F. WRIGHT.

GATE.

APPLICATION FILED SEPT. 25, 1908.

917,233. Patented Apr. 6, 1909.

Fig. 1.

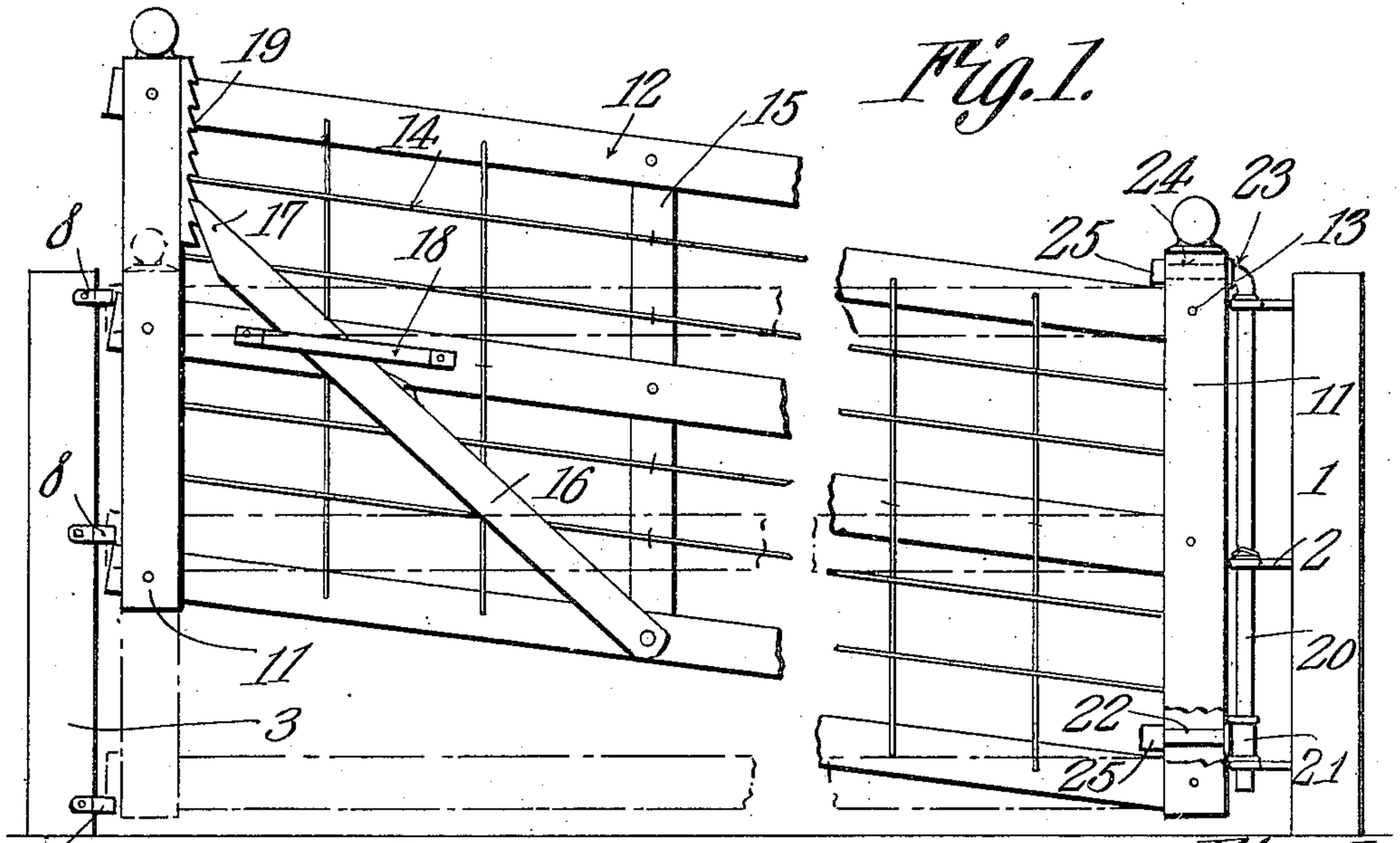


Fig. 3.

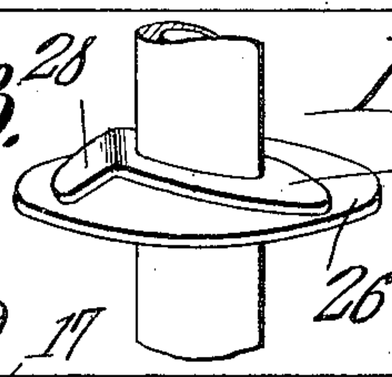


Fig. 4.

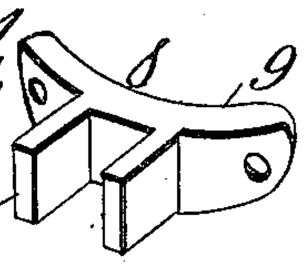
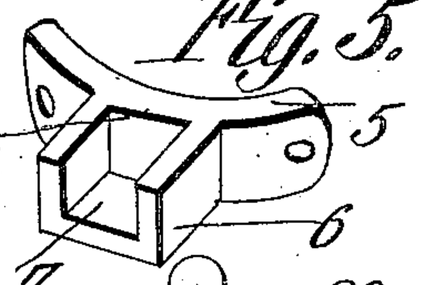


Fig. 5.



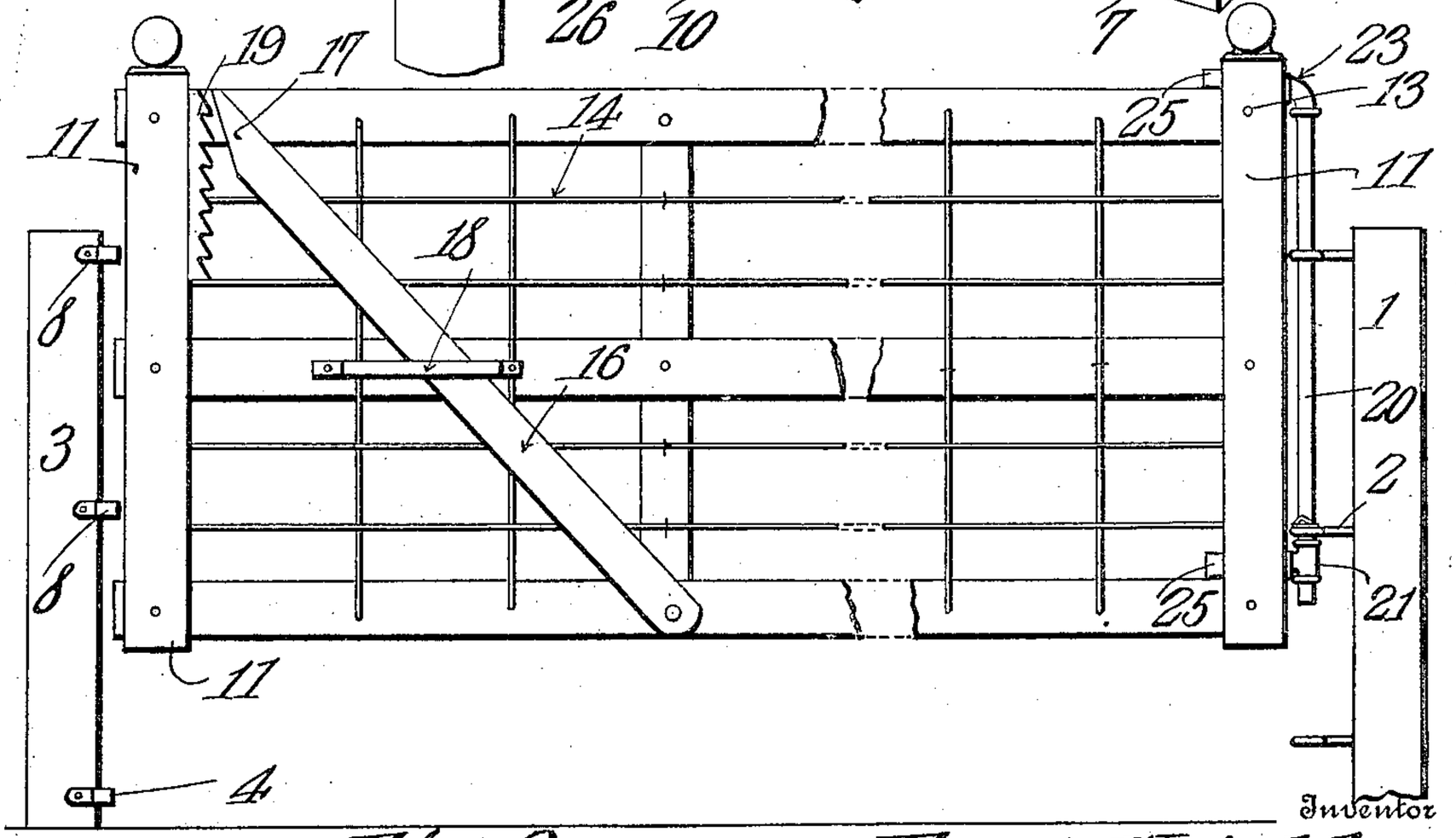


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

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GATE.

No. 917,233. Specification of Letters Patent. Patented April 6, 1909.

Application filed September 25, 1908. Serial No. 454,785.

To all whom it may concern:

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

This invention relates to gates of that type designed to be adjusted to different angles and elevations so as to readily swing over accumulations of snow, rubbish, etc., and which can be adjusted so as to permit small animals to pass beneath it, but prevent the passage of large animals.

The object of the invention is to provide simple and efficient means upon the gate whereby said gate can be quickly secured at any desired angle to the horizontal so as to easily swing over any accumulated material adjacent the gate.

A further object is to provide a hinge for the gate which permits said gate to be bodily elevated, said hinge carrying means for automatically locking the gate in any position to which it may be elevated, so as to prevent it from moving downward to its normal position.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of a gate constructed in accordance with the present invention, portions of said gate being broken away, and the position of the gate when inclined being indicated by full lines, and the normal position of the gate being indicated by dotted lines. Fig. 2 is a view similar so Fig. 1, but showing the gate bodily elevated. Fig. 3 is a detailed view of the lock used in connection with the gate hinge. Fig. 4 is a detailed view of one of the keepers of the gate. Fig. 5 is a perspective view of the gate-supporting socket.

Referring to the figures by characters of reference 1 designates the gate-post, the same being provided at desired intervals with eye-bolts 2 of sufficient strength to properly support the gate hereinafter referred to. The latch-post 3 of the gate has a socket member 4 secured to the lower portion thereof, said member consisting of a base-plate 5 and an angular extension 6 thereon provided with a recess 7 constituting a seat as hereinafter set forth. Secured to the latch-post at suitable points above the socket member 4 are yokes or keepers 8 each consisting of a base-plate 9 and spaced ears 10.

The gate constituting the present invention consists of parallel end members 11 each of which is formed of spaced parallel strips. Pivotally mounted within these members are the end portions of parallel rails 12, said end portions projecting between the strips constituting the members 11 and being mounted on bolts or other suitable pivot devices 13. A fabric consisting of straight wires, such as indicated at 14, is secured to the end members 11 and to the rails 12, those of the wires which extend vertically being provided with terminal portions which extend at right angles therefrom and through the upper and lower rails, said terminal portions being clenched. Pivotal connections between the upper and lower rails and the fabric are thus produced.

One or more intermediate strips 15 are pivotally connected at their ends to the upper and lower rails 12, and pivotally connected to the lower portion of one of these strips 15 and to the lower rail 12 is a locking bar 16, the free end of which is preferably beveled as indicated at 17, said bar being mounted to swing relative to the gate and being limited in its movement by a guide strap 18 secured to one of the rails of the gate. The beveled end 17 of bar 16 normally rests by gravity against a rack 19 which is fastened to the end member 11 nearest the latch-post 3. It will be apparent therefore that by moving this end member 11 upwardly the latch end of the gate will be elevated and the rack 19 will be moved relative to the beveled end 17, that end remaining in engagement with the rack so that as soon as the upward movement of the latch end of the gate has been completed said gate will be maintained in such position by the bar 16.

By referring especially to the dotted lines in Fig. 1 it will be noted that the gate, when in its lowered or normal position, has one end of the lower rail 12 seated within the socket 7, while the adjoining ends of the other rails are positioned between the ears 10 and the keepers 8. This is permissible in

view of the fact that the rails 12 project beyond the member 11 located at the latch end of the gate.

The hinge member connected to the hinge end of the gate is formed preferably of a length of pipe, such as indicated at 20, said pipe being provided near its lower end with a T 21 from which a tubular arm 22 extends, said arm being disposed perpendicularly to the pipe section 20. An elbow 23 is located at the upper end of the pipe section 20 and has a tubular arm 24 extending therefrom, said arm being disposed perpendicularly to the pipe section 20. The arms 22 and 24 extend through the member 11 located at the hinge end of the gate and said member is clamped against the T 21 and the elbow 23 by means of sleeves or nuts 25 which are screwed on to the arms 22 and 24. The pipe section 20 is slidably mounted within the eye-bolts 2, the upper two bolts being located upon said pipe section between the elbow 23 and the T 21, while the lower eye-bolt is designed to be detachably engaged by the lower extremity of the pipe section 20. It will be apparent therefore that the pipe section 20 can be elevated relative to the eye-bolts 2 until the T 21 is brought into contact with the intermediate eye-bolt as indicated in Fig. 2.

In order that the gate may be automatically held in any position to which it may be elevated, a locking device, such as shown in detail in Fig. 3, is provided. This locking device consists of a base washer 26 designed to rest by gravity upon the intermediate eye-bolt 2, said base-washer supporting a locking member consisting of a washer 27 bent along one of its chords to form a metal tongue 28 the extremity of which bears on the washer 26. The pipe section 20 extends through the two washers 26 and 27 and can be readily moved upwardly therethrough. When however the pipe section is moved downwardly the main portion of the locking washer 27 will assume an inclined position as indicated in Fig. 3 and diametrically opposed portions of the washer will bite into the pipe section 20 and thus prevent it from moving downward. In order to effect the downward movement of the gate after it has once been elevated at its hinge end it is first necessary to insert some tool or other suitable object between the base washer 26 and the inclined body portion of washer 27 so as to elevate said body portion to a substantially horizontal position. The section 20 can then be lowered until a desired point has been reached.

It will be seen that a gate as here described is cheap to manufacture and can be readily placed in position. Inasmuch as the latch end of the gate can be adjusted vertically independently of the hinge end thereof and vertical adjustment of said hinge end is also permitted it will be seen that a gate as here described will be found especially advantageous where it is desired to retain large animals within an inclosure and at the same time permit smaller ones to pass under the gate.

What is claimed is:—

1. A device of the class described comprising a post having outstanding upper and lower hinge members, a gate, a hinge member connecting the upper and lower portions of one end of the gate and slidably mounted within the outstanding hinge members, and tiltable means supported by one of the outstanding hinge members and loosely surrounding the slidable member for automatically engaging said slidable member when subjected to the weight of the gate to limit the downward movement of the gate.

2. The combination with superposed fixed hinge members; of a gate, a hinge member connecting the upper and lower portions of one end of the gate, said member being slidably mounted within the fixed members, the lower terminal of said slidable member being removably mounted within the lower fixed member, and tiltable means separate from but bearing upon one of the fixed members and loosely surrounding the slidable member for automatically engaging said slidable member to limit its downward movement under the weight of the gate.

3. The combination with superposed fixed hinge members; of a gate, an elongated hinge member connected thereto and slidably mounted within the fixed members, and locking means comprising a base supported by one of the fixed members and loosely surrounding the slidable member, and a locking washer loosely surrounding the slidable member and bent along one of its chords to form a tongue for holding the apertured portion of the washer inclined relative to the base, said locking washer being movable by gravity into frictional engagement with the slidable member to support the same against downward movement.

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

FRED WRIGHT.

Witnesses:
DICK VANDERSTELT,
NORRIS MARCH.