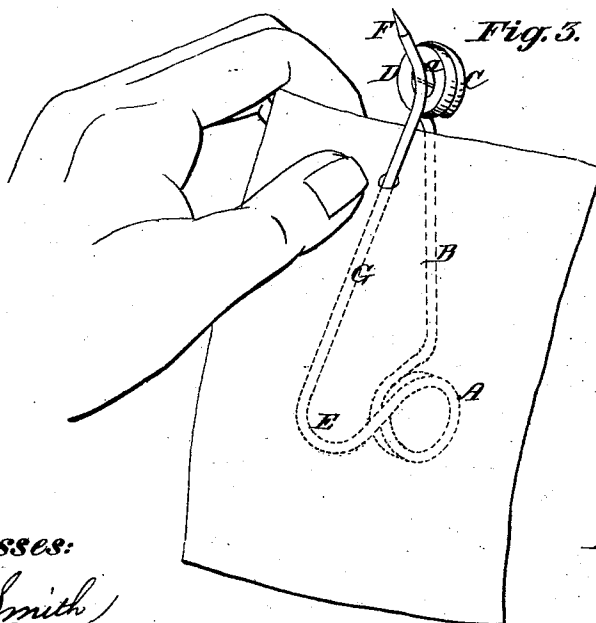
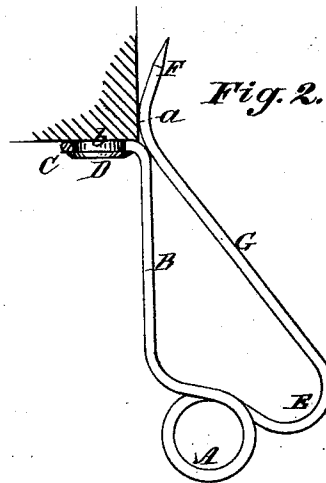
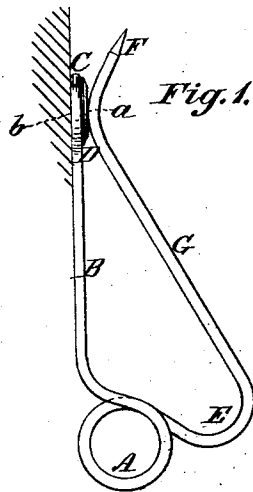


J. CAIN.
Bill-Files.

No. 152,070.

Patented June 16, 1874.



Witnesses:

J. B. Smith
Wm. E. Chaffee.

Inventor:

Jacob Cain
by Johnson & Johnson
His Attorneys.

UNITED STATES PATENT OFFICE.

JACOB CAIN, OF ALTOONA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO ANDREW G. GAMBLE, OF SAME PLACE.

IMPROVEMENT IN BILL-FILES.

Specification forming part of Letters Patent No. **152,070**, dated June 16, 1874; application filed
April 22, 1874.

To all whom it may concern:

Be it known that I, JACOB CAIN, of Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Bill-Files; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The improvement I have made in the spring paper-file consists in the combination of a hubbed holder with the eye of the suspending-stem and the oblique piercing-point of the spring-holder, whereby the suspending-point is brought below the piercing-point and the hubbed holder made to serve as a brace for the suspending-eye, the bearing for the piercing-point, and the clamp for the confining-screw.

In the accompanying drawings, Figure 1 represents a view of my paper-file as attached to a vertical board or wall; Fig. 2, a view, showing the manner of manipulating.

A piece of wire is bent into a coil at A, one portion rising vertically from the coil and forming the hanging stem B, which hanging stem terminates in an eye, C, which is wound around and soldered to the hub of a button, D, through which the fastening-screw is driven. The other portion issues from the coil, continues a short distance in a goose-neck form at E, and thence inclines toward the button D, upon which it bears, and, bending outward again at an angle, terminates at F in a piercing-point, forming an oblique holding-stem, G, which pierces and holds the papers. This holding-stem G has two points of spring, one at the goose-neck E and the other at the coil, whereby great elasticity of tension is effected and the stem rendered sensible to the slightest touch. The stem G always, when at rest,

has its bearing *a* upon the button D, and never flies back out of its straight line of movement to entangle itself with the hanging stem. This is due to the fact of the broad button, which forms the bearing for the piercing-stem.

In hanging a paper upon the file it is simply grasped by the thumb and index of either hand, drawn over the piercing-point, and released. The space formed between the piercing-stem and the vertical hanging stem is triangular, and sufficient always for a large quantity of papers, according to the size of the hook or file.

To draw off a paper it is seized in the same manner as it hangs, turned upward and off, the tension of the oblique stem being so delicate that the simple drawing off the paper causes it to leave its bearing.

The device is adapted for the filing of telegraph-messages, bill-receipts, and other papers.

The button D has a hub, *b*, of less diameter than the rimmed face or head, and round this hub the eye of the stem is formed, and to which it is soldered, so that it is clamped between the head and the surface to which the eye is secured, thereby holding the stem B rigidly in a vertical position.

I claim—

The hubbed holder D, in combination with the eye C of the suspending-stem and the oblique piercing-point E, whereby the suspending-point is brought below the piercing-point, and the hubbed holder is made to serve as a brace for the suspending-eye, as a bearing for the piercing-point, and as a bearing for the confining-screw.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JACOB CAIN.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.