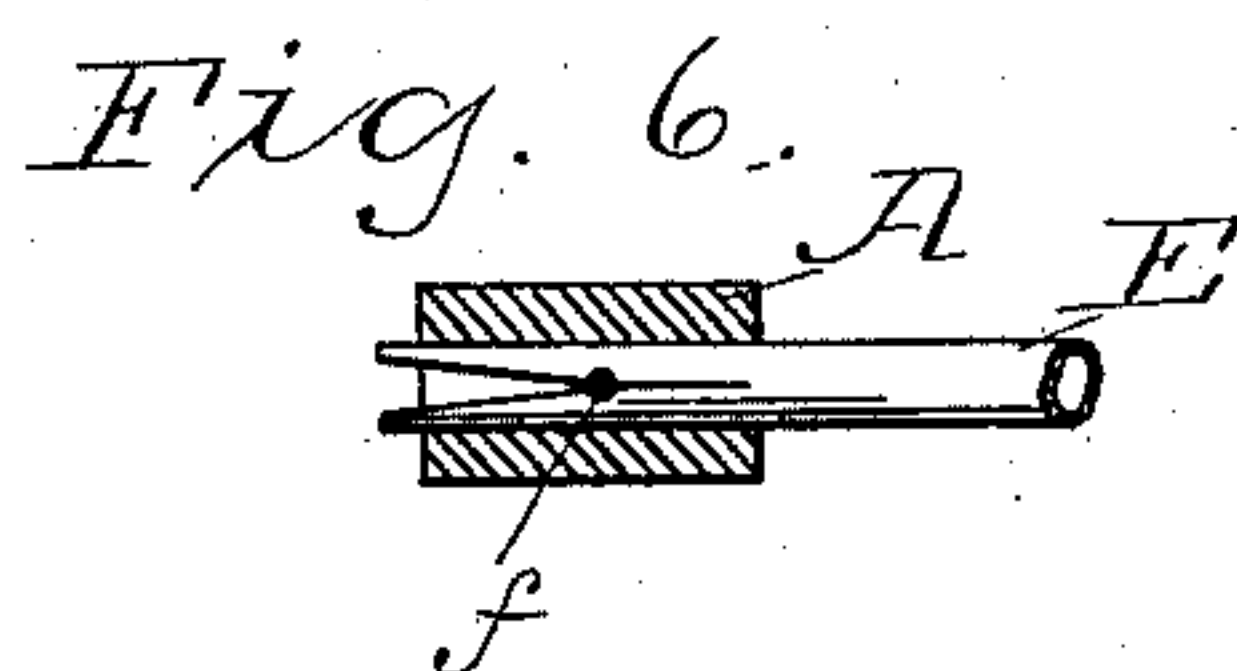
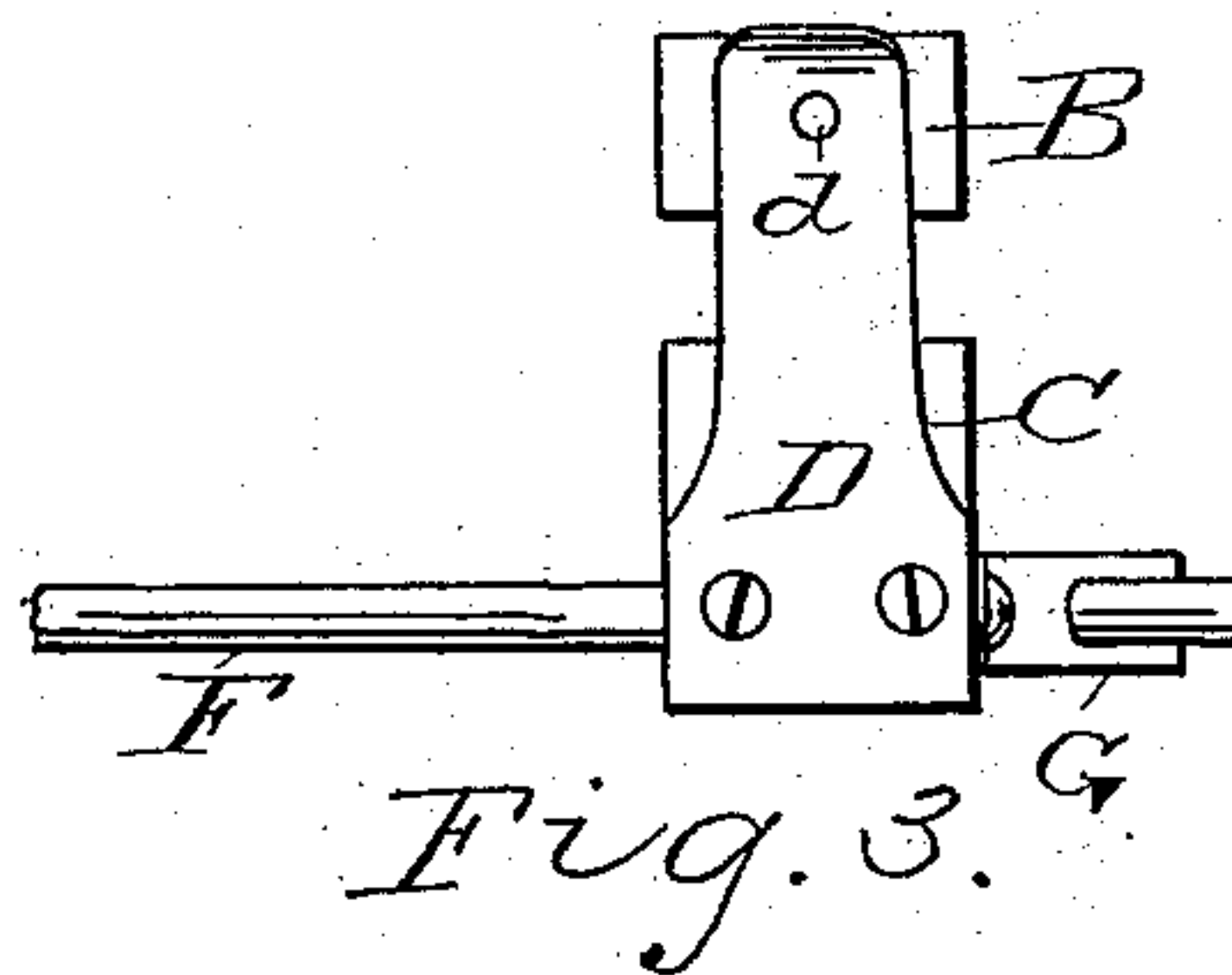
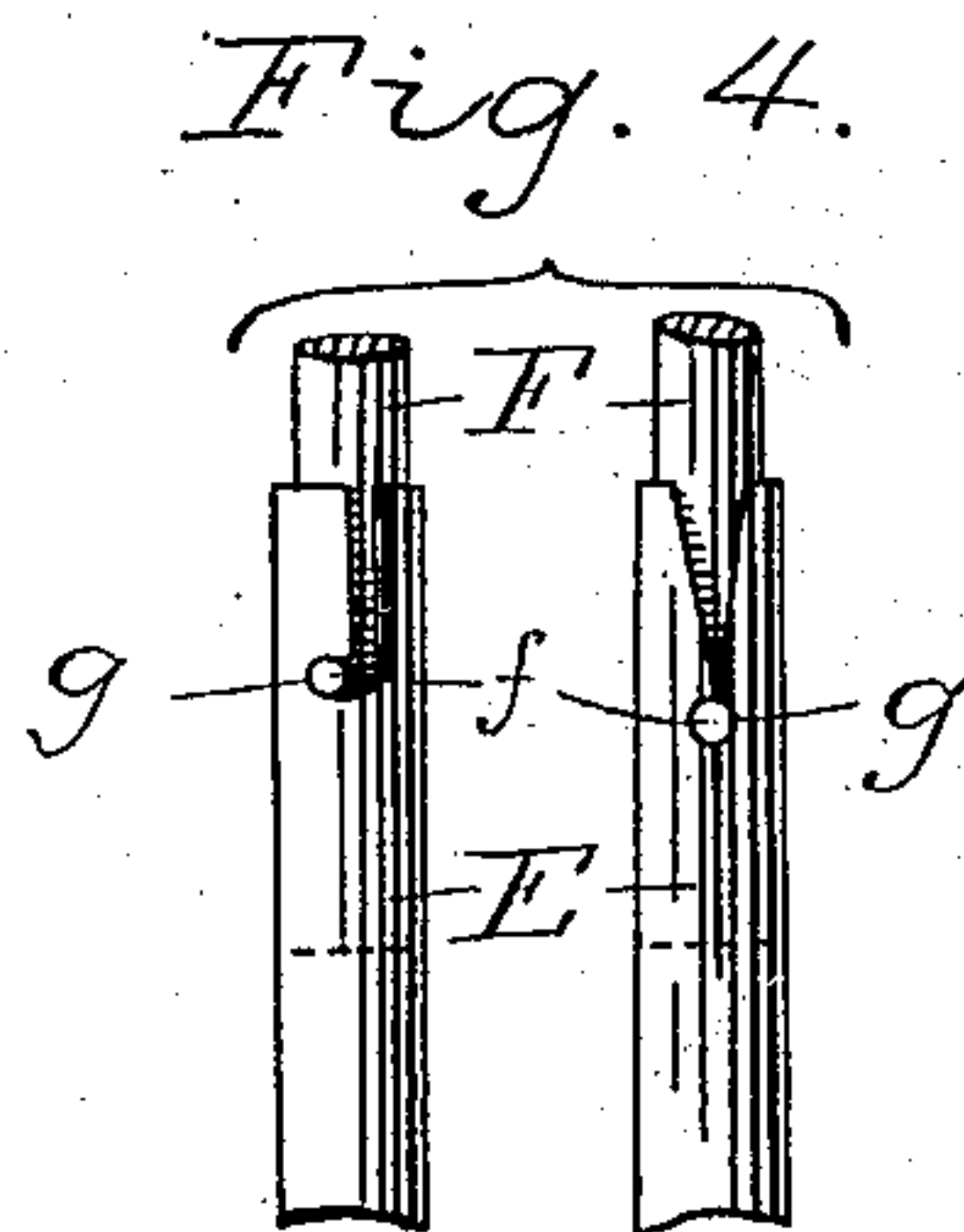
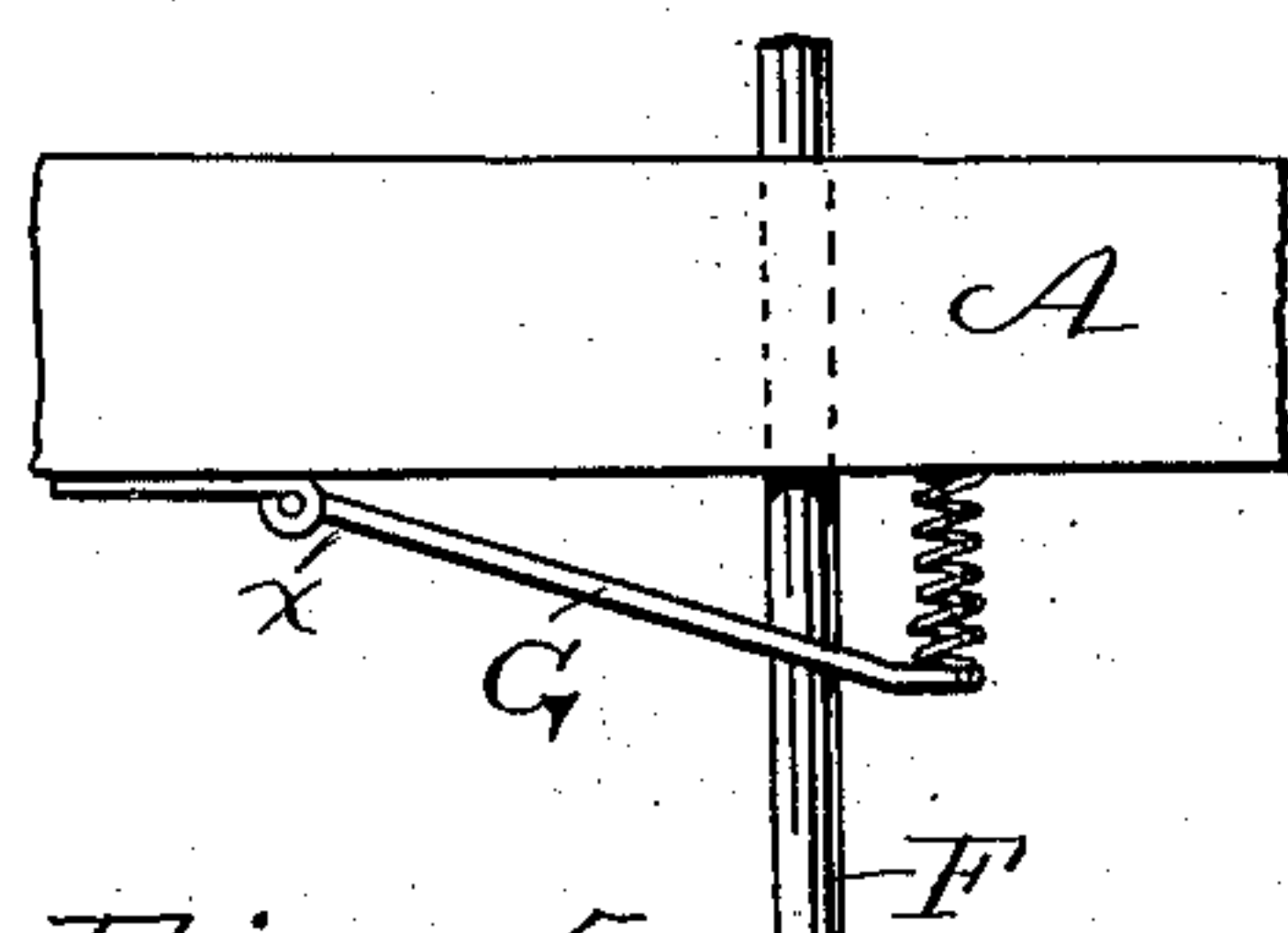
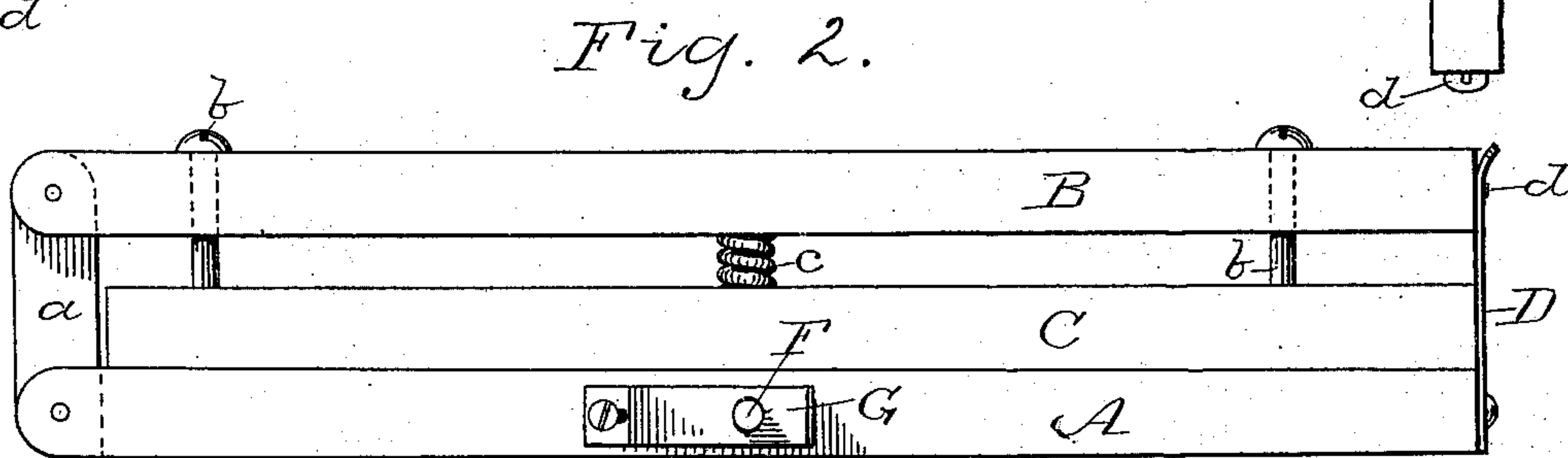
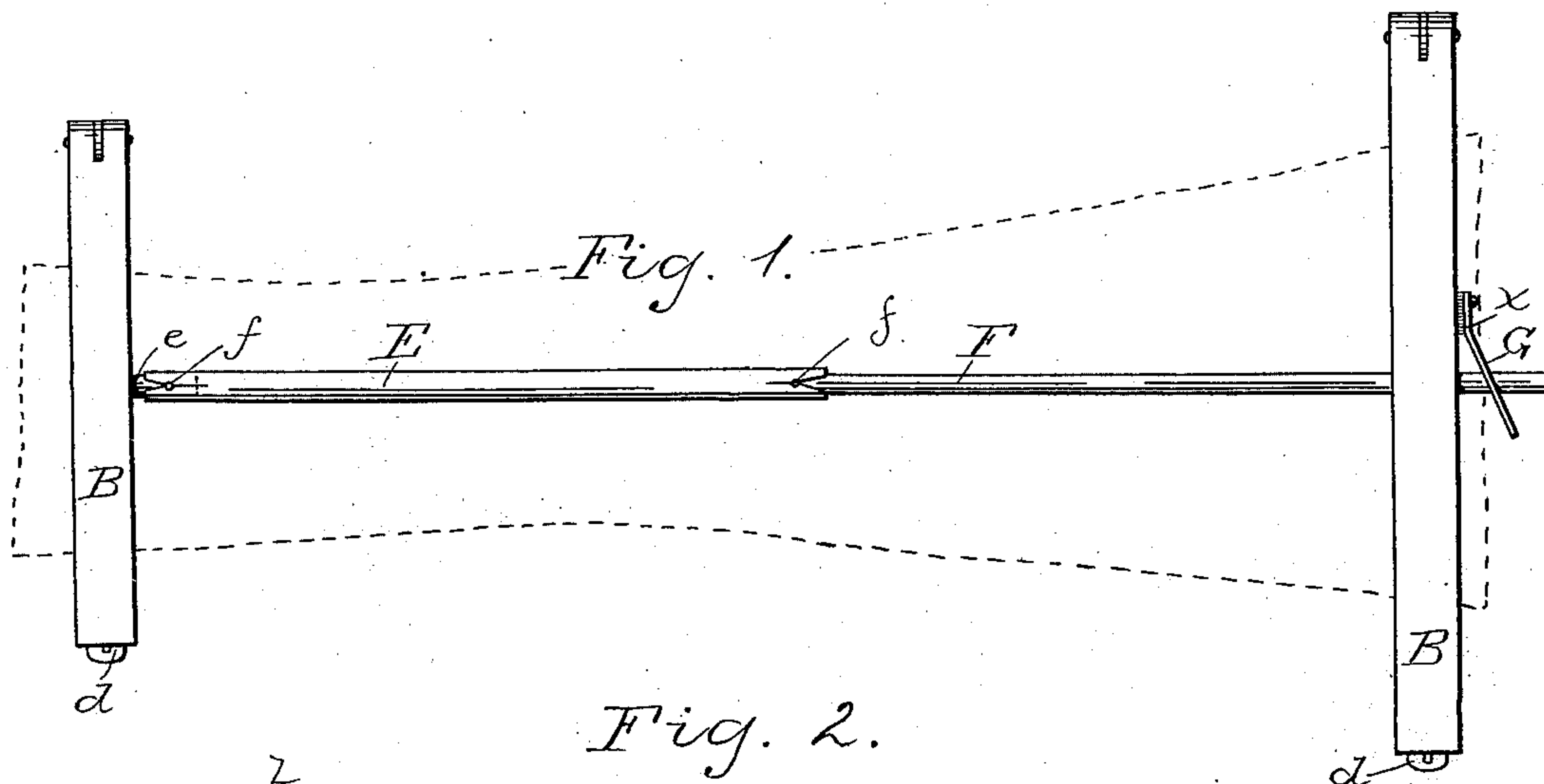


(No Model.)

H. E. GALLOWAY.
TROUSERS STRETCHER.

No. 376,083.

Patented Jan. 10, 1888.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY E. GALLOWAY, OF CHICAGO, ILLINOIS.

TROUSERS-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 376,083, dated January 10, 1888.

Application filed March 14, 1887. Serial No. 230,769. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. GALLOWAY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pants-Stretchers; 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.

The object of my invention is to provide a simple, cheap, yet perfect-acting pants-stretcher. This I accomplish by the means hereinafter described, and as illustrated in the drawings, in which—

Figure 1 is a plan view of my invention. Fig. 2 is an end view of my invention when set up; or it may just as fitly be described as a side elevation of one of the clamps used therein. Fig. 3 is an end view of one of said clamps. Fig. 4 is a detail view showing the rod F inserted in the tube E. Fig. 5 is a detail view showing the clamping-plate G secured to the frame A, and Fig. 6 is a detail view showing the connection of the tube E and the foot-clamp.

My invention consists of two clamps—one to hold the bottom of the pants and the other to hold the upper part—and means to separate and adjust apart said clamps. These clamps each consist of a rectangular strip or frame, of wood, A, having a vertical arm, *a*, at one end and a spring-catch, D, at the other. To the top of arm *a* is pivoted, longitudinally to frame A, a similar frame, B, which has a pin, *d*, projecting from its free end, which, when swung to a position parallel to frame A, is caught and held by the spring-catch D thereof. To frame B is connected the presser-bar C by means of pins *b b*, which project from the side of bar C, adjacent to frame B, vertically through corresponding holes in said frame B. These pins *b b* work loosely in the holes in frame B, and their heads prevent their withdrawal therefrom. Between frame B and bar C, I place a strong expansion-spring, *e*, (or several of them, if desired,) which, when strip or frame B is swung parallel to frame A, presses hard against the adjacent surface of said frame A.

The only difference between the clamp for the bottom and the clamp for the upper part of the pants is that the former is shorter than the latter.

In order to adjust the clamps apart, after the bottom and upper part of the pants have been secured therein, I provide the foot-clamp with a stud, *e*, which projects laterally from about the center of length of frame A thereof, which has, projecting laterally from a point near its end, a pin, *f*. Over the end of this stud *e*, I slip a tube, E—say fourteen inches in length. Both ends of this tube E are provided with a longitudinal V-slot, which has a circular hole, *g*, made in said tube at its vertex, from whence the tube is split longitudinally a short distance. Thus when the tube is slipped over the end of the stud *e* the pin *f* thereof enters the V-slot, and as it approaches the vertex thereof forces the bifurcated end apart until it enters the hole *g*, whereupon the bifurcations snap back into their normal positions and inclose said pin within hole *g* securely enough to prevent the separation of the tube from the stud *e* by the usage it is subjected to while stretching pants.

Inserted into the end of tube E, opposite the stud *e*, is a rod, F, having a pin, *f*, at one end similar to stud *e*, and connected to the tube in like manner, having its other end smooth. Rod F extends longitudinally to and loosely through a transverse hole in frame A of the waistband-clamp, at about its center of length, and then through a hole slightly greater in diameter in the clamping-plate G. This plate is secured to the side of frame A opposite to where rod F enters it by a screw or bolt, which passes through an elongated hole in the end of said plate and through a rubber cushion into said frame. After it is secured it pursues an oblique course outward from said frame to a point beyond the rod F. Consequently as the hole in the plate G is slightly greater in diameter than the rod when turned obliquely thereto it clamps it securely.

In operation the clamps, after having secured the bottoms and upper part of the pants therein between the presser-bars and frames A thereof, are separated sufficiently to draw the pants taut, the finger being pressed upon plate G, so as to permit rod F to move

freely through the hole in said plate. When the pants are sufficiently stretched, the finger is released from said plate, whereupon its elasticity restores its obliquity to said rod and
5 clamps it.

In Fig. 5 I show plate G hinged to the side of frame A and provided with a spring pushing its free end outward to maintain its obliquity.

10 In Fig. 4 I show in detail the means, before described, for securing the rod F and tube together. I also show a modification of such devices. The former will only be rendered more apparent by such enlarged illustration. The
15 latter shows the end of the tube slotted with an offset at its source, into which pin *f* of the rod enters when said rod is pushed into the tube and turned laterally. Otherwise the construction is the same.

20 It is apparent that a differently-constructed clamp could be used in conjunction with the devices for maintaining them apart, hereinbefore explained. I wish to be understood as covering all such combinations, especially
25 when a clamping device having a hole in it through which the rod passes and is clamped when said device is turned is used.

30 In Fig. 6 I show how the stud *e* can be dispensed with. In this figure, it will be observed, is a hole of about the same diameter as tube E, and in alignment with the same, in frame A. In this hole, diametrically across it, is a blind pin of the same diameter as pin *f*. When the tube E is shoved into said hole,

this blind pin enters the V-slot in the end of said tube and is caught therein, thus securely holding said tube. 35

What I claim as new is—

1. In a pants-stretcher, the combination, with clamping devices, the one having the stud
40 *e* and the other the plate G, of rod F and tube E, having its ends slotted, said stud *e* and rod F being constructed with laterally-projecting pins *f*, as set forth.

2. In a pants-stretcher, the combination, 45 with clamping devices, of tube E, having its ends slotted, rod F, having on one end a laterally-projecting pin, *f*, and plate G, constructed so as to clamp said rod when the said plate is turned obliquely. 50

3. In a pants-stretcher, the combination, with clamping devices for the bottom and upper part of the pants, consisting of strips A and B, the latter hinged to the former and secured in a parallel position to the same, and
55 presser-bar C, connected to bar B and adapted to press against strip A, of stud *e*, tube E, having its ends slotted, rod F, and clamp-plate G, said stud and rod being provided with lateral pins *f*, as and for the purpose set forth. 60

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

HENRY E. GALLOWAY.

Witnesses:

P. B. COOLIDGE,

FRANK D. THOMASON.