J. WOODWARD.

Gate.

No. 36,817.

Patented Oct. 28, 1862.

Fig. 1

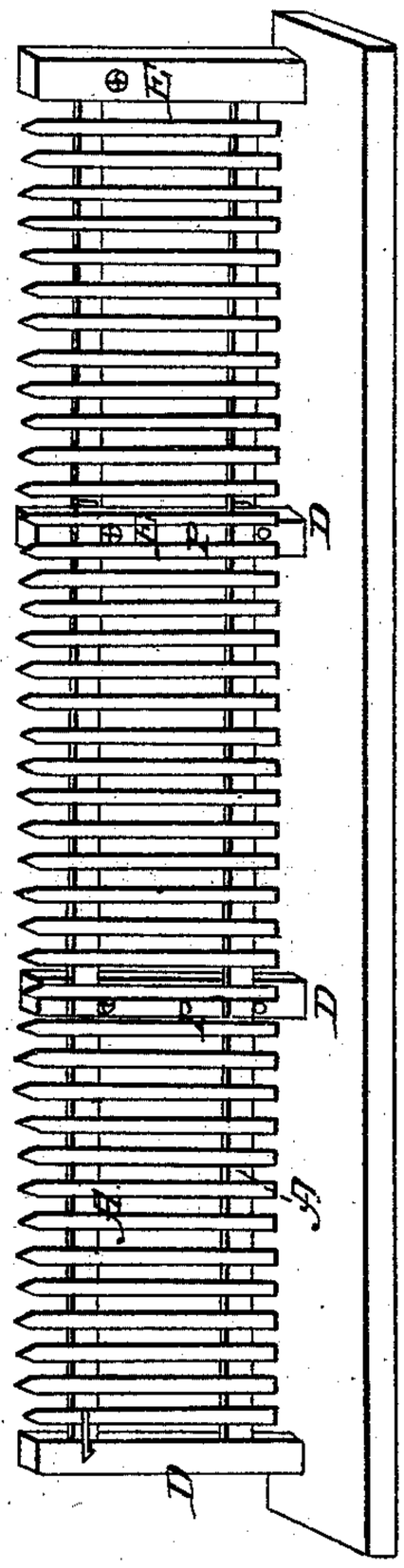

Fig. 2

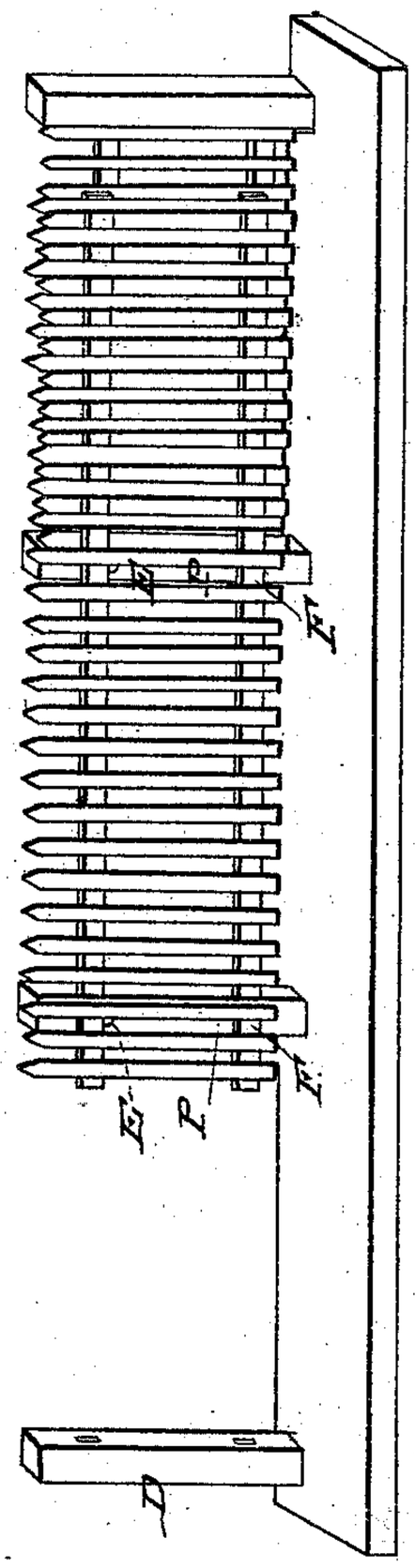

Fig. 3

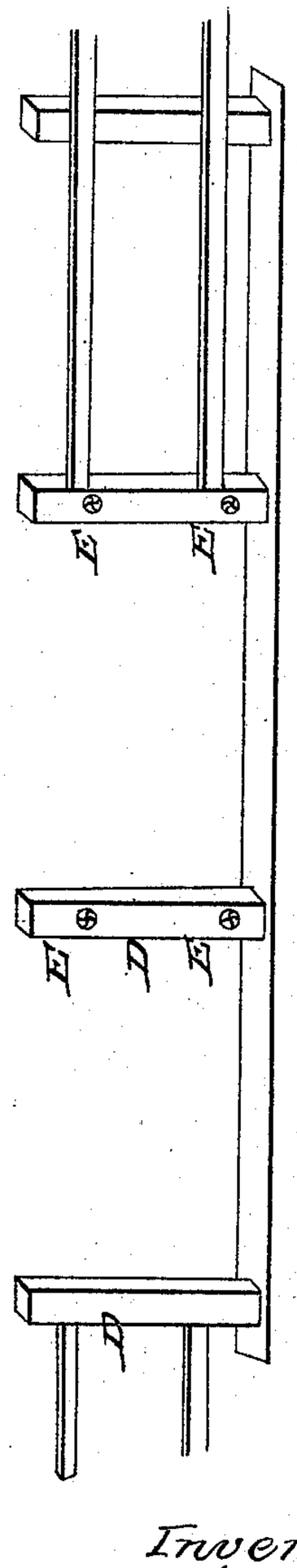

Fig. 4

Fig. 5

Fig. 6

Witnesses

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JOHN WOODWARD, OF WILMOT, NEW HAMPSHIRE.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **36,817**, dated October 28, 1862.

To all whom it may concern:

Be it known that I, JOHN WOODWARD, of Wilmot, county of Merrimac, and State of New Hampshire, have invented a new and Improved Mode of Constructing and Operating Fence-Gates; and I do hereby declare that the following, annexed, is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The following is an exact description of the same, with reference being had to drawings making a part thereof.

Figure 1 is a perspective view of the gate closed. Fig. 2 is a perspective of the same open. Fig. 3 is a perspective view showing the position of the posts with the rollers attached. Fig. 4 is a perspective view of a portion of a grooved rail. Fig. 5 is a perspective view of one of the flanged rollers, and Fig. 6 is a vertical longitudinal section of the same.

Like letters indicate like parts in all the different figures.

The gate consists of two parallel horizontal rails or bars, A A, grooved upon their under side or edge, about one inch from their back sides, the grooves *g g* being made wide and deep enough to receive the flanges *f f* on the rollers E E, which serve as guides, retaining the gate in its proper position upon the posts while in the act of opening or closing. The rails are twice or more than twice the length of the space used as a gateway, and may be covered with boards, pickets, lattice, or any other desirable covering, the gate in all instances being made twice or more than twice the length of the space used as a gate proper or passage-way, and so hung upon the rollers that the portion of the gate back of the front rollers shall balance the portion forming the gate proper, thus preventing the front end from tipping down. This back portion also operates as one panel of fence when the gate is closed, as is shown in Fig. 1.

The posts D D, consisting of wood, stone, or any other suitable material, are set in the ground a suitable depth to retain them in their proper position. The post on which the front rollers are placed stands far enough from the post to which the gate is made fast, when closed, to leave what space is desirable for a passage or passage-way, thus leaving a space between the post with the front rollers and the post containing the rear rollers equal or more than equal to the space first mentioned, without rails or covering, as shown in Fig. 3. The rollers, about one inch or more in thickness and five in diameter, as seen in Fig. 5, are of cast-iron, having a flange, *f*, rising from the front side of the rim or circumference some three-fourths of an inch high, leaving the smooth circumference of the roller E, on which the rails of the gate rest or move. The rollers E E are placed upon the front sides of the posts D D, as seen in Fig. 3, in a proper position to receive the rails of the gate, and are fastened to the posts by means of journals or bolts, on which they revolve, thus affording an easy motion to the gate. The flanges of the rollers, moving in the grooves of the rails, retain the gate in its perpendicular position by the side of the posts. There is one iron pin or peg, P, placed in each of the posts D D, just above the bottom rail, to prevent the gate being lifted from the wheels or rollers, as shown in Fig. 2.

I do not confine myself to this particular style of gate. They may be made of boards or slats, some four or five inches wide and of any desirable length and thickness, placed at an equal distance from each other and connected by three or more slats crossing them at right angles, secured by bolts, screws, or nails, the under edge of the top and lower rail being rounded, so as to run in grooves in the wheels or rollers so prepared for this style of gate. The operation of this style is precisely the same as the one constructed with rails and pickets, as shown in the drawings, the principle being the same, the gates differing only in style of construction.

The two bottom rollers may be dispensed with, and hooks or grooves F F (shown in Fig. 2) used instead, to keep the gate in its proper position.

These gates, in all of their different styles, are so constructed that they form what may be termed a "gate proper and one panel of fence," the rear portion of the gate back of the front rollers operating as one panel of fence when the gate is closed, as shown in Fig. 1, and the front end or portion forming one panel of fence when the gate is opened, as shown in Fig. 2.

From what has been heretofore described may be readily seen the simplicity of the gate,

facility with which it may be constructed, and how readily it may be opened and closed by gently pressing against the gate in the direction you wish it to move. There may be one extra roller placed on the post next in the rear of posts D or D in a suitable position to receive the top rail of the gate when it is desirable to open both spaces the gate fills when it is closed, as shown in Fig. 1.

I do not claim as my invention a gate with wheels or rollers attached to the same and operating upon a fixed track or bar, or a gate of sufficient length to fill the space required for an opening, and no more, that may be attached to rollers and operate in any other form; but

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

A gate twice or more than twice the length of the space used as a passage-way, provided with the grooved rails and flanged rollers, constructed and operating in the manner and for the purpose set forth.

JOHN WOODWARD.

Witnesses:

J. L. ARMES,

S. E. WOODWARD.