E. DENSMORE.

Fence.

No. 200,645. Patented Feb. 26, 1878.

Fig. 1.

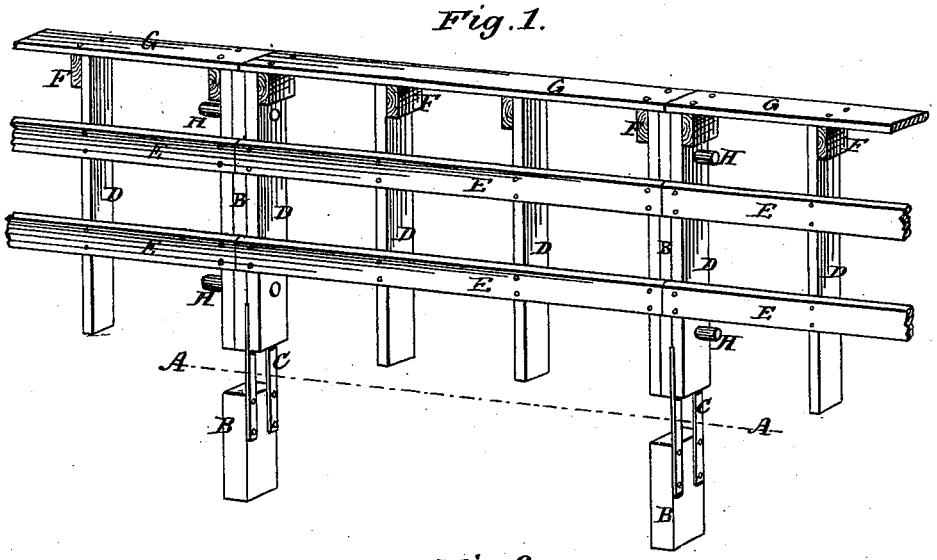


Fig. 2.

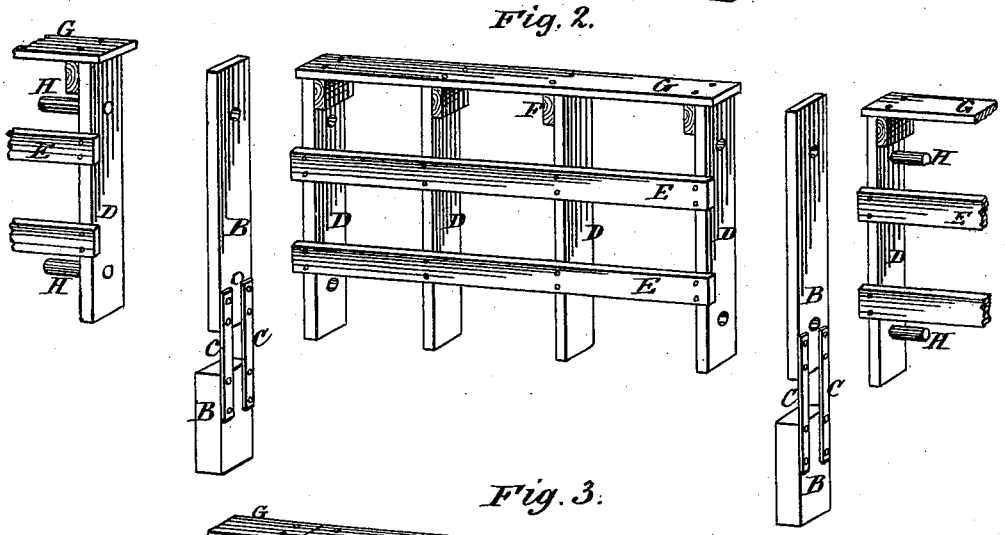
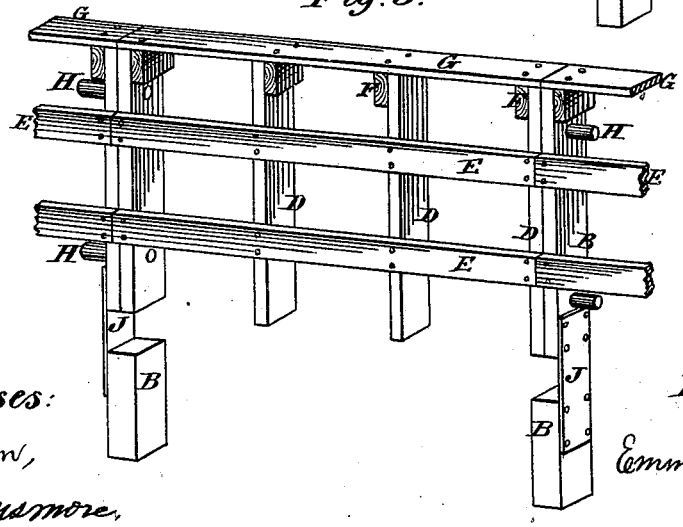


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

EMMETT DENSMORE, OF BLOOMING VALLEY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO HORATIO G. BARDWELL.

IMPROVEMENT IN FENCES.

Specification forming part of Letters Patent No. **200,645**, dated February 26, 1878; application filed January 29, 1878.

To all whom it may concern:

Be it known that I, EMMETT DENSMORE, of Blooming Valley, county of Crawford, and State of Pennsylvania, have invented Improvements in Fences, of which the following is a specification:

The invention relates to post and board fences; and its nature is in combining, in a fence-post, two wooden parts, in line with but separate from one another, one part adapted to be buried in the ground below the surface, and the other to be elevated above the ground and free from the surface; and in combining, in a fence-panel, a series of board stiles, each thin in the line of the fence, and wide transversely thereto, to which are attached a series of rails, one above another, with a board cleat or rafter attached across the upper end of each stile, and the grain of which rafter is in line across the line of the fence, with a board rail or cap, thin vertically and wide horizontally.

The accompanying drawing and following description fully illustrate the invention.

The figures of the drawing represent views as follows: Figure 1, a view of the invention; Fig. 2, a view of the devices detached; and Fig. 3, a view of a modified form of the invention.

The description is as follows: A represents the ground-line of the fence; B, a board fence-post, thin in the direction of the fence and wide transversely thereto, and divided horizontally near the ground-line A—one part inserted in the ground below the surface, and the other extended vertically above the surface from near the ground-line A; C, two metal connections, one attached to each opposite edge or side of each division of each fence-post B, vertically and laterally across the ground-line A; D, a board stile or series of board stiles, thin in the direction of the fence and wide transversely thereto, and set along the ground-line A; E, a board rail or wooden strip, or series of board rails or wooden strips, one above another, in lines parallel with the ground-line A, and attached to and across the edge of each stile D; F, a board cleat or rafter, whose grain is in line across the ground-line A, attached across the side, and even with the upper end of each stile D; G, a board rail or cap, thin vertically and wide horizontally, attached to each rafter F, over the upper end of each stile D; H, a bolt, pin, or other fastening, in line parallel with the ground-line A, through the contiguous stile D, and through or into each fence-post B; and J, a wide, thin metal connection, in place of the two metal connections C, attached to the two divisions of each fence-post B, the wide way of the connection across the ground-line A, as represented in the modified form of the invention in Fig. 3.

The subject of fencing is becoming serious to the farming industry. In many parts of the country split rails are no longer obtainable, and even posts and boards are an onerous tax. Besides, the common post-and-board fence has serious objections. Posts, even of the most enduring woods, rot off at the ground-line quickly; but even before rotting the action of the frost heaves them from the ground, and as it heaves some faster than others, the nails are sure to break and the boards loosen more or less; and, again, such fence, as commonly made, is often too easily blown over.

A cheap, durable fence is a great want; and it is the object of this invention to remedy these defects and supply this want. Wooden fence-posts rot quickly only at the ground-line. Deep in the ground, below the surface, they will last a life-time, or longer, as they will, also, suspended in the air above the ground. It is only where the air and ground meet that the rotting trouble occurs. I therefore use a light board fence-post, divided horizontally near the ground-line, one part inserted in the ground below the surface, and the other suspended above the surface, where neither will rot quickly, and unite them by metal connections, which will not rot at the surface. I insert the post with its wide way across the line of the fence, so it will be in itself a brace against the wind, and the fence itself will sustain it longitudinally. Being thin and small, and of metal, the frost will not seize and cling to the connections, so as to heave the post from the ground. Thus the fence will be steadfast, and will endure as long as wood will last in the open air; and being free from heaving, the nails will not break nor the boards get loose;

and being of light posts and panels, they are readily portable, and can all be prepared at the farmer's barn or other convenient place, and taken to the field all finished, except the setting of the posts. The panels D E F G are complete trusses, and make the fence stout and stiff. The wide way of the stiles D and cap-rail G being across the ground-line A makes the fence stiff laterally, and the wide way of the side rails E being vertical to the ground-line A makes it stiff vertically. The grain of the rafters F being across that of the stiles D adds lateral strength to the upper ends of the stiles, and aids in holding the nails of the cap-rail G. The stiles or suspended posts D, being short and thin and cheap, may be set comparatively closely together, which will allow the side rails E to be quite narrow, which, with the edges of the stiles and cap-rail G, present only a small surface comparatively against the force of the wind. The fastenings H may be iron bolts or wooden pins; and as they are not liable to work out of place, they are not required to fit tightly, but may be sufficiently loose to insert and remove readily, so that whenever an opening in the fence is desired a suitable panel can be removed at once for that purpose.

Fig. 3 represents a modified form of the fence, in which only every alternate panel is removable, the fence-posts themselves serving for the others, and in which the metal connections between the divided parts of each post is a thin wide plate, instead of two separate bars, set asunder.

The combination of a wooden fence-post above the ground with a metal connection to go into the ground; the combination of a wooden fence-post above the ground with a metal connection to go into the ground, and attached to a wooden anchor buried in the ground; and the combination of a fence-post with a fence-panel made of vertical board stiles and longitudinal board rails, with or without a cap-board, form no part of this invention; but the improvements which are new are a fence-post made of two wooden sections, united by metal connections, as described, combined with any fence-panel, and a fence-panel containing wooden cleats or rafters across the upper ends of the board stiles, to which rafters is attached a cap-board, as described, combined with any fence-post. Therefore,

What I claim is as follows:

1. In a fence-post, the combination of two wooden parts in line with but separate from one another, one part adapted to be buried in ground below the surface, and the other to be elevated above the ground and free from the surface, with a metal plate thin in the line of the fence and wide transversely thereto, or with two metal bars asunder in line across the line of the fence, attached to both the upper and lower wooden parts, substantially as described.

2. In a fence-panel, the combination of a series of board stiles thin in the line of the fence and wide transversely thereto, to which are attached a series of rails, one above another, with a board cleat or rafter attached across the upper end of each stile, and the grain of which rafter is in line across the line of the fence, and with a board rail or cap thin vertically and wide horizontally, attached to the rafters over the ends of the stiles, substantially as described.

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Witnesses:
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