

A.D. 1884, 13th MARCH. N° 4828.

Improvements in Telegraph Posts.

PROVISIONAL SPECIFICATION.

I JOSEPH OPPENHEIMER of 52 Brown Street Manchester in the County of Lancaster Merchant do hereby declare the nature of my Invention for IMPROVEMENTS IN TELEGRAPH POSTS to be as follows:—

My Invention relates to telegraph posts and consists in forming each of such
5 telegraph posts of a metal tube or tubes of an oval section or of a tube or tubes having flattened sides joined by curved portions. The telegraph post may be formed of one tube of either of the sections above mentioned which tube may be parallel or may taper from the bottom to the top, or the telegraph post aforesaid may be formed of two or more tubes of either of the sections above mentioned
10 which tubes are secured together in a manner similar to that described and shown in the Specification of Letters Patent granted unto me dated November 20, 1867, N° 3286. To fix the said telegraph post in the earth I employ an earth plate or plates similar in construction to those described and shown in the Specification of the Letters Patent above referred to and also in the Specification of Letters Patent
15 granted unto me dated November 16th 1869 N° 3308 and in the Specification of Letters Patent granted unto me dated June 18th 1875 N° 2240 or the said telegraph post may be fixed in the earth by means of any other suitable appliance.

By the employment of a tube or tubes of either of the sections above described I am enabled to form the joints of the telegraph post in a safer and firmer manner
20 than heretofore and I render such telegraph posts better able to resist strains thereon in the directions most required. By forming telegraph posts of the section above described I am enabled to secure thereto the brackets or other attachments for supporting telegraph wires with greater security and firmness than hitherto and I am also enabled to secure the telegraph posts to the earth plates or other
25 appliances by which they are supported so that there is less liability of their becoming loose than heretofore.

Dated this Twelfth day of March 1884.

W. T. CHEETHAM.
Agent to the Applicant.

Oppenheimer's Improvements in Telegraph Posts.

COMPLETE SPECIFICATION.

I JOSEPH OPPENHEIMER of 52 Brown Street Manchester in the County of Lancaster Merchant do hereby declare the nature of my Invention for IMPROVEMENTS IN TELEGRAPH POSTS and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My Invention relates to telegraph posts and consists in forming each of such telegraph posts of a metal tube or tubes of an oval section, or of a tube or tubes having flattened sides joined by curved portions. The said telegraph posts may be formed of one tube of either of the sections above mentioned which may be parallel or may taper from the bottom to the top or the telegraph post aforesaid may be formed of two or more tubes of either of the sections above mentioned.

In constructing telegraph posts by joining two or more metal tubes of different diameters I obtain two or more metal tubes made by rolling drawing welding or otherwise the larger of which I heat and shrink upon the smaller one in a manner similar to that described and shown in the Specification of Letters Patent granted unto me dated November 20th 1867 N° 3286 or I unite the separate tubes forming the telegraph post by a metal socket or other convenient and suitable means.

In order that my Invention may be better understood and more readily carried into effect I will now proceed to describe the same reference being made to the accompanying Drawing in which Drawing Fig. 1 shows in elevation partly in section a telegraph post constructed according to this modification of my Invention.

The telegraph post is in this instance formed of three pieces of tube *a b c* each of which is of an oval section as shewn by Figs. 2. 3. 4 which are cross sections of the tubes *a. b. c* taken upon the lines A B. C D. E. F of Fig. 1 respectively.

The tubes *a. b. c* are united at the points *d. e* by being shrunk together as above mentioned.

I strengthen the telegraph post at the joints *d. e* by means of rings *f. f¹* shrunk thereupon and I also shrink a ring *f²* at the upper extremity of the telegraph post.

Although I have only described and shown the telegraph post as being formed of three tubes a greater or less number of tubes may be employed as may be found desirable.

In order to support the telegraph posts in the earth I secure to each of such telegraph posts earth plates *g. h* which earth plate or plates may be similar in construction to those described and shewn in the Specification of the Letters Patent above referred to and also the Specification of Letters Patent granted unto me dated November 16th 1869 N° 3308 and in the Specification of Letters Patent granted unto me dated June 18th 1875 N° 2240 or the said telegraph post may be fixed in the earth by means of any other suitable appliance.

One of the earth plates is shown in plan in Fig. 5. Between the earth plate *h* and the tube *a* forming the lower end of the telegraph post I place a strengthening or bridge piece or bracket *j* and I secure the tube *a* to the earth plate *h* by means of the strap *k* and nuts *l* which bind the whole together. The oval form of the tube *a* enables the tube *a* and earth plate *h* to be more securely bound together than heretofore such oval form also preventing the tube *a* from being rotated within the strap *k*.

Instead of employing an earth plate of the construction previously described I in some cases employ a cast iron base of the construction shown by Figs. 6. 7. and 8— Fig. 7 being a view at right angles to Fig. 6 and Fig. 8 being a plan of Fig. 6— The tube *a* of oval section forming the bottom of the telegraph post I secure into

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a cavity formed in the cast iron base *m* either by wedges *n* the space between which I fill with any suitable cement, or any other suitable means the oval form of the tube *a* preventing such tube from being rotated within the cast iron base *m*.

- 5 To the upper part of the telegraph post I secure the arms *o* which carry the insulators *p* for supporting the telegraph wires—The arms *o* are secured to the telegraph post by means of bolts *q* and plates *r* as usual one of such arms *o* insulators *p* bolts *q* and plates *r* being shown in plan by Fig. 9.

10 The oval section of the tube *c* prevents the arms *o* from being turned around the telegraph post aforesaid.

In fixing my improved telegraph posts I so place them that the longest diameter of the oval is at right angles to the line of the telegraph wire as shown in Figs. 1. 2. 3 4 5 and 9, in which the longest diameter of the oval is in the direction of the line G. H and the line of the telegraph wire or wires is in the direction of
15 the line J. K.

According to another modification of my Invention I form each telegraph post of a single tube as shown by Fig. 10—The tube *s. t* is of oval section as shown by Fig. 11 which is a cross section of the said tube taken on the line L M of Fig. 10—The said tube *s. t* I formed of the largest diameter at its base *s* and cause such
20 tube to taper towards its upper extremity *t*.

When it is necessary or desirable to lengthen the telegraph post I attach to the lower end thereof another tube of appropriate section and of suitable material in any convenient manner.

The tube *s. t* may be secured in the earth in any convenient manner and arms
25 or brackets for supporting the telegraph wires may be secured to the post *s. t* as usual.

I have hereinbefore described the tube or tubes of which each of my improved telegraph posts is formed as being of an oval section but I also propose in some cases to make each of such telegraph posts of a tube or tubes having flattened sides
30 joined by curved portions as shown in Fig. 12 which is a section of one of such tubes taken at right angles to the length of such tube.

By my Invention I am enabled to form a metal telegraph post of greater strength in proportion to its weight than has hitherto been the case and I am thereby enabled to support a greater number of telegraph wires by one metal
35 telegraph post than has hitherto been possible.

Having now particularly described and ascertained the nature of my said Invention and in what manner the same is to be performed I declare that what I claim is:—

Constructing a telegraph post of one or more metal tubes such tube or tubes
40 being of an uniform diameter from end to end or such tube or tubes may taper from the bottom upwards such tube or tubes aforesaid being of an oval section or of a section the same as or similar to that shown in Fig. 12 for the purposes hereinbefore described and shown.

Dated this 31st day of May 1884.

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JOSEPH OPPENHEIMER.

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