No. 807,383. PATENTED DEC. 12, 1905.

R. H. JOHNSON.

ARCH FILE.

APPLICATION FILED JAN. 28, 1905.

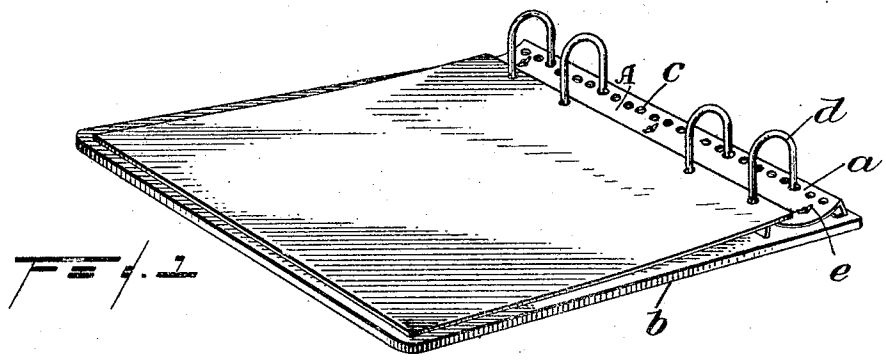


Fig. 1.

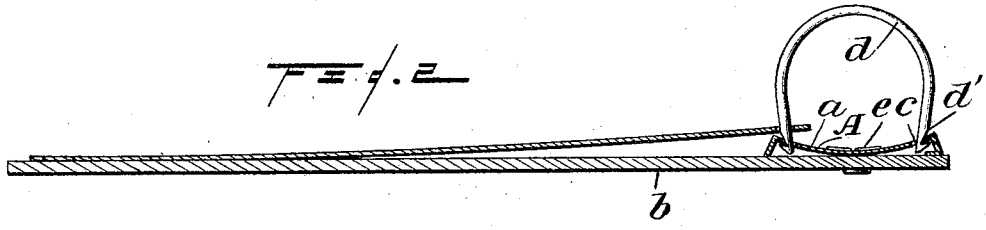


Fig. 2.

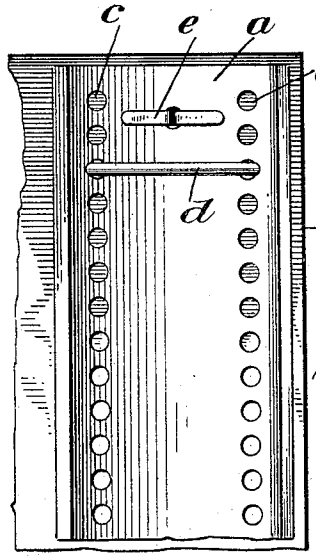


Fig. 3.

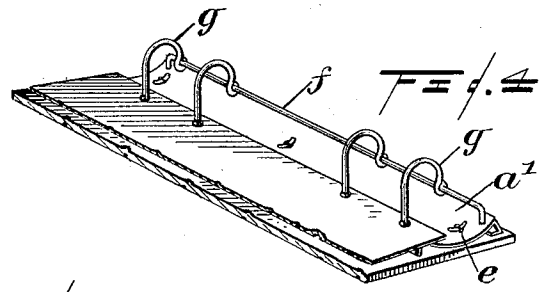


Fig. 4.

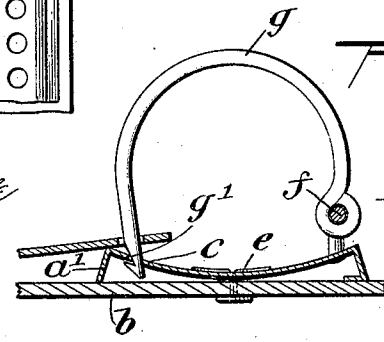


Fig. 5.

WITNESSES:

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RUFUS H. JOHNSON, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO JAMES S. BODEN, OF NEW YORK, N. Y.

ARCH-FILE.

No. 807,383. Specification of Letters Patent. Patented Dec. 12, 1905.

Application filed January 28, 1905. Serial No. 243,052.

To all whom it may concern:

Be it known that I, RUFUS H. JOHNSON, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Arch-File, of which the following is a full, clear, and exact description.

My invention relates to a file for securing loose leaves; and the principal object thereof is to provide means whereby the distance from each other of the arches or other holding devices for the file can be varied at will to accommodate different punchings in the sheets to be held.

A further object of the invention is to provide means for easily detaching the arches from the main body of the holder and readily slipping the articles to be held onto them.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view showing a preferred embodiment of my invention. Fig. 2 is a vertical sectional view of the same on an enlarged scale. Fig. 3 is a plan view of a fragment on an enlarged scale. Fig. 4 is a fragmentary perspective view showing a modification, and Fig. 5 is a vertical sectional view of the form shown in Fig. 4 on an enlarged scale.

Referring to Figs. 1, 2, and 3, *a* represents a plate constituting the main portion of the holder. This plate is preferably mounted upon a base *b* and is provided with two series of perforations *c* on the opposite sides thereof, adapted to receive the ends of the leaf-holding elements, which are shown in the form of arches *d*. These arches are formed of resilient material, and their feet are provided with notches *d'*, adapted to engage the walls of the perforations *c*. The manner of applying the arches to the plate and of disengaging them therefrom for the application of the loose leaves will be readily understood. The plate *a* is preferably formed of thin sheet metal and may conveniently be depressed in the center for the reception of a fastening device *e* and to provide for a concave surface A just below the perforations to assist in guiding the ends of the arches to the proper place. It will be seen that the arches may be placed in any desired perforations along the plate *a* and that any desired number of them may be employed, thus providing for the system of punching which may be used on the leaves.

In Figs. 4 and 5 I have shown a modification which embodies a plate *a'*, having only one series of perforations *c* and mounted upon a base *b* by means of a fastening device *e*, as in the other case. Secured in a stationary position with respect to the plate *a'* and preferably located at a point near the back row of perforations in the other form is a rod *f*, on which are pivoted a plurality of fastening elements or arches *g*. These arches are each provided with a notch *g'*, similar to the notches *d'* and adapted to enter the perforations *c* in one side of the plate *a'*.

The advantages of this invention, whether carried out in either of the forms shown or in any other form, will be readily understood.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A loose-leaf holder, comprising a plate having a plurality of perforations in two rows, and leaf-holding elements adapted to be secured in said perforations the number of perforations in each row exceeding the number of leaf-holding elements.

2. A loose-leaf holder, comprising a plate having a plurality of perforations, and leaf-holding elements adapted to be secured in said perforations; each of said elements having a notch for securing it in place in contact with the walls of the perforations said leaf-holding elements being held solely by said walls.

3. A loose-leaf holder, comprising a plate having a plurality of perforations arranged in a row along one edge of the plate, a plurality of resilient arches adapted to have one leg of each secured in said perforations, and means for securing the other leg of each arch opposite said perforations.

4. A loose-leaf holder, comprising a plate having a concave upper surface and a series of perforations along one edge of said surface, and a series of arches adapted to be secured in said perforations.

5. A loose-leaf holder, comprising a series of arches having notches in their feet, and a base for holding them comprising a plate of sheet material provided with a concave upper surface and two series of perforations along the opposite outer edges of said concave surface for the reception of said notches.

6. A loose-leaf holder comprising a plate

having a series of perforations along one edge extending from one end of the plate to the other, and a plurality of arches adapted to be secured in said perforations.

7. An arch-file, comprising a base, and a plurality of resilient arches removably mounted thereon, the base having a plurality of means for receiving the feet of the arches the number of said means exceeding the number of feet.

8. An arch-file comprising a plate having a concave upper surface and two series of perforations spaced opposite each other in said surface near its outer and upper edges, and a series of arches each having a notch and a hook below the notch in each leg thereof, said arches being formed of resilient material and normally having the space between the notches greater than the space between the outside surfaces of two opposite perforations, whereby the arches can be sprung into the perforations from either side and will be retained therein, said concave surface constituting a guide for directing the feet of the arches into the perforations.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RUFUS H. JOHNSON.

Witnesses:

ALBERT E. FAY,

EVERARD BOLTON MARSHALL.