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R. G. WILLIAMS

1,802,995

GAIN FIXTURE FOR POLES

Filed March 10, 1930

Fig. 1.

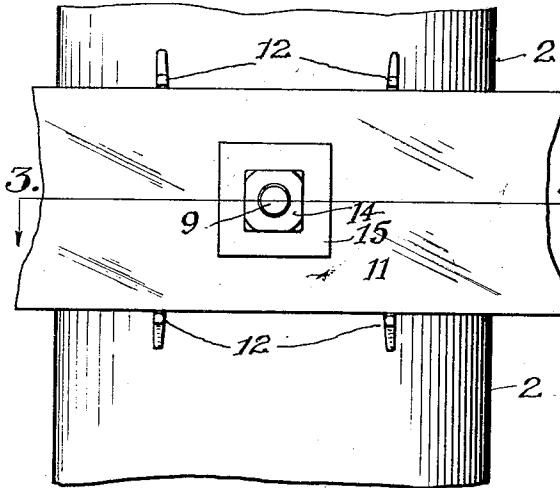


Fig. 2.

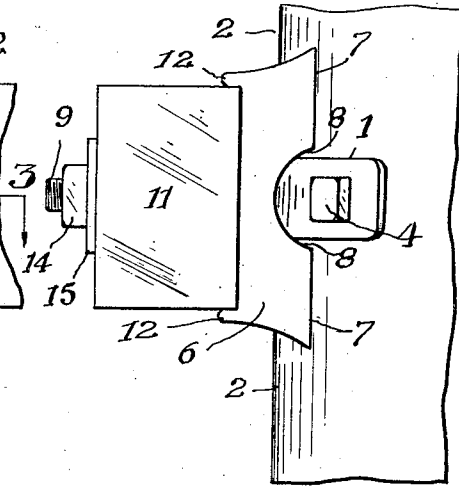


Fig. 3.

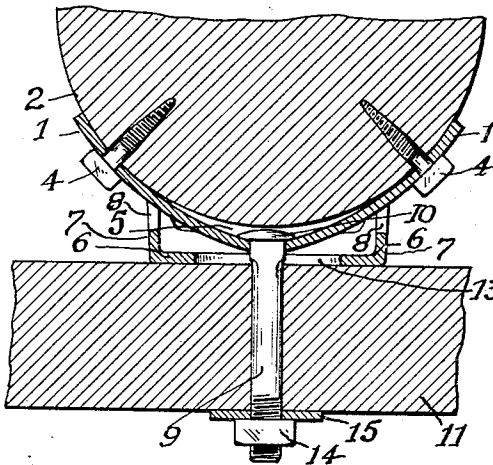


Fig. 4.

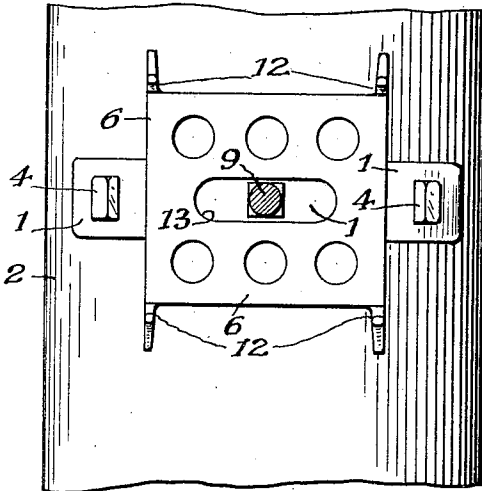
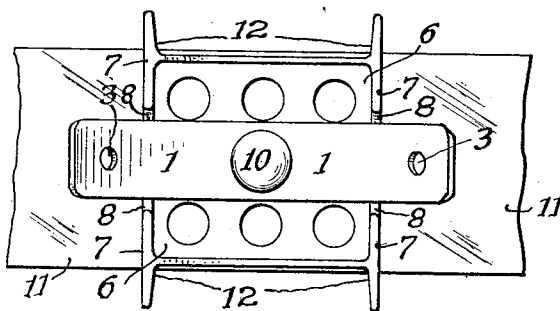


Fig. 5.



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UNITED STATES PATENT OFFICE

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GAIN FIXTURE FOR POLES

Application filed March 10, 1930. Serial No. 434,825.

My invention relates to gain fixtures for poles such as are used for the service of telegraph, telephone, electric light, &c., and has for its object to avoid boring a hole through the pole for a securing bolt, and also to provide for ready adjustments of the fixture so that the cross-arm supported thereby may be in proper alinement.

In the accompanying drawing which is to be read as a part of the description which follows:—

Figure 1 is a front elevation of a cross-arm secured in position to a pole by my improved fixture—

Figure 2 is a side elevation—

Figure 3 is a section at the line 3—3 of Figure 1—

Figure 4 is a view similar to Figure 1 with the cross-arm removed, and

Figure 5 is a detail rear view of the fixture with the cross-arm in place.

Similar numerals of reference denote like parts in the several figures of the drawing.

In securing a fixture of this sort to a pole, a hole is usually bored entirely through the pole to accommodate the bolt that supports the fixture, but it has been found that water will get into the bore, the bolt will rust, and rotting of the pole will ensue, which not only weakens the pole but causes the wall of the bore to no longer afford a comparatively close fitting support for the bolt, and the latter will consequently sag and wobble, thereby rendering the fixture inefficient.

In my improvement, the means for supporting the fixture consists of a heavy metal band or strap 1 that embraces the pole 2 and extends part way around the latter, the ends of the band being pierced as at 3, to accommodate large lag screws 4 that are driven, preferably at an angle within the pole, as shown at Figure 3, and this band is curved and is spaced at its central portion from the pole as shown at 5.

6 is the gain fixture whose sides 7 contact the pole and are cut away midway of their length to form recesses 8 that embrace the upper and lower edges of the band 1, which thus affords a support for the fixture, and the latter can be shifted along the curved

band, for the purpose presently to be explained.

9 is a bolt whose head 10 is in the rear of the band 1 within the space 5, the bolt being inserted through a hole in the band.

11 is the cross-arm which is seated to the fixture between lugs 12 that extend from the corners of said fixture, and the bolt 9 extends through an elongated slot 13 in the fixture and through the cross-arm, and the outer end of the bolt is threaded and extends beyond said arm, a nut 14, with an interposed washer 15, being driven on said end to hold the arm firmly in position.

In installing fixtures of this sort, it frequently happens that the cross-arm does not aline properly with other arms on the same pole or with the similar arms on preceding or succeeding poles, either because the band is not accurately positioned on the pole, or because the fixture itself is not suitably adjusted along the curved band, and in such an instance, the nut is relaxed and the fixture slid along the band in either direction, as the occasion may demand, until the arm assumes proper position, and the nut is then tightened.

All poles are subjected, as a rule, to a liquid treatment that acts as a preservative and extends a certain distance within the poles, and the lag screws, while they do not penetrate beyond the treatment, nevertheless could be safely used with untreated poles, since such screws are taper threaded and effectually plug the openings which they make.

What is claimed is:—

1. A gain fixture for poles, comprising a curved band extending partway around the pole and secured thereto by lag screws driven through the ends of the band into the pole, said band being spaced at its central portion from the pole, a fixture having an elongated slot in its face and whose sides contact the pole and are adjustably supported on said band, a cross-arm seated to said fixture, a bolt extending from said band through said slot and cross-arm, and a nut driven on the end of said bolt.

2. A gain fixture for poles, comprising a curved band secured to the pole and spaced

therefrom at its central portion, a fixture
slidably supported on said band and having
its sides contacting the pole, a cross-arm
seated to said fixture, a bolt extending from
5 said band through said fixture and cross-arm,
and a nut driven on the end of the bolt against
said arm.

3. A gain fixture for poles, comprising a
curved band secured to the pole and spaced
10 therefrom at its central portion, a fixture
slidably supported by said band and having
its sides contacting the pole, a cross-arm sup-
ported by said fixture, and means for secur-
ing said fixture and cross-arm directly to said
15 band.

In testimony whereof I affix my signature
hereto.

ROLLAND G. WILLIAMS

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