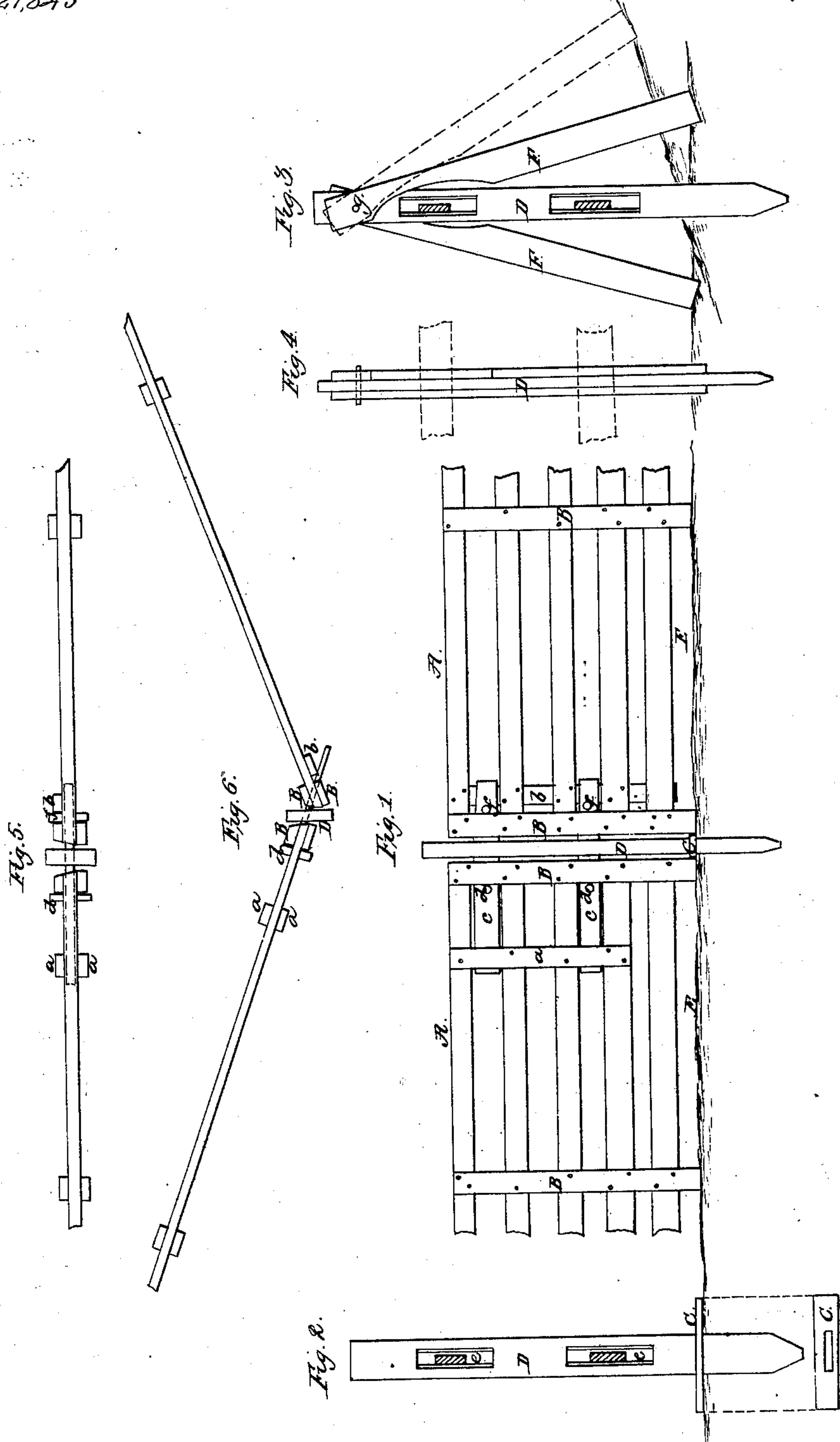


J. B. Mitchell

Portable Fence,

Patented Oct. 19, 1858.

N^o 21,843



UNITED STATES PATENT OFFICE.

JOHN B. MITCHELL, OF WAYNE, NEW YORK.

FIELD-FENCE.

Specification of Letters Patent No. 21,843, dated October 19, 1858.

To all whom it may concern:

Be it known that I, JOHN B. MITCHELL, of Wayne, in the county of Steuben and State of New York, have invented a new and Improved Method of Constructing Convertible Field-Fences; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1, is an elevation of the post and a portion of two panels. Fig. 2, is an elevation of the post viewed transversely, the connecting slides of the panels being in section. Fig. 3, is the same view of a post with braces attached. Fig. 4, is a side view of the same. Fig. 5, is a plan view of that portion of the fence shown in Fig. 1. Fig. 6, is a plan view of same converted into a worm fence.

The same letters refer to corresponding parts in each of the figures.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

I construct my fence in sections, consisting of panels composed of a suitable number of strips of usual board length, say of twelve or sixteen feet, though I prefer the former. These are secured together by nailing two narrow strips, or battens, upon opposite sides at each end, and two in the middle, using hard wood, (oak being preferable) for the purpose, and wrought nails. Upon one end of each panel I place two short battens, *a* Fig. 1, distant one or two feet from the end and, at the opposite end I place an extra batten, *b*, Figs. 1, 5 and 6, upon one side of the panel only.

In two of the spaces between the rails I provide sliding pieces, *c*, which move the distance between the end battens and the short one, *a*, and are prevented from going farther by the pin, *d*. I also provide a single post to each panel, which should be made of hard wood, and long enough to insert in the ground to a depth of one and a half feet or thereabout. In this post are two vertical slots, *e e*, Fig. 2, through which pass the movable slats, *c*. These slots are about ten inches long, or more than double the width of the sliding piece, *c*, to admit of the post rising from the upheaval of the

ground by frost without affecting the fence. The post passes through a mortise in a small base or ground piece, *C* Fig. 2, which lies upon the surface of the ground and aids materially in keeping it perpendicular in soft ground and rendering it less liable to be overturned by winds, &c.

The arrangement of the panels and relative position of the post are shown in Fig. 1; *A A*, being the panels; *B*, the battens, and *D*, the post. *E*, is the surface of the ground on which set the lower ends of the battens they being made a few inches longer than the bottom board to elevate it slightly above the ground. The ends may rest on stone to prevent the absorption of moisture from the ground.

For high fences, and those exposed to wind, or designed to break the snow, I attach swivel braces *F, F*, Fig. 3, which have their axis in a pin through the top of the post at *g*. The two detached extremities of these braces are separated at an angle more or less diverging, and, the post being driven down until they press hard against the surface of the ground, they brace it very effectually. They can be spread more or less as required, and are equally applicable to hill sides, where, by extending that on the upper side, they are readily adapted to the inclination of the surface.

This fence is convertible from a straight to a worm fence, and vice-versa, at the option of the farmer, requiring no change of construction, and merely the setting of the posts in different positions.

Fig. 5, is a plan view of a portion of the fence, as built straight. The different parts are designated by their respective letters, the slides being indicated by dotted lines. To convert it into a worm, or angular fence, it is only necessary to place the posts alternately on two parallel lines at proper distances, or at what would constitute the angles of a zigzag line. The panels are then placed between them as at Fig. 6, and the slides, *c*, drawn, the ends of which pass between the end battens *B*, obliquely, and also between them and the auxiliary batten, *b*, securing both panels to the post effectually, as the slide in this position acts both as a lock and as a brace against batten *b*. Another pin may be placed in the slide at *f* to prevent it being withdrawn. The ends of

the panels, the battens, and the slots in the posts are beveled to adapt them to this arrangement, which is a valuable one to the owner of the soil, as adapting the fence to all situations, since it frequently happens that a strong worm fence is required in a certain place which, when removed to another where the land is more valuable for cultivation, would be much more economical both as regards the land occupied, and the length of fence obtained from a certain amount of lumber, if built straight. It is therefore left to the choice and judgment of the farmer whether he sets it up straight or angular. The posts operate in the same manner in the one as the other; that is, they yield to the action of frost without affecting the fences and can at any time be righted up or driven deeper without removing the panels or slides. In taking up the fence it is only necessary to insert the end of a bar or lever in one of the slots, *e*, of the post using a piece of board of suitable height as a fulcrum, when they are drawn out with trifling labor. Any panel can be removed to form a gate way at a moment's notice by withdrawing the slides and taking it out without impairing the strength of the others. Experience has convinced me that no straight fence either portable or permanent will be efficient without posts which enter the ground, and in order to have the fence endure for a reasonable length of time without leaning or becoming irregular and unsightly from the action of the elements, the posts must be capable of adjustment without taking down the fence and rebuilding. This result is obtained by means of the connecting slides *c* of the panels, and slotted posts.

The braces *F F*, may be used or not as the purpose and situation of the fence require.

This fence while possessing all the advantages of lightness and portability that are usually attained has in addition those of

economy of cost and durability. To evidence its economy I will state the cost.

Each panel requires, including one post—	50
30 feet of lumber costing one cent	
per foot -----	30 cts.
Nails 3 c.; cost of labor in making	
6 c -----	9 "
	<hr/>
	.39
	55

It is peculiarly adapted to forming square pens or rectangular inclosures for herding stock together. In doing this and in forming right angles generally it is only necessary to pass the slides *c* through the space between battens *B* and *b*, and pass a pin through them. For ordinary purposes only one slot through the post and one slide is necessary, and the distance from the forward end of the slide to the adjusting piece *a* should be about sixteen inches, and more if required.

Soft wood will answer the purpose for battens when hard is not easily procured though the latter is preferable. A cap-piece or strip of board placed lengthwise on the top of the panels may be added if thought desirable, both for strengthening the fence and to give a more finished appearance.

I do not claim as my invention constructing fences in separate sections or panels and uniting them with posts in any other than the specific manner which I have described.

I claim—

The combination of the slotted post *D*, with the panels *A A*, when constructed with the slides *c* and auxiliary battens *a* and *b*, so as to form a fence readily convertible from a straight to an angular one, substantially in the manner and for the purposes set forth.

JOHN B. MITCHELL.

Witnesses:

H. T. MITCHELL,
ELIZABETH MITCHELL.