends of the U-shaped portion of the pipes 60 are bent around the sides of the shelf 62 which overlies the forward portion of the sorting area 46 adjacent the table top 12 and thence downwardly through the forward portion of the sorting area 46 for supporting the forward end of the sorting area 46. The pipes 60 are secured to the side walls and rear walls of the shelves 62 by suitable U-shaped clips 70 in an obvious manner. Positioned at one side of the sorting area or table 46 is a candling device 72 which includes a glass positioned in an opening in the sorting table 46, a suitable illuminating means being positioned thereunder for inspecting the opened envelopes for determining if there are any papers which remain in such envelopes before destruction thereof. A control switch 74 is provided at the forward portion of the recessed area 50 which controls the operation of the electric motor 28 and the conveyor belt 22 whereby the sorter may regulate the amount of opened mail which is deposited on the sorting table.

The method of operation of the device will be readily apparent. A sorter is positioned in the recessed cut-out area of the sorting table 46 and he is positioned on a suitable chair for immediate access to the control switch 74, the candling device 72, the compartments formed by the shelves 62 and partitions 68, the upper surface of

the sorting area 46 and the receptacles 52. A plurality of persons sit along each side of the table top 12 on suitable chairs and these operators open the mail deposited in the bins 42 with a suitable opener and the entire contents of each envelope are deposited onto the conveyor belt between the upstanding guide members 24. The papers are arranged in a predetermined order and may be fastened together with a paper clip from the bins 44 or with a stapling machine if necessary. By manipulating the control switch 74, the sorter may actuate the conveyor belt 22 thereby depositing the opened and arranged mail onto the upper surface of the sorting table or area 46 wherein he may quickly determine the proper disposition of the opened mail and deposit each piece of mail in the proper receptacle 52 or compartment formed by the shelves 62. It will be seen that the receptacles 52 and the shelves 62 are within easy reach of the sorter wherein he may easily deposit the sorted pieces of mail according to the predetermined classifications set forth for each of the receptacles 52 and compartments formed by the shelves and partitions. The empty envelopes may be quickly and easily inspected by placing them over the candling device 72 for determining if all of the enclosures have been removed from the envelopes. The envelopes may be easily positioned in one of the receptacles 52 adjacent the candling device 72 for future destruction, or the like. The unopened mail may be positioned in the bins 42 by a messenger, or the like, and also the receptacles 52 and the compartments formed by the shelves 62 may be emptied as they become filled with sorted pieces of mail. It will be seen that the pivotal closures 56 on the receptacles 52 facilitate the removal of the sorted material and the receptacles 52 may be removed for dumping when desired without utilizing the pivotal doors 56. The device may be constructed of readily obtainable materials such as a wood table 12 and sorting table 46 together with the shelves 62. The receptacles 52 may be constructed of suitable metal, or the like. This device is especially useful in relatively large offices having a high volume of incoming mail that must be sorted. The device is especially designed for classifying various types of reports, application papers, forms, etc., such as income tax reports, order blanks for merchandise, requests for information and other items of similar nature.

From the foregoing, the construction and operation of the device will be readily understood and further ex-

planation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. In an apparatus for opening and sorting mail, the combination of an elongated table, an endless conveyor belt extending longitudinally centrally on said table from one end thereof to the other, means for driving said belt, a plurality of mail receptacles provided at longitudinally spaced points on said table at both sides of said belt whereby mail deposited in said receptacles may be opened and placed on the conveyor belt, a substantially U-shaped desk provided at one end of said table and having its bight portion substantially contiguous with said one end of the table, said desk having its top spaced downwardly from the top of said table, a sloping ramp extending from said conveyor belt to the bight portion of said desk whereby opened mail carried by the belt may be discharged on the desk, means carried by the desk for controlling said conveyor belt driving means, a set of compartments for sorted mail mounted in U-shaped formation above said desk, and a plurality of waste receptacles provided exteriorly at opposite sides of said desk.

2. The device as defined in claim 1 wherein said desk includes a plurality of upright supporting members carrying the desk top and projecting above the same, said supporting members having horizontally angulated upper portions carrying said compartments.

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