

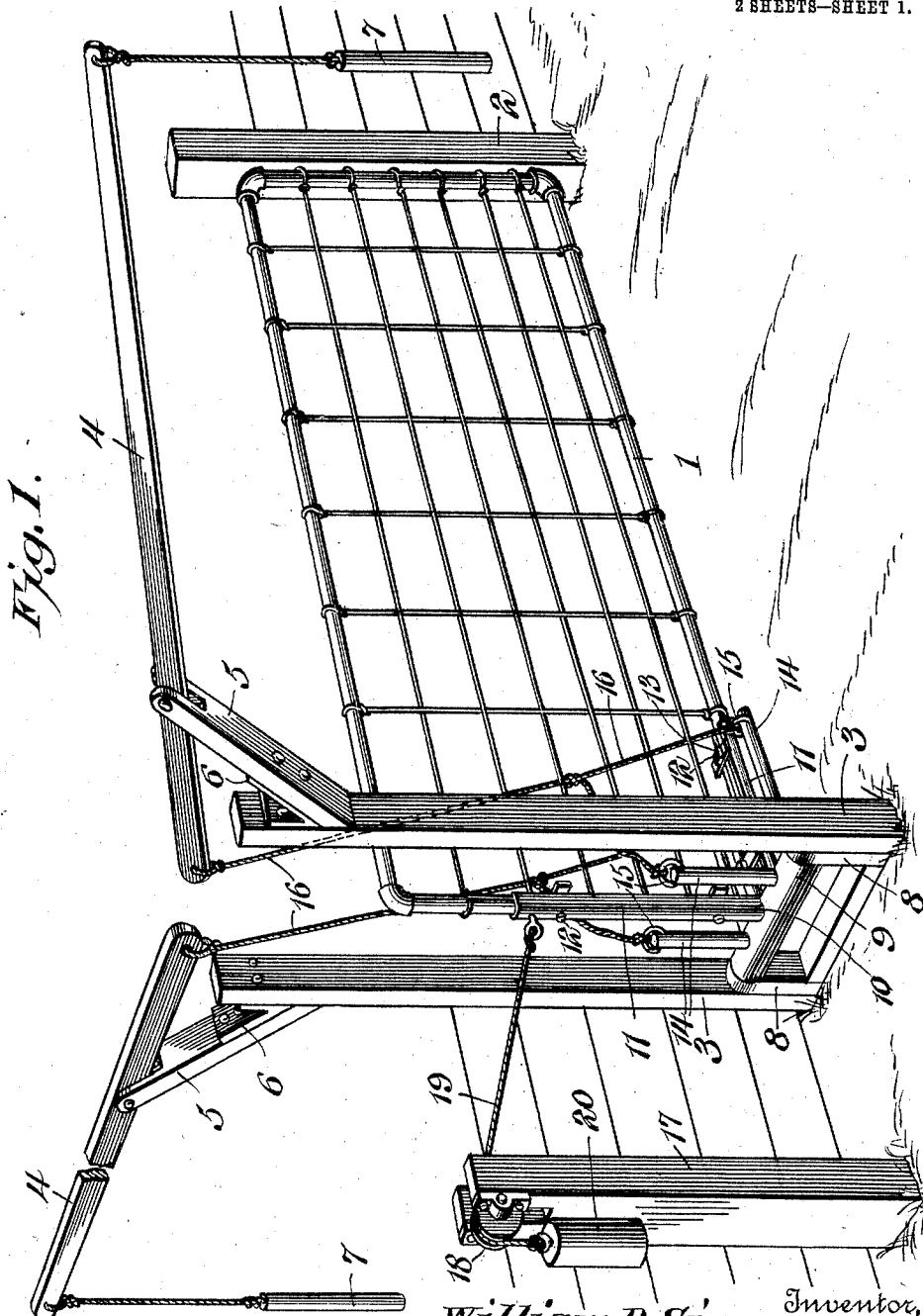
W. B. SIMPSON.
GATE.

APPLICATION FILED APR. 4, 1910.

967,453.

Patented Aug. 16, 1910.

2 SHEETS—SHEET 1.



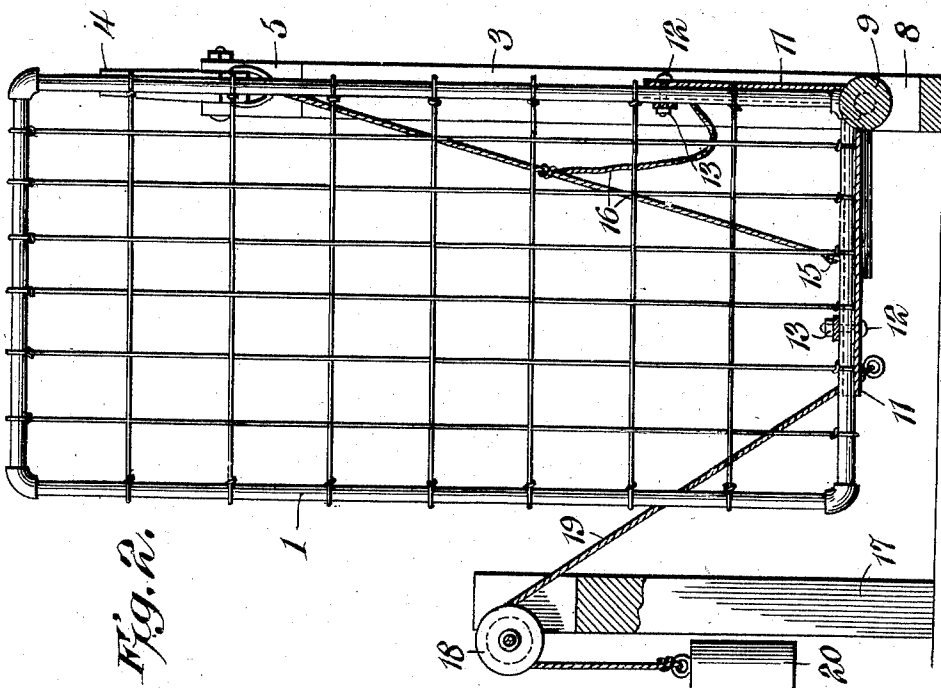
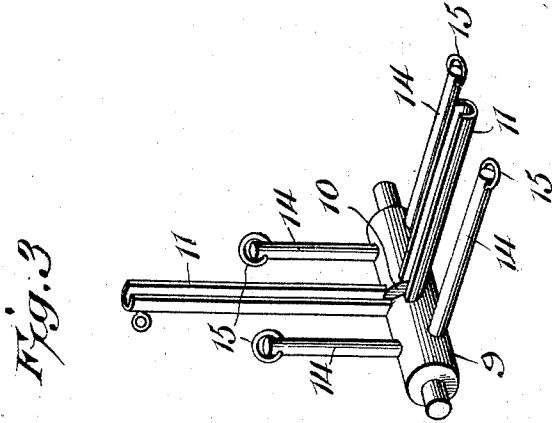
Witnesses
Howard D. Ott.
R. W. Bishop

Inventor,
William B. Simpson,
By
E. J. Siggers
Attorney

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Attorney

UNITED STATES PATENT OFFICE.

WILLIAM BUTLER SIMPSON, OF SHREVEPORT, LOUISIANA.

GATE.

967,453.

Specification of Letters Patent.

Patented Aug. 16, 1910.

Application filed April 4, 1910. Serial No. 553,320.

To all whom it may concern:

Be it known that I, WILLIAM BUTLER SIMPSON, a citizen of the United States, residing at Shreveport, in the parish of Caddo and State of Louisiana, have invented a new and useful Gate, of which the following is a specification.

This invention relates to improvements in gates, and the principal object of the invention is to provide a simple and efficient device whereby any ordinary farm gate may be converted into a tilting gate, and may be easily operated so as to be opened or closed without the necessity of a person approaching in the gate on horseback or within a vehicle being obliged to alight.

The invention consists in certain novel features of the device illustrated in the accompanying drawings, all of which will be hereinafter first fully described and then particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a gate showing my invention operatively connected with the gate and the gate in closed position. Fig. 2 is a sectional elevation showing the gate in opened position. Fig. 3 is a detail perspective view of the gate holder or carrier.

The gate body 1 may be of any desired construction, and is illustrated as consisting of tubular ends connected by upper and lower tubes and horizontal and vertical wires secured to and extending between the said tubular portions. The latch post 2 is set up at one side of the road in the line of the fence and may be, if so desired, equipped with any convenient form of latch so as to hold the gate in its closed position. At the opposite side of the road, I set up two posts or standards 3 which rise to considerable height so as to extend above the top of the gate and form proper supports for the operating levers 4 which are fulcrumed to supporting arms 5 secured to the outer sides of the post and extending upward and outward therefrom and connected rigidly thereto through intermediate V-shaped brackets or angle plates 6 secured to the meeting sides of the arms and the posts, as clearly shown in Fig. 1. The outer ends of the operating levers 4 are equipped with handles 7 of any desired form and which are shown in the drawings as consisting of short rods suspended from the free ends of the levers through intermediate cables.

Between the posts or standards 3 at the lower ends of the same are provided bearings 8 in the upper ends of which is pivotally mounted a rock shaft 9 which extends between the said plates, as clearly shown. This rock shaft is provided at its center with a recess 10 in which one corner of the gate body 1 is fitted, and extending from the said rock shaft at right angles to each other and registering with the ends of the said recess 10 are gate-holding or carrying arms 11 which are of proper cross-sectional form to receive the end and bottom bars of the gate and fit snugly around the same. The gate may be secured in these holding and carrying arms 11 in any desired manner, and, for convenience, I have illustrated bolts 12 extending through the said arms and the end and bottom bars of the gate and secured therein by nuts 13. When a gate body is fitted in these holding arms 11, the gate will be firmly supported and will be necessarily caused to follow the movements of the arms, which are oscillated in a vertical plane by means of operating devices connected with the rock shaft, as will be readily understood. Between the said holding arms 11 and the ends of the rock shaft, I provide lever arms 14 which extend from the rock shaft in planes coincident with the holding arms and are provided at their upper ends with rings or eyes 15 which are engaged by the ends of cables 16 extending up to the inner ends of the operating levers 4. It will be observed that the lower ends of these cables 16 are forked and that one branch is secured to each of the lever arms 14, the result being that whether the gate is in its opened or its closed position, one of the branches of the cables will be taut, so that a pull on the operating levers will actuate the gate through the said cables, while the other branch of the same will be flexed and consequently inoperative. This action of the connection cables 16 will be readily understood on reference to Figs. 1 and 2 of the drawings. Adjacent the post 3 and at such a distance therefrom as will permit the gate body to assume a vertical position, as shown in Fig. 2, I set up a post 17 having a pulley 18 at its upper end and over the said pulley a cable 19 passes so as to connect a counterweight 20 with the upper end of one of the holding arms 11. The counterweight 20 is thus connected to the back end of the gate

so as to assist in the movement of the same by preventing the gate coming to rest on the dead center.

From the foregoing description, it will
 5 be seen that I have provided a simple and efficient device whereby any gate which a farmer may have in his possession may be converted into a tilting gate at a slight cost. In arranging a gate so as to tilt, it is neces-
 10 sary simply to remove the old hinge parts and secure the gate in the holding arms 11, which may be readily done by any unskilled person. The gate having been set up in the position shown in Fig. 1 and herein-
 15 before described, a person approaching the gate will pull downward on either of the handles 7, thereby vibrating the operating levers 4 so as to pull upward on the cable 16 attached to the said lever. The gate will
 20 thereby be swung over into the position shown in Fig. 2 so as to present a clear passage through the gateway without requiring the persons passing through the gateway to dismount in order to operate the gate. The
 25 gate may be closed by pulling downward on the second handle 7, whereupon the lifting impulse will be transmitted to the back end of the gate instead of to the bottom thereof, and the gate will be swung over
 30 into its closed position, as will be readily understood. It will be noticed that the arrangement of parts devised by me permits the posts 3, 3 which support the operating levers to be set close together and that the
 35 lever arms 14 extending from the rock shaft 9 will prevent the passage of small stock around the end of the gate so as to escape from one field to another or to pass from the farm onto the main road.
 40 From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which
 45 the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment

thereof, I desire to have it understood that the device shown is merely illustrative, and
 50 that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, and desire to secure by Let-
 55 ters Patent, is:—

1. In a gate, the combination of a pair of posts, a rock shaft mounted between the same, lever arms extending from the said rock shaft, operating cables connected to the
 60 said lever arms, and holding arms extending from the said rock shaft between the lever arms and adapted to receive a gate body.

2. The combination of a pair of posts, a rock shaft mounted between the posts, lever
 65 arms extending from the said rock shaft at right angles to each other, operating levers mounted on the posts, cables secured to the said levers and having branched lower ends attached to the ends of the lever arms, and
 70 holding arms extending from the rock shaft between the lever arms and adapted to receive a gate body.

3. In a gate, the combination of a pair of
 75 posts, a rock shaft mounted between the same and provided at its center with a gate-receiving recess, holding arms extending from the rock shaft at right angles to each other and registering with the said recess, lever arms extending from the rock shaft at
 80 the sides of the holding arms and in the same planes therewith, operating levers mounted on the posts, cables secured to the said levers and having branched lower ends secured to the lever arms, a counterweight
 85 connected with one of the holding arms, and a post arranged adjacent and spaced from the first-mentioned posts and supporting the said counterweight.

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

WILLIAM BUTLER SIMPSON.

Witnesses:

A. F. POWELL,
 J. M. WALLING.