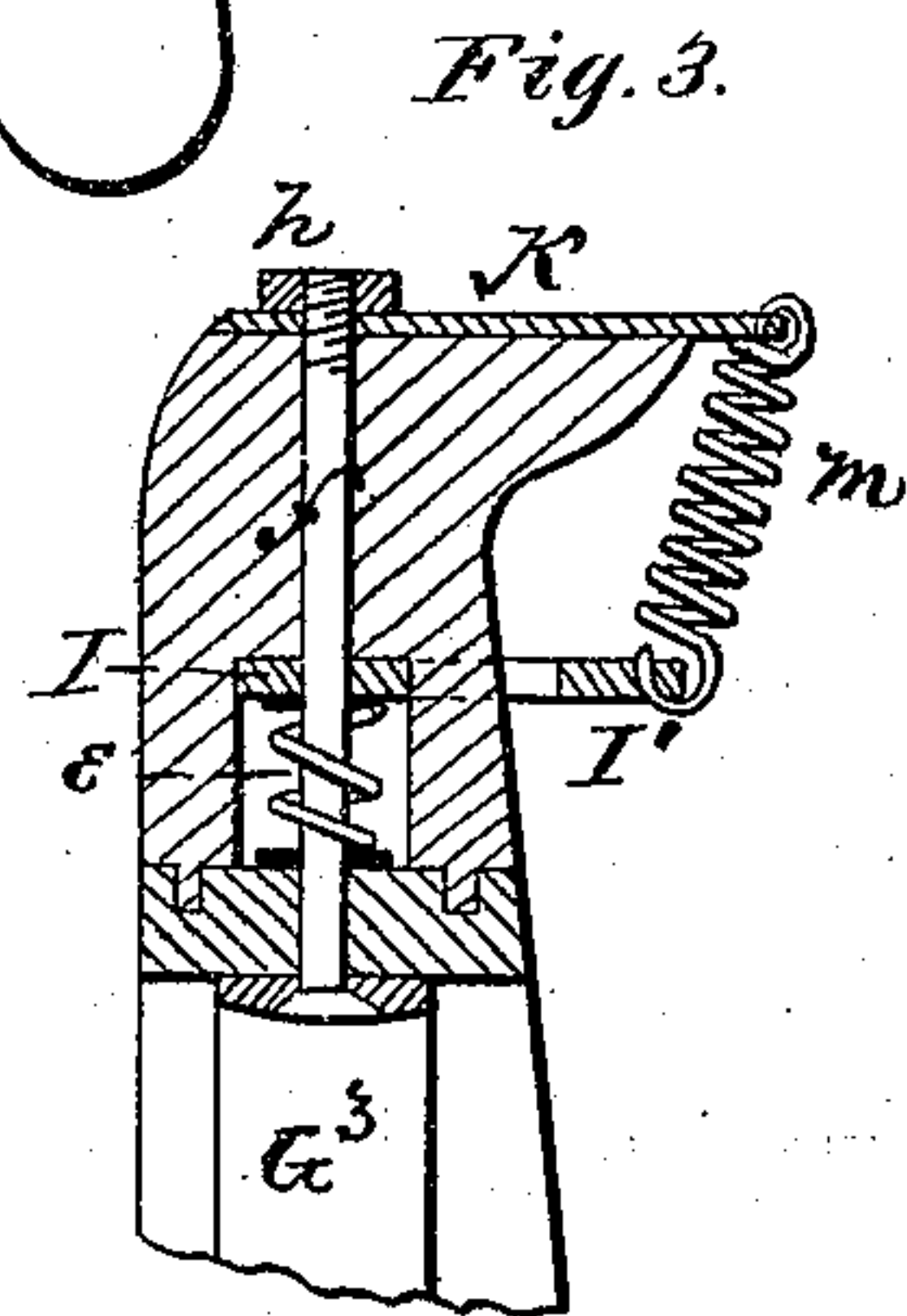
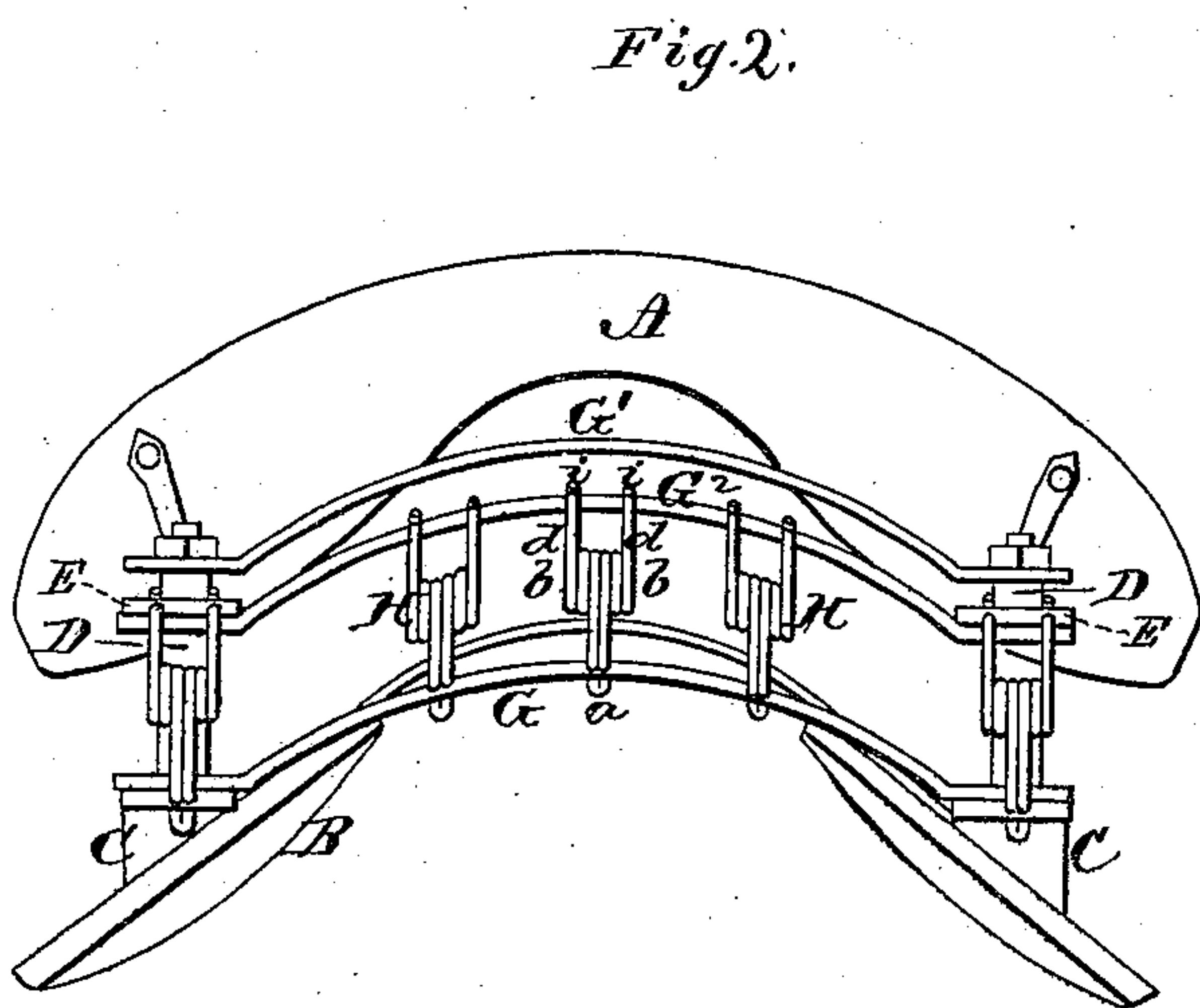
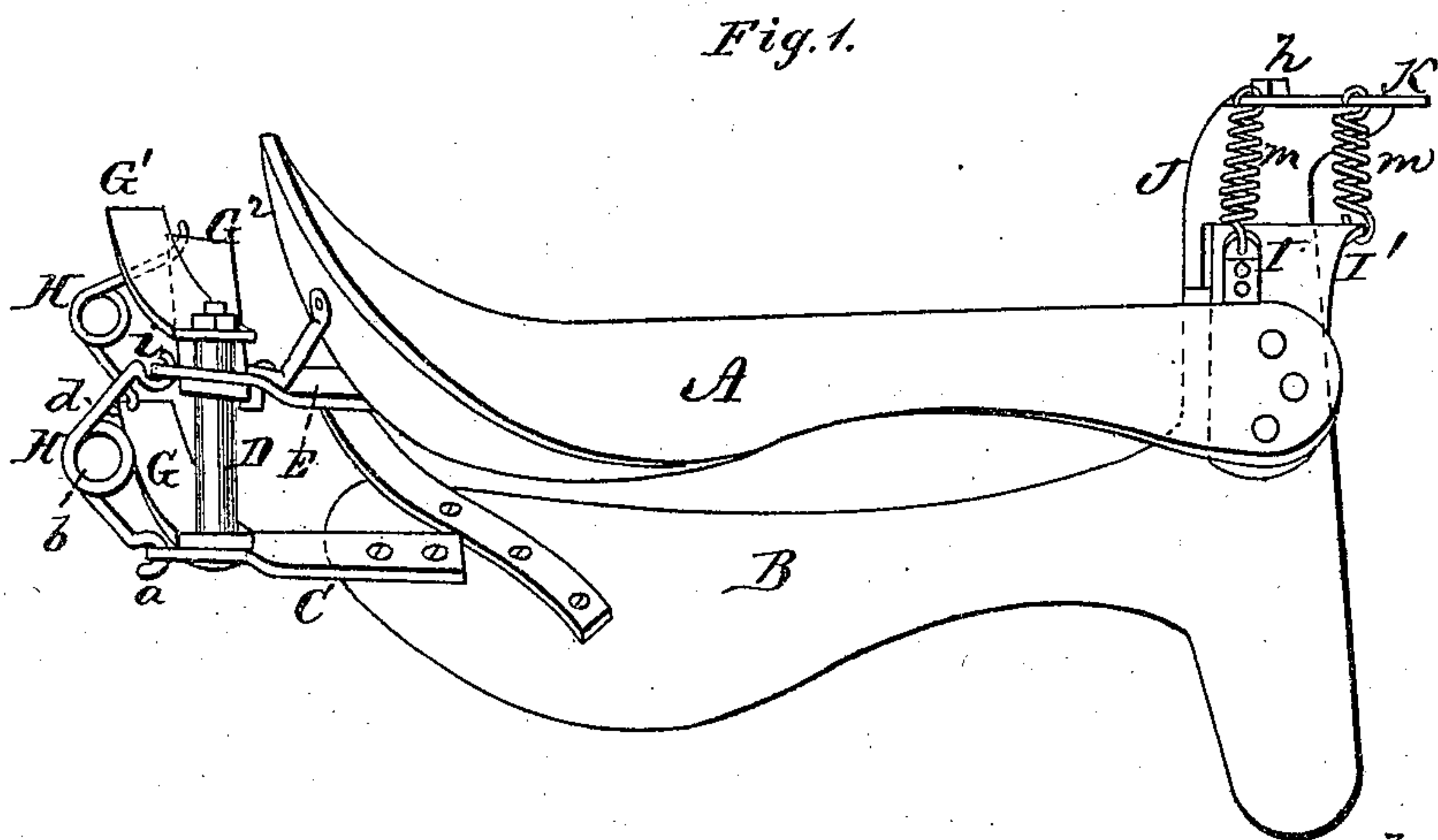


BY. NUNAMACKER.
Saddles.

No. 148,379.

Patented March 10, 1874.



Witnesses:

Henry N. Miller
W. F. Du Hamel

Inventor.

By. Nunamacker
Per H. S. Abbot.
Attorney.

UNITED STATES PATENT OFFICE.

BY NUNAMACKER, OF EARLHAM, ASSIGNOR OF ONE-HALF HIS RIGHT TO
J. G. MARK, OF DEXTER, IOWA.

IMPROVEMENT IN SADDLES.

Specification forming part of Letters Patent No. **148,379**, dated March 10, 1874; application filed
February 20, 1874.

To all whom it may concern:

Be it known that I, BY NUNAMACKER, of Earlham, county of Madison and State of Iowa, have invented certain new and useful Improvements in Saddles, of which the following is a specification:

My invention relates to such saddles as are supported from the saddle-tree by springs; and the nature of my invention consists in the construction and arrangement of the springs and the devices whereby the saddle is supported and adjusted by said springs, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of a saddle embodying my invention. Fig. 2 is a rear elevation of the same; and Fig. 3 is a vertical section of the pommel, with the devices connected therewith.

A represents the saddle proper, and B the saddle-tree, which may be constructed in any of the known and usual ways, but are made entirely separate from each other, and the saddle supported, by means hereinafter described, at a suitable distance above the tree, so as to leave at all times a space between the two for the passage of air. This is of great advantage, both to the horse and the rider. From the rear portion of the saddle-tree B, on each side of the center, projects a plate or bar, C, to which is firmly secured an upright post or standard, D. The two posts D D are connected at their lower ends by an arched cross-bar, G, and their upper ends are connected by a similar cross-bar, G¹. From the rear of the saddle A projects a bar, E, on each side of the center, which bars are suitably braced, as shown, and pass over the posts D D, between the two cross-bars G and G¹. The outer or rear ends of the bars E E are connected by an arched cross-bar, G². The saddle A is, at this end, supported by means of a series of springs H H, each of which is made of a single piece of wire, substantially in the following manner: The wire is bent double in the middle, and shaped to form a hook, *a*, which is passed

from the top downward, through a hole in the cross-bar G, the doubled wire extending outward and upward for a suitable distance when they are bent to form the coils *b b*. From these coils the arms *d d* of the wire extend inward and upward, and their ends form hooks *i i*, which are passed from underneath upward through holes in the cross-bar G², thereby supporting the saddle, and leaving the entire space between the bars G² and G, that the saddle may sink down. The springs H H, or any number of them, can be readily attached and detached at will, to regulate the spring of the saddle to suit the weight of the driver. At the front end of the saddle-tree is an arched cross-bar, G³, from the center of which rises a post, *f*, which is surrounded by a spiral spring, *e*. At the front end of the saddle is a cross-bar, I, which passes over the post *f*, and rests upon the spring *e*. J represents the pommel of the saddle, and has its lower end slotted for a suitable distance to fit over the cross-bar I of the saddle and rest upon the neck of the saddle-tree and on the cross-bar G³, the post *f* passing upward through a central hole in the pommel, and has a nut, *h*, screwed upon its upper end, which holds the pommel firmly in its place. The bar I of the saddle is allowed to move up and down freely in the slot of the pommel. This cross-bar has an extension, I', extending from each side in front of the pommel, as shown. On the top of the pommel J is secured a plate, K, which extends beyond the edges of the pommel, and is, by spiral springs *m m*, connected with the cross-bar I, or its attachment, I'.

The springs *m m* may be attached and detached at will to suit the weight of the rider; and may be, if so desired, arranged within the pommel, instead of on the outside.

By the arrangement of springs, as above described, at both ends of the saddle, the rider will not rub against the springs and injure either himself or his clothing, which is often the case with other saddles provided with springs.

I do not broadly claim a saddle supported or suspended by springs, as I am aware this has been long known.

Having thus fully described my invention,

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

1. The combination, with a saddle, A, and saddle-tree B, of the posts D D, permanently attached to the tree, and connected by cross-bars G G¹, the bars E E, attached to the saddle, placed over the posts, and connected by a cross-bar, G², and the springs H H, connecting the cross-bars G and G², all substantially as and for the purposes herein set forth.

2. The combination, with a saddle, A, and saddle-tree B, of the cross-bar G³ on the tree,

the post *f*, with spring *e*, the cross-bar I on the saddle, the transversely-slotted pommel J, with plate K, and the springs *m m*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention, I hereunto affix my signature this 20th day of February, 1874.

BY NUNAMACKER.

Witnesses:

HENRY N. MILLER,
W. K. DU HAMEL.