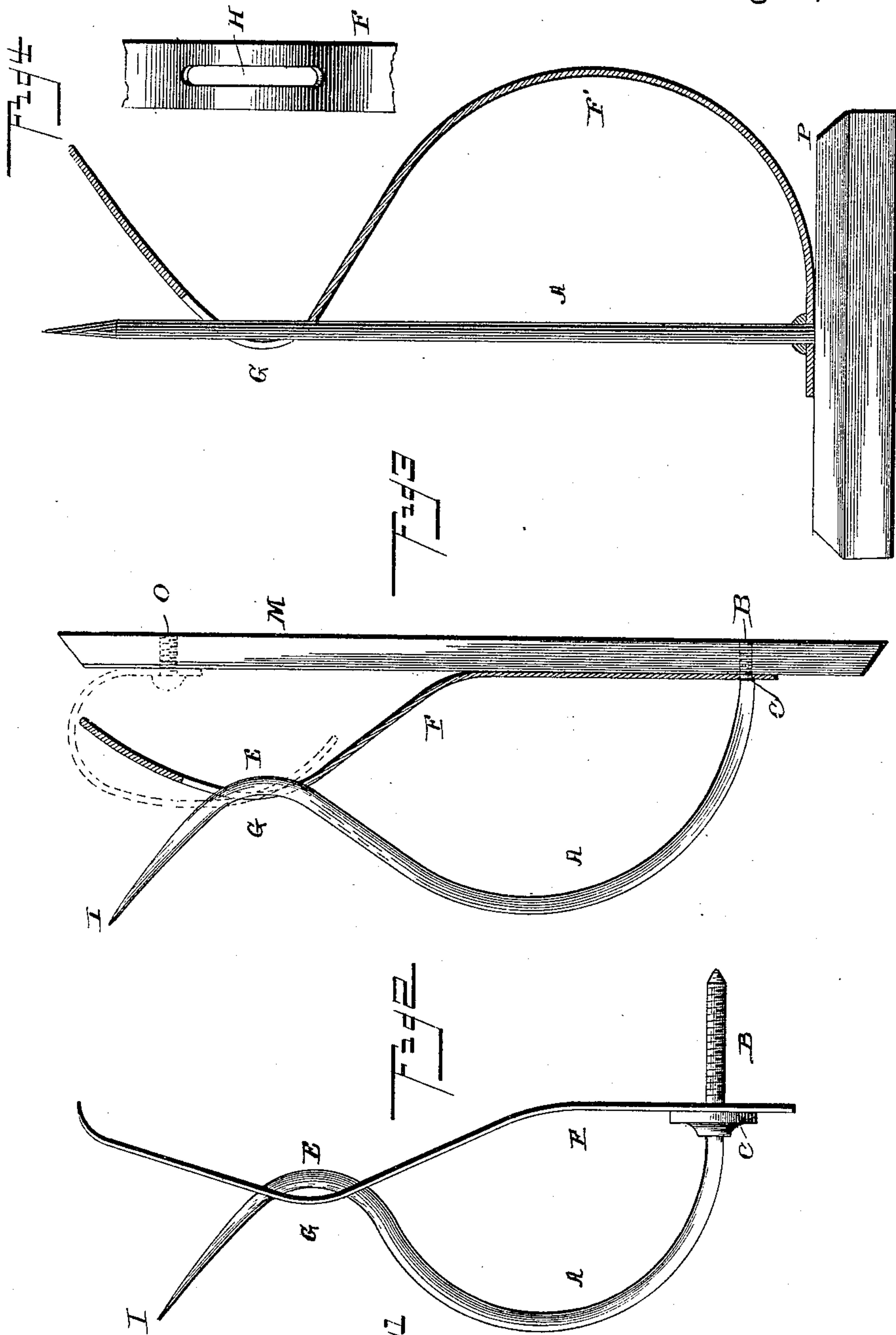


(No Model.)

G. W. HALL.
BILL FILE.

No. 479,908.

Patented Aug. 2, 1892.



Witnesses
John Finnie
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UNITED STATES PATENT OFFICE.

GEORGE W. HALL, OF WASHINGTON, DISTRICT OF COLUMBIA.

BILL-FILE.

SPECIFICATION forming part of Letters Patent No. 479,908, dated August 2, 1892.

Application filed October 7, 1890. Renewed January 5, 1892. Serial No. 417,093. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HALL, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Bill-Files, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to bill files or clips for holding letters, bills, telegrams, and the like.

10 The object of the invention is to produce a hook, clip, or needle on which sheets of paper may be stuck for filing with a single movement and on which the papers will be retained (until purposely removed) by a spring catch
15 or holder, which will prevent the accidental blowing away of the papers.

Figure 1 is a side elevation of a hook or clip made of two pieces which may be attached to a desk or ceiling. Fig. 2 is a similar elevation, partly in section, of a hook attached
20 to a bracket ready for attachment to a wall or upright. A modification is indicated in dotted lines. Fig. 3 is a side elevation, partly in section, of a vertical needle or spindle connected to a base which may be a paper-weight. Fig. 4 is a broken front elevation of the slotted spring.

A indicates a stiff wire or rod sharpened at the end and preferably bent into the form of
30 a hook. One end of this rod or wire, as at B, is screw-threaded and pointed, so that the screw-threaded part may bore its way into a board for attaching the hook. A button or shoulder C is permanently secured to the hook
35 at the end of the screw-threaded portion. The hook A has a reflex curve E near the pointed upper end. A flat spring F is perforated for the passage of the screw-threaded part B of the hook. The spring has a bend at G and is
40 slotted lengthwise along this bent portion, as shown at H, Fig. 4. The spring when clamped by the button or shoulder C of the hook is pressed forward, so that the slotted portion of the spring straddles the reflex curve or re-
45 turn bend of the hook.

Referring now to Fig. 1, if a sheet of paper be pressed against the point I of the hook and then drawn down the sheet will press back the spring F and will slide down past
50 the curve E of the hook until it rests against the button or shoulder C, the hook having

made its own perforation in the paper. The spring F will move back astride of the curve E of the hook, and will thus form a stop or catch to prevent the paper from being too
55 readily lifted or blown away; but by taking hold of the bottom of the paper and lifting upward the spring will be forced back again by the movement of the paper and the sheet may be drawn off the end of the hook. 60

In Fig. 2 the construction is similar, except that the screw part C of the hook enters a wooden or metallic bracket or holding-piece M, and the spring F is clamped between the two. The bracket M may be attached to the
65 wall by nails, screws, or otherwise.

By a slight modification, as indicated in dotted lines, Fig. 2, the spring may be attached near the top of the bracket and extend downwardly with a reflex or return bend. Such
70 construction is a little more expensive, as a separate screw or fastening device O is required.

In Fig. 3 the sharpened rod A' is shown attached to a base or paper-weight P. The slot-
75 ted spring F' has a more pronounced curve than in the other constructions to compensate for straightness of the needle or spindle. The papers are applied to this form of holder and removed in the same manner as in the con-
80 structions hereinbefore described.

It will be observed that by reason of the angle at which the hook or spindle and the slotted portion of the spring approach each other it will be easy to apply or remove a pa-
85 per from the hook or spindle, and at the same time the spring will form an effective check against the removal of papers from the spindle or needle, except by a pull in the direction of the length of the hook or needle. The
90 spindle or hook should be so rigid that it will not yield in applying papers. The plate-spring should be light and yielding to permit the ready application and removal of papers, but should be strong enough to prevent the pa-
95 pers from blowing away.

What I claim is—

1. The combination of the pointed hook having a reflex bend, as at E, a shoulder C, and a screw-threaded portion B, with a slot-
100 ted spring F, having a bent portion along the slot, which embraces the hook, and having a

perforation through which the screw-threaded portion of the hook passes, substantially as described.

2. The combination of the hook A, having
5 a reflex portion E, with the perforated spring F, through which the base of the hook passes and having a reflex curve G, slotted lengthwise and embracing the reflex bend of the hook, substantially as described.

10 3. The combination, with a base-piece, of a sharpened spindle projecting therefrom, a

plate-spring having a perforation through which said spindle passes and having a reflex bend slotted lengthwise and in position to straddle the spindle or needle, all substan- 15
tially as described.

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

GEORGE W. HALL.

Witnesses:

W. A. BARTLETT,

T. W. JOHNSON.