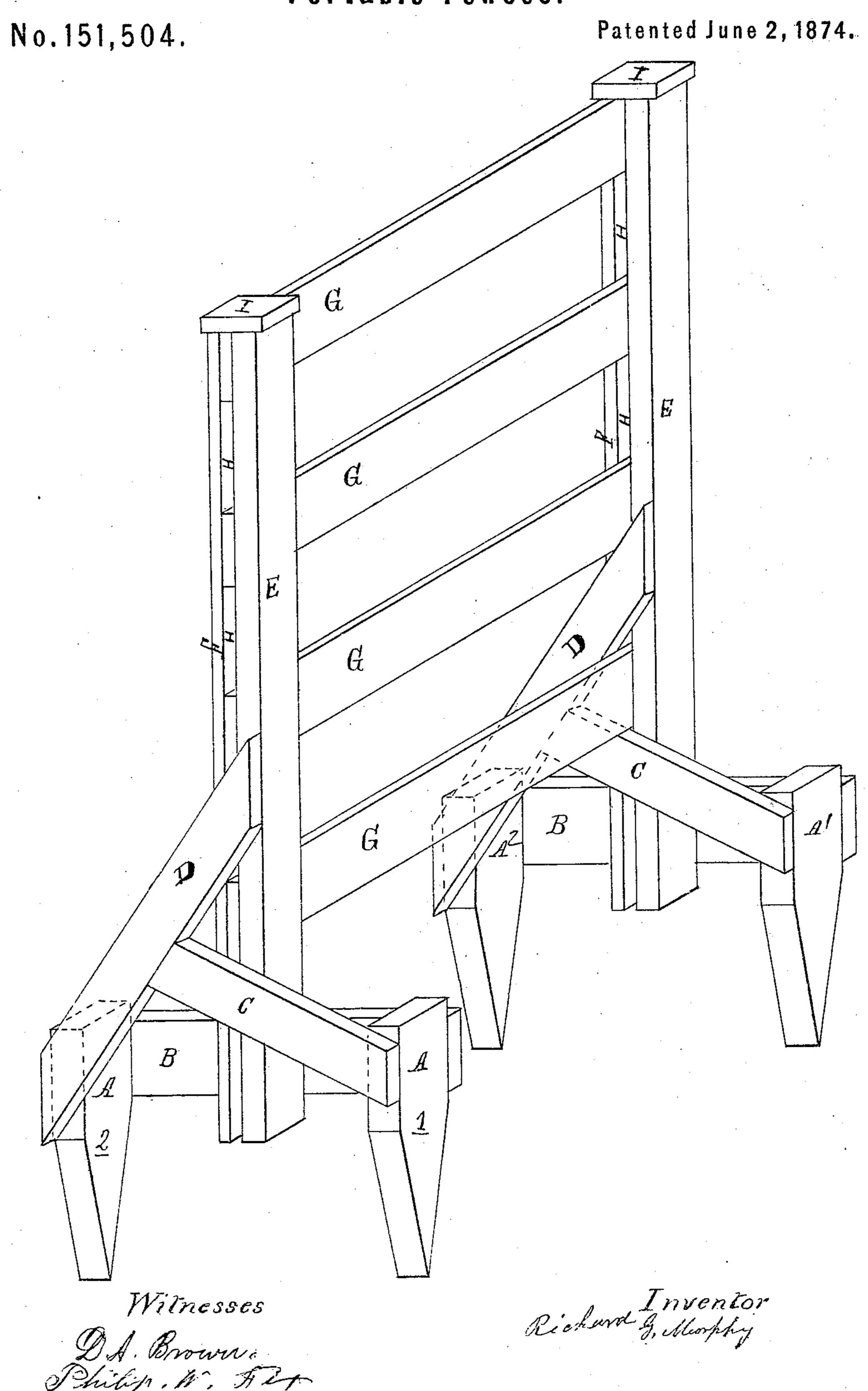
R. G. MURPHY. Portable Fences:



UNITED STATES PATENT OFFICE.

RICHARD G. MURPHY, OF SHAKOPEE, MINNESOTA.

IMPROVEMENT IN PORTABLE FENCES.

Specification forming part of Letters Patent No. 151,504, dated June 2, 1874; application filed February 6, 1874.

To all whom it may concern:

Be it known that I, RICHARD G. MURPHY, of Shakopee, Scott county, Minnesota, have invented a Board Fence, of which the follow-

ing is a specification:

In the drawing, which is a perspective view of a panel or section of my fence, A^1 A^2 are pointed stakes, adapted to be driven into the ground, and to support the other portions of the fence. B are cross-pieces or girts, secured to the upper ends of stakes $A^1 A^2$ by means of two nails, one at each end of the girt or girts. E F are the posts or uprights, between which the boards G are secured by nails in any usual or approved manner. D are braces, extending from the top of each stake A^2 to the posts or uprights E F. C are also braces, connecting posts E F with stakes A¹. The upper ends of braces C extend beyond the posts, and abut against the braces D, being sawed at such a bevel as to insure an accurate fit upon the under side of said braces D. These braces are arranged upon one side of a pair of posts, and a cross-bar or girt, B, is secured to the opposite side of the posts; these parts—namely, the braces, posts, and girt being held firmly in place by nails.

As shown in the drawings, the pointed stakes A¹ A² are of the same width as the posts, and hence fit accurately between the outer ends of the girts and braces.

It will be seen that my combination and arrangement of girts, posts, and braces form a series of triangles, thereby forming a very simple yet effective system of bracing, and that the fence may be supported at such distance from the ground as will materially increase its durability by preserving it from the dampness of the ground.

By driving the stakes on one side of the fence deeper into the ground than those on the other side I can erect the fence in a perpendicular position upon a side-hill.

This construction will be found very convenient for portable fences from the fact that

the stakes A¹ A² can be folded inward toward the posts, the nails serving as pivots, in which case they (the stakes) are out of the way, and do not interfere with handling the panels.

H H are blocks employed to assist in keeping the boards or rails properly spaced. I I are caps which secure the upper ends of posts E F to each other, and which may also be made to support the boards against upward pressure, as will be explained.

I have shown two methods of applying the braces, one pair being arranged upon the outer faces of the posts, and one pair on the inner side.

In practice I prefer to employ them in the latter manner, as I thereby secure some additional advantages not derived from their use on the outside.

Thus, when they are applied to either the inner or outer side, the posts, sills, and braces may be drawn tightly to place by using the projecting end of the shorter brace C as a fulcrum. making the longer brace D serve as a lever, the fence being materially strengthened against a wind blowing upon the side on which the long brace is placed; hence this side may be advantageously placed so as to receive the prevailing strong winds.

When the brace D is placed inside of the posts said brace may also be made to force the boards G and blocks H against each other, or even against the caps I, thereby further increasing the tightness and firmness of all the parts, and rendering the fence more capable of resisting the racking and loosening effects of either the wind or handling.

What I claim is—

A portable fence made in separate panels, consisting of the stakes A¹ A², sills B, braces C D, posts E F, boards G, and blocks H, all constructed and arranged as described.

R. G. MURPHY.

Witnesses:

D. A. BROWN, PHILIP W. FIX.