June 14, 1932. K. A. HAWLEY 1,863,539

POLE TOP PIN

Filed Dec. 14, 1929

Fig. 2.

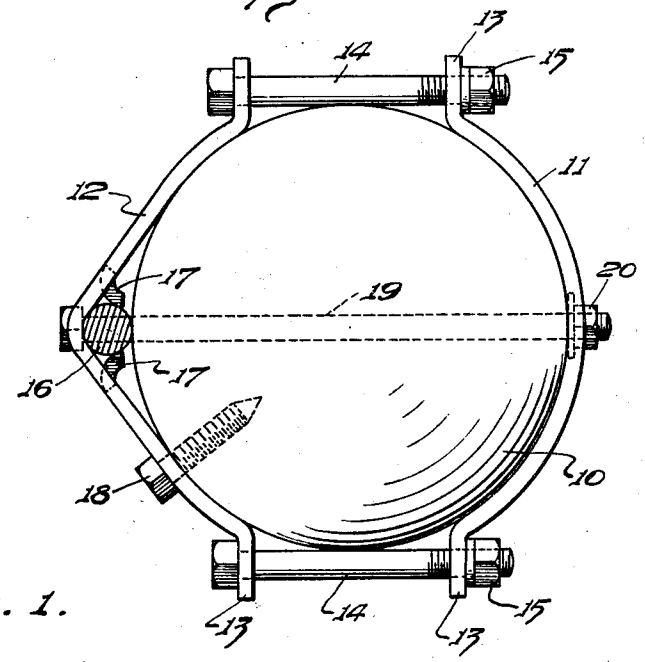
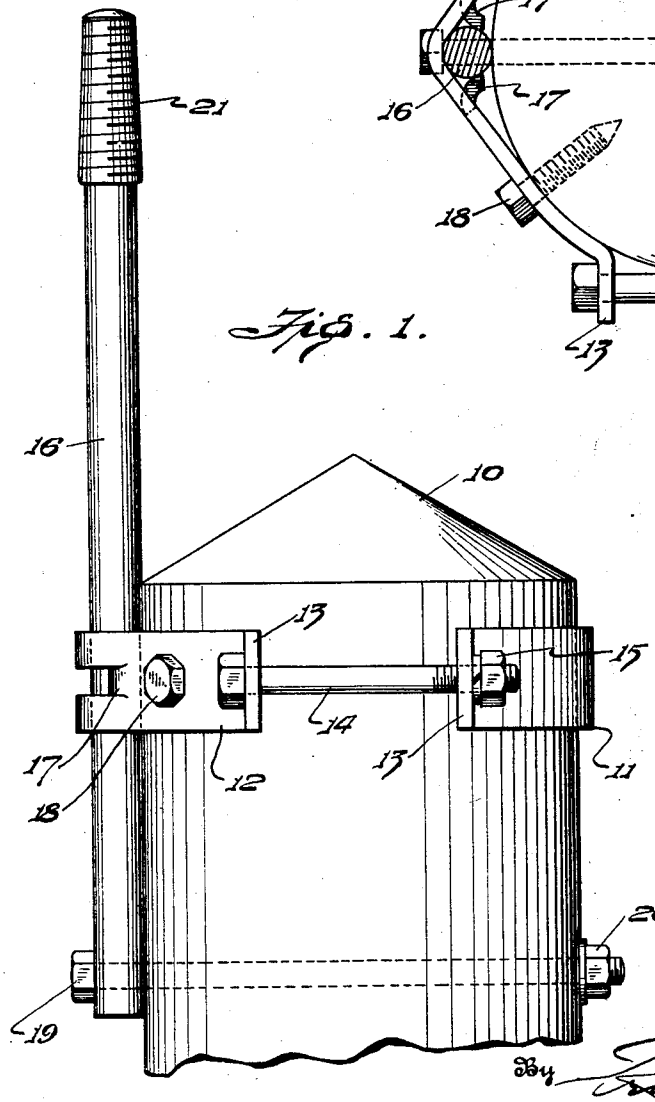


Fig. 1.



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1,863,539

UNITED STATES PATENT OFFICE

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POLE TOP PIN

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The invention relates to supports for insulators and has special reference to a pin and supporting means therefor adapted to be mounted at the top of a wooden pole.

It is well known that the usual pole top pin is fastened to the pole by bolts which extend through holes bored in the pole. These holes, particularly the one nearest the top, have a tendency to start cracks in the pole, ultimately causing a serious split which may progress and produce a dangerous weakening effect.

It is with the above facts in view that I have devised the present invention which has for an important object the provision of a pole top pin which may be mounted in place without necessitating a hole near the end of the pole and yet which will be more secure than the ordinary type.

A more specific object of the invention is to provide a pole top pin and mounting therefor involving a sectional band structure embracing the pole near its end and consequently reinforcing the pole and not only preventing the development of splits but closing together any splits which may already exist or which may have started from any cause whatsoever.

Another object of the invention is to provide a device of this character which is substantially self-adjusting so as to be capable of use on poles varying in dimensions without it being necessary to provide a plurality of sizes.

Still another object is to provide a pin and bracket structure in which the pin will be held most rigidly so as to be incapable of displacement from any cause.

An additional object is to provide a structure of this character which will be very simple and inexpensive to make, easy to install, positive in action, efficient and durable in service, and a general improvement in the art.

To the attainment of the foregoing and other objects and advantages, the invention preferably consists in the details of construction and the arrangement and combination of parts to be hereinafter more fully described and claimed, and illustrated in the accompanying drawing in which:

Figure 1 is a side elevation showing my pole top pin in mounted position, and

Figure 2 is a top plan view thereof with the pin in section.

Referring more particularly to the drawing, the numeral 10 designates a wooden pole such as is commonly used for supporting insulators in certain types of installation. In carrying out my invention I provide a sectional clamp or band, the sections being designated by the numerals 11 and 12 respectively. This clamp is intended to be embracingly engaged upon the pole and to be drawn tightly in relation thereto for which reason the ends of the sections 11 and 12 are formed with outstanding ears or lugs 13 for the passage of bolts 14 equipped with nuts 15. The stock from which these clamp sections are formed need not be of great thickness and as a matter of fact sheet steel of suitable gauge and properly galvanized to prevent rusting is eminently suitable for the purpose. By constructing the clamp of material which is not excessively rigid it is apparent that the clamp sections may, when the nuts are turned down on the bolts, accommodate themselves to the contour of the pole. Furthermore as the bolts may be of considerable length it is apparent that a clamp of a given size may be used upon poles of considerably different dimensions.

The clamp section 11 need be simply arcuate in shape but as the clamp section 12 is intended to hold the pin 16, it is necessarily of somewhat different formation. As shown in the drawing, this section 12 may be substantially V-shaped and formed at opposite sides of its angle with outstruck lugs 17 bearing against the pin 16 and acting to center the same.

To prevent any possibility of the clamp becoming displaced in the event of unexpected and excessive shrinkage of the pole, a lag screw 18 may be passed through either of the sections 11 and 12 and into the pole. To complete the holding action on the pin, I may employ a through bolt 19 passing through a hole in the lower end of the pin and through the pole, this bolt being equipped with a nut 20.

There is nothing unusual in the construc-

tion of the pin itself as it may be of a generally accepted type and provided at its upper end with a threaded rod, cob or thimble 21 upon which the insulator, not shown, is to be screwed. As a lead cob or thimble is comparatively soft, it is clear that the insulator, when applied, may be forced around to bring its conductor receiving groove in the proper direction or line without necessitating loosening of the pin itself in its retaining clamp.

From the foregoing description and a study of the drawing it will be apparent that I have thus provided a very simple pin mounting which will entirely avoid splitting of the pole. Owing to the fewness of the parts and their simplicity it is evident that the device may be manufactured at very slight cost. It is believed that the construction, operation and advantages will be readily apparent to one skilled in the art without further explanation.

While I have shown and described the preferred embodiment of the invention, it should be understood that the disclosure is merely an exemplification of the principles involved as the right is reserved to make all such changes in the details of construction as will widen the field of utility and increase the adaptability of the device provided such changes constitute no departure from the spirit of the invention or the scope of the claims hereunto appended.

Having thus described the invention, I claim:

1. A pole top pin structure comprising the combination of a pole, a sectional clamp engageable upon the upper end of the pole, a pin closely engaged between the pole and one section of the clamp, means for securing the lower end of the pin to the pole, and means on one section of the clamp engaging opposite sides of the pin for maintaining the same in upright position.

2. A pin and mounting therefor for use on wooden poles, comprising an adjustable clamp adapted to be engaged upon a pole in embracing relation thereto, a pin adapted to be confined between the pole and the clamp and having its lower end adapted to be secured to the pole, the pin engaging portion of the clamp being of angular formation with the pin located and confined in the angle and being provided with projections additionally engaging the pin at a plurality of points for maintaining the same in upright position.

3. A pole top pin structure and mounting comprising a sectional clamp embracingly engageable upon a pole and equipped with adjusting means, one section of the clamp being of substantially V-shape and formed with outstruck lugs at the sides of the angle, and a pin engageable between the pole and said section of the clamp and located within said angle and between said lugs.

4. A pole top pin and mounting therefor comprising a clamp including a pair of sections, bolts connecting said sections, one section having an angle therein, a pin engageable between the pole and said section and located within said angle, and said section being formed with outstruck lugs at the opposite sides of the angle therein, said lugs bearing against the pin for maintainng the same erect.

5. A device of the character described comprising a clamp including a pair of sections, one of curved form and the other of substantially V-shape, said sections being formed at their ends with outstanding ears, bolts passing through said ears and equipped with nuts, said V-shaped section being formed with outstruck lugs at opposite sides of the angle therein, a pin located within the angle, and means for directly securing the lower end of the pin to a pole, the intermediate portion of the pin being located within said angle and in engagement with said lugs.

6. A mounting of the character described, comprising clamp sections, one of curved form and the other of substantially V-shape, means engaging said sections for securing the same upon a pole, a pin located within the angle of said V-shaped section, and projections on the inner side of said V-shaped section engaging against opposite sides of the pin.

In testimony whereof I affix my signature.

KENT A. HAWLEY.