

(No Model.)

2 Sheets—Sheet 1.

C. A. BEHLEN.

BUGGY TOP.

No. 375,861.

Patented Jan. 3, 1888.

Fig 1

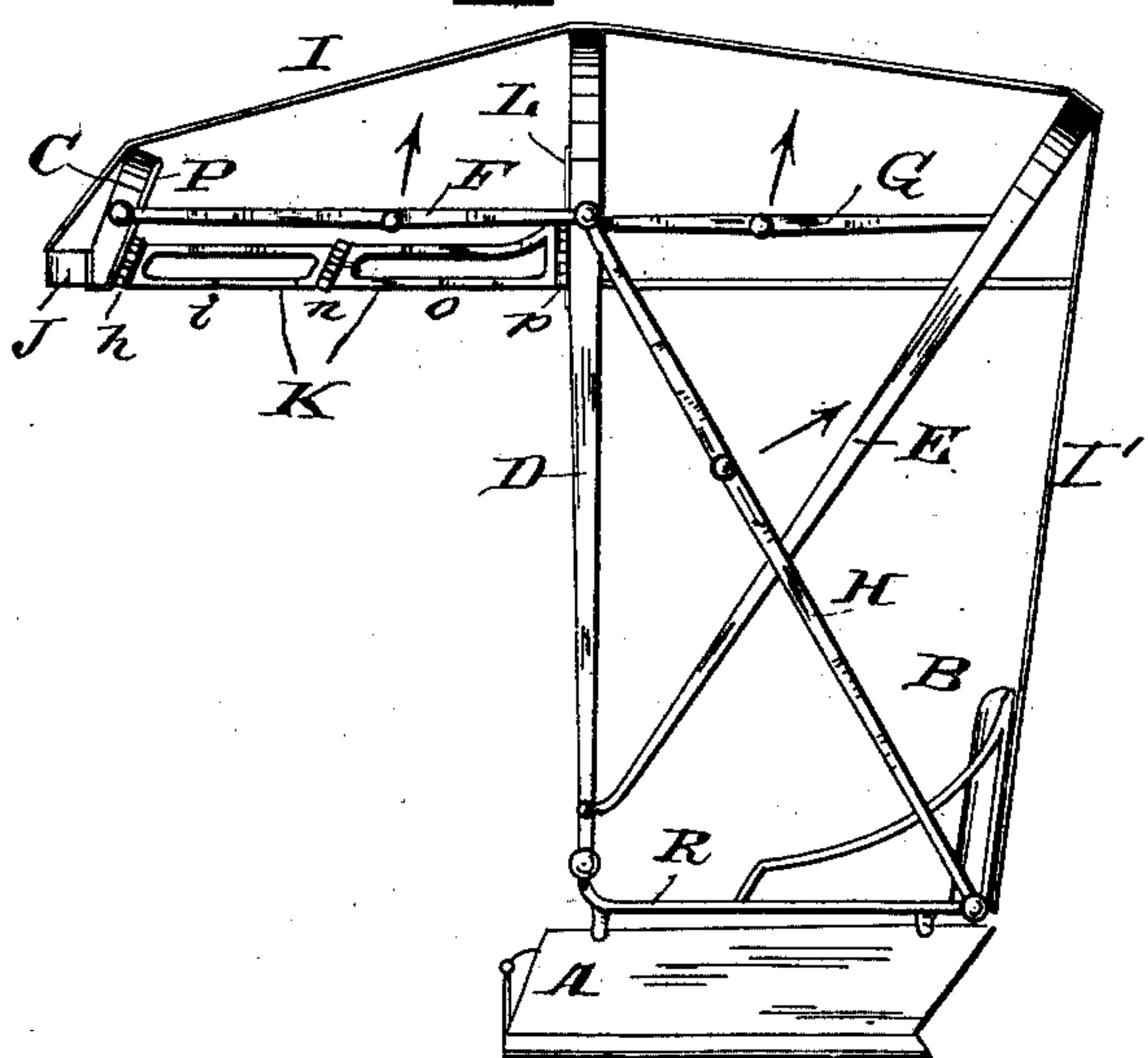


Fig. 2.

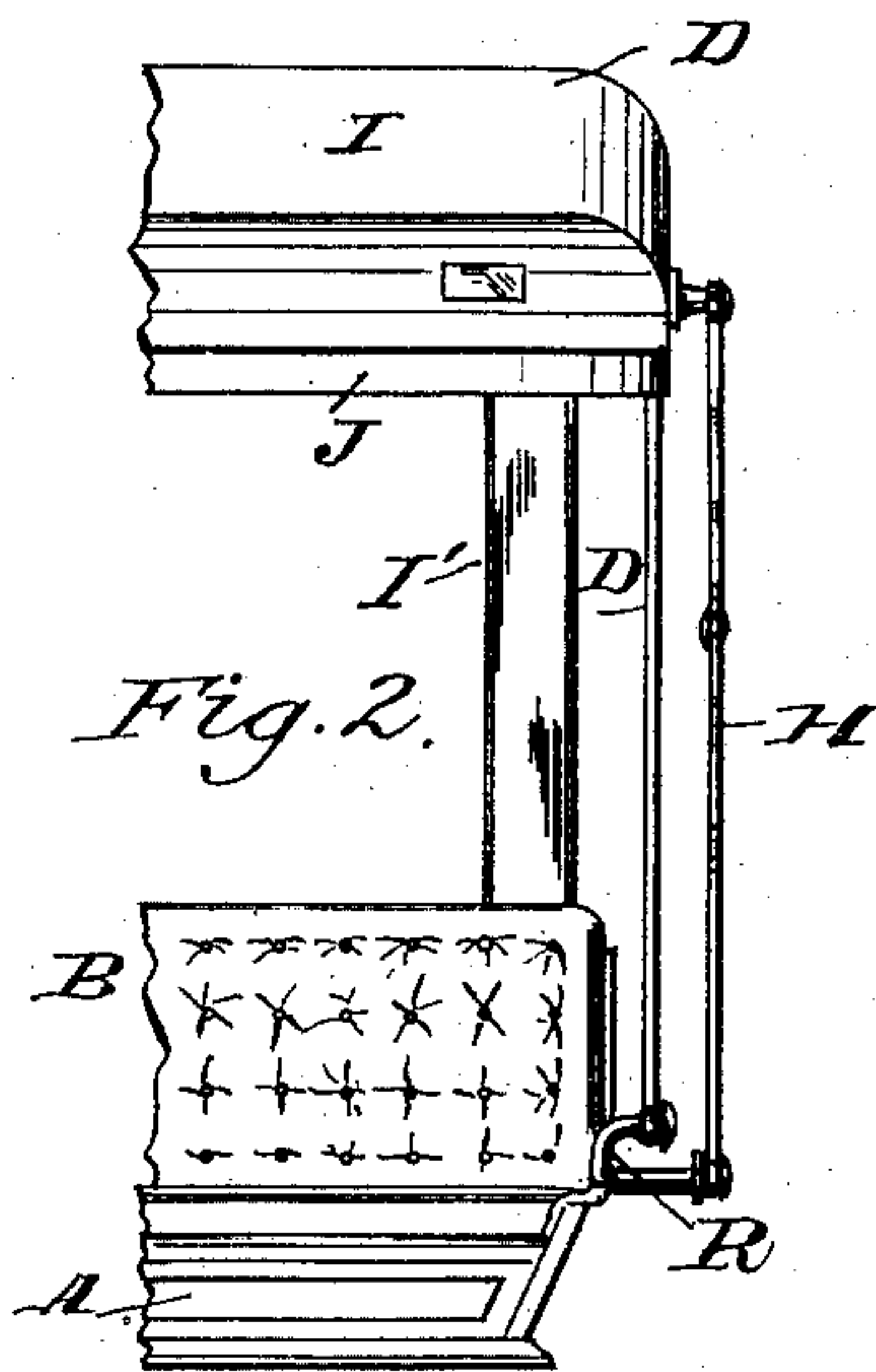


Fig. 3.

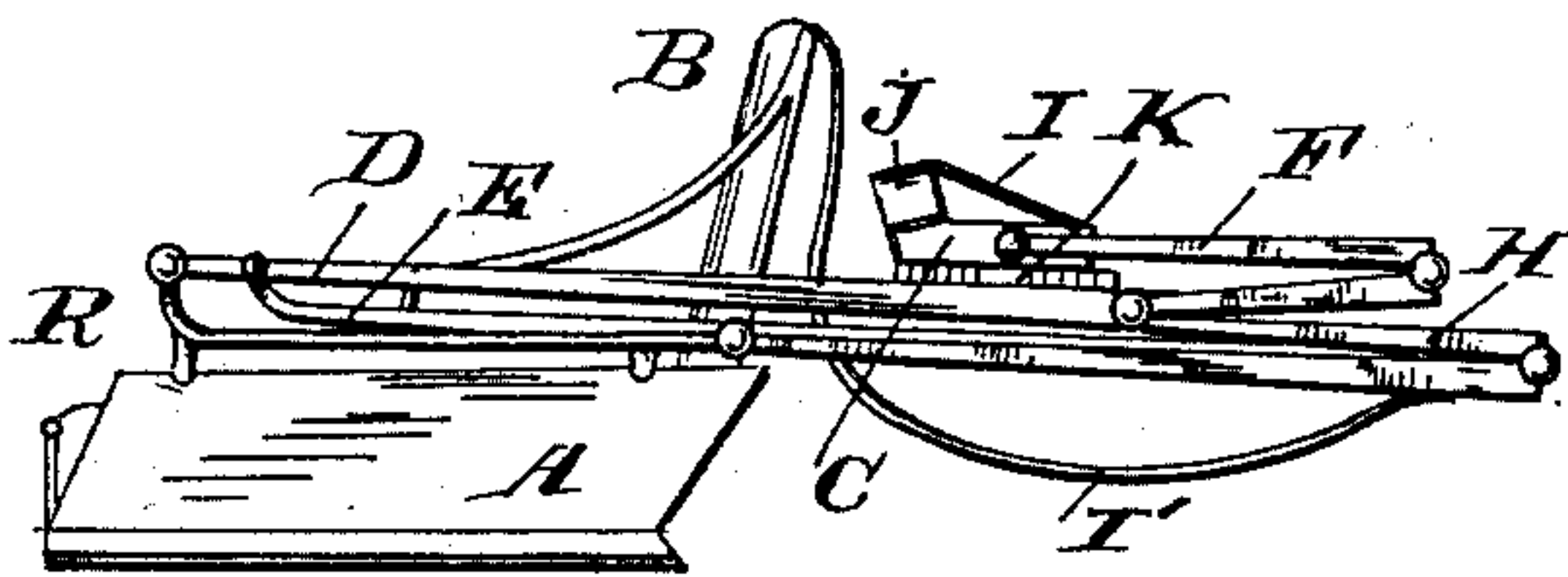


Fig 4

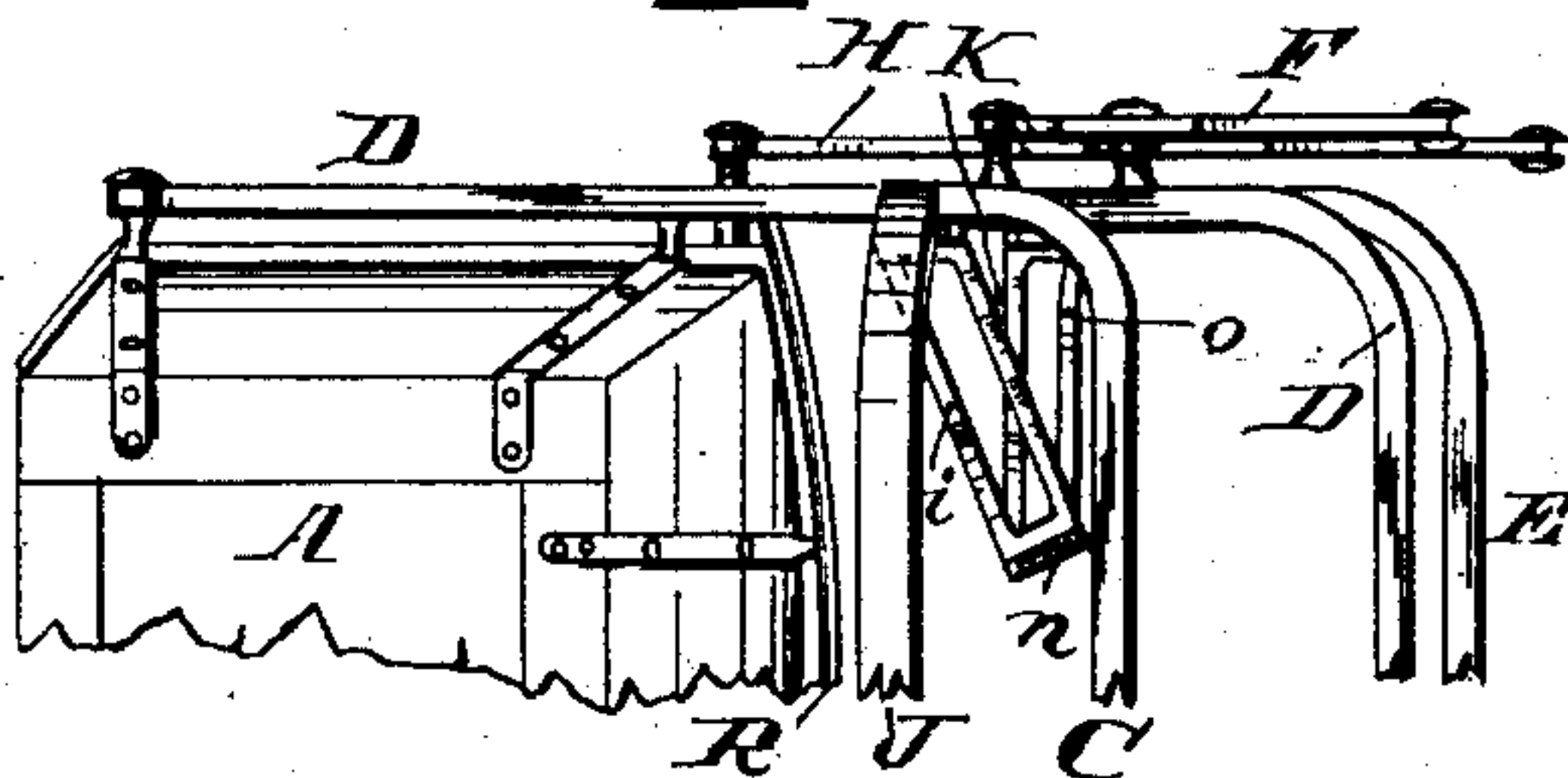


Fig. 5.

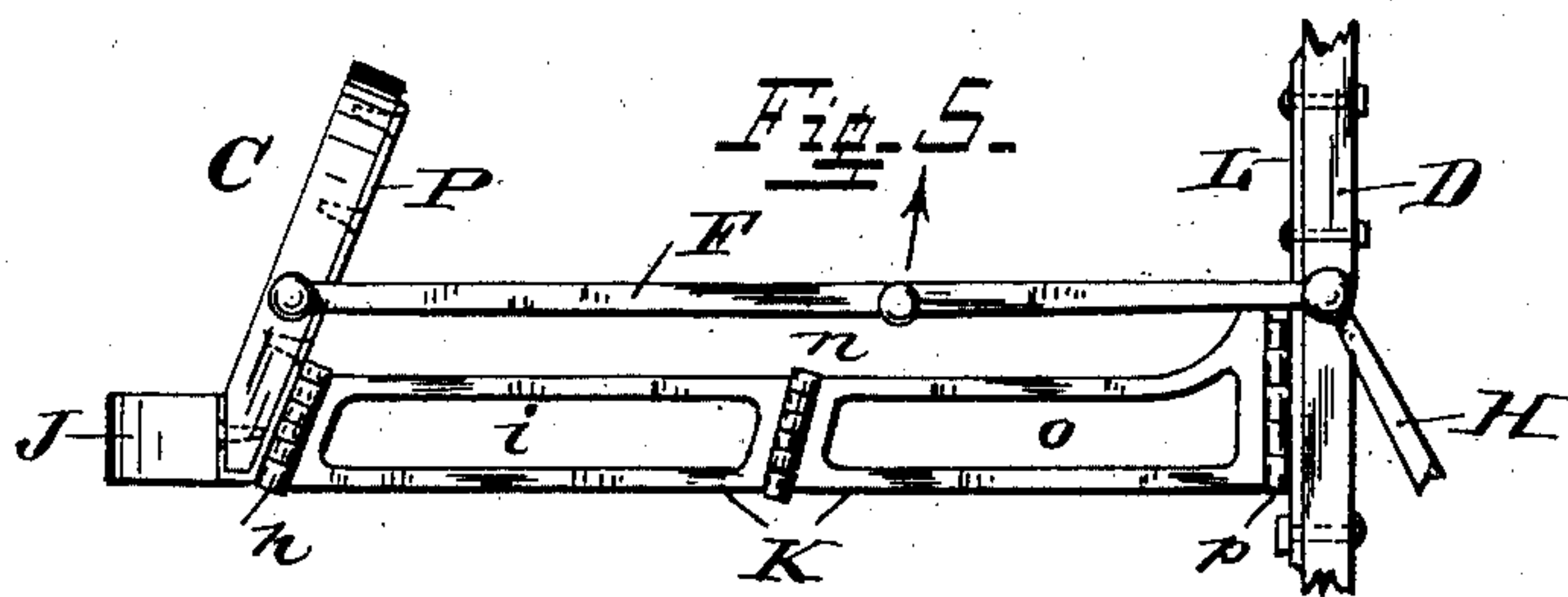
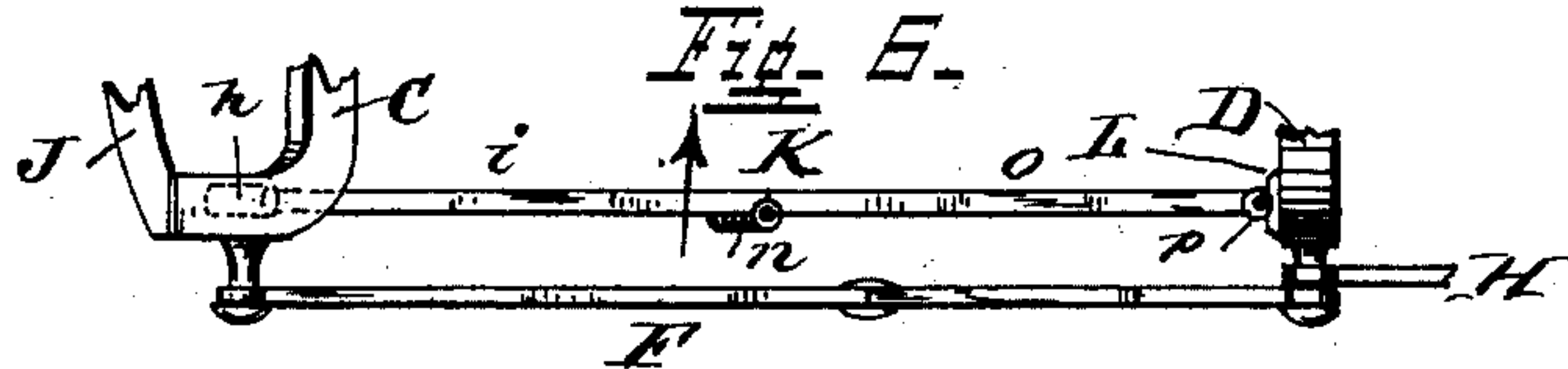


Fig. 6.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 7.

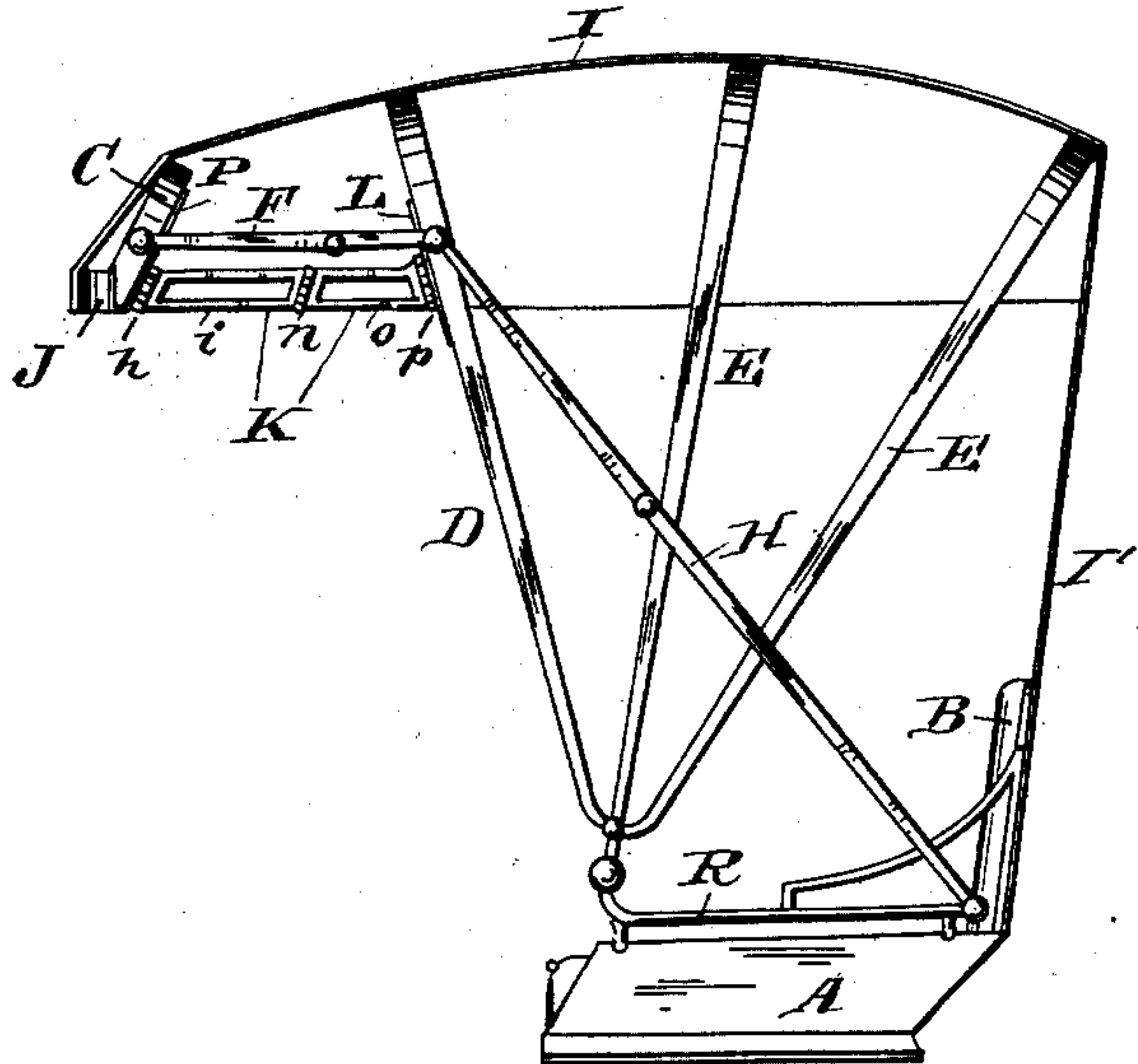
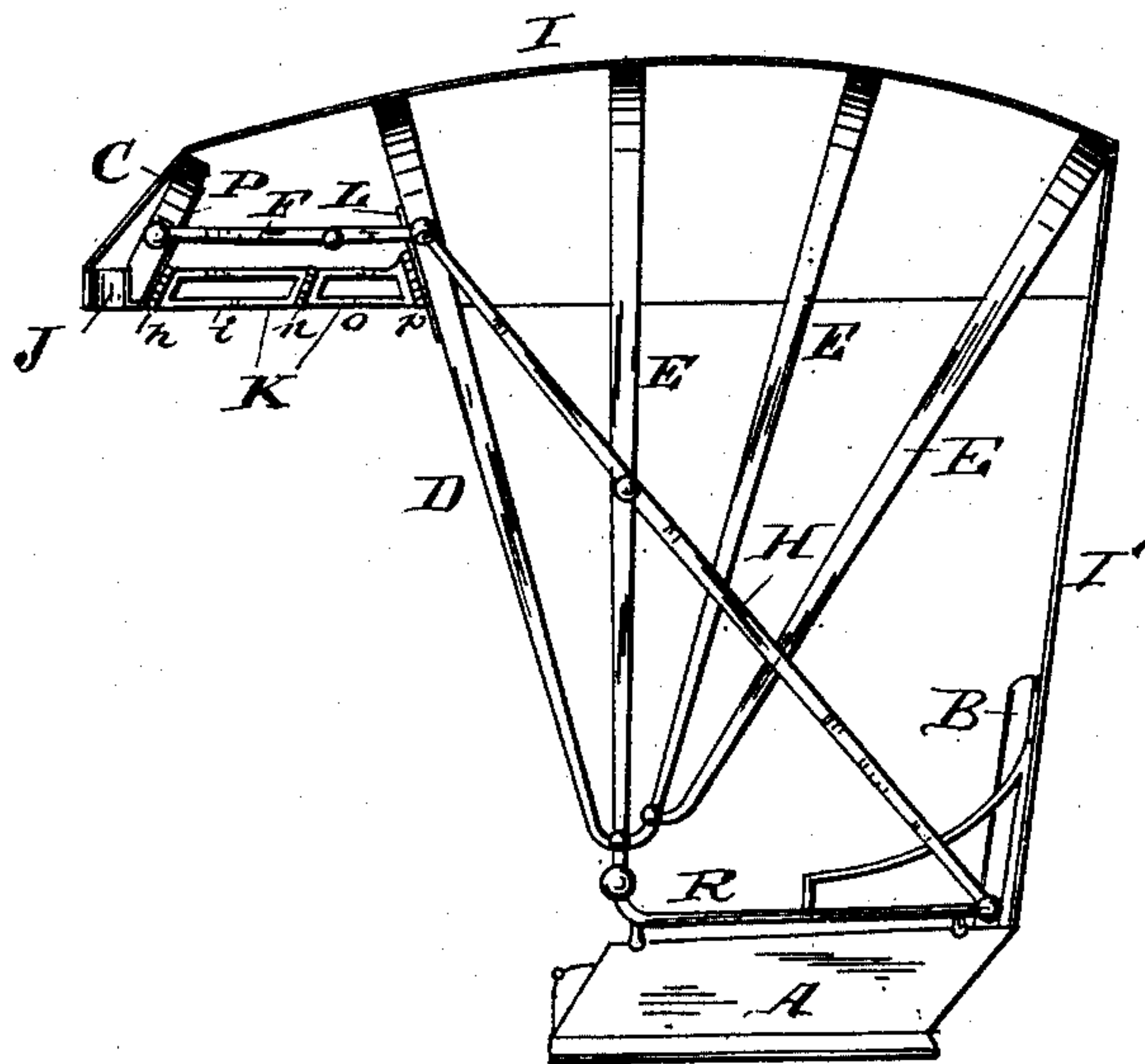


Fig. 8.



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UNITED STATES PATENT OFFICE.

CHARLES A. BEHLEN, OF CINCINNATI, OHIO.

BUGGY-TOP.

SPECIFICATION forming part of Letters Patent No. 375,861, dated January 3, 1888.

Application filed August 25, 1887. Serial No. 217,524. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BEHLEN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Buggy-Tops, of which the following is a specification.

My present invention is an improvement on the buggy-top for which on the 23d day of November, 1886, I obtained Letters Patent of the United States, said Letters Patent being numbered 353,195.

As buggy-tops are now constructed, they, when raised, are open and exposed at their upper front, thus exposing the occupant and the interior of the vehicle to the inclemency of the weather—such as rain, snow, sleet, &c.—while when thrown back the interior lining, or a goodly portion of it, is exposed, consequently permitting the dust or mud to settle thereon, causing damage as well as much labor in cleaning.

The object of my improvements is to remedy these defects; and this is accomplished by causing a hood to be attached to the front bow of the top, which, when the latter is raised, will protect the occupant and the interior of the vehicle, and when thrown back cover the lining, so as to keep off any substance of a soiling nature or tendency. These features will be understood from the description which I will hereinafter give and by reference to the accompanying drawings, forming part of my application, in which—

Figure 1 is a side view of a buggy-top containing my improvements, the top being raised and the leather covering on the side near the spectator being removed in order to show the various parts and the positions they occupy. Fig. 2 is a front view of the top when raised. Fig. 3 is a side view of the top when thrown back. Fig. 4 is a plan view of the top when thrown back, the leather or other covering being entirely removed from the bows. Fig. 5 is an enlarged side view of my horizontal sustaining hinged brace and the ordinary knuckle-jointed brace, and shows the manner of this application to the supporting-bows. Fig. 6 is a top view of same. Figs. 7 and 8, respectively, show my improvements applied to a buggy-top which has three or more upright

sustaining frame-bows, Fig. 7 showing the top provided with three such bows, and Fig. 8 with four.

It may be remarked here that while my improvements are designed principally for tops wherein the ordinary angular frame-bow is omitted, still they are not incapable of being used on tops that have such features, but may be used on such with practical advantage.

A represents the buggy-seat, and B the back thereof; C, D, and E, the ordinary supporting-bows, the bow C being inclined rearwardly, as shown, instead of forwardly, as in tops of the ordinary construction.

F, G, H are the ordinary knuckle-jointed braces, the brace G being attached to the interior of the top, the other two to the exterior. These jointed braces and bows are attached to one another as ordinarily, and are supported on the seat through the ordinary rail, R, which is affixed to most seats.

I is the top covering, usually of leather, and lined on the inside with cloth. This covering, instead of only extending to and ending at the bow C, as in ordinary tops, is continued down and its end attached to the cross-piece J.

K is my brace (of which there are two, one on each side of the interior) for supporting the front of the top when it is raised and enabling it to be thrown back when desired. These braces are composed of two parts, *i* and *o*, and are hinged together at *n*, the connection being an inclined one, as shown.

P is a plate attached to the bow C by means of nails or screws, and to this plate, in the form of a hinge, *h*, is attached the free end of the brace part *i*, the incline of the hinge *h* corresponding in direction and degree to nearly that of hinge *n*. The free end of part *o* is also hinged to a plate, L, attached to bow D; but this hinge is straight and vertical with respect to the bow to which it is attached, as shown. This latter hinge is designated by the letter *p*.

In my patent, No. 353,195, hereinbefore referred to, the hinges *h* and *n* were inclined in a direction opposite to that shown in the drawings of the present application. There the front bow, when the top is being thrown back, will be raised up, and when altogether back said bow will lie beyond the other bows; but in the present case, when the collapsing is tak-

ing place the bow will be brought down, and when the top is thrown completely back the said front bow, C, in connection with cross-piece J and the formed hood, will assume a position such as will cover whatever portion of the top's lining that may be exposed, and thus protect it from dust, dirt, or any other substance which would cause injury or trouble. This will be made more apparent from the operation of the various parts, which will now be given in detail.

We will suppose the top is in its raised position, as indicated by said Fig. 1, and it is desired to have it thrown back. The jointed braces F on the outside are broken, as indicated by the arrow. This action will permit sustaining-braces K on the interior of the top to collapse, the collapsing being through the instrumentality of the hinges *n* and *h*, and their direction is inwardly or toward the occupant of the vehicle. As the collapsing is continued, the parts *i* will depart from a horizontal position and assume a downward angular course, drawing with it the bow C and attached cross-piece J, which are also gradually assuming a downward position—that is, downward with respect to the bow D. This will continue until further collapsing is prevented by the bow C being brought up against the bow D. The former is now supported in its present position by the forward part of brace F, in connection with part *i* of the sustaining-brace K. The braces G and H are then broken, as ordinarily, and there being no other prop to the top the bows D and E are pushed back, bringing with them the whole of the top. The parts will then have assumed the positions indicated by the side view, Fig. 3, or the top view, Fig. 4.

Now it will be observed that should any portion of the lining or top's interior be exposed, the hood, formed by the continuation of the covering I over the bow C and down to cross-piece J, will overlap, cover, and protect the same from the annoying features hereinbefore enumerated. Whatever dust or dirt is flying will fall on the outside of the leather covering, where it does no injury and can be easily brushed off. The tops now in use do not have this hood, and consequently from the bow C inwardly to the seat considerable of the interior is exposed, thus permitting the dirt and other objectionable matter to have free access thereto and accumulate thereon with the attendant results.

I represents the ordinary leather strips or stays surrounding the back of the top, and between which the back curtain is fastened. It is optional whether or not the jointed brace G is employed. Therefore in Sheet I of the

drawings I show it in use; but in Figs. 7 and 8 it is omitted.

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

1. In a buggy-top, a protecting-hood formed between the rearwardly-inclined front bow, C, and cross-support J, in combination with sustaining-braces K on each side of the top, the said braces being composed of two parts, *i* and *o*, connected together by an inclined hinge, *n*, their outer ends being attached, respectively, to bows C and D by an inclined and vertical hinge, as *h* and *p*, the hinge *h* being in substantially the same direction as hinge *n*, whereby when the top is thrown back the hood will cover and protect the interior lining, substantially as shown and described.

2. A buggy-top comprising the following elements: the seat A, sustaining the bows D E through the rail R, and the covering I, in combination with jointed braces F H, the side sustaining-braces K, composed of the parts *i* *o*, joined by an inclined hinge, *n*, their outer ends being provided with an inclined and vertical hinge, respectively, attached to rearwardly-inclined bow C and bow D, whereby the hood, formed between the said bow C and the cross-piece J, will be supported when the top is raised and cover the exposed parts of the top's interior when the same is thrown back, substantially as shown and described.

3. The rearwardly-inclined front bow, C, bow D, intermediate side braces, K, divided into parts *i* *o*, which are joined together by the inclined hinge *n*, and connected to said bows C D by inclined hinge *h* and vertical hinge *p*, respectively, in combination with the top-covering I, which extends below the bow C and is fastened to the cross-piece J, whereby a hood is formed, the bow E, and jointed exterior braces, F H, all arranged substantially as shown and described, and for the purposes specified.

4. In a buggy-top, the supporting-bows D E, exterior jointed braces, H and G, and interior braces F, in combination with the covering I, rearwardly-inclined bow C, cross-support J, and braces K, composed of parts *i* *o*, connected together by inclined hinges *n*, the outer parts being respectively attached to bows C and D by inclined hinge *h* and vertical hinge *p*, and the whole supported on a seat, as A, substantially as shown and described, and for the purposes specified.

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Witnesses:

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