

(No Model.)

A. BUTTERFIELD.
FARM GATE.

Patented Oct. 20, 1896.

No. 569,855.

Fig. 1.

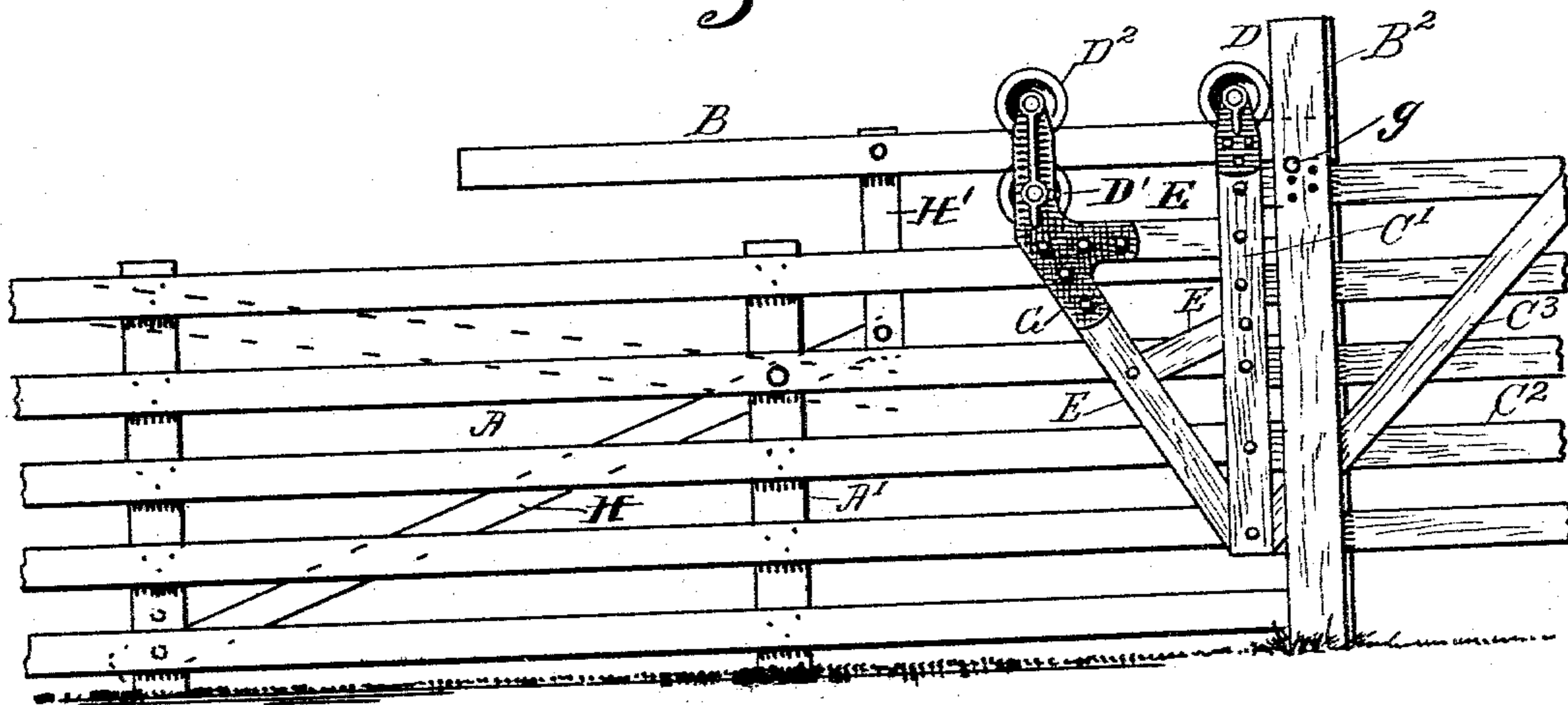
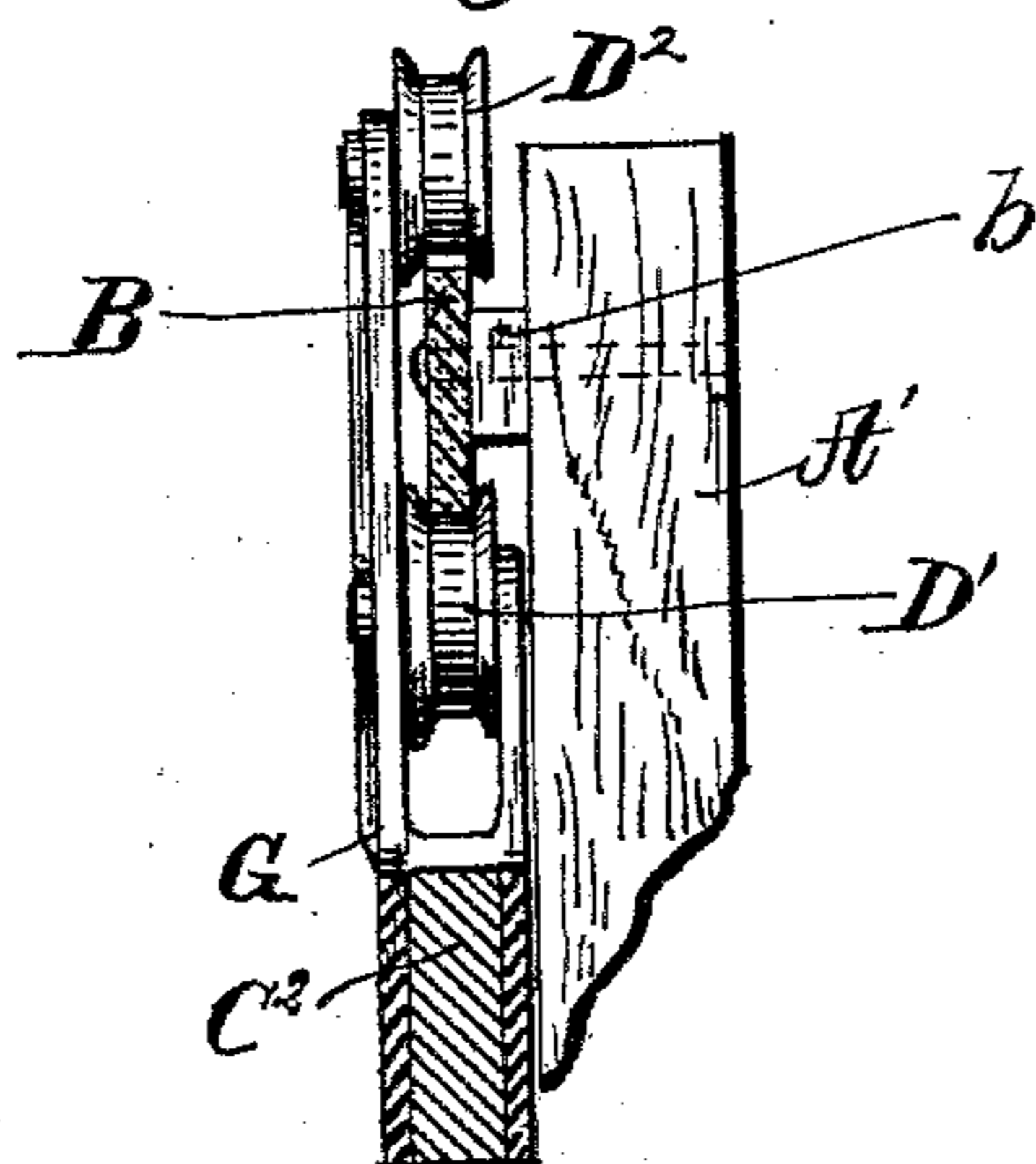


Fig. 2.



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UNITED STATES PATENT OFFICE.

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FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 569,855, dated October 20, 1896.

Application filed February 3, 1896. Serial No. 577,857. (No model.)

To all whom it may concern:

Be it known that I, ALVOR BUTTERFIELD, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in sliding gates.

The object of this invention is to provide a farm-gate that will be simple and cheap in its construction, not liable to get out of order, and that can be adjusted so as to raise the gate above the ground when for any reason it is desired to increase or lessen the clearance between the ground and said gate.

I accomplish the objects of this invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in side elevation of a part of a gate, showing my improvements; and Fig. 2 is a detail in cross-section of the track on which the gate is mounted.

Similar letters of reference indicate like parts throughout both views of the drawings.

A represents the fence, which may be of any usual material, as boards, wire, &c., and A' is a post to which horizontal portions of the fence are fastened.

B is a track of any material strong enough to sustain the weight of the gate and hard enough to resist the wear resulting from usage. The drawings show a board used for a track, but in practice I have found a metal track made out of a flat bar of iron, such, for example, as an old wagon-tire cut and straightened out, to be very durable and satisfactory in its adaptation to this purpose. The track will be held away from the standard H' or other support by means of a block b, in order to leave room for the flanges of the rollers.

C is the gate, of any usual construction. The rear vertical piece of the gate is continued up a suitable distance and has the roller D mounted thereon. The roller D has flanges on both sides of the tread of the wheel. The

roller rests on top of the track B, the track being between the two flanges, and is held from displacement by the flanges. The gate-post B² on the side next to the track is double, that is, two posts are set side by side with an opening or space between the two wide enough to allow the gate to slide through in vertical position, whereby the posts act as supports to hold the gate up. By holding up the outer end of the gate so it will not drag on the ground the gate can be moved longitudinally on the roller D. This is done automatically by providing a second roller D', rigidly secured a suitable distance out from the end of the gate and placed so as to bear against the under side of the track. This second roller will be secured by means of a horizontal arm E and diagonal brace E', running from the outer end of the arm to the bottom of the gate, and will be strengthened by one or more intermediate braces E².

G is a special boxing made to give support to the roller D' and at the same time overlapping the meeting ends of the arm E and brace E', in order thereby to strengthen and bind them more securely together. This box or casing will be extended up to form supports for a third roller D², the purpose of which is to engage the top of the track B, so as to prevent the displacement of the lower roller in case the outer end of the gate is raised too high.

It is sometimes desirable to provide an opening through which sheep and hogs can be driven, but through which larger animals cannot pass. This I accomplish by elevating the entire track and gate. This construction is specially desirable in countries frequented by heavy snows, for by its means the gate can be lifted up bodily above the obstruction and operated in that position. The details of this construction consist of the lever H, pivoted to the post, as shown in Fig. 1, standard H', pivoted to the short end of the lever, and the track pivoted to the upper end of the standard. The sagging of the track is obviated by means of the pin g through the double post. The construction is so well illustrated in Fig. 1 that further description is deemed unnecessary.

Gates already in use can be fitted with my rollers and used without the expense of making a gate specially for the purpose.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

The combination with a gate having a pair of rollers mounted thereon near one end of said gate but separated a suitable distance from each other, the outermost of said pulleys being adapted to engage the under edge of the track and the inner one of the pulleys resting on the upper edge of the track, of a lever pivoted to the fence, a standard pivoted

to the short arm of the lever, a track mounted 15
on the upper end of the standard and adapted to support and guide the gate through engagement with the pulleys on said gate in the manner as shown and described, and means for locking the lever in its different adjust- 20
ments.

In testimony whereof I affix my signature in presence of two witnesses.

ALVOR BUTTERFIELD.

Witnesses:

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