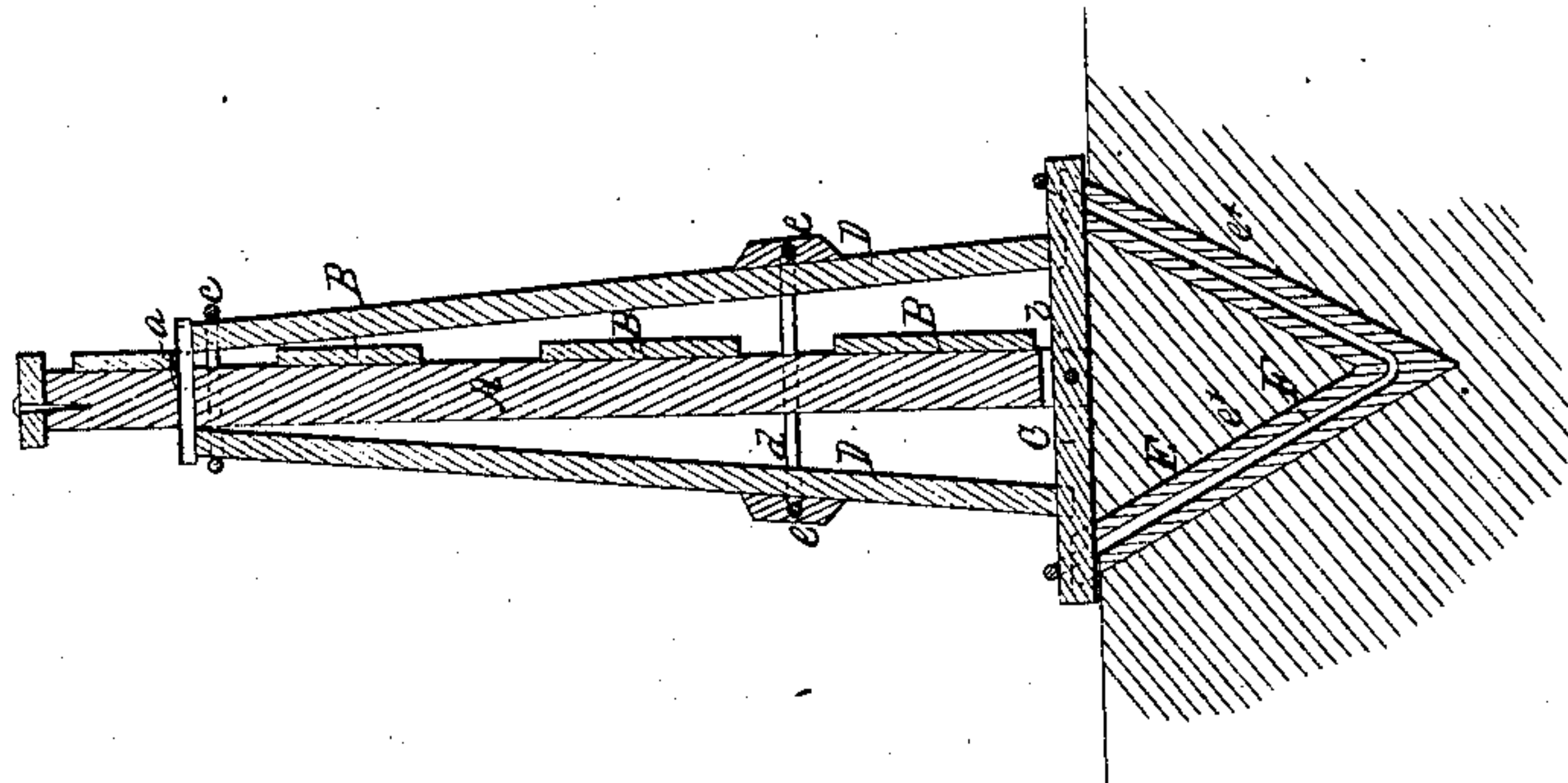


*C. R. Smith,*  
*Wood Fence,*

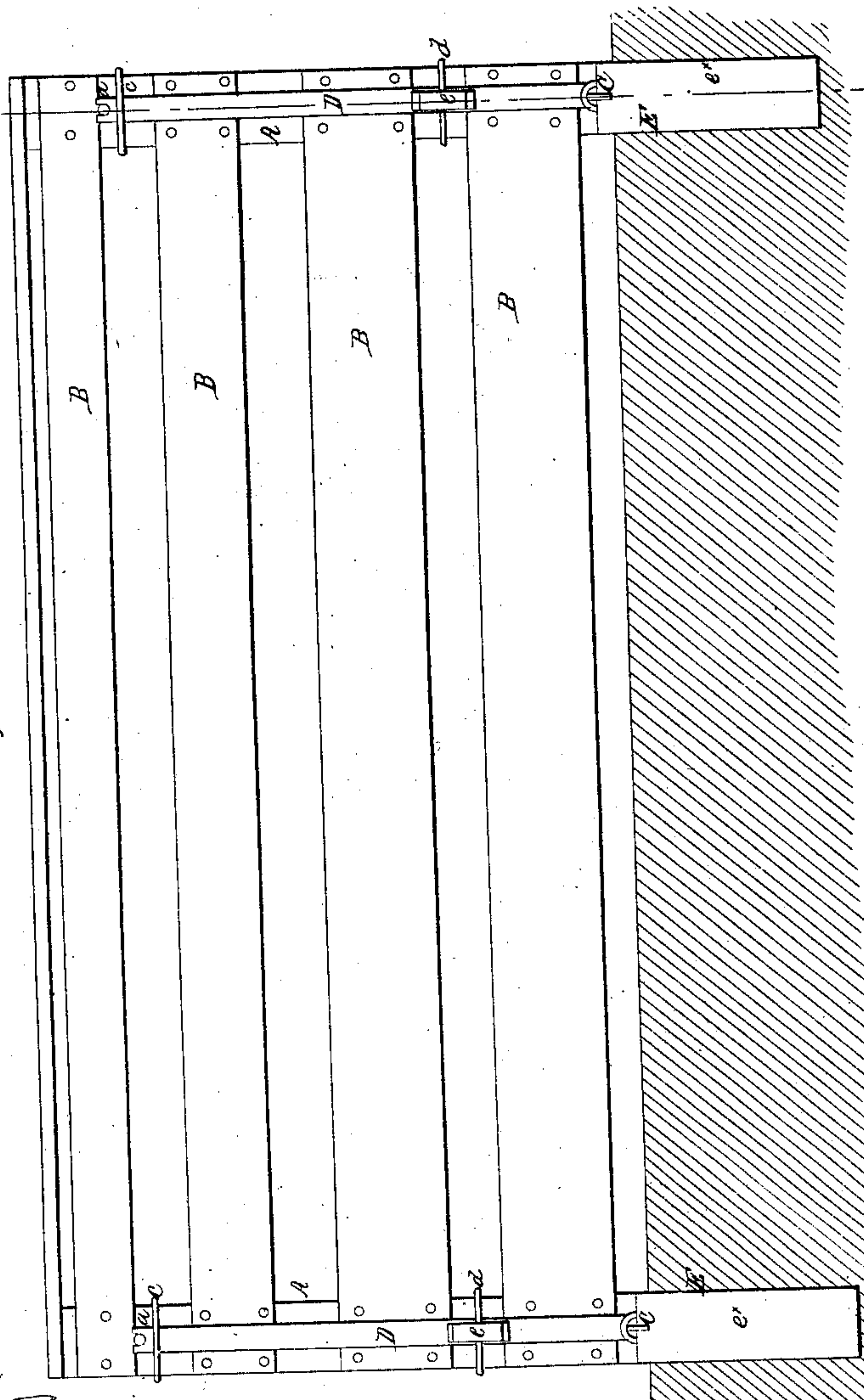
*Nº 11,541.*

*Patented Feb. 9. 1864.*

*Fig 2.*



*Fig 1.*



*Witnesses*  
*John A. Smith*  
*Geo. Reed*

*Inventor,*  
*Charles R. Smith*  
*per J. M. Smith*  
*Attorney*



# UNITED STATES PATENT OFFICE.

CHARLES R. SMITH, OF HAVERHILL, NEW HAMPSHIRE.

## IMPROVEMENT IN FENCE-POSTS.

Specification forming part of Letters Patent No. 41,541, dated February 9, 1864.

*To all whom it may concern:*

Be it known that I, CHARLES R. SMITH, of Haverhill, in the county of Grafton and State of New Hampshire, have invented certain new and useful Improvements in the Construction of Fences; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of a section or panel of a fence constructed according to my invention; Fig. 2, a transverse vertical section of the same, taken in the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A A represent the two parts of a section or panel of a fence, and B represents the rails or boards which are nailed to the posts at one side thereof at suitable distances apart. Through each post A, near its upper end, a pin, *a*, passes transversely, and projects a short distance beyond the sides of the posts. These pins may be of wood or metal, the latter being preferable.

In the lower end of each end post, A, there is fitted transversely a metal bar, C. These bars are secured in the posts by pins *b*, and said bars project a considerable distance beyond the sides of the posts, as shown in Fig. 2.

D D represent two braces, which are of wood, that being the preferable material, although metal rods may be used instead. The upper ends of these braces are notched, and are fitted under the pins *a*, a brace being at each side of each post, as shown in Fig. 2. The upper parts of these braces, near the pins *a*, are encompassed by a wire, *c*, and they are also encompassed by a wire, *d*, near their lower ends, both wires passing around the posts A A. The lower wire, *d*, is much larger in diameter than the upper one, in order to admit of the braces being expanded or spread apart to a certain extent at their lower ends, as shown in Fig. 2. The upper wire merely retains the braces in contact with the pins *a*.

The lower wires, *d*, have small cleats or strips *e* of wood on them for the braces D D to bear against.

The lower ends of the braces D D are notched and rest on the bar C, and firmly retain the posts in position. This will be fully understood by referring to Fig. 1. The braces, it will be seen, cannot be pressed inward at their lower ends, as they will "bind" on the bar C, and they cannot be loosened by being pressed outward, for the wires *d* retain them. The braces, in order to be detached from the posts, require to be free from the wires *d*, and the latter may be readily opened, as its ends need only to be twisted around each other to form a fastening. For portable fences I prefer the wires *d* with their ends fastened together by a twist; but for permanent fences a bolt may be employed passing through the posts and their two braces.

By this arrangement it will be seen that a fence may be readily put up and taken down, and when put up the fence will be stiff and firm.

The bars C are secured to a foundation, E, which may be of tile or any artificial stone or baked earth or earthy cements. It is composed of slabs *e<sup>x</sup>*, two or more, put together in V form, as shown in Fig. 2, and connected together by a metal rod, F, which passes longitudinally through them, and is made at one end to clasp the bar C and hold it snugly to one end of the foundation, and it may be secured at its opposite end in the same way to the bar C, or by a nut and screw or other proper means. This foundation is fitted snugly in the earth, and serves as a firm and durable foundation for the posts, preventing them being thrown out from the perpendicular by frost and other causes. The space between the slabs *e<sup>x</sup>* *e<sup>x</sup>* may be filled in with earth or any other suitable material, such as cement, brimstone, &c. If these latter materials be used, the rod F may be dispensed with, although I think it would be preferable to use it in all cases.

It will be seen that all drilling is avoided, none being necessary, as in stone foundations, where posts and braces are fitted into them. The tiles may be made at small expense, and readily placed or sunk in position to receive the posts. The tiles, in consequence of being placed or adjusted together in V form, will set snugly in the earth, and will not be liable to get misplaced by the action of the frost and other causes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The foundation E, formed of slabs  $e^x$  of tiles, factitious stone, or any baked earthy cement, placed together in V form, substantially as shown and described.

2. The combination of the foundation E with

the posts A, braces D D, bars C, and the wires  $d$ , or their equivalents, as and for the purpose herein specified.

CHARLES R. SMITH.

Witnesses:

HENRY SWAN,

J. B. F. WOODWARD.