

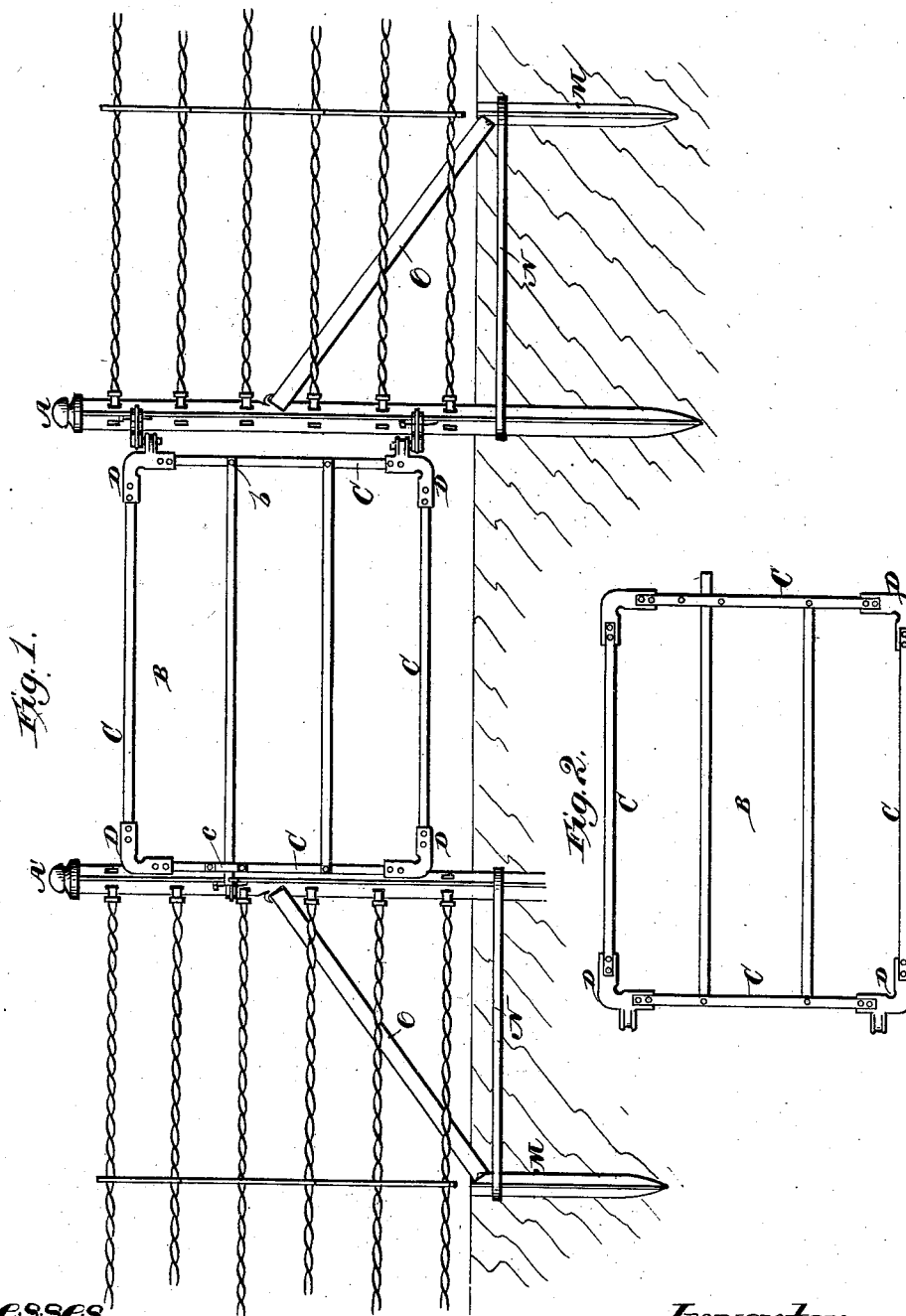
(No Model.)

2 Sheets—Sheet 1.

P. HAYDEN.
METALLIC GATE AND HINGE.

No. 261,345.

Patented July 18, 1882



Witnesses.

Robert Emmett
Leitch

Inventor.

Peter Hayden.

By James L. Norris.

Atty.

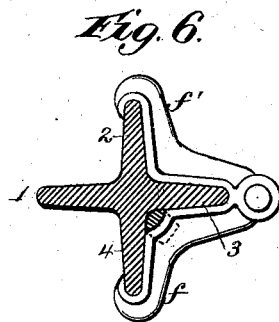
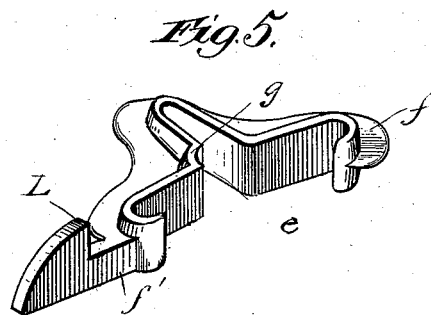
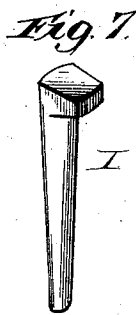
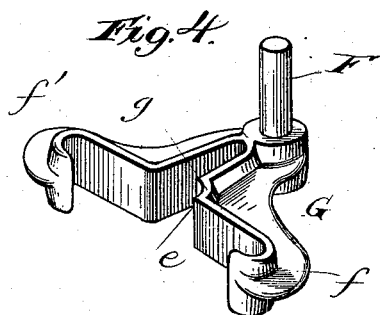
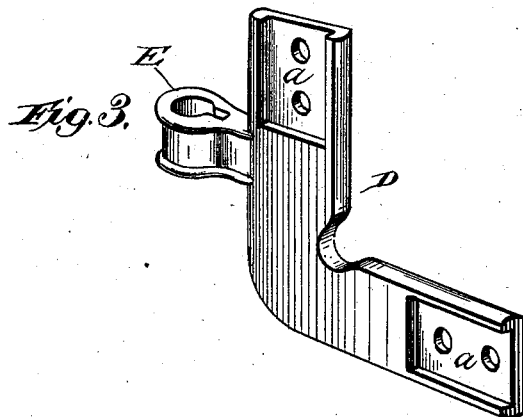
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2 Sheets—Sheet 2.

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Witnesses.

Robert Everett,
Witness

Inventor.

Peter Hayden.

By *James L. Norris,*
Att'y

UNITED STATES PATENT OFFICE.

PETER HAYDEN, OF NEW YORK, N. Y.

METALLIC GATE AND HINGE.

SPECIFICATION forming part of Letters Patent No. 261,345, 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 Gates and Hinges therefor, of which the following is a specification.

My invention relates to all-iron fences or fences composed of steel strands supported by iron posts, and has for its object to provide novel and efficient means for hanging the gate. This object I accomplish by the construction of parts illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a fence, including the gate-posts, showing the gate in place. Fig. 2 is an elevation of the gate detached, said view being taken from the rear side. Fig. 3 is a perspective view of one of the corner-pieces of the gate detached, showing the method of forming one part of the hinge. Fig. 4 is a view in perspective of the pintle of the hinge, together with the device for attaching it to the gate-post. Fig. 5 is a perspective showing the gate-catch with its attaching device. Fig. 6 is a cross-section of the gate-post, showing the hinge-pintle slipped on and fastened in place. Fig. 7 is a detail view of the key by which the gate-catch and hinge-pintles are fastened in place upon the posts.

A A' in the drawings indicate the gate-posts, which are constructed of iron, being rolled out into the form shown in section in Fig. 6, each post being composed of two plates of suitable thicknesses intersecting each other longitudinally at right angles, or thereabout, forming a post having four leaves, 1 2 3 4, of substantially the same shape and size, and all radiating from a common center. It will be readily seen that with posts of such form special devices are required for attaching the gate and its fastenings thereto.

B indicates the gate, which is composed of any desired number of straight bars, four of which form the outer frame, C, while the remainder are extended from side to side of said frame, and bolted thereto at their ends. The bars C are united in the required form by angle-plates D. (Shown in detail in Fig. 3.) These plates are formed in a single piece by casting in the form shown, each plate being sharply curved at or about at its middle point to an

angle of ninety degrees, and having the two ends recessed, as shown at *a*, to receive the ends of the bars C, which are secured by bolting through both the plate and the bar. These recesses *a* are formed upon the rear face of the angle-plate, and are of sufficient depth to receive the entire thickness of the bar, forming a flush surface at the point of attachment. Upon two of these plates I cast a part, E, of the gate-hinge, so that when the frame C is completed the female portions of said hinge are in position to receive the pintle. One of the interior bars, which extend from side to side of the gate-frame, is fastened to the vertical bar next to the hinges by a pivot-bolt, *b*, and its other end is confined by a keeper, *c*, a portion of the bar being allowed to project beyond the gate-frame to engage with the catch upon the gate-post A'. It thus serves the double function of a latch and one of the gate-strips.

The gate being thus constructed is ready to be attached to the post. In order to accomplish this, I mount the ordinary hinge-pintle, F, upon a clip or bracket, G, (shown in Fig. 4.) the whole being cast in one piece. The clip G has a central opening, *e*, corresponding in size and shape with any one of the four leaves of the post A, as 3, and adapted to receive said leaf, while the laterally-extending arms *f f'*, upon each side of the opening *e*, lie flat against the faces of the two adjacent leaves 2 4, their ends being hooked around the edges of each, as shown in Fig. 6. At the angle between the opening *e* and the arm *f* a portion of the bracket is cut away, forming a recess, *g*, adapted to receive a key, I, which is driven forcibly in when the bracket or clip G is in position upon the post, thereby locking the bracket in place with great security. In adjusting the gate the lower pintle is first applied to the post and locked in place. The gate is then raised, the lower portion of its hinge is slipped over the pintle, and the upper bracket is set on the post with its pintle inverted, and is dropped until the latter enters the upper hinge on the gate. The key I is then driven, and the operation is complete. By inverting the upper pintle all possibility of the gate being removed by lifting the hinges from their pintles is avoided. The gate-catch is applied to the opposite post in a similar manner. The catch L is cast upon a bracket

similar in all substantial respects to the brackets carrying the hinge-pintles. The form of construction is shown in Fig. 5, the catch L being cast upon one of the lateral arms *f* of the bracket and projecting horizontally in the same direction as said arm. It is applied to the post A' in the manner already described, with the exception that instead of being placed upon the side adjacent to the gate it is placed upon the farther side, as shown in Fig. 1, in order to prevent tearing of the clothes and possible injury of the person by its proximity to the path. It is more sightly, also, to leave the inner side of the post A' free from projections. Moreover, by applying the bracket upon the farther side of said post, I am able to extend the gate so that its edge laps over upon the inner flange of the post. I am thus enabled to construct a gate from straight strips or bars of iron, variations in size being effected by merely adjusting the length of the strips. The gate is of neat and substantial construction, and can be produced at a greatly diminished cost. Moreover, by my invention such gates may be hung and their fastenings applied to the iron posts of the peculiar form shown, and are not only secured in position with perfect strength and permanence, but may, if desired, be at any time removed by driving out one of the keys I in the pintle-brackets G.

The gate-posts A A' may be braced in the manner shown in Fig. 1 by driving an end-brace stub, M, even with the surface of the ground and at such a distance from the post

as to admit of a link, N, being set upon both the post and the stub. The end brace, O, is then applied, one end resting upon the stub M and the other against the post at or about its middle point. By this means great strength and rigidity are imparted to the supporting posts. This method of bracing, being fully described and claimed in another application filed of even date herewith, forms no part of the invention shown and described in this case.

What I claim is—

1. The combination of a metallic fence-post constructed with radial leaves, as described, and adapted to be driven into the ground, the cast-metal clip G, having a central opening, *e*, receiving one of the leaves of the post and provided with a recess, *g*, and lateral arms *f*, and the key I, inserted in the recess *g*, to cramp the leaves of the fence-post to the lateral arms *f*, substantially as described.

2. The combination, with the post having wings or webs 1 2 3 4, of the pintle and catch-brackets G and L, each being provided with a recess, *g*, and the locking-pin I, having two plane faces at right angles, and an outer curved surface fitting said recess, substantially as 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.