

(No Model.)

V. MITCHELL.
GATE.

No. 594,030.

Patented Nov. 23, 1897.

FIG. 1.

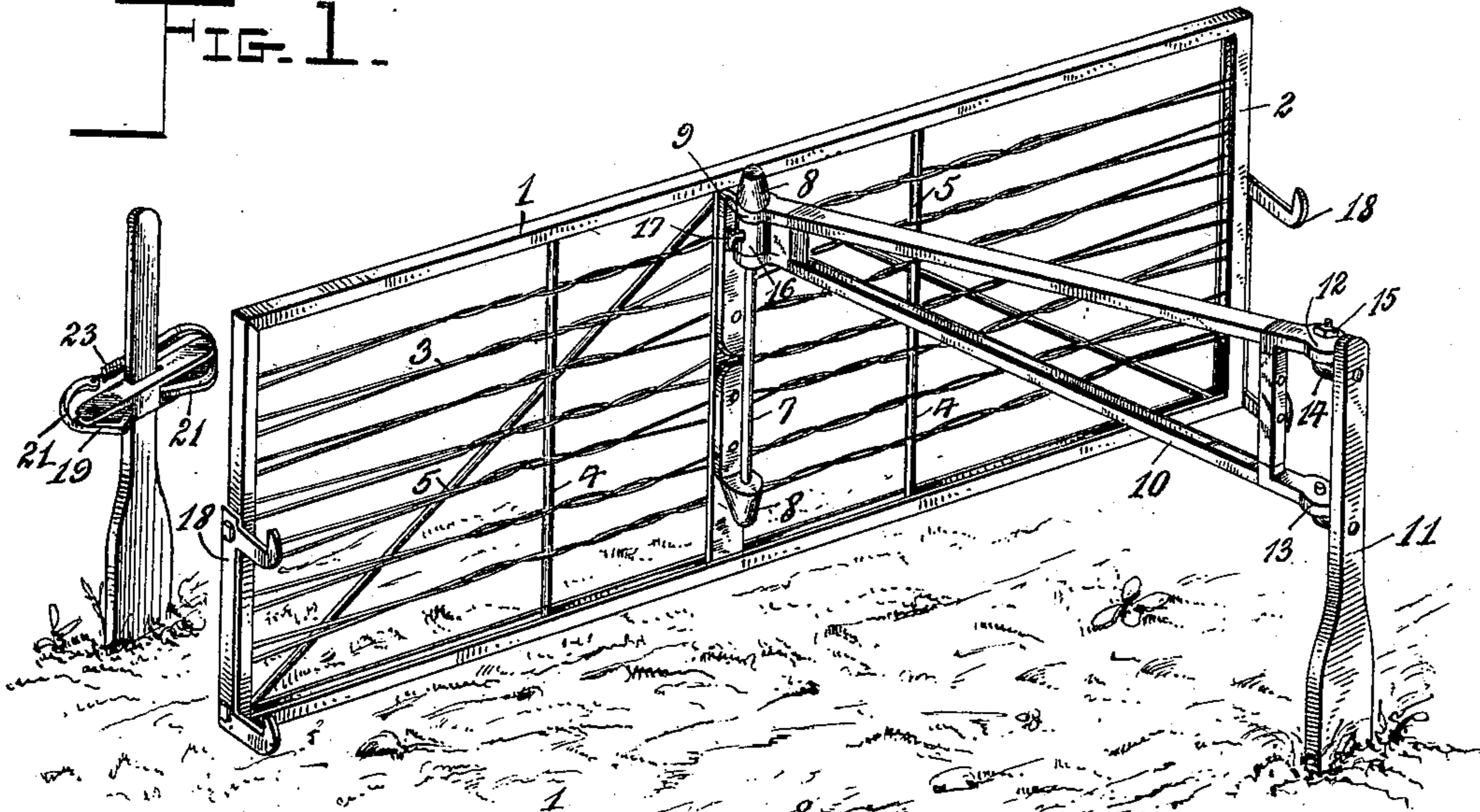


FIG. 2.

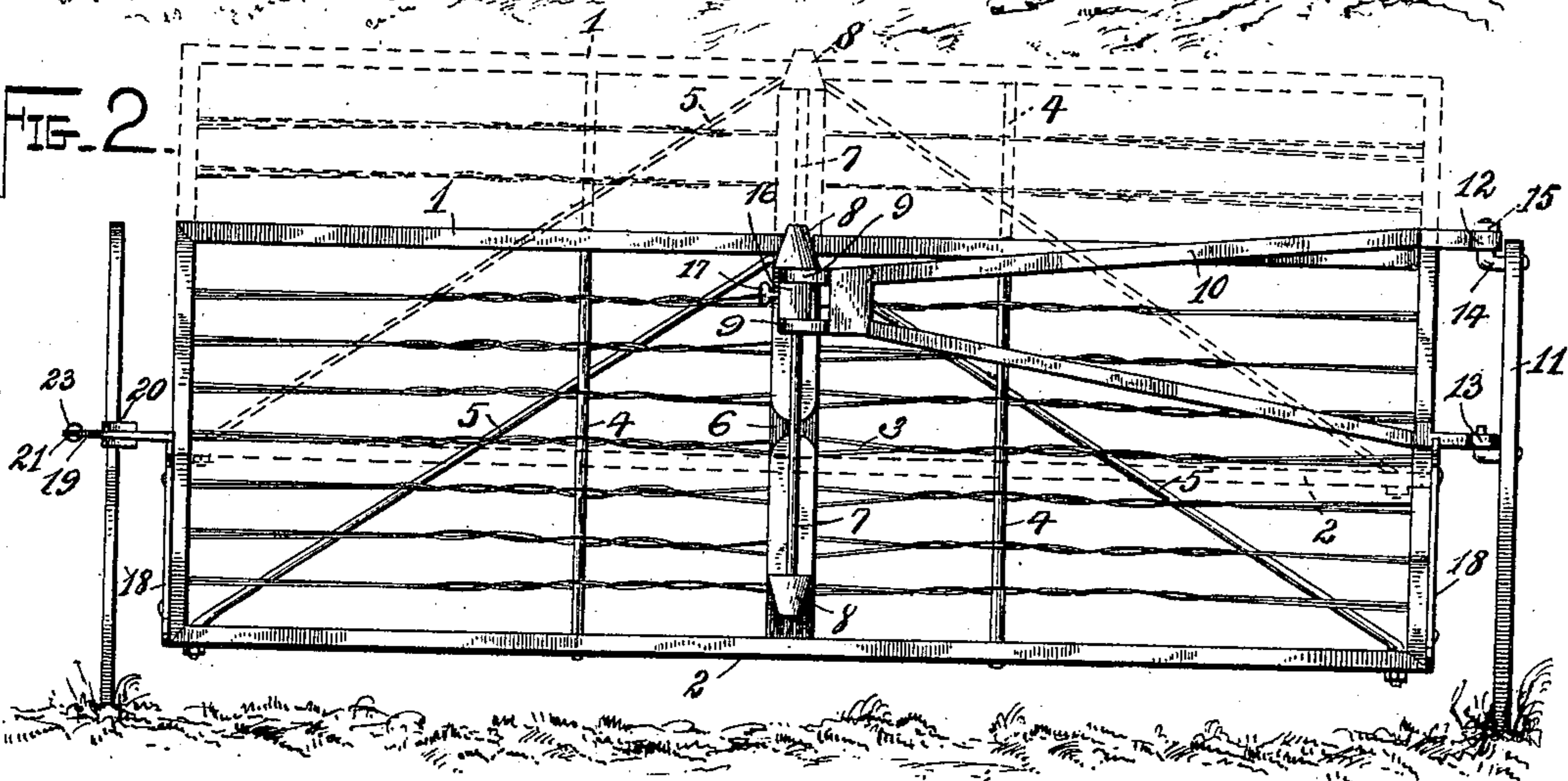


FIG. 3.

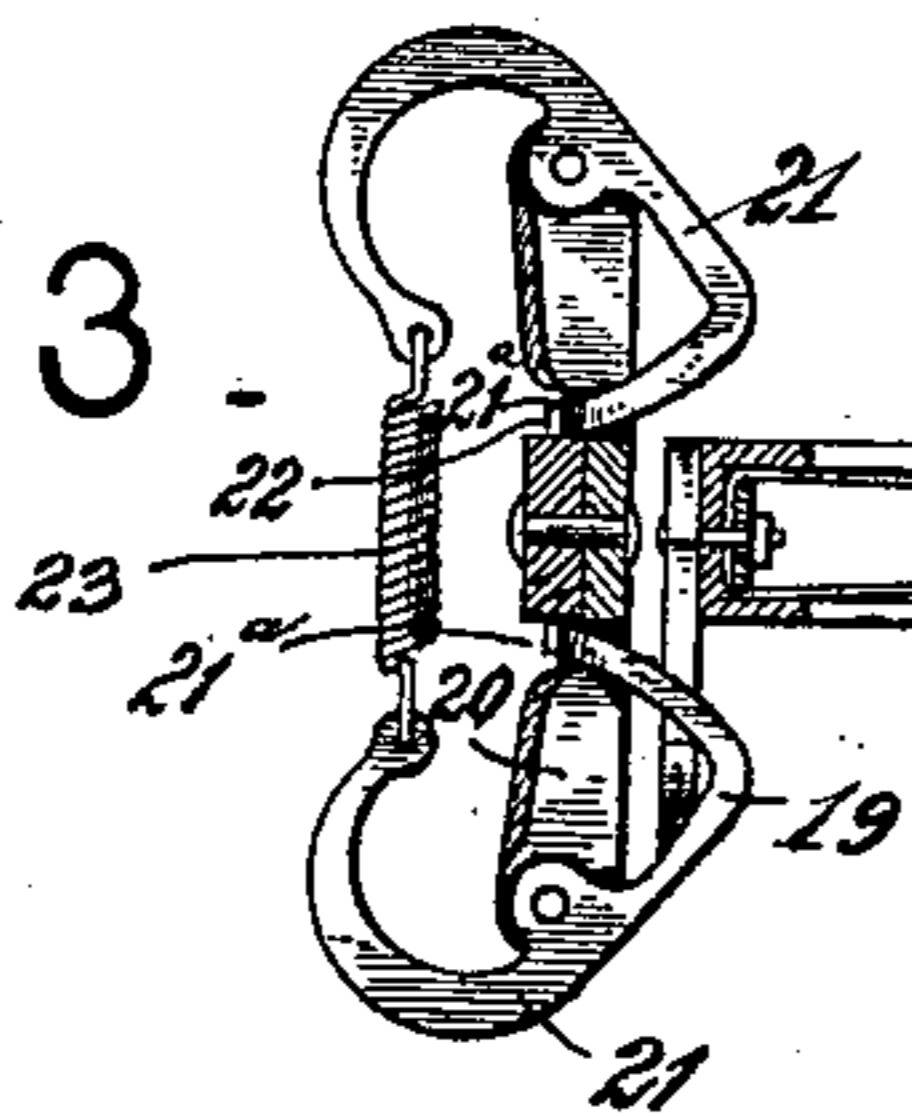
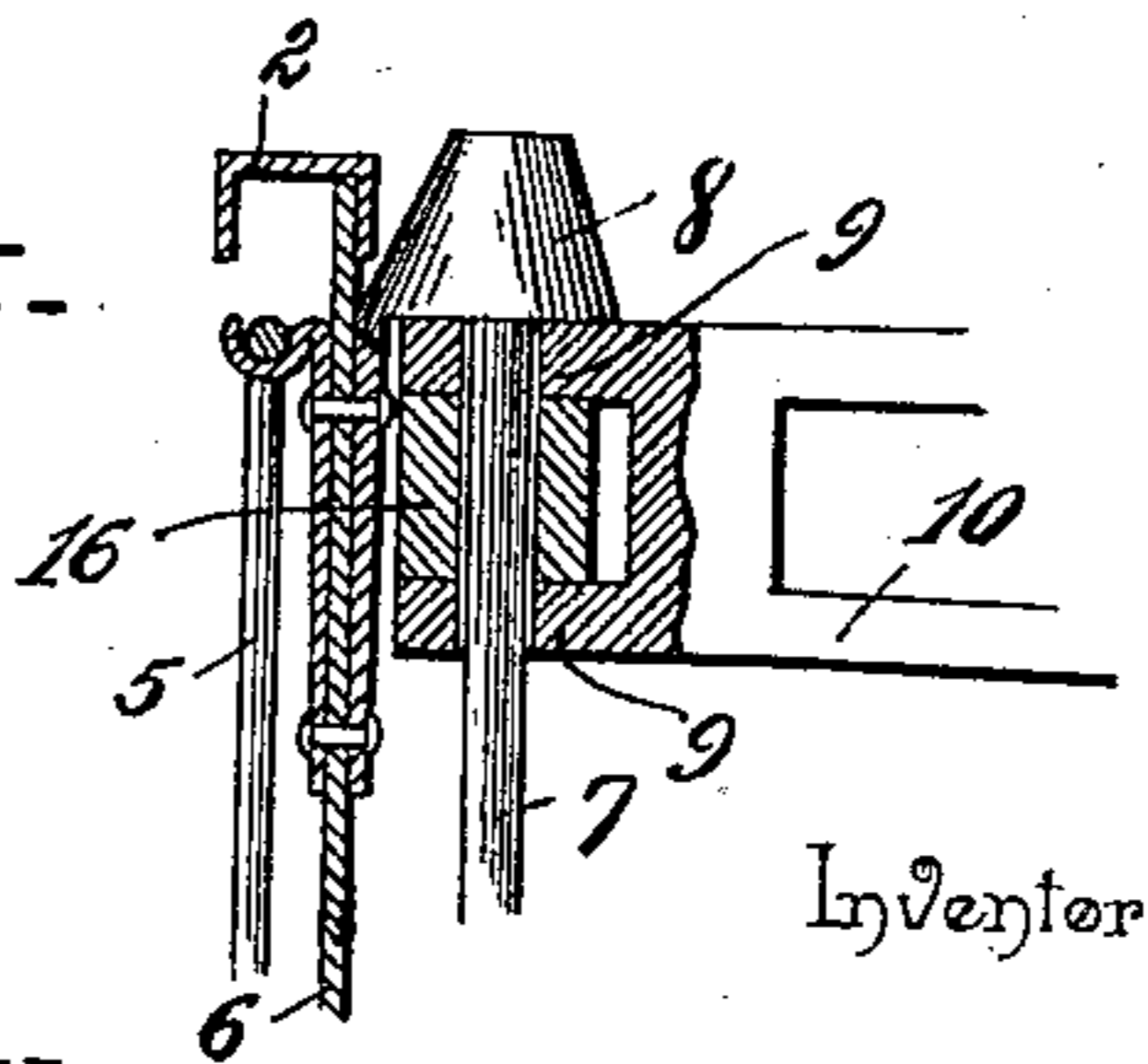


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

VALENTINE MITCHELL, OF HORTON, MICHIGAN.

GATE.

SPECIFICATION forming part of Letters Patent No. 594,030, dated November 23, 1897.

Application filed June 29, 1897. Serial No. 642,831. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE MITCHELL, a citizen of the United States, residing at Horton, in the county of Jackson and State of Michigan, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

10 The object of the present invention is to improve the construction of swinging gates and to provide a simple, strong, and durable one adapted to open in either direction and capable of vertical adjustment to enable it to clear snow and other obstructions, and also to afford a passage-way for small animals, such as sheep and hogs.

20 The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention, the gate being partially open. Fig. 2 is a side elevation of the same, the gate being closed. Fig. 3 is a horizontal sectional view illustrating the construction of the latch. Fig. 4 is a detail vertical sectional view illustrating the manner of adjustably mounting the gate.

30 Like numerals of reference designate corresponding parts in the several figures of the drawings.

35 1 designates a gate consisting of a substantially rectangular frame 2, of channeled iron, horizontal wires 3, connecting the vertical end bars of the frame, and vertical and diagonal braces 4 and 5; but the gate may be constructed of any other suitable material and may be of any other desired form. The gate, which has a central vertical bar 6, is provided with a vertical pintle 7, which is mounted in oppositely-disposed upper and lower sockets 8, secured to the bar 6 and loosely receiving the ends of the pintle.

45 The vertical pintle passes through eyes 9 of a substantially triangular hanger or frame 10, which is hinged to a post 11, being provided at its hinged end with upper and lower eyes 12 and 13, receiving pintles of the post 11. The upper pintle 14 is preferably thread-

ed and provided with a nut 15 to prevent the swinging gate-supporting frame or hanger from becoming disengaged from the pintles of the post 11. The swinging gate-supporting frame or hanger, which is preferably constructed of channeled iron secured to end castings, is adjustably connected with the gate by means of a sleeve 16 and a clamping-screw 17. The sleeve, which is arranged between the eyes 9 of the swinging frame or hanger, receives the vertical pintle 7, and is provided with a threaded perforation for the reception of the clamping-screw, which binds against the pintle-rod. This construction permits the gate to be readily raised or lowered and quickly arranged at the desired elevation, so that it will clear snow and other obstructions or afford a passage-way for small animals, such as sheep and hogs.

The gate is adapted to open in either direction and is provided at each end with a pair of horizontally-extending catches 18, adapted, as illustrated in Fig. 2 of the accompanying drawings, to engage the inner portion of the swinging frame or hanger for securing the rear end of the gate rigid with the same when the front or outer end of the gate is in engagement with a latch 19. Although two catches are shown at each end of the gate, it will be apparent that any number may be provided, and these catches are so arranged that either end of the gate is adapted to be engaged with the hanger or the latch.

85 The latch, which is adapted to engage the gate automatically, comprises a horizontal support 20 and a pair of spring-actuated jaws 21, pivoted between their ends to the horizontal support at the outer ends thereof. Each jaw is substantially L-shaped and has its angle portion projecting from the support. The shorter arm of each jaw extends through an opening 21^a of the support and is provided with a stop 22, which engages the rear side of the support, and the longer arms of the jaws are curved inward, as shown, and are connected by a spiral spring 23, whereby the angle portions of the jaws are held in position for engaging the gate. The support 20, which is bifurcated at its ends to receive the jaws, may be constructed in any other suitable manner and the jaws may be mounted on any other desired form of support.

The invention has the following advantages:

The gate is simple, strong, and durable and is adapted to open in either direction without necessitating a person walking more than a few steps, and it is capable of ready vertical adjustment to enable it to swing clear of snow and other obstructions, and also to afford a passage for small animals, such as sheep and hogs.

The gate is also centrally hung, so that it is impossible for it to sag at one end, and it automatically engages the latch in closing from either side.

What I claim is—

1. The combination with a hinge-post, a swinging frame or hanger mounted thereon, and a gate provided with a pintle mounted on the outer end of the swinging frame or hanger, of a latch comprising a pair of horizontally-disposed jaws provided with angular engaging portions adapted to receive the gate between them, and a coiled spring connecting the rear portions of the jaws and holding the latter in position for engaging the gate, substantially as described.

2. The combination with a hinge-post, a horizontally-swinging frame or hanger mount-

ed thereon, a gate provided with a central vertical pintle mounted on the swinging frame or hanger, and the horizontally-disposed catches projecting from the same side of the gate and adapted to engage the swinging frame or hanger, of a latch comprising a pair of horizontally-pivoted jaws provided at their front portions with angular engaging parts, and a coiled spring connecting the rear ends of the jaws, substantially as described.

3. The combination with a gate, of a latch comprising a support, a pair of substantially L-shaped jaws pivoted between their ends and having their angles projecting from the support and adapted to receive the gate between them, each jaw being provided at the end of one arm with a stop and having its other arm extended at the rear end toward the opposite jaw, and a coiled spring connecting the rear ends of the jaws, substantially as described.

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

VALENTINE MITCHELL.

Witnesses:

E. H. BELDEN,
JOSIAH B. FROST.