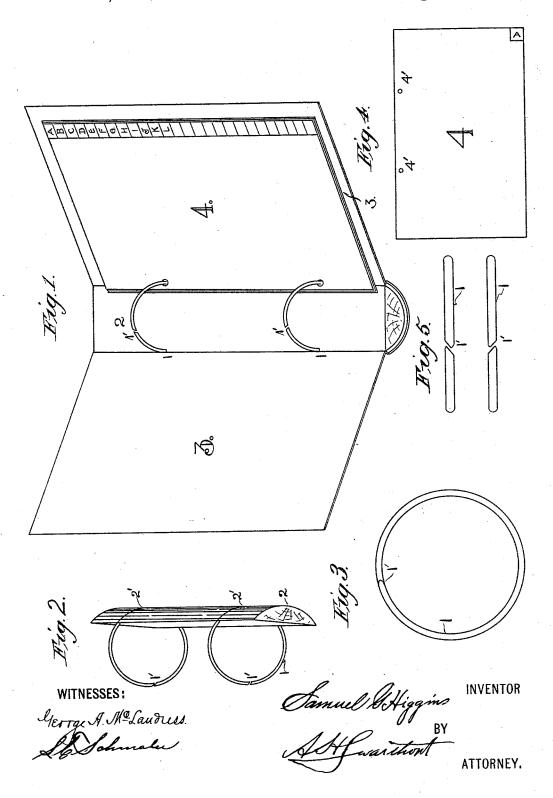
## S. G. HIGGINS. MEMORANDUM AND SCRAP FILE.

No. 458,394.

Patented Aug. 25, 1891.



## UNITED STATES PATENT OFFICE.

SAMUEL G. HIGGINS, OF SAGINAW, MICHIGAN.

## MEMORANDUM OR SCRAP FILE.

SPECIFICATION forming part of Letters Patent No. 458,394, dated August 25, 1891.

Application filed March 28, 1891. Serial No. 386,879. (No model.)

To all whom it may concern:

Be it known that I, Samuel G. Higgins, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented a certain new and useful Memorandum or Scrap File; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to files in which to file 15 papers, printed clippings, memoranda, &c., alphabetically or in other classified order, so that the same can be easily referred to or removed for use. This I accomplish in the file

hereinafter described.

Figure 1 is a view of my file inclosed in book form, provided with alphabetical index or other classifying leaves or sheets. Fig. 2 is a view of my file, showing the back adjustment, and may be used in this shape without covers. Fig. 3 is an enlarged view of the slotted ring. Fig. 4 shows a leaf or sheet with perforations required. Fig. 5 is a top view of the rings, showing the slot.

1 and 1 are the file-rings, and in them and 30 in their application and the arrangement of them my invention consists. They are made of cylindrical wire or other substance bent circular, or nearly so. The points of approach of the two ends of the metal, instead of being 35 square cut, as they may be, I prefer to cut diagonally at an angle of about forty-five degrees, so that when the ring is formed one point passes by the other, as a mechanic would place them if the ends were to be welded to-40 gether, leaving a diagonal or angular slot or opening 1' in the ring, which otherwise is rigid and retains its circular form. The same result is obtained by cutting a slot through a solid ring or by casting or molding a ring with 45 a slot in it. I form the slot 1' in one ring in an exactly opposite angle to the slot 1' in the

other. The points at the slots should be rounded off to avoid their catching on the sheets, as will be explained hereinafter. The slots 1'1' are of such width as to permit the sheets, hereinafter described, to be slipped into the slots and then the rings passed through

the holes 4', cut near the margin of the sheets, thus attaching the sheets to the rings. The rings are made of different sizes, according to 55 the size of the file; but I find that rings two and one-half inches in diameter, made of spring-steel or brass round wire three-sixteenths of an inch in diameter, work well. The rings should be polished or plated, so that 60 they will slip easily through the holes in the sheets.

2 is the back or support of the rings 1 and 1. It may be made of wood, leather, or other material. I prefer to make it of wood and in 65 the following manner: By means of a turninglathe I turn a piece of wood into the form of a cylinder of the same diameter as the outside diameter of the rings, and then I turn grooves 2' around the cylinder the same width 70 and depth as the thickness of the wire composing the rings, so that the rings will fit closely in the grooves. The grooves should be made about one-third the length of the cylinder from each end thereof, so that the 75 space between the grooves will be about the same as the space between the grooves and the ends of the cylinder. Then I saw off from the sides of the cylinder lengthwise three pieces, the convex side of each 80 piece being about one-third the circumference of the cylinder, and each piece so sawed off forms the back or support of a file, and is ready to have the rings slipped upon it and into the grooves 2', where they are held in 85 place by staples or by another piece of wood or leather, or other substance, being glued or otherwise fastened over them. Thus the rings are held firmly in place, but are free to turn in the grooves. The same result may be ob- 90 tained by fitting the rings into a support of leather or pasteboard or other substance pressed into shape. This back or support 2, with the rings so fastened to it, may be used with or without the covers 3; but I prefer to 95 attach to it covers like those of an ordinary book, the part next to the rings being flexible or else shaped to fit around the rings. By taking the rings and back 2 to a book-bindery the covers 3 3 can be easily supplied, and 100 I have a file-book ready for use. Indexsheets 4 may be added, if desired, and any index, alphabetical or otherwise, may be used.

gin, through which the rings are passed at the diagonal slots 1', thus attaching the index-sheets to the rings, and upon these indexsheets may be written references and cross-5 references to the matter filed in the file. Supplemental sheets with holes in the margin are placed between the index-sheets and attached to the rings in the same manner as the index-sheets, and upon these supple-10 mental sheets are written the memoranda or are pasted or fastened the slips, clippings, memoranda, letters, bills, invoices, and other papers. When the file is full, the sheets can be removed and bound or tied together and 15 new sheets inserted upon the rings the same as the first.

Instead of the supplemental sheets, or in connection therewith, papers, memoranda, documents, letters, bills, &c., can be inserted 20 upon the rings by cutting holes in the margin of the papers, as 4', so desired to be filed. If it is desired to put in an index-sheet or to file a supplemental-sheet containing memoranda, clippings, &c., or other paper, turn to

25 the desired place and open the file. It may be the rings 1 1 will be so turned that the slots 1'1' are covered by other sheets or memoranda. Take each ring in thumb and finger and turn it in the grooves 2' until the 30 slots are in sight and in convenient position. Then take hold of the ends of the index-sheet or supplemental sheet or paper and bend it to the angle of the slots in the rings and slip the holes of the sheet upon the rings. When 35 thus placed upon the rings, the index-sheets and supplemental sheets or papers turn easily upon the rings, and the file may be opened or

As stated heretofore, I prefer to have the 40 slots 1'1' angular, for the reason that the sheets will not so readily come off the rings. It is obvious that the rings 11 may be supported within the book in various ways, as by two or more staples to each ring, passing over 45 the ring and through the back 2 therefor. I

closed like an ordinary book.

do not wish to confine myself to any special form or construction of parts, and any change may be made that comes within ordinary mechanical skill without departing from the principles of my invention.

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

Patent, is-

1. The rings 1 1, having the angular slots 1' 1', in combination with the back or support 2, 55 provided with the grooves 2' 2', in which the rings 1 1 are held and turned, substantially as described.

2. The rings 1 and 1, having the slots 1'1'. in combination with the back or support 2 60 and the covers 33, substantially as described.

3. The rings 1 and 1, having the slots 1'1', in combination with the back or support 2, the covers 3 3, and the index-sheets 4, substantially as described.

4. The rings 1 and 1, having the slots 1'1', in combination with the back or support 2, the covers 3 3, the index-sheets 4, and supplemental sheets, substantially as described.

5. A file-book consisting of the rings 1 and 70 1, having angular slots 1' 1', the back or support 2, having grooves 2' 2', in which the rings 1 and 1 freely turn, the covers 3 3, and the index and supplemental sheets, substantially as described.

6. In a file-book, the combination of the rings 1 1, having angular slots 1' 1', and the angular slots 1' 1', with the back or support 2, having grooves 2' and 2', in which the rings 1 1 freely turn, and the grooves 2' and 2', and 8c the covers 33, and the index-sheets 4, and supplemental sheets, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL G. HIGGINS.

Witnesses:

A. H. SWARTHOUT, S. E. SCHMALER.