July 20, 1926.

1,593,326

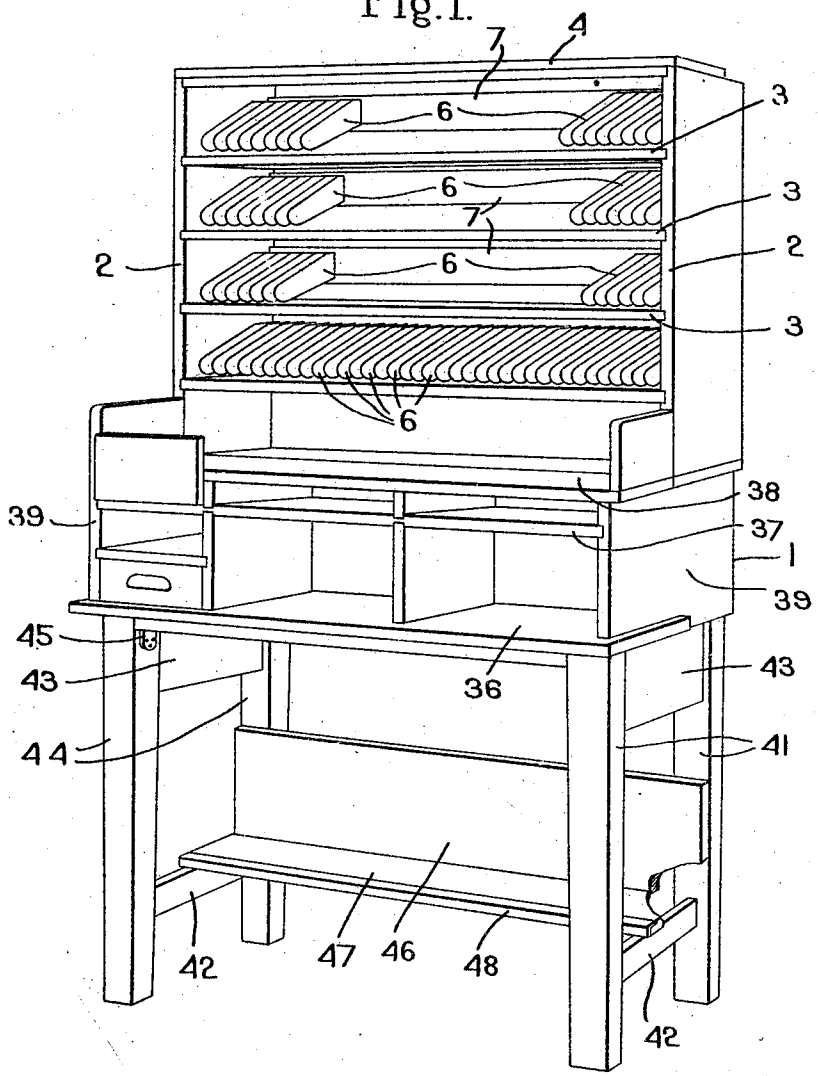
R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922

6 Sheets-Sheet 1

Fig.1.



Inventor.
Robert T. Bourn
by Heard Smith & Tennant
Attys.

July 20, 1926.

1,593,326

R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922

6 Sheets-Sheet 2

Fig.2.

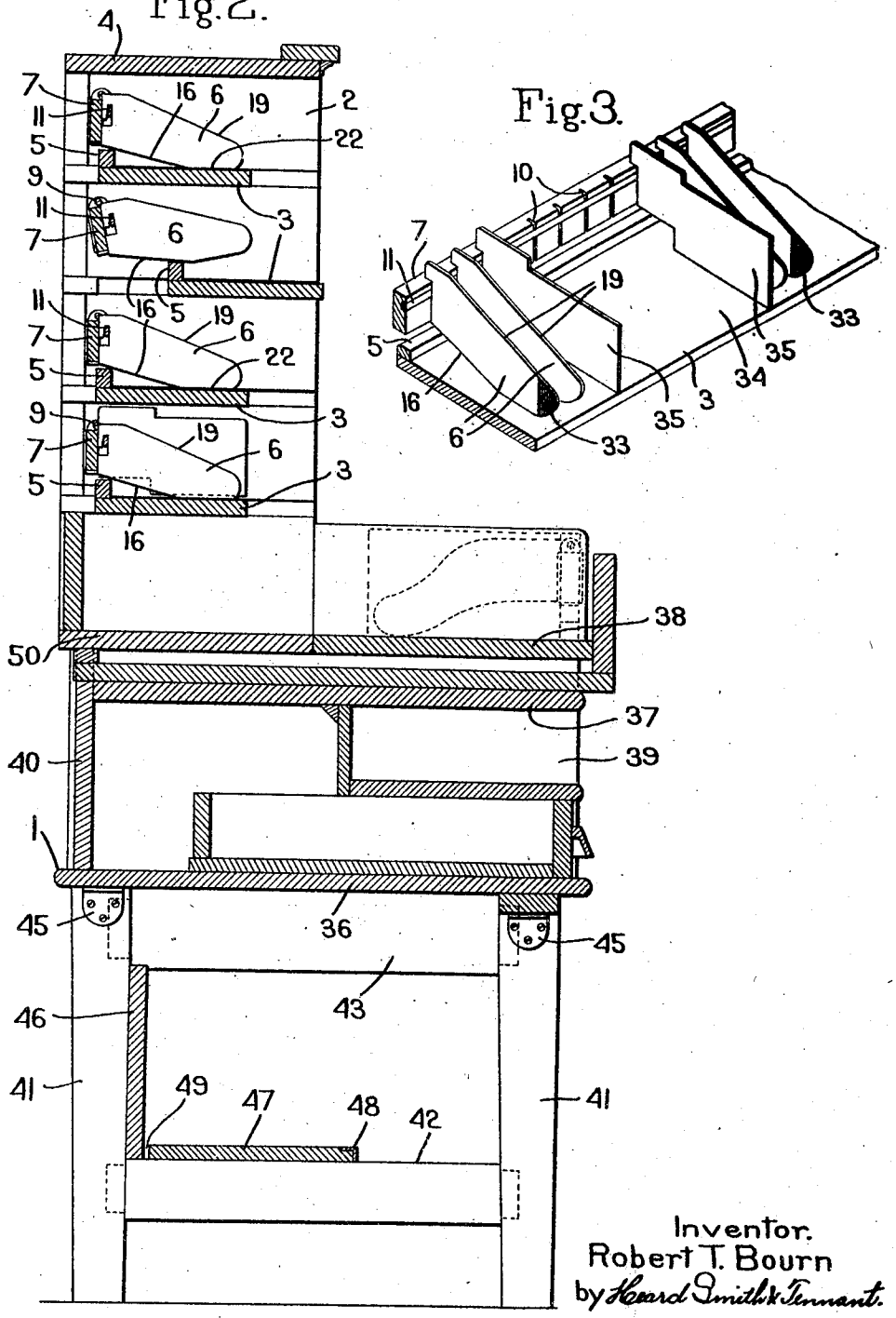


Fig.3.

Inventor.
Robert T. Bourn
by Heard Smith & Tennant.
Attys

July 20, 1926. 1,593,326

R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922 6 Sheets-Sheet 3

Fig.4.

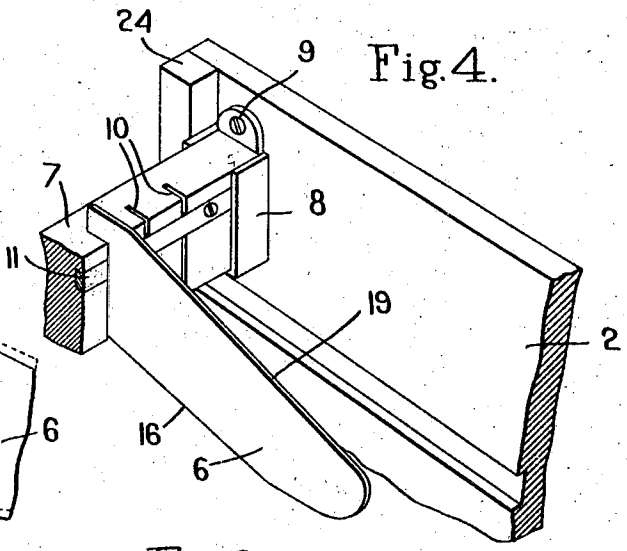


Fig.5.

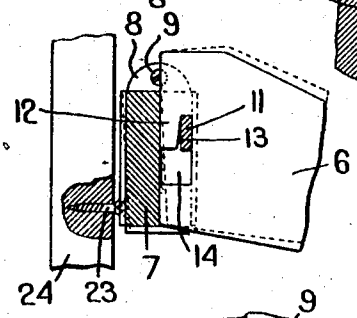


Fig.6.

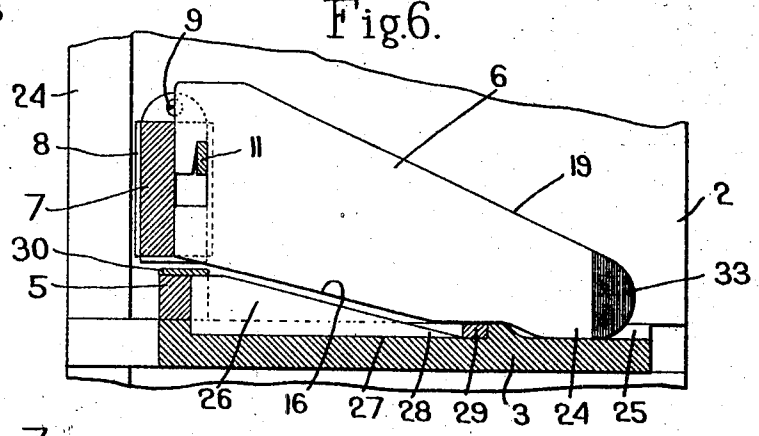
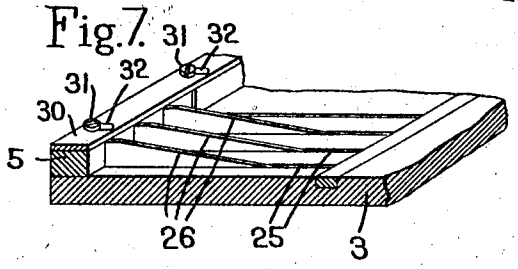


Fig.7.



Inventor.
Robert T. Bourn
by Heard Smith & Tennant.
Attys.

July 20, 1926. 1,593,326

R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922 6 Sheets-Sheet 4

Fig.8.

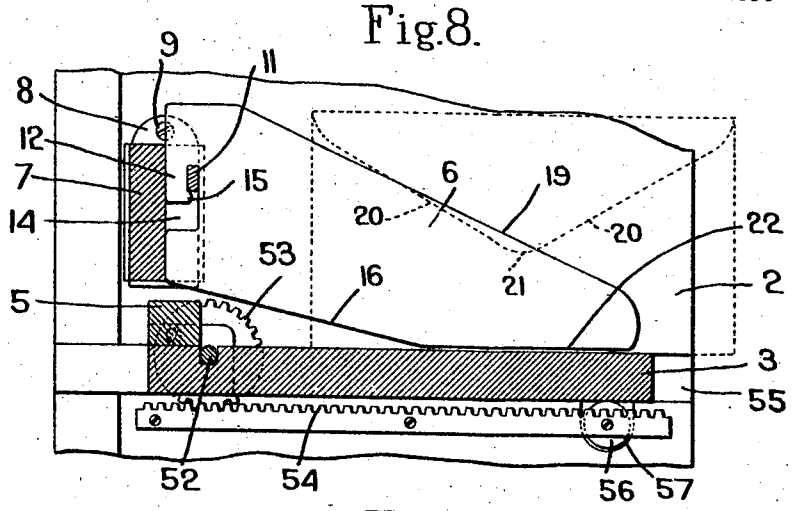


Fig.9.

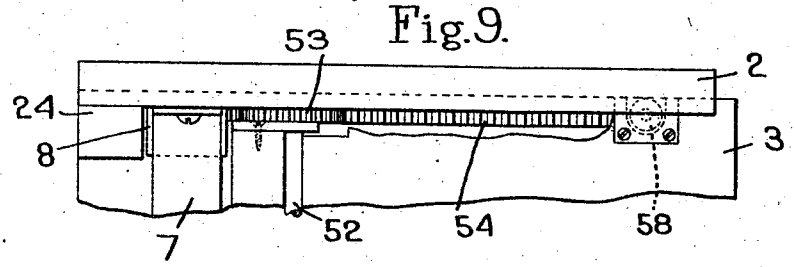
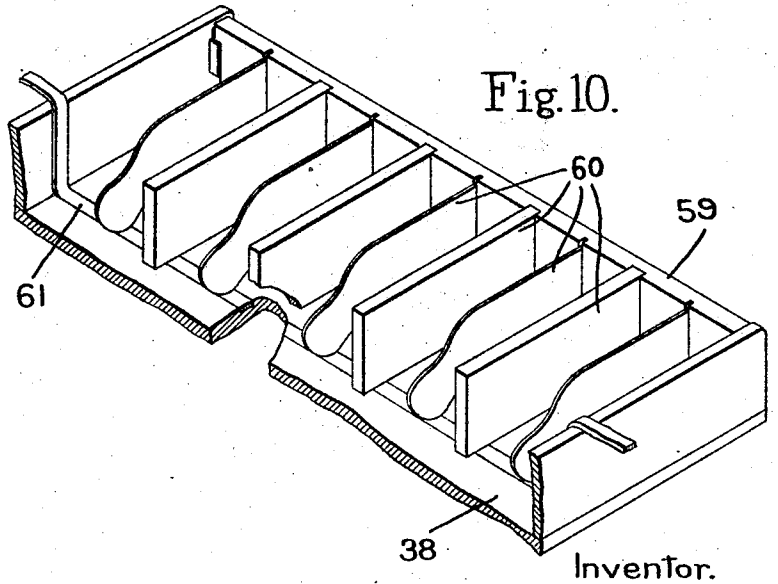


Fig.10.



Inventor.
Robert T. Bourn
by Heard Smith & Tennant.
Attys.

July 20, 1926. 1,593,326

R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922 6 Sheets-Sheet 5

Fig.11.

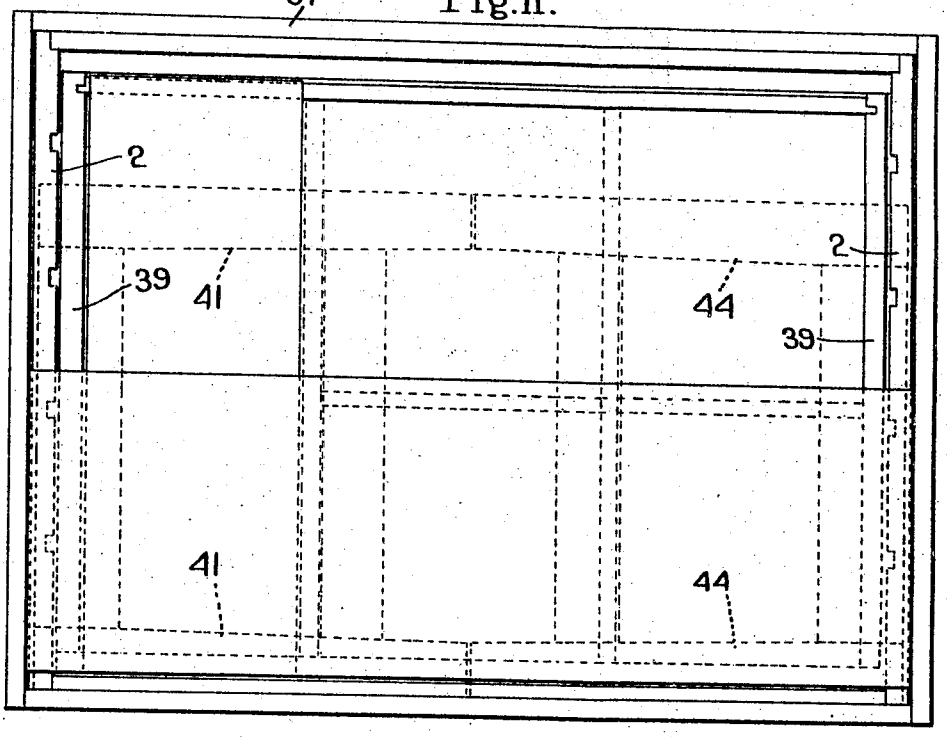


Fig.12.

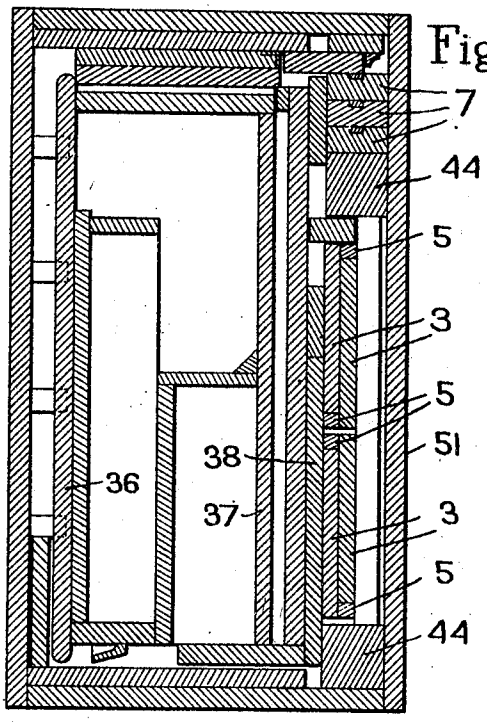
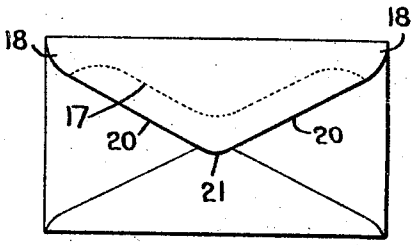


Fig.15.



Inventor.
Robert T. Bourn
by Heard Smith & Tennant
Attys

July 20, 1926.

1,593,326

R. T. BOURN

POST OFFICE FURNITURE

Filed June 20, 1922

6 Sheets-Sheet 6

Fig. 13.

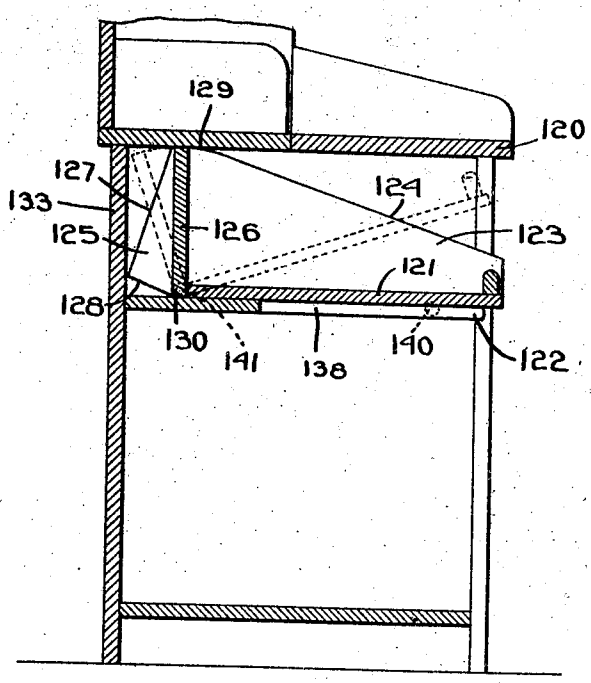
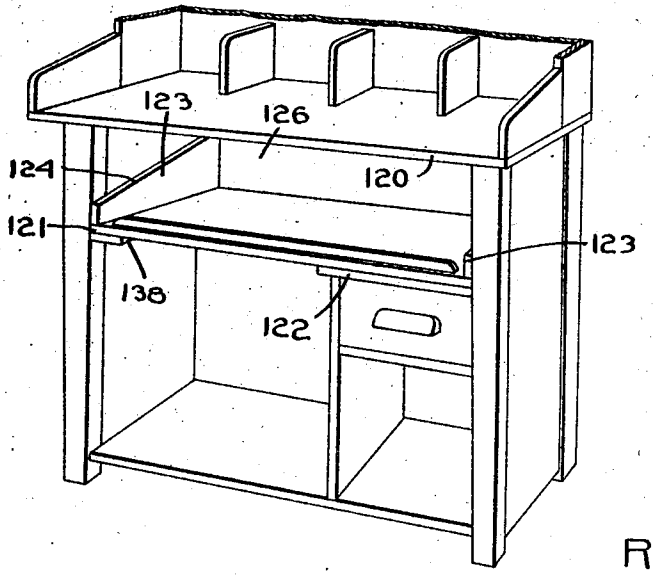


Fig. 14.



Inventor.
Robert T. Bourn
by Howard Smith & Howard
Attys.

Patented July 20, 1926. 1,593,326

UNITED STATES PATENT OFFICE.

ROBERT T. BOURN, OF TEMPLETON, MASSACHUSETTS.

POST-OFFICE FURNITURE.

Application filed June 20, 1922. Serial No. 569,705.

This invention relates to that type of post office furniture commonly referred to as carriers' desks or routing cases and which are used by letter carriers to assist them in sorting their mail.

These carriers' desks are usually constructed with a table on which is supported a routing case provided with shelves each separated into compartments by partitions.

One of the objects of the present invention is to provide a carrier's desk having an improved form of partition which is so shaped as to eliminate any possibility that the flaps of the letters will become caught thereon as the letters are thrown into the compartments during the mail sorting operation.

Another object of the invention is to provide an improved form of partition which will hold letter mail of a great variety of sizes without danger that the smaller letters will slip under the partitions from one compartment into another.

Still another object of the invention is to provide a novel carrier's desk which is arranged to present eye guides for assisting the carrier in sorting his mail.

The invention also comprehends a novel construction of shelf by which the shelf is prevented from twisting as it is drawn forwardly.

The invention also comprehends an improvided form of carrier's desk which has large capacity for holding bulky mail such as newspapers and the like.

The invention further comprehends a novel carrier's desk which is constructed so that it can be readily knocked down and packed for shipment. This is provided for by making the table legs detachable from the table top and so proportioning the table top and the routing case that the table top may be packed within the routing case when the shelves are removed, and by further so proportioning the parts that the table legs, shelves and other parts can also be packed within the routing case.

In the drawings;

Fig. 1 is a perspective view of a carrier's desk embodying the invention;

Fig. 2 is a vertical sectional view;

Fig. 3 is a fragmentary perspective view of one of the shelves with some of the partitions;

Fig. 4 is a fragmentary perspective view showing the manner in which the supports for the partitions are held in place;

Fig. 5 is a vertical section through one of the partition supports;

Fig. 6 is a sectional view showing a form of the invention wherein the front ends of the partitions are received in grooves in the shelves;

Fig. 7 is a perspective view of the form of shelf shown in Fig. 6;

Fig. 8 is a vertical sectional view through one shelf showing means for preventing the shelf from twisting;

Fig. 9 is a plan view of Fig. 8;

Fig. 10 is a perspective view of the device used for sorting newspapers and bulky material;

Fig. 11 is a view showing the carriers' desks knocked down and packed for shipment;

Fig. 12 is a section on the line 12—12, Fig. 11.

Fig. 13 is a vertical sectional view showing a different embodiment of the invention.

Fig. 14 is a perspective view showing the construction illustrated in Fig. 13.

Fig. 15 is a detail hereinafter described.

The carrier's desk herein illustrated is of the usual type having a table portion 1 and a routing case sustained on the table and comprising a plurality of shelves, each being partitioned off into compartments. The routing case comprises the two side members 2 which support the shelves 3, said side members being connected together at their top by a cross-piece 4. Each shelf will preferably be provided with a back stop 5 which rises a considerable distance thereabove and which prevents the letters from being forced over the back edge of the shelf.

The partitions which divide the shelves into compartments are indicated at 6 and the partitions for each shelf are shown as secured to a movable support 7 which is sustained at its end in holders 8 pivotally secured to the sides 2 at 9 all as shown in my Patent No. 1,500,226, dated July 8th, 1924. The manner herein illustrated of securing the partitions to the supports is also the same as illustrated in my above mentioned application, each support having grooves 10 in which the rear ends of the partitions 6 are received and the partitions

being formed in its rear end with an opening or slot through which a clamping bar 11 extends, said clamping bar being secured to the support. The opening is made with a portion 14 large enough to receive the clamping bar and then with the slot portion in which the bar is received when the partition is in operative position so that the placing of the partitions in position involves simply inserting the finger 12 of each partition into the groove 10 and bind the clamping bar 11.

In Fig. 8 the finger 12 is shown as having an extension 15 fitting under the clamping bar 11, so that each partition is locked in place.

The construction of the shelf and partitions is such that each shelf can be removed without removing the partitions. This is provided for by the way in which the supports 3 are pivotally mounted. Each partition is formed with the inclined under edge 16 which is engaged by the back stop 5 when the shelf is withdrawn as shown in Fig. 2. The engagement of the back stop with the partitions lifts the latter to allow the shelf to be withdrawn and such lifting of the partition is provided for by the manner in which the stop 7 is pivoted. When any shelf is thrown forwardly the back stop 5 will engage the mail and withdraw it from the partitions.

The partitions are specially designed so that they will hold equally well letters of all sizes and so that there is no possibility that any part of the partition will become caught on the portion of the flap of any envelope between the point where the adhesive is applied and the edge of the envelope.

In most envelopes the adhesive is applied to the flap within the area included by the dotted line 17 in Fig. 15 and therefore when the envelope is sealed the portion 18 of the flap is free from the envelope. Sometimes this unsealed portion 18 of the envelope stands out from the envelope slightly and as a result when the letters are thrown into the routing case the corner 18 of the flap is apt to become caught on the front of the partition thus tearing or injuring the envelope.

In the present invention the partitions are designed so as to obviate this danger. This is accomplished by giving the partition such a shape that when a letter of any size is thrown into a compartment close to a partition the partition will engage first with the portion of the flap having the adhesive before it engages the portion 18 of the flap and thus the partition cannot enter the space between the flap and body of the envelope at the point 18.

Each partition is made with an inclined edge 19, the inclination of which is less than that of the edges 20 of the flap. With this arrangement whenever any letter is thrown into the compartment next to a partition the point 21 of the flap will be the first portion thereof which will engage the partition and after the point 21 has passed between the edges 19 of the partition then there can be no possibility that the unsealed portion 18 of the flap will engage any part of the partition and become torn thereby.

This is illustrated in Fig. 8 wherein an envelope is shown in dotted lines and wherein is also illustrated the difference in the angle between the edge 19 of the partition and the edge of the flap. From said figure it will be observed that the point of the flap is entered behind the partition before the part 18 thereof engages the partition.

In the construction shown in Figs. 2 and 8 the bottom edge of the partition has the inclined portion 16 and the straight portion 22 which extends parallel to the shelf. The stop 7 is held in position so that the edge 22 of the partitions will be just free of the shelf and such adjustment of the stop is provided for by means of an adjusting screw 23 which is secured in the strip 24 carried by the side 2 and which forms a stop for the swinging movement of the support 7 in one direction. This screw 23 can be adjusted so as to raise or lower the front edges of the partitions to place them so that they will just be free of the shelves 3.

In Fig. 6 a construction is shown wherein each partition is formed on its under side at the front end with an extension 24 which fits in a groove 25 formed in the shelf 3. This construction may be employed where it is desired to provide means to hold the front ends of the partitions from lateral movement.

In Fig. 6 a construction is also illustrated wherein the shelves have dividing members 26 spaced the same distance apart as the partitions and arranged directly underneath the partitions. These dividing members form continuations of the partitions and fill the space beneath the inclined face 16 of the partitions so as to prevent the possibility of any small mail slipping under the partitions at this point. These dividing members 26 are shown as pieces of sheet metal set into grooves 27 formed in the shelves and the back stop 5. The front ends of the dividing members are pointed as shown at 28 and said front ends are held in place by a retaining bar 29, which is set in a groove in the shelf and which overlies the edges of the pointed ends 28. The back stop is provided with a retaining plate 30 which overlies the rear ends of the dividing members and holds them in position. This retaining plate is held in position by screws 31 passing through slots 32 formed therein. The purpose of the slot is to permit the retaining plate to be adjusted back to the rear

whenever it is desired to remove or insert any dividing member 26.

The front ends of some or all of the partitions may be differently colored to provide eye guides to assist the operator in sorting the mail. For instance, the partitions forming compartments corresponding to some predetermined section of the carrier's route may have their front ends of one color, the partitions forming compartments corresponding to another section of the route may have their tip ends of a different color, and the partitions corresponding to still another section may have their tip ends of another color, etc. Or, if desired, those partitions which separate the different sections of the route may have their tip ends colored. In either case the color on the ends of the partitions acts as an eye guide to assist the carrier in quickly placing any piece of mail into its correct location.

In the drawings the colored portions of the partitions are indicated at 33.

Where the partitions are removed at some point to make a wide compartment, such for instance as the compartment 34 in Fig. 3 it is sometimes desirable to have high partitions at each side of the compartment as shown at 35, said partitions being more nearly rectangular and extending substantially the full vertical distance between the shelves. This form of partition is desirable at this point because where the wide compartment is employed the mail does not necessarily stand on edge but is thrown into the compartment promiscuously and much of it lies flat on its side.

The table shown in Fig. 1 is provided with a top which has large compartments adapted to receive paper and other bulky mail. This table top comprises the shelf members 36, 37, and 38 which are connected to end members 37 and a suitable back 40. Said shelves, end member and back are rigidly connected and constitute a unit. The legs of the tables are detachably secured to the top and the said legs are arranged in connected pairs, one pair being situated at each end of the table. The two legs 41 at one end of the table are rigidly connected by the cross bars 42, 43 and the two legs 44, on the other end of the table are similarly connected. Each pair of legs are detachably secured to the table by means of suitable brackets 45. When the table is set up the two back legs are connected by a board 46 which is detachably secured to them by means of screws, and the cross pieces 42 support a shelf 47 which is also detachably secured thereto. This shelf 47 constitutes an additional space for holding mail, mail-bags or any other articles thrown into the carrier's desk and it also constitutes a foot rest for the carrier when he is seated in front of the desk. The front edge of this shelf 47 is protected by an angle iron strip 48 and in setting up the shelf it is spaced slightly from the back board 47 as shown at 48 so that any dirt on the shelf can be easily brushed therefrom.

The routing case is provided with the bottom 50 and is detachably secured on the table top. The shelf 38 of the table top extends only part way to the rear and when the routing case is in place this shelf 38 is in line with the bottom 50 of the routing case so that the two combined form a complete shelf. The routing case is made of slightly greater length than the table top so that the sides 2 of the case overhang the ends of the table top. One purpose of this is to provide a construction in which the table top can be packed into the routing case for shipment.

In packing for shipment the routing case is disconnected from the table top and the legs are also removed therefrom. The shelves are then taken out of the routing case and the table top may be placed within the routing case as shown in Figs. 11 and 12. The table legs may then be placed on the routing case as indicated in Fig. 11 and the shelves 3, supports 7, and other parts assembled as indicated in Figs. 11 and 12 after which the knocked down structure may be enclosed in a packing box 51.

In Figs. 8 and 9 a construction is shown which provides a roller bearing for the shelves and which also prevents the possibility of the shelves twisting as they are drawn outwardly. In this construction each shelf has loosely journalled therein a shaft 52 carrying at each end a gear 53 which meshes with a rack bar 54 secured to the side 2 of the routing case. The two gears 53 are rigid on the shaft 52 and therefore as the shelf is moved back and forth in its groove 55 both ends of the shelf will be compelled to move at the same speed. This will obviate the possibility of the shelf twisting.

The front edge of the shelf is shown as supported on a roller 56 which is received in a recess 57 formed in the side 2 and is confined behind the rack bar 54.

To further guide the shelf each shelf carries a guide roll 58 which engages the bottom of the groove 55 thus reducing friction.

To assist in sorting the paper mail I have shown in Fig. 10 a device comprising a board 59 having a plurality of partitions 60 extending therefrom. This device is adapted to be placed on the shelf 38 with the board 59 at the front of the shelf and the partitions directed backwardly. This device is intended to be used by the carrier in sorting paper and other bulky mail after he has finished sorting the letter email. A strap or tape 61 may be laid on the shelf 38 so that when the mail is placed in the compartments formed by the partitions 60 it will overlie the strap 61. After the sorting has been accomplished the sorting device is removed

from the front of the shelf 38 thus leaving the mail properly arranged to be bundled up by the strap or tape 61. When not in use this sorting device can be placed on the shelf 47.

In Figs. 13 and 14 I have illustrated a different embodiment of the invention wherein the table is provided with a tilting tray for holding the bulky mail matter. In this construction the table is formed beneath the top 120 with a tray or shelf 121 which is supported on the transverse partition 122. This tray is a tilting tray and it is adapted to be turned from the position shown in full lines Figs. 13 and 14 into the dotted line position Fig. 13. When in the full line position the bottom of the tray stands substantially horizontally and the front is open so that mail matter may be freely deposited on the tray. When the tray is in the dotted line position the front is elevated so as to afford plenty of knee room for the carrier.

In order to permit the tray to thus tilt the sides 123 thereof are made with the inclined or slanting upper edge 124, each side being relatively shallow at the front and at the back extending from the bottom of the tray to the table top. Each side is also provided with the extension 125 in the rear of the back 126 of the tray and this extension is formed with the two edges 127, 128 at right angles to each other, the edge 128 being inclined to the horizontal. The top edge of the tray is formed slightly rounding as shown at 129 thereby permitting the tray to tilt or rock about the point 130. When the tray is in its dotted line position the edge 128 of each extension rests on the support 122 and the edge 127 rests against the back 133. Furthermore when in this tilted position the inclined edge 124 of each side rests against the under side of the table top 121. In this position the bottom of the tray is elevated at the front so that the carrier sitting at the desk will have plenty of knee room, it being understood that the horizontal partition 122 is cut away at the front as shown at 138 to provide the desired knee room when the tray is tilted.

140 indicate rollers carried by the partition 122 on which the bottom of the tray is supported and 141 are rollers carried by the tray and rolling on the partition 122. These rollers are to facilitate the withdrawal of the tray if it is desired to pull it outwardly.

I claim.

1. In a carrier's desk, the combination with shelves, of partitions dividing the shelves into compartments, each partition having a downwardly-inclined upper edge, the inclination of which is less than that of the edge of the flap of an envelope, whereby when an envelope is inserted into a compartment the sealed portion of the flap will engage the partition before the unsealed portion thereof.

2. In a carrier's desk, the combination with a case having removable shelves each having a back stop, of a plurality of partitions for each shelf, a pivoted support for the partitions for each shelf, each partition having an inclined under edge which is engaged by the back stop as the shelf is withdrawn.

3. In a carrier's desk, the combination with a case, of a plurality of shelves removably sustained thereby, partitions for each shelf supported independently thereof, each shelf having relatively short grooves at its front edge in which the front ends of the partitions are received and by which they are retained against lateral movement, said partitions being vertically movable so as to permit the ends thereof to ride out of the grooves when the shelf is withdrawn.

4. In a carrier's desk, the combination with shelves, of partitions dividing the shelves into compartments, each partition having a vertical dimension substantially equal to that of an ordinary envelope and a downwardly-inclined upper edge, the inclination of which edge is less than that of the edge of the flap of an envelope whereby when the sealed envelope is inserted into a compartment the point of the flap will be the first part thereof which engages the partition and the inclined edge of the partition will have a progressive engagement with the flap from the point thereof to the top.

5. In a carrier's desk the combination with a table having a top, of a routing case supported on said top, and a tray situated beneath the top, said tray being pivotally mounted at its rear end and swingable while in position beneath the table top from a horizontal position, in which it is operative to receive mail, upwardly toward the table top into an inclined position thereby to provide added knee room for the carrier.

6. In a carrier's desk, the combination with a table having a top, of a routing case supported on said top, and a tilting tray sustained by the table beneath the top, and adapted to be tilted from a horizontal position upwardly into an inclined position above the horizontal position, said tray in the latter position providing added knee room for the carrier.

In testimony whereof, I have signed my name to this specification.

ROBERT T. BOURN.