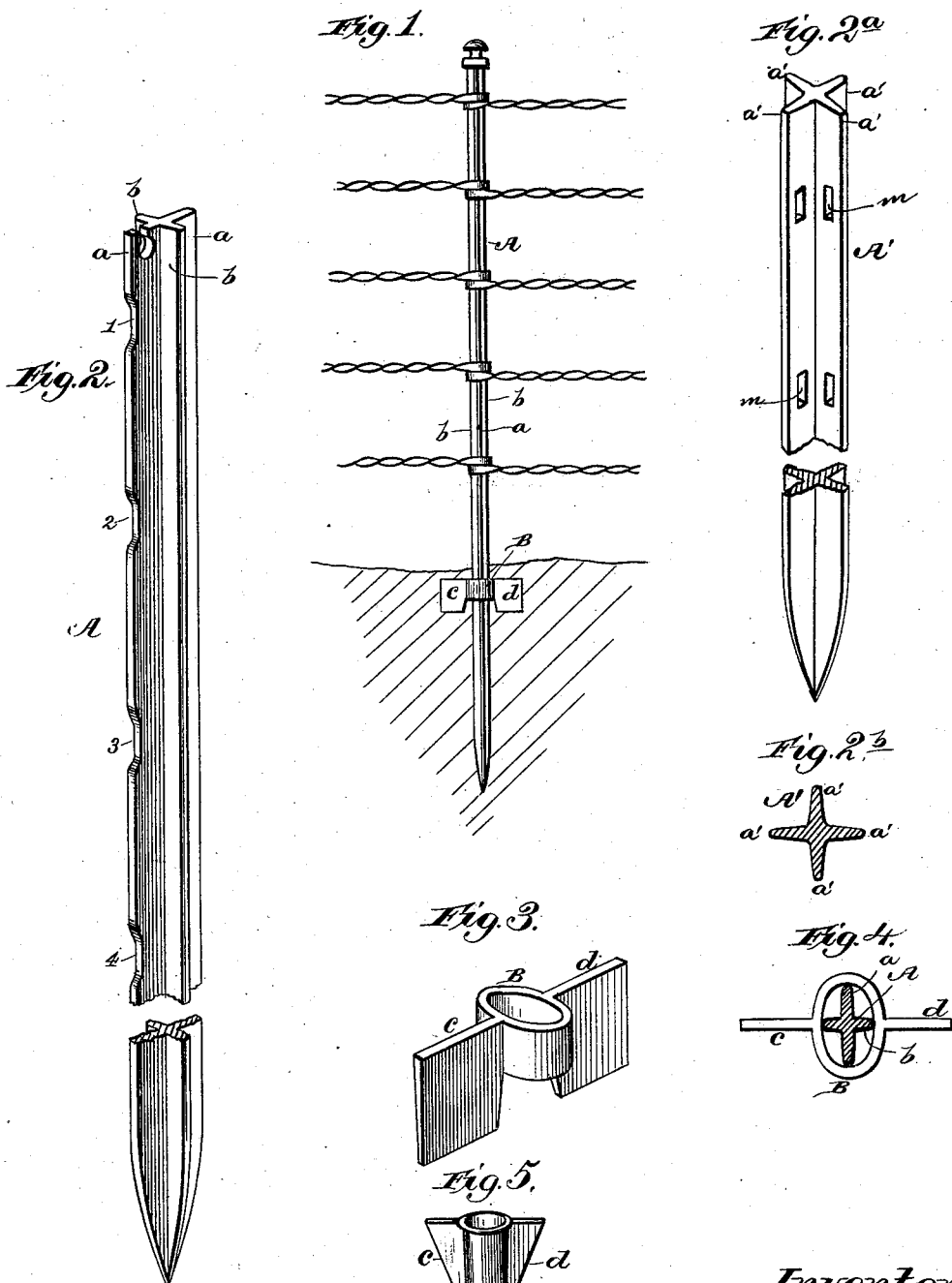


P. HAYDEN.
METALLIC FENCE POST.

No. 261,346.

Patented July 18, 1882.



Witnesses.

Robert Emmett

J. A. Rutherford

Inventor:

Peter Hayden.

By James L. Norris,
Atty.

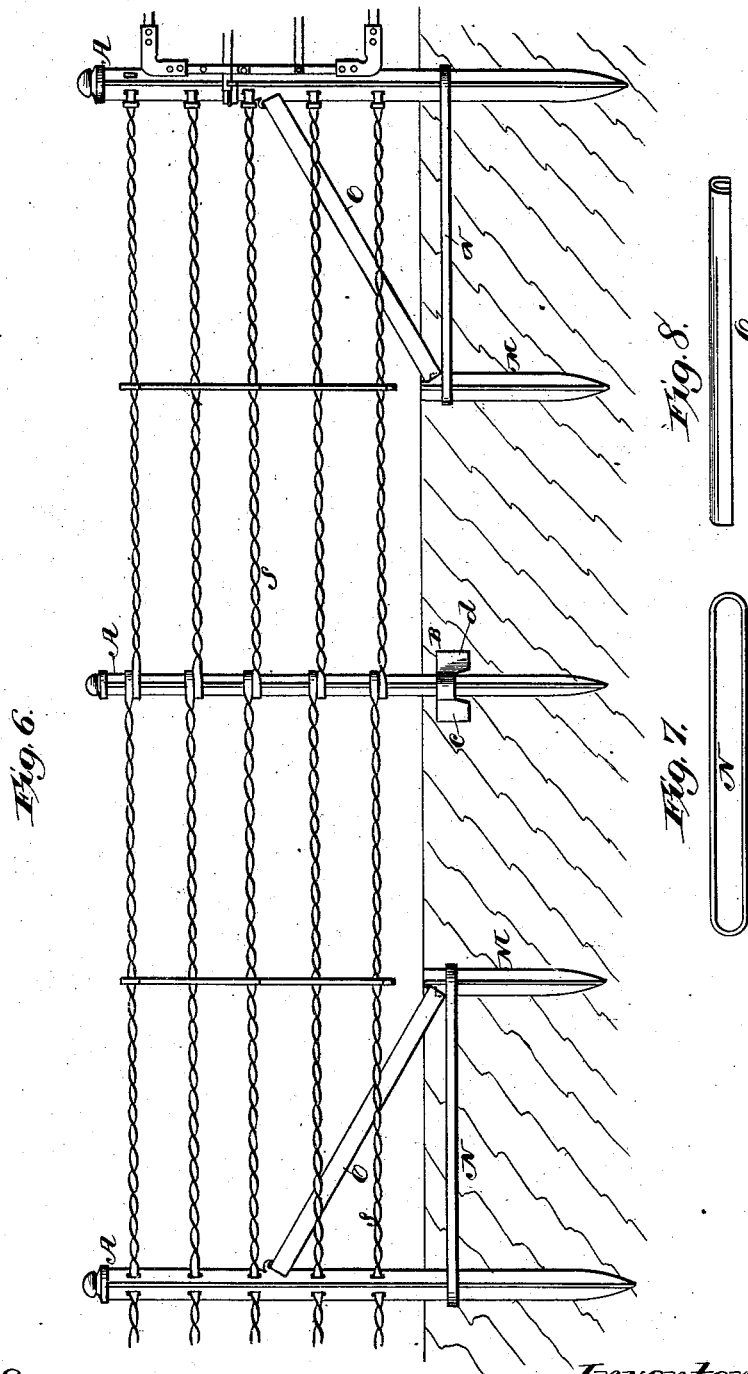
(No Model.)

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UNITED STATES PATENT OFFICE.

PETER HAYDEN, OF NEW YORK, N. Y.

METALLIC FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 261,346, dated July 18, 1882.

Application filed May 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, PETER HAYDEN, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Metallic Fence-Posts, of which the following is a specification.

This invention relates to improvements in iron fences, and has for its object to provide efficient means for bracing the end and the gate posts. This object I accomplish by devices illustrated in the accompanying drawings, in which—

Figure 1 is an elevation showing a portion of a steel-strand or all-iron fence with my improved post, having the stiffening-sleeve in position. Fig. 2 is a perspective view of said post removed from the ground and disconnected from the strands. Fig. 2^a is a perspective view, showing a modified form of construction of the post illustrated in Fig. 2. Fig. 2^b is a transverse section of Fig. 2^a. Fig. 3 is a perspective view of the stiffening-sleeve detached. Fig. 4 is a horizontal section taken in a plane passing through the stiffening-sleeve and post. Fig. 5 is a view of a modified form of the stiffening-sleeve. Fig. 6 is an elevation of a portion of an all-iron or steel-strand line of fence, illustrating the manner of bracing the end and the gate posts. Fig. 7 is a plan view of the link for connecting the post with the end-brace stub. Fig. 8 is a detail showing the end brace detached.

A in the drawings indicates the post, which is constructed of iron. It consists of a solid plate or bar, *a*, having upon one or both sides a central rib, feather, or strengthening-strip, *b*, extending longitudinally from end to end of the post. These ribs are formed at right angles to the plate *a*, or thereabout, and, while they are of about equal thickness, they are of considerably less width than said plate, as shown in Fig. 4. One edge of the plate *a* is notched at regular intervals, as shown at 1 2 3 4, Fig. 2, the number of these notches corresponding with the number of strands to be used in forming the fence. These strands are looped once around the post, as illustrated in Figs. 1 and 6, and lie in the notches, whereby they

are secured against vertical displacement. At its lower end the plate *a* and its strengthening rib or ribs *b* are tapered to a point, so that the post may be easily driven into the ground.

When the post is in place it is evident it will be supported by the strands against all strain applied in the line of said strands.

Fig. 3 illustrates a stiffening-sleeve consisting of a central elliptical portion, *B*, having two plates or fins, *c d*, one upon each side, and both in the same plane with the minor axis of the central portion, *B*. The greatest diameter of the latter is equal to the width of the plate *a* of the post, and its measurement in the opposite direction is equal to the width of the strengthening-ribs *b*, so that when said sleeve *B* is slipped upon the post the plate *a* of the latter will stand at right angles to the plates *c d* upon the sleeve, as shown in Fig. 4. Being applied to the post in this manner, the sleeve is pushed up to such a point that when the post is driven the sleeve, with its plates *c d*, will be buried either even with or a little below the surface of the ground, the said plates having their entering edges thinner than the upper edges, to enable them to enter the soil with as little difficulty as possible. The post is to be driven with the plates *c d* parallel with the strands supported by the post. In this position not only is the broad plate *a* so arranged as to receive and resist strain or pressure from either side of the fence, but the plates upon the sleeve *B* also afford a broad and strong support to the post, preventing its displacement in both directions.

The sleeve *B* may be slipped over the post after the latter is driven, and forced into the ground by any convenient means. It should not be keyed or secured to said post, but left free to move vertically thereon, in order to prevent the frost from drawing the post upward, as it might if the sleeve were secured to it.

A modified form of construction of the stiffening-sleeve is shown in Fig. 5, in which the plates *c d* have their outer edges tapered or beveled toward the central portion, *B*, which may be made of somewhat greater length than shown in Fig. 3, in order to enable said plates to be attached throughout their entire length.

The post A is preferably rolled, the notches 1 2 3 4 being formed by the rolls. It is evident, however, that it may be produced by other methods; but I prefer rolling, as being more expeditious and cheaper.

Instead of the form of construction shown in Fig. 2, I may use the modified form of post illustrated in Fig. 2^a and in Fig. 2^b, wherein the post A' is composed of four equal ribs or plates, a' a'. Each rib may increase somewhat in thickness from its edge toward the point of common intersection, as shown in Fig. 2^b. The strands S may be applied to it by entering mortises m, (see Figs. 2^a and 6;) or; instead of said mortises, the ribs a' may be notched, as seen in Fig. 2. The mortises, as well as the notches, may be rolled out during the construction of the post. Moreover, this form of post may be used either as an end or gate post or as an intermediate post, or both, the stiffening-sleeve B being applied in the manner already described in connection with Fig. 1.

In the construction of fences of this class it is necessary to provide means for stiffly bracing the end and gate posts, to impart the greatest possible strength and rigidity against the strain produced by the tight steel strands S, as well as against accidental thrust or tension acting in the same direction. For this purpose my invention provides the following simple and effective means: Let A', Fig. 6, indicate the end or the gate post in a line of fencing, each being constructed as shown in Fig. 2^a and Fig. 2^b, and already described. These posts being driven, a link, N, (shown in Fig. 7,) is slipped over each post and pulled toward the next small or intermediate post until the end of the link is drawn snugly up against the post, lying parallel with the line of the strands. In this position an end-brace stub, M, which is formed of metal, with four webs, like the posts A', is inserted within the link close to its farther end, and driven down until it is flush with the ground. This stub has its end cut squarely off, and one of its webs is notched or cut away at the top. In driving this notched web is placed next to the post to be braced. The post and stub, being thus driven with the link in place, are now ready to receive the end brace, O. This is shown detached in Fig. 8, and is composed of a metal plate bent longi-

tudinally into such form that its cross-section is U-shaped. It is applied to the stub M with its curved side uppermost, and is placed upon the notched web of the stub, the two arms of the U lying one on each side of the web, while the bent portion between them rests in the notch and bears against the cross-webs. The other extremity is then placed in a similar manner upon the central rib or web of the post A', and by means of a chisel a fin is turned or chipped down above the curved or bent portion of the brace, to prevent it from slipping up when the strain is applied. This method of bracing may be applied not only to end posts or gate-posts, but to corner-posts as well. In the latter instance braces are applied upon each side of the post and parallel with the lines of strands.

What I claim is—

1. In all-iron or steel-strand fences, the combination, with the end or gate posts, of a link connected at one end with said post near its bottom, a stub driven into the ground and connected with the other end of said link, and a brace abutting against the upper portion of the post and the upper end of the stub.

2. The combination, in an all-iron or steel-strand fence, with the end or gate posts, of a stub driven at a suitable distance therefrom and in the line in which strain is applied to the post, a link coupling said stub to the lower portion of the post, and an end brace abutting against the upper extremity of the stub and the body of the post, said end brace being U-shaped in cross-section and held in place by a fin turned down from the metal of said post, substantially as described.

3. The combination, with the end or gate posts, which are cruciform in cross-section, of the end stub, M, the link N, and the end brace, O, held in place on the post by turning down a fin thereon, the several parts being constructed and arranged substantially in the manner and for the purpose described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PETER HAYDEN.

Witnesses:

ADAM HILL,

GEO. S. HICKOK.