Dec. 12, 1961 L. J. SCHERMERHORN, JR 3,012,750

POLE BRACKET

Filed May 18, 1959 2 Sheets-Sheet 1

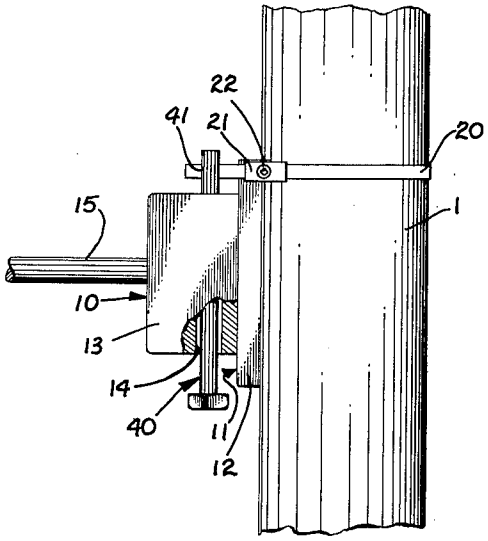


FIG. 1

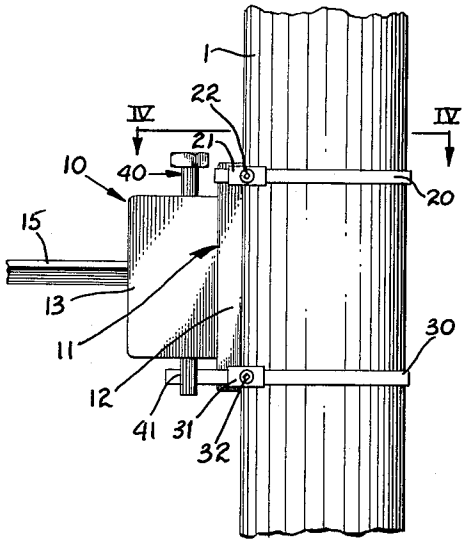


FIG. 2

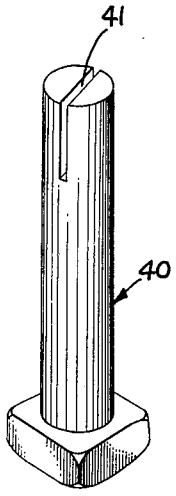


FIG. 3

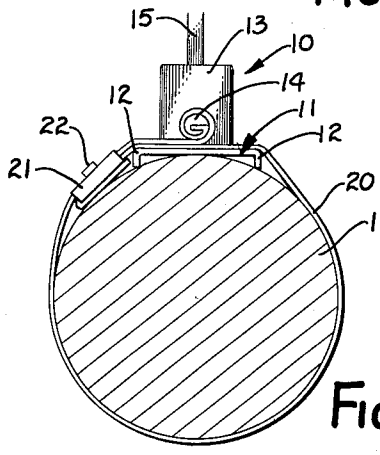


FIG. 4

INVENTOR.
LORENZ J. SCHERMERHORN JR.
BY Prin & Hummeld
ATTORNEYS

Dec. 12, 1961 L. J. SCHERMERHORN, JR 3,012,750

POLE BRACKET

Filed May 18, 1959 2 Sheets-Sheet 2

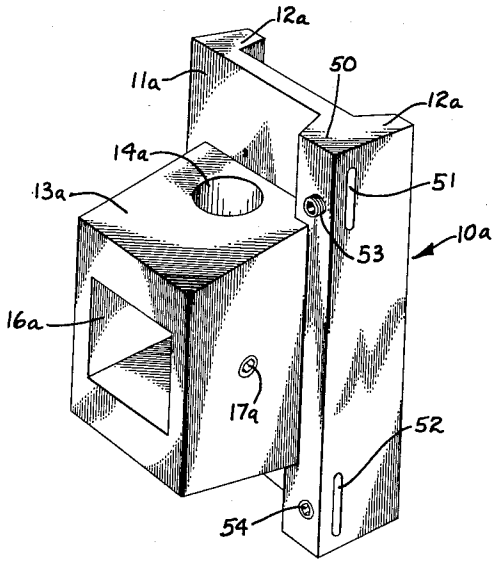


FIG. 5

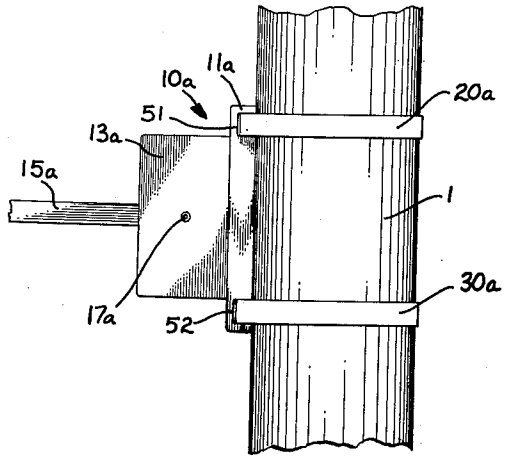


FIG. 6

INVENTOR
LORENZ J. SCHERMERHORN JR.

BY Price & Heneveld

ATTORNEYS

United States Patent Office

3,012,750

Patented Dec. 12, 1961

3,012,750

POLE BRACKET

Lorenz J. Schermerhorn, Jr., 1143 Worden SE., Grand Rapids, Mich.

Filed May 18, 1959, Ser. No. 813,709
5 Claims. (Cl. 248—231)

This invention relates to a pole bracket. More particularly, this invention relates to a bracket apparatus to be utilized for mounting signs and the like on a pole.

This invention teaches a simplified manner in which signs and the like may be mounted on a pole by use of a unique bracket structure. In the past, when poles were made of wood, it was quite simple to mount signs on such a pole. However, poles presently being installed are made of metal or concrete, and the problems associated with the mounting of street signs, Christmas decorations and the like thereon are greatly increased. It is, therefore, an object of this invention to provide a pole bracket adapted to be used equally well with any type of pole. The bracket comprising this invention is simple in construction and adapts signs and the like to be rigidly mounted in place.

The apparatus shown and described in this invention is especially advantageous in that a minimum of tools are utilized in securing the bracket to the pole. Further, the tools required are conventional. The time and effort consumed in this mounting are minimal, thereby making the task of putting up a number of new signs a relatively easy job. The bracket itself is simple in structure and can be simply and economically fabricated. The simplicity with which the bracket can be rigidly mounted on a pole constitutes the real advantage of this invention.

Other objects of this invention will become obvious to those skilled in the bracket art upon reading the following specification in conjunction with the accompanying drawings, wherein:

FIG. 1 is a side elevation view of the bracket comprising this invention partially mounted on a pole, certain parts thereof being broken away to better show the invention;

FIG. 2 is a side elevation view of the bracket comprising this invention mounted on a pole by means of two locking bands;

FIG. 3 is a side, perspective view of the tightening bolt utilized with the bracket shown in FIGS. 1 and 2;

FIG. 4 is a sectional view of the bracket taken along the plane IV—IV of FIG. 2;

FIG. 5 is a top, perspective view of a modification of the bracket comprising this invention;

FIG. 6 is a side elevation view of the bracket shown in FIG. 5 mounted on a pole by means of two locking bands.

Briefly, this invention relates to bracket apparatus for mounting signs and the like on a pole, including a mounting plate adapted to lie against the pole. A supporting body extends from generally the center portion of this mounting plate, and locking bands of a length sufficient to circumscribe the pole and the plate are provided. One of these bands is adapted to circumscribe the pole and the top end of the plate and the other band is adapted to circumscribe the pole and the bottom of the plate. Means for securing the ends of each of these bands together is provided. An opening extends through the body lying generally parallel to the plate and perpendicular to the bands. A tightening bolt is slidable within this opening, the bottom of the shaft of the bolt having a generally perpendicular slit therein. This slit envelops one end of one of the bands when the bolt is inserted into the opening from one direction whereby the bolt may be rotated for tightening the band about the pole and the plate and the ends of this band then secured in tightened position. The bolt may then be positioned within the opening from the other direction and the slit will envelop one end of the other band whereby this other band may be similarly secured in tightened position to secure the bracket to the pole.

Turning more specifically to the drawings, the reference numeral **1** designates a pole. The reference numeral **10** designates a bracket for supporting a sign and the like and the reference numerals **20** and **30** designate locking bands for securing the bracket **10** to the pole **1**. The reference numeral **40** designates a tightening bolt, the purpose of which will be described hereinafter.

The bracket **10** includes a mounting plate **11** having flanges **12** along its longitudinal edges. These flanges better adapt the mounting plate **11** to lie against poles of varying circumference and cross sectional configuration (FIGS. 1 and 4). A supporting body **13** extends from generally the central portion of the mounting plate **11** in a direction opposite to that of the flanges **12**. An opening **14** extends through the supporting body **13**, lying longitudinally thereof and generally parallel to the mounting plate **11**. The purpose of the opening **14** will be more fully described hereinafter.

It will be noted that a shaft for supporting an object such as a sign is secured to the supporting body **13**. In FIG. 1, a round shaft is shown which may be threaded into the supporting body **13**. In FIG. 2, a square shaft is shown which may be secured to the supporting body **13** by means of a set screw (not shown). The particular supporting member is not important to this invention, which is concerned with the mounting of the bracket itself on a pole. It is, therefore, believed that once a bracket having a supporting body is rigidly secured to a pole, the user may choose any type of member to actually support the object from the bracket.

Locking bands **20** and **30** rigidly secure the bracket **10** to the pole **1**. These bands must be of a length sufficient to circumscribe both the pole **1** and the mounting plate **11**. The bands may be made of any material possessing the chracteristics of flexibility and strength. Collars **21** and **31** receive the respective ends of the bands **20** and **30** (FIGS. 2 and 4). Set screws **22** and **32** are positioned within the collars **21** and **31**, the purpose of these set screws being to positively secure the ends of the respective bands together.

A tightening bolt **40**, of a size sufficient to be slidable within the opening **14** of the supporting body **13**, is utilized to tighten the bands **20** and **30** before securing them in tightened position by means of set screws **22** and **32**. The bolt **40** has a slit **41** in the bottom thereof, the slit **41** being generally perpendicular to the bottom of the bolt.

Assembly and Operation

The bracket **10** is of one piece construction and may be formed from any material possessing the characteristics of strength and durability. The flanges **12** of the bracket **10** are placed against a pole, the flanges lying parallel to the longitudinal axis of the pole. With the bracket held in this position, a band **20** is positioned to circumscribe both the pole **1** and the top of the mounting plate **11** as shown in FIG. 1. The ends of the band **20** are placed through the collar **21** (FIGS. 1 and 4). The bolt **40** is then inserted into the opening **14** of the supporting body **13**, the bolt being inserted therein from the bottom of the supporting body **13**. One end of the band **20** is then placed within the slit **41** of the tightening bolt **40** as shown in FIG. 1. It will now be noted that upon clockwise rotation of the bolt **40** one end of the band **20** will be gripped within the slit **41** and drawn through the collar **21**. Continued rotation of the bolt **40** will draw

the band 20 into its tightest possible position, firmly securing the top of mounting plate 11 to the pole 1.

When the band 20 has been drawn into this tightened position, one then simply tightens the set screw 22 which will positively secure the ends of the band together, thereby securing the band 20 in its tightened position. The bolt 40 is then withdrawn from the opening 14 and the top part of the bracket 10 is positively secured to the pole 1, as shown in FIG. 4.

The band 30 is then positioned to circumscribe the pole 1 and the bottom of mounting plate 11, as shown in FIG. 2. The ends of the band 30 are then positioned within the collar 31. It will now be noted that the bolt 40 may again be inserted through the opening 14 in the supporting body 13 from the opposite direction so that the slit 41 in the bolt 40 may envelope one end of the band 30. Upon rotation of the bolt in a clockwise position, the band 30 will also be drawn tightly around the pole 1 and the bottom of the mounting plate 11. When the bolt has been rotated sufficiently to tighten the band, the set screw 32 is turned to secure the ends of the band 30 within the collar 31. The tightening bolt 40 may then again be withdrawn from the opening 14.

It will now be obvious that the bracket 10 is rigidly and positively secured to the pole 1. The shaft 15 can now be secured to the bracket. A sign or other similar object may then be supported from the shaft 15. A bracket has been disclosed which may be mounted upon any type of pole very simply and quickly. The tools needed for this mounting are merely a wrench to turn the tightening bolt 40 and a screw driver or Allen wrench for the set screws 22 and 32. The mounting is rigid and positive. The bracket apparatus itself is simple in construction and easy and economical to fabricate.

Modification

The bracket shown in FIGS. 5 and 6 of the drawing discloses a modification of the invention described. This modified bracket 10*a* again includes a mounting plate 11*a* having flanges 12*a* at the back thereof for engaging a pole 1. A supporting body 13*a* protrudes from the face of the mounting plate 11*a* and the bands 20*a* and 30*a* are adapted to secure this bracket to a pole 1. The opening 14*a* is the same as opening 14 in bracket 10, described hereinbefore. An opening 16*a* is positioned horizontally in the supporting body 13*a*, this opening being adapted to receive a shaft 15*a* which may be secured therein by means of the set screw 17*a* positioned in the side of the supporting body.

The principal difference between this bracket and the bracket described hereinbefore is the raised portion 50 in the mounting plate 11*a*. The raised portion 50 has a pair of transversely extending slots 51 and 52 adapted to receive the ends of the bands 20*a* and 30*a*. The set screws 53 and 54 are mounted in the raised portion 50, positioned generally perpendicular to the slots 51 and 52. It will now be obvious that the principle of operation of this bracket is the same as described hereinbefore. However, the separate collar member has been eliminated and the means for securing the ends of the bands together is incorporated directly into the bracket at the time of its casting. The set screws 53 and 54 will secure the ends of the bands 20*a* and 30*a* together within the slots 51 and 52 respectively.

This modification is extremely simple in construction and very durable even though subjected to hard use. It is believed that the operation as described hereinbefore will suffice to also teach the operation of this modification. It should be obvious that the structure of this modification exhibits the same advantages and provides the same beneficial results as also described hereinbefore.

While only these embodiments of this invention have been shown and described, certain other embodiments may be utilized to practice this invention without departing from the spirit and scope thereof. Such other embodiments are to be considered a part of this invention unless the following claims specifically state otherwise.

I claim:

1. Bracket apparatus for mounting signs and the like on a pole comprising: a mounting plate adapted to lie against a pole; a supporting body extending from generally the center portion of said plate; locking bands of a length sufficient to circumscribe the pole and said plate, one of said bands circumscribing the pole and one end of said plate and the other band circumscribing the pole and the other end of said plate; means for securing the ends of each of said bands together; an opening extending through said body lying generally parallel to said plate and perpendicular to said bands; a tightening bolt slidable within said opening, the bottom of the shaft of said bolt having a generally perpendicular slit therein; and said slit enveloping one end of one of said bands when said bolt is inserted into said opening from one direction whereby said bolt may be rotated for tightening said one band about the pole and said plate and the ends of said one band secured in said tightened position and said slit enveloping one end of the other of said bands when said bolt is inserted into said opening from the other direction whereby said other band may be similarly secured in tightened position.

2. Bracket apparatus for mounting signs and the like on a pole comprising: a mounting plate adapted to lie against a pole; a supporting body extending from generally the center portion of said plate; locking bands of a length sufficient to circumscribe the pole and said plate, one of said bands circumscribing the pole and one end of said plate and the other band circumscribing the pole and the other end of said plate; collars for receiving the ends of each of said bands; a set screw positioned in each of said collars securing said ends of the respective bands therein; an opening extending through said body lying generally parallel to said plate and perpendicular to said bands; a tightening bolt slidable within said opening, the bottom of the shaft of said bolt having a generally perpendicular slit therein; and said slit enveloping one end of one of said bands when said bolt is inserted into said opening from one direction whereby said bolt may be rotated for tightening said one band about the pole and said plate and the ends of said one band secured in said tightened position within said collar receiving said ends and said slit enveloping one end of the other of said bands when said bolt is inserted into said opening from the other direction whereby said other band may be similarly secured in tightened position.

3. Bracket apparatus for mounting signs and the like on a pole comprising: a mounting plate having a flange along two of its opposite edges, said flanges adapted to lie against a pole; a supporting body extending from generally the center portion of said plate in a direction oppositely from said flanges; locking bands of a length sufficient to circumscribe the pole and said plate, one of said bands circumscribing the pole and one end of said plate and the other band circumscribing the pole and the other end of said plate; collars for receiving the ends of each of said bands; a set screw positioned in each of said collars securing said ends of the respective bands therein; an opening extending through said body lying generally parallel to said plate and perpendicular to said bands; a tightening bolt slidable within said opening, the bottom of the shaft of said bolt having a generally perpendicular slit therein; and said slit enveloping one end of one of said bands when said bolt is inserted into said opening from one direction whereby said bolt may be rotated for tightening said one band about the pole and said plate and the ends of said one band secured in said tightened position within said collar receiving said ends and said slit enveloping one end of the other of said bands when said bolt is inserted into said opening from the other direction whereby said other band may be similarly secured in tightened position.

4. Bracket apparatus for mounting signs and the like on a pole comprising: a mounting plate adapted to lie against a pole; a supporting body extending from generally the center portion of said plate; locking bands of a length sufficient to circumscribe the pole and said plate; one of said bands circumscribing the pole and one end of said plate and the other band circumscribing the pole and the other end of said plate; means on said plate for receiving the ends of each of said bands; said screws positioned in said means securing said ends of the respective bands within said means; an opening extending through said body lying generally parallel to said plate and perpendicular to said bands; a tightening bolt slidable within said opening, the bottom of the shaft of said bolt having a generally perpendicular slit therein; and said slit enveloping one end of one of said bands when said bolt is inserted into said opening from one direction whereby said bolt may be rotated for tightening said one band about the pole and said plate and the ends of said one band secured in tightened position within said means and said slit enveloping one end of the other of said bands when said bolt is inserted into said opening from the other direction whereby said other band may be similarly secured in tightened position.

5. Bracket apparatus for mounting signs and the like on a pole comprising: a mounting plate having a flange along two of its opposite edges, said flanges adapted to lie against a pole; a supporting body extending generally from the center portion of said plate in a direction oppositely from said flanges; locking bands of a length sufficient to circumscribe the pole and said plate, one of said bands circumscribing the pole and one end of said plate and the other band circumscribing the pole and the other end of said plate; means for receiving the ends of each of said bands in said plate; a set screw positioned in each of said means securing said ends of the respective bands therein; an opening extending through said body lying generally parallel to said plate and perpendicular to said bands; a tightening bolt slidable within said opening, the bottom of the shaft of said bolt having a generally perpendicular slit therein; and said slit enveloping one end of one of said bands when said bolt is inserted into said opening from one direction whereby said bolt may be rotated for tightening said one band about the pole and said plate and the ends of said one band secured in said tightened position within said means and said slit enveloping one end of the other of said bands when said bolt is inserted into said opening from the other direction whereby said other band may be similarly secured in tightened position.

References Cited in the file of this patent

UNITED STATES PATENTS

1,498,539	Callahan	June 24, 1924
1,978,646	Oishei	Oct. 30, 1934
2,415,207	Goranson	Feb. 4, 1947
2,499,011	Weeks	Feb. 28, 1950