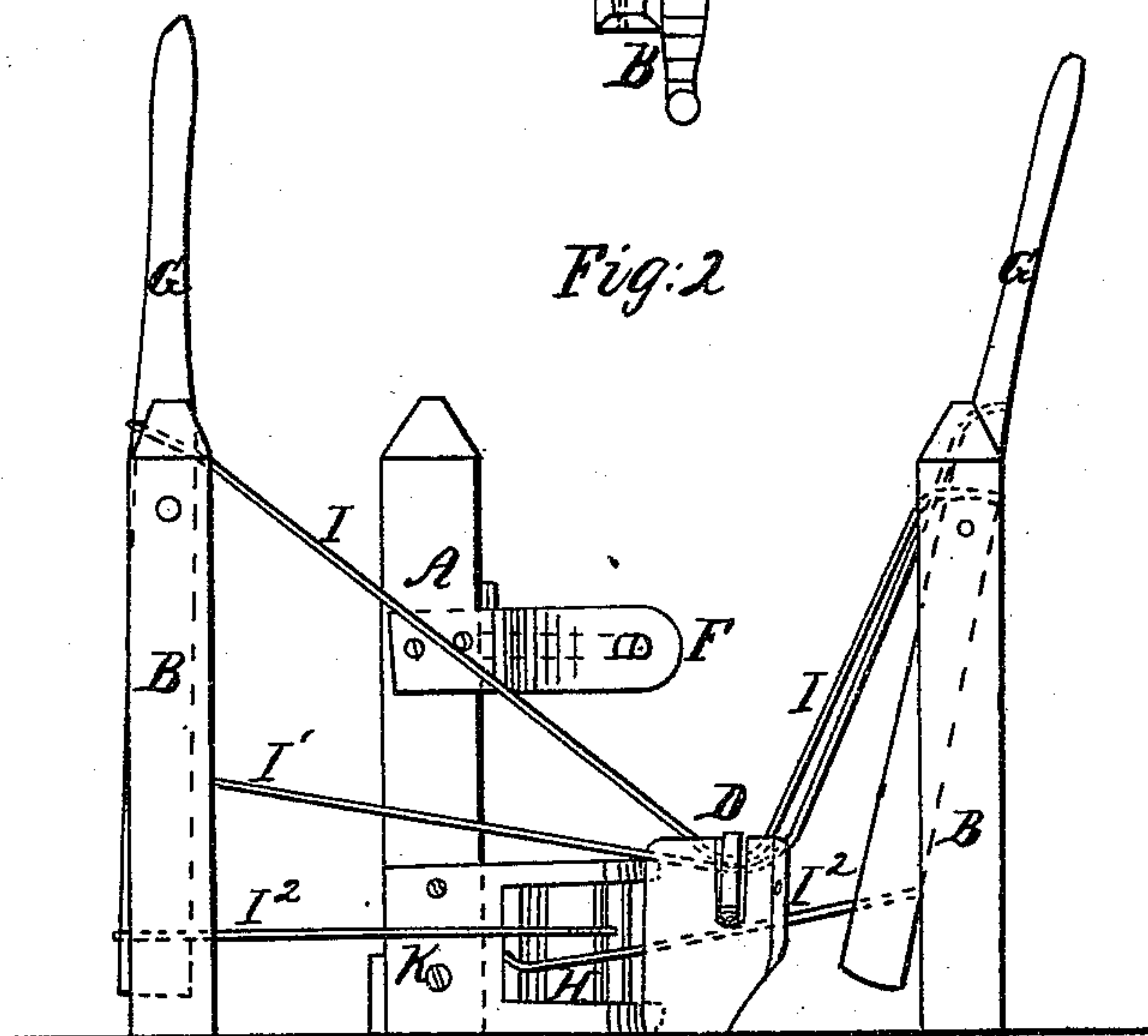
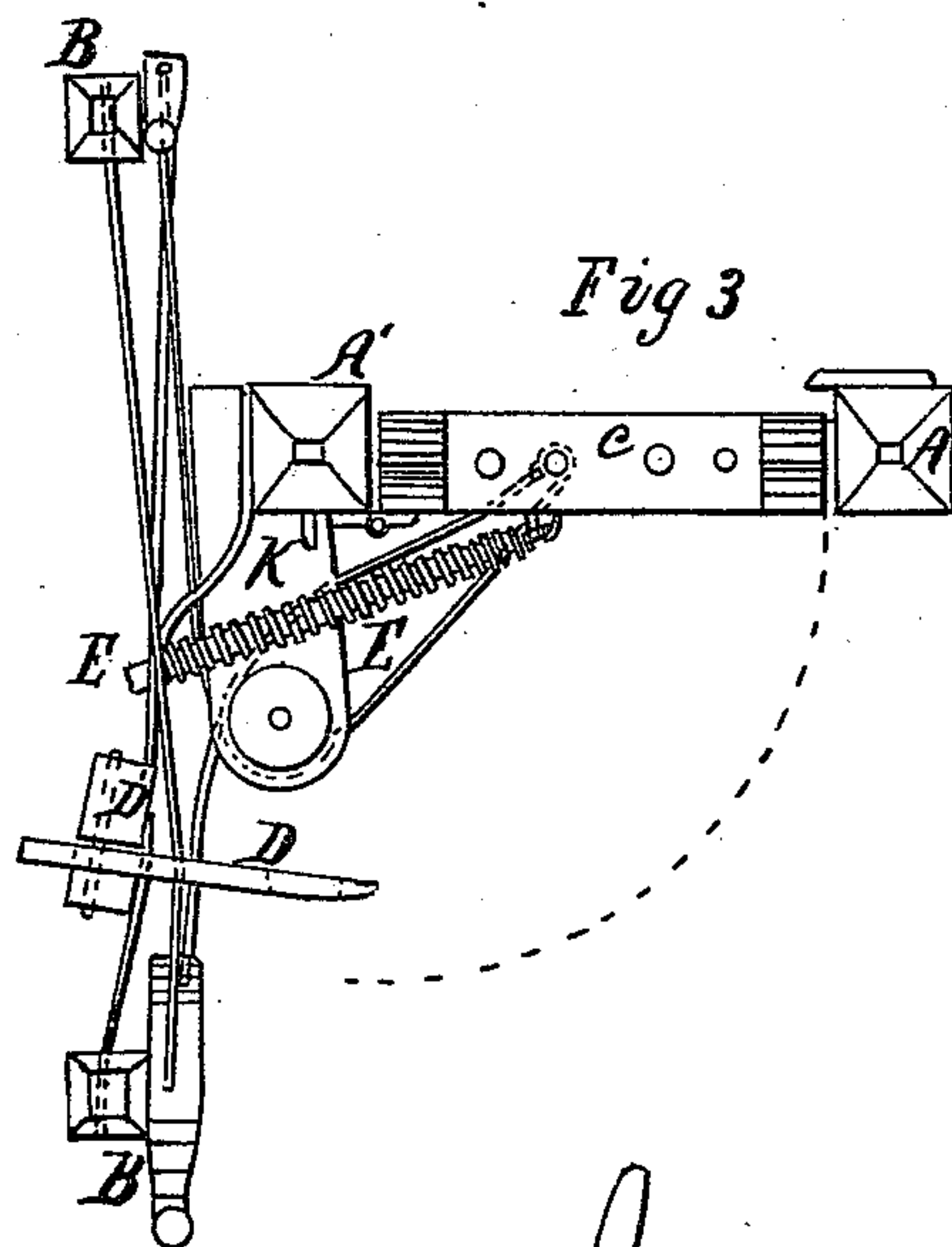
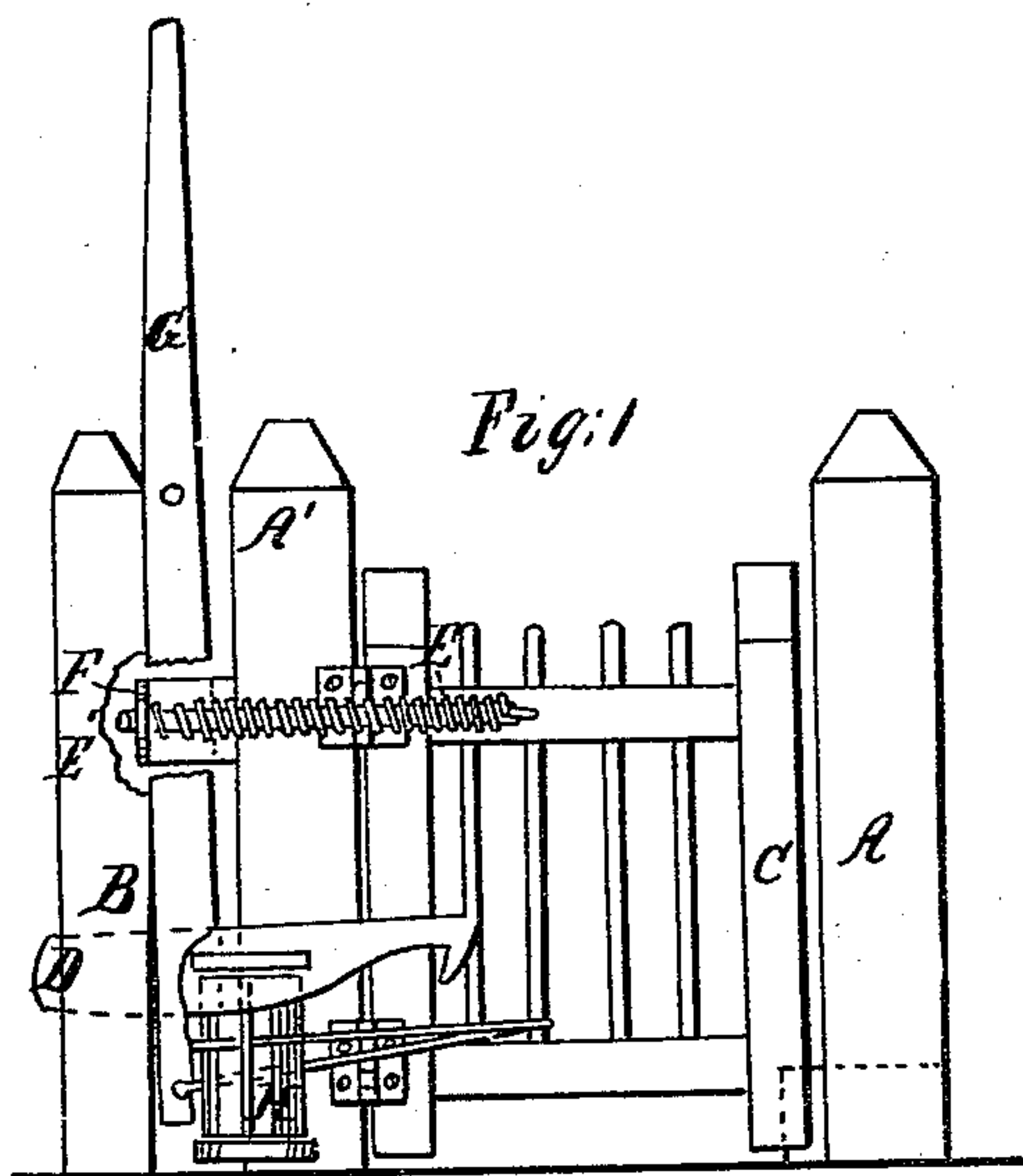


S. Elliott
Automatic Gate.
No 93,977. Patented Aug. 24, 1869.



Witnesses.

C. F. Clausen
A. Ruppert.

Inventor

S. Elliott
D. P. Holloway & Co.
Atty's

United States Patent Office.

STEPHEN ELLIOTT, OF RICHMOND, INDIANA.

Letters Patent No. 93,977, dated August 24, 1869.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, STEPHEN ELLIOTT, of Richmond, in the county of Wayne, and State of Indiana, have invented a new and useful Improvement in Farm-Gates; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, the different parts being designated by different letters.

Figure 1 is a front elevation of my improved gate, showing the spring for closing the same, and the latch for holding it in its open position;

Figure 2 is an end elevation, showing the levers and ropes and chains for opening the gate when closed, and for liberating the latch, for allowing the same to be closed by the action of the spring; and

Figure 3 is a plan or top view of the same.

This invention relates to farm-gates; and

It consists in a jointed rod, in connection with a spiral spring, which is to be attached to the gate, for the purpose of closing the same after it has been opened for the passage of a vehicle, or for any other purpose.

The invention further consists in the combination and arrangement of the posts for opening and closing the gate, as will be more fully described hereafter.

A A' represent the posts of the gate, which may be of any desired form, and be placed at any desired distance apart, so as to admit between them a gate of the desired length.

B B' represent two posts, which are to be set in the ground, or otherwise secured in position, at a distance from the gate-posts sufficient to admit of a person seated in a wagon or carriage operating the levers connected therewith, without leaving such vehicle.

C represents a gate, which may be of any desired construction, and suspended upon one of the posts, A or A', in any suitable manner, and caused to swing back or open upon a line parallel with a line drawn through the posts B B'.

D represents a latch or catch, which is to be pivoted to a post, D', to be provided for that purpose, as shown in fig. 3 of the drawings. The office of this latch is to receive the gate in its open position, for which purpose it is made to hook over or upon one of the horizontal bars of such gate, into which position it falls by its own gravity when the gate is swung open.

E represents a jointed rod, which is to be secured to one of the horizontal bars of the gate, the joint in which is to be near such bar, for the purpose of enabling it to be turned at an acute angle with such bar,

which position it assumes when the gate is closed, while, when the gate is in its open position, it assumes a direction nearly of a right angle to such bar. This jointed rod is to be surrounded with a spiral spring, E', one end of which is to rest upon the bar of the gate, while the opposite end is to bear against the guide-arm F', as a consequence of which, when the gate is swung open, said spring will be contracted to such an extent as that when the gate is permitted to close, by raising the latch, the spring will carry the gate to its closed position with rapidity and certainty.

F represents an arm, which is to be secured to the post to which the gate is suspended, and in such a position as to permit the jointed rod to pass through its outer end, it forming a guide for said rod, and also an abutment for the spring to press against when the gate is being opened and closed.

G G' represent levers, which are pivoted to the posts B B', for the purpose of enabling the operator to open and close the gate, as above described.

H represents a roller, which is held in its place by the bracket K, the roller being the guide to the ropes or drum which lead from the lever G G' to the gate. The arrangement of this roller and of the ropes upon it is clearly shown in fig. 2 of the drawings.

I I' represent cords, ropes, or chains, which lead from the upper position of lever G G' to and through the latch, and from thence to the posts B B', to which their opposite ends are secured. It will be seen that the arrangement of these ropes is such that if the upper ends of levers G G' be pressed outward or away from the gate, the latch D will be raised from its hold upon the gate, and the spring will instantly close the same.

I² I² represent cords or ropes, which extend from the lower ends of the levers G G' to and around the roller H, and from thence to the lower bar of the gate, as it may be, to any one of the vertical rods or slats to which their opposite ends are secured, the arrangement being such that as the upper ends of such levers are pressed inward, or toward the gate, it will be forced into its open position, in which it will remain secured by the latch D until the vehicle has passed through, when, by manipulating the opposite lever, as above described, the latch D will be raised, and the spring will at once close the gate.

K represents the bracket above referred to, which is attached to the post A, and which receives in its outer bifurcated end the roller H, around which the ropes for opening the gate pass.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The jointed rod E, in combination with the gate C, guide-arm F, and spring E', substantially as shown and described.

2. The combination and arrangement of the gate C, the ropes or chains I', roller H, and levers G, substantially as and for the purpose specified.

3. The arrangement of the levers G G', ropes I I',

and latch D, substantially as and for the purpose specified.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

STEPHEN ELLIOTT.

Witnesses:

D. P. HOLLOWAY,

C. F. CLAUSEN.