W.R.KRAMER. Farm-Gate.

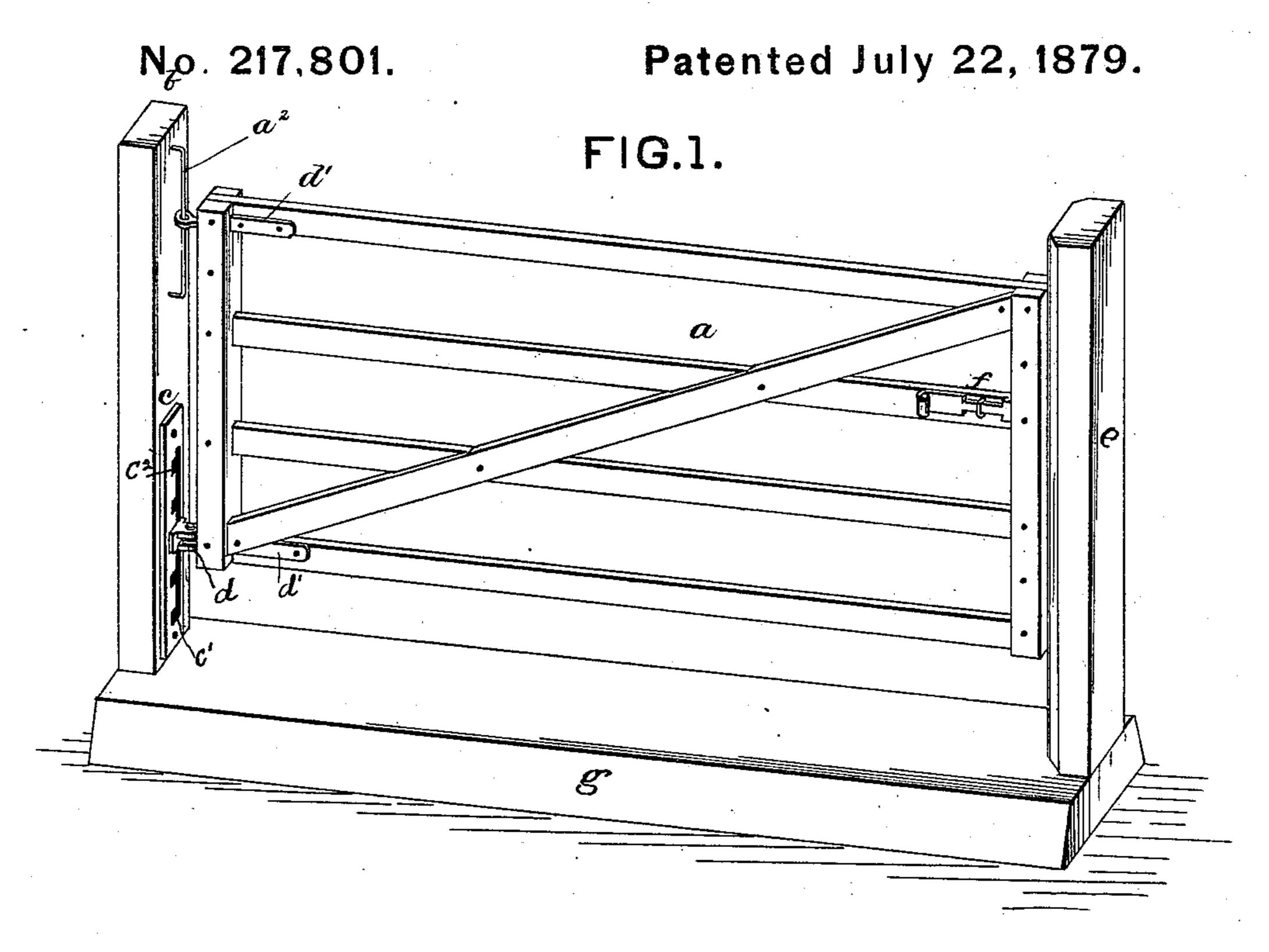
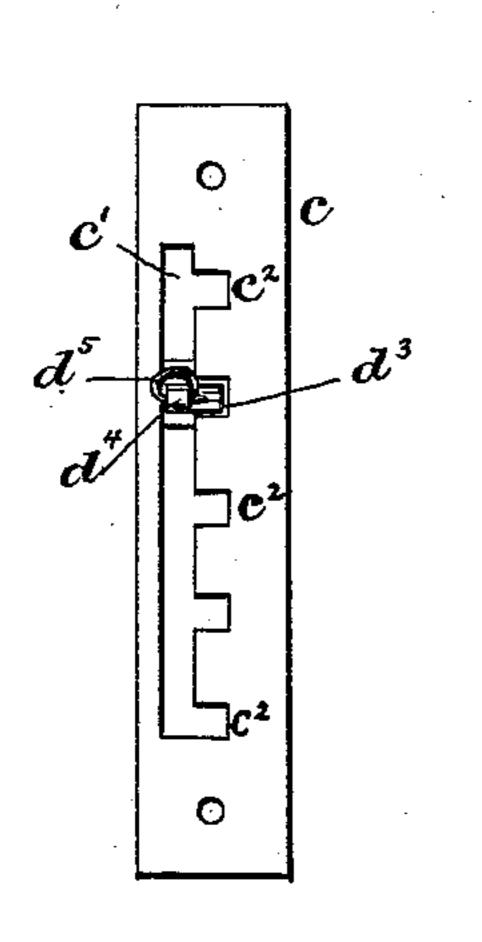
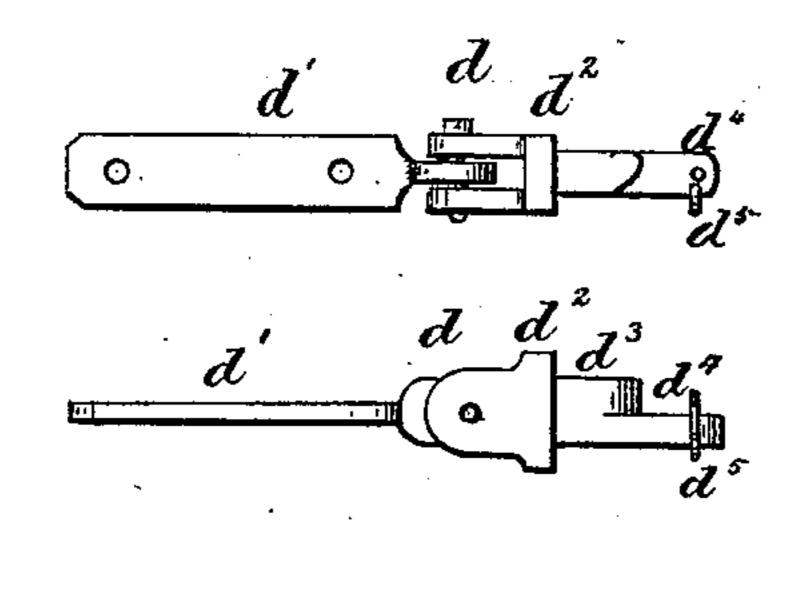


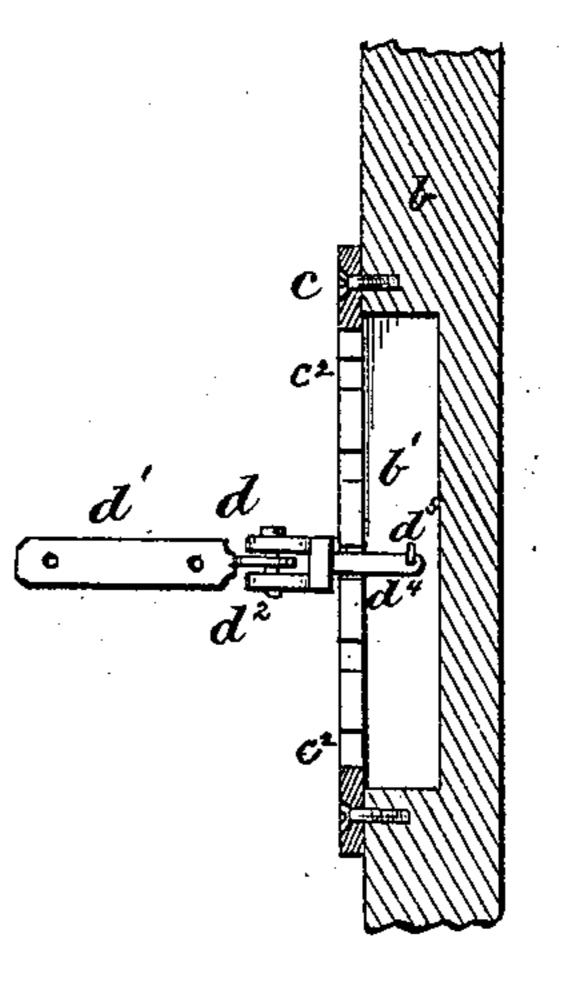
FIG.2.

F1G.3.

FIG.4.







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## UNITED STATES PATENT OFFICE.

WILLIAM R. KRAMER, OF SPRINGPORT, MICHIGAN.

## IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. 217,801, dated July 22, 1879; application filed February 26, 1879.

To all whom it may concern:

Be it known that I, WILLIAM R. KRAMER, of Springport, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Farm Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has for its object to furnish an improved hinge for gates, whereby the latter may be raised or lowered, as desired.

It consists in a recessed post, a slotted and notched plate, and a hinge-head having an extended head or arm, all constructed and adapted to be applied to the gate and gate-post in the manner hereinafter fully set forth.

In the drawings, Figure 1 is a gate and gatepost with my improvement applied thereto. Fig. 2 is the slotted and notched plate. Fig. 3 is the lower hinge, showing the hinge-head with the extended arm; and Fig. 4 is a vertical section of the lower portion of the gatepost, showing the plate and hinge attached thereto.

a is the gate, of ordinary construction, provided with the upper hinge-strap,  $a^1$ , which has an eye that slides up and down on a rod,  $a^2$ , affixed to the upper end of the gate-post b. The post b has formed near its lower end, on the face next the gate a, an oblong vertical recess or mortise, b', which is covered by the retaining-plate c, as shown in Fig. 1.

The retaining-plate c has formed in it the vertical slot  $c^1$ , which is made of the same length as the mortise b'.  $c^2$  are a series of side notches formed in the plate c outward from the slot  $c^1$ , as shown in Fig. 2.

d is the hinge, composed of the strap  $d^1$ , which attaches to the gate by means of screws or rivets, and the head  $d^2$ , which attaches to the gate-post, as hereinafter described.

The hinge-head  $d^2$  has the rear shank,  $d^3$ , rectangular in shape, and adapted to fit in one of the notches  $c^2$  and across the vertical slot  $c^1$  in the plate c, as shown in Fig. 2.

 $d^4$  is a small arm or extension, reaching back from and in line with one side of the shank  $d^3$ . It has a thickness equal to the width of the slot  $c^1$ , and slides freely up and down in the latter, as hereinafter described. It has in its outer end a small hole, in which is placed a small retaining key or pin,  $d^5$ , which is arranged at a distance from the end of the shank  $d^3$  equal to about the thickness of the plate c.

To hang the gate, the upper hinge is placed on the guide-rod  $a^2$ , as indicated, the shank and arm of the lower hinge are put through the slot  $c^1$ , and the key or pin  $d^5$  is inserted and secured in place, after which the plate  $d^4$  is fastened to the post over the mortise b', as shown in Figs. 1 and 4.

To raise or lower the gate, the lower hinge is drawn outward till the pin  $d^5$  strikes the plate c, which brings the arm or extension  $d^4$  into the slot  $c^1$ . The gate may then be raised or lowered to any desired notch,  $c^2$ . When the hinge shall have been moved, as indicated, till the shank  $d^3$  is opposite the desired notch, the gate, after being released, will of its own gravity force the said shank into the notch, as shown, and hold the gate firmly in its place.

The operation above described can only be executed when the gate is open or partially open.

The gate, when closed against the post e and fastened by the latch or bolt f, will be held in its position so that it cannot be moved by any force applied to its under edge by hogs or other animals.

I claim—

An adjustable hanger for swinging gates, consisting of the combination of the strap  $d^1$ , the head or block  $d^2$ , having strap  $d^3$  and arm  $d^4$ , and the plate c, provided with the vertical slot and side notches, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM R. KRAMER.

Witnesses:

JAMES M. CROSBY,

CHARLES JAY.