

(No Model.)

T. A. HILL.
GATE.

No. 328,118.

Patented Oct. 13, 1885.

Fig. 1.

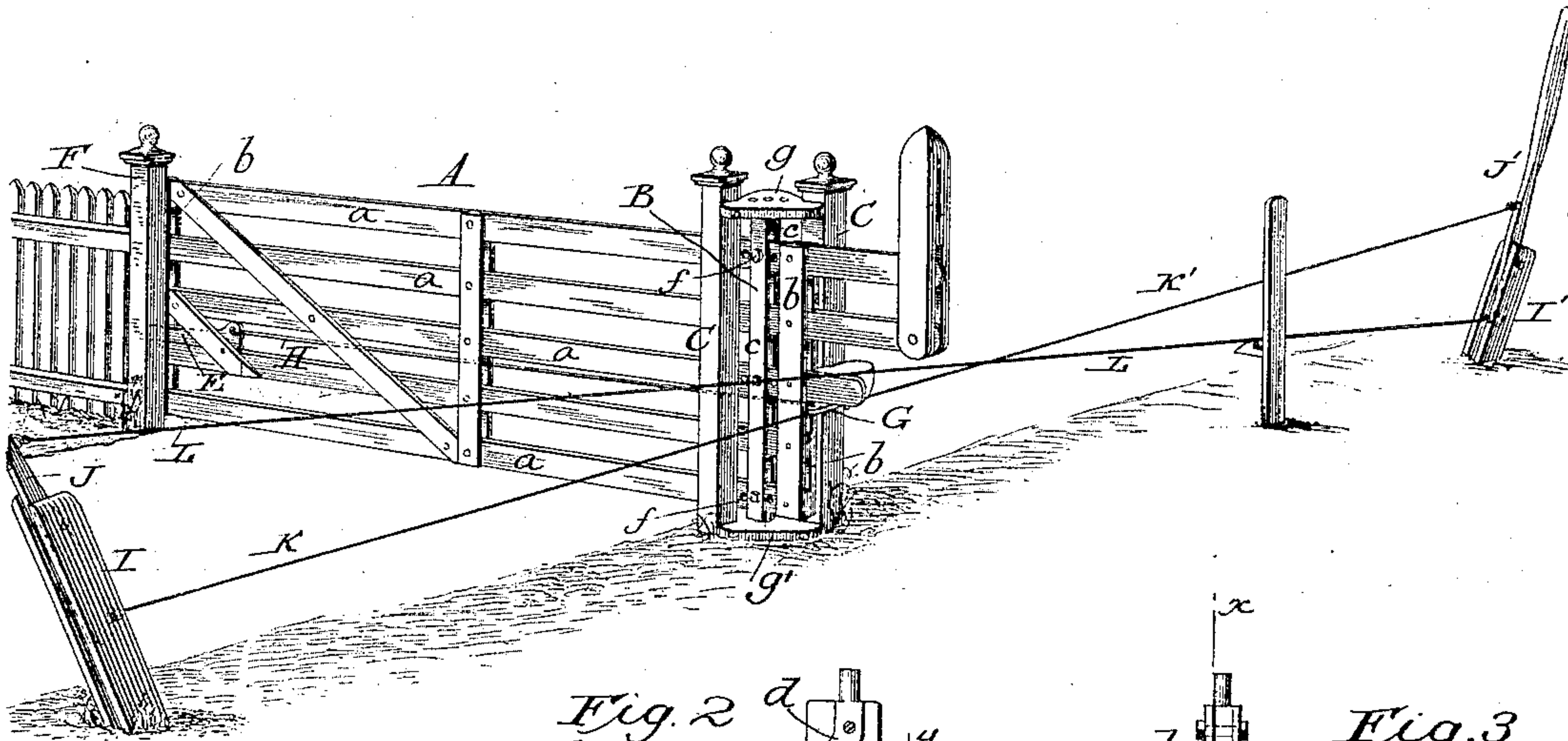


Fig. 2
on x-x

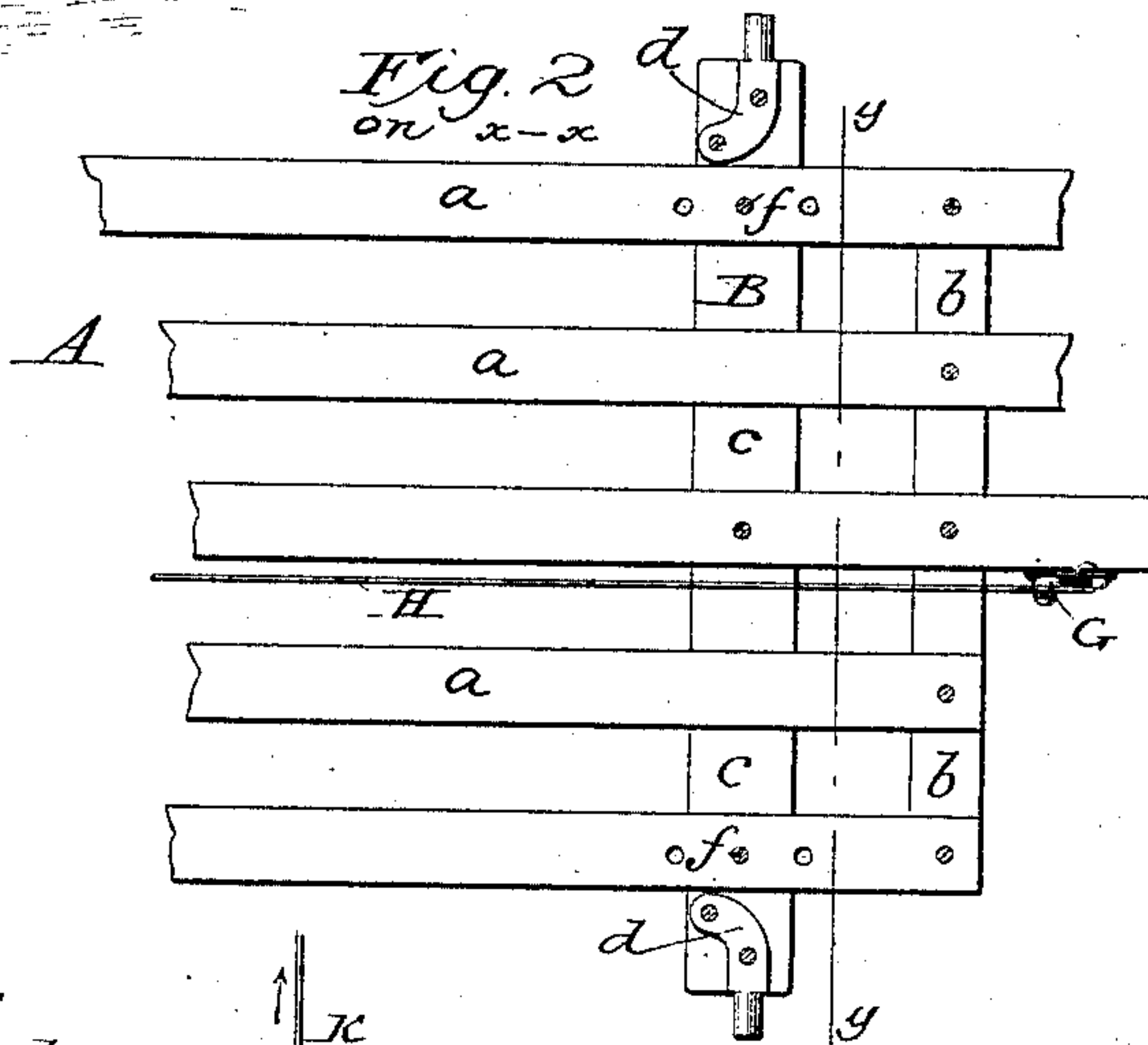


Fig. 3
on y-y

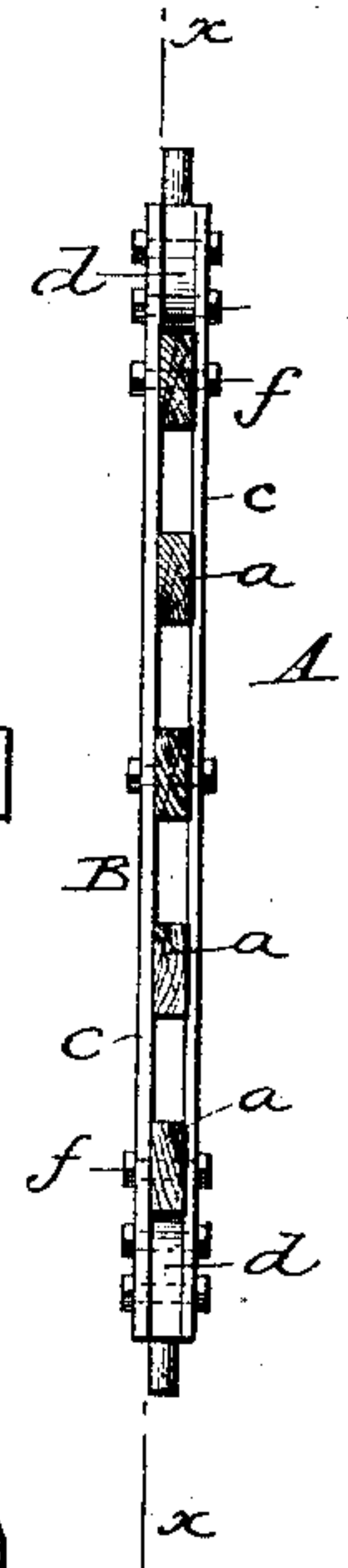


Fig. 4.

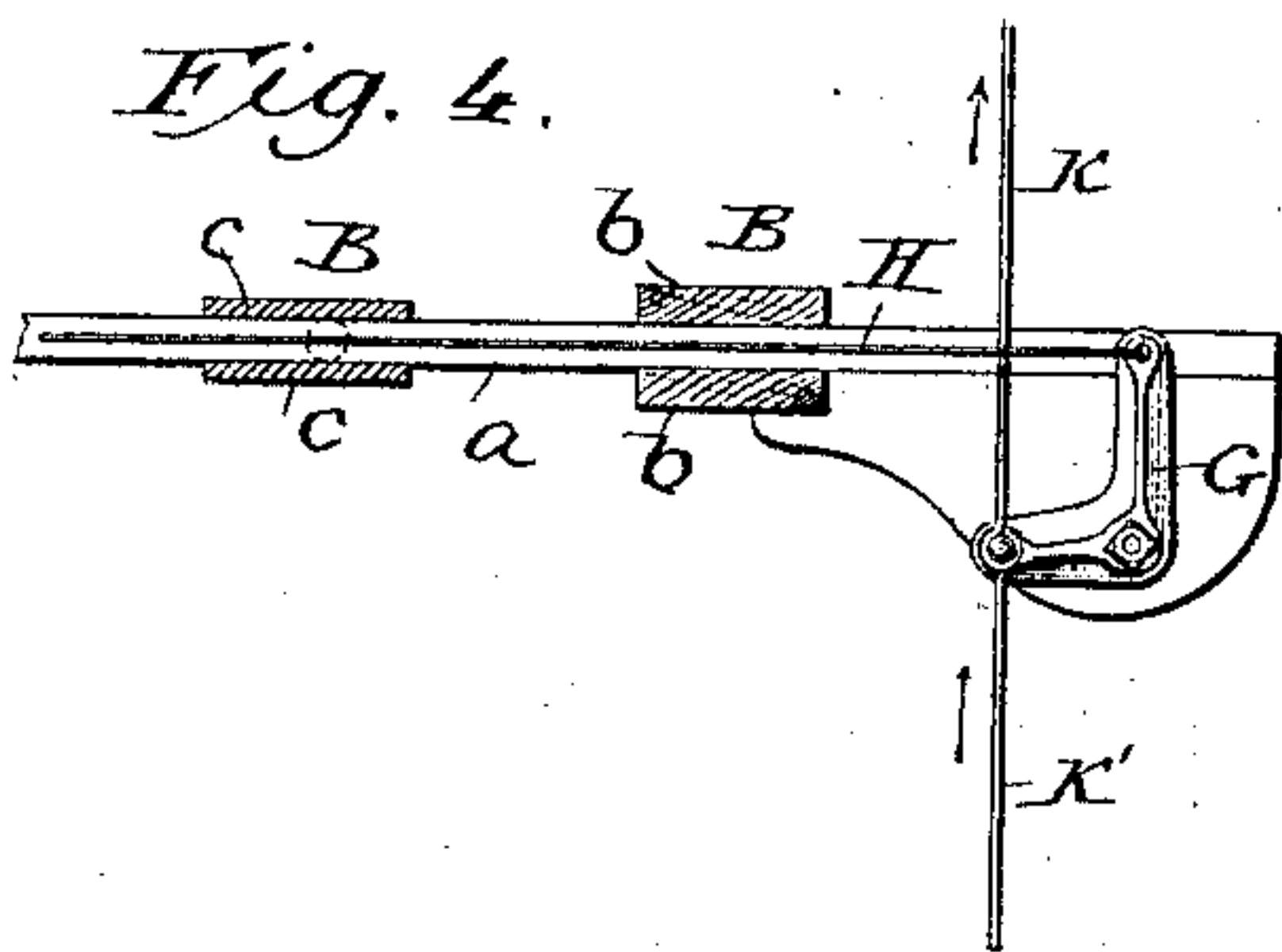
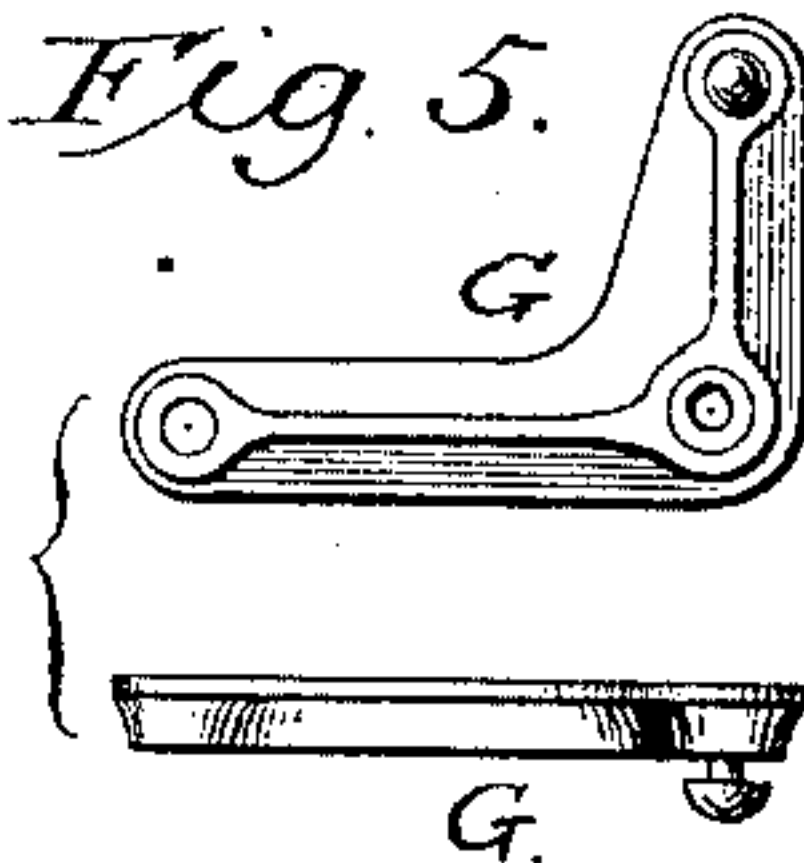


Fig. 5.



WITNESSES

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GATE.

SPECIFICATION forming part of Letters Patent No. 328,118, dated October 13, 1885.

Application filed October 22, 1884. Serial No. 146,189. (No model.)

To all whom it may concern:

Be it known that I, T. A. HILL, of Richland, in the county of Keokuk and State of Iowa, have invented certain Improvements in
5 Gates, of which the following is a specification.

This invention relates to that class of swinging gates which are opened and closed and latched and unlatched by means of hand-le-
10 vers located at a distance therefrom.

It consists in various peculiarities of construction which are hereinafter described and claimed.

Referring to the accompanying drawings,
15 Figure 1 is a perspective view of my gate as it appears when closed. Fig. 2 is a vertical longitudinal section through the rear end of the gate on the line *xx* of Fig. 3. Fig. 3 is a cross-section of the same on the line *yy* of
20 Fig. 2. Fig. 4 is a bottom plan view showing the link and the connection of the rods therewith for operating the latch. Fig. 5 represents a top plan and an edge view of the latch-operating lever.

25 In proceeding to embody my invention I first construct the rigid rectangular gate A, consisting of a series of horizontal bars or rails, *a*, firmly united at their front and rear ends by means of vertical bars *b*, bolted or
30 nailed thereto. Diagonal or other braces may be applied in any ordinary or appropriate manner to give rigidity to the structure.

Near its end I extend the rails of the gate through a swiveled post, B, the details of
35 which are shown in Figs. 2 and 3. This post consists of two vertical bars, *c*, applied to opposite sides of the gate and bolted at their upper and lower ends to journal-plates *d*, which are inserted between them in the man-
40 ner shown. Each of these plates has a journal or trunnion on its outer end, and has its inner end curved laterally or widened in order that it may be firmly connected to and afford a solid bearing for the bars *c*. The
45 gate is secured within the swiveled post by means of transverse bolts *f*, inserted through its upper and lower rails, which latter are provided with a series of holes to receive the bolt, in order that by changing the bolt from
50 one to another the gate may be adjusted to raise or lower its forward end.

Having provided the gate, I next erect two

vertical posts, C, and connect the same at their upper and lower ends by means of horizontal bars or plates *g g'*, provided with holes
55 to receive the trunnions of the swiveled posts and thus give support to the gate.

It will be observed that each of the bars *g g'* is provided with a number of holes in order to admit of the trunnions being shifted in such
60 manner as to compensate for any inclination of the posts C and maintain the gate at all times in a vertical position. I provide the gate at its forward end with a pivoted gravitating latch, E, such as shown in Fig. 1, and
65 provide a stationary post, F, having a catch or keeper to engage the latch. To the rear end of the gate I pivot a horizontally-swinging angular lever, G, as plainly shown in Figs. 1 and 4, and connect one end of the same, by
70 a wire or rod, H, with the upper end of the latch, as shown in the several figures, so that when the lever is moved in the direction indicated by the arrow in Fig. 4 it will have the effect of raising the latch and releasing the
75 gate.

I next erect at the right side, on opposite sides of the gate at a suitable distance therefrom, inclined posts or standards I I', in which I pivot upright hand-levers J J'.
80 From the lower end of the lever J, I extend a rod or wire, K, to the latch-operating-lever G, and then continue a wire, K', from said lever to the upper end of the second hand-lever, J'. I also extend a wire or rod, L, from
85 the upper end of the lever J to the lower end of the lever J', this arrangement causing the movement of either lever in one direction to move the other in the opposite direction.

The operation is as follows: Assuming the
90 gate to be closed and latched, as represented in Fig. 1, the operator approaching the same from either side will urge the upper end of the appropriate hand-lever in the direction of the gate, the effect of which will be, first,
95 to cause the connecting-wires to turn the elbow-lever G in the direction shown by the arrow in Fig. 4, thereby unlatching the gate, and, second, through the lever to urge the rear end of the gate laterally in such manner as to
100 cause the gate to swing open. After passing the gate, the operator urges the second lever in a direction away from the gate, the effect of which is to cause the rods to swing the gate

to its closed position and release the latch so that it may engage the keeper.

It is to be observed that both levers are moved in the direction in which the operator travels, so that they may be actuated by those riding in carriages or on horseback without the necessity of dismounting.

It will be observed that the adjustment of the gate and the posts C by means of the pins *f*, and the series of holes therefor provides for lifting the free end to compensate for any sag which may occur, and that the adjustment by means of the series of holes in the bars *g g'* will compensate for the inclination of the posts C in a lateral direction.

Having thus described my invention, what I claim is—

1. In combination with the gate having the trunnions *d*, the posts C, located on opposite sides of the gate and connected by the cross-bars *g* to sustain the trunnions, the latch E, the angular lever G, mounted on the rearward extension of the gate and connected with the latch, and the two levers J and J', located at opposite sides of the gate and connected by the crossed wires K, K', and L with each other and with the lever G.

2. In combination with the swinging gate having trunnions *d* thereon, and the levers and crossed rods or wires for operating said gate, the posts C C, located in the relative positions shown on opposite sides of the gate, and the cross-bars *g g'*, connecting said posts and provided with a series of holes to admit of the positions of the trunnions being changed.

3. In combination with a gate provided with a series of holes, the pins *f*, the slotted swiveling post B, the stationary posts C, located on opposite sides of the gate and the cross-bars *g g'*, connecting said posts and provided with a series of holes to receive the trunnions, whereby the gate may be adjusted to raise and lower its swinging end, and also adjusted to compensate for lateral inclination of the posts C.

In testimony whereof I hereunto set my hand, this 10th day of July, 1884, in the presence of two attesting witnesses.

TERELIUS A. HILL.

Witnesses:

JACOB JONES,
EZRA HADLEY.