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J. KLOVRZA

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MAST

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FIG. 1

FIG. 2

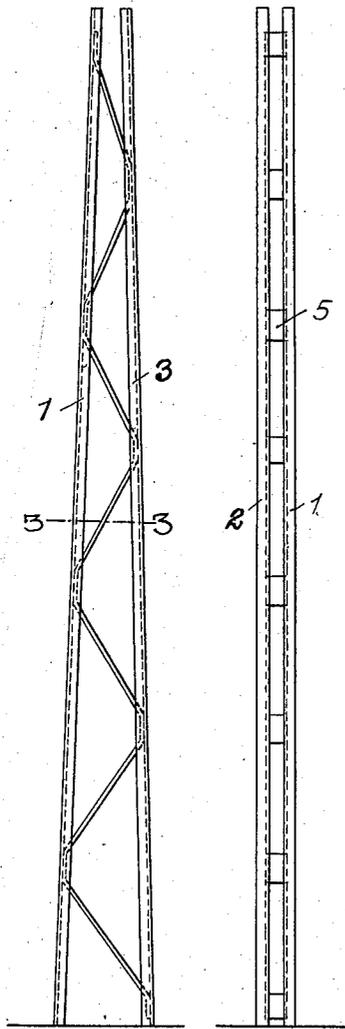
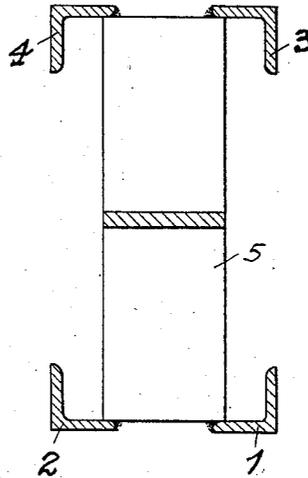


FIG. 3



Inventor  
Josef Klovza  
by B. Singler *Att'y*

# UNITED STATES PATENT OFFICE

JOSEF KLOVRZA, OF JUNDIAHY, BRAZIL

## MAST

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This invention relates to improvements in masts.

The object of the invention is to make a mast, particularly suitable for supporting electric conductors of metallic elements to enhance its rigidity without unduly increasing its weight.

Another object of the invention is to provide a mast for the purpose described which will be sufficiently flexible under the action of wind pressure or similar strains to present resiliency without being subject to breakage.

Another object of the invention is to provide a mast of this character which can readily be assembled from a plurality of relatively light weight elements and which after assembly will present resistance against excessive strains acting thereon in any direction.

With these and numerous other objects in view an embodiment of the invention is described in the following specification, in which reference is made to the accompanying drawings.

In the drawings:

Fig. 1 is a front elevation of the mast;

Fig. 2 is an end elevation of the same, and

Fig. 3 is a horizontal cross-section on line 3—3 of Fig. 1, on a larger scale.

The improved mast, post or column is preferably made up of four longitudinal members, preferably in the form of angle irons, as indicated at 1, 2, 3 and 4, and positioned relatively to each other to form the outline of a truncated pyramid whose sides are at right angles to each other. The apices of the angle irons constitute the edges of the pyramid, and the angle irons are spaced in pairs, so that the pairs 1, 3 and 2, 4 respectively constitute the two converging sides of the pyramid, while the pairs 1, 2, and 3, 4 respectively constitute the narrow side of the pyramid, the last mentioned side being substantially of uniform width over the entire height of the post.

In order to maintain the corner members 1, 2, 3, 4 in suitable relation to each other, a web member 5 is located in the space confined by said corner members, said web member extending alternately and diagonally

from each pair 1, 2 of said corner members to the opposite pair 3, 4 and back again. This web member 5 is formed in the embodiment illustrated of a flat bar bent back and forth between the pair 3, 4 and the pair 1, 2 of the corner members, the longitudinal distance between the recurring bends increasing from one end of the post towards the other.

At the bent portions the web member 5 is flattened out to engage over a substantial length the inner surfaces of the tips of those flanges of angle irons 3, 4 and 1, 2 respectively which are directed towards each other, and at these points of engagement the web 5 is secured to these flanges. It will be noted that the space between the tips of the flanges of the angle irons 1, 2 or 3, 4, which are directed towards each other is less than or equal to the width of the web member 5. Where the web member 5 engages these angle irons, it is secured to the same in any suitable manner, as for instance by welding.

I claim:

A mast comprising four vertical angle irons spaced from each other and a single flat bar bent back and forth and forming a continuous diagonal web connecting the spaced angle irons in pairs with each other, said angle irons forming the corners of a mast rectangular in cross section and their flanges being directed towards each other, the bends of said flat bar being flattened to engage alternately the inner sides of oppositely arranged pairs of flanges of said angle irons over a substantial length, each pair of flanges thus engaged by a flattened bend of said bar being directed toward each other.

In witness whereof I affix my signature.

JOSEF KLOVRZA.