June 17, 1924. 1,498,176

M. LACHMAN

TAPERED METAL POLE

Filed March 22, 1920

Fig. 1.

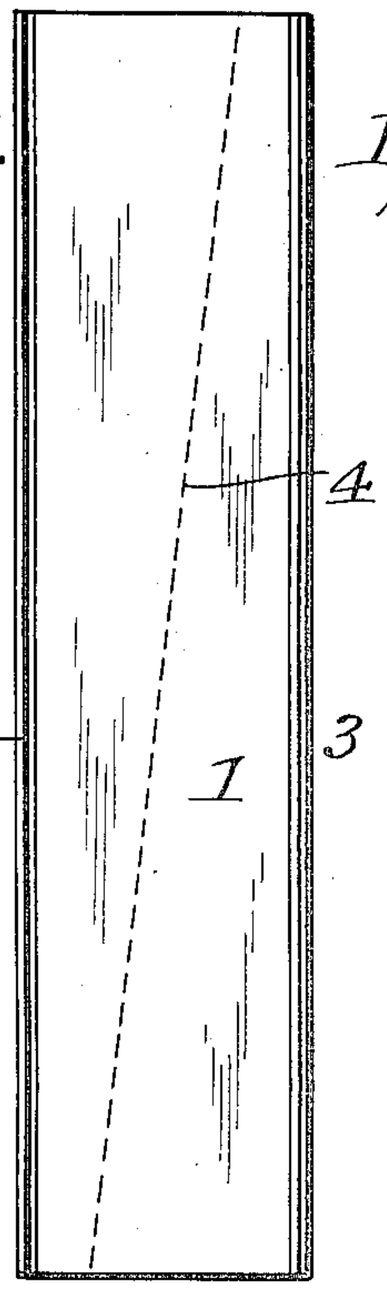


Fig. 3.

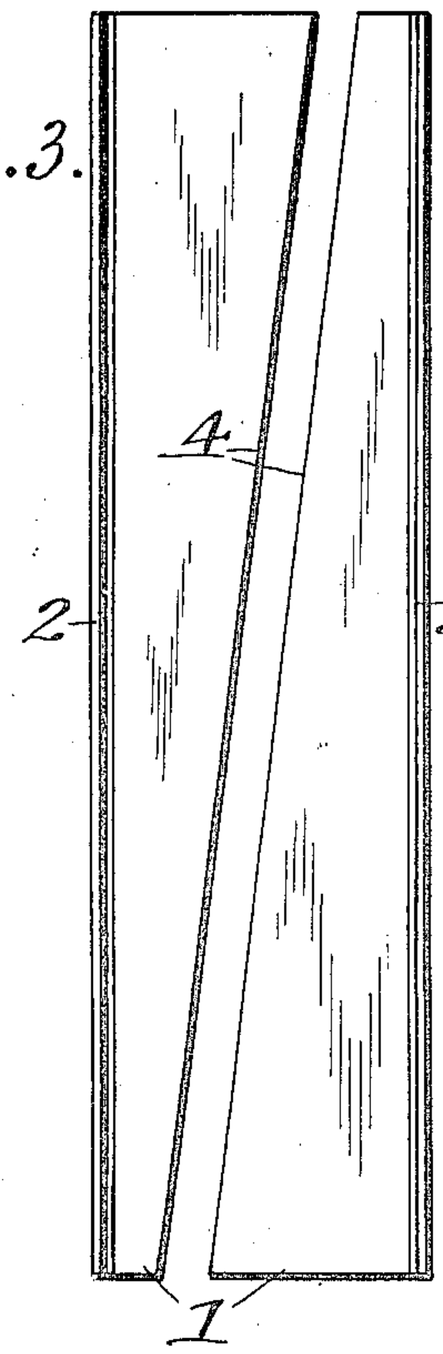


Fig. 4.

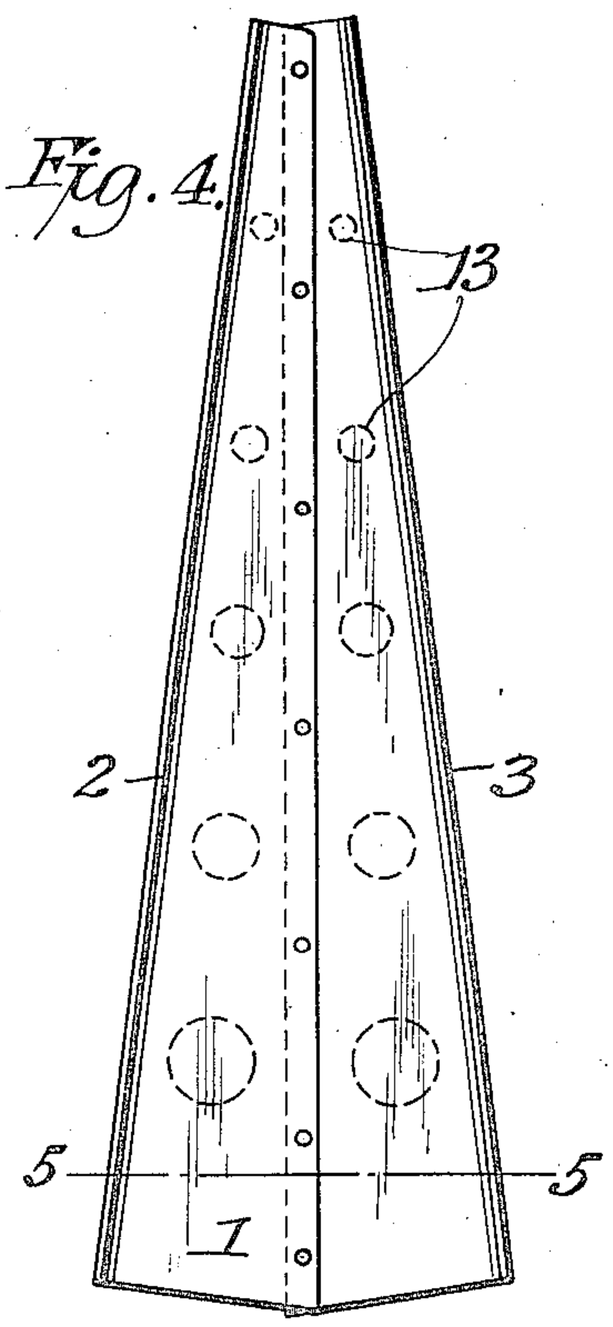


Fig. 2.

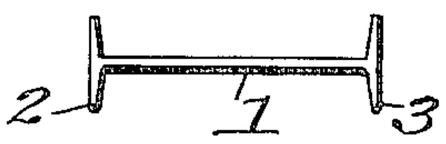
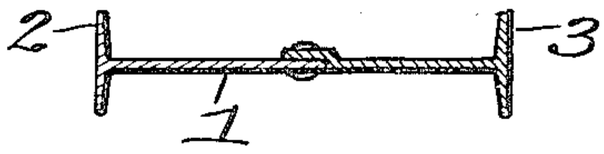


Fig. 5.



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UNITED STATES PATENT OFFICE.

MAURICE LACHMAN, OF NEW YORK, N. Y., ASSIGNOR TO ELECTRO STEEL PRODUCTS CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TAPERED METAL POLE.

Application filed March 22, 1920. Serial No. 367,739.

To all whom it may concern:

Be it known that I, MAURICE LACHMAN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Tapered Metal Poles, of which the following is a specification.

My present invention relates to the manufacture of tapered metal telegraph, transmission and other poles and its object is to simplify the method of manufacturing and the construction of such poles and thereby lower the cost of the finished article.

The invention relates more particularly to poles in which the body or main central portion consists of a web or plate having a flange at both edges of the said web integral therewith.

The form of pole to which my invention more particularly relates may be otherwise stated to be, in its preferred form, of a form resembling an I-beam in cross-section with a web tapering from the base up or, in other words, having a web of lessening width at sections of the pole made at different heights.

One of the special objects of my invention is to utilize for the construction of a pole of this character flanged structural shapes known commercially as flange and I-beams or plates usually made in a rolling mill and having the web part, as is well known, of substantially uniform width in such way that the metal constituting the web of said I-beam shall constitute the tapering web of the finished pole while the double flanges at the edges of the I-beam shall constitute the double or other flanged edge or side of said tapered pole.

The invention consists in the method of manufacturing the pole as well as in the construction of the pole as hereinafter described and then specified in the claims.

In the accompanying drawings, Fig. 1 is a side elevation of a length of rolled flanged section utilized in carrying out the invention.

Fig. 2 is an end view of the same.

Fig. 3 is a view similar to Fig. 1 after the section has been divided into two component parts.

Fig. 4 is a side elevation of the finished pole.

Fig. 5 is a cross-section taken on the line 5—5 of Fig. 4.

In carrying out the invention a rolled section such as an I beam is preferably employed although it will be understood that other rolled sections having flanges along the longitudinal edges may be employed. In the drawings such a section is indicated having a web 1 and flanges or T's 2, 3 along each longitudinal edge. The size, proportions and weight of beam is determined upon according to the conditions required in the finished pole as will be obvious to those skilled in the art.

The beam is then separated into two preferably duplicate longitudinal parts or members by a bias cut, indicated by the dotted lines 4, Fig. 1, through the web from one end of the beam to the other. This bias cut or severing of the parts is effected in any suitable manner.

One of the parts is then reversed or upended with relation to the other part and the cut edges 4 of the webs 1 are brought together so that the wide and narrow ends of each part are at the same end of the finished pole and the webs are secured directly to one another at the cut edges. This results in a tapered pole with the joint between the parts running vertically and centrally through the web and in which the web or body portion of the pole, tapered to make the tapering pole, consists essentially of the web portion of said I-beam and the sides or edges of the pole are flanged, said flanges consisting of the heads of said I-beams.

The edges 4 may be presented to each other and secured together in any desired manner. In the form shown in Figs. 4 and 5 one of the edges if offset and lapped over the other edge so that the two parts of the web lie in substantially the same plane. The lapped edges may then be riveted, spot-welded or joined in any suitable way.

If desired to lighten the pole, lessen the wind resistance or for purposes of ornamentation, openings 13 (indicated by dotted lines in Fig. 4) of any desired shape may be formed in the webs of each part or member.

The ends of the pole illustrated in Fig. 4 may be trimmed or squared off as desired.

It will be understood that the invention

consists broadly in longitudinally dividing a rolled flanged section or I beam into two component parts by a bias cut, then reversing one of the parts and joining the webs of the two parts directly to one another in any suitable manner, and that many modifications in the method of securing the parts together may be resorted to without departing from the spirit of the invention.

The invention claimed is:

1. The method of manufacturing metal poles consisting in providing an I beam section, dividing the section into two parts by a bias cut longitudinally through the web, reversing the longitudinal relation of the separate parts and securing the cut edges directly to one another to form a flanged section consisting of two members only and tapering from one end to the other wherein the body or web of the pole consists of the web of the I-beam and the double flanges of said I-beam constitute flanged edges or sides of the pole integral with the web of said pole.

2. A tapered metal telegraph or other pole comprising two duplicate flanged plates or members, the edge of the web of each part running obliquely to the flange, and said parts being assembled with the cut edges of the webs meeting and secured directly to one another to form a tapered pole comprising two members only.

3. A tapered metal telegraph or other pole, consisting of two members only and comprising two flanged metal plates each having its web or body part diminishing in width from end to end thereof and secured directly to one another with the narrower portions in apposition, the said web parts together constituting the web or body of the tapered pole and the flanges of said bars or members integral with the web parts constituting the flanged edges or sides of the pole.

Signed at New York, in the county of New York and State of New York, this 19th day of March, A. D. 1920.

MAURICE LACHMAN.

Witness:

IRENE LEFKOWITZ.