

March 29, 1932.

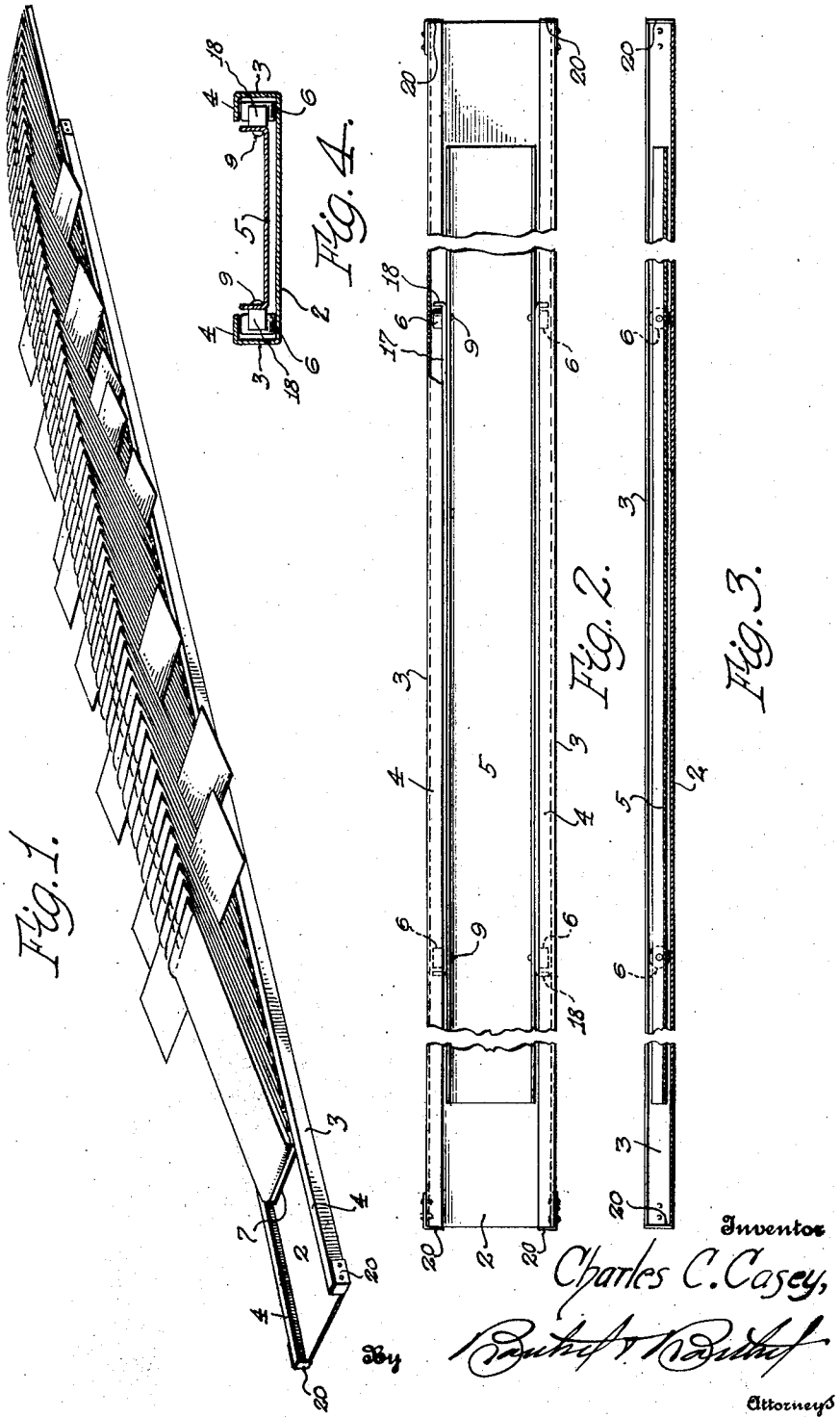
C. C. CASEY

1,851,662

SORTING DEVICE

Filed March 10, 1928

2 Sheets-Sheet 1



March 29, 1932.

C. C. CASEY

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2 Sheets-Sheet 2

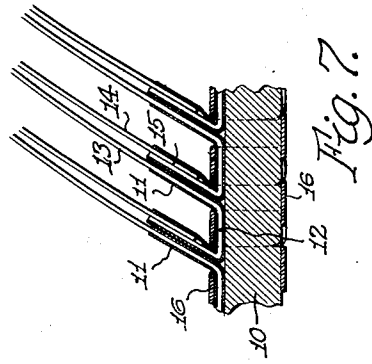


Fig. 7.

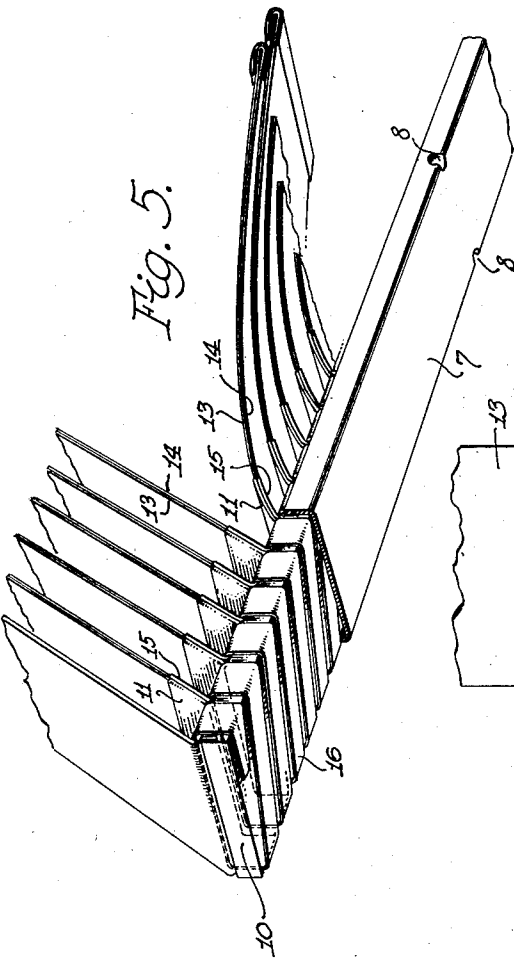


Fig. 5.

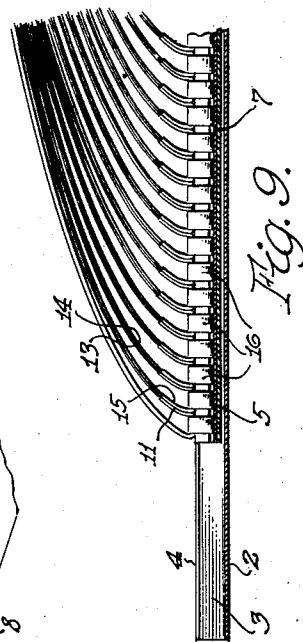


Fig. 9.

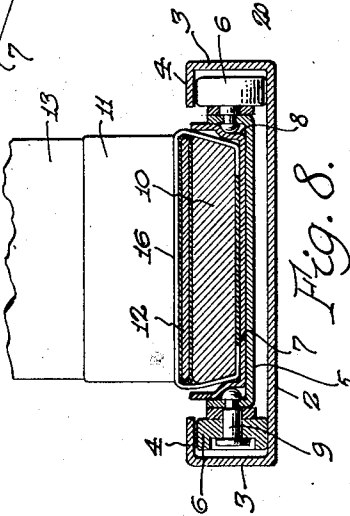


Fig. 8.

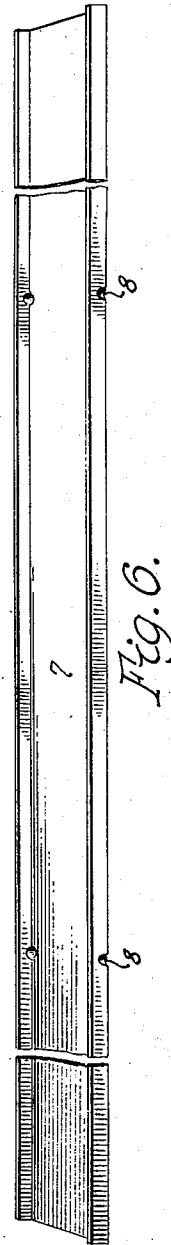


Fig. 6.

Inventor

Charles C. Casey,

By

Bartholomew

Attorneys

UNITED STATES PATENT OFFICE

CHARLES C. CASEY, OF DETROIT, MICHIGAN

SORTING DEVICE

Application filed March 10, 1928. Serial No. 260,563.

The present invention pertains to a novel sorting device of the general character disclosed in my Patent No. 1,439,793, of December 26, 1922, but modified for greater capacity and greater convenience in handling. The ordinary foldable sorting device of the flap type becomes too long for convenient handling if more than a limited number of flaps are provided therein. The handling of such a device moreover requires considerable shifting back and forth as the operator uses the parts of the alphabet located at the ends thereof. The present invention overcomes such shifting and moving of the sorter by bodily movement thereof, with the result that more flaps may be used, the operator's work is less tedious and hence quicker and more accurate.

In keeping with these objects, the device of the invention embodies a series of flaps movable in unison along a track. This track may be in the form of a separate member which itself may be carried from place to place, or in the nature of a built-in structure provided in the top of a desk or work table. A carriage moves in this track and carries the index flaps which under these conditions, may be more numerous than is conveniently possible in the foldable type of sorter. The overlapping index flaps are secured to this carriage, and the latter may be easily shifted by the operator with one hand in filing in distant parts of the alphabet or series, while the other hand may at the same time be used for locating and lifting an article from the pile of work.

The invention is fully disclosed by way of example in the following description and in the accompanying drawings, in which

Figure 1 is a perspective view of the device;

Figure 2 is a plan view of the track and carriage;

Figure 3 is a longitudinal section thereof;

Figure 4 is a transverse section thereof;

Figure 5 is a fragmentary perspective view of the flaps and base therefor;

Figure 6 is a perspective view of the tray;

Figure 7 is a fragmentary longitudinal section of the structure shown in Figure 5;

Figure 8 is a transverse section of the complete device; and

Figure 9 is a fragmentary longitudinal section thereof.

Reference to these views will now be made by use of like characters which are employed to designate corresponding parts throughout.

The track member is preferably formed of sheet-metal stamped to provide a flat bottom section 2, side flanges 3 and upper flanges 4 extending inwardly from the edges of the side flanges to provide the ways as will presently appear. In the track member is mounted a carriage having a body in the shape of a tray 5 with rollers 6 secured to the sides thereof. These rollers ride in the ways previously mentioned, namely those formed by the flanges 4 cooperating with the flat portion 2 of the track member.

The carriage 5 in turn receives a tray 7 fitted therein and bent inwardly at points 8 to accommodate the heads of the pins 9 which hold the rollers 6 to the carriage. The tray carries the sorter tabs or flaps, the assembly of which will now be described.

These flaps are arranged upon a stiff elongated base member 10 across which are laid binding strips 11 bent to a U-shaped configuration and disposed in pairs nested one within the other as shown more clearly in Figure 7. Each flap has one end secured between a pair of nested binders, co-extensively therewith as indicated by the numeral 12, is carried outwardly as at 13, bent back upon itself as at 14 and finally has its other end secured in the adjacent pair of binders as at 15. A tape 16 is now wound transversely around the base 10 and laid across the backs of the uppermost U-shaped binders whereby it secures the binders and flaps to the base and acquires a somewhat helical formation. This structure fits into the tray 7 as shown in Figure 8 and is preferably secured thereto, so that a number of such flap and tray assemblies may be interchangeable with respect to the carriage 5.

The sides of the carriage are provided with longitudinal strips 17 having their ends bent outwardly at 18 to serve as stop members in conjunction with angular bumpers 20 se-

cured to the ends of the track member. This arrangement prevents the carriage from being slid off the track.

In the use of the device the number of tabs or flaps provided on the carriage may be so great that the ends of the series are out of reach of the operator. This however is not detrimental to the use of the device, since the entire series may be instantly shifted by moving the carriage along the track. Hence this system enables the use of a greater number of flaps than is usually possible in a sorting device of this general character.

The track, instead of being a separate member, may be built into the top of a desk or table if desired.

Although a specific embodiment of the invention has been illustrated and described, it will be understood that various alterations in the details of construction may be made without departing from the scope of the invention as indicated by the appended claims.

What I claim is:—

1. A sorting device comprising a track member, a carriage movable along said member, and a series of mutually overlapping flaps carried by said carriage, said flaps being swingable on axes lying transversely of said track and adapted to receive members of greater width than the flaps and track therebetween.

2. A sorting device comprising a track member, a carriage movable along said member, a base member carried by said carriage, and a series of mutually overlapping flaps attached to said base member, said flaps being swingable on axes lying transversely of said track and adapted to receive members of greater width than the flaps and track therebetween.

3. A sorting device comprising a track member, a carriage movable along said member, a removable tray mounted on said carriage, and a series of flaps mounted on said tray on axes lying transversely of said track.

4. A sorting device comprising a track member, a carriage movable along said member, a removable tray mounted on said carriage, a base member secured in said tray, and a series of flaps secured to said base member on axes lying transversely of said track.

5. A sorting device comprising a track, a base member mounted to move along said track, binding members secured transversely of said base member, flaps secured in said binding members, and a tape wound helically around said base member and over said binding members.

6. A sorting device comprising a track, a base member mounted to move along said track, binding members secured transversely of said base member and consisting of pairs of nested U-shaped strips, flaps each having one end secured between a pair of nested strips coextensively therewith and the

other end inserted between the adjacent pair of nested strips, and a tape wound helically around said base member and over said binding members.

7. A sorting device comprising a base member, reinforcing members secured transversely of said base member and consisting of pairs of nested U-shaped strips, flaps each having one end secured between a pair of nested strips coextensively therewith and the other end inserted between the adjacent pair of nested strips, and a tape wound helically around said base member and over said binding members.

8. A sorting device comprising a track, a carriage movable along said track, stops carried by said carriage, bumpers secured to the ends of said track and adapted for engagement by said stops, and a series of mutually overlapping flaps carried by said carriages, said flaps being swingable on axes lying transversely of said track and adapted to receive members of greater width than the flaps and track therebetween.

9. A sorting device comprising a track member, a carriage movable along said member, and a series of mutually overlapping flaps carried by said carriage, said flaps being swingable on axes lying transversely of said track, said series of flaps having an overall length greater than an arm's reach from either end of the series.

In testimony whereof I affix my signature.
CHARLES C. CASEY.

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