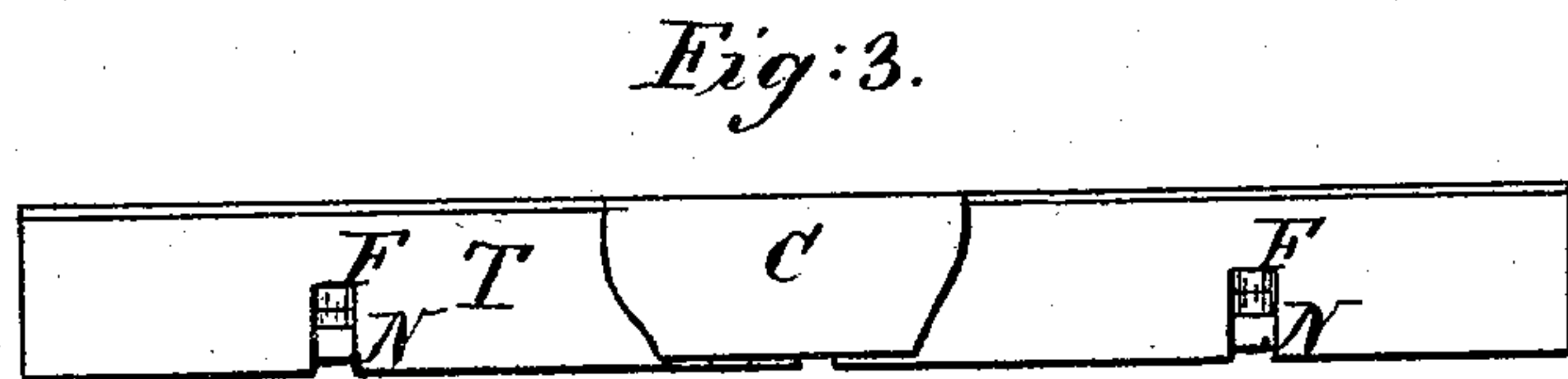
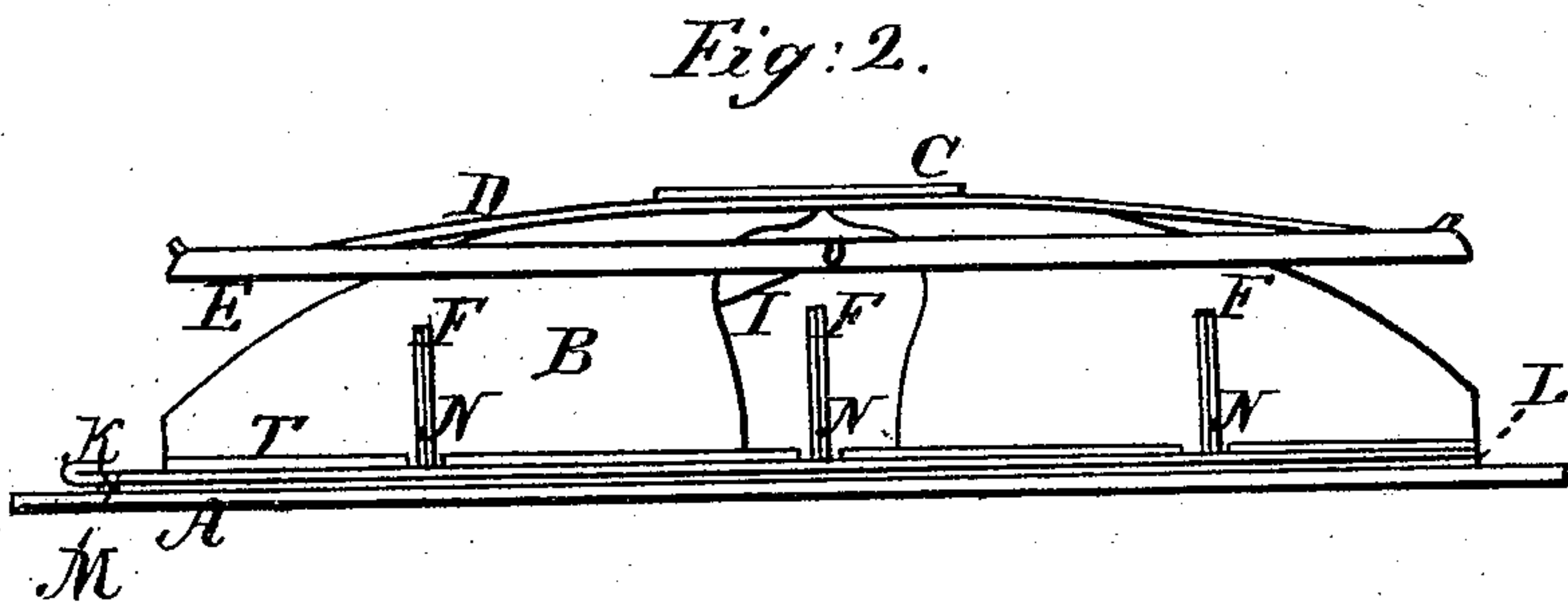
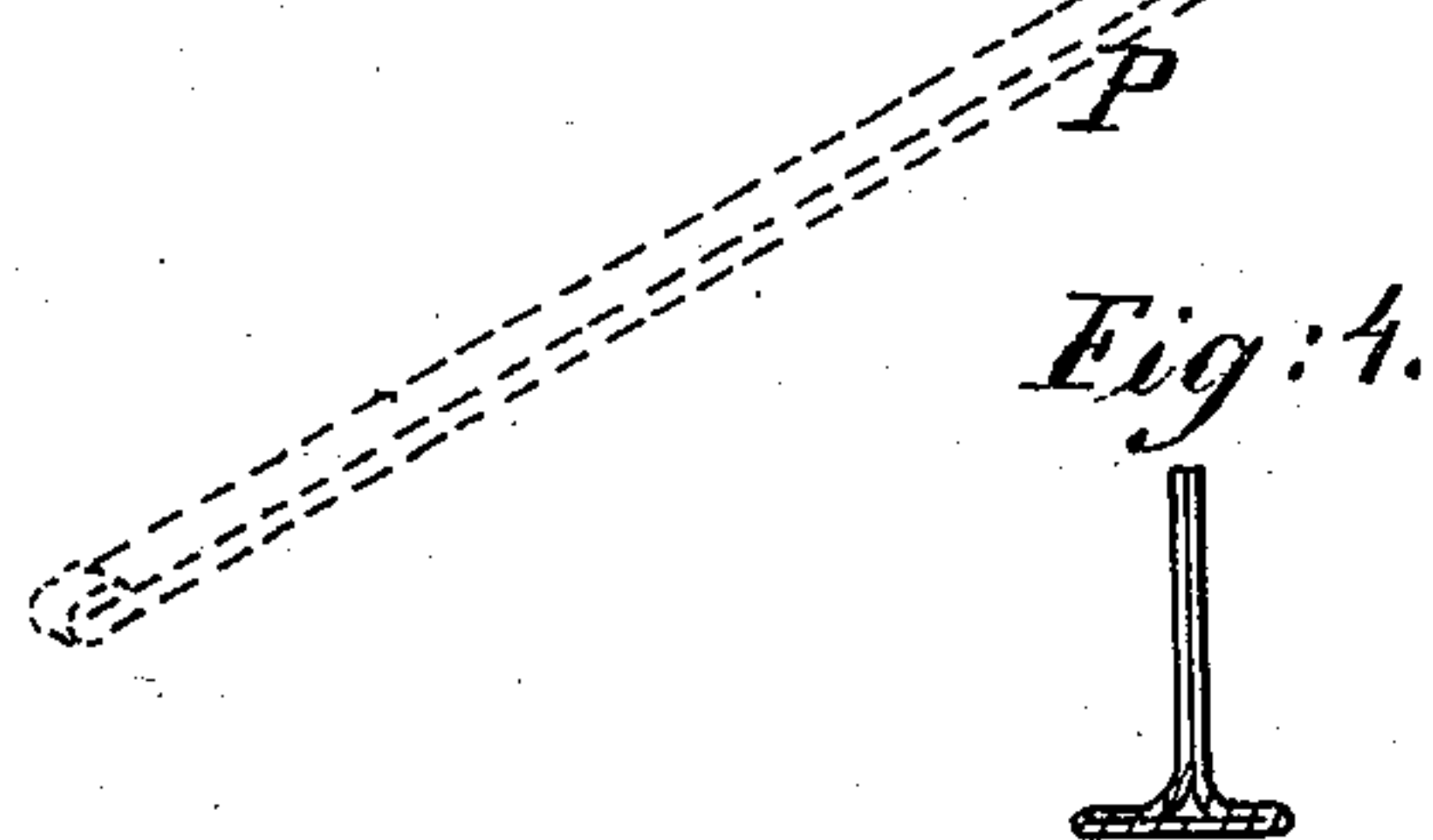
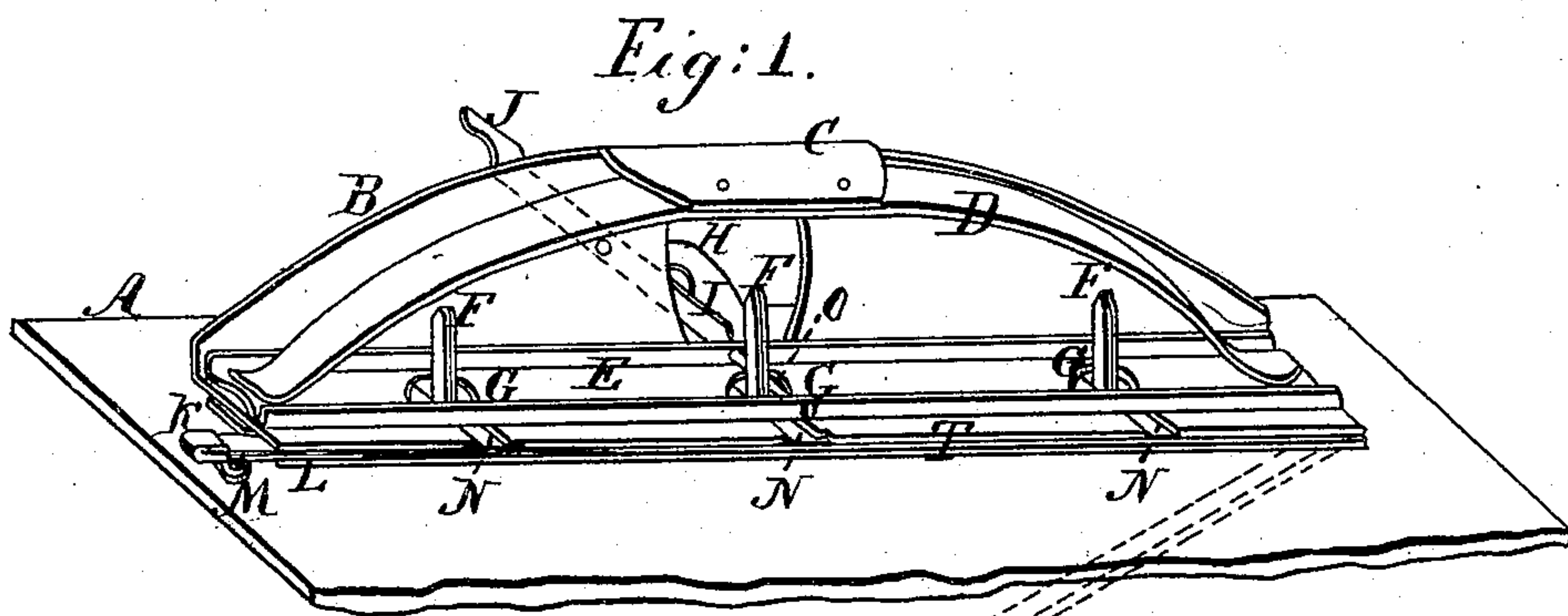


G. W. EMERSON.
PAPER CLIPS.

No. 98,479.

Patented Jan. 4, 1870.



Witnesses.
Drs. R. Parrott
J. & Clarke

Inventor.
G. W. Emerson,

United States Patent Office.

GEO. GE W. EMERSON, OF CHICAGO, ILLINOIS.

Letters Patent No. 98,479, dated January 4, 1870.

IMPROVEMENT IN PAPER-CLIPS.

The Schedule referred to in these Letters Patent and making part of the same

I, GEORGE W. EMERSON, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain Improvements in Paper-Clips and Files, for holding, filing, and binding papers.

The first part of my invention relates to the construction of a paper-clip for holding papers, by means of a half-elliptic spring.

The second part of my invention relates to the construction of a paper-clip, in which metallic paper-fasteners may be adjusted to file and bind papers.

Figure 1 is a perspective representation of my invention, attached to a board.

Figure 2 is a front elevation of the same.

Figure 3 is a plan view, with the spring and the spring-plate removed.

Figure 4 is an elevation of one of the paper-fasteners patented by McGill.

A is a broken section of the board to which the clip is firmly fastened.

B, C, and T, is the body of the clip, made of sheet-brass or other suitable material, and turned at right angles to form the cap C and the foot T.

This foot is swaged up from the bottom the entire length, in a line with the back end of the slots N N N, to allow sufficient space between the foot T and the bed-plate L for the heads of the paper-fasteners F F F. This bed-plate is the same length, and one-eighth of an inch wider than the foot T. This bed-plate extends one-eighth of an inch to the front of the foot T, that the paper-fasteners F F F may be more easily adjusted in the slots N N N. This bed-plate is used more especially to form a firm, smooth surface underneath the paper-fasteners F F F.

The handle H is cut out of the back B. The lower end of this handle is attached to the foot T, and serves to brace the body of the clip when it is turned down and riveted or otherwise firmly fastened to the board A. This handle extends over the board, with a hole in it by which the clip may be hung up.

The spring D is made of spring-steel or other suitable material, in such shape that the ends of the spring may press the spring-plate E firmly on to the foot T, when the centre of this spring is riveted or otherwise firmly fastened to the cap C. The ends of this spring are free and turned up a very little, that they may slide easily on the spring-plate E, when it is raised or lowered. This spring and the cap C form a guard to protect the paper fasteners F F F from being bent down or otherwise injured while in use.

P is a bar, of flat steel-tempered wire, to hold the paper-fasteners F F F firmly to the back end of the slots N N N. This bar is riveted to the under side of the foot T, near the end, at the right hand, and at the proper distance from the front edge to insure the bar's pressing firmly against the upper fasteners F F

F, in slots N N N, as above described. This bar is held in this position, between the foot T and the bed-plate L, by the catch M.

K is a small ring, turned on the end of the bar P, by which the bar is the more easily fastened on or unfastened from the catch M. This catch is a round-headed rivet, with a notch in one side, in which the bar P is held, as heretofore described. As will be seen from the drawing, this catch is set in the board A.

When the bed-plate L is used, I consider it the best to set the catch M in this bed-plate, near the end, at the left hand, the proper distance from the front edge.

The spring-plate E is made of sheet-brass or other suitable material, and swaged up, rounding in the centre, and both edges turned up about one-eighth of an inch, the entire length, to stiffen the plate, and, at the same time, to cause less friction between the ends of the spring D and the plate E, and to form a groove in which the ends of this spring slide, when this plate is raised or lowered.

G G G are holes through the spring-plate E, through which the paper-fasteners F F F extend. These holes are elongated in the direction of the length of this plate, to prevent it striking the paper-fasteners F F F when it is lowered.

I J is the lever by which the spring-plate E is raised. This lever is made of sheet-brass or other suitable material. The thumb-piece J is turned to one side, at right angles with the main part of the lever, which is firmly fastened, with the pivot near its centre, to the back B, in such place, that by pressing on the thumb-piece J, the spring-plate E is raised well above the tops of the paper-fasteners F F F, in slots N N N, when the lower end of this lever is attached to the plate E, with pivot O, which is riveted or otherwise firmly fastened to the end of the lever and the edges of the spring-plate E, in holes made for the purpose. This pivot passes through opening in back B, made by cutting out the handle H, and through edges of the spring-plate E, near its centre, as heretofore described.

The clip is firmly fastened to the board A, with points cut out and attached to the foot T and the bed-plate L. These points pass through the board A, and are set firmly, in opposite directions, on the back of this board.

As will be seen, I use McGill's patent paper-fasteners; but I do not mean to confine myself to the use of these paper-fasteners, but make my clip to suit any other paper-fasteners that may be desired.

When papers are to be filed and bound, the bar P is removed from under the slots N N N, by raising it from the catch M and turning it out, as shown by the dotted lines in fig. 1. Raise the spring-plate E, place one or more paper-fasteners well back in the slots N

N N, one or more. Fasten the bar P on catch M. Pass the paper to be filed between the tops of the paper-fasteners and the spring-plate E to the back B, which serves as a gauge to place the papers against. Allow the spring D and the spring-plate E to press the papers on to the paper-fasteners F F F. When these fasteners are full, unfasten the bar P, then remove the fasteners with papers, and set the points of the fasteners firmly on the papers in opposite directions.

Other fasteners are adjusted, and other papers are filed and bound in a similar manner.

When papers are to be merely held by this clip, and not bound, as above described, the bed-plate L, the catch M, the bar P, the swaging of the foot T, the slots N N N, in the foot T, and the holes G G G, in spring-plate E, are not required, and may be dispensed with.

I claim, as my invention—

1. The combination, with the body of the clip B, C, and T, of the spring-plate E, the lever I J, the pivot O, the handle H, and the spring D, substantially as and for the purpose hereinbefore set forth.

2. The combination, with the body of the clip B, C, and T, of the spring D, of the spring-plate E, the handle H, the lever I J, the pivot O, the catch M, the bed-plate L, and the bar P, substantially as and for the purpose hereinbefore set forth.

3. The bar P, arranged to hold the paper-fasteners F F F, one or more, in place, and to unloose them when they are full, substantially as hereinbefore described and set forth.

GEO. W. EMERSON.

Witnesses:

JNO. R. BARRETT,
H. A. CLARK.