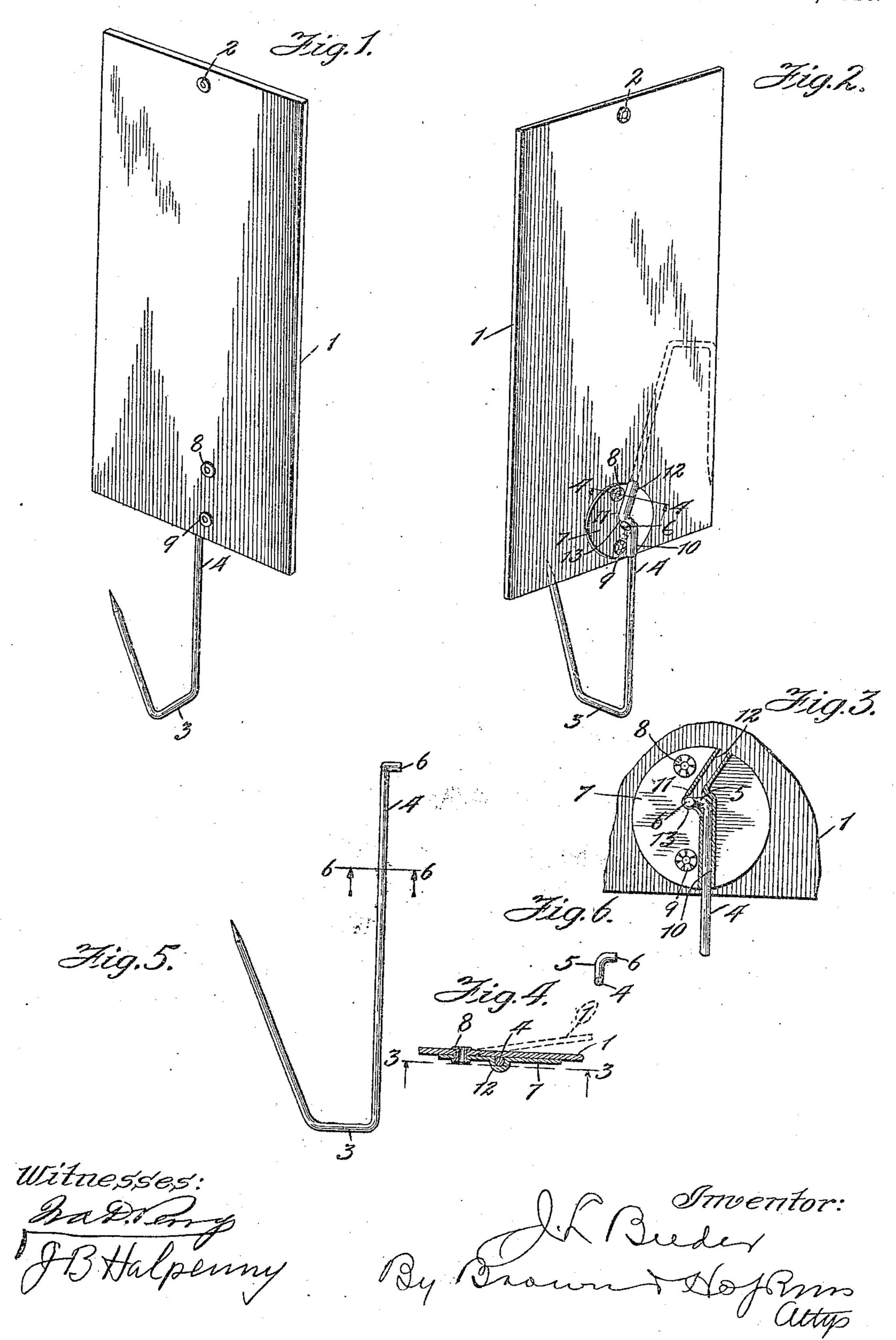
## J. L. BIEDER. DOCUMENT FILE. APPLICATION FILED SEPT. 17, 1908.

952,441.

Patented Mar. 22, 1910.



## NITED STATES PATENT OFFICE.

JACOB L. BIEDER, OF CHICAGO, ILLINOIS.

## DOCUMENT-FILE.

952,441.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed September 17, 1908. Serial No. 453,410.

To all whom it may concern:

Be it known that I, Jacob L. Bieder, a citizen of the United States, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented certain new and useful Improvements in Document-Files, of which the following is a full, clear, and exact

specification.

This invention relates more particularly 10 to that class of inexpensive bill or document files usually intended for advertising purposes, and consequently embodying as its main supporting element a card or similar article to which the hook or impaling device 15 is so secured as to be capable of folding flat against the card to put the construction in appropriate condition for transmission through the mails; and the invention has for its primary object to provide an im-20 proved, simple and inexpensive form of document file of this character.

With a view to the attainment of these ends and the accomplishment of certain other objects which will hereinafter appear, 25 the invention consists in the features of novelty which will now be described with reference to the accompanying drawings and then more particularly pointed out in the

claims.

In the said drawings—Figure 1 is a perspective front view of a document file constructed according to this invention; Fig. 2 is a perspective rear view thereof showing the impaling hook in its folded position; 35 Fig. 3 is an enlarged sectional view taken on the line 3—3 of Fig. 4; Fig. 4 is a transverse section on the line 4—4 of Fig. 2, taken on an enlarged scale; Fig. 5 is a detail side elevation of the impaling hook. 40 Fig. 6 is a detail cross-section thereof on the line 6—6 of Fig. 5.

1 is the card or body, which may be proit may be suspended on the wall or other 45 support, and 3 is the impaling hook provided with a shank extension 4 capable of being attached to the card 1 in such a way that it may occupy either of the positions shown in Fig. 2. This shank extension 4 of 50 the hook is provided with a bend or branch 5 which extends substantially at right angles thereto, and this branch or bend terminates in a rounded extension or lug 6. The shank with its end thus formed is placed between 55 the card 1 and a plate 7 secured to the back 1

or one face of the card in any suitable way, as by means of eyelets or rivets 8 and 9. This plate is provided with a channel or groove 10 in its inner side or face, which may be formed by upsetting or pressing the 60 metal or material of which the plate is composed, and which channel or groove is connected by a cross-channel or groove 11 with another channel or groove 12. The groove 10 is preferably straight and arranged per- 65 pendicular with reference to the lower outline of the card 1, while the groove 12 extends at a slight angle thereto and both of these grooves 10 and 12 continue to the edge of the plate 7. Shank 4 of the hook or im- 70 paling member is placed between the plate 7 and the card 1 with the bend 5 in the crosschannel or groove 11, and the terminal bend 6 projecting through the perforation or aperture 13 formed at the intersection of 75 the lower end of the channel 12 and the cross-channel 11.

When the impaling hook is in position for use, as in Figs. 1 and 2, the shank 4 will lie in the channel 10 with the bend 5 in the 80 cross-channel 11, as indicated in Fig. 3. The impaling hook is held in this position with sufficient firmness to retain it in place during ordinary usage by the elastic pressure of the back of the card, forcing it into the 85 channel in the plate, but when it is desired to place the hook in the position indicated in dotted lines in Fig. 2, where it lies flat against the back of the card, or in a plane parallel with such back, it is forced by a 90 rotary movement, using first the bend 6 as a pivotal center, and eventually the bend 5 as such center, on which to turn the hook until it squeezes out of the groove 10 and finally snaps into the groove 12, where it 95 will be retained during transportation, or while not in use, by the elastic pressure of vided with an eyelet or aperture 2 whereby | the card 1. It will thus be seen that the card 1 serves as a means for securing the impaling hook resiliently and adjustably to 100 the channeled member or plate 7. The construction of the bends 5 and 6 and the crosschannel 11 with the perforation 13 is such that when this rotary movement first starts, the bend 6 will remain at substantially 105 right angles to the face of the card 1 and serve as a pivot or fulcrum on which to turn the shank and to force the shank out

of the groove 11, and then, as the rotary

movement proceeds, the bend 5 will worm 110

itself out of its position between the plate and the card and project through the aperture 13, where it will remain when the shank 4 eventually snaps into position in the groove 12, permitting the hook to drop back flat against the card with its point lying entirely within the confines of the card so as to be protected or prevented from puncturing the envelop or other packages in the

mails during transportation.

In order that the hook and its shank may be given the described rotary movement throughout nearly a half-turn, it is of course apparent that the eyelets or attaching de-15 vices 8 and 9 should be located wholly to one side of the two grooves 10, 12. It is also apparent that inasmuch as the hook projects outwardly from the face of the card 1 as contradistinct from the back of the 20 card, when the hook is in position for use and the bend 5 is in the cross-channel 11, it necessarily follows that when the shank 4 is returned to the groove 10, the hook will be automatically brought to its proper position 25 for use as a necessary consequence of refitting the shank and the bend 5 to the grooves 10, 11. The bends 5, 6, in conjunction with the groove plate 7, therefore serve as a means for imparting to the shank of the 30 hook a partial rotary movement in passing from the groove or channel 12 to the groove or channel 10, and a similar rotary movement, but in the reverse direction, in passing from the groove 10 back to the groove 12. In order that the invention may be understood by those skilled in the art, the details

What I claim as new and desire to secure

of an embodiment thereof have been thus

40 by Letters Patent, is:—

specifically described, but

1. In a device for the purpose described the combination of a flexible member, a plate secured thereto and provided with a channel, its face contiguous to said flexible 45 member, and an impaling member having one end pivotally related to said plate and confined between the plate and the flexible member so as to be held in said channel by the flexible member.

50 2. In a device for the purpose described the combination of two members secured together face to face and one of which is capable of being flexed with relation to the other, one of said members having a groove 55 or channel in its face contiguous to the other part, and an impaling member having one end pivotally related to the first two said members and situated between them in position to be turned upon its said pivot into

60 or out of said groove.

3. In a device for the purpose described the combination of two members secured together face to face, one of said members being capable of being flexed with relation to 65 the other, one of said members having a

channel in its face contiguous to the other, an impaling member having one end pivotally related to the first two said members and situated between them, the ends of said channel extending to the edges of the mem- 70 ber in which it is formed and the impaling device being adapted to turn on its said pivot from one end of the channel to the other.

4. In a device for the purpose described 75 the combination of two members secured together face to face, one of said members being flexible, one of said members having a channel in its face contiguous to the other, an impaling member having a lug passing 80 through one of the other said members and constituting a pivot on which to turn the impaling member, said impaling member being situated between the first two said members and adapted to turn on said pivot 85 into and out of said channel.

5. In a device for the purpose described the combination of two members, one of which is flexible with relation to the other and one of which is provided with a channel 90 in its face contiguous to the other, means located wholly upon one side of said channel for securing the members together face to face, and an impaling member having one end situated between the first two said 95 members and pivotally related thereto so as to turn on said pivot into and out of said

channel. 6. In a device for the purpose described the combination of two members secured to- 100 gether face to face, one of said members being flexible and one of said members having a channel in its face contiguous to the other, said channel having an offset portion, an impaling member having a shank adapted to 105 sit in said channel between the first two said members and said shank having a bend adapted to seat in said offset portion, and means giving the shank a pivotal relation to the said channeled member whereby it 110 may be turned on said pivot to positions into and out of said groove.

7. In a device for the purpose described the combination of two members, one of which is capable of being flexed with rela- 115 tion to the other, one of said members having a channel in its face contiguous to the other and said channel having an offset portion terminating in a perforation through the member in which it is formed, an im- 120 paling member having a pivot arranged in said perforation and a bend seated in said offset portion whereby the impaling member may be turned on said pivot to positions into and out of said channel.

8. In a device for the purpose described the combination of two members secured together face to face, one of said members being capable of being flexed with relation to the other and one of said members having 130

952,441

a downwardly extending channel in its face contiguous to the other member, the upper side of said channeled member also having an upwardly extending channel communicating with said downwardly extending channel, the point of communication between said channels being offset, an impaling member having a shank adapted to seat in said downwardly and upwardly extending channels alternately, and a pivot giving it pivotal relation to the first two said members whereby it may be turned on said pivot into either of said channels.

9. In a device for the purpose described 15 the combination of two members secured together face to face and one of which has a channel in its face contiguous to the other extending in a downward direction, an offset channel at the upper end of said first 20 channel and a third channel extending from the outer end of the offset channel in a diagonal direction with relation to the first said channel, an impaling member having a shank adapted to seat alternately into either the 25 first or the third said channel, and an angular portion seated in said offset channel, the said angular portion having pivotal relation to the said members whereby the shank may be turned on said pivot into or out of 30 the first said channel.

10. In a device for the purpose described the combination of a card, a plate secured to said card and having a downwardly extending channel formed in the inner face 35 thereof, an offset channel extending from the upper end of said first channel and having a perforation at its outer end, and a third channel extending from said perforation upwardly into diagonal direction with 40 relation to the first said channel, an impaling device having a shank arranged between the card and said plate, the inner end of said shank having an angular portion seated in said offset channel and a lug on the end of 45 said angular portion engaging in said perforation whereby the impaling device may be turned on said lug and angular portion in a rotary direction between the plate and

card from the downwardly extending channel into the upwardly extending channel.

11. In a device for the purpose described the combination of two members secured together face to face, an impaling device having a shank confined between said members, the inner end of said shank having pivotal 55 relation to said members whereby the shank may describe an arc and move in a plane substantially parallel with the plane of said members, one of said members having means of engagement with the impaling device 60 when the latter is moved into position for use.

12. In a device for the purpose described the combination of two members secured together face to face and an impaling member having a shank confined between the first said two members, said impaling device and one of said members having cooperating means for permitting the impaling device to describe an arc and move in 70 a plane substantially parallel with the plane of said first two members, and also means for causing a partial axial rotation of the impaling device while describing said arc.

13. In a device for the purpose described, 75 a member provided with a channel, an impaling member seated in said channel, and resilient means for holding said impaling member fixed in said channel.

14. In a device for the purpose described, 80 a member provided with a channel, an impaling member pivotally connected with the channeled member, said impaling member being rotatable about an axis and movable in a plane through said axis, and resilient 85 means for adjustably securing said impaling member in said channel.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 20th day 90 of August A. D. 1908.

JACOB L. BIEDER.

Witnesses:

M. W. CANTWELL, Francis A. Hopkins.