Nov. 18, 1958 L. F. MARKS ET AL 2,860,642

CARD FILE

Filed July 26, 1956 2 Sheets-Sheet 1

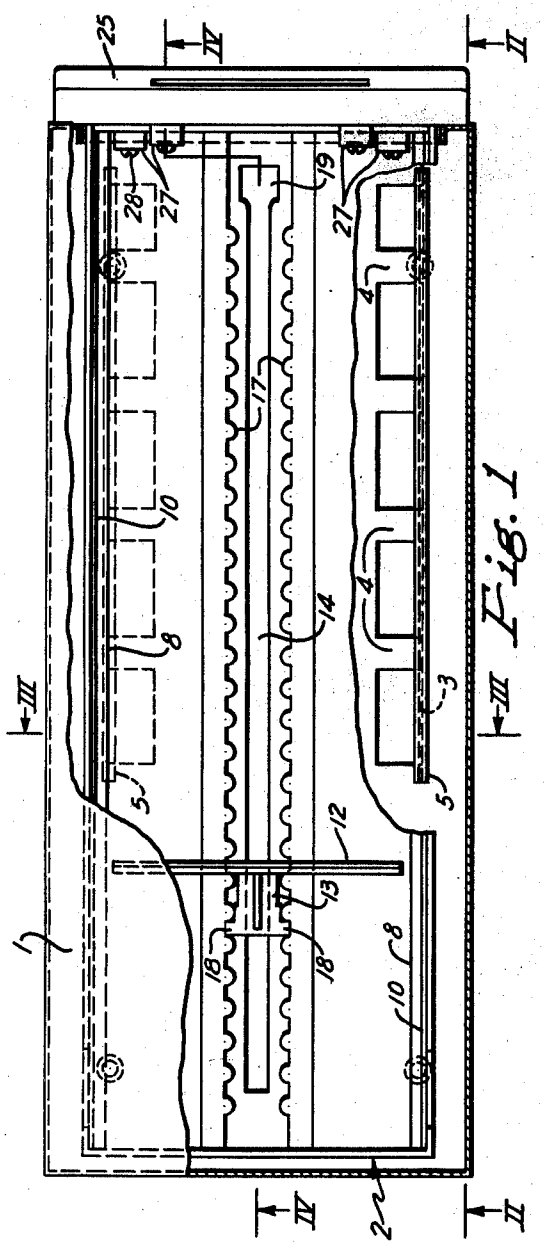


Fig. 1

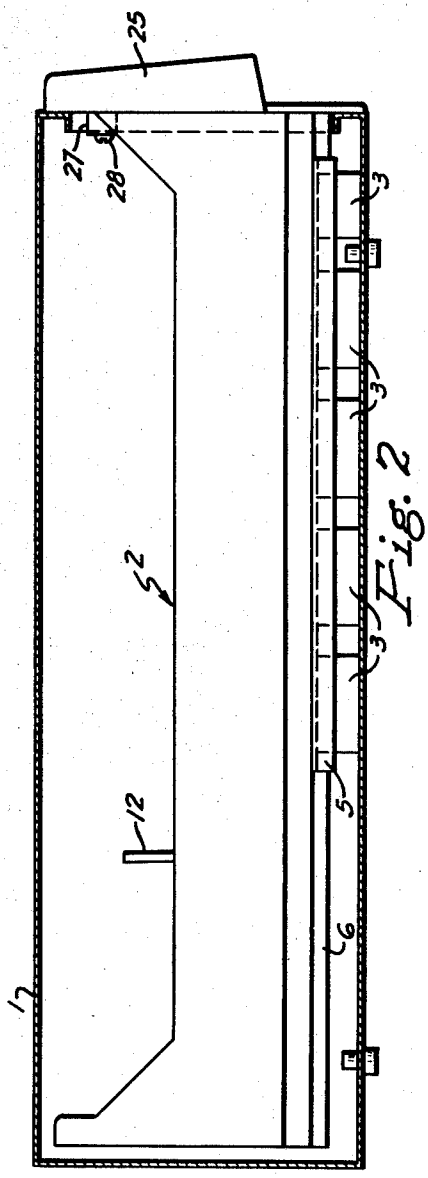


Fig. 2

INVENTORS
LOU F. MARKS AND
BY LEONARD LOUIK

Brown, Critchlow, Flick & Peckham
ATTORNEYS

Nov. 18, 1958 L. F. MARKS ET AL 2,860,642

CARD FILE

Filed July 26, 1956 2 Sheets-Sheet 2

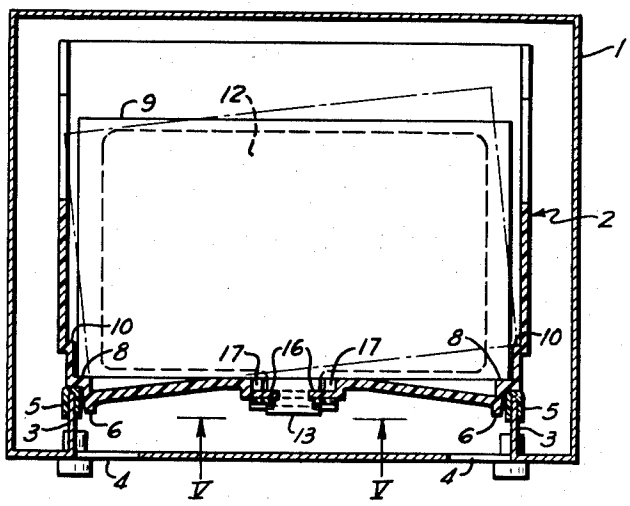


Fig. 3

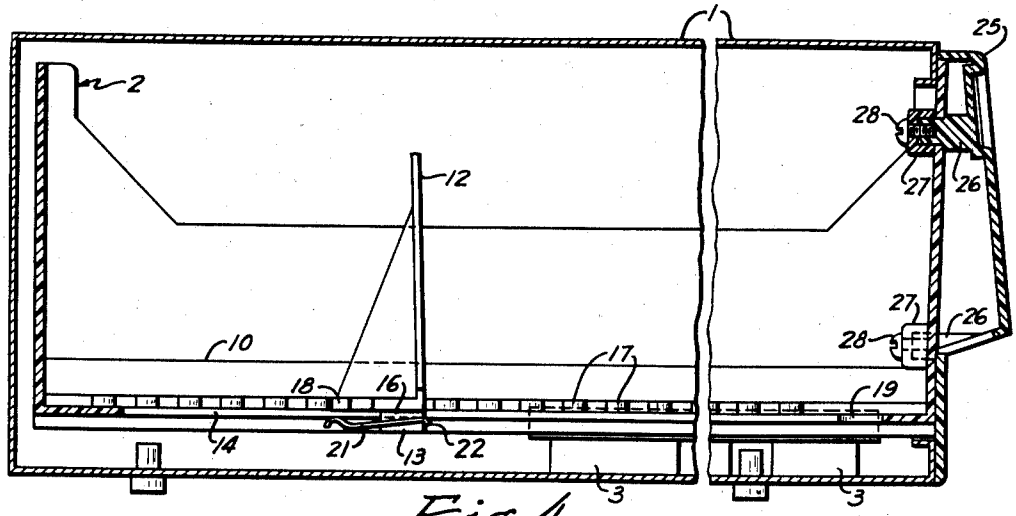


Fig. 4

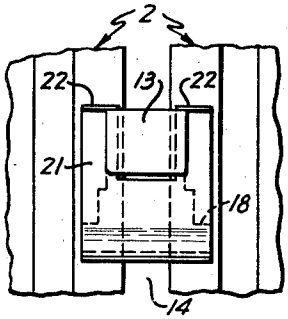


Fig. 5

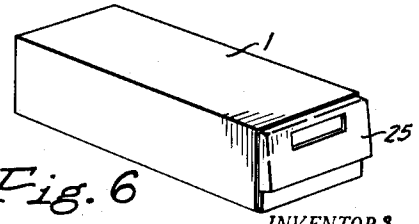


Fig. 6

INVENTORS
LOU F. MARKS AND
BY LEONARD LOVIK

Brown, Critchlow, Flick & Peckham
ATTORNEYS

United States Patent Office 2,860,642 Patented Nov. 18, 1958

2,860,642

CARD FILE

Lou F. Marks and Leonard Louik, Pittsburgh, Pa., assignors to Haskell Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application July 26, 1956, Serial No. 600,239

3 Claims. (Cl. 129—31)

This invention relates to card files of the type in which a drawer is slidably mounted in a cabinet.

It is among the objects of this invention to provide a card file which is relatively inexpensive to make, which utilizes a minimum number of parts and fasteners, which has interchangeable face panels for the front of the drawer, and in which selected cards can be held in a tilted position relative to the remaining cards in the drawer.

The preferred embodiment of the invention is illustrated in the accompanying drawing, in which

Fig. 1 is a plan view of the entire file, with most of the cabinet top and part of the drawer broken away;

Fig. 2 is a longitudinal section through the cabinet, taken on the line II—II of Fig. 1;

Fig. 3 is an enlarged cross section through the file, taken on the line III—III of Fig. 1;

Fig. 4 is an enlarged longitudinal vertical section through the file, taken on the line IV—IV of Fig. 1;

Fig. 5 is a fragmentary enlarged view, taken on the line V—V of Fig. 3; and

Fig. 6 is a greatly reduced perspective view of the complete file.

Referring to the drawings, the card file cabinet **1** is an elongated metal box which is open at its front end so that a drawer **2** can be slid in and out of the cabinet. To support and guide the drawer, the lower part of the cabinet is provided with a track. The track is formed by punching two parallel rows of tongues **3** out of the bottom of the cabinet and bending them upward so that all of the tongues in each row are in a straight line. Preferably, the tongues are rectangular. The horizontal upper edges of all of the tongues in both rows lay in the same horizontal plane. By striking up spaced tongues from the bottom of the cabinet instead of bending up a long rib, the openings left by the tongues are spaced by strips **4** of metal so that the bottom of the cabinet is not weakened like it would be by a long slot. In order to form a smooth and continuous track, an inverted U-shaped rail **5** is fitted over the upper edge portions of the tongues in each row. This rail preferably is formed from a synthetic plastic and it frictionally grips the tongues to hold itself in place. The upper surfaces of the two rails slidably support the drawer resting on them. To restrict sideways movement of the drawer, the bottom of it is provided with parallel longitudinal ribs **6** which substantially engage the inner sides of the two rails, as shown in Fig. 3.

Although the drawer can be made of different materials, a most suitable material is a synthetic resin which can be molded into the desired shape. By molding the drawer from a plastic, it can be provided with the desired features that are about to be described, without the expense that would be involved if it were built up from metal plates and the like. One of these features is that the drawer permits any given card in it to be supported in tilted position so that one corner will project above the rest of the cards in the drawer. Accordingly, the inside of the drawer is provided with shoulders **8** extending along opposite sides of the bottom wall for normally supporting the opposite ends of cards **9** on edge, as

shown in Fig. 3. A drawer that is made for standard 3 x 5 cards, for example, will have the shoulders less than five inches apart, so each card will be supported at its lower corners. A short distance above each shoulder is a ledge **10** that extends along the adjoining side wall. These ledges project into the drawer like the shoulders, but not as far. Each ledge projects far enough, however, to support one end of a card while the lower corner of the opposite end of the card is disposed below the shoulder beside that corner, as shown in broken lines in Fig. 3.

In other words, when a card is moved endwise off one of the shoulders and its opposite end simultaneously is raised, that opposite end can be made to rest on the adjacent ledge. The card will not slide endwise off the ledge, because the opposite end of the card will engage either the inner edge of the adjoining shoulder or the upper edge of the side wall of the drawer. Both shoulder and drawer side wall can be engaged simultaneously if desired, by having the opposite ledge at the correct height. Preferably, the card will engage at least the edge of the shoulder. Cards that are tilted in this manner and therefore project above the rest of the cards in the drawer can be referred back to readily by a person who is working on the cards. When he is through with the tilted cards, he merely has to lift the lower end of the card so that the other end will drop down onto the underlying shoulder. The shoulders and ledges are, of course, molded into the drawer.

It is preferred to also support the horizontal cards along their central portions, so the upper surface of the central longitudinal area of the bottom wall of the drawer is located in the same plane as the shoulders and is connected with the bottoms of the shoulders by inclined surfaces. Preferably, the inclination of each surface is such that the ledge at the opposite side of the drawer lies in the same inclined plane. Therefore, when a card is tilted in the drawer, it will rest flat against one of these two inclined surfaces depending upon which end of the card is raised.

To keep the cards upright and also pressed together if desired, an upright card follower **12** is provided. This follower can be moved forward and back along the drawer to press the cards together or to permit them to be spread apart. The follower has a central foot **13** that extends out behind it a short distance and also down through a slot **14**, with which the bottom wall of the drawer is provided. This slot extends along the drawer throughout nearly its entire length. As shown in Figs. 3 and 4, the foot has grooves **16** in its opposite sides that receive the opposite walls of the slot to hold the foot in place but yet allow it to slide lengthwise of the drawer. The top of the bottom wall of the drawer is provided along the opposite sides of the slot with rows of longitudinally spaced teeth **17**. Preferably, the tops of these teeth are flush with or slightly below the upper surface of the central portion of the drawer. The teeth at each side of the slot project toward those at the opposite side, and their inner ends are spaced a short distance from the edges of the slot so that the foot can slide along between the two rows of teeth. To hold the follower in different selected positions, the rear end of its foot has lateral projections **18** fitting between a pair of teeth in each row. As long as the projections are between the teeth the follower cannot be moved lengthwise of the drawer. However, the lower walls of the foot grooves are inclined downwardly and rearwardly to permit the rear end of the foot to be tilted up in order to lift its lateral projections from between the teeth. When that is done the follower can be moved along the slot. The front end of the slot is enlarged at **19** to permit the foot to be inserted in or removed from the slot.

It is possible to use the follower as just described if it is balanced in such a manner that the foot projections **18** will tend to stay down between the teeth. It is better, however, to provide means for positively holding the projections between the teeth so that there will be no danger of the follower accidentally moving along the slot. For this purpose a spring **21** (Figs. 3, 4 and 5) is attached to the foot beneath the bottom wall of the drawer and presses up against it. By swinging the top of the follower forward, the spring will be compressed and projections **18** will be lifted from between the teeth.

As shown in Fig. 5, the preferred form of spring is a forked leaf spring that straddles the follower foot beneath the bottom wall of the drawer and extends into and along grooves **16** in the foot. The spring projects behind the foot and is bent in such a manner as to press down against the lower walls of the grooves and up against the bottom wall of the drawer to normally hold projections **18** down between the teeth. The bifurcated front end of the spring has down-turned lips **22** (Fig. 4) that engage the front of the foot to hold the two members connected. The spring can be removed by moving the follower forward in the drawer until the foot reaches the wide front end of the slot. At this point the narrow front portion of the foot can tilt down through the slot and the spring easily pulled backward out of the grooves in the foot. The follower then can be lifted from the drawer.

Another feature of this invention is that the front of the drawer can be provided with a removable face panel so that panels of different colors can be used. Accordingly, as best shown in Fig. 4, the front wall of the drawer is provided with several holes, and the colored face panel **25** is provided with bosses **26** that fit in the holes and project back into the drawer a very short distance. The bosses have threaded openings in their rear ends and the latter fit into cups **27** that are provided with holes aligned with the threaded openings. Screws **28** extend through the cup holes and into the boss openings to connect the cups to the bosses and press the cups against the back of the front wall. This holds the panel in place but permits it to be removed easily and replaced by a panel having a different color. The panels may be molded from colored plastic.

It will be observed that the opening in the front of the cabinet is high enough to permit the drawer to be opened and closed even when the cards are tilted as indicated in Fig. 3.

According to the provisions of the patent statutes, we have explained the principle of our invention and have illustrated and described what we now consider to represent its best embodiment. However, we desire to have it understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically illustrated and described.

We claim:

1. A card file drawer having front and rear ends and having a bottom wall provided with a central slot therethrough extending lengthwise of the drawer, an upright card follower in the drawer having a central foot projecting toward the rear end of the drawer and extending down through said slot and slidable lengthwise thereof, said foot having grooves in its opposite sides receiving the opposite side walls of the slot to hold the foot therein with the upper walls of the grooves seated flat on top of said side walls, the top of said bottom wall being provided along the opposite sides of the slot with rows of longitudinally spaced teeth spaced from said slot sides, and the rear end of said foot having lateral projections fitting between a pair of said teeth in each row to normally lock said follower against movement along the slot, the lower walls of said foot grooves being inclined downwardly and rearwardly to permit the rear end of the foot to be tilted up to lift said lateral projections from between the teeth, whereby the follower can be moved along the slot to another position in the drawer.

2. A card file drawer having front and rear ends and having a bottom wall provided in its top with a central recess extending lengthwise of the drawer, the bottom of said recess having a central longitudinal slot through it, an upright card follower in the drawer having a central foot in said recess projecting toward the rear end of the drawer and extending down through said slot and slidable lengthwise thereof, said foot having grooves in its opposite sides receiving the opposite side walls of the slot to hold the foot therein with the upper walls of the grooves seated flat on top of said side walls, a row of spaced teeth projecting from each side wall of the recess toward the opposite side of the recess, said teeth being spaced from said sides of the slot, and the rear end of said foot having lateral projections in said recess fitting between a pair of said teeth in each row to normally lock said follower against movement along the slot, the lower walls of said foot grooves being inclined downwardly and rearwardly to permit the rear end of the foot to be tilted up to lift said lateral projections from between the teeth, whereby the follower can be moved along the slot to another position in the drawer, and a spring attached to the foot and pressing up against the bottom wall of the drawer to normally hold said lateral projections down between the teeth.

3. A card file drawer having front and rear ends and having a bottom wall provided with a central slot therethrough extending lengthwise of the drawer, an upright card follower in the drawer having a central foot projecting toward the rear end of the drawer and extending down through said slot and slidable lengthwise thereof, said foot having grooves in its opposite sides receiving the opposite side walls of the slot to hold the foot therein with the upper walls of the grooves seated flat on top of said side walls, the top of said bottom wall being provided along the opposite sides of the slot with rows of longitudinally spaced teeth spaced from said slot sides, and the rear end of said foot having lateral projections fitting between a pair of said teeth in each row to normally lock said follower against movement along the slot, the lower walls of said foot grooves being inclined downwardly and rearwardly to permit the rear end of the foot to be tilted up to lift said lateral projections from between the teeth, whereby the follower can be moved along the slot to another position in the drawer, and a bifurcated leaf spring straddling the foot beneath said bottom wall and extending along said grooves, the spring projecting behind the foot and having its rear end pressing up against the bottom wall to normally hold said lateral projections down between the teeth, and the front end of this spring being bent down over the front of the foot to hold the spring in place on the foot.

References Cited in the file of this patent

UNITED STATES PATENTS

354,896	Goodman	Dec. 28, 1886
461,375	Spaunhorst	Oct. 13, 1891
729,351	Kade	May 26, 1903
814,816	Wheeler	Mar. 13, 1906
814,817	Wheeler	Mar. 13, 1906
831,024	Burrage	Sept. 11, 1906
860,956	Yawman	July 23, 1907
993,881	Rudolph	May 30, 1911
1,058,236	Hawkins	Apr. 8, 1913
1,325,537	Ringler	Dec. 23, 1919
1,741,743	Straubel	Dec. 31, 1929
2,176,183	Krieg	Oct. 17, 1939
2,176,913	Mandel	Oct. 24, 1939
2,289,665	Link	July 14, 1942

FOREIGN PATENTS

244,234	Italy	Nov. 14, 1925