

No. 658,469.

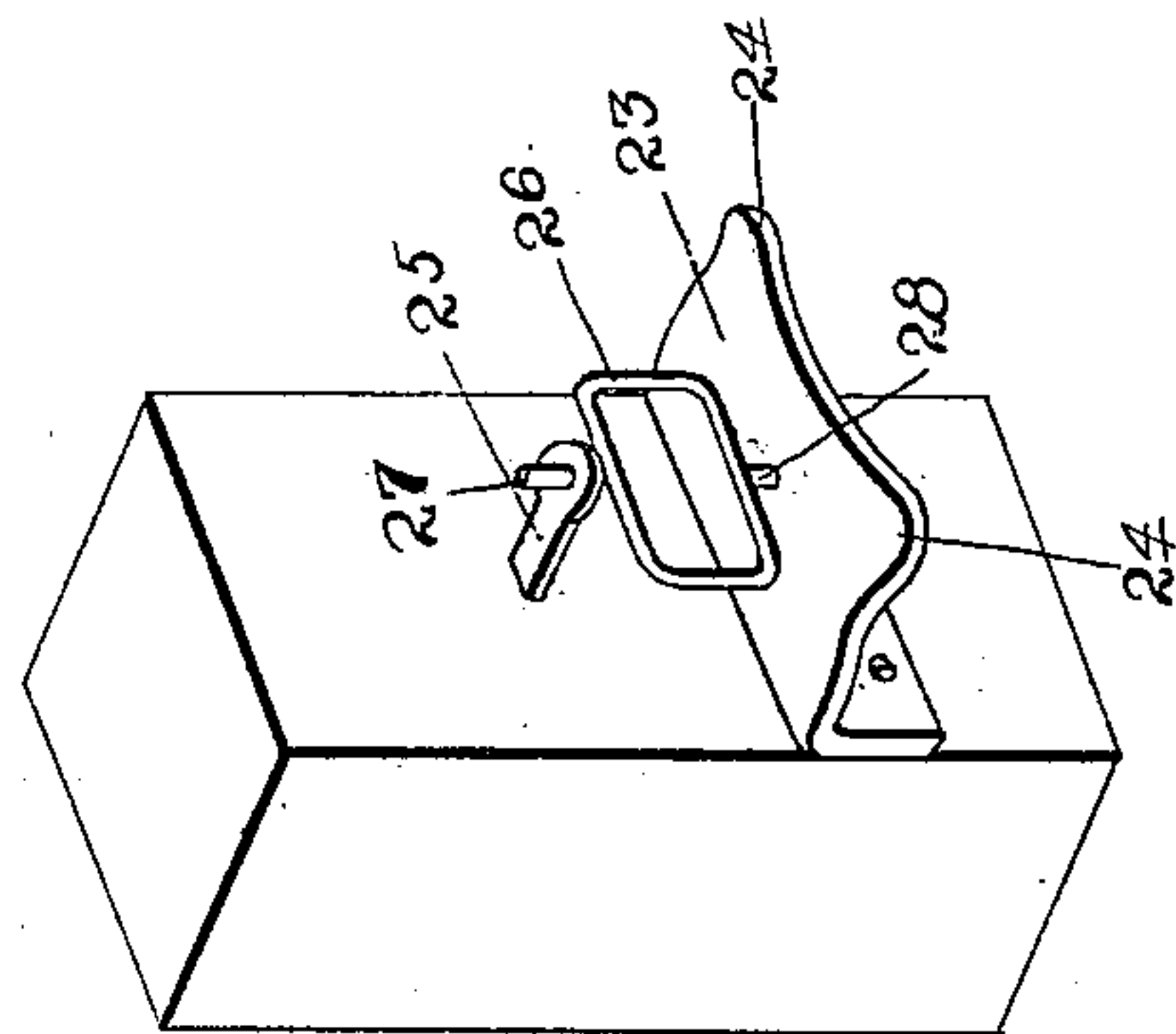
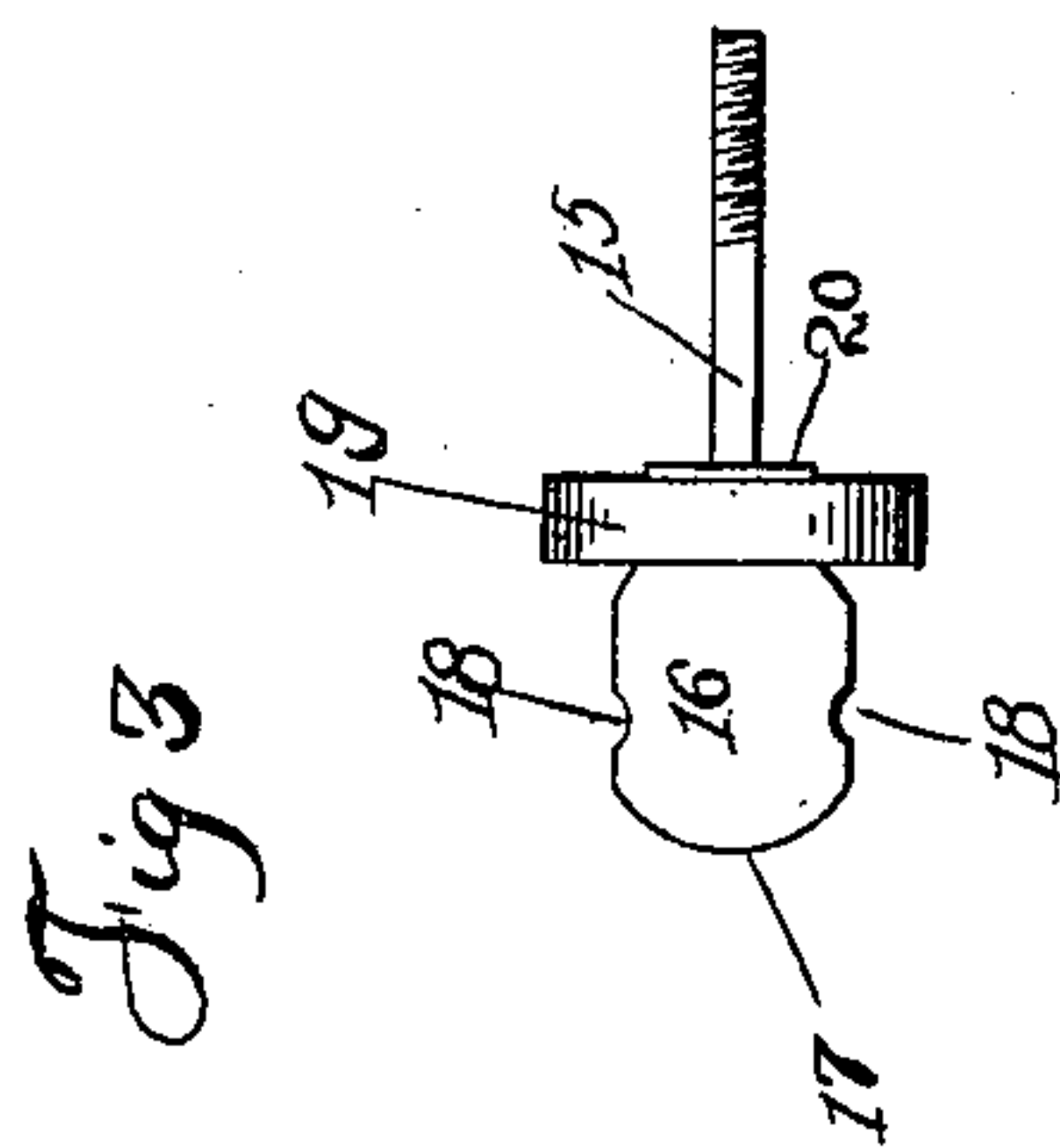
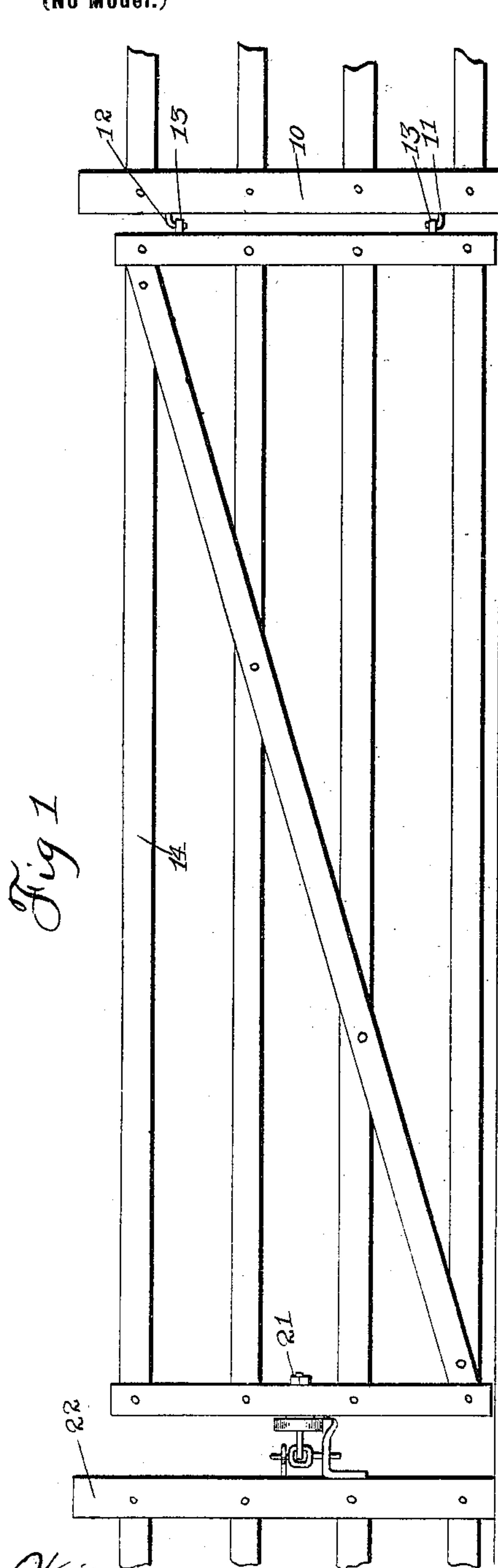
Patented Sept. 25, 1900.

W. J. SCHOONOVER.

GATE LATCH.

(Application filed May 1, 1899.)

(No Model.)



Witnesses:

*J. E. Roe*  
*G. F. Wilcox*

Inventor: William J. Schoonover,

By *J. Ralph Drwig* Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM J. SCHOONOVER, OF DES MOINES, IOWA.

## GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 658,469, dated September 25, 1900.

Application filed May 1, 1899. Serial No. 715,093. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. SCHOONOVER, a citizen of the United States, residing at Des Moines, county of Polk, State of Iowa, have invented certain new Improvements in Automatic Gate-Latches, of which the following is a specification.

One object of this invention is to provide a gate-latch of simple, strong, durable, and inexpensive construction that may be swung to either side and that will automatically lock when the gate is closed from either side.

A further object is to provide a latch of this class in which there are no sharp corners or projecting parts liable to be caught in the harness of passing animals.

A further object is to provide a gate-latch of this class in which the locking means will also serve to prevent the gate from being elevated by animals seeking to pass through or under it, and, further, to prevent the gate from sagging and for holding it when in its locked position in a perfect horizontal line.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the latch whereby the objects contemplated are attained, as hereinafter more fully set forth, and pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the gate and the adjacent portions of the fence provided with my improved latch. Fig. 2 shows in perspective a portion of the fence-post and the portion of the latch that is fixed thereto. Fig. 3 shows a top or plan view of that portion of the latch which is applied to the gate proper.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate a fence-post having thereon two hinge-pintels 11 and 12, the lower one being bent upwardly and the upper one downwardly to enter eyes 13, which are attached to the gate. The gate, which is of the ordinary construction and indicated by the numeral 14, is capable of swinging on the hinges thus formed. Attached near the central portion of the opposite end of the gate is a screw-threaded rod 15, designed to be passed through the gate-upright and having thereon an integral flattened head 16 with a rounded outer edge 17 and

notches 18 formed in its side edges. Mounted on the rod 15, adjacent to the head 16, is a flat-surfaced wheel 19 and a washer 20. This device is passed through the gate-upright and the head 16 made to stand in a horizontal position, with the washer 20 engaging the side of the upright, and a nut 21 is provided for holding the rod 15 in place.

The numeral 22 indicates a fence-post adjacent to the free end of the gate and having secured thereon a platform 23, with rounded corners 24, which are inclined downwardly a slight distance. Above this platform is a support 25, driven in the post 22, and pivotally mounted between the said platform and support is a rectangular metal loop 26, having the integral projections 27 and 28 at its top and bottom to enter openings in the parts 23 and 25. This loop 26 is so shaped and arranged that when the roller 19 is resting upon the top of the platform 23 the flat head will enter the loop 26 close to its top edge, so close, at least, as to prevent the gate from being raised. Furthermore, said loop is so proportioned as to nearly fit the head 16 both as to its horizontal and vertical proportions, hence preventing the possibilities of any considerable vertical movements of the head within the loop.

In practical use it is obvious that when the gate is swung toward the post 22 the roller 19 will first engage the downturned edge of the platform 23, and as the roller moves toward the central portion of the platform the gate will necessarily be elevated to its proper position, so that the head 16 will enter the loop 26 close to the top edge of said loop, and when the head 16 strikes the loop 26 it will obviously enter the loop and cause the loop to stand in a plane at right angles to the rod 15, and thereby firmly lock the gate against lateral movement until the loop 26 is swung by manual force out of its position to thereby release the gate. By reason of the peculiar conformation of the head 16 the said loop 26 will be moved to a proper position for receiving the head 16 no matter at what angle it was left standing, for obviously if the loop is standing at an angle approaching alignment with the fence the head 16 will strike the loop, which will swing laterally and surround the head, or if said loop is standing at or near a right



angle to the fence the near edge of the loop will engage either the inclined edge 17 or enter the notches 18, which will start it to move laterally.

- 5 I am aware that heretofore a flat-headed rod has been attached to a gate to enter a pivoted metal loop attached to a fence-post for the purpose of locking automatically. I am also aware that heretofore a roller has been  
 10 attached to a gate to engage a track or platform upon the fence-post to prevent the gate from sagging; but I am not aware that there has ever been combined with a flat-headed rod on the gate a roller for which the  
 15 said rod serves as a support to coact with a pivoted loop on the gate-post and in which the platform for receiving the roller serves the double function of supporting the pivoted loop and also supporting the roller.  
 20 Having thus described my invention, what I claim as new therein, and desire to secure

by Letters Patent of the United States therefor, is—

In a gate-latch the combination with a round shank 15 adapted to be attached to a 25 gate having an integral flattened head 16 provided with rounded outer edges, a roller 16 encircling said shank, a platform 23, adapted to be attached to a gate-post, provided with rounded corners 24 inclined downwardly, 30 a support 25 above the platform, of a rectangular loop 26 pivotally mounted in said platform and support, said loop being of a size slightly larger than the head 16, whereby when said head 16, is engaged by the loop 35 only slight vertical movement of said head is permitted, as and for the purposes set forth.

WILLIAM J. SCHOONOVER.

Witnesses:

J. RALPH ORWIG,  
 C. O. SAYRE.