J. W. ALTMYER.

METALLIC FENCE POST.

APPLICATION FILED AUG. 14, 1908.

946,093.

Patented Jan. 11, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

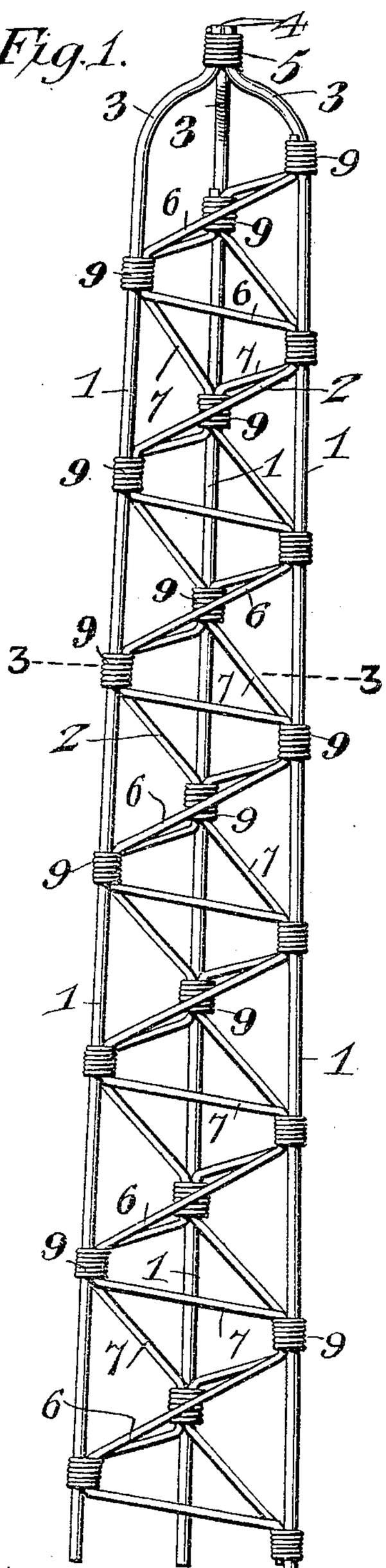


Fig. 2.

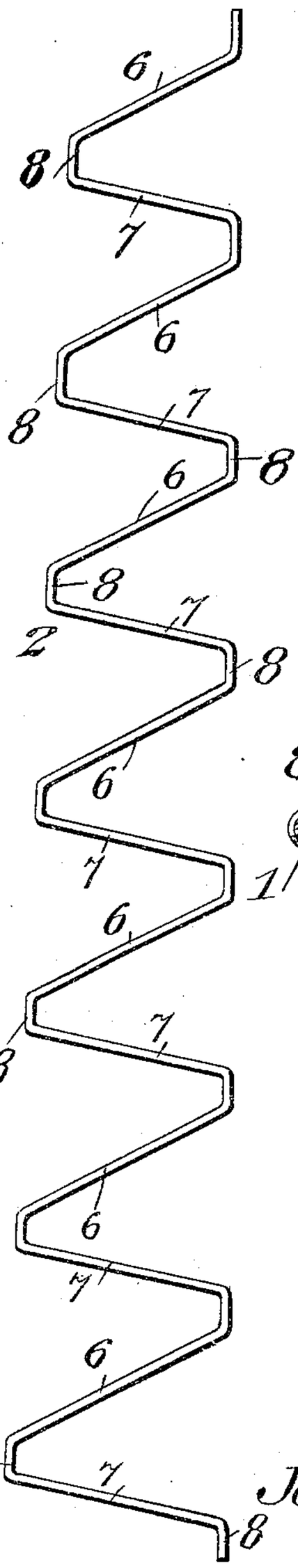
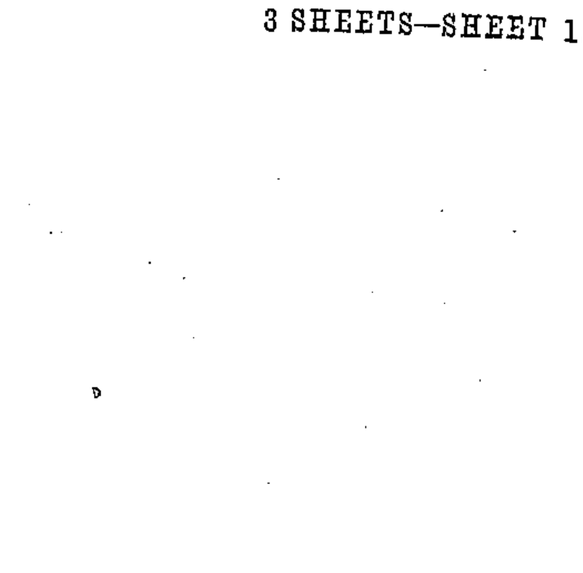


Fig. 3.



Witnesses

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Fig. 4.

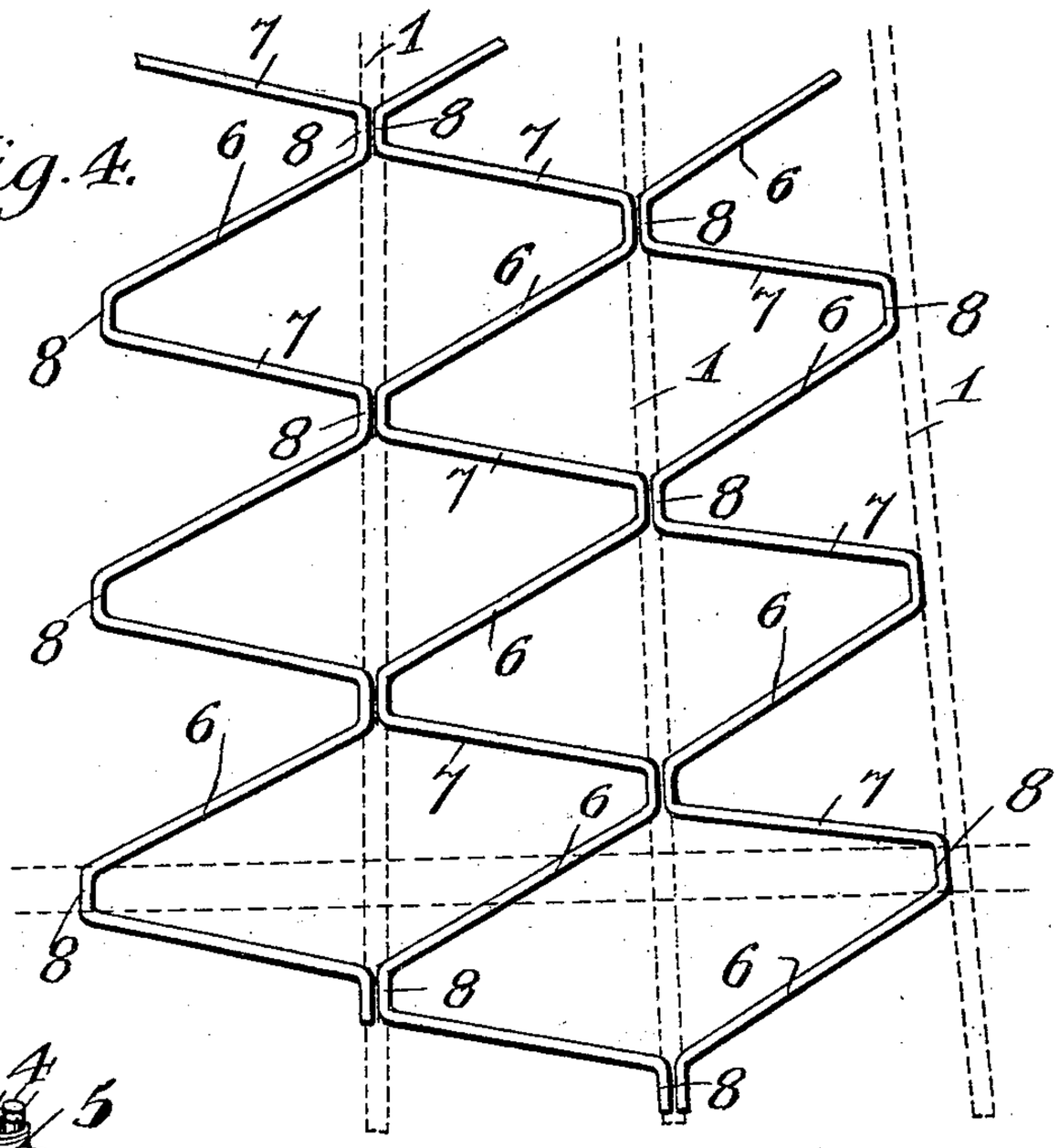


Fig. 5.

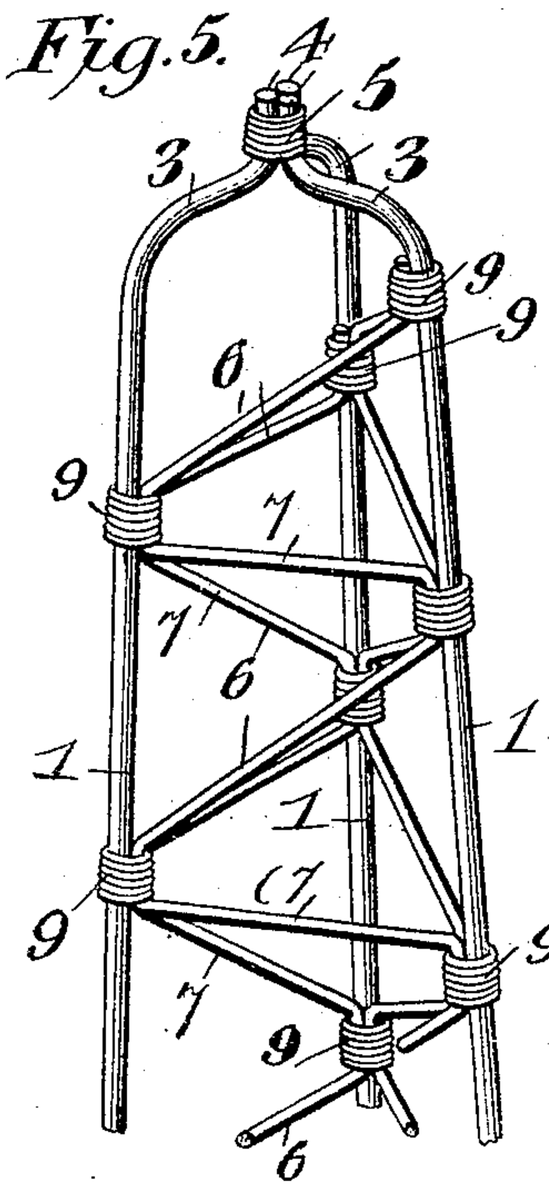


Fig. 6.

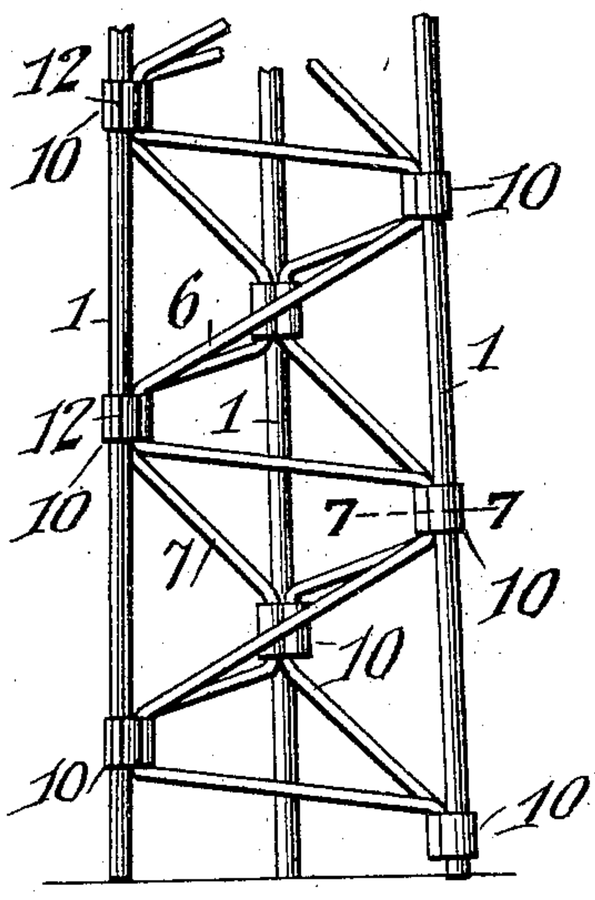
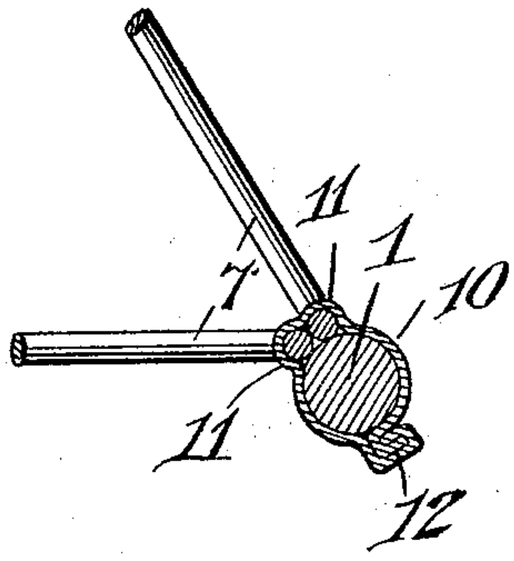


Fig. 7.



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3 SHEETS—SHEET 3.

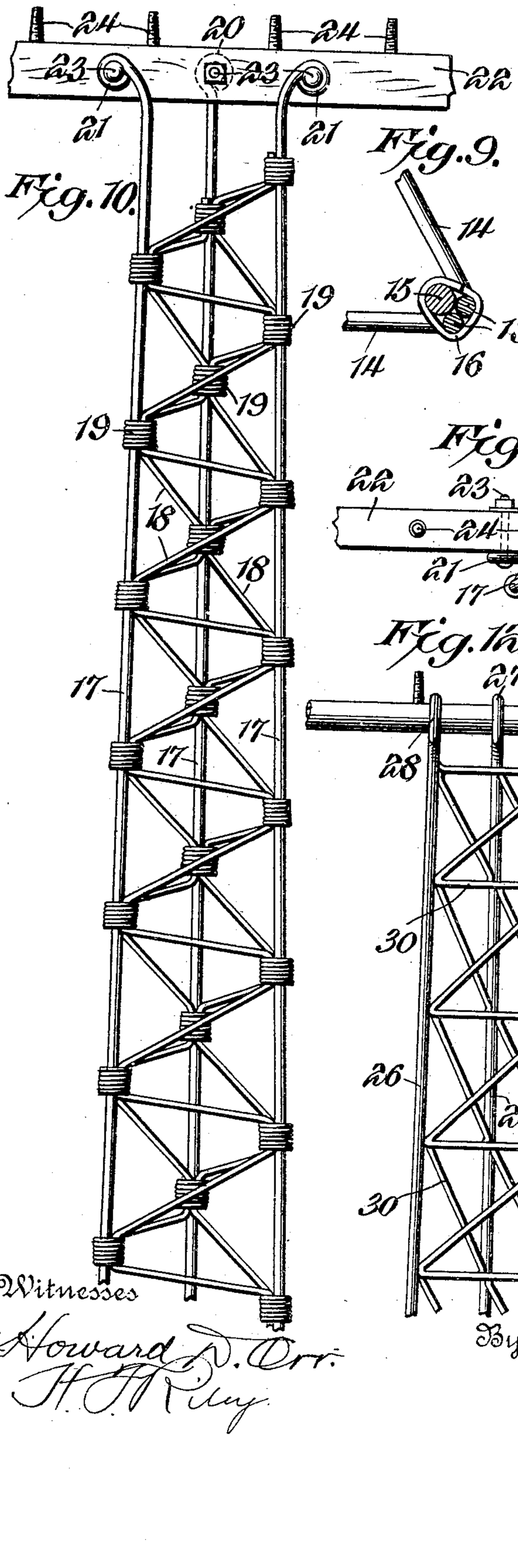

Fig. 10.

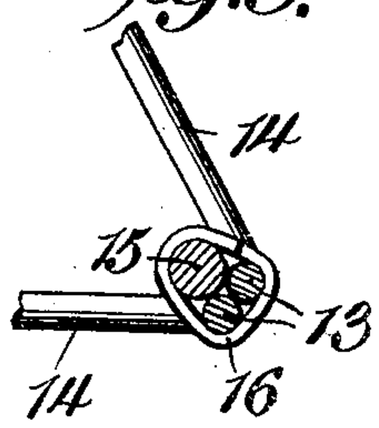

Fig. 9.

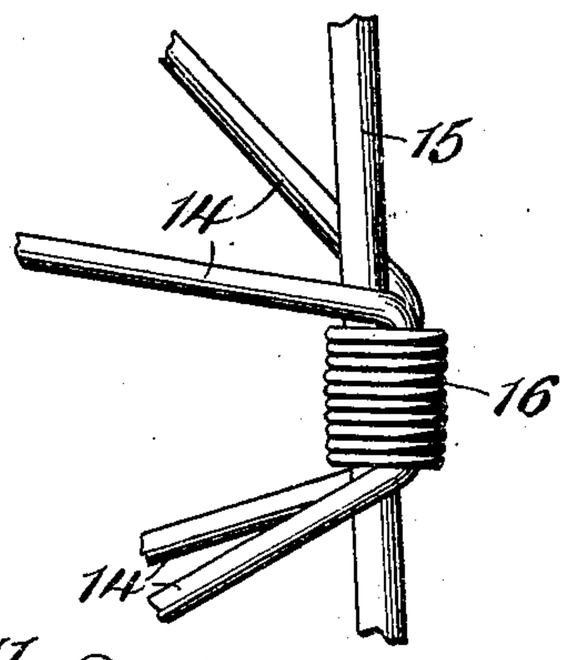

Fig. 8.

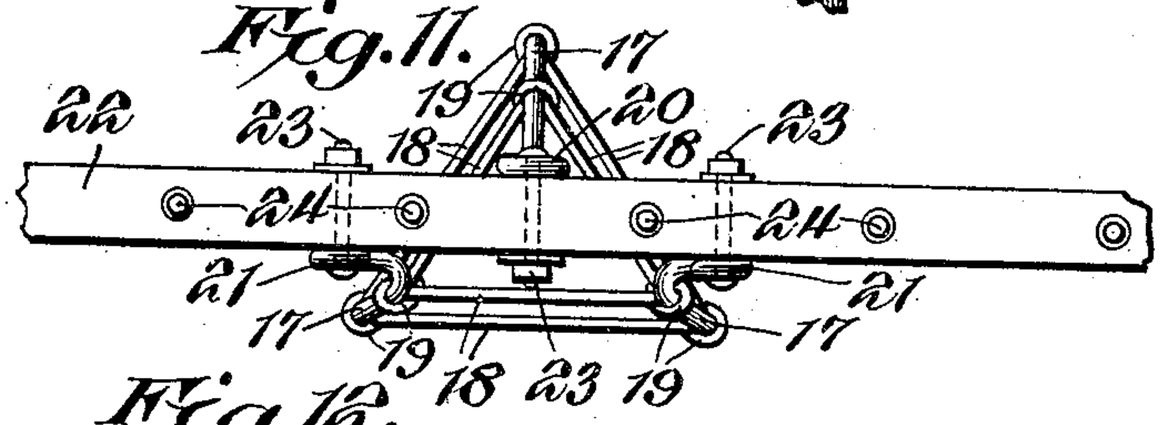

Fig. 11.

Fig. 12.

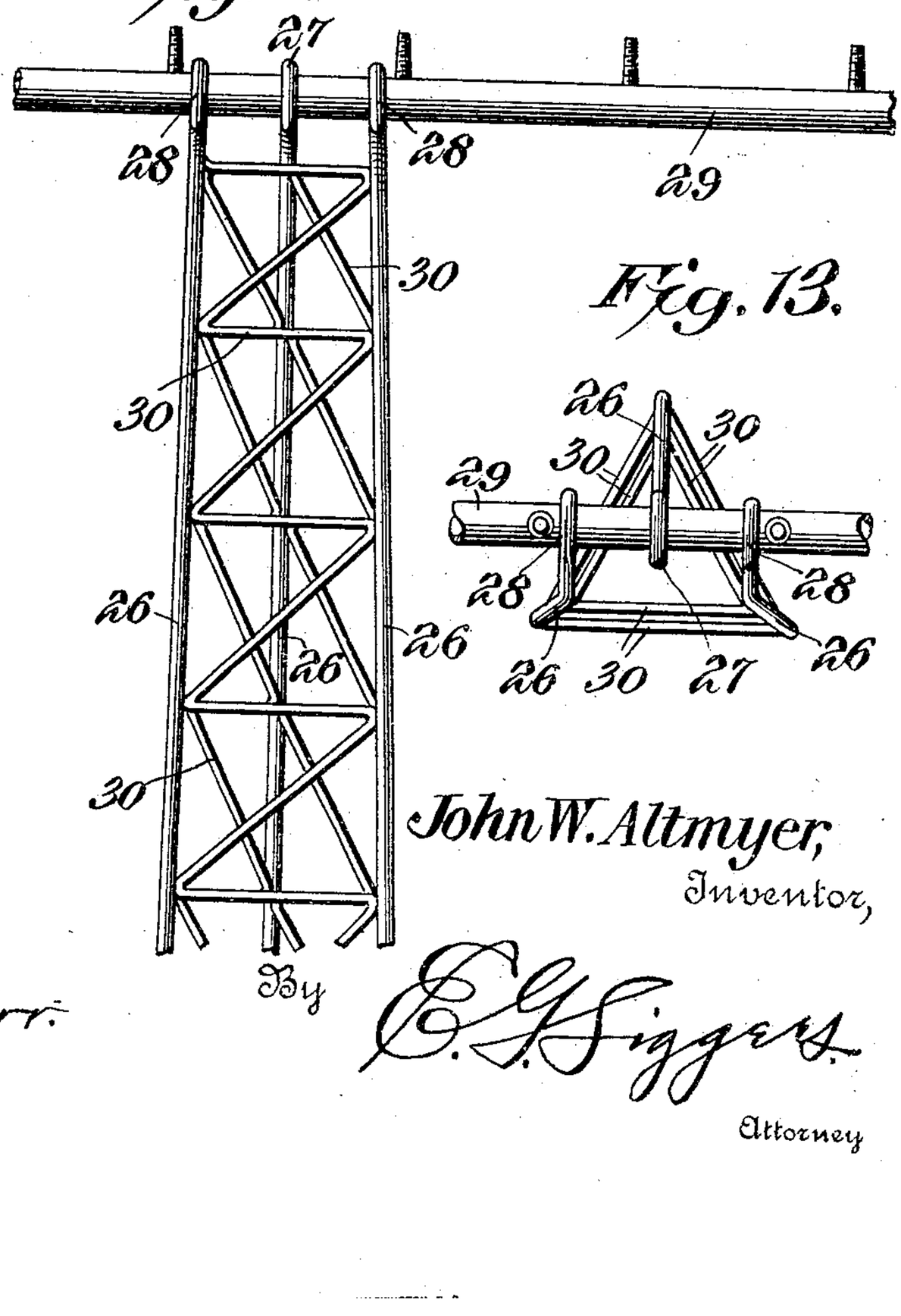

Fig. 13.

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UNITED STATES PATENT OFFICE.

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METALLIC FENCE-POST.

946,093. Specification of Letters Patent. Patented Jan. 11, 1910.

Application filed August 14, 1908. Serial No. 448,602.

To all whom it may concern:

Be it known that I, JOHN W. ALTMYER, a citizen of the United States, residing at Central City, in the county of Linn and State of Iowa, have invented a new and useful Metallic Fence-Post, of which the following is a specification.

The invention relates to improvements in metallic fence posts.

The object of the present invention is to improve the construction of metallic fence posts, and to provide a simple and comparatively inexpensive post construction, adapted to obtain a maximum strength with a minimum amount of metal, and capable of being advantageously employed in the construction of fence posts, telegraph and telephone poles, and the like.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is an elevation of a fence post, constructed in accordance with this invention. Fig. 2 is a detail view of one of the bracing members. Fig. 3 is a horizontal sectional view, taken substantially on the line 3—3 of Fig. 1. Fig. 4 is an elevation, showing a portion of the bracing members in a spread-out condition, the upright members being illustrated in dotted lines. Fig. 5 is an enlarged perspective view of the upper portion of the post. Fig. 6 is an elevation of a portion of the post, illustrating a modification of the invention, metallic binding sleeves being substituted for wire binding sleeves. Fig. 7 is an enlarged horizontal sectional view on the line 7—7 of Fig. 6. Figs. 8 and 9 are detail views, illustrating the manner of securing the vertical connecting portions of the bracing members to the corner uprights at the outside thereof. Fig. 10 is an elevation of a pole braced, as shown in Fig. 1 and equipped with a wooden cross tree or bar to adapt it for use as a telegraph or telephone pole. Fig. 11 is a plan view of the pole illustrated in Fig. 10. Fig. 12 is an elevation of the upper portion of a post or pole, illustrating the manner of supporting a metallic horizontal cross tree or bar. Fig. 13 is a plan view of the post or pole shown in Fig. 12.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

The metallic fence post, which is triangular in cross section, as clearly illustrated in Fig. 3 of the drawings, is provided at the corners with uprights or members 1, which are connected at intervals by zigzagly bent bracing members 2. The corner uprights, which may be constructed of stout wire, or other suitable material to adapt the structure for use either as a fence post or telegraph or telephone pole, are preferably converged upward to form a tapering post, and their top portions 3 are inclined upwardly and inwardly and united at the center of the top of the post, the terminals 4 being arranged vertically and fitted against each other and secured together by a binding sleeve, consisting of spiral coils 5 of wire. The bracing members are each constructed of a single wire of less diameter than the corner uprights or members, and the contiguous bracing members abut together and against the corner uprights at the inner sides thereof, the abutting contiguous portions being arranged in pairs, as hereinafter fully explained. Each bracing member is bent to form alternate long and short inclined braces 6 and 7 and short substantially vertical connecting portions 8, spacing the inclined braces. The short upright connecting portions 8 of the contiguous braces are arranged in pairs, and the members of each pair fit against each other and against the contiguous corner upright, as clearly illustrated in Fig. 3 of the drawings. In the form of invention illustrated in Figs. 1 to 5 inclusive of the drawings, the abutting vertical connecting portions 8 are secured to the corner uprights 1 by means of spaced binding sleeves 9, consisting of coils of wire encircling the uprights and the vertical portions of the bracing members, as clearly shown in Fig. 3 of the drawings. This construction provides an exceedingly cheap post or pole of great strength and durability, adapted to

be easily constructed and requiring only a minimum amount of metal.

The vertical connecting portions of the contiguous bracing members coincide, and the joints or connections successively occur at the several corner uprights or members at different elevations, as clearly shown in Fig. 1 of the drawings. The lowermost joint in the said figure is at the lower end of the right hand upright or member, and the next joint occurs at the left hand corner upright, and the third joint is located at the corner upright or member appearing in Fig. 1 between the right and left hand corner uprights or members. The long and short braces enable the joints to accurately occur at regular intervals, so that each joint of each corner member will be located opposite the intervals between the joints of the other two corner members. The relative arrangement of the three bracing members is illustrated in Fig. 4 in a spread-out condition in order to show more clearly the alternate arrangement of the long and short braces.

In Figs. 6 and 7 of the drawings is illustrated a modification of the invention, in which metallic clamps 10 consisting of sleeves of sheet metal, or other suitable material, are employed for securing the short substantially vertical connecting portions of the braces to the corner uprights. The clamps consist of a substantially cylindrical body portion embracing the corner uprights, and an extension 11 receiving the bracing members and adapted to hold the same in contact with each other and against the corner uprights. The edges of metal of the clamps are united by a seam 12, located at the outer side of the upright and formed by bending or folding the edges on each other.

In Figs. 8 and 9 of the drawings is illustrated a method of bracing by which the vertical connecting portions 13 of the bracing members 14 are arranged exteriorly of the corner upright 15. The bracing members are fitted together and against the outside of the corner upright, which is interposed between the angularly related bracing members, as clearly shown in Fig. 9 of the drawings, and the said vertical connecting portions are secured together and to the corner upright by means of a binding sleeve 16 of wire, wrapped as clearly shown in Fig. 8 of the drawings. The braces 14 are composed of alternately arranged long and short inclined portions and upright connecting portions similar to those heretofore described.

In Figs. 10 and 11 of the drawings is illustrated a post or pole, composed of corner posts 17 and bracing members 18, constructed and arranged similar to the bracing members 2 and secured to the corner uprights by sleeves 19. The upper ends of the corner uprights are coiled or otherwise bent to form central and side eyes 20 and 21 for supporting a horizontal wooden cross tree or bar 22. The upper portions of the corner uprights are bent inwardly in substantially a horizontal direction to arrange the eyes 20 and 21 in the same horizontal plane and to position the said eyes properly with relation to the horizontal cross tree or bar 22, which is secured to the eyes by bolts 23. The cross tree or bar is equipped at its upper edge with supports 24, adapted to receive insulators in the usual manner.

In Figs. 12 and 13 of the drawings is illustrated a modification of the invention in which the corner uprights 26 are provided at their upper ends with central and side eyes 27 and 28, arranged in alinement and receiving a metallic cross tree or rod 29, which is passed through the eyes 27 and 28. The upper portions of the corner uprights are bent inward above the bracing members 30 to arrange the eyes in horizontal alinement, and the metallic cross tree or bar 29, which is preferably constructed of tubular metal, is secured in the eyes of the corner uprights in any preferred manner. The bracing members 30, which are zigzagly bent, are composed of inclined and horizontal portions, which may be secured to the corner uprights in any preferred manner. The horizontal portions of the free bracing members occur at regular intervals and at the same points along the corner uprights so that the said horizontal portions form a continuous belt or triangular frame for connecting the said uprights.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A metallic post angular in cross section and comprising corner uprights, zigzagly bent bracing members arranged vertically between the uprights and including alternately arranged inclined braces connected by upright portions arranged in pairs and abutting against the inner side of the corner uprights and against each other, and means for securing the abutting portions of the bracing members to the uprights.

2. A metallic post angular in cross section comprising corner uprights, zigzagly bent bracing members including alternately arranged long and short inclined braces and upright connecting portions, the upright connecting portions of the bracing members being arranged in pairs and abutting against the corner uprights, and means for securing the upright portions of the bracing members to the corner uprights.

3. A metallic post angular in cross section comprising corner uprights, and zigzagly bent bracing members connecting the corner uprights and including long and short inclined braces, said bracing members having contiguous abutting portions secured to the

corner uprights to form spaced joints or connections, the joints or connections of each upright being located at points opposite the intervals of the joints or connections at the other upright.

4. A metallic post angular in cross section comprising corner uprights, and zigzagly bent bracing members connecting the corner uprights and including long and short inclined braces, said bracing members having contiguous abutting portions secured to the corner uprights to form spaced joints or connections, said joints or connections occurring successively at the corner posts or uprights at different elevations.

5. A metallic post angular in cross section comprising corner uprights, zigzagly bent bracing members connecting the corner uprights and consisting of alternately arranged inclined portions and upright connecting portions spacing the inclined portions and fitted against each other and against the corner uprights, and means for securing the upright portions of the bracing members to the corner uprights.

6. A metallic post angular in cross section composed of corner uprights, and zigzagly bent bracing members connecting the uprights, said uprights being provided at their upper terminals with eyes, and a cross tree or arm supported by the eyes of the corner uprights.

7. A metallic post angular in cross section composed of corner uprights, and zigzagly bent bracing members connecting the uprights, the latter having their upper terminals bent inwardly above the bracing members and provided with central and side eyes arranged in the same horizontal plane, and a horizontal cross tree or bar supported by the eyes.

8. A metallic post angular in cross section composed of corner uprights, and zigzagly bent bracing members connecting the uprights, the latter having their upper ends provided with central and side eyes arranged in spaced relation and disposed in the same horizontal plane, and a cross tree or member arranged between and secured to the said eyes.

9. A metallic post angular in cross section and composed of corner uprights provided at their upper ends with central and side eyes arranged in spaced relation and disposed in the same horizontal plane, a cross tree or member arranged between the said eyes, bolts passing through the eyes and securing the cross tree or member to the corner uprights, and braces connecting the said uprights.

10. A metallic post angular in cross section and comprising corner uprights, zigzagly bent bracing members composed of alternately arranged inclined portions and connecting upright portions spacing the inclined portions and fitted against each other and against the corner uprights, and binding sleeves consisting of wire wrapped around the upright portions of the bracing members and around the contiguous portions of the uprights.

In testimony, that I claim the foregoing as my own, I have hereunto affixed my signature in the presence of two witnesses.

JOHN W. ALTMYER.

Witnesses:

ED. LECLERE,

A. T. MINEHART.