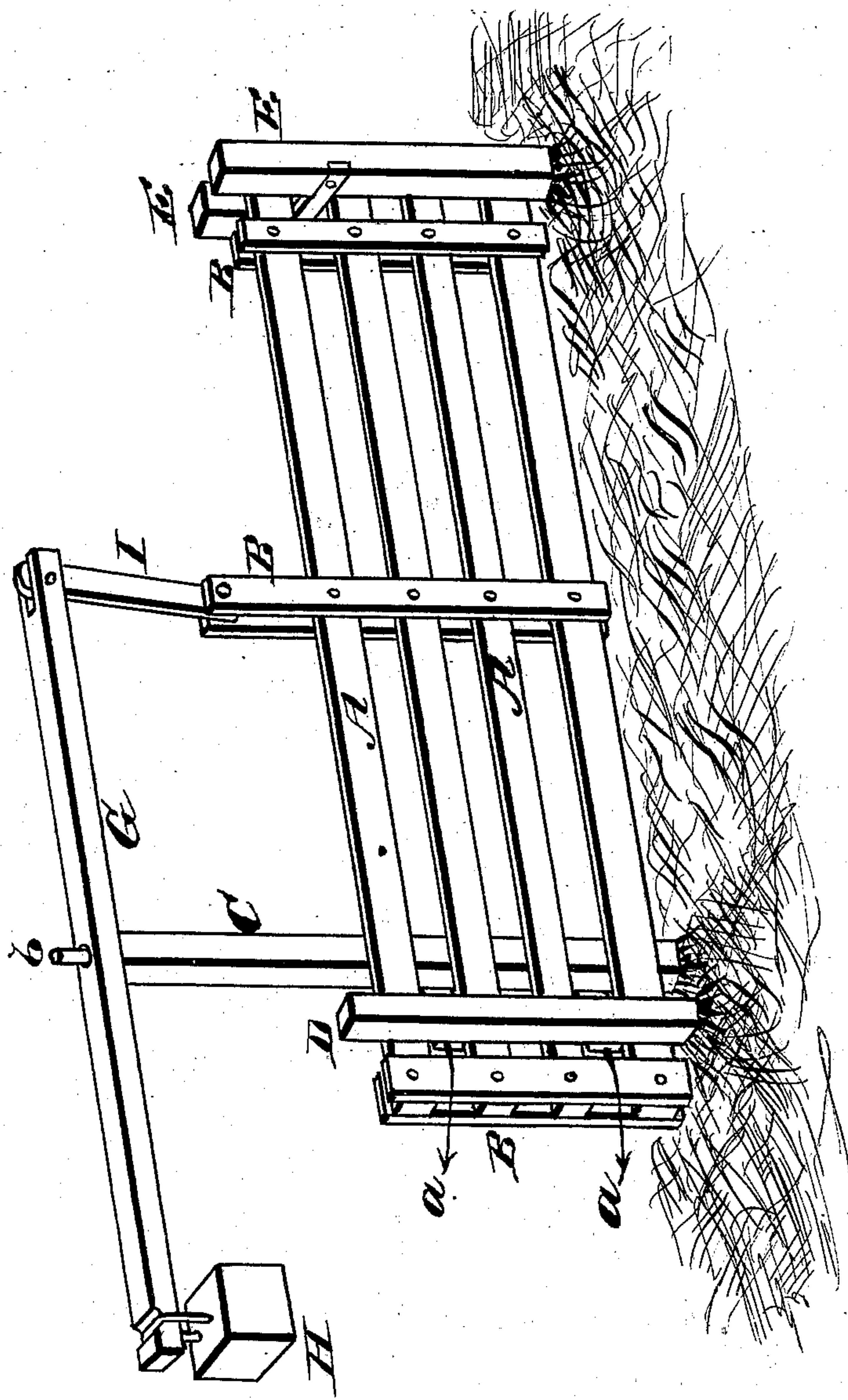


T. J. INGELS.
GATES.

No. 194,685.

Patented Aug. 28, 1877.



WITNESSES
E. H. Bates
James Sheehy

INVENTOR.
Thomas J. Ingels.
Gilmore, Smithey & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS J. INGELS, OF ATCHISON, KANSAS, ASSIGNOR OF TWO-THIRDS HIS
RIGHT TO JOHN APPLETON AND M. F. INGELS, OF SAME PLACE.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **194,685**, dated August 28, 1877; application filed
June 2, 1877.

To all whom it may concern:

Be it known that I, THOMAS J. INGELS, of Atchison, in the county of Atchison and State of Kansas, have invented a new and valuable Improvement in Gates; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a perspective view of my gate.

The nature of my invention consists in the construction and arrangement of devices for hanging and operating a gate, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

The gate is constructed in any ordinary manner of a series of horizontal boards, A, connected at or near the ends and in the middle by vertical strips B B.

The inner end of the gate is placed between two posts, C and D, the post C being set square, while the post D is set diagonally from it, and the two posts connected by two short pieces, *a a*, passed between the boards A of the gate. The outer end of the gate slides in between two parallel posts, E E.

On top of the post C is pivoted a lever, G, by means of a pin, *b*, passed through a hole in the lever into the end of the post. The hole in the lever is made sufficiently large to allow the lever to tilt slightly endwise, while it also turns around on its pivot. From the outer end of the lever G is suspended a weight, H, while the inner end of the lever is, by a short pivoted bar or link, I, connected with the center strips B of the gate, the weight H thus balancing and suspending the gate.

When the gate is pushed back a trifle, so as to clear the posts E, it can readily be turned

open, and in closing the gate, when it reaches the posts E it must again be pushed back till the ends get opposite the space between said posts, when the weight, lever, and link, acting upon the gate, move it outward again to close it.

No latch, hinges, or similar devices are needed. The lever with its weight and link operates the gate easily and perfectly.

I am aware that a gate suspended by a chain from a cross-bar resting on the top faces of two diagonally-arranged posts, and having the weight of the gate counterbalanced by a weight applied to the prolongation of its upper rail, the point of attachment of the chain to the gate being near one of its ends, has heretofore been employed, and I therefore lay no claim to such invention, which is objectionable because the chain has to support more than twice the weight of the gate, and is liable to break, which objection is obviated in my construction.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the gate A B, having its inner end hung between the posts C D diagonally opposite each other, and connected together by the supporting-strips *a a*, and its outer end sliding between the posts E E, in combination with the tilting lever G, pivoted at its middle, weight H, and link I, pivoted at its lower end to the central vertical strips B, and at its upper end to the inner end of said lever, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

THOMAS J. INGELS.

Witnesses:

JOHN N. APPLETON,
R. B. DRURY.