R. C. STEWART.

CONSTRUCTION OF POSTS.

APPLICATION FILED JULY 15, 1909.

958,334.

Patented May 17, 1910.

Fig. 1.

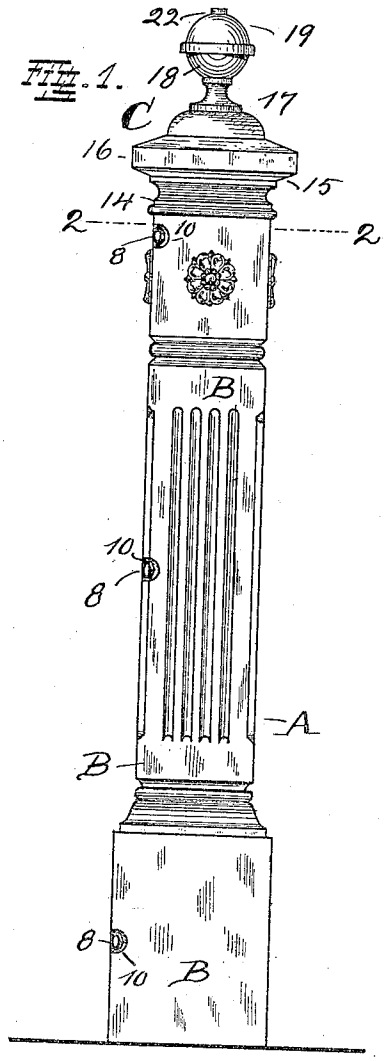


Fig. 3.

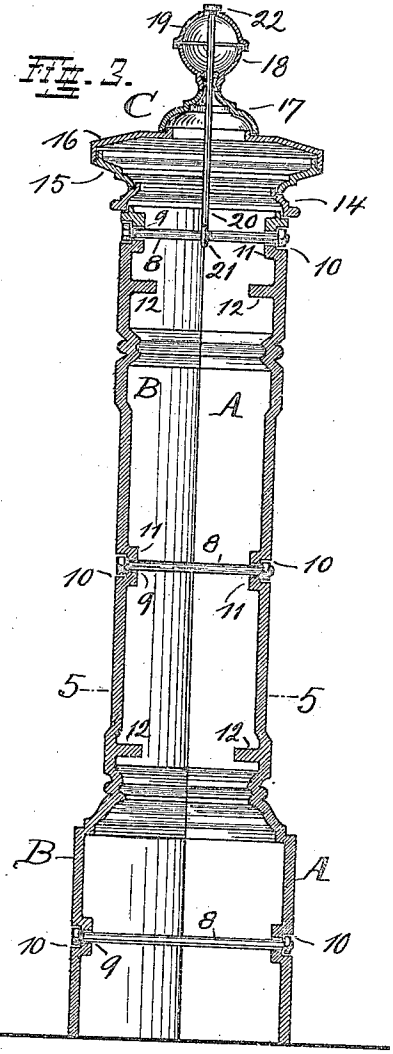


Fig. 2.

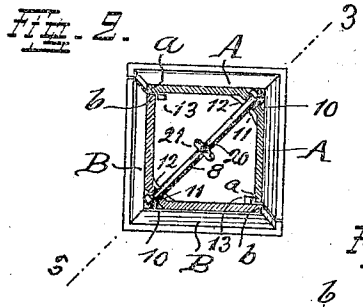


Fig. 4.

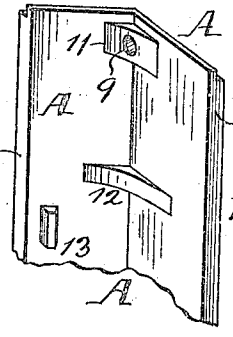


Fig. 5.

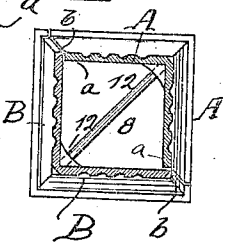
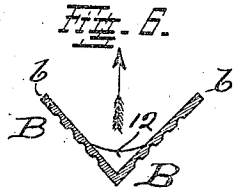


Fig. 6.



Witnesses.

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CONSTRUCTION OF POSTS.

958,334. Specification of Letters Patent. Patented May 17, 1910.

Application filed July 15, 1909. Serial No. 507,686.

To all whom it may concern:

Be it known that I, RICHARD C. STEWART, a citizen of the United States, and residing at Covington, Kenton county, State of Kentucky, have invented certain new and useful Improvements in the Construction of Posts; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawing, with the reference characters marked thereon, which forms also a part of this specification.

This invention relates to improvements in the construction of posts, particularly such used in connection with fences and when made of cast-metal.

It concerns further such posts which are polygonal and the sides of which are more or less ornamented. Such posts, when made of cast-metal have been cast hollow, to reduce their weight and to avoid the unnecessary use of material which a solid post would require without increasing the strength proportionately. They have also been cast in vertical sections to be connected against each other to form the post. When the sides of such posts are ornamented, which is generally the case, the preparation of the mold for these sectional castings is somewhat complicated, since the possibility of withdrawal of the patterns from the sand must be considered.

The object of my invention is to construct such a post of two vertical parts of substantially equal length and adapted to be connected against each other to form the post complete, the vertical division of the posts being so arranged that the resultant parts of which it is made up, together with any ornamentation on them, assume a shape which admits of being readily cast in molds which may be formed without requiring a complicated arrangement.

In the following specification and particularly pointed out in the claims at the end thereof, will be found a full description of my invention, together with its parts and construction, which latter is also illustrated in the accompanying drawing, in which:—

Figure 1, is an elevation of my post constructed as contemplated by my invention. Fig. 2, is a horizontal section of this post on a line indicated at 2—2 in Fig. 1. Fig. 3, is a vertical section of the post, taken on a diagonal plane, indicated at line 3—3 of Fig. 2. Fig. 4, in a perspective view shows the upper end of one of the two complementary parts of which the post is made up. Fig. 5, is a horizontal section similar to Fig. 2, but taken at a different height and as indicated by line 5—5 in Fig. 3. Fig. 6, shows one of the parts as shown in Fig. 4, it might also be the pattern for it and the position in which the same appears while in the mold.

As before alluded to, my invention concerns only posts of polygonal profile-section and I have illustrated the construction thereof in connection with a four-cornered post, the four sides A, A, B, B, of which, between these corners, are ornamented as shown. Such a post is made up of two complementary sections of substantially equal height and so shaped that the vertical edges of one of these sections come together with the corresponding opposite edges of the other section, when they are assembled and connected to form the post, at two corners diagonally apart. From this it follows that all the sides of the post are contained in these two sections, a number of them being in one section and the rest of them being in the other section; the adjoining sides at two of the corners being joined, while the sides at all the other corners are integrally connected. Accordingly, this case illustrating a four-sided post, the sides A, A, are contained in one section, having narrow free edges *a*, *a* and the sides B, B, are contained in another section having narrow free edges *b*, *b*, each section being made in form of an integral casting. No complicated molds are required to form these castings and the patterns may be readily withdrawn from the sand notwithstanding any ornamentation on the sides of the post and contained in the casting. Observe in this connection Fig. 6, which shows the position of the pattern in the mold, the arrow indicating how it may be withdrawn therefrom.

When the post is to be formed, its two complementary sections are placed against each other at their free edges as best shown in Figs. 2 and 5, butt-joints being formed in each case, that is to say the narrow free edge of one of the sides of one casting contacts with the other casting at the inner side of one of the sides thereof to which it is to be joined and inside of the free edge of this side. A joint-interstice directly upon the apex of the corner is thus avoided, and the division line between the two sections does

not coincide with the corner-line proper but occurs slightly to one side thereof and at a distance equal to the thickness of the metal of the casting so that an intact corner results.

In the arrangement shown in Fig. 2, the two sections are exactly alike and of the two edges of each section, one butts against the innerside of one of the sides of the other section, while the other free edge forms one of the corners. Thus for instance referring to Fig. 2, one of the narrow edges *a* of section A, forms the corner of the post shown at the upper left of said figure, while the corner of the post shown at the lower right is formed by one of the free edges *b* of section B.

In the arrangement shown in Fig. 5, the corners of the post at both of the joints are formed by the free edges of one of the sections, it being the edges *b*, *b*, of section B. The other corners between and intermediate these corners at the joints, are formed in both cases by the integral apex where adjoining sides in a section come together in the casting, there being no other joints. The complementary castings intended to make up a post after so positioned are connected by tie-rods 8 extending from one of the integral corners of one of the sections to an integral corner of the other section. Their ends are seated in openings 9 in the metal at the integral corners and held there in any suitable way. They may be screw-rods with heads, bolts with heads and nuts, or rods with rivet-heads formed at their opposite ends. These heads, nuts, or other equivalent enlargements provided at the ends of these rods, to complete the connection, are seated in recesses 10 provided in the integral corners to prevent their projection beyond the outside of the post. This results in a formation as shown at 11, metal being provided across the corners on the inside to form the bottoms of these recesses. This metal also acts as braces to re-inforce the corners of the sections.

Additional braces may be provided as shown at 12. Stops 13 to facilitate the placing of the sections in proper position may also be provided in the form illustrated in Fig. 2.

The head C of the post to be placed upon the upper ends of its connected sections and as to its exterior appearance may be variously formed, more or less ornamental. It is sub-divided horizontally into sections in a manner permitting each section to be conveniently cast.

In the case shown, 14 and 15, indicate the throat-forming members of a coping or cap 16 upon which rests a base 17, which supports a ball consisting of two sections 18 and 19, all the sections being arranged to meet and fit each other properly where they come together, the lowermost section also fitting the upper open end of the post. They are all held in position on each other and on the upper end of the post by an anchor-tie rod 20, held to the post by the upper one of tie-rods 8, the connection between them being made by a loop 21, through which said tie-rod is passed while being placed in position. After the various sections of the top are placed in position, a nut 22 is applied to the upper projecting end of anchor-rod 20. The extreme end of the rod beyond the nut may be riveted to prevent the latter from turning, or a rivet-head may be formed without the use of a nut. Equivalent substitute means may be used to connect rod 20 to rod 8.

When the post has more sides than four, the construction is the same, it being divided on a line coincident with one of the diagonals while the tie-bolts are located in another diagonal at an angle to the diagonal on which the post is divided. In each case two joints only result at corners diagonally opposite each other and the two resulting complementary post-sections may be readily cast, particularly if ornamented or fluted on their outside, because all the sides in a section assume an angular position with reference to their bed in the mold and none of them are parallel to the direction in which the pattern is withdrawn from the sand, which withdrawal would otherwise be prevented by reason of the ornamentation. (Observe Fig. 6.) This possibility of convenient formation of molds permits also the castings to be formed of reduced thickness so that less metal may be used without detriment to strength and durability.

Having described my invention, I claim as new:

1. A hollow polygonal post, consisting of two complementary, cast-metal sections, each of which contains a number of straight post-sides angularly arranged and ornamented on their outside, the sections being fitted to each other at their free longitudinal edges, one of which, at each joint to be formed, constitutes also one of the corners of the post, the other edge being spaced from this corner-forming edge equal to the thickness of the metal and located within and flush with the plane of the particular side of the post and means to hold the two post-sections to each other.

2. In post construction, two cast-metal sections, each containing a number of angularly arranged post-sides which are of limited thickness and ornamented on their outside, the sections being side-wise fitted to each other so as to meet at diagonally opposite post-corners, tie-bolts to hold these sections to each other to form a hollow post open at its upper end, a top fitted to this upper end so as to close it and a tie-rod

which holds this top in place by connecting it to the upper one of the tie-bolts.

3. A hollow, polygonal post made up of two cast-metal sections each containing a number of angularly disposed sides of limited thickness and ornamented on their outside, the sections being fitted to each other at their free edges, one of which, at each joint, forms also one of the corners of the post, there being stops spaced inwardly from each of these particular edges, equal to the thickness of the metal, which form shoulders against which the other edge is fitted so as to meet the corner-forming edge properly and means to hold the two sections to each other.

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

RICHARD C. STEWART.

Witnesses:

C. SPENGEL,

T. LE BEAU.