

(No Model.)

G. W. BLAKE.

BUCKLE.

No. 272,197.

Patented Feb. 13, 1883.

Fig. 1

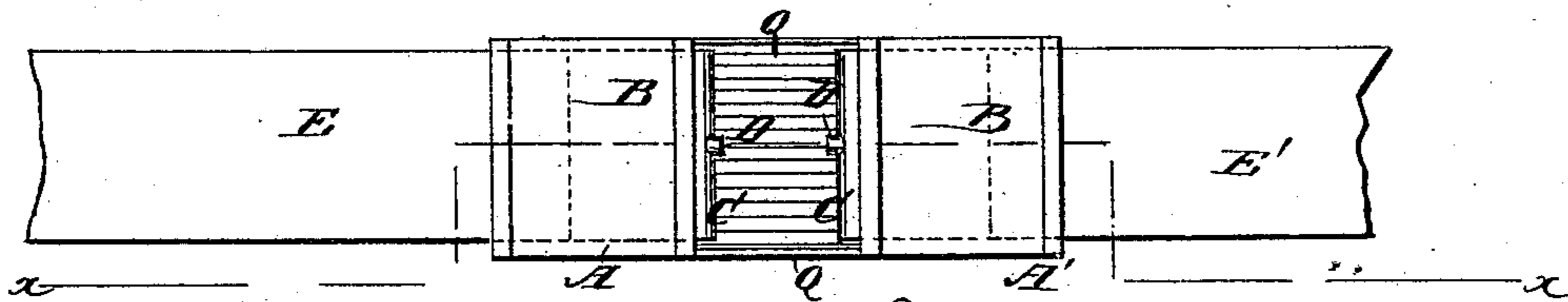


Fig. 2.

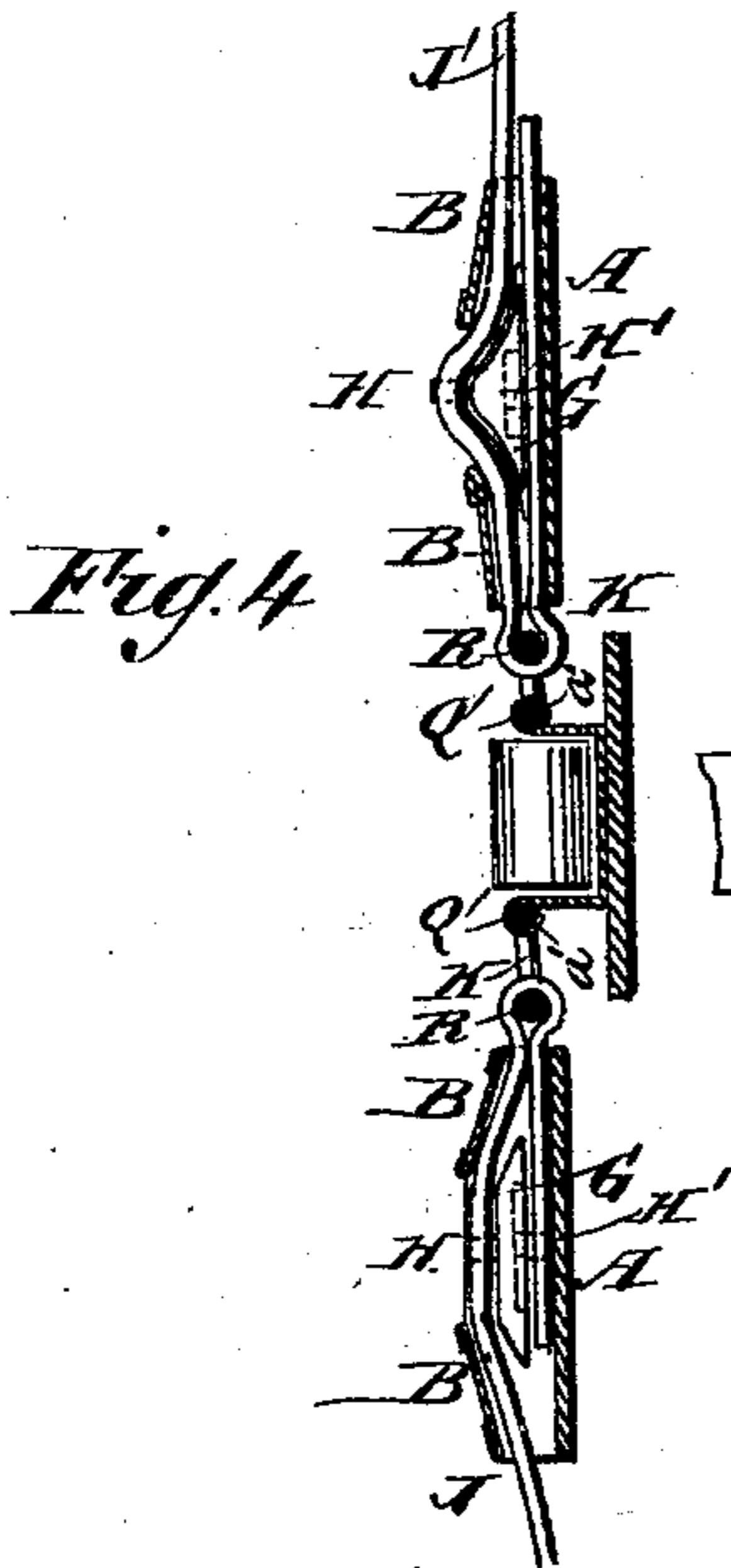
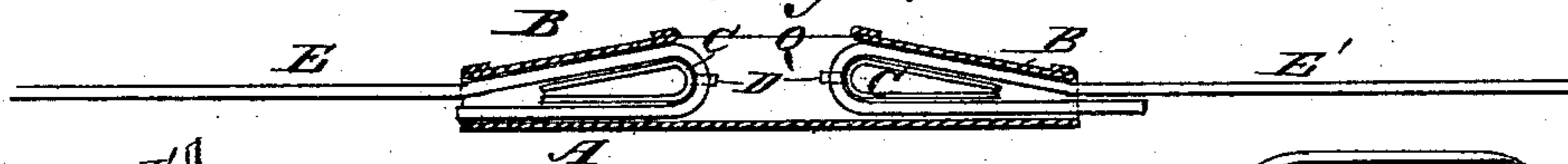


Fig. 3

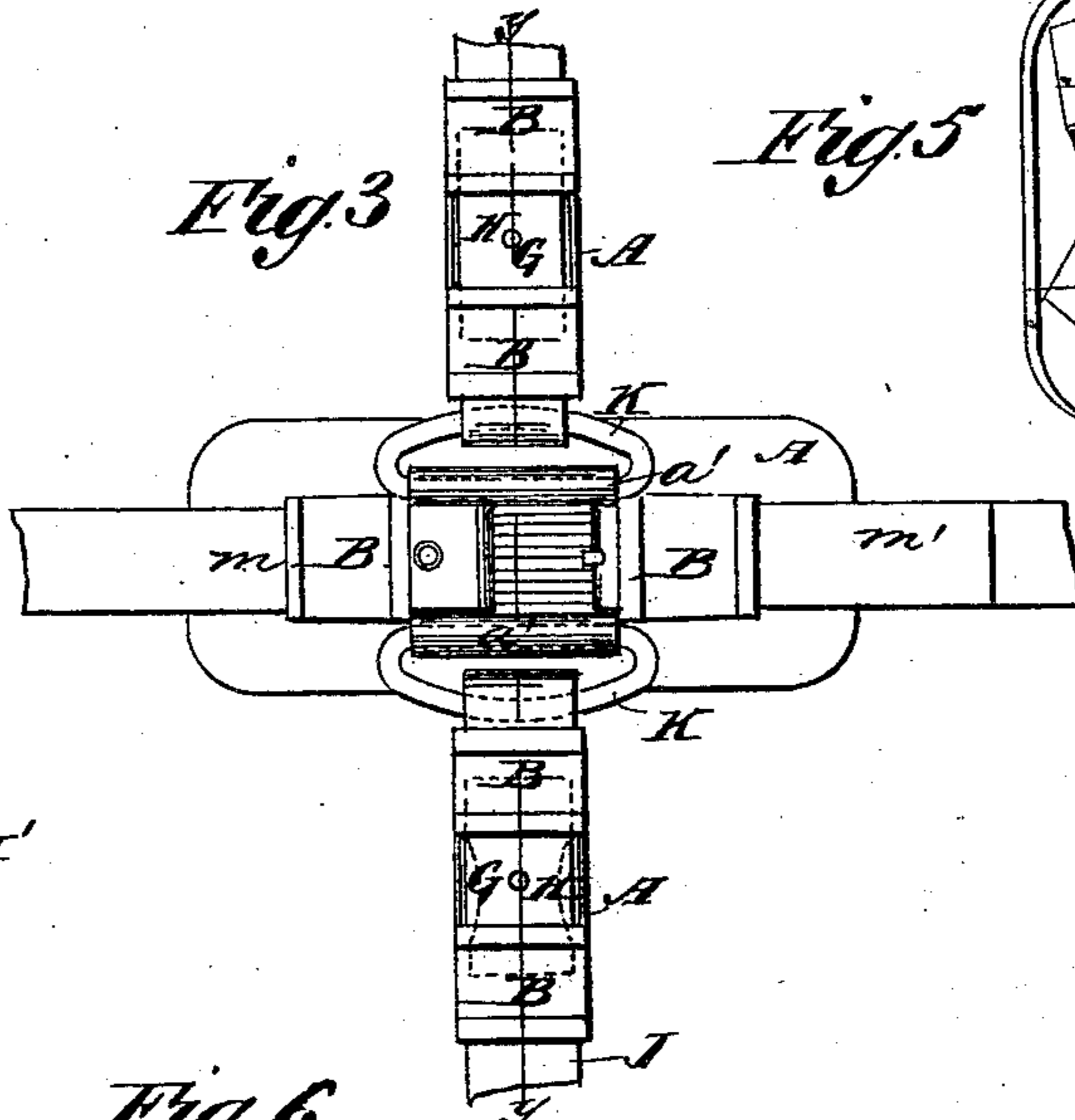


Fig. 5

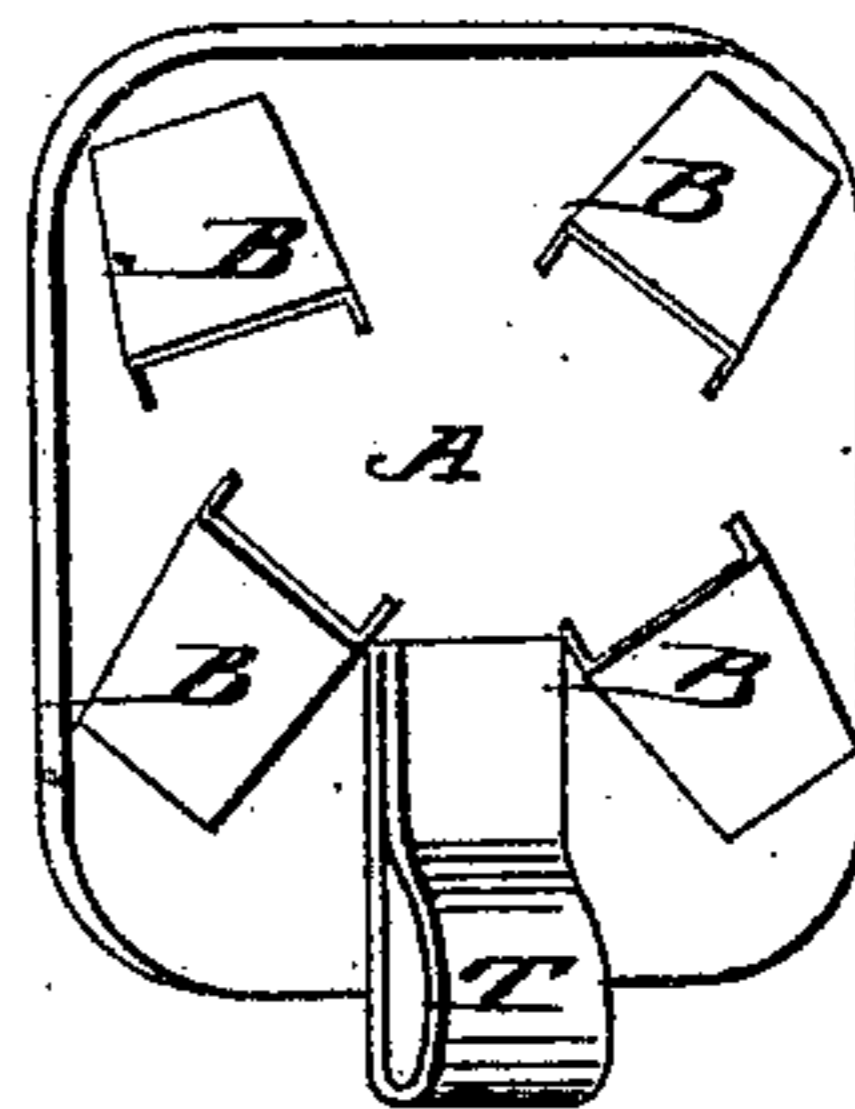


Fig. 6

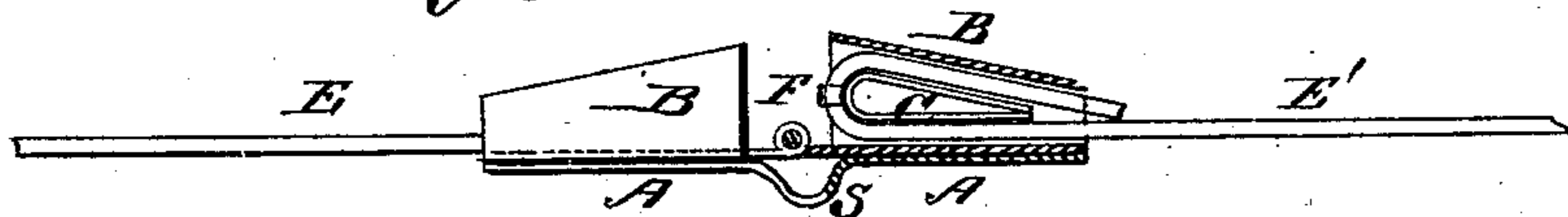


Fig. 7.

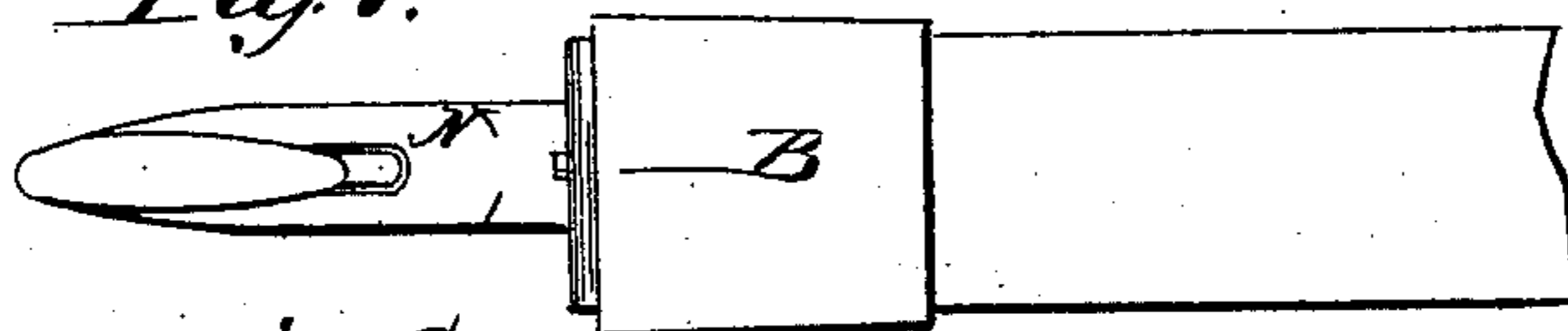
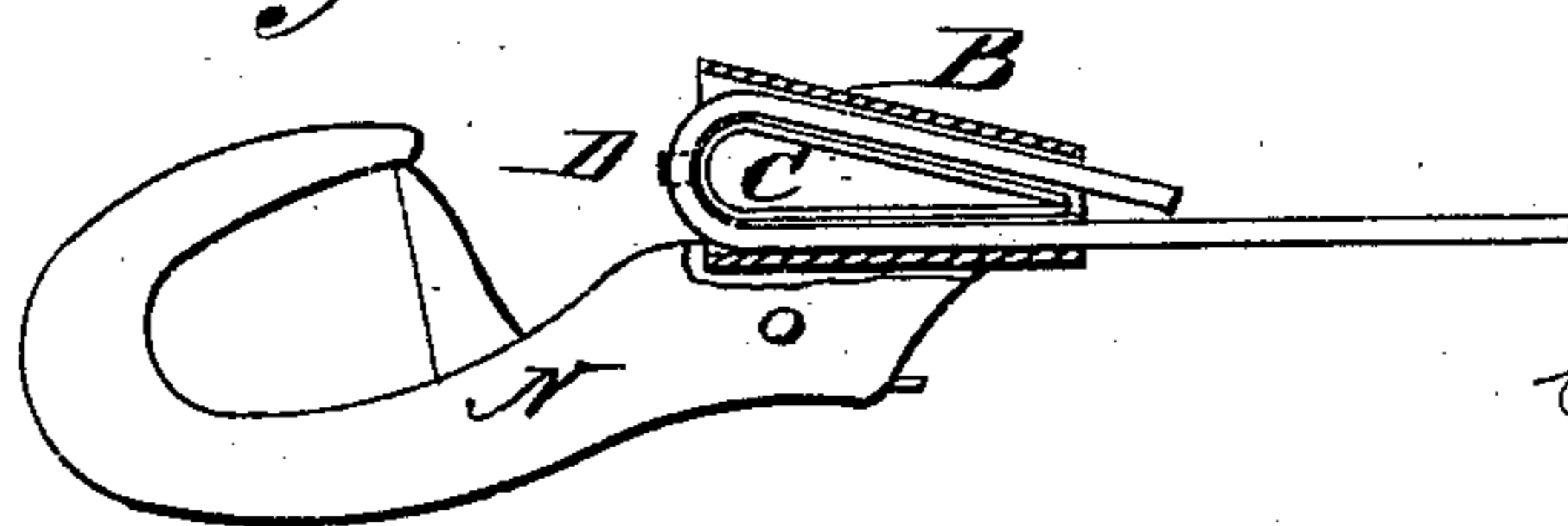


Fig. 8



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GEORGE W. BLAKE, OF PORT TOWNSEND, WASHINGTON TERRITORY.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 272,197, dated February 13, 1883.

Application filed June 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BLAKE, of Port Townsend, in the county of Jefferson and Territory of Washington, have invented a new and Improved Buckle, of which the following is a full, clear, and exact description.

My invention relates to buckles for harness and other straps, and for connecting belts, and has for its object to provide buckles to which the straps or belts may be connected without sewing or stitching to avoid the cost of the same, but more particularly to provide a stronger and more lasting connection, as well as one that may be more quickly made and is neater when made, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved buckle as arranged for the connection of two straps together. Fig. 2 is a sectional elevation of Fig. 1 on line *x x*. Fig. 3 is a plan of the said improved buckle as contrived for the connection of the two parts of a harness tug or trace and the back-band and belly-band, together with a wear-pad for the comfort of the horse. Fig. 4 is a section of Fig. 3 on line *y y*. Fig. 5 is a plan view, showing the application of my improved buckle for the connection of four straps in a common center, as the back-strap, crupper, and trace-carriers, upon the haunches of the horse. Fig. 6 is partly a side elevation and partly a sectional elevation of the buckle as contrived with a joint for running over pulleys when used for a belt-fastener. Fig. 7 is a plan view, and Fig. 8 is a sectional elevation of the application of the buckle to a snap-hook for buckling said hook to a line.

A and B represent the bottom and sides of a flattened and tapered metal socket, and C a tongue or wedge of corresponding form, but sufficiently smaller to enter the socket within the loop of a strap, E or E', inserted through the small end of the socket, doubled around the wedge, and passed back out of the said small end of the socket, as clearly shown, so that strain on the straps will wedge the loop tightly in the socket, binding harder the more the strain increases. Thus it will be seen that

the socket or buckle is connected to the strap without any stitches, and by a method that may be accomplished at any time without any tools or fitting, so that the buckle can be readily removed from one strap to another in case of emergency, and it is to be especially noted that the strap is not exposed to excessive strain concentrated upon any one place, but takes it alike across its whole breadth. The wedge is preferably provided with a little stud, D, projecting from its head to enter a hole in the strap to serve as a further security against the slipping of the strap; or said wedge may be open at the point, thus forming jaws, within which a stationary nipple and teeth are placed, and the end of the strap is inserted in the jaws of the wedge instead of being wrapped around it, and is buttoned over said nipple, and is gripped by said teeth and clamped by the jaws of the wedge when drawn into the tapering socket, whereby the strap is securely held within the wedge, and at a saving of leather.

The buckle thus made is to be a part of or be attached to the device to which it is to connect the strap. If the said device is another buckle, as in Figs. 1 and 2, then the two buckles will be connected by being formed on one and the same bottom plate and with continuous or connecting sides Q, as shown in said figures. If it is a snap-hook, N, Figs. 7 and 8, ring, or other device, then the bottom plate of the buckle will be formed on or connected to the shank of the hook, ring, or other device, as shown, except that in practice the bottom of the socket will be on a level with the bottom of the snap.

To utilize the buckle for connecting the tugs *m m'* and back-band and belly-band, as in Figs. 3 and 4, the edges of the continuous sides Q of the parts connecting the two buckles will have rings K secured to them by being rolled upon them, as shown at *a'*, Figs. 3 and 4, or in any approved way, for connecting said straps by loops R, the straps being in this case looped through the socket out of the smaller end, and having a wedge or tongue, G, which wedge has a stud, H, made stationary or screwed in place, and projecting from the middle of its upper side through the strap, so that the strap which passes over the wedge draws

the wedge by said stud along with it into the narrow part of the socket, instead of drawing around the head of the wedge, as in the other case, and midway on the plate, between the 5 tapering sockets, is another stationary pin, H', Fig. 4, with a small head on it, which projects upward through the end of the strap that is under the double wedge into a T-shaped groove or slot in the bottom of the wedge. This pin 10 prevents the end of the strap from slipping, and the head on it holds the wedge from falling out if the upper strap is removed. The double buckle is also used in this case, but only one wedge, the wedge being double, and 15 extending across the space between the two sockets, the wedge having a ridge at the middle on the upper side, that prevents it from drawing through the sockets, and to press the wedge down firmly upon the end of the strap 20 lying between the wedge and the bottom of the sockets when under tension. These double wedges may be flat or oval on the top, as preferred, but forming a ridge all the same.

In Fig. 6 the two buckles are connected by 25 a joint, F, as will be found useful in connecting the two ends E E' of a belt for running over pulleys, and the buckles are padded on the under side with leather, S, or other suitable material, to protect the metal of the buckle 30 and the pulley and prevent noise.

The bottom plate, A, is a wear-plate of smooth metal for the protection of the horse, and such plate may serve as the means of connecting two or more of the buckles in a cluster; 35 also, other devices, as in Fig. 5, where four of the buckles are clustered, as for use upon the haunches for the back-strap, crupper, and trace-carriers, together with a loop, T, that may also be attached for any other purpose. Said

single sockets are also provided with a thong 40 or pin, or any other convenient device that falls over the butt of the wedge, to afford greater security against their coming out.

In the buckle shown in Fig. 4, where the double wedge is used, the upper rim of one of 45 the tapering sockets may be provided with a roller to assist in drawing the strap through.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An improved buckle for harness, consisting of the flattened and tapered socket A B 50 and wedge C, provided with a stud projecting from its head, adapted to pass through a hole in the bend of the strap, substantially as herein shown and described. 55

2. The improvement in buckles for harness and other straps, consisting of a pair of tapered sockets, A B, having tongues or wedges C, and having rings K attached to the connecting-plates of the said sockets, substantially as described. 60

3. The improvement in buckles for harness, consisting of a pair of flattened and tapered sockets and a double tongue or wedge, G, having stud H, substantially as described, and a 65 stud, H', on the upper side of the plate between the sockets.

4. The improvement in buckles for harness and other straps, consisting of a pair of tapered and flattened sockets, A B, and tongue C, said 70 sockets being connected by a joint, F, substantially as described.

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Witnesses:

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