No. 765,054. PATENTED JULY 12, 1904.

E. F. TAFEL.

TELEGRAPH POLE.

APPLICATION FILED MAR. 1, 1904.

NO MODEL.

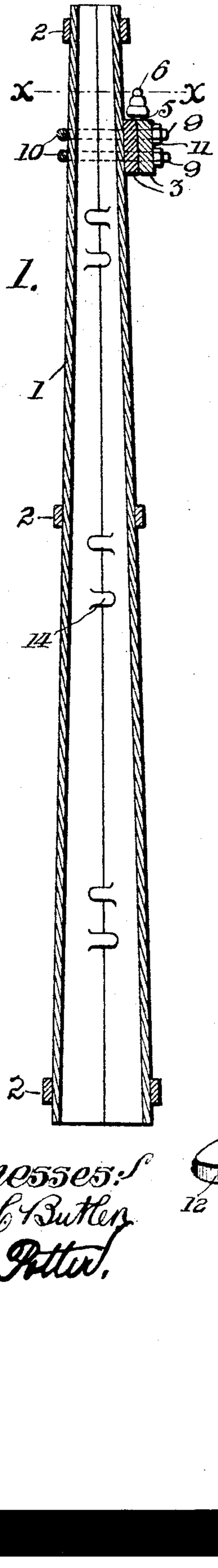

Fig. 1.

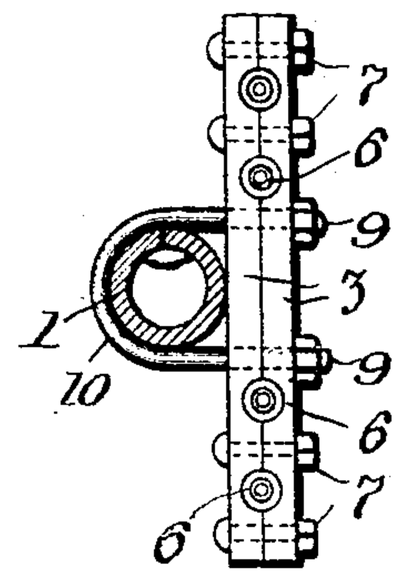

Fig. 2.

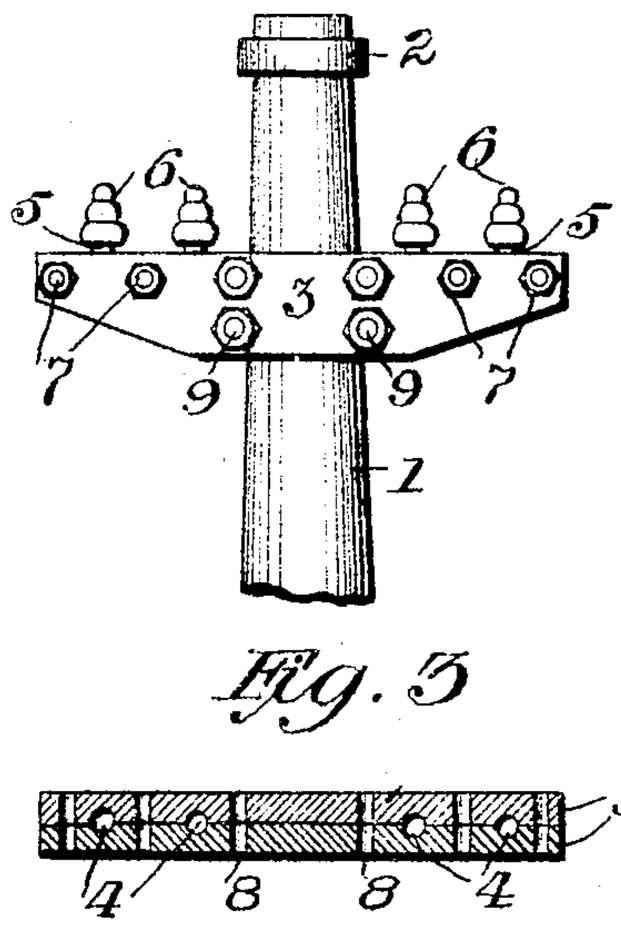

Fig. 3

Fig. 4.

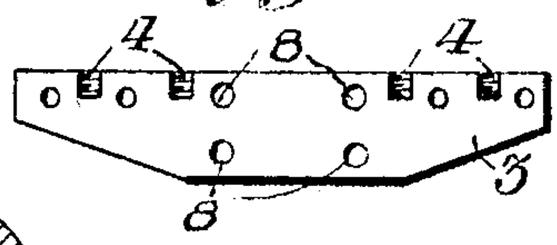

Fig. 5.

Fig. 6.

Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD F. TAFEL, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JAMES C. GORMLEY, OF PITTSBURG, PENNSYLVANIA.

TELEGRAPH-POLE.

SPECIFICATION forming part of Letters Patent No. 765,054, dated July 12, 1904.

Application filed March 1, 1904. Serial No. 195,977. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. TAFEL, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Telegraph-Poles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to telegraph-poles, and has for its object the provision of a novel form of pole and of cross-bars therefor, the entire structure to be composed of metal and the cross-bars being adapted to be applied to the pole at any desired point without piercing the pole for the reception of bolts, screws, or other fastenings.

In carrying my invention into effect I provide a tapered metallic pole formed of rolled or pressed metal with an unwelded joint, and I surround the pole with metallic bands, which are shrunk upon the pole at suitable intervals, and I thereby produce a tapered pole of exceptional strength and lightness and at comparatively low cost.

In connection with the pole as above described I employ a cross-bar or a plurality of the same, consisting of two flat pieces of metal united by bolts, each piece having half screw-threads pressed in the metal at coinciding points, which when the two pieces are united will form screw-threaded holes for the reception of insulator-pins, the cross-bars, constructed in the foregoing manner, being fixed in position on the pole by means of U-shaped clips, which embrace the poles and project through holes in the cross-bars and are secured therein by means of nuts screwing on the projecting ends of the clips.

Referring to the accompanying drawings, Figure 1 is a vertical sectional view of a pole and cross-bar constructed according to my invention. Fig. 2 is a horizontal sectional view of the same on the line *x x* of Fig. 1. Fig. 3 is a side elevation of a portion of the pole looking at one side of the cross-bar. Fig. 4 is a horizontal sectional view of the cross-bar detached from the pole. Fig. 5 is a side elevation of one of the half-sections of the cross-bar. Fig. 6 is a fragmentary perspective view of a portion of the pole, showing the clamping-guides carried upon the interior thereof.

The body of the pole is composed of a single section of metal 1, tapering gradually from top to bottom and embraced by metallic rings or bands 2 2 2, which are shrunk upon the pole at suitable points, one of the bands being located near the top of the pole, one near the bottom of the same, and the third midway of the other two. While I have shown but three of these bands and have found this a sufficient number for a pole of ordinary character, I wish it to be understood that any desired number of such bands or rings may be employed.

The cross-bar which constitutes an important feature of my invention is composed of two similarly-formed half-sections 3 3, each of which has half-threads 4 4, pressed in its inner side, which half-threads when the half-sections 3 3 are united constitute screw-threaded holes for the reception of insulator-pins 5 5, which screw into these holes and carry insulators 6 6. The half-sections 3 3 are secured together by bolts 7 7, arranged at appropriate points, and the half-sections are pierced at 8 8 for the passage of the legs 9 9 of clips 10 10, the legs being screw-threaded and being provided with nuts 11 11, by means of which the clips may be drawn up so as to tightly embrace the pole and hold the cross-bar in position. The cross-bar is, as shown in Fig. 3, tapered from near the middle toward the outer ends for the purpose of decreasing its weight, and a single cross-bar or any desired number of cross-bars may be fixed on a single pole, the cross-bars being adjustable in a vertical direction and also adjustable to any position tangentially to the pole that may be found necessary or desirable. The half-sections of the cross-bar are formed of rolled plate, and the half-threads being pressed in the half-sections obviate the laborious and expensive work of tapping the screw-threads for the reception of the insulator-pins.

In the forming or rolling of the pole or in the making of the same of pressed steel I provide guides 12, formed on the interior of the pole and adjacent to the abutting edges of the same, whereby when the pole is formed these guides will prevent the edges of the pole from overlapping and will serve to clamp the two edges of the pole together. In Figs. 1 and 6 of the drawings this construction is shown, and it will be observed that a number of these guides are carried by one edge of the pole and protrude outwardly and engage the other edge, as indicated at 14. These guides may be welded upon the interior of the pole or secured thereon by any suitable means.

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

1. The combination with a telegraph-pole, of a cross-bar composed of two similar half-sections, each having pressed half-threads at coinciding points.

2. A cross-bar for telegraph-poles, composed of two flat metallic half-sections united by bolts, the half-sections being formed with pressed half-threads at coinciding position, constituting threaded holes for insulator-pins.

3. The combination with a telegraph-pole, of a cross-bar composed of united half-sections, having coinciding half-threads pressed into their abutting surfaces, and clips embracing the pole, projecting through the half-sections of the cross-bar and carrying nuts.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD F. TAFEL.

Witnesses:
H. C. EVERT,
K. H. BUTLER.