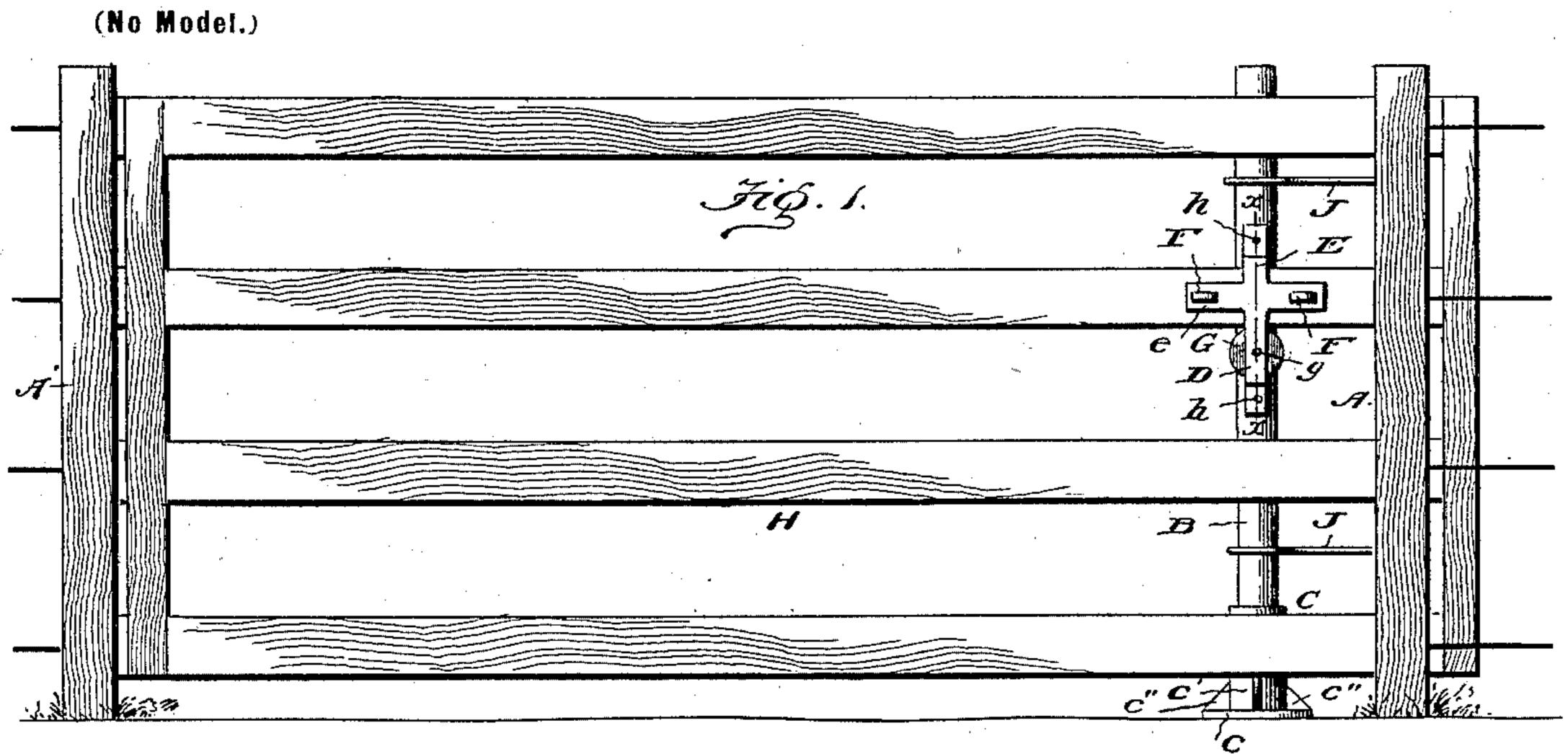
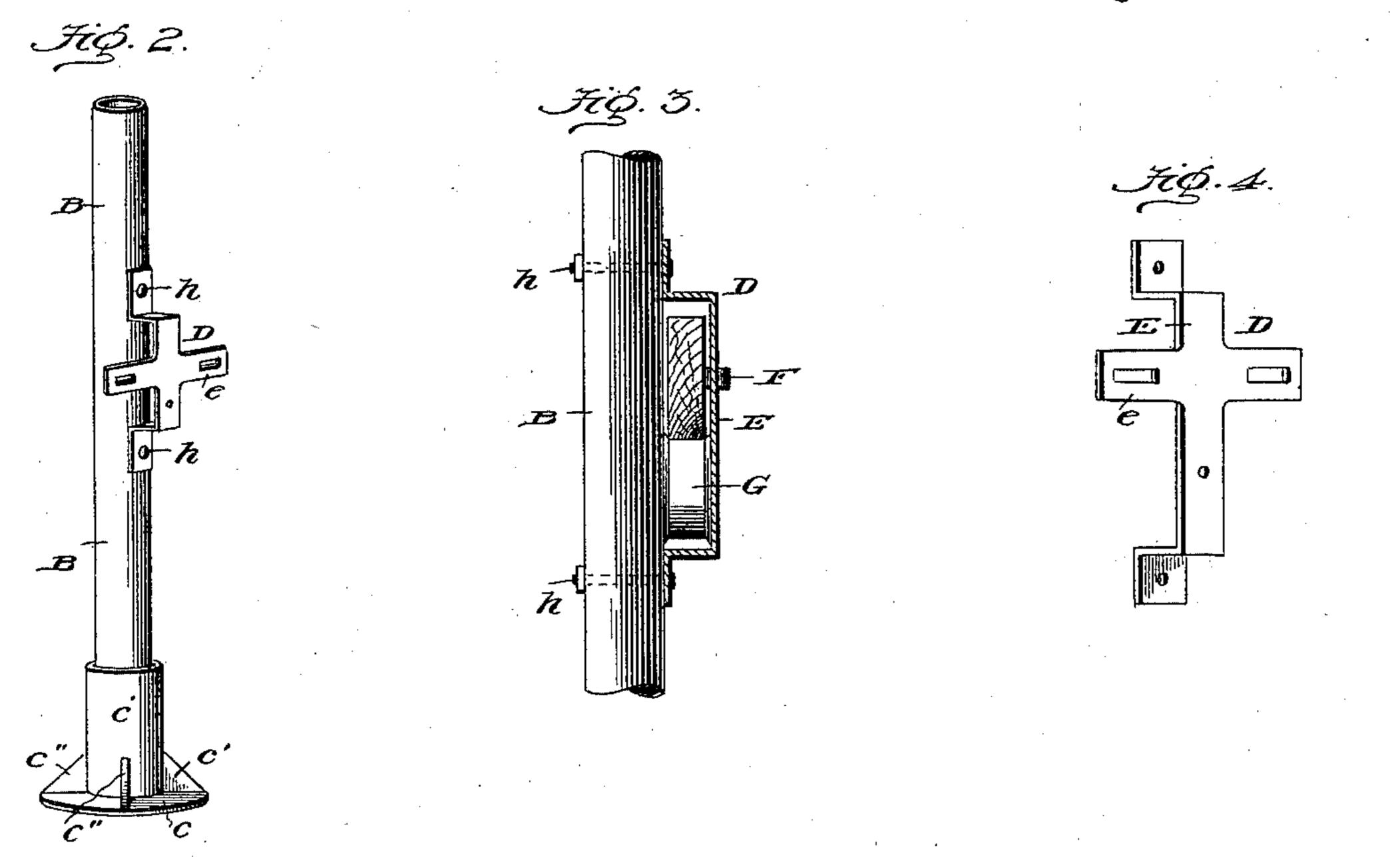
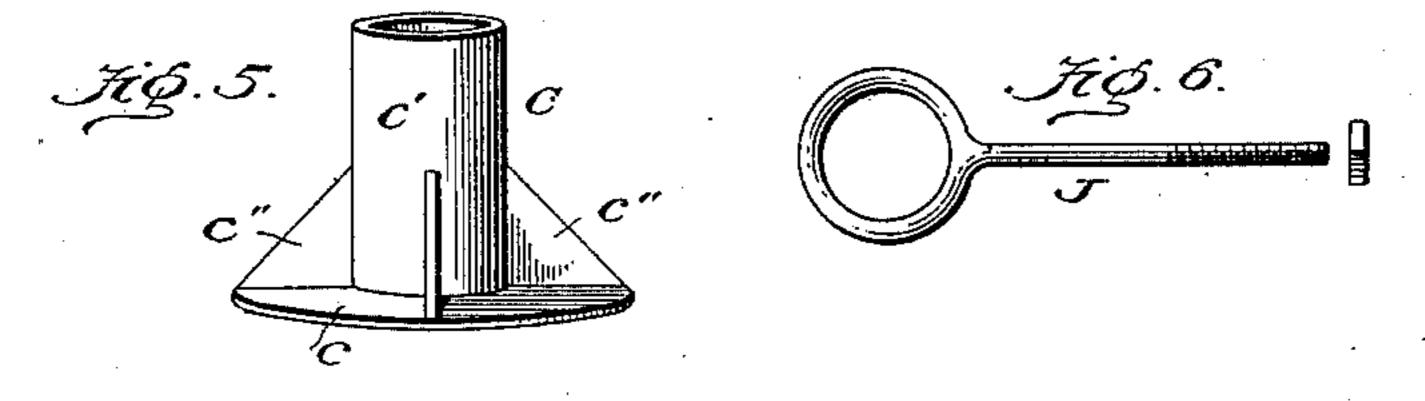
W. H. KIMBALL. GATE.

(Application filed July 26, 1898.)







WITNESSES:

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GATE.

SPECIFICATION forming part of Letters Patent No. 613,010, dated October 25, 1898.

Application filed July 26, 1898. Serial No. 686,942. (No model.)

To all whom it may concern:

Beitknown that I, WILLIAM H. KIMBALL, a citizen of the United States, residing at Jonesville, in the county of Hillsdale and State of 5 Michigan, have invented certain new and useful Improvements in Gates; 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 to it appertains to make and use the same.

My invention relates to improvements in hinges for gates of that class having a sliding and swinging movement; and the object I have in view is to provide mechanism which 15 can be applied to an ordinary construction of railed or slatted gate and which mechanism will strengthen and support the gate to prevent large animals from breaking the same or its hinges.

My invention consists in the combination, with a sliding and swinging gate, of a pivoted gate-supporting post, a gate-hanger on said post, a bearing-roller, and means connecting | said post with the fence-post; and the inven-25 tion further consists in the detailed construction of parts, as will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodi-30 ment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a side elevation of my improved hinge or hanger applied to a gate. Fig. 2 is 35 a perspective view of the hinge-post and hanger. Fig. 3 is a vertical section on line x x, Fig. 1. Fig. 4 is a detail view of the hanger. Fig. 5 is a detail perspective view of the post-socket. Fig. 6 is a view illustrat-40 ing the eyebolt.

Like letters of reference denote like and corresponding parts in all the figures of the

drawings, referring to which—

A A' designate the usual gate-posts, and B 45 the pivot-post. This post B is preferably cylindrical or tubular in form and constructed of metal. This post is fitted to turn in a base or socket C, which is either securely fastened on the surface or is buried in the ground. 55 This socket C is preferably constructed substantially in the form shown in Fig. 5, having

supporting-wings c''. The diameter of the collar c' is larger than the diameter of the post B, whereby the post is adapted to fit 55 loosely in said socket and have a turning or pivot movement therein. At a suitable point on said post B, I provide the gate-hanger D, bolted or otherwise secured to said post. This hanger consists of the bridge-piece E, 60 having a cross-arm e formed integral therewith, near the ends of which are suitable friction-rollers F F. A bearing-roller G is journaled between the bridge E and the post B on the bolt g, which bolt, in connection with 65 the smaller bolts h h, also serves to support the hanger on the post.

The post B is preferably situated near the post A and so placed or set that the gate H will pass between them, and these posts are 70 connected by the eyebolts J J, which are securely fastened to the post A, while the post B is loosely fitted in the eyes of said bolts. These bolts serve to strengthen the post B, retain the same in its proper position, and 75 give a better or firmer support to the gate when strain is brought to bear thereon. These bolts J may be passed through the post A and be secured thereto, or they may be threaded

to screw into the post.

To open the gate, it is only necessary to push the same back toward the posts A and B until it balances on the hanger D, when the gate can be turned, by means of the pivot-post B, to open at a right angle. In pushing or 85 sliding the gate back one of the rails h of the gate rides upon the bearing-roller G, while the friction-rollers F F bear against the side of said rail and prevent the gate from binding. The rollers FF at the end of the cross- 90 arm e serve to hold the gate firmly to the post B and prevent the gate from having too much lateral motion.

The gate and hanger can be very cheaply constructed and after it is properly adjusted 95 is very easily operated. The hinge can be easily and quickly applied to an ordinary farm-gate, and thus no peculiar construction of gate is necessary.

I am aware that changes and modifications 100 in the form and proportion of parts and in the details of construction herein shown and described as the preferred embodiment of my the broad flat base c, the collar c', and the | invention may be made by a skilled mechanic;

but I desire to reserve the right to make such changes and modifications as fairly fall within the scope of my invention.

Having thus fully described my invention, 5 what I claim as new, and desire to secure by

Letters Patent, is—

1. In a sliding and swinging gate, the combination of the gate-post, the pivot-post having a hanger provided with rolls between 10 which is received a slat of said gate and with lateral arms also having rolls adapted to bear against the same slat of the gate and eye-ended bolts fitted upon said pivot-post and connecting with said gate-post, substantially as set 15 forth.

2. In a sliding and swinging gate, the combination of the gate, the gate-post, the pivotpost having a hanger provided with rolls between which is received a slat of the gate and 20 with lateral arms also having rolls bearing against the same slat of the gate, the eyeended bolts fitted upon said pivot-post and connected to said gate-post, and the socket

adapted to receive said pivot-post and permit of axially pivoting said pivot-post, substan- 25

tially as set forth.

3. In a sliding and swinging gate, the combination with the gate-posts, of a pivot-post loosely resting in a socket or base and situated near one of said gate-posts leaving a 30 space to accommodate the gate between them, evebolts fastened to the gate-post and inclosing the pivot-post which is adapted to rotate freely within the eyes of said bolts, and a hanger rigidly fastened to the pivot-post and 35 supporting the gate thereon, said hanger consisting of a bridge-piece, a cross-arm, frictionrollers on said cross-arm and the bearingroller, substantially as described.

In testimony whereof I affix my signature 40

in presence of two witnesses.

WILLIAM H. KIMBALL.

Witnesses:

S. D. MCNEAL, R. B. GREENE.