

(No Model.)

N. H. VOSS.
LETTER FILE OR PAPER CLIP.

No. 555,229.

Patented Feb. 25, 1896.

Fig. 1

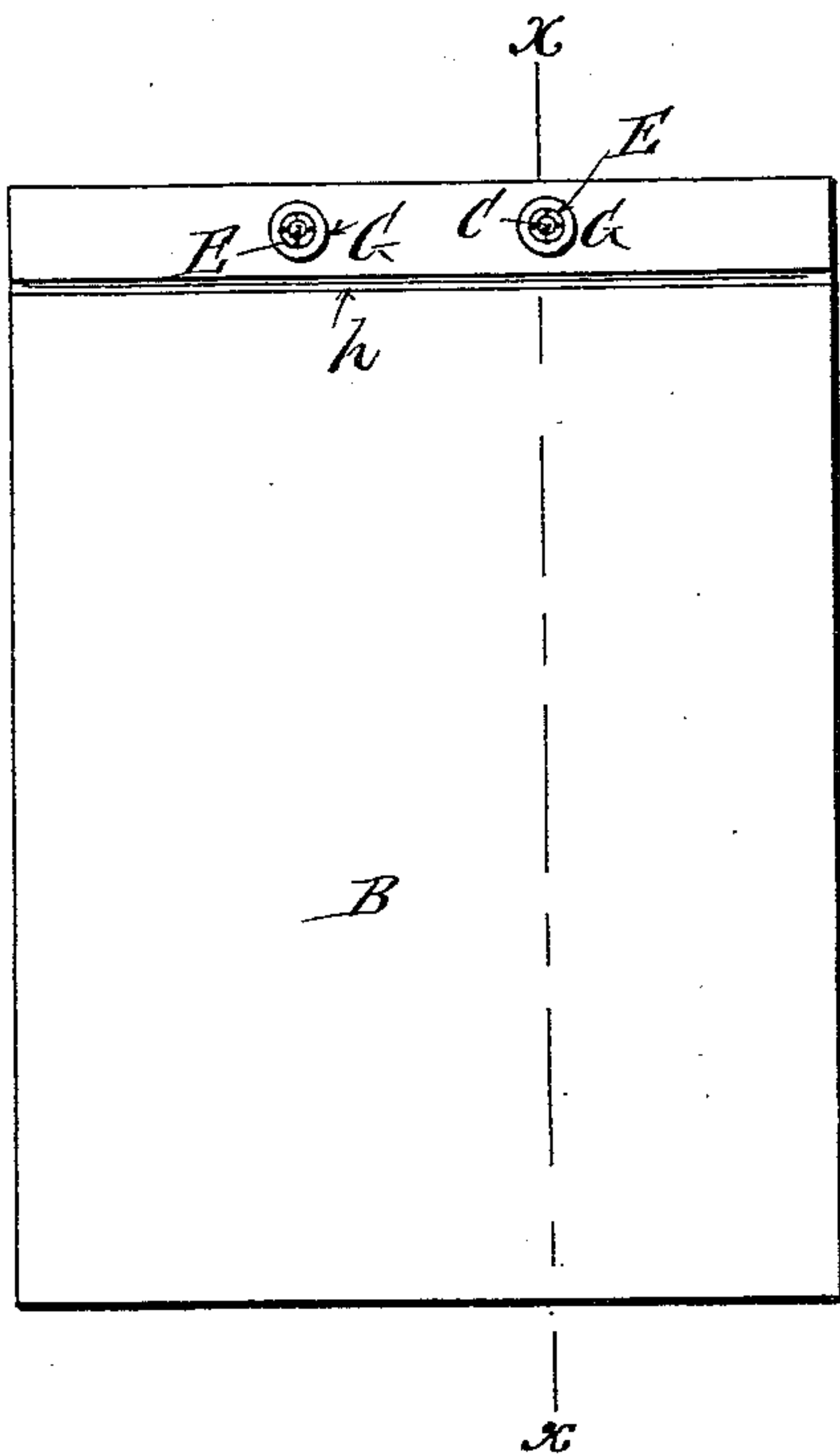


Fig. 4.

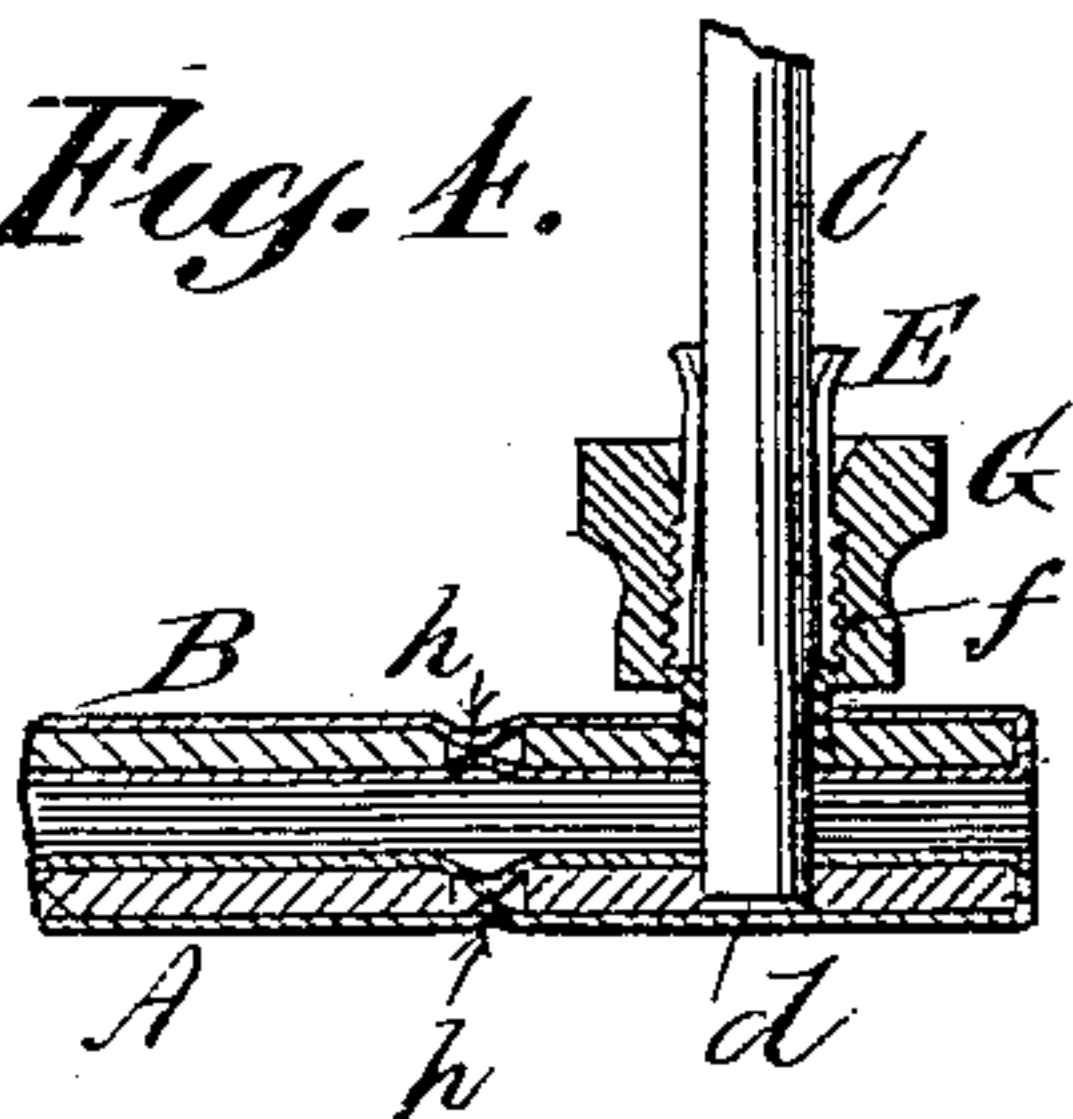


Fig. 5.

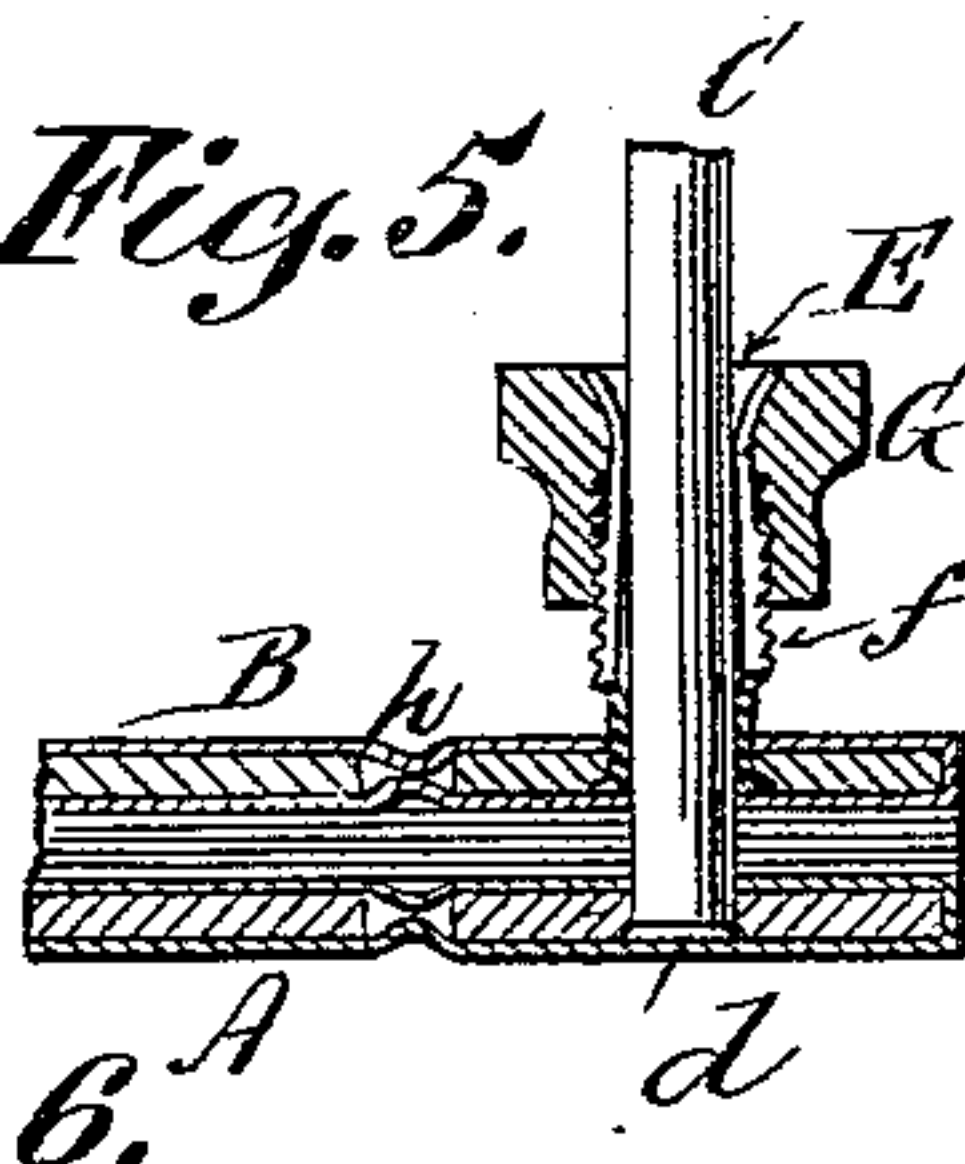


Fig. 6.

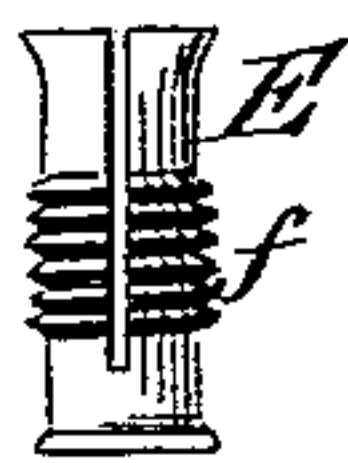


Fig. 3.

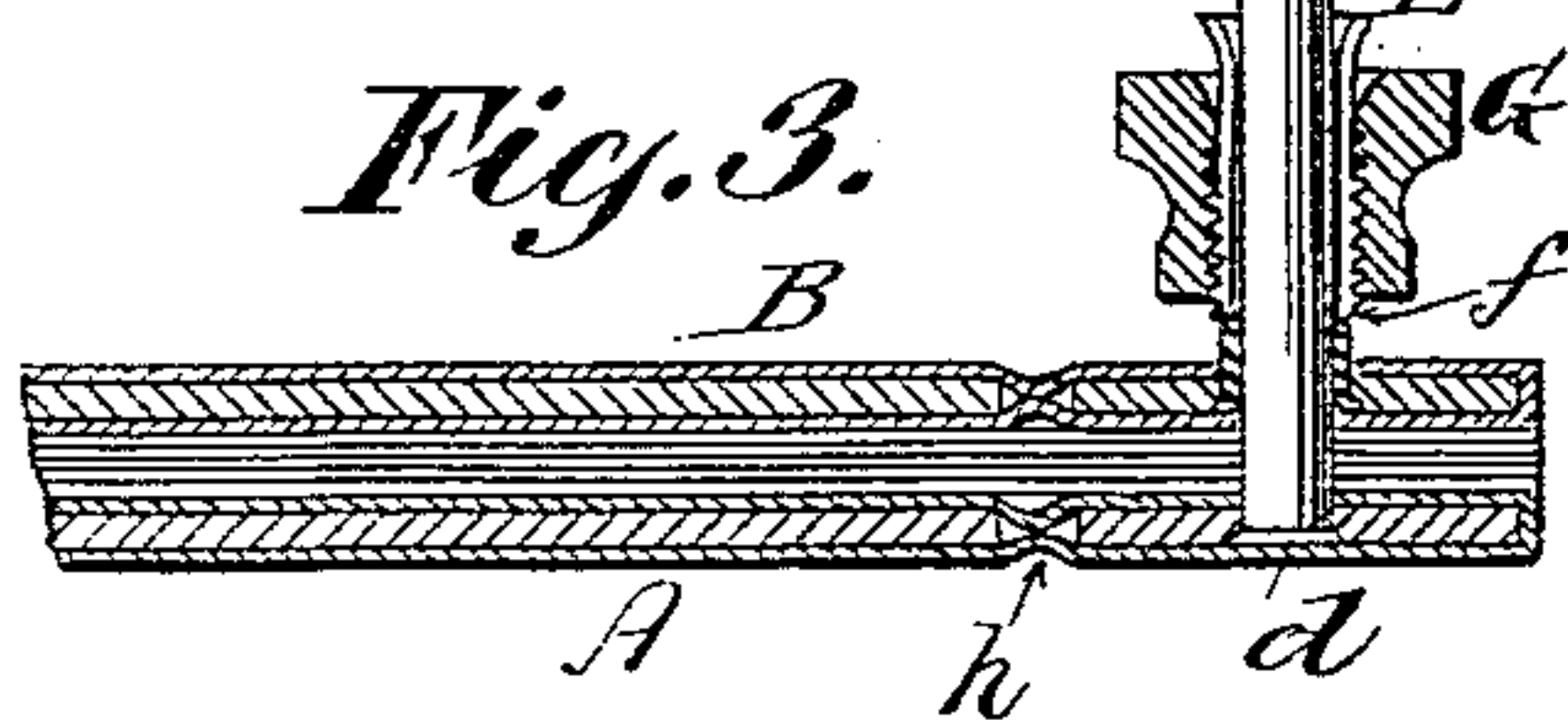
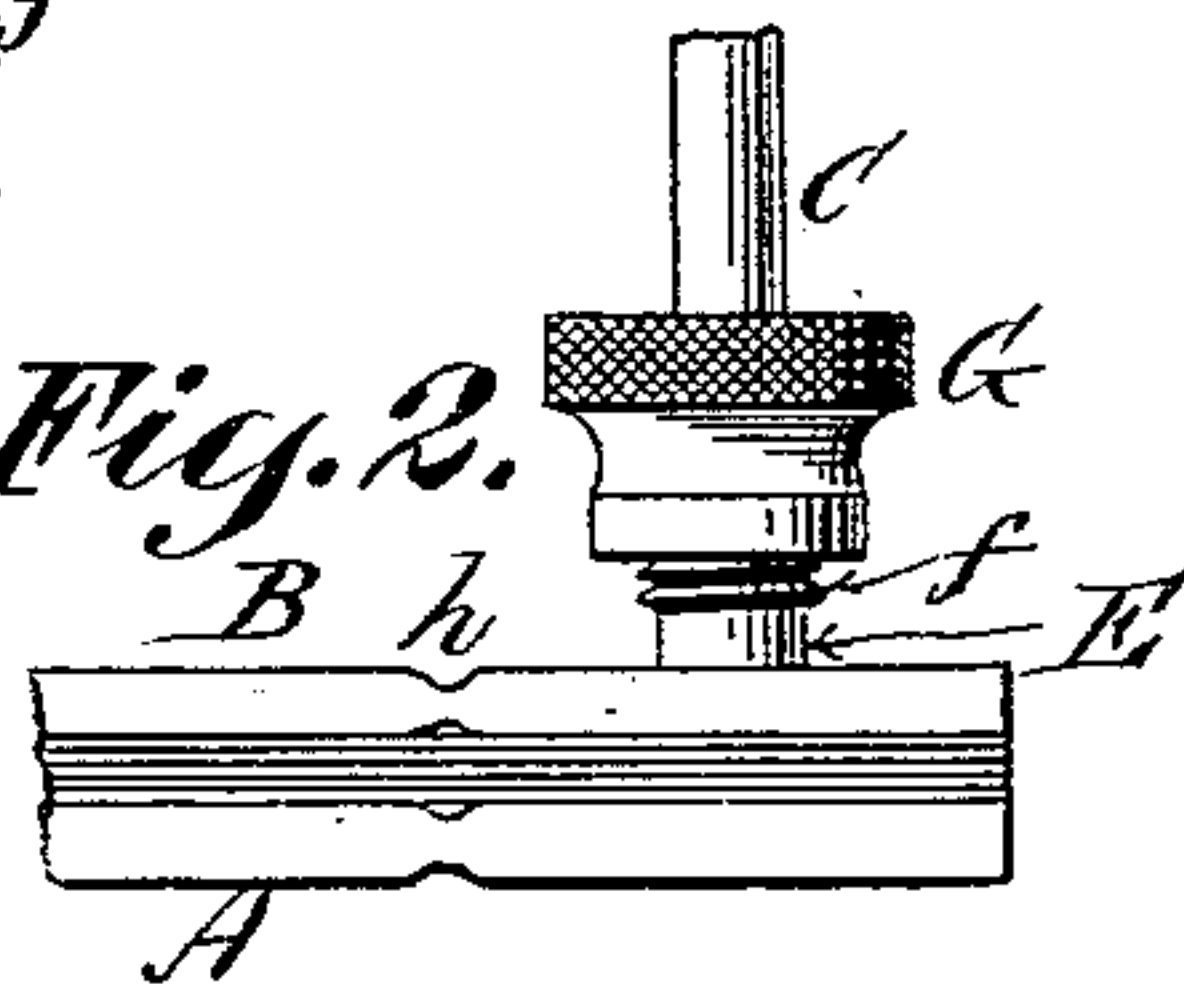


Fig. 2.



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UNITED STATES PATENT OFFICE.

NICHOLAS H. VOSS, OF NEW YORK, N. Y.

LETTER-FILE OR PAPER-CLIP.

SPECIFICATION forming part of Letters Patent No. 555,229, dated February 25, 1896.

Application filed March 22, 1895. Serial No. 542,840. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS H. VOSS, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented a certain new and useful Improved Letter-File or Paper-Clip, of which the following is a specification.

This invention relates to an apparatus for holding letters, bills, invoices, or other papers in such a manner as to effectually preserve them from loss or injury and at the same time allow them to be readily examined or removed and replaced when desired.

The invention consists in certain novel details of construction, arrangement, and operation of devices appertaining to a letter-file or paper-clip in which the essential features are a stationary lower or base board provided with one or more upwardly-extending posts or rods adapted to be passed through perforations in the papers to be filed, a movable upper or covering board provided with one or more elastic sleeves or tubes for engagement with said posts or rods, and means for effecting the engagement and disengagement of said sleeve or tube and said post or rod, all as hereinafter more particularly described and set forth.

The accompanying drawings illustrate a mode of carrying out the invention.

Figure 1 is a top view of the apparatus in position for use. Fig. 2 is a side view looking from the upper right-hand side of Fig. 1. Fig. 3 is a longitudinal vertical section taken in the line $x x$ of Fig. 1. Figs. 4 and 5 are vertical sections showing certain devices in different positions. Fig. 6 is a detail view of the elastic sleeve or tube.

The lower or base board, A, and covering-board B may be made of any suitable material. In ordinary cases it may be found preferable to make them of what is known as "binders' board" covered with canvas or other suitable fabric.

The lower board, A, carries one or more upwardly-extending rods or posts C, the lower ends of which are formed into flanges d , by which means they are secured in place in the board, so as to prevent them from rising.

The upper or covering board, B, carries one or more cylindrical sleeves or tubes E, the

lower ends of which are flanged or flared outwardly, like an eyelet, flush with the lower surface of the board B, by which means they are secured in place in the board. The relative dimensions of the sleeve or tube E and the rod or post C are such that the one will fit snugly and slide smoothly on the other.

The sleeve or tube E is perfectly cylindrical and solid from its flanged or flared lower end upward to a point somewhat higher than the upper surface of the board B in which it is fitted. From this point to its upper end the sleeve or tube E is divided or split, so as to form a number of elastic strips or tongues concavo-convex in their transverse section and having an external screw-thread f formed thereon.

G is a thumb-nut or collar internally threaded for engagement with the external thread f on the elastic strips or tongues of the sleeve or tube E. The interior threaded portion of this collar or thumb-nut is slightly tapering inward and upward, so that when engaged with the externally-threaded strips or tongues it compresses them when it is screwed down, and their elasticity allows them to expand when it is unscrewed or turned upward. The length of the sleeve or tube E is somewhat greater than the height or thickness of the collar or thumb-nut G. When the collar or thumb-nut is placed in position outside of the sleeve or tube, the upper edges of the elastic strips or tongues may be bent and flared outward for engagement with a countersunk cavity at the upper end of the bore of the collar or nut. By this means the nut is secured against improper removal from its place on the sleeve; and, furthermore, when the nut is unscrewed or turned upward until the flared upper edges of the strips or tongues engage with the countersunk cavity in the nut, said strips or tongues are compressed in the same manner as when the nut is turned downward.

The apparatus being adjusted for use, when the parts are in the position shown in Fig. 3 the sleeve is not in a state of compression, but fits snugly on the post and is free to slide thereon in order to allow the covering-board to be raised or lowered or removed, if desired; but when the nut or collar G is screwed down, as shown in Fig. 4, the elastic strips or tongues are compressed, in consequence of the taper-

ing form of the collar or nut, causing them to bite or bind tightly on the rod or post and prevent the sleeve from sliding thereon. When the nut or collar is unscrewed or turned upward as far as to the position shown in Fig. 3, the pressure is reduced sufficiently to allow the sleeve to slide on the rod or post, so that the covering-board may be raised or lowered. When the unscrewing or upward turning of the nut is continued until the flared upper edges of the tongues are engaged by the countersunk cavity of the nut, as shown in Figs. 2 and 5, the elastic tongues are again compressed and caused to bite or bind on the rod or post and prevent the sleeve from sliding thereon.

As shown in the drawings, the apparatus herein described is provided with two of the rods or posts and corresponding sleeves and nuts. In some cases, where the papers to be filed are of sufficient width to require it, there may be any suitable number provided; and in still other cases the papers to be filed may be so narrow that one rod or post and its corresponding sleeve and nut will be sufficient for the purpose.

As shown in the drawings, each of the boards A and B is formed of two pieces of binder's board or other stiff material covered with canvas or other flexible fabric. One piece in each board is a strip or bar of sufficient width to hold the fastening devices and a portion of the paper to be filed, and the other piece is large enough to cover the remaining portion of the paper. Where the edges of the two pieces are connected to each other by the flexible covering fabric, said fabric is depressed between said edges, so as to form a groove on both the upper and lower surface of the board, which double-grooved portion constitutes a hinge *h*. By this con-

struction, when the apparatus is lying flat, the upper board can be readily raised like a hinged box-cover, and when the apparatus is held in the hand the boards can be manipulated like the covers of a bound book. Another advantage resulting from this construction is that when the apparatus contains but a small number of papers the hinged construction of the boards admits of the upper portion of the apparatus being inclined or bent, so as to occupy less space than would be required if the posts remained in a position at a right angle with the surface of the board.

I am aware that the construction of the boards as above described is not new, and said construction is not claimed as a part of this invention.

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

In a letter-file or paper-clip constructed as described, the combination of the board A provided with one or more posts or rods C flanged or flaring at their lower ends, the board B provided with one or more elastic sleeves or tubes E flanged or flaring at their lower and upper ends, made in one piece but cleft to form strips or tongues, which are externally screw-threaded, and one or more tightening collars or nuts G internally screw-threaded surrounding said sleeves or tubes E, substantially as and for the purposes hereinabove described.

Signed at New York city, in the county of New York and State of New York, this 19th day of March, A. D. 1895.

NICHOLAS H. VOSS.

Witnesses:

W. H. BROKAW,
W. F. WINSOR.