

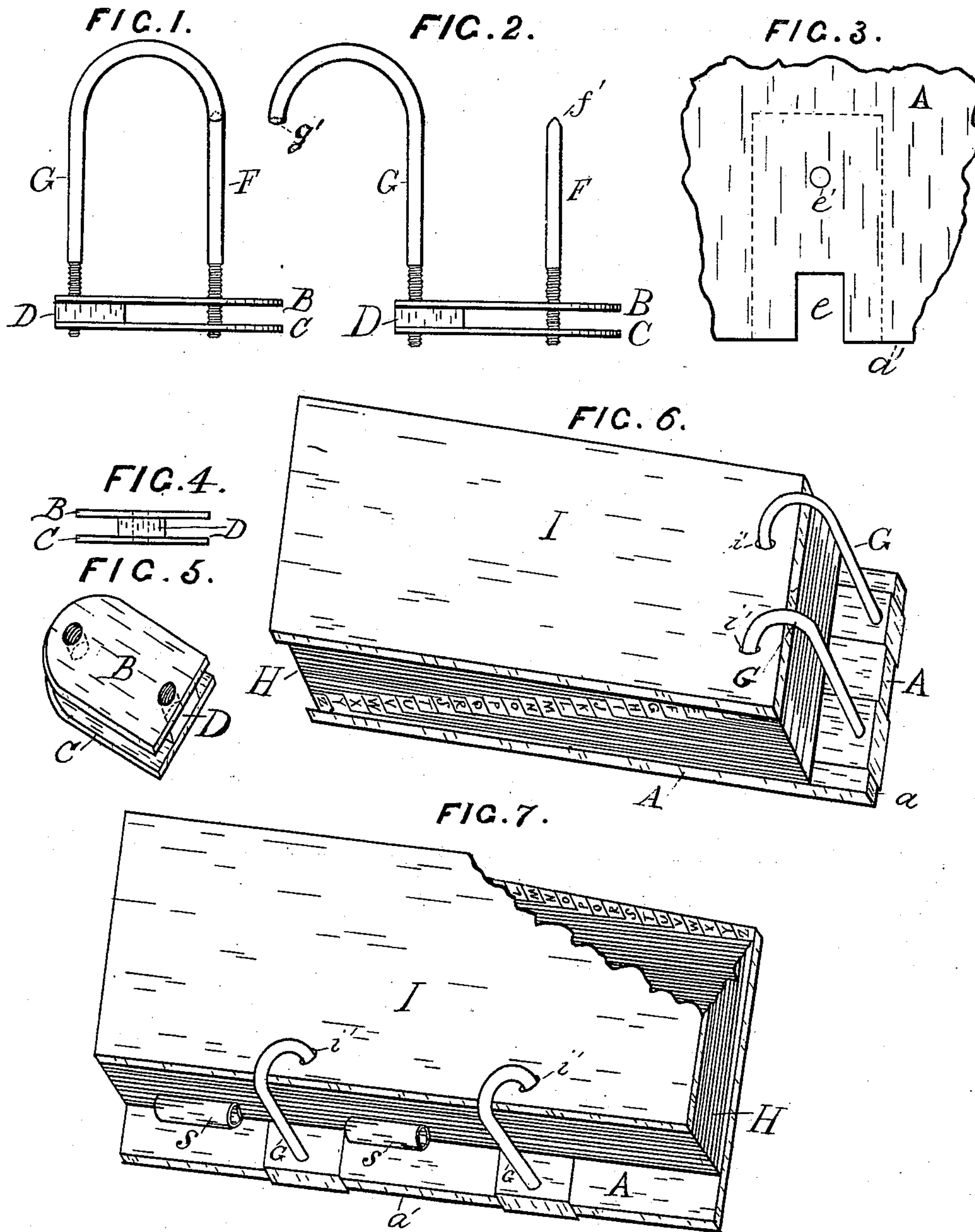
(No Model.)

2 Sheets—Sheet 1.

C. D. CRANE.
PAPER CLIP OR FILE.

No. 322,913.

Patented July 28, 1885.



WITNESSES:

Percy White
G. L. DeMotte

Calvin D. Crane
INVENTOR:

by John F. Halsted & Son.
His Attys.

(No Model.)

2 Sheets—Sheet 2.

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FIG. 9.

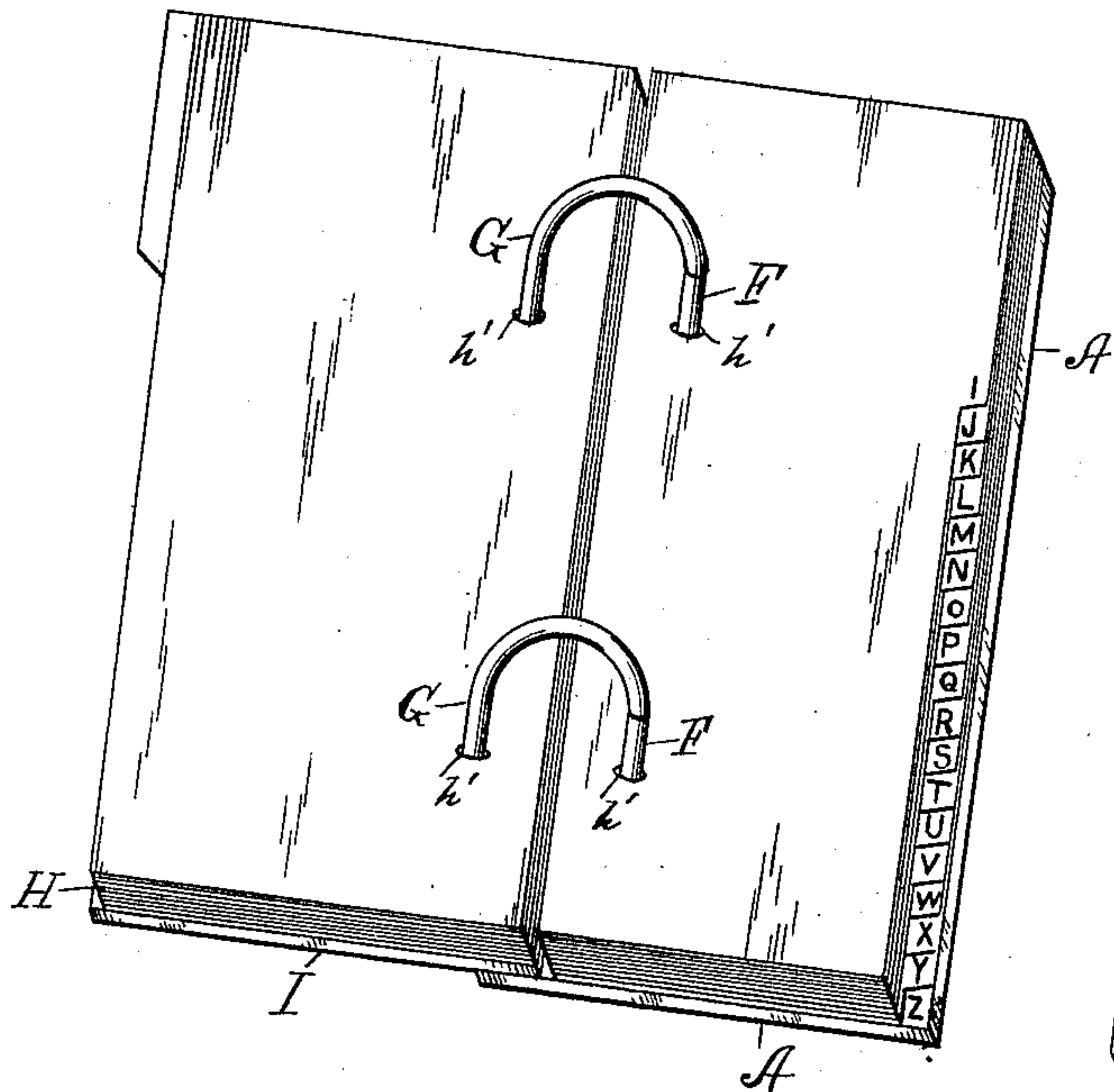


FIG. 8.

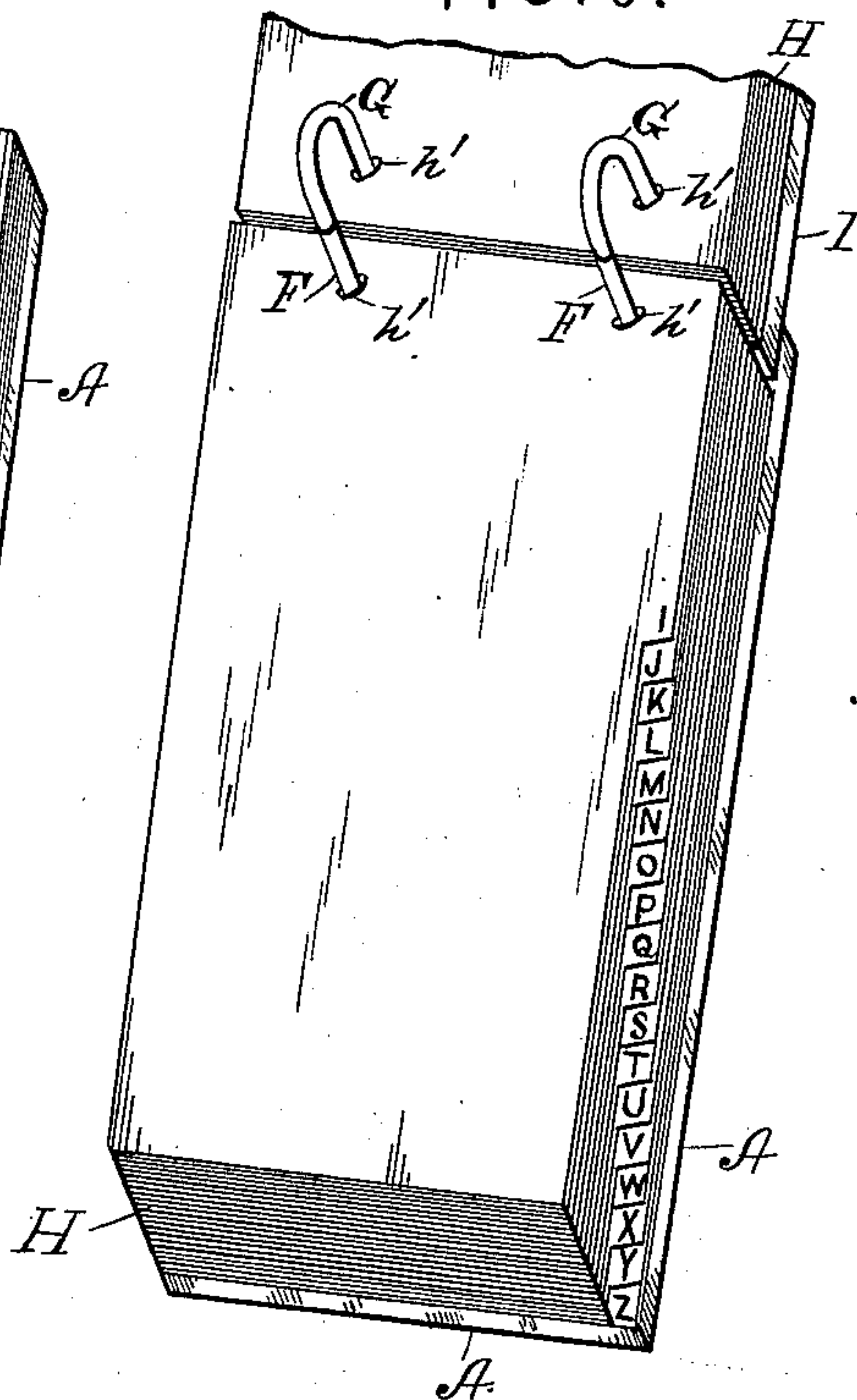


FIG. 10.

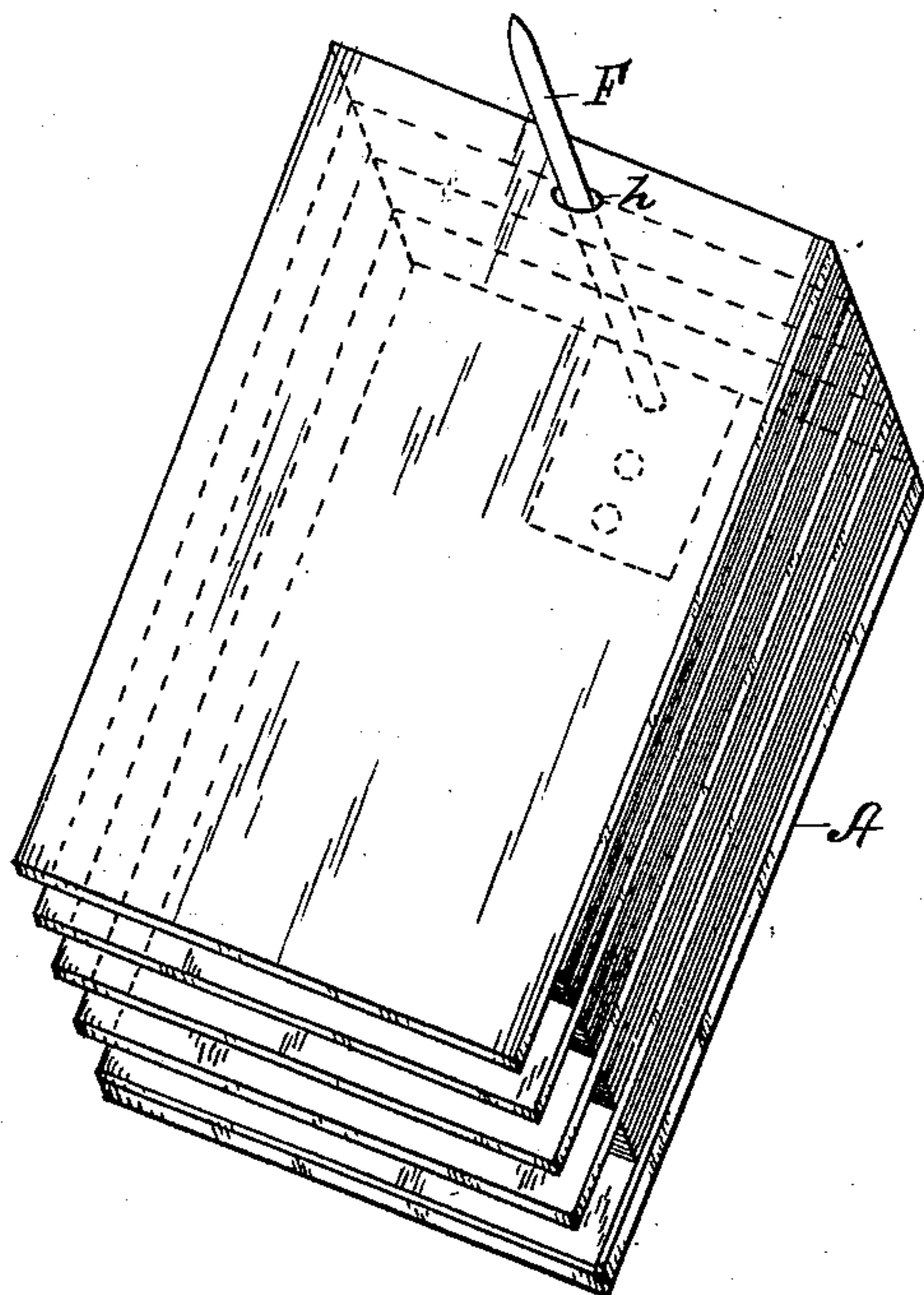
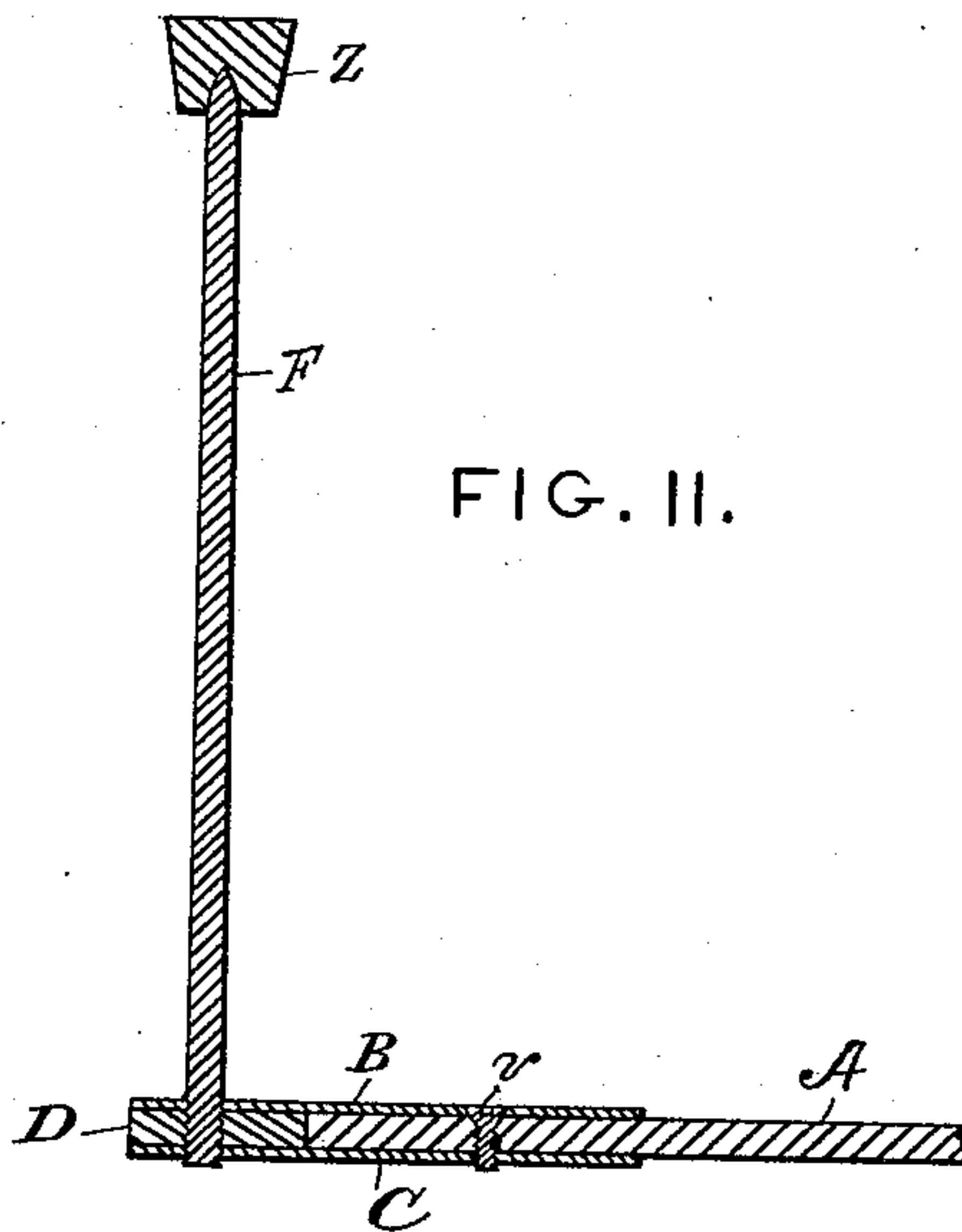


FIG. 11.



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UNITED STATES PATENT OFFICE.

CALVIN DENNISON CRANE, OF ST. LOUIS, MISSOURI.

PAPER CLIP OR FILE.

SPECIFICATION forming part of Letters Patent No. 322,913, dated July 28, 1885.

Application filed August 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, CALVIN D. CRANE, of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Paper Clips or Files; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

My invention consists in a special construction of a paper clip or file, the particulars of which will clearly appear from the following.

In the accompanying drawings, Figure 1 is an elevation of the clip proper or device for holding the papers in the file with the holding-wires connected. Fig. 2 is an elevation of the same with the holding-wires disconnected. Fig. 3 is a detail of the back piece of the clip or file. Figs. 4 and 5 are details of the paper-holding device or clip proper. Fig. 6 is a perspective view of the complete file. Fig. 7 is a perspective view of another form of the same. Fig. 8 illustrates such a file as is represented in Fig. 6 with some of the papers turned back. Fig. 9 illustrates such a file as is represented in Fig. 7 with some of the papers turned back. Fig. 10 is a perspective view illustrating a modified form of file and the manner of using the same. Fig. 11 represents details of said file.

Similar letters represent like parts in all the figures.

A is the stationary back of my improved clip or file, and which may be made of cloth or leather, covered tar-board, or any other suitable material.

The device for holding the papers securely in the file is made as follows: B C are two metal plates connected at one of their ends by a metal block, D, which is about the thickness of the back A, and serving not only to clasp the back, but also to support the wires and to vary their practical length on which the papers are filed and in conjunction therewith, to afford a firm structure, and the block and upper plate give a sufficient depth for the screw on the curved wire to allow of its being swung around without screwing out. The

block D connects said plates B and C, so that their surfaces shall be parallel. The back A has a mortise or recess, *e*, at one edge, *a'*, of the same size as the block D, so that when the plates B and C are slid over the edge of the back the block D will enter and fill up the mortise *e*, and thus the plates will be prevented from turning, and they will also be substantially flush with the edge *a'* of the back A.

F and G are two spring-wires, each of which is inserted by a screw-thread on its lower end into and through the parallel plates B C. The wire F not only passes through its corresponding holes in the two plates, but also through another hole, *e'*, in the part of the back A which is inclosed between the two plates. The wire F, together with the metal block D, will thus hold the fastening device securely to the back A. The wire F terminates at its upper end by a conical point, *f'*. The wire G is connected with the wire F by being bent to the required shape and having at its upper end a conical cavity, *g'*, to receive the conical point *f'* of the wire F. The wire G is screwed through the plates B C and the block D, and when the upper end is about opposite the conical point *f'* it is sprung over the said point, and thus forms a continuous circuit above the plates. The wires F and G may be of various lengths, according to the uses desired.

It is necessary for most purposes to attach at least two sets of these wires and plates to the back A. When two sets are used, before the papers H are placed in the file or holder they are perforated with two holes, *h'*, Figs. 8 and 9, corresponding in their distance apart with the two wires F F, and slightly larger than said wires. The holes *h'* should also be about the distance from their upper or left-hand edge (as the case may be, according to the style of sheet) as is equal to a little less than half the distance between the wires F and G. This latter provision is in order that the papers may be turned back over the wires G, as shown in Figs. 8 and 9.

When papers are to be placed in the file or holder, the bent wire G is detached from F by an upward pull or pressure of the hand, and then turned to the right or left, and the

papers are then put over or on the wire F. G is then turned back to position over F.

To obtain access to any paper in the file, lift up and slide over all the papers which lie above said paper, from the wire F to the wire G. The required paper will then be on top. (See Figs. 8 and 9.) If it be desired to detach said paper, then turn the wire G to the right or left, and lift the paper over the wire F; next replace the wire G and return or turn over the papers from G to F. When it is desired to write on the reverse side of a paper, or to examine it, it will be brought into the proper position by simply moving it, with those over it, over from F to G.

I is a supplemental back or cover, of similar material to the back A, and having holes *i' i'* for the wires F F to pass through, and thus allow said back I to be placed over the papers H. This back, which is a great protection to the papers in the holder, may be used or not, as desired.

The metal connecting-block D may be made in the form of a disk or portion of a disk, and the mortise *e* in such case will have to be made of corresponding form and size; but the form shown in Figs. 1, 2, 4, and 5 I have found to be the best adapted for my purpose.

Among the uses and adaptations to which this described file or holder may be put are the following, viz: first, as a collection file or a file for holding statements of account; second, for holding letter, note, or any other style of paper; and, third, for holding prescriptions, the modified form shown in Figs. 10 and 11 being best adapted for the purpose. In this case the back I is not used, a long straight wire, F, is used in place of the curved wire G, and a short screw, *v*, in place of the straight wire F. In this case, also, only one set of plates, B C, with their interposed block, D, is required and used.

A piece of rubber or cork, *z*, (see Fig. 11,) may be placed on the point of the wire F to prevent the wind or a draft of air from

blowing the papers off the file. The wire F should be of sufficient length to hold five hundred or a thousand prescription-papers.

Any prescription-paper may be readily seen by revolving away from it on the wire F all the papers above it, and any or all of the papers may be readily lifted off the wire upon removing the rubber or cork piece *z*.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a paper file or holder, the solid holding-wires F and G, screw-threaded at their lower ends to permit the raising or lowering of either or both wires and to permit their connection or disconnection with each other by the turning of the curved wire on its screw, and whereby, also, the capacity for holding more or less numbers of papers is regulated, and whereby the holding-power at the junction of the wires may be adjusted, and increased or diminished, substantially as described.

2. In a paper file or holder, the metal plates B and C, connected at their external ends with a metal block, plate, or disk, in combination with the back A, interposed between said plates, and provided with a recess, *e*, to receive the block or disk D, substantially as described.

3. In combination, the mortised back A, plates B and C, the metal block D, and the adjustable solid wire F, screwed into said plates and back, the combination serving to attach the plates to the back and to vary the practical length of the wire, substantially as described.

4. In combination, the mortised back A, plates B and C, the metal block D, the adjustable solid wire F, screwed into said plates and back, and the adjustable solid curved wire G, screwed into said plates and block, all substantially as shown and described.

CALVIN DENNISON CRANE.

Witnesses:

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