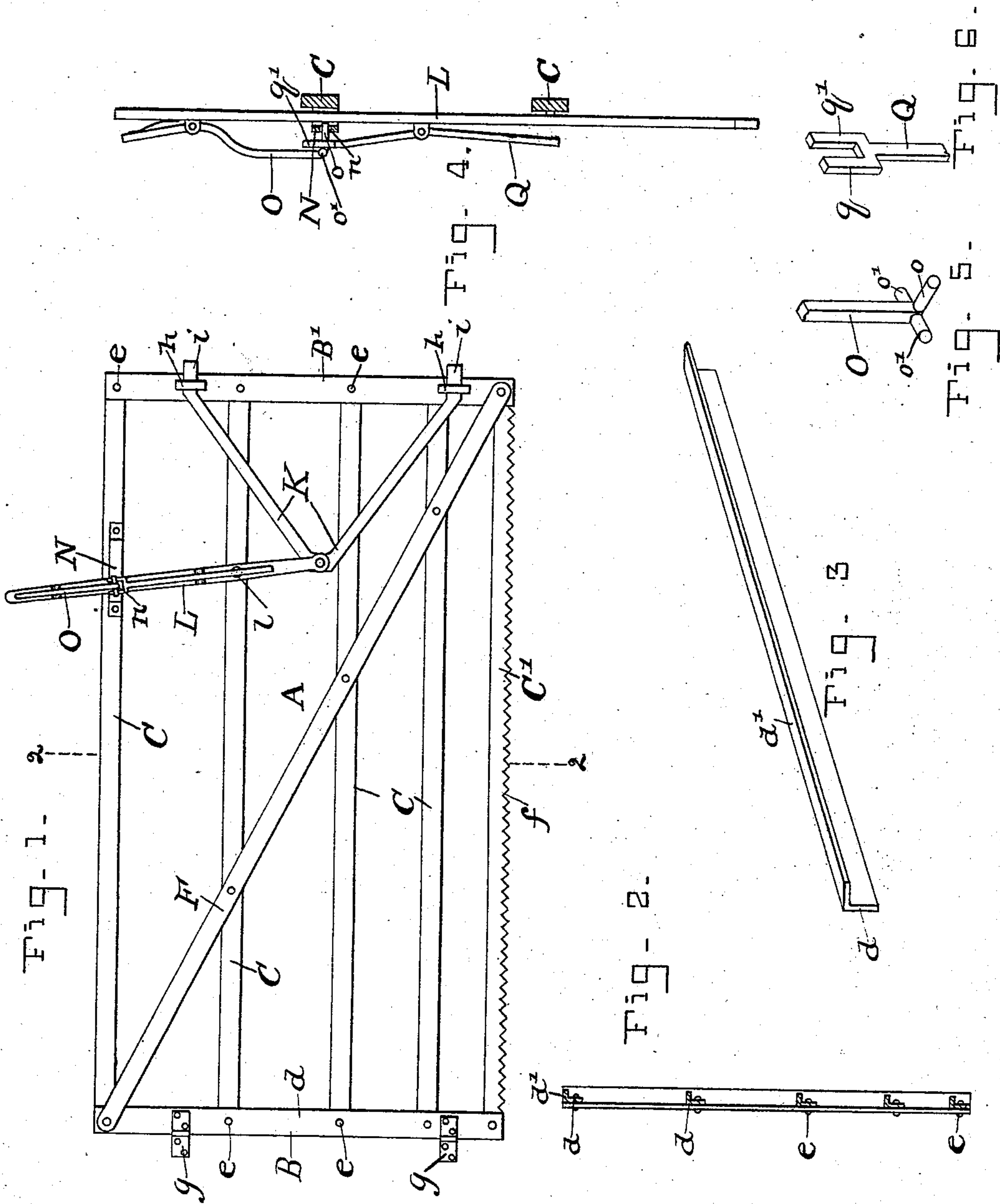


(No Model.)

J. M. CREWS.
GATE.

No. 540,047.

Patented May 28, 1895.



WITNESSES : -

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GATE.

SPECIFICATION forming part of Letters Patent No. 540,047, dated May 28, 1895.

Application filed September 8, 1894. Serial No. 522,424. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. CREWS, a citizen of the United States, residing at Arlington, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Gates, of which the following is a specification.

This invention relates to certain new and useful improvements in gates, and the object of the invention is to provide a gate of improved construction and with an improved latch therefor, as will be hereinafter described and claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view of the improved gate in side elevation. Fig. 2 is a sectional view of the gate on line 2 2 of Fig. 1. Fig. 3 is a view of one of the longitudinal angle-bars of the gate. Fig. 4 is a cross-section showing two of the longitudinal bars of the gate without angles and illustrating the locking mechanism of the actuating-lever, and Figs. 5 and 6 are detail views showing the coacting parts of the pivoted catches O Q.

The gate, A, is constructed as usual of two end posts, B, B', and a number of longitudinal bars, C, connecting said posts. The end posts and the longitudinal bars are constructed, as shown in Fig. 3, of angle bars each having two flanges, *d*, *d'*, disposed one at right angles to the other. In the assembled gate as shown in Figs. 1 and 2, the flange, *d*, of each longitudinal bar is bolted or riveted at, *e*, to the flanges, *d*, of the end posts and the ends of the plates, *d*, and, *d'*, of said longitudinal bars abut against the plates, *d'*, of the end posts. A diagonal bar, F, connects the two end posts, B, B', and the longitudinal bars, C. This construction of gate with angle-end posts and longitudinal bars makes a gate of light weight and gives to the gate great strength and durability.

The lowermost bar, C', of the gate is an angle bar and has its vertical pendent flange, *d'*, provided on its edge with downward-projecting teeth or serrations, *f*, which are integral with the flange. By using angle-iron, the horizontal flange, *d*, gives sufficient strength and stiffness to the vertical pendent flange, *d'*, to enable the latter to be made thin so that the teeth thereof will be sharp and effective.

These teeth, *f*, deter hogs and other animals from rooting or burrowing underneath and prevent them from lifting the gate and squeezing through the opening below the bottom of it.

One end post, B, of the gate has hinges, *g*, by which the gate is hung to a side post (not shown) and the other end post, B', of the gate has two guide loops, *h*, one near the top and the other near the bottom of the gate for a purpose to be described.

The latch mechanism comprises two latch bars, *i*, to take into suitable sockets in a side post. (Not shown). These two latch bars work in the two guide loops, *h*, of the end post, B', and each bar, *i*, projects from one of the ends of a V-shaped arm, K, so that the two latch bars are thus united. An actuating lever, L, has its end pivoted to the center or base part, of this V-arm, and is also pivoted at *l*, to one of the longitudinal bars, C, and the upper end of said lever extends up and its end has position above the gate. It will be seen by this construction and arrangement that by moving the actuating lever, L, laterally one way the latch bars, *i*, will both be simultaneously projected or thrown out into locking position, and by moving the actuating lever the opposite way both latch bars will be retracted or withdrawn out of said locking position. By providing two latch bars, one at the top and the other at the bottom of the gate, the gate will be held firmly and securely against sagging and the lower part of the gate cannot be pushed out of position by a hog or other animal seeking passage through the closed gate. The lever, L, is provided with an automatic locking device to hold it securely against accidental movement when the latch bars, *i*, are projected.

The top longitudinal bar, C, carries a locking bar, N, having a hole, *n*, through it. The end of the actuating lever, L, has position between said longitudinal bar and the locking bar; and the actuating lever carries a pivoted catch, O, having an inward-pointed locking prong, *o*, and two lateral shoulders or prongs, *o'*, one at each side of the locking prong. A spring, *p*, normally tends to press this locking prong into locking engagement with the hole, *n*.

An auxiliary lever, Q, to operate the piv-

oted catch is pivoted to the gate below the actuating lever and is the means whereby a person unable to reach the upper pivoted catch may disengage the latch-bars, in order
 5 to open the gate. This auxiliary lever has a bifurcated end, q, q' , which takes about the locking prong, o , of the pivoted catch and each end, q, q' , engages one of the shoulders or prongs, o' . By grasping the lower end of
 10 the auxiliary lever, the prong, o , will be disengaged from the hole, n . The actuating lever may then be shifted to move the V-shaped arm and latch bars, i , as in the other case.

In Fig. 1 the two latch-bars, i , are shown
 15 projected in latching position and the actuating lever, L , is held locked by the pivoted catch, O . When it is desired to withdraw the two latch bars, i , from their locking position the upper end of the lever, L , is grasped to
 20 disengage the prong, o , from the hole, n , and then the actuating lever may be shifted laterally to move the V-shaped arm and its two latch bars, i , the lateral prong, o , during this operation sliding on the exterior of the
 25 bar, N . Now when the actuating lever, L , is moved in the opposite direction to project the latch bars, i , this lateral prong, o , will automatically engage with the hole, n ; and hold said actuating lever locked and keep the two
 30 latch bars projected.

Having thus described my invention, what I claim is—

1. The combination of the gate, A ; a V-shaped arm, K , having two latch bars, i , working in guide loops on one end-post of the gate; 35 a locking lever, L , pivoted to the gate and also to the base or center of the said V-shaped arm so as to move both latch bars simultaneously; a locking bar, N , on the gate; and a pivoted catch, O , which automatically engages 40 said locking bar, substantially as and for the purpose described.

2. The combination of the gate, A ; a V-shaped arm having two latch bars, i , working in guide loops on one end post of the gate; an 45 actuating lever, L , pivoted to the gate and also to the V-shaped arm so as to move both latch bars simultaneously; a locking bar, N , on the gate; a pivoted catch, O , having a locking prong, o ; which engages said bar and a 50 lateral shoulder or prong, o' , at each side of the locking prong; and an auxiliary lever having a bifurcated end q, q' , engaging with said lateral shoulders or prongs.

In testimony whereof I affix my signature 55 in the presence of two witnesses.

JAMES M. CREWS.

Witnesses:

LOUIS O. KIEFER,

REUBEN B. FUESSLE.