

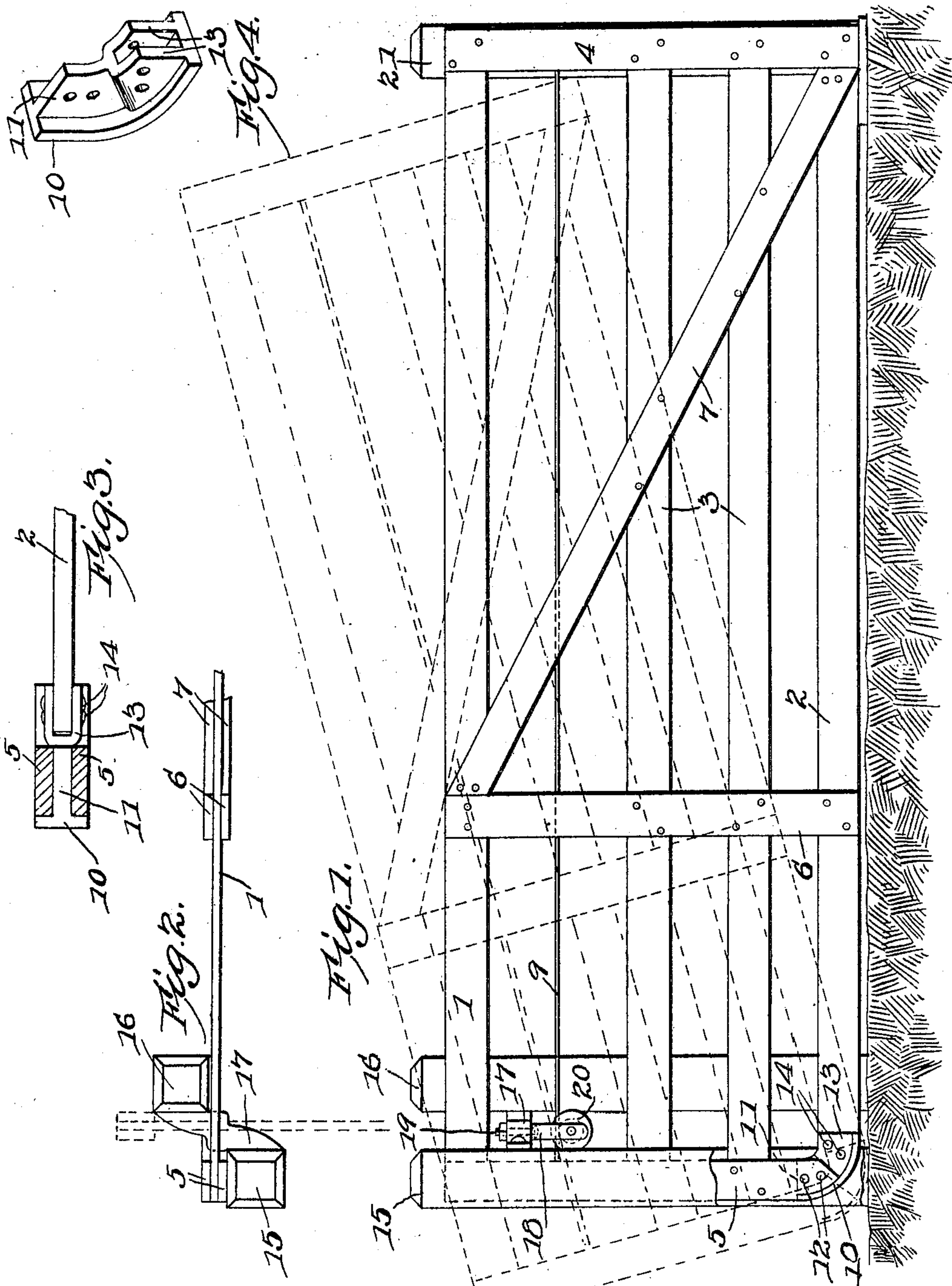
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PATENTED JUNE 5, 1906.

C. C. DU BOIS.

GATE.

APPLICATION FILED DEC. 29, 1905.



WITNESSES:

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CASPAR C. DU BOIS, OF NOBLESVILLE, INDIANA.

GATE.

No. 822,513.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed December 29, 1905. Serial No. 293,861.

To all whom it may concern:

Be it known that I, CASPAR C. DU BOIS, a citizen of the United States, residing at Noblesville, in the county of Hamilton and State of Indiana, have invented a new and useful Gate, of which the following is a specification.

This invention relates to gates, and is primarily designed to permit the vertical tilting thereof without swinging the gate open, so as to enable the passage of small stock beneath the gate. In this connection it is proposed to provide for supporting the gate upon the ground when tilted, so as to remove strain from the swinging support of the gate and to have the ground-engaging portion of the gate shod, so as to take the wear incident to the frictional engagement between the bottom of the gate and the ground when the former is being tilted.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a gate embodying the features of the present invention, the lower portion of one of the gate-posts being broken away to disclose the shoe upon the lower inner corner of the gate and a tilted position of the gate being shown by dotted lines. Fig. 2 is a fragmentary top plan view of the gate, its open position being shown by dotted lines. Fig. 3 is an enlarged fragmentary sectional view taken through the inner end bar of the gate to show the arrangement of the shoe. Fig. 4 is a detail perspective view of the shoe.

Similar numerals of reference designate corresponding parts in all of the figures of the drawings.

The present invention is primarily designed as a farm-gate and includes a rectangular frame made up of upper and lower longitudinal rails 1 and 2, intermediate longitudinal rails 3, an outer end bar 4, and an inner end bar 5. Any suitable arrangement

of braces may be employed—such, for instance, as a cross-brace 6, disposed about one-third of the length of the gate from the inner end bar, and a diagonal brace-bar extending from the upper end of the cross-bar 6 to the lower outer corner of the gate. By preference each end bar and the braces are made up of spaced duplicate elements embracing the longitudinal rails, as clearly shown in Figs. 2 and 3 of the drawings. In lieu of the next to the uppermost longitudinal rail of the gate I employ a metal rod or bar 9, which is suitably secured to the end and brace bars and upon which the gate is adapted to slide, as will be hereinafter explained.

At the lower inner corner of the gate the end bar 5 and the bottom rail 2 of the gate are connected by a metallic shoe 10, which is in the nature of an arcuate plate provided upon its concaved face and upper end with an intermediate longitudinal flange 11, fitting between the bars 5 and to which it is connected by suitable fastenings 12, piercing the bars and the flange. The flange 11 extends about one-half of the length of the shoe and is then forked, as at 13, to form a longitudinal socket extending throughout the remaining portion of the shoe with its outer end and top open for the reception of the adjacent end of the lower rail 2, the latter being held in place by means of suitable fastenings 14, piercing the socket and the rail.

The inner end portion of the gate is received between diagonally-spaced gate-posts 15 and 16, between the adjacent faces of which is a cross-bar or bracket 17, located below and adjacent the upper ends of the posts. From the middle of this cross-bar or bracket there depends a forked or yoke-shaped hanger 18, having a stem 19 rotatably piercing the cross-bar or bracket and constituting a swiveled support for the hanger. This hanger straddles the rod 9 and carries a grooved roller 20, engaging the under side of the rod 9 and constituting a support therefor upon which the gate may be slid back and forth. The slidable movement of the gate is limited in one direction by the inner end bar 5 engaging the bracket or cross-bar 17, and the slidable movement in the opposite direction is limited by the brace-bar 6 engaging the bracket 17.

By reason of the diagonal disposition of the gate-posts 15 and 16 and the swiveled mounting of the hanger 18, carrying the roller 20, the gate may be swung away from the post 16 upon the hanger 18 as a hinge, as indicated by dotted lines in Fig. 2 of the drawings. It will of course be understood that the gate can swing from its closed position in one direction only, and it closes against a suitable latch-post 21, to which it may be latched in any approved manner.

In addition to the swinging and slidable movements the gate may be tilted upwardly, as indicated by the dotted position in Fig. 1 of the drawings, upon the shoe 10 as a rocking support or fulcrum in order that the outer or free end of the gate may be elevated sufficiently to enable small stock to pass beneath the gate without swinging the latter open. There is of course sufficient lateral play of the gate to allow the swinging of the free end of the latter into position for engagement with the inner face of the latch-post 21, so as to prop the gate in its tilted position, thereby avoiding the necessity of manually supporting the gate when small stock are being driven beneath the same.

The shoe 10 not only serves to connect the inner end bar and the lower rail of the gate, but also forms a rounded bearing for engagement with the ground to facilitate the tilting of the gate. Moreover, the shoe takes the wear incident to the frictional engagement between the gate and the ground when the former is being tilted.

In connection with the tilting of the gate it is proposed to have the space below the bracket 17 and between the posts 15 and 16 unobstructed, and to employ a relatively thin metallic rod or bar 9 in lieu of a broad wide rail in order that there may be nothing to obstruct the tilting of the gate.

From the foregoing description it will be understood that the mounting of the present gate is accomplished in a very simple and efficient manner and enables the swinging, sliding, and vertical tilting of the gate without requiring any setting or adjustment of the pivotal or hinged support for the gate.

Having thus described the invention, what is claimed is—

1. A vertically-tiltable gate having an inner end bar, a lower rail, and a rounded shoe having a longitudinal rib upon its concaved face with the lower end of the inner end bar and the lower rail connected thereto, the lower inner corner of the gate being free to permit tilting of the gate, and the shoe being disposed to engage the ground as a support when the gate is being tilted.

2. A vertically-tiltable gate including a lower longitudinal rail, a pair of spaced inner end bars, and a bowed shoe provided at one end with a socket receiving the adjacent end of the lower rail and having its other end provided with an intermediate longitudinal flange embraced by the end bars, the inner lower corner of the gate being free to permit tilting thereof, and the shoe being disposed to bear upon the ground as a support when the gate is being tilted.

3. As a new article of manufacture, a gate-shoe including a bowed body provided upon its concaved face with an intermediate longitudinal rib leading inwardly from one end thereof and forked at the other end of the body to form a socket.

4. A vertical tiltable gate having an inner end bar, a lower rail, and a rounded shoe connecting these members, the shoe being provided upon its concaved face with a longitudinal rib terminating at one end in a socket, one of the gate members being received within and secured to the socket, the other gate member embracing and secured to the other end of the rib, the lower inner corner of the gate being free to permit tilting of the gate, and the shoe being disposed to engage the ground as a support when the gate is being tilted.

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

CASPAR C. DU BOIS.

Witnesses:

RUSS S. EADOR,
R. M. JAMISON.