

(No Model.)

A. C. GREENE.

STANCHION.

No. 348,964.

Patented Sept. 14, 1886.

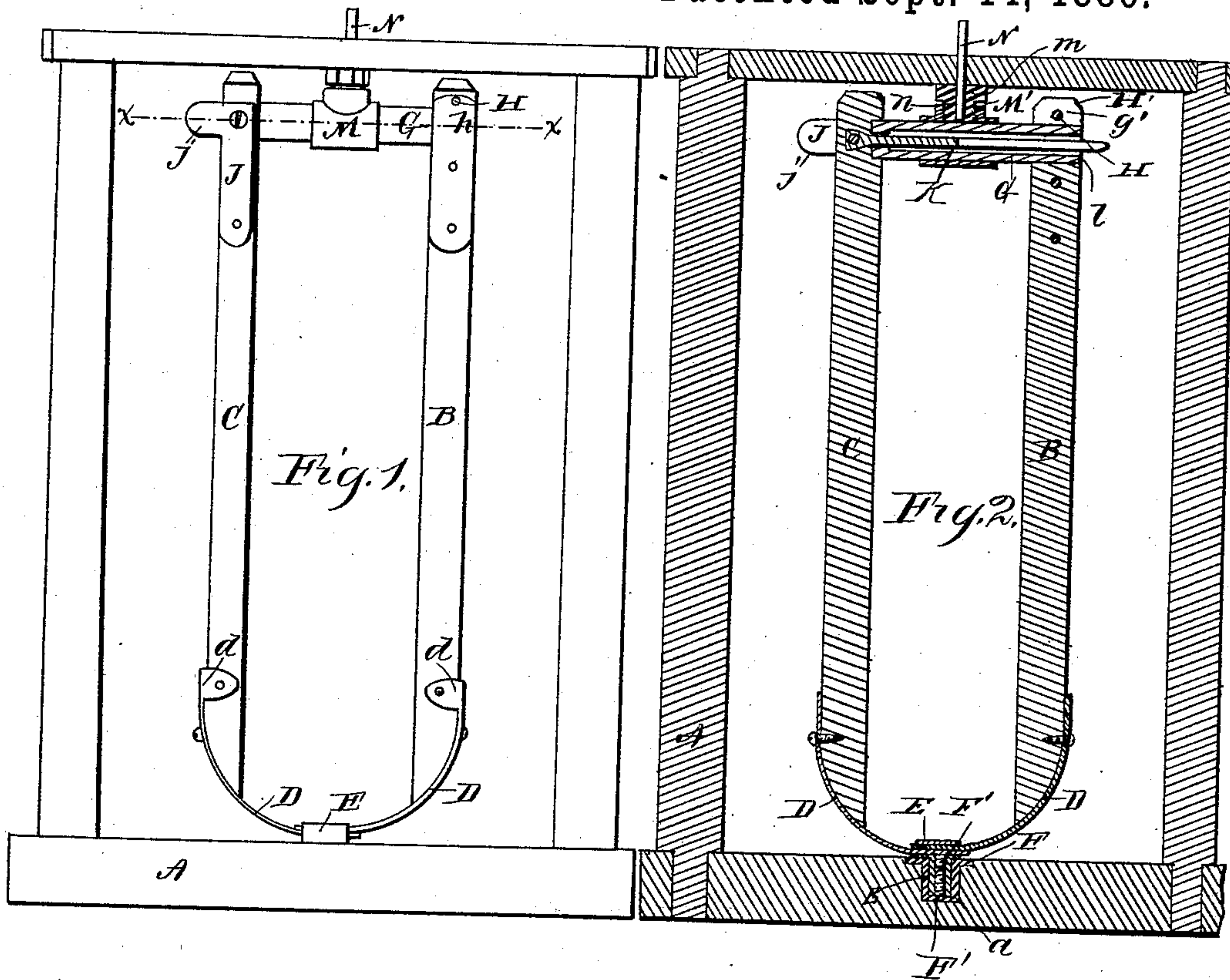


Fig. 3.

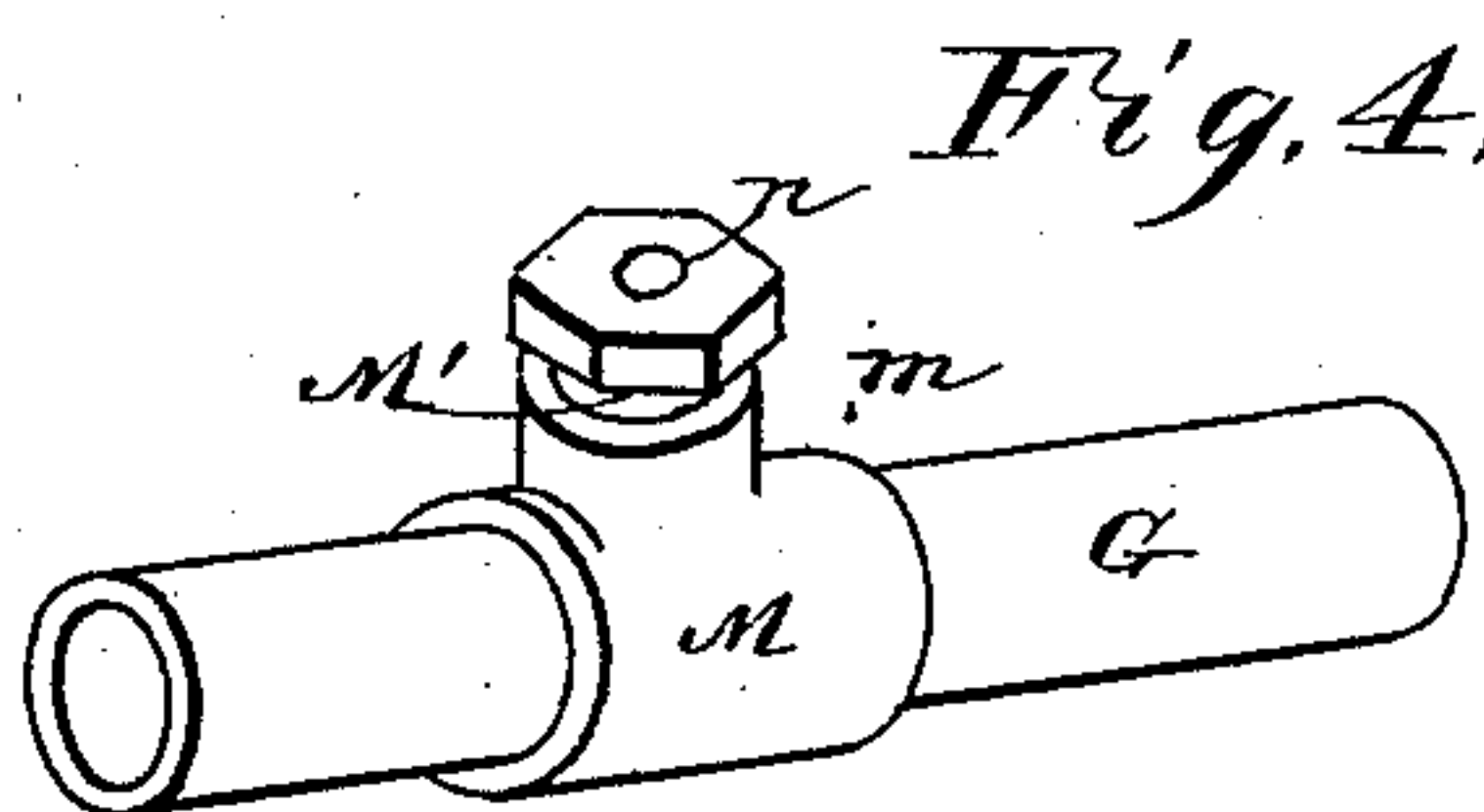
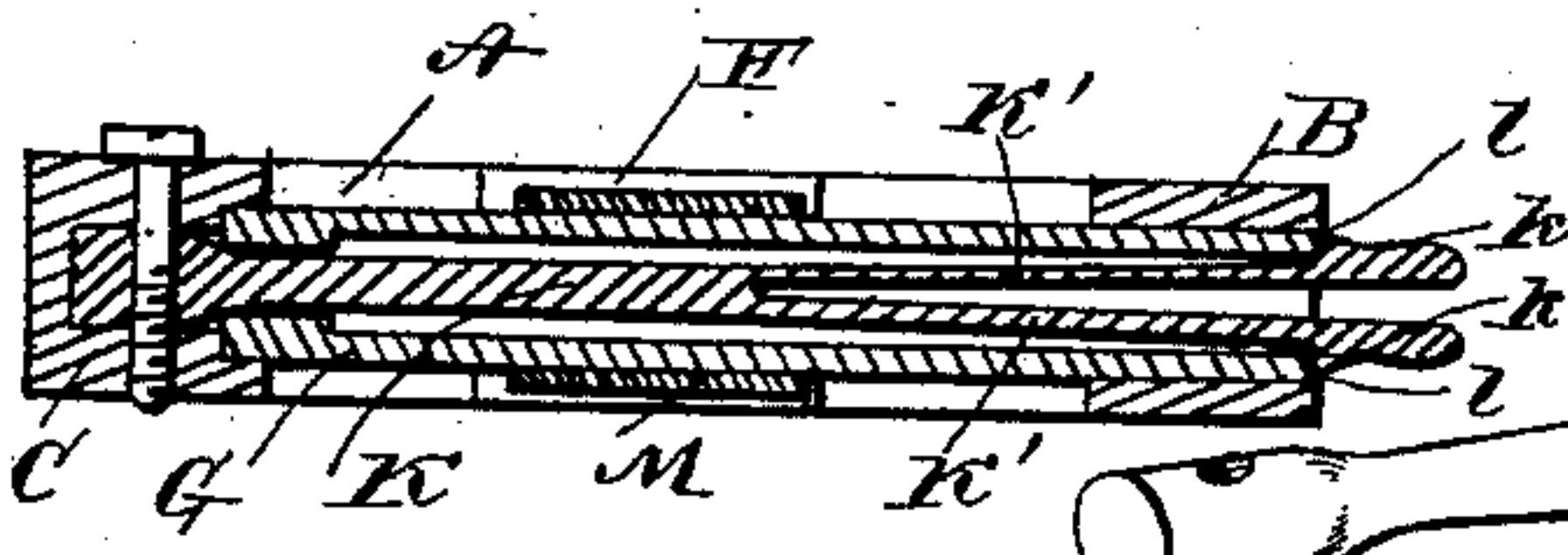


Fig. 4.

Fig. 5.

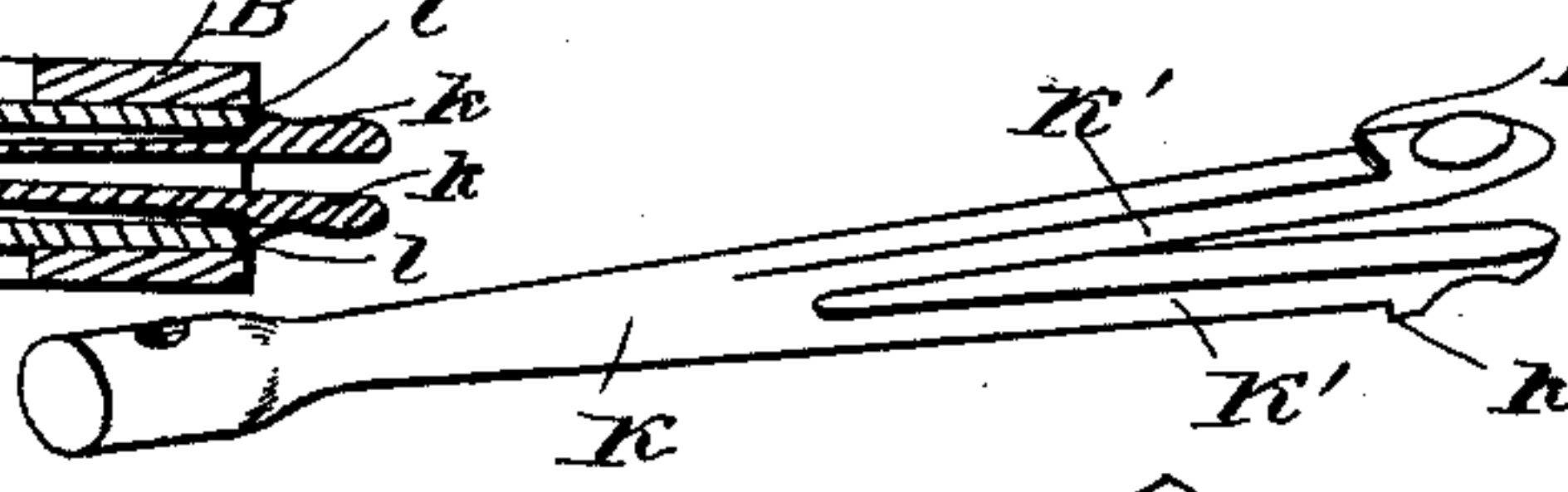


Fig. 7.

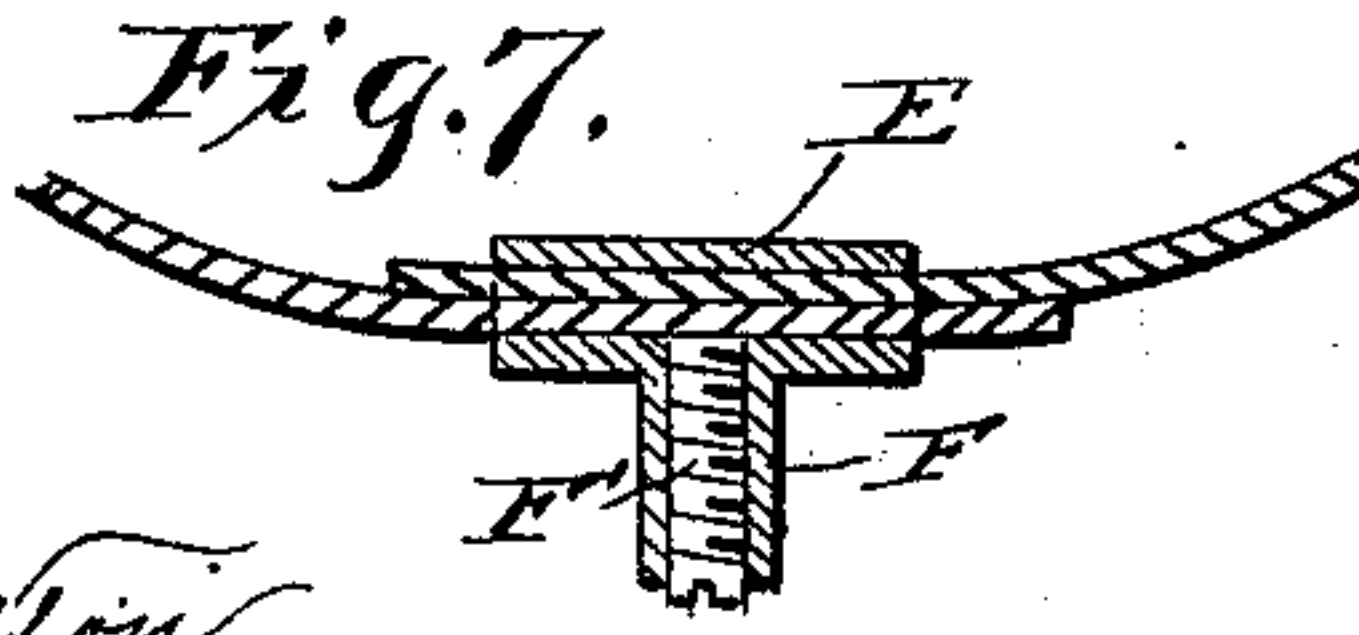
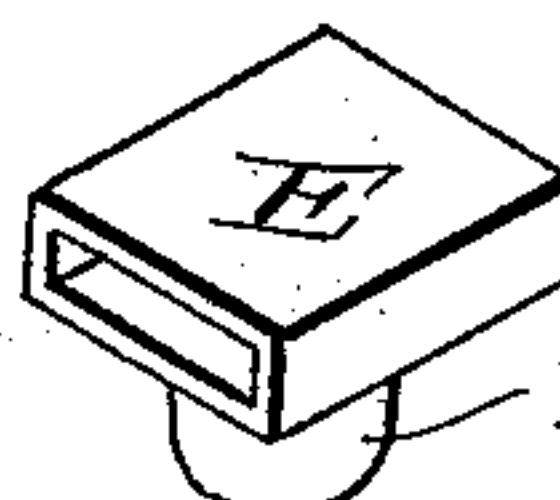


Fig. 6.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## STANCHION.

SPECIFICATION forming part of Letters Patent No. 348,964, dated September 14, 1886.

Application filed May 15, 1886. Serial No. 202,314. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT C. GREENE, a citizen of the United States, residing at Willett, in the county of Cortland and State of New York, have invented a new and useful Improvement in Stanchions, of which the following is a specification.

My invention relates to improvements in stanchions; and it consists of the peculiar combination and novel construction and arrangement of the various parts for service, substantially as hereinafter set forth, and specifically pointed out in the claims.

The object of the present invention is to provide an improved stanchion, which can be easily and readily adjusted to adapt it to animals of large or small sizes, and which, when so adjusted can also be readily adjusted so that it is pivoted centrally and will swing or move horizontally without binding upon any of the parts.

A further object of my invention is to provide an improved locking device, which shall be capable of operation very quickly and easily to release the animal from and secure it in the stanchion-posts, to provide means whereby the stanchion can be readily detached from the main frame in which it is journaled, and to provide an improved stanchion which will permit the animal great freedom of movement, and which shall be simple and strong in construction, effective in operation, and cheap and inexpensive of manufacture.

In the accompanying drawings, Figure 1 is a side elevation of a stanchion embodying my invention. Fig. 2 is a vertical central sectional view thereof. Fig. 3 is a horizontal sectional view on the line *x x* of Fig. 1. Fig. 4 is a detached perspective view of the tube for connecting the upper ends of the posts. Fig. 5 is a detached perspective view of the spring-arms. Fig. 6 is a like view of the sleeve *F*. Fig. 7 is an enlarged sectional view of the sleeve *F* and the lapped ends of the spring *D*.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, *A* designates the rigid frame, in which my improved stanchion is journaled to swing horizontally, said frame being of any

preferred construction and secured rigidly in any desired place, and the lower horizontal bar or beam of the said rigid frame *A* is provided with a metallic socket-piece, *a*, while the upper bar is provided with a vertical opening through which passes a shaft or bolt that retains the upper end of the stanchion in place therein.

*B* and *C* designate the vertical posts or uprights of my improved stanchion, which are arranged a distance apart which is sufficient to permit the animal to move its head freely between the same, either up or down. The lower ends of the posts or uprights have secured thereto supporting springs *D*, which are preferably curved longitudinally, so that they bear against the lower ends of the posts or uprights, which are curved transversely, so that the springs can bear very firmly and squarely against the same, as clearly shown. The outer end of each of the carrying springs *D* is provided with integral lugs or flanges *d*, that fit on opposite sides of the stanchion-posts, and the lugs and spring proper are secured to its post or upright by means of screws or other suitable fastening devices. The inner ends of the springs, which are made flat or leaf shape in form, are fitted in an open-ended socket, *E*, so that they overlap one another, this socket being common to both carrying-springs, and they are adjustable longitudinally in the open-ended socket to vary the distance which the lower ends of the stanchion-posts lie from one another, and thus adapt the device to animals of different sizes. The socket-piece *E* is made of a width a little greater than the combined widths of the free ends of the carrying-springs, so that when the latter are fitted therein they bind upon another and the inclosing walls of the socket, and the socket-piece is further provided with a tubular extension, *F*, that is formed integral or cast therewith. This tubular extension forms the journal for the lower ends of the stanchion, and it is journaled in the socket *a*, set in the rigid frame *A*, and the journal-extension is provided with interior threads, with which engage the threads on the periphery of a binding-screw, *F'*, that works in the said tubular journal, one end thereof bearing



against the ends of the carrying springs that are fitted therein, so that the springs are very rigidly and securely held in place in the socket E, and they thereby support or carry the lower ends of the stanchion-posts or uprights, as will be readily understood. The upper end of one of the stanchion posts or uprights, preferably the post B, is provided with a transverse recess, *g*, and is split longitudinally from the recess toward the free upper end thereof, as at *g'*. Through this transverse recess passes one end of a connecting piece, G, for the upper free ends of the stanchion-posts, one end of this connecting-piece being rigidly secured in and carried by the upper end of the post or upright B. This connecting-piece G is made hollow and tubular in form, and one end thereof is secured and adjustable longitudinally in the recessed end of the post B. Through the split end of the post B passes a transverse bolt or threaded pin, H, which serves to draw the split ends of the post together and bind upon the periphery of the tubular connecting-piece to rigidly and securely clamp the latter in place. It will be seen that by splitting the upper ends of the post B, I thus provide two clamping-jaws, H', and on the outer faces of each of these clamping-jaws are provided or secured brace-plates *h*. The plates are secured rigidly in place by screws or other suitable means, one of the plates having a threaded opening for the free end of the adjusting screw or bolt H, to work therein and draw the jaws together and upon the tubular connecting-piece. The upper end of the stanchion post or upright C is provided with strengthening-plates J, which are rigidly secured thereto by screws, &c., and the ends of these plates are provided with lateral lugs or flanges *j*, that are adapted to fit on opposite sides of one of the vertical bars of the rigid frame, when the said post C is released from the fellow post B and forced laterally by its carrying-spring D. The upper end of the post C is further provided with an arm or rod, K, which is rigidly secured thereto and projects laterally therefrom toward the post or upright B, and the free end of the rod passes through the tubular connecting-piece carried thereby. The free end of the rod is bifurcated or split longitudinally to provide the two arms K', which are adapted to spring or yield outwardly from each other. The outer end of each spring-arm K' of the rod K is provided with a nib or lug, *k*, that is adapted to lock with a shoulder or flange, *l*, at the free end of the tubular connecting-piece G, to limit the outward movement or play of the post C when the device K is released from the opposite edges of the tubular connecting-piece G, to release the animal. The tubular connecting-piece is provided with a sleeve, M, that is fitted and adjustable longitudinally thereon, and this sleeve carries a tubular lug, *m*, that is interiorly threaded and receives a binding-screw, M', that secures the sleeve to any desired longi-

tudinal adjustment on the tubular connecting-piece. The binding-screw M' is provided with a central longitudinal opening or socket, *n*, at its upper end, and in this socket is fitted one end of a shaft or pin, N, that passes through the opening in the upper beam or bar of the rigid frame A.

This being the construction of my invention, the operation thereof is as follows: When the cattle are confined therein, the nibs *k* at the free ends of the spring-arms K' engage with the edges of the tubular connecting-piece at the end thereof, which is secured in the upper end of the post B, and the opposite end of the tubular connecting-piece bears against and is strengthened by the upper end of the post C. To separate the posts and thus release the animal from confinement between the same, the free ends of the spring-arms are compressed together by hand to release the nibs *k* from engagement with the edges of the tubular connecting-piece, and the hand-pressure thereon is released, whereupon the carrying-spring D at the lower end of the post C forces the latter outwardly and away from the post B at the upper end thereof, the post B being unaffected by its carrying-spring and held in place by the tubular connecting-piece and the adjustable sleeve thereon, which is connected with the rigid frame by the shaft N. To confine the animal between the stanchion-posts, the head is inserted between the posts, and the upper end of the post C forced inwardly and against the tension of the carrying-spring D thereof until the free ends of the arms K' pass through the end of the tubular connecting-piece G, that is secured in the post B, whereby the nibs *k* are forced to engage the edges of the piece G, this movement of the spring-arms taking place automatically and without requiring any adjustment on the part of the operator when the post C is forced toward the post B. When it is desired to adjust the stanchion-posts laterally of each other to accommodate the stanchion to animals of different sizes, the binding screw M' is loosened to permit the free ends of the carrying-springs D to be moved toward or from each other in the socket-piece F, and when the springs and posts have been adjusted to their desired positions, the binding-screw is again turned to bear against and clamp the free ends of the carrying-springs in place. The tubular journal is now fitted in the socket-piece *a* in the rigid frame, and, owing to the lateral adjustment of the posts, it will be found that the sleeve M is out of the center of the stanchion and consequently the latter will not swing freely and unobstructedly in either direction, as is necessary and desirable in this art. To compensate for this adjustment of the springs and posts and obviate the objectionable feature above mentioned, the sleeve M is adjusted longitudinally on the tubular connecting-piece by removing the shaft N and loosening the screw M', so that the sleeve can be readily



moved, after which the screw is tightened to clamp the sleeve on the connecting-piece. To remove the stanchion from the rigid frame A it is only necessary to remove the pin N and then lift the device bodily from the said frame, and it will be seen that the stanchion can be readily moved or transported and adjusted in place in a similar or different frame at another point.

From the foregoing description it will be observed that I provide an improved stanchion which is free to swing horizontally, and that the animal can move its head between the posts B and C, thus permitting him great freedom and ease of movement; that the animal can be easily and readily released from, and confined within, the stanchion; that the stanchion can be readily adjusted to accommodate animals of different sizes and to swing in a perfectly horizontal position, and that the device or means by which I attain these ends are simple and strong in construction and cheap of manufacture.

I would have it understood that I do not intend to confine myself to the exact details of construction and form and proportion of parts herein shown and described as an embodiment of my invention, as I am aware that many changes therein can be made without departing from the principle or sacrificing the advantages of my invention.

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

1. In a stanchion, the combination of the uprights, the carrying springs for the uprights, the socket-piece connecting the springs, the connecting-piece for the free ends of the uprights, and a locking device carried by one of the uprights, substantially as described.

2. The combination of the uprights or posts, the carrying springs secured at one end to the posts, the socket-piece in which the free ends of the springs are fitted, the binding-screw carried by the socket-piece for clamping the springs therein, and the connecting-piece for the free ends of the uprights, substantially as described.

3. The combination of the uprights or posts, the curved carrying-springs secured at one end to the posts, the socket-piece common to both springs and having the free ends of the springs adjustably and detachably fitted therein, and the binding-screw carried by the socket-piece and bearing against one of the springs, the free ends of the springs being lapped in the socket-piece, substantially as described.

4. The combination, with the upright B, carrying a connecting-piece, G, of a sleeve, M, fitted on the connecting-piece, a binding-screw, M', provided with a socket, n, a shaft fitted in said socket, which holds said parts from lateral movement, the spring-actuated post C, movable laterally of the post B, and a locking device carried by the post C, and adapted to

engage the connecting-piece, substantially as described.

5. The combination of the upright B, held from lateral movement, the laterally-movable upright C, the carrying-springs for the said uprights, a socket-piece in which the carrying-springs are secured, a connecting-piece carried by one of the uprights, and a locking device carried by the other upright, substantially as described.

6. The combination of the uprights or posts, the carrying-springs therefor, the socket-piece in which the springs are secured, a tubular connecting-piece carried by one of the uprights, and a rod carried by the other upright, and having the yielding arms, substantially as described.

7. The combination of the uprights, a tubular connecting-piece carried by one of the uprights, a rod having the spring-arms provided with nibs and normally inclosed within the tubular piece, one end of the tubular piece having a flange, against which the nibs of the spring-arms are adapted to take when the uprights are separated, substantially as described.

8. The combination of the uprights, the carrying-springs therefor, a socket-piece having an extension forming a journal, and a binding-screw for clamping the carrying-springs, the connecting-piece, and a sleeve fitted on the connecting-piece, and provided with a binding-screw, M', substantially as described.

9. The combination of the uprights, the carrying-springs therefor, the socket-piece adjustably secured to the free ends of the springs and arranged between the uprights, the connecting-piece for the opposite ends of the uprights, and a sleeve adjustable longitudinally on the connecting-piece and arranged intermediate of the uprights, substantially as described.

10. The combination of the uprights, the carrying-spring connected to one end thereof, a socket-piece having an extension forming a journal intermediate of the uprights in which the free ends of the springs are adjustably connected, the tubular connecting-piece adjustably secured in and carried by one of the uprights, a rod carried by the other upright and having the yielding arms, and a sleeve adjustably secured on the connecting-piece and having a lug, m, substantially as described.

11. The combination of the uprights, one of which is provided with the clamping-jaws, the connecting-piece intermediate of the uprights and fitted at one end between the jaws, an adjusting-screw for binding the jaws upon the connecting-piece, and a locking device for securing the uprights together, substantially as described.

12. The combination of the upright B, having the recessed and split end to form the clamping-jaws, the tubular connecting-piece

fitted at one end in the recess of the upright,  
the plates secured to the jaws, one having a  
threaded opening, a binding screw passing  
through the jaws and plates and working in  
5 the threaded opening of one of the latter, the  
upright C, and arm L, substantially as de-  
scribed.

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

ALBERT C. GREENE.

Witnesses:

JOHN WATERBURY,

DANIEL BARRY.