(Model.)

G. N. CRICHTON.

ROLLER GATE HINGE.

No. 343,759. Patented June 15, 1886.

Fig. 1.

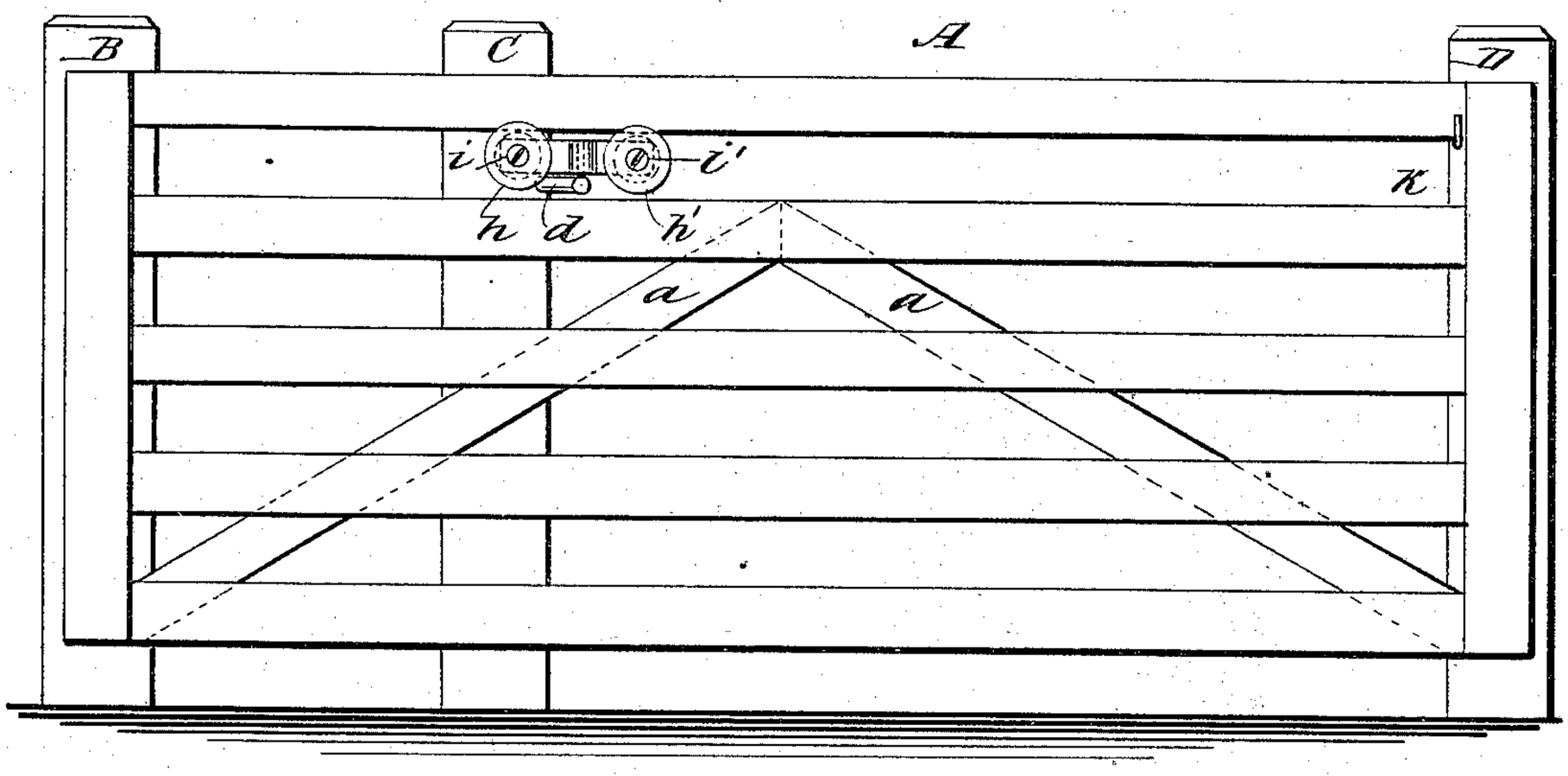


Fig. 2

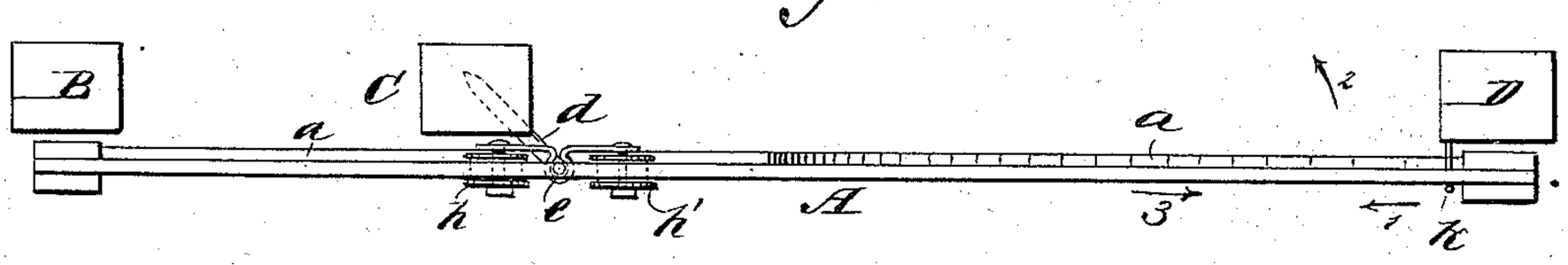


Fig. 3.

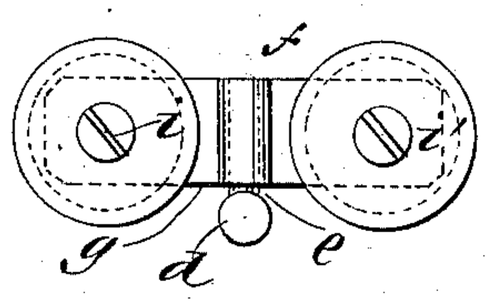
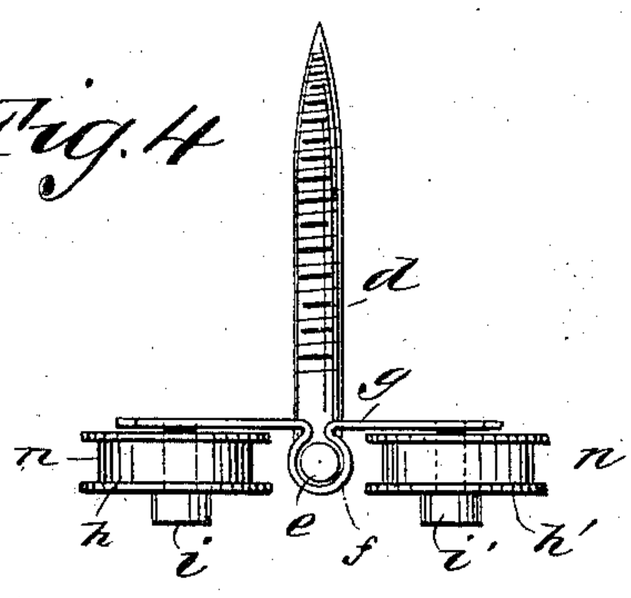


Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE N. CRICHTON, OF PARSONS, KANSAS.

ROLLER GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 343,759, dated June 15, 1886.

Application filed July 11, 1885. Serial No. 171,407. (Model.)

To all whom it may concern:

Be it known that I, GEORGE N. CRICHTON, of Parsons, in the county of Labette and State of Kansas, have invented a new and useful Improvement in Roller Gate-Hinges, of which the following is a full, clear, and exact description.

My invention relates to that class of devices employed to hang farm-gates; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of a gate mounted upon one of my improved hinges. Fig. 2 is a plan view of the same. Fig. 3 is a front view of the hinge and its supporting bolt or pin, and Fig. 4 is a plan view of the same.

A represents a gate, which is preferably strengthened by diagonal brace-pieces, as *a a*, that reach only to the bar or rail next to the top, so as to leave the top bar free and clear.

B, C, and D are the gate-posts, preferably arranged, as shown, to provide two openings that are covered by the same gate, although it will of course be understood that but a single opening need be made.

To the post C there is secured a screw pin or bolt, *d*, said pin being screwed into the post from the front central corner thereof, as is clearly shown in Figs. 1 and 2.

Projecting upward from the outer end of the pin or bolt *d* is an upright arm, *e*, which engages with a socket, *f*, formed in a strong metallic plate, *g*. This plate *g* may be of malleable iron cast to form; but I prefer to use wrought-iron centrally bent to form the socket *f*.

To either end of the plate *g*, I secure a roller, as *h h'*, connecting the rollers to the plate by means of journal screws or bolts *i i'*.

The top rail of the gate A rests in grooves *n n*, formed in the peripheries of the rollers *h h'*, and when the gate is closed it is held in place and prevented from sagging by an upwardly-hooked pin, *k*, that is driven into the post D in position to engage with one of the upper bars of the gate. If it is desired to fully open the gate, it is lifted from engagement with the pin *k* and pushed back in the direction of arrow No. 1 until the gate is balanced on the roller-hinge, when it is swung around in the direction of arrow No. 2 until the gate is at about right angles with the line of the fence. If, however, it is desired only partially to open the smaller gateway—as for the purpose of letting small animals pass through while the larger ones are kept back—the gate is simply pushed forward in the direction of arrow No. 3, so as to leave an opening between the end of the gate and the post B.

If a very cheap gate is desired, the braces *a a* may be omitted, as the gate has no tendency to sag, and may, moreover, be mounted on very light posts.

I am aware that a gate has been supported upon rollers journaled in a support pivoted to a bolt which is secured to the gate-post, and I therefore do not claim such invention.

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

The herein-described roller-hinge, consisting of the bar or plate *g*, having a central socket, *f*, and provided with a laterally-projecting pin near each end, the grooved rollers on said pins, and a pin or bolt, *d*, having an upright arm, *e*, fitting in the socket of the said bar or plate, as set forth.

GEORGE N. CRICHTON.

Witnesses:
W. N. BARROWS,
LOT L. BAIRD.