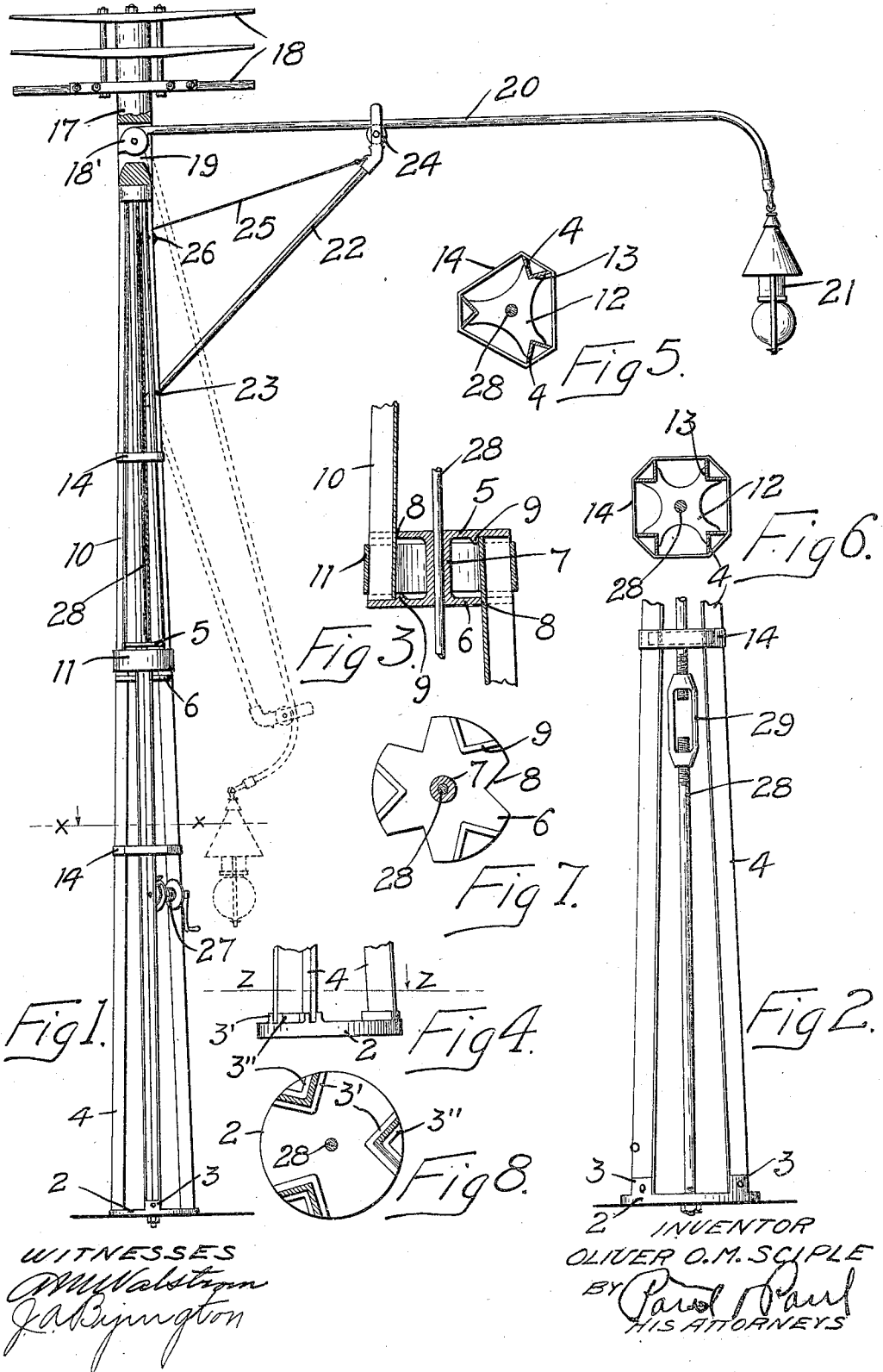


O. O. M. SCIPLE.
SECTIONAL POLE.
APPLICATION FILED APR. 10, 1908.

933,854.

Patented Sept. 14, 1909.



UNITED STATES PATENT OFFICE.

OLIVER O. M. SCIPLE, OF MINNEAPOLIS, MINNESOTA.

SECTIONAL POLE.

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Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed April 10, 1908. Serial No. 426,240.

To all whom it may concern:

Be it known that I, OLIVER O. M. SCIPLE, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful
6 Improvements in Sectional Poles, of which the following is a specification.

This invention relates to sectional poles for telephone, telegraph, trolley wires and other purposes.

10 The primary object of the invention is to provide a pole having a lamp supporting bracket thereon with means for operating the same to enable the person in charge of the lamp to lower it within reach at a point
15 near the base of the pole.

A further object is to provide means for bracing the bars of which the pole is composed, between the joints.

20 A further object is to improve the construction of the joint.

Other objects of the invention will appear from the following detailed description.

25 The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a view
30 illustrating a sectional pole embodying my invention. Fig. 2 is a detail view of the lower portion of the pole. Fig. 3 is a detail view showing the construction of the joint of the pole. Fig. 4 is a detail view of a
35 modified form of base for the pole. Fig. 5 is a sectional view on the line $x-x$ of Fig. 1. Fig. 6 is a sectional view through a pole having four bars. Fig. 7 is a detail view showing the construction of the plate
40 at the joint between the sections of the pole. Fig. 8 is a sectional view on the line $z-z$ of Fig. 4.

In the drawing, 2 represents the base of the pole having a series of lugs 3 thereon
45 to which the lower ends of the bars 4 composing the first section of the pole are secured by suitable means as by bolts or rivets. Instead of the lugs 3, ribs 3' and 3'' may be formed on the base having recesses be-
50 tween them into which the lower ends of the bars 4 are inserted.

At the joint between the first and second sections of the pole is a casting consisting

of upper and lower plates 5 and 6 with a centrally arranged hub 7 connecting them. 55 These plates are provided with alternately arranged V-shaped recesses or notches 8 and with correspondingly shaped ribs 9, the notches being formed in the peripheries of the plates and the ribs being located on the
60 under side of the plate 5 and the upper side of the plate 6. The bars 4, composed preferably of angle bar iron have their upper ends in contact with the ribs 9 on the under side of the plate 5 and also fitting within
65 the notch in the plate 6 directly beneath the said rib. Each bar thus has a bearing at two points in the joint. The bars 10 of the next section have their lower ends seated on the plate 6 against the rib 9 thereon and
70 fitting within the notch 8 in the plate 5 above, and a band 11 passes around the joint and the ends of the bars 4 and 10 and clamps them securely against the plates 5 and 6. I
75 am thus able to provide an extremely rigid and substantial joint at the intersection of the bars.

As indicated in Fig. 3 the pole tapers slightly from the bottom toward the top and the band 11 is correspondingly flared 80 and is of greater diameter at the bottom than at the top and when forced downward will press the ends of the angle bars firmly against their seats in the plates 5 and 6. Below the joint between the sections I provide a spreader plate 12 having V-shaped
85 notches 13 to receive the upright angle bars 4, and a binder ring 14 incloses the spreader plate and squeezes the bars snugly into the sockets or recesses in the binder, thus preventing any bending or buckling of the bars and materially strengthening the pole. A similar binder plate is shown in Fig. 6, corresponding to the one described, except that it is adapted for use with four upright bars 95 instead of three. At the top of the pole a cap 17 is provided whereon cross arms 18 are mounted.

Near the top of the pole I provide a hub 18' journaled in a recess 19 and carrying a
100 bracket 20 which extends out horizontally and has a downwardly turned end to support a lamp 21, and is capable of swinging down to an inclined position to allow access to the lamp. To operate this bracket I provide a
105 brace 22 pivoted at 23 on the pole and hav-

ing an anti-friction bearing 24 on the bracket 20. An operating cable 25 is attached to the brace 22 and passes over a pulley 26 on the pole and from thence to a windlass 27 that is mounted between the bars 4 of the first section in position to be conveniently operated by a person placing a ladder against the pole or by the use of the step ladder usually employed for such work.

10 When this windlass is operated the lamp may be lowered to a point where the person operating the windlass can reach the lamp to clean it or replace the carbons without leaving his position on the ladder. Generally

15 it has been necessary to first lower the lamp into the street, then take the ladder and place it in the street under the lamp and climb up to the lamp and then return the ladder to the pole and raise the lamp to its

20 elevated position. With this invention I am able to avoid the necessity of putting the ladder in the street and of moving it from place to place, the lamp being lowered within reach of the person operating the windlass and when the lamp is ready for use again it may be raised without moving the ladder.

The pole sections are held together against longitudinal movement by means of threaded rods 28 and a turnbuckle 29, the rod passing through the hub 7 and uniting the base and the top of the pole.

I claim as my invention:

1. A joint for a sectional pole, comprising

35 an upper and a lower plate and a centrally arranged hub connecting them, said plates having a series of notches in their peripheries and one of said plates having a series of ribs on its under surface and the other of said

40 plates having a similar series of ribs on its upper surface, the ribs of each plate being opposite respectively the notches of the other plate, bars fitting within said notches and seated against said ribs whereby double bearing points are provided, and a clamping

45 band inclosing the ends of said bars and clamping them securely in said notches and against said ribs.

2. In a sectional pole, a joint comprising

50 parallel plates and means connecting said plates with one another, each plate having a series of peripheral notches and a series of ribs alternating with said notches, the ribs of the upper plate being on the under

55 side and those of the lower plate on the upper side and opposite respectively the notches of the other plate, a series of angle bars having their ends fitting within said notches and seated against said ribs, and a

60 tapered band inclosing the ends of said angle bars and clamping them securely in said notches and against said ribs.

3. In a sectional pole, a joint comprising upper and lower plates and a centrally ar-

65 ranged hub connecting them, said plates having a series of peripheral notches and ribs forming V-shaped recesses, the ribs on one plate being in line with the notches of the other plate, angle bars having their ends fitting within said notches and seated against

70 said ribs, and means for clamping said bars and plates together.

4. A sectional pole comprising a base plate, a series of bars secured thereto, a joint between the first and second sections of the

75 pole and consisting of plates, and a hub connecting them, said plates having notches in their peripheries and ribs forming V-shaped recesses and in which notches and recesses the ends of said bars are seated, means for

80 clamping the ends of said bars in said notches and recesses, a cap piece and threaded rods having a tightening means connected to said base plate and said cap piece through

85 said hub, substantially as described.

5. A joint for a sectional pole, comprising upper and lower plates, and means connecting them, said plates having peripheral

90 seats, and bars having bearings on said seats and extending upwardly and downwardly from said plates, and a clamping band inclosing said bars and holding them securely on said seats.

6. A joint for a sectional pole comprising upper and lower plates and means connecting them, said plates having notches in their peripheries and bars fitting within said

95 notches, and a clamping band inclosing the ends of said bars and holding them securely in said notches.

7. A joint for a sectional pole, comprising upper and lower plates having notches in their peripheries and angle bars fitting within said notches, said upper plate having seats

100 formed therein to receive the upper ends of the depending bars and said lower plate having seats thereon to receive the lower ends of the upwardly extending bars and means for clamping said bars within said notches and against said seats.

8. A joint for a sectional pole, comprising an upper and a lower plate and means connecting them, said plates being provided with peripheral seats and upwardly and downwardly extending bars having their ends

105 fitting within said seats and means for clamping said bars and plates together.

9. A joint for a sectional pole, comprising an upper and lower plate having peripheral seats and angle bars projecting upwardly and downwardly from said plates and fitting

120 within said seats, each bar having a double bearing and means for clamping said bars in said seats.

10. A joint for a sectional pole, comprising

125 plates arranged one above another and having peripheral seats substantially V shaped in form, angle bars having their ends fitting

within said seats and projecting upwardly
and downwardly therefrom, the edges of
said bars being flush substantially with the
edges of said plates and a band inclosing
5 said bars and locking them in said seats.

11. A joint for a sectional pole, comprising
upper and lower plates and means connect-
ing them, said plates having peripheral seats,
and the upper plate being of less diameter
10 than the lower plate, bars having their ends
fitting within said seats and projecting up-

wardly and downwardly from said plates,
and a clamping band tapered in form and
inclosing the ends of said bars and clamping
them in said seats. 15

In witness whereof, I have hereunto set
my hand this 1st day of April 1908.

OLIVER O. M. SCIPLE.

Witnesses:

J. A. BYINGTON,
J. H. BALDWIN.