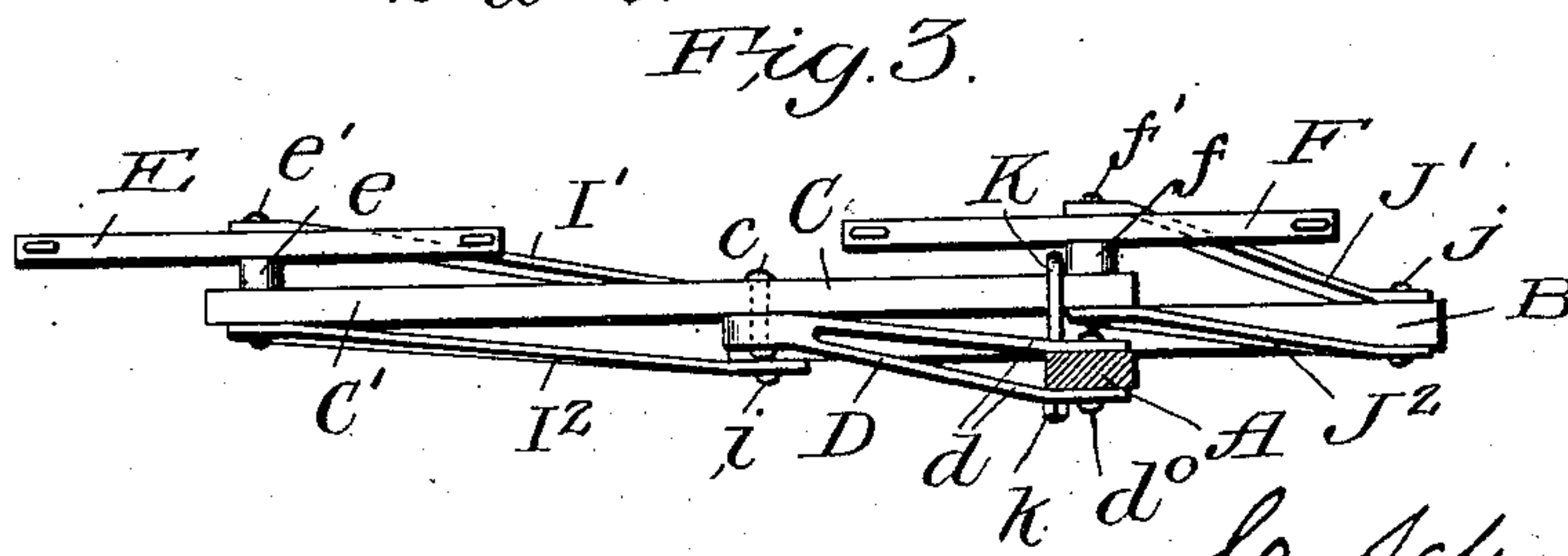
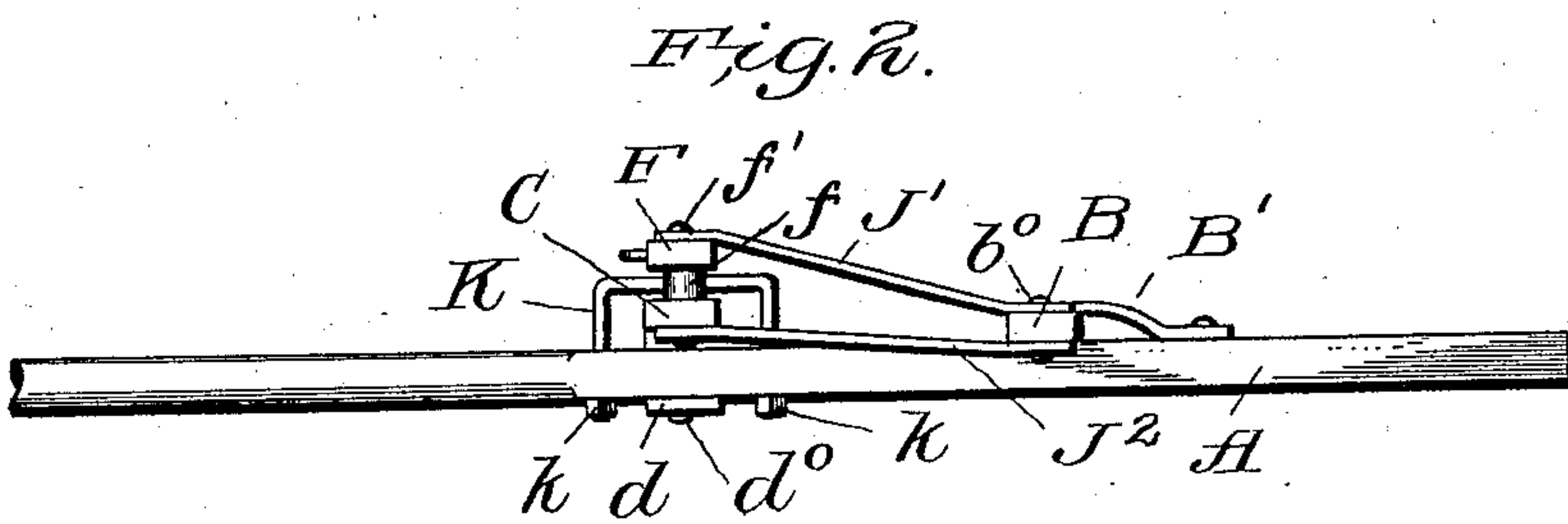
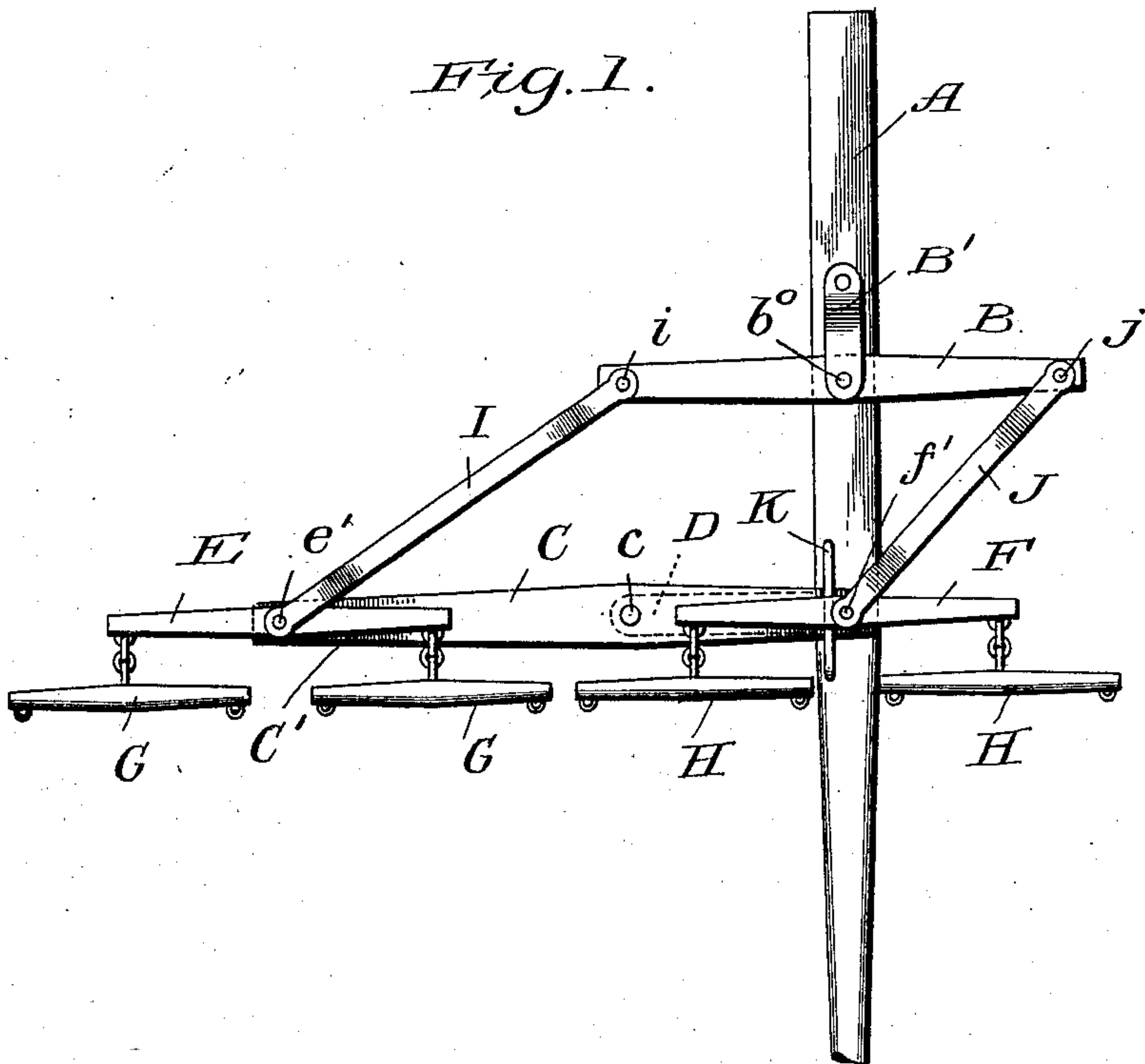


No. 751,348.

PATENTED FEB. 2, 1904.

C. SCHNOOR.
DRAFT EQUALIZER.
APPLICATION FILED OCT. 23, 1903.

NO MODEL.



Witnesses

Geo. A. Byrne.
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By

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UNITED STATES PATENT OFFICE.

CLAUS SCHNOOR, OF WICHITA, KANSAS.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 751,348, dated February 2, 1904.

Application filed October 23, 1903. Serial No. 178,231. (No model.)

To all whom it may concern:

Be it known that I, CLAUS SCHNOOR, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in draft-rigging, and is especially designed to furnish a simple, cheap, effective, and durable equalizing mechanism for use in connection with binders, reapers, and other classes of agricultural machines using side draft.

To more fully understand my invention, reference is had to the accompanying drawings, illustrating the same, in which like letters designate like parts in the several views, and in which—

Figure 1 is a plan view of my equalizer applied to the tongue of the machine; Fig. 2, a side elevation of the same; and Fig. 3, a front elevation, the tongue being shown in section.

A represents the tongue; B and C, the rear and forward equalizing-bars, respectively, of the equalizer.

The equalizing-bar B is pivoted centrally, as at b^0 , to the tongue beneath the brace or arm B' .

The forward bar C is pivotally supported on a bracket D, provided with the spaced arms d , pivoted to the tongue A, as at d^0 . The pivot-point c of the bar C is not centrally of the bar, but is so located as to permit of the bar C having a longer leverage on its outer end C' than at its inner end.

To each end of the bar C is pivotally supported the doubletrees E F, each carrying a pair of swingletrees G H. These doubletrees are spaced from the bar C by spacing-washers $e f$, and they are further held in position thereon by the spaced arms I J, pivotally supported at one end by the pivot-pins $e' f'$ to the forward equalizer-bar and at their other end pivotally connected, as at $i j$, to the rear equalizer-bar B. These spaced bars I and J, as clearly shown in Figs. 1 and 2, comprise the upper plates $I' J'$, located above the equalizer-bar B and the doubletrees, and the

lower plates $I'' J''$, extending beneath the lower face of the equalizer-bars B C.

K designates a substantially elongated U-shaped brace extending above the forward equalizer-bar C at its inner end and beneath the doubletree F on the inside face of the washer f ; the free ends of this U-shaped brace preferably extending through the tongue and screw-threaded to receive the bolts k . This U-shaped brace serves to prevent the outer end C' of the forward equalizing-bar from dropping and further serves to limit the forward and rearward movement of the inner end of the bar C. Thus it will be seen that I have invented a cheap, efficient, and durable equalizer, the parts being so constructed, arranged, and braced as to perform their functions and stand the strain thereon in a most satisfactory manner.

I do not wish to limit myself to the exact details as illustrated, as it is obvious that modifications might be made without departing from the spirit of my invention. For instance, by a slight rearrangement of the construction the equalizer might equally as well be adapted for use with more or less than four horses.

Having thus described my invention, what I claim is—

1. In a draft-equalizer, the combination with the centrally-pivoted rear bar, of a pivoted forward bar carrying the swingletrees, and angularly-inclined bars pivotally supported by and connecting the respective ends of said forward and rear bars.

2. In a draft-equalizer, the combination with the tongue, of a centrally-pivoted rear bar, a bracket secured to the tongue forward of the rear bar, a forward bar, carrying the swingletrees, eccentrically pivoted to said bracket, means connecting the respective ends of said forward and rear bars, and a guiding-brace for the shorter end of said forward bar comprising the U-shaped inclosing member carried by the tongue.

3. In a draft-equalizer, the combination with the tongue, of a centrally-pivoted rear bar, a bracket pivotally secured to the tongue forward of the rear bar, a forward bar, carrying the swingletrees, eccentrically pivoted

to said bracket, spaced bars pivotally supported by and connecting the respective ends of said forward and rear bars, and a guiding-brace for the shorter end of said forward bar
5 comprising the U-shaped inclosing member carried by the tongue.

4. In a draft-equalizer, the combination with the tongue, of a centrally-pivoted rear bar, a bracket carried by the tongue forward
10 of the rear bar, a forward bar pivotally supported on said bracket, doubletrees carried at each end of said forward bar, swingletrees carried by said doubletrees, angularly-disposed spaced bars pivotally connected at their
15 rear ends to said rear bar, and at their forward ends embracing the lower face of said forward bar and the upper face of said doubletrees, and pivot-pins passing through and connecting said forward bar, doubletrees and
20 spaced bars.

5. In a draft-equalizer, the combination

with the tongue, of a centrally-pivoted rear bar, a bracket carried by the tongue forward of the rear bar, a forward bar eccentrically pivoted to said bracket, doubletrees carried
25 at each end of said forward bar, swingletrees carried by said doubletrees, a U-shaped guiding-brace carried by the tongue and enveloping the inner short end of said eccentrically-pivoted bar, spaced bars pivotally connected
30 at the rear ends to said rear bar, and at their forward ends embracing the lower face of said forward bar and the upper face of said doubletrees, and pivot-pins passing through and connecting said forward bar, doubletrees and
35 spaced bars.

In testimony whereof I affix my signature in presence of two witnesses.

CLAUS SCHNOOR.

Witnesses:

J. J. SEEMAN,
S. B. PORTER.