July 1, 1941. L. LOMBARDINI 2,247,637

FILING DEVICE

Filed Dec. 22, 1938

Fig. 1

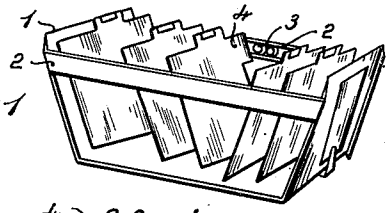


Fig. 2

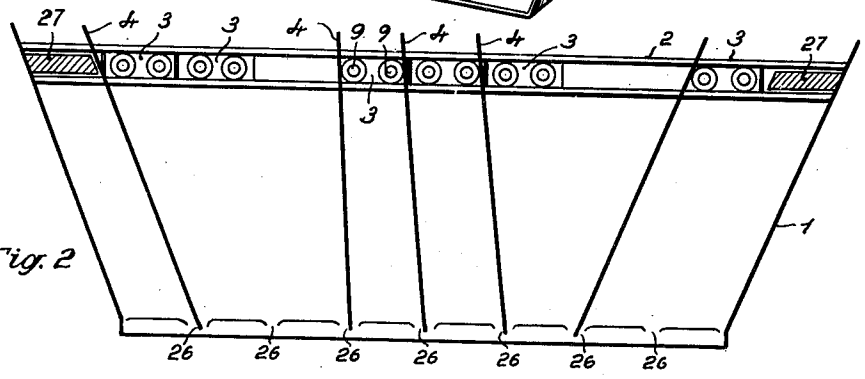


Fig. 3

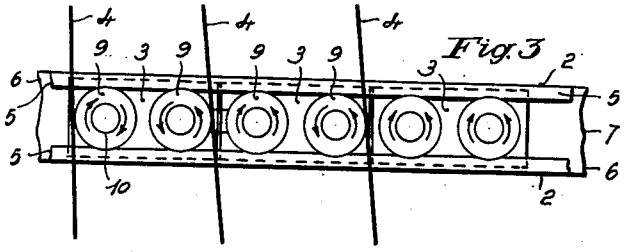


Fig. 4

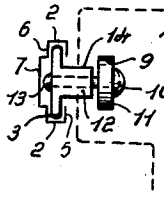


Fig. 5

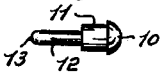


Fig. 6

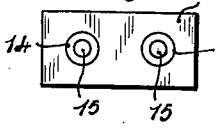


Fig. 7

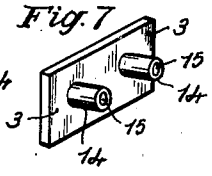


Fig. 8

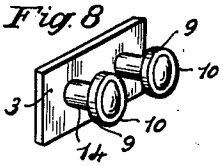


Fig. 9

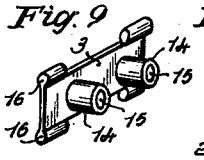


Fig. 10

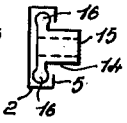


Fig. 11

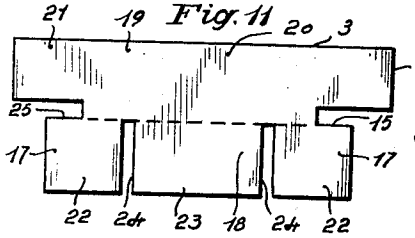


Fig. 12

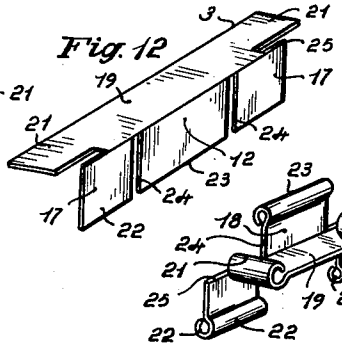


Fig. 13

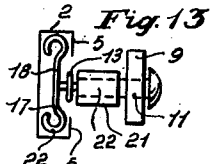
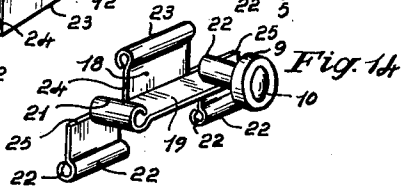


Fig. 14



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Patented July 1, 1941 2,247,637

UNITED STATES PATENT OFFICE

2,247,637

FILING DEVICE

Luigi Lombardini, Turin, Italy

Application December 22, 1938, Serial No. 247,176
In Italy May 20, 1938

2 Claims. (Cl. 129—16)

The present invention has for its object improvements in distancing devices for partitions in filing devices. The improvements according to the present invention consist in applying externally to the distancing blocks one or more rotating devices, independent of each other, so as to reduce appreciably the friction between the partitions and the blocks, both in the partition that pushes the said block in handling the file drawer and in the blocks that in such handling engage the partitions, which friction is thus transformed from sliding to rolling friction.

The invention is illustrated, by way of example and not of limitation, in the annexed drawing in which are shown certain preferred embodiments thereof.

In said drawing:

Fig. 1 is a perspective view of a file drawer provided with improved distancing devices according to the invention.

Fig. 2 is a side longitudinal section view, on a larger scale, as seen from the inside of the drawer, of the improved distancing elements in accordance with the invention, and of some of the partitions.

Fig. 3 is a partial view, on a still larger scale, of Fig. 2.

Fig. 4 is a side view of Fig. 3.

Fig. 5 shows a detail of Fig. 4.

Figs. 6, 7 and 8 show respectively a front view and two perspective views of the said distancing device according to one embodiment.

Fig. 9 shows in a perspective view, a modified form of distancing element according to the invention.

Fig. 10 is a side view thereof shown completed with its respective guide.

Figs. 11 and 12 show the stamping or pressing and bending of another form of distancing element in metal sheet adapted to bear devices for applying wheels and the like in order to reduce friction to a minimum.

Figs. 13 and 14 show, respectively, in side view, and in perspective the distancing element shown in Figs. 11 and 12 carrying one of the rotating devices forming the object of the invention.

As shown in the said drawing, in which the same numbers distinguish the similar parts, in the first embodiment illustrated in Figs. 6, 7 and 8, block 3 is provided with two spaced projections 14, internally hollow, for supporting the rotating devices according to the invention, constituted by rollers, washers and the like. For that object, a pin or other equivalent means is used (Fig. 5) having a cylindrical enlargement 11 near head 10, of a diameter greater than terminal part 12. On the said pin, and on its part 11, is inserted a washer or a little wheel 9, bored centrally. The whole assemblage is then inserted into the recess 15 of each projection 14, the pin being fixed at 13 on the back of block 3. By means of this device the various displacements of the partitions 4 in contact with the said rotating devices will be effected through the same and facilitated to a maximum, inasmuch as the friction occurring between the partitions and the said rotating devices will be transformed from a sliding to a rolling friction of almost negligible value.

In Figs. 9 and 10 is shown a modification of the improved distancing device together with a block, shaped so as to reduce also substantially, its surfaces coming into contact with the lateral guides of the drawer. For that object, block 3 carries, in analogy with the embodiment previously described, two horizontal spaced hollow projections 14, adapted to contain the pin carrying the washer or little wheel 9 constituting the sliding device for the reduction of the friction. The block 3 in this modification is provided with rounded ears 16 which engage the guide-way.

According to the further embodiment shown in Figs. 10 to 14, illustrating a distancing device obtained by means of stamping or pressing and bending a metal sheet 20 and made for the same object of reducing substantially the surfaces thereof in contact with the side guides of the drawer, the bent edges 21 of projection 19 are shaped, in bending, in such a way as to obtain equally a recess adapted to receive the pin and the respective washer or wheel 9 which constitute the sliding device for the reduction of the friction; devices which will take in the drawer, with relation to the respective distancing elements, the position shown in Figs. 1 and 2 and will act as is shown in Fig. 3.

The metal blank 20 is provided with recesses 25 and 24 which define members 17 and 18. The members 17 and 18 are then rounded to provide partitions 22 and 23, as shown in Figures 13 and 14.

The distancing device thus described engages in the guideway 2 inserted between the side wall members 1 of the file drawer.

The partitions 4 engage at their upper edges the rolls 9. The lower edges of the partition engage in the grooves 26 along the bottom of the file drawer. An abutment 27 is provided at each end of the file drawer for each end partition. The guide member 2 may be made of sheet metal

bent to provide wall members 5 defining the groove 2, as shown in Figures 10 and 13 of the drawing. In the modification shown in Figure 5, the guide member is bent step-wise to provide wall members 6 and 7 for the head 13 of the pin 12.

I claim:

1. In a vertical file drawer having partitions hingedly supported at one edge within the drawer, the combination of a guide-way extending along an upper part of the drawer, a plate-like member mounted for sliding within said guide-way, a socket extending laterally of said plate-like member, a pin fitting into said socket and a roller mounted for free rotation on said pin and adapted to engage said partition at another edge.

2. In a filing device having partitions hingedly supported along one edge in said device, the combination of a pair of guide-ways extending longitudinally along the opposite sides of said filing device, slidable members in each of said guide-ways, a plurality of spacing members for said partitions fixed on each of said slidable members in spaced relationship, friction-reducing means carried by said spacing members and adapted to engage the opposing free edges of said partitions.

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