April 24, 1962 H. C. PFAFF, JR 3,031,041

SECTIONAL POLE AND METHOD OF FORMING SAME

Filed May 24, 1957 2 Sheets-Sheet 1

Fig. 1.

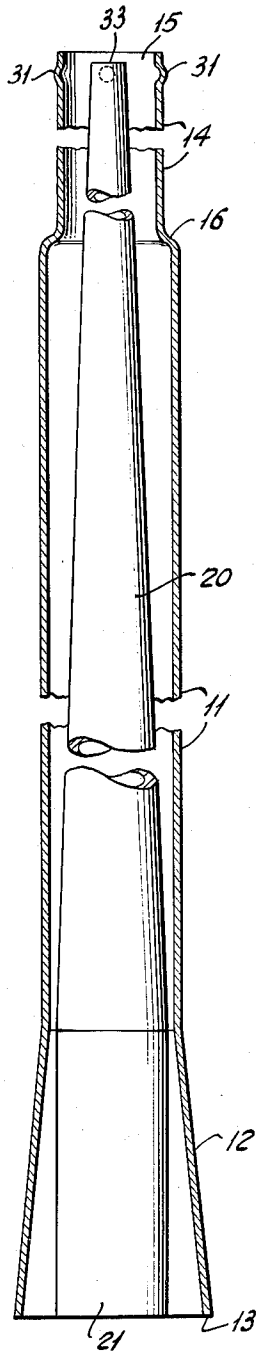


Fig. 2.

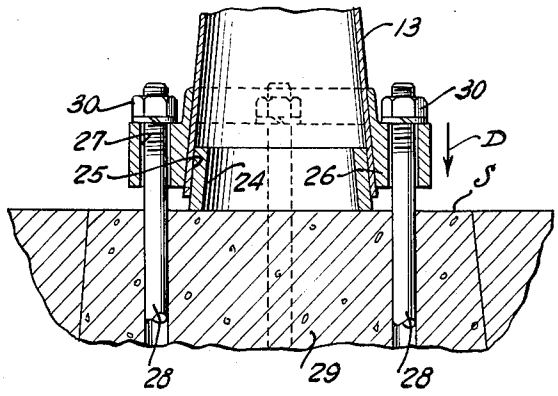
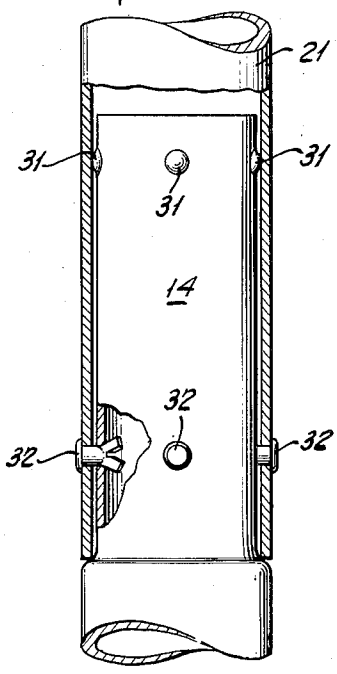


Fig. 3.



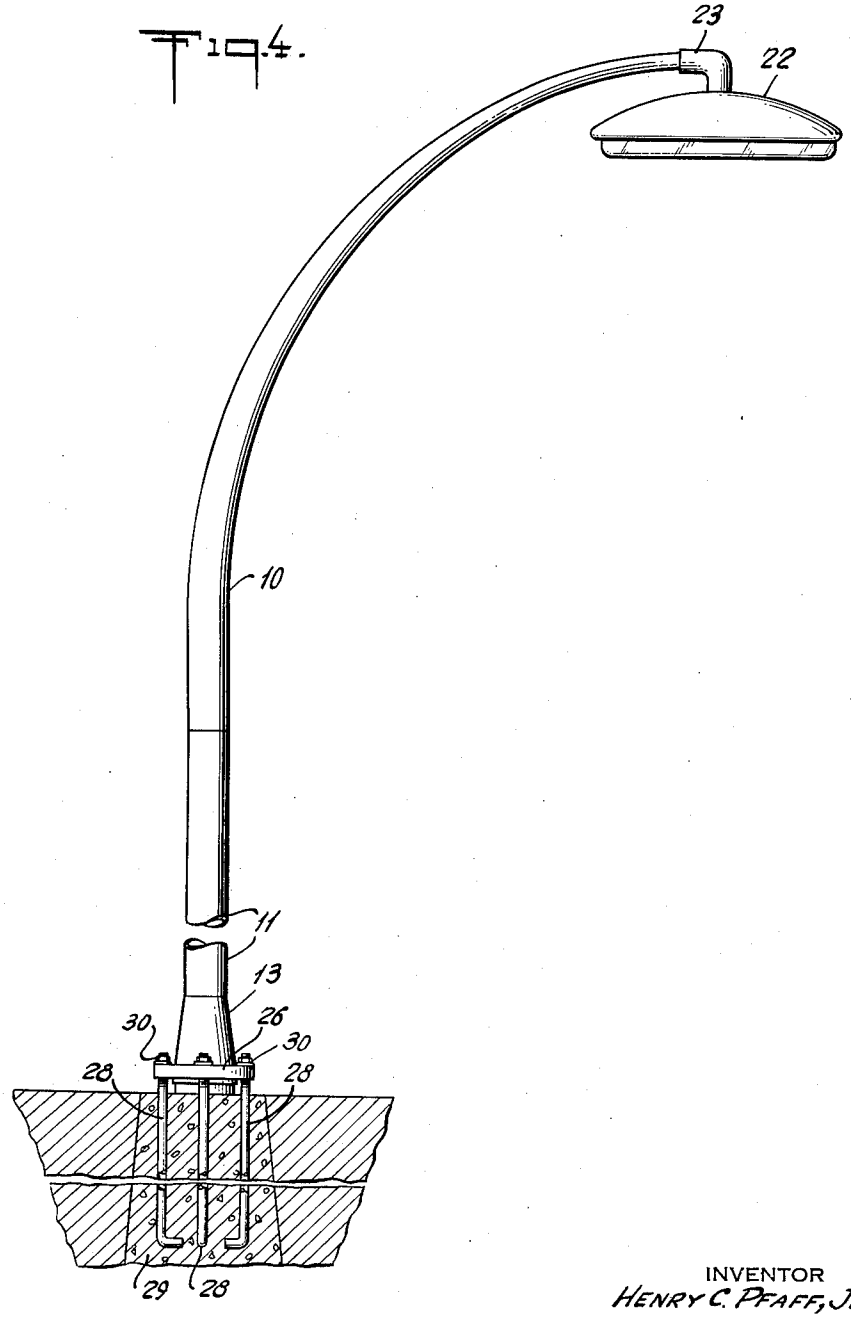
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Fig. 4.



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SECTIONAL POLE AND METHOD OF FORMING SAME

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1 Claim. (Cl. 189—29)

This invention relates to the art of poles, such as are used for highway illumination and for similar purposes. Pursuant to the present invention, a pole, useful for the purposes above mentioned, is formed sectionally of such structure that it may be prefabricated and shipped in essentially two parts for the pole proper which may be readily assembled at the point of installation and there secured in place. A further feature of the invention consists in novel means for rapidly and permanently anchoring the pole to a supporting surface at the point of installation. The pole may be prefabricated and shipped in two sections as above noted, thereby reducing considerably the shipping charges, and also obviating the risk of damage to poles shipped in full length.

While the pole is described below and in the accompanying drawings shown as formed of two sections, it may be so formed of three or more sections, pursuant to the invention, within the spirit and scope thereof and pursuant to the claim below.

In the drawings:

FIG. 1 is a partly sectional, elevational view of the pole sections—one positioned within the other, formed pursuant to the invention and assembled for shipment,

FIG. 2 is a fragmentary, sectional view of the lower end of the pole secured to a supporting surface pursuant to the invention,

FIG. 3 is a fragmentary, sectional, elevational view of the pole sections shown secured together, pursuant to the invention, and

FIG. 4 is a partly fragmentary, partly sectional, elevational view of a pole formed pursuant to the invention.

As shown in the drawings, in accordance with this invention, the pole 10 (FIG. 4) is initially prefabricated of an elongated first section 11 which is flared or tapered outwardly as at 12 (FIG. 1) toward one end 13 thereof, and a contracted portion 14 formed at the opposite end 15 thereof, providing a shoulder 16 spaced from said opposite end 15, with the reduced portion 14 intermediate the shoulder and said end 15. The second elongated section 20, which may be of substantially equal length to the first section, is formed so as (FIG. 1) to be adapted to be positioned within the first section for shipment therewith as a single unit of substantially less length than that of the pole proper 10 to be formed of the sections embodying the invention. The second section has an end 21 formed straight and larger than the reduced end portions 14 of the first section (FIG. 3) so as to be slidable thereover to assemble the second sections. With the parts thus assembled the second section 20 may, if desired, be bent to form it into an arc, as shown in FIG. 4, or it may simply be left in straight position, depending upon the wish of the ultimate user. Likewise, the lighting fixture 22 may be secured first to the second section 20 by any suitable means directly, or through the medium of a bracket such as 23, FIG. 4, or it may be secured to a bracket of different structure which might be secured to the second section 20 in any desired or convenient manner, as for example, by a separate arm after telescopic engagement of the end 21 of the second section 20 with the reduced end portion 14 of the first section 11.

The end portion 13 of the first section 11 may be secured to the surface S (FIG. 2) to which the pole is to be secured by providing a first ring 24 to be positioned

at the point at which the pole is to be located, said first ring 24 being complementarily tapered to the end 13 of first section 11. A second ring, 26 is provided (FIGS. 2 and 4) adapted to engage the outer face of the tapered end of the first section to interlock the first section and rings. Means are provided for drawing the second ring downwardly (arrow D, FIG. 2) toward the surface S, to anchor the pole to said surface. Said means may comprise ring 26 and means for moving the same downwardly in the direction of arrow D, or equivalent means to engage the end 13 of the first section and movable downwardly in the direction of arrow D. To that end, the second ring 26 may be provided with a plurality of apertures 27 for reception of a plurality of bolts 28 anchored in a cement or other block or member 29, FIG. 2; by rotating the nut members 30 on the bolts, the section above mentioned may be attained, securing the pole to the surface S.

It will be appreciated from the foregoing, that the assembly of the pole may be thus accomplished at the point of installation, in a simple manner and without the use of any special tools. To further facilitate assembly of the parts, the reduced end portion 14 of the first section 11 and the end 21 of the second section 20 may be provided with complementary interengaging friction means such as protuberances 31 (FIG. 3) formed either on the contracted portion 14 of the first section 11 or in the end 21 of the second section 20 for frictional engagement of the parts. The mentioned parts 14 and 21 may also be provided with apertures for registration and reception of interlocking members 32 passed through said apertures and interlocking said sections. The second section 20 may be of straight form from the end 21 thereof to the opposite end 33 thereof, or may be tapered as shown in FIG. 1.

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

A sectional pole assembled at the point of installation and adapted for shipment in disassembled relation, comprising an elongated section flared outwardly at one end, a reduced portion formed at the other end of said section providing a shoulder spaced from said other end, a second elongated section of a length substantially equal to that of the first mentioned section and adapted to be telescopically received within the first mentioned section for shipment therewith and telescopically engaging the reduced end of the first mentioned section on assembly of said section, means securing said sections together to form the elongated sectional pole, a ring positioned on the surface to which the pole is to be secured, said ring and the flared end of the first mentioned section being complementarily flared, and the flared end of the first mentioned section being positioned over the ring, a second ring engaging the outer surface of the flared end of the first mentioned section, said second ring being complementarily flared and slidable on said flared end of the first mentioned section, and bolt means for drawing the second ring toward the mounting surface thereby to lock the flared end of the first mentioned section between the inner and outer rings to secure the pole on the mounting surface.

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