(No Model.)

T. G. ORWIG.
Fence Post.

No. 233,871. **Patented Nov. 2, 1880.**

Fig. 1

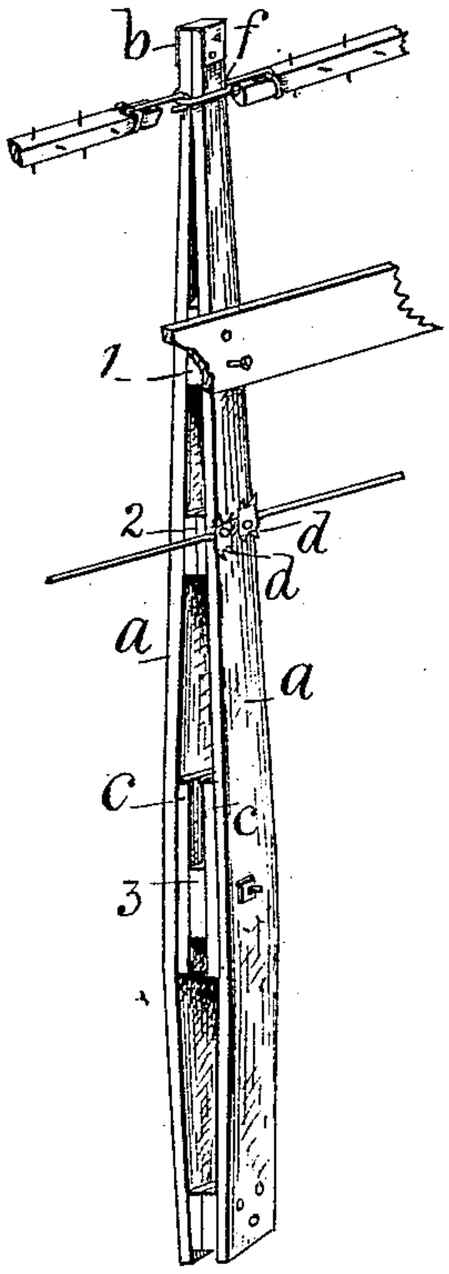


Fig. 2

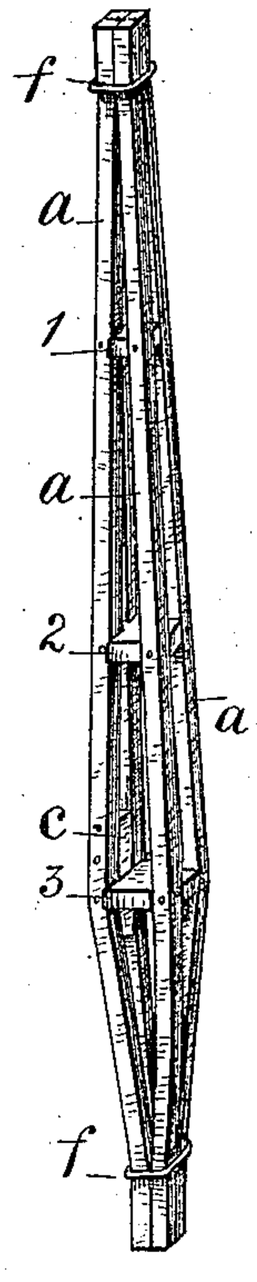


Fig. 3

Fig. 4

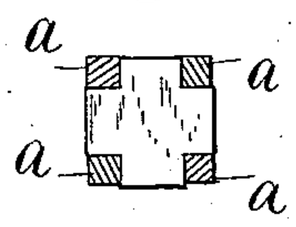


Fig. 5

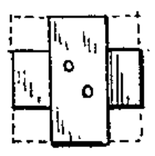
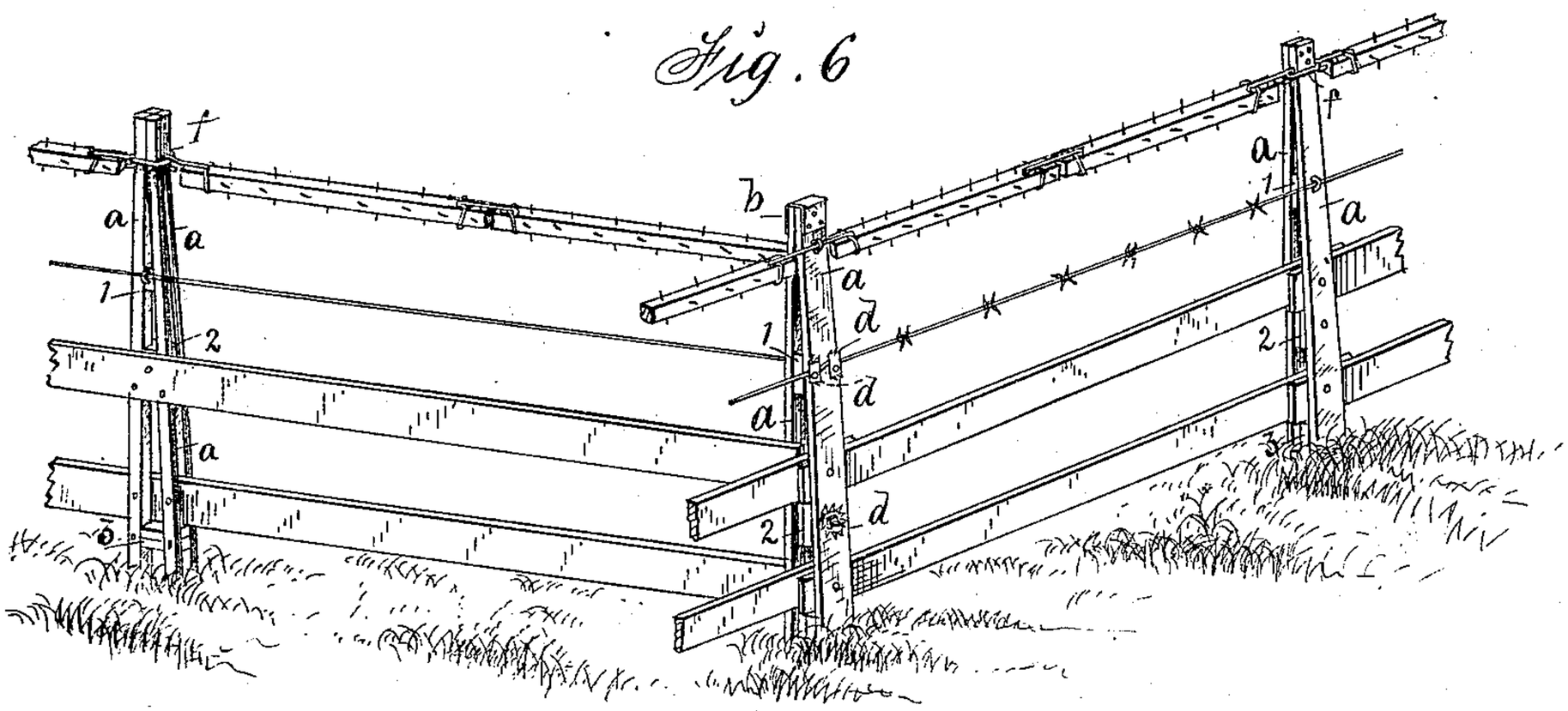


Fig. 6



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS G. ORWIG, OF DES MOINES, IOWA.

FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 233,871, dated November 2, 1880.

Application filed May 4, 1880. (No model.)

To all whom it may concern:

Be it known that I, THOMAS G. ORWIG, of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Fence-Post, of which the following is a specification.

The object of my invention is to diminish the maximum bulk of wood required in a fence-post, and to augment the minimum strength and durability of a post constructed from a given quantity of wood.

It consists in constructing complete posts from pieces of fence-boards, square strips of wood, and wooden stay-blocks, as hereinafter fully set forth.

Figure 1 of my accompanying drawings is a perspective view of a post made from two uniform pieces of board, *a a*, that are about an inch thick. They may be uniform in width or tapering toward their top ends and vary in size, as desired.

1 2 3 represent wooden stay-blocks fixed between the pieces *a* at intervals corresponding with the spaces desired between the rails of a fence. The pieces *a* and the blocks are fastened together by means of nails, screw-bolts, or in any suitable way to connect the strips *a* and to form fence-rail bearings, into which nails and staples can be driven, for the purpose of fastening fence-boards and fence-wires to the complete post. These stay-blocks are graduated in size, and may vary in shape, number, and dimensions. They may be formed of solid pieces of wood, or of several pieces joined together.

b is a piece of sheet metal bent over the united upper ends of the pieces *a*, and fastened to form a cap to cover and protect the top end of the post.

c c are elongated pieces of wood fixed to the stay-block 3, to form extended bearings for the pieces *a* at the points where they are bent, and to re-enforce that part of the complete post that will, in practical use, be subjected to the greatest strain.

I am aware that the ends of fence-boards have been fastened between the uprights of a portable truss and adjustable re-enforcing pieces and fixed standards attached to the outside of the truss-uprights; but such trusses were not designed to be set in the ground to form a fixed fence.

My truss-form post is adapted to be set in the ground, and has fixed stay-blocks that aid in securing and supporting the fence-boards that are designed to be fixed thereto to form a permanent fence; and my combination of an elongated re-enforcing piece, *c*, with a fixed stay-block in a skeleton post to form an extended bearing for the upright piece *a* that is bent over the stay-block, is novel and greatly advantageous in that it prevents short bends and breaking of fiber in the main pieces *a*, and helps to spread and stiffen and strengthen that part of the complete post that is subject to the greatest strain when it is fixed in the ground to support fence boards and rails of various kinds.

d d represent devices that serve as washers on the bolts, nails, or spikes that are used to secure the pieces *a* to the stay-blocks and to each other. They also serve as a means of securing fence-wires to the posts. They may be stamped from plate-metal, and vary in form and size. Their edges may be scalloped and the points bent outward to serve as barbs for preventing animals from pushing and breaking a fence.

Fig. 2 is a perspective view of one of my skeleton posts in which four square strips of wood, *a*, are combined by means of a graduated series of stay-blocks, 1 2 3.

f f represent ferrules, preferably made of heavy wire, fixed on the connected ends of the strips *a*, to bind them firmly together.

Fig. 3 is a cross-section of one of my posts, showing the strips attached to the opposite and parallel edges of a stay-block. Fig. 4 shows the corners of the block cut out and the strips fitted in. Fig. 5 is a modified form of stay-block in the shape of a Greek cross, composed of two uniform pieces of wood fixed together in a crossed position to produce angular bearings in the corners of the complete block, into which the strips can be readily placed and secured. Fig. 6 is a perspective view of a section of fence, and illustrates the manner of using my open or skeleton wood posts to support fence-boards, fence-wires, and flexible barbed wood rails.

The wood in skeleton-truss form posts thus constructed of thin pieces can be more readily permeated with lime, copperas, alum, creo-

sote, or other suitable preserving materials than posts made from solid and thicker pieces; and it may be so permeated and made practically decay-proof and fire-proof before or after the pieces are combined.

I am aware that metal bars have been connected by means of a graduated series of stay-pieces or cores having recesses corresponding to the size and shape of the bars, and metal hoops corresponding in size with the cores, to produce tapering and skeleton telegraph-poles.

I am also aware that metal rods and bars have been passed through and inclosed in a graduated series of metal stay-pieces, and their ends then connected to form a metal fence-post similar in form and appearance to my wooden post; but fence-boards and wires cannot be fastened to such metal posts in a common way by means of nails and staples.

By substituting wooden bars for metal bars and solid wooden blocks for perforated metal stays, and allowing the solid wooden blocks to form part of the outside surface of the complete post, nails and staples can be readily driven into such a wood surface for the purpose of fastening thereto fence-rails of every kind.

The surface and bulk of my improved wooden post are greater, and its weight and cost much less than a skeleton metal post or solid wooden post of corresponding strength; and when the pores of the wood are filled with preservative matter, as contemplated, it will be as durable as iron and more durable than a solid wooden post that has its pores not filled with preservative matter from surface to center.

I claim as my invention—

1. In the construction of a fence-post, the elongated re-enforcing strip *c*, with a solid wooden stay-block, and a wooden strip and side piece, *a*, substantially as shown and described, for the purposes specified.

2. As an improved article of manufacture, a skeleton wooden fence-post, as distinguished from skeleton metal posts composed of wooden side strips, *a*, re-enforcing strips *c*, and a series of stays, 1 2 3, for the purposes specified.

THOMAS G. ORWIG.

Witnesses:
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