

(No Model.)

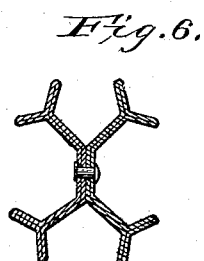
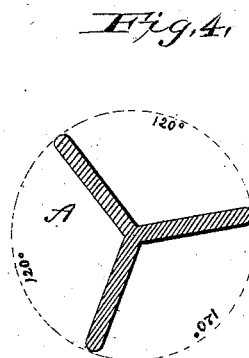
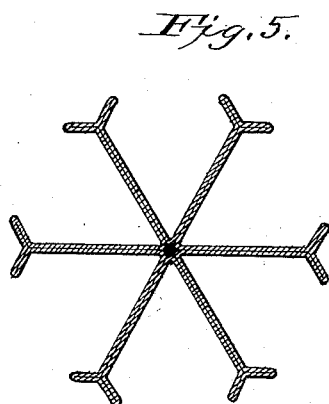
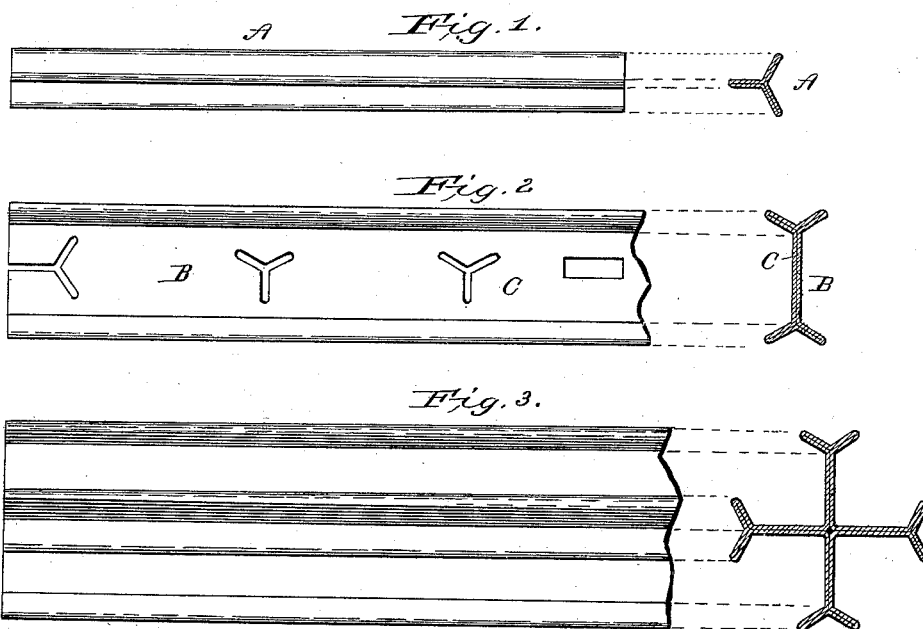
2 Sheets—Sheet 1.

W. H. COKER.

IRON FENCE.

No. 383,343.

Patented May 22, 1888.



Witnesses,
John S. Finch Jr.
Charles H. Davis.

Inventor,
Wm. H. Coker.
By *his Attorney,*
Wm. Alexander.

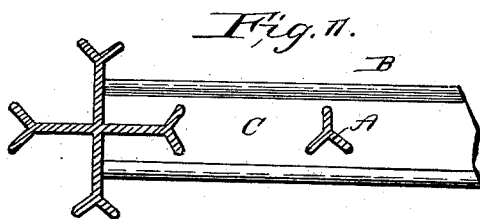
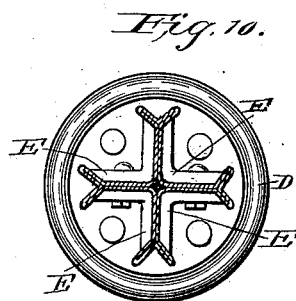
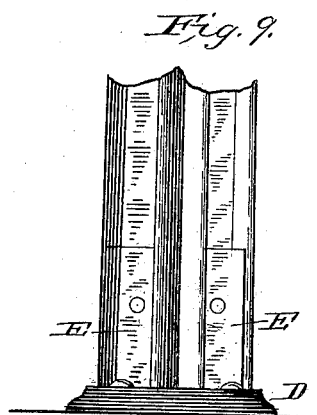
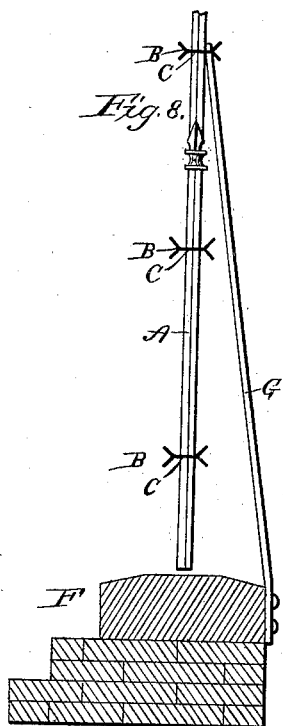
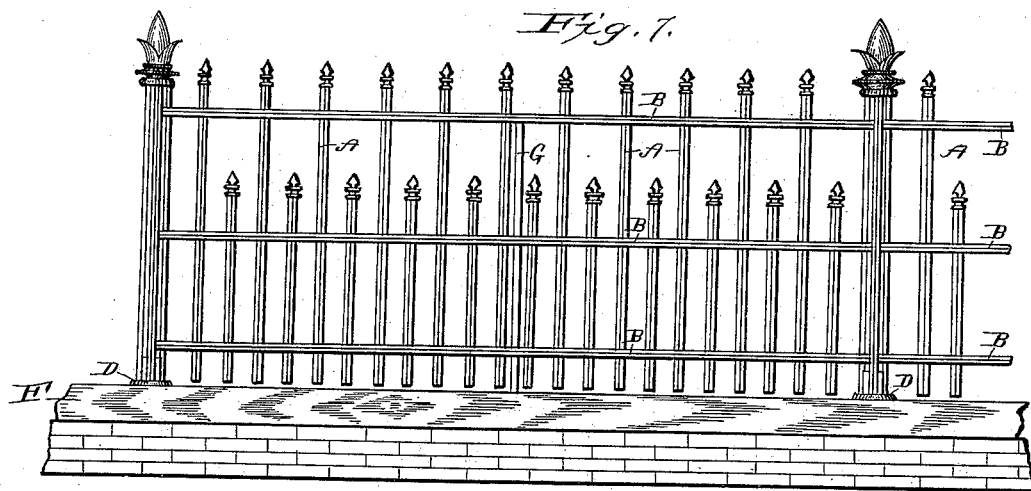
(No Model.)

W. H. COKER.
IRON FENCE.

2 Sheets—Sheet 2.

No. 383,343.

Patented May 22, 1888.



Witnesses
John S. French Jr.
C. H. Davis

Inventor,
William H. Coker
By his Attorney,
Wm. Alexander

UNITED STATES PATENT OFFICE.

WILLIAM H. COKER, OF MACON, GEORGIA.

IRON FENCE.

SPECIFICATION forming part of Letters Patent No. 383,343, dated May 22, 1888.

Application filed September 14, 1887. Serial No. 249,660. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. COKER, a citizen of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented certain new and useful Improvements in Iron Fences, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a side and sectional view of the simple strip particularly adapted for fence-pickets. Fig. 2 is a like view of a compound strip adapted for use as a fence-rail. Fig. 3 is a like view of a compound strip adapted for use as a fence-post. Fig. 4 is an enlarged section of Fig. 1, showing a slightly different construction. Figs. 5 and 6 are sectional views of different forms of posts. Fig. 7 shows the invention applied to a fence. Fig. 8 is a sectional view of the fence, showing one of the brace-rods. Figs. 9 and 10 are respectively a side elevation and sectional plan view of a foot-block for a post. Fig. 11 is a view illustrating the manner of attaching the fence-rail to the post.

My invention has for its objects to provide an extremely light and durable metallic fence, which will at the same time be highly ornamental in appearance and very strong and stable when once erected, as will be fully understood from the following description and claims when taken in connection with the annexed drawings.

The strip A shown in Figs. 1 and 4, and on which the construction of all the other parts is based, has three equidistant radial arms or flanges of equal or unequal lengths in cross-section. The strip may be rolled into form, and may be solid or formed of sheet metal or otherwise constructed. The preferred method of constructing these strips (which are used as pickets in the fence) so as to make them light and inexpensive is to form them out of a single strip of sheet metal cut the required width and bent and folded upon itself, and pressed into shape by suitable dies or formers, the contiguous faces of the metal being pressed closely in contact, as shown clearly in Fig. 1. The construction of the strip is such, as will be evident from the drawings, that a strain from any direction will be resisted by one of the flanges

in an edgewise direction or by two of the flanges meeting in V shape, either of which strongly resists departure from their normal shape.

In Fig. 2 is shown a fence rail, B, formed of two strips, A A, having two of the flanges joined together, so as to form a web, C, with V-shaped ends, which may have variously-shaped pieces punched out of it, as plainly shown in the plan, Fig. 2.

The apertures or slots made in the webs of the rails are similar in shape to the pickets, and are for the purpose of receiving them, the pickets being forced into the slots, which are cut so as to fit the pickets snugly and hold them in place in the rails. The ends of these rails are also slotted for the purpose of receiving the flanged vertical edges of the posts, the slots being cut to fit and clamp the webs of the posts tightly and be thereby supported.

In Figs. 3 and 5 several strips A, with one of the flanges of each elongated and all joined at a common center, are used to form a fence-post with a multiple-part web.

In Fig. 6 two rails such as shown in Fig. 2 are joined at the center of the web by rivets or otherwise to form a compound web, and the ends, bent outward, forming a strong post or rail.

The rails and posts are all preferably constructed in a similar manner to the pickets A—that is, are formed of strips of sheet metal cut to a suitable width and folded longitudinally, and pressed into shape by dies or formers, the contiguous faces of the metal being pressed closely together.

In Figs. 9 and 10 is shown a bed-block for the posts, which consists of a base-plate, D, having lugs or standards E raised thereon to embrace the webs of the posts and be firmly secured thereto by bolts or otherwise. These blocks may be secured to a coping, F, (shown in Figs. 7 and 8,) or be fastened in any other manner to firmly support the fence-posts.

The fence may be further supported by brace-rods G, one end of which may pass through one of the rails B.

In putting the fence together the posts first receive the rails, and then the pickets are inserted through the holes prepared for them; or the rails and pickets may be placed together before being secured to the posts; but in either

case, or after the entire panel or panels are put together, they are dipped in acid, and then in a galvanizing material to galvanize and cement them together. However, other fluids or processes may be used, the fence, or part thereof, being put together before being treated. The galvanizing material closes the joints and solders the pickets and rails together.

In addition to the advantages of strength, lightness, and cheapness possessed by the constructions described may be mentioned that of ornamentation, as a fence even in its simplest form, as shown in Figs. 1, 2, and 3, will present a pleasing appearance.

It will be understood that ornaments of various kinds may be applied to different parts of the fence, and that other forms and modifications than those shown may be used.

It will be perceived that an essential feature of my invention consists in so slotting the ends of the horizontal rails that they will embrace the flanged radial wings of the posts, the slots in the ends of the rails being of such a width that they will, when the rails are forced to the proper position on the posts, closely and firmly clamp the radial flanged wings of the same. By this construction the rails will not only be supported by the posts, but they will be securely attached to them, thus insuring a very strong and firm fence when the panels are all connected together and erected, as is evident. The galvanizing material will serve to further secure the parts of the panel in position.

Having described the invention, what I claim is—

1. The metallic fence-panel herein described, consisting of the posts provided with radial flanged wings, the horizontal rails each consisting of a web provided on its longitudinal edges with two diverging flanges, the ends of the said rails being provided with slots, which are cut to embrace and closely clamp the radial flanged wings of the posts in the manner described, whereby the said rails are supported

by the posts and securely attached thereto, and the three-winged pickets supported by the said rails, substantially as described.

2. A fence-post consisting of the longitudinal radial wings, each of the said wings being provided on its longitudinal edge with two diverging flanges, the said post being constructed of sheet metal bent longitudinally and folded upon itself, as shown, the contiguous faces of the metal being pressed into intimate contact, substantially as described.

3. The herein-described fence-rail, consisting of a strip of metal bent longitudinally and folded upon itself with its contiguous surfaces pressed closely in contact, the sheet being so bent as to form a web, C, provided on its longitudinal edges with two diverging flanges equidistant from each other and the web, substantially as described.

4. The herein-described metallic fence-panel, consisting of the posts constructed of radial wings, the longitudinal edges of which are each provided with two diverging flanges, the rails B, each consisting of a web, the edges of which are also provided with two longitudinal diverging flanges, the webs of the said rails being punched or perforated for the reception of the pickets and slotted at their ends to engage or embrace the flanged edges of the radial wings of the post, and the pickets inserted in the perforations in the webs of the rails, and each consisting of three radial wings equidistant from each other, the several parts of the panel being constructed of strips or sheets of metal bent longitudinally and folded upon themselves with their contiguous faces pressed into intimate contact, all arranged substantially as herein described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. COKER.

Witnesses:

J. L. WATSON,

J. G. WILBURN.