

3,238,948

2 Sheets-Sheet 1

Fig.3

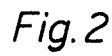


Fig. 2

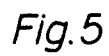
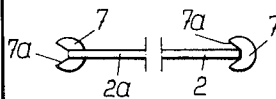


Fig.5



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DEVICE FOR FILING PUNCHED PAPERS IN FOLDERS

Filed Jan. 4, 1963

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Fig. 6

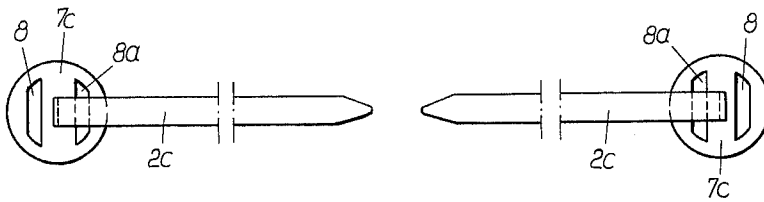


Fig. 7

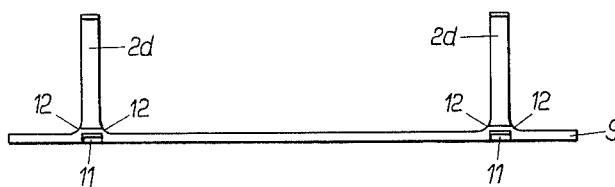
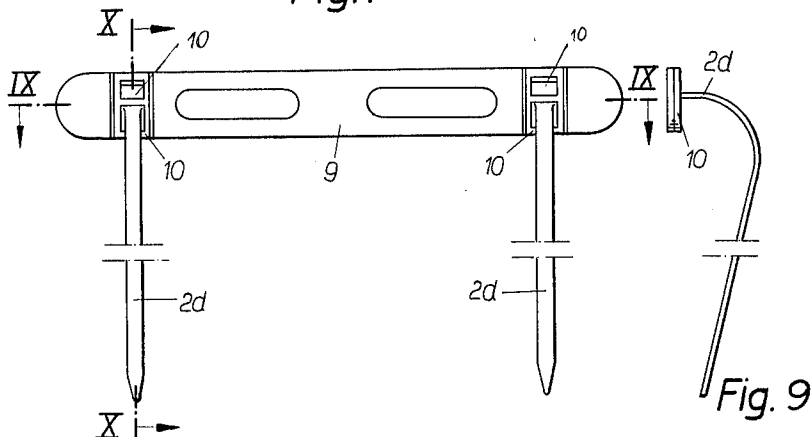


Fig. 8

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DEVICE FOR FILING PUNCHED PAPERS IN FOLDERS

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F 35,731

5 Claims. (Cl. 129—41)

This invention relates to filing devices, and more specifically to a filing device for holding punched papers between the covers of a folder by means of flat elastically flexible filing strips which consist preferably of plastics and are preferably anchored in holes in base plates provided on either side of the folding back of the folder.

In loose-leaf binders and folders for punched papers it is known to use instead of metallic filing strips such as plastics which are flat, elastic and flexible and can also be anchored individually with a broad base portion in a hole provided with a bayonet lock and located in a binder leaf adjacent the folding back of the folder on the inside thereof, the free ends of the filing strips being insertable into further holes in another binder leaf opposite the first one adjacent the folding back of the folder. For holding the filed stack of papers the free ends of the filing strips are either folded back with their flat sides transversely of the filing margin of the papers or inserted into channels, bridges, loops or the like provided on the covers of the folders.

It is the object of the present invention to provide in folders of all kinds, especially in collecting folders, a filing device which permits relative shifting of the free ends of the folding strips in the holes when one or both covers of the folder are opened or closed. This ensures that the papers firmly and immovably held by the filing strips will be neatly spread out when the folder is opened and the filing margins will automatically move away from each other towards the outer edges of the folder, whereas when closing the folder the thickness thereof will only be determined by the height of the actually filed stack of papers since the filing strips will readily move in the holes but nevertheless hold the papers so firmly that the folder can be held by the back or suspended. The papers are securely held even when providing only two holes therein for filing them and no additional binder leaves are required to take up the tension.

The invention provides a filing device which comprises two base plates provided with holes and carried by the folder, one on either side of the folding back thereof, at least two flat elastically flexible filing strips having enlarged foot portions and projecting from the holes in each base plate so as to be foldable transversely of the filing margin of the papers and adapted to have their free ends passed through the corresponding holes in the base plate on the other side of the folding back.

In an expedient embodiment of the filing device a U-shaped double filing strip having legs connected by a web is associated with each base plate, said web underlying the base plate between the recesses in a plane which extends at right angles to the plane of the legs so as to constitute the enlarged foot portions of the same.

Conveniently each filing strip may be embodied in a small circular plate having an open ended recess tapering towards the centre of the circular plate and defined at this centre by the attachment end of the filing strip.

According to a further feature of the invention the enlarged foot portion of each filing strip may be embodied in a small circular plate having two slots extending transversely and on both sides of the longitudinal axis of the filing strip.

Finally, the filing device may be so constructed that the enlarged foot portion of each filing strip is embodied in small lateral projections connected to a common base plate at the holes provided therein, said holes communicating with an open ended transverse depression in the underside of the base plate for the passage therethrough of the opposite filing strips.

The filing devices according to the invention permit reading of the papers filed in a folder as if they were leaves of a book without having to release the filing strips. Moreover, when closing the folder filled with papers no additional manipulation of the device is necessary. When removing or inserting a leaf, the papers already filed will remain immovably in place on the right and left on at least two filing strips of each base plate.

Several preferred embodiments of the invention will now be described by way of example and with reference to the accompanying drawings, in which:

FIG. 1 is a top plan view of a filing device according to the invention, shown as mounted on an opened folder;

FIG. 2 is a vertical section taken on the line II—II of FIG. 1;

FIG. 3 is a side elevational and an end view of a double filing strip as a single unit;

FIG. 4 is a view similar to FIG. 1 of another embodiment of the filing device which, when viewed in section as on the line II—II in FIG. 1 presents a view substantially identical with FIG. 2;

FIG. 5 is a top plan view of two single filing strips having enlarged foot portions serving as anchoring means;

FIG. 6 is a top plan view of another embodiment of such filing strips having anchoring means provided with two transverse slots each;

FIG. 7 is a top plan view of another double filing strip;

FIG. 8 is a longitudinal section taken on the line IX—IX of FIG. 7, and

FIG. 9 is a cross section taken on the line X—X of FIG. 7.

FIGS. 1 and 2 show a filing device comprising two flat elastically flexible double filing strips 1a and 1b which are positioned flat on the folding back of an opened folder 3 which consists of two leafboards hingedly connected in a conventional manner. The filing strips extend in superimposed bridging relationship across and transverse to the space between the leafboards, and jointly pass through holes in the papers 5.

FIG. 3 shows such a double filing strip bent into U shape and comprising two legs 1 connected by a web 1c, the legs 1 being subjected to torsion so that their plane extends at right angles to the plane of the web 1c which underlies a mounting or base plate 6 and may be rigidly or detachably connected therewith. The legs project through holes 13 in the base plate 6 which may be rigidly or detachably secured to the inside of the folder 3. Portions of the plate 6 have been shown bent away from the leafboards of the folder 3 in FIG. 2 for the sake of clarity. The holes 13 may be of any desired cross section, e.g. they may be oval or slot-like but preferably they are round.

In the embodiment shown in FIGS. 1 and 2 the double filing strips 1a and 1b together with their base plates 6 are conventionally secured to both filing margins. After paper or documents 5, which have been omitted in FIGS. 1 and 4 for the sake of clarity, have been filed on the filing strips 1a or 1b, the free ends of said filing strips are passed through the holes 13 in the opposite base plate 6. Now the other filing strips are passed in the opposite direction over the first filing strips and through the opposite holes 13, so that in each case two strips are located flat one above the other and a double filing is obtained. When now one of the sides of the folder is turned over to the other side, all the filing strips will follow this move-

ment and move inwardly through the holes 13. When the folder is opened again the initial position will be re-established since the filing strips are automatically withdrawn.

In the embodiment shown in FIGS. 4 and 5 two separate filing strips 2 and two separate filing strips 2a are provided which have each an enlarged foot portion 7. This foot portion 7 may consist (FIG. 5) of a circular small plate provided with an open ended recess 7a tapering towards the centre of the circular plate. At two opposite positions near the folding back, for example by using the base plates 6 shown in FIG. 4, the filing strips 2 and 2a are passed through corresponding holes in the plates 6 and held therein. The positions of the filing strips are the same as in the previous embodiment. Since after filing the documents 5 also these filing strips 2 and 2a are passed in opposite directions through the associated holes, in the opposite base plate, they can be shifted on one another without resistance. The recesses 7a are defined by guide edges which facilitate the opening and closing of the folder and therefore are expediently so formed as to widen outwardly, i.e. the guide edges extend at an angle towards each other and not in parallel.

The aforescribed embodiments of the filing device are suited to meet highest requirements and can be mass produced. The foot portions 7 may be given another than a circular shape and they may be attached to the folder 3 without base plates, e.g. by gluing or the like.

It is self-evident that according to the number of perforations in the documents any desired number of filing strips may be used in one folder.

A further advantage of the filing device proposed by the invention consists in that the filing strips are upright when withdrawn from the opposite base plate 6 so that, when it is necessary to add further documents, for example in the middle of the filed documents, the further documents can be readily filed on the right and left.

FIG. 6 shows two filing strips 2c which may also be used in connection with the folder 3 shown in FIG. 4. These filing strips 2c are provided with a foot portion 7c having slots 8 and 8a extending transversely of the longitudinal axis of the filing strips. When filing documents the free end of each filing strip is pushed into the corresponding slot 8 or 8a of the opposite filing strip.

FIGS. 7 to 9 show an embodiment in which two filing strips 2d are arranged on a common base plate 9. The portions of the base plate 9 from which the filing strips project are somewhat thicker than the remaining portion of the base plate 9. A transversely extending depression 11 is formed in each of the thicker portions at the underside thereof and open ended at the longitudinal side of the base plate remote from the other base plate. A hole 10 is provided at either side of each filing strip 2d so that the corresponding filing strip of the other base plate can be passed through said hole and the open ended depression 11. The filing strips 2d are provided with two lateral projections 12 (FIG. 8) located between the holes 10, so that the full width and height of the depressions 11 is free for the passage therethrough of the free ends of the filing strips 2d.

The filing strips and/or the base plates consist preferably of plastics and may be formed integral.

I claim:

1. A filing folder comprising:

- (a) a pair of leafboards hingedly connected for movement between a closed position in which the leafboards are normally in spaced opposed parallel relationship, and an open position in which the leafboards are normally in spaced coplanar relationship;
- (b) two base plates respectively carried by said leafboards, and each formed with a hole therethrough; and
- (c) two flexible and elongated filing strips respectively associated with said base plates,
- (d) said holes and strips of said base plates located on said leafboards at positions substantially directly across from each other;

(1) each filing strip having an end portion secured to the associated base plate and another free end portion received in the hole of the other base plate for longitudinal movement therein during said movement of said leafboards between said positions thereof,

(2) said filing strips extending in superimposed bridging relationship across and transverse to the space between the leafboards in such a manner that a punched paper may be held in the folder by the filing strips jointly passing through a hole in said paper.

2. The filing folder as defined in claim 1 wherein said holes are generally rectangular slots and said strips are substantially rectangular in transverse section.

3. The filing folder as defined in claim 2 wherein said slots extend transversely to the longitudinal axes of said strips.

4. The filing folder as defined in claim 1 wherein each base plate is elongated and has first and second end portions, said holes and strips being positioned at said first end portions of the base plates, and holes and strips corresponding to each of said mentioned holes and strips being positioned at said second end portions of said base plates.

5. The filing folder as defined in claim 4 wherein said base plates and associated strips are of a generally U-shaped configuration and are constructed from plastic material.

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