To all whom it may concern:

Be it known that I, Anton C. Kudla, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Trolley Stands and Poles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in Figure 1 a side view of a trolley pole constructed in accordance with my invention. Fig. 2 a front view of the same. Fig. 3 an underside view of the base. Fig. 4 a sectional view on the line a—b of Fig. 1. Fig. 5 a longitudinal sectional view through the base. Fig. 6 represents a portion of a car illustrating means for operating the locking slides. Fig. 7 a sectional view on the line c—d of Fig. 6.

This invention relates to an improvement in trolley stands and poles, and particularly to the type of poles which normally stand in a substantially vertical position. The object of this invention is to provide a pole which is not only vertically adjustable, but which may also be rocked in either direction as may be required when running under bridges or into car barns; and the invention consists in the construction hereinafter described and particularly recited in the claim.

In carrying out my invention, I employ a base 2 adapted to be secured to the top of a car in the usual way. This base includes two centrally arranged upwardly projecting arms 3, 4, between which is pivoted the foot 5 of the main pole 6 which comprises two upwardly extending arms 7 and 8 between which the sliding member 9 extends, the sliding member passing through a plate 10 secured to the top of the arms 7 and 8. The upper end of the sliding member carries a yoke 11 supporting a long roller 12 which rides on the trolley wire. Preferably and as shown, the ends of the yoke will have inclined bearing surfaces 36 at each end of the roller which will assist in causing the roller to assume a position under the main wire at cross-overs and switches. The lower end of the vertical member carries a block 13 traveling between the arms 7 and 8 and forming a guide for the moving member. This block is connected with the plate 10 by coil springs 14 the tendency of which is to lift the movable member and hold the roller 12 against the trolley wire. A rope 15 may be attached to the block 13 by which the movable member may be drawn down, the rope 15 leading to any convenient point on the car.

The ends of the base 2 have upwardly and outwardly projecting arms 16 and 17 to which springs 18 and 19 are connected, the inner ends of these springs being connected with the lower end of the main pole 6. These springs tend to hold the pole in a vertical position yet permit it to be turned in either direction. The opposite edges of the main pole are formed with downwardly projecting feet 20 and 21 which are adapted to come in contact with longitudinally movable slides 22 and 23 arranged in the base 2, the slides serving to prevent the pole from rocking. These slides are connected together by a spring 24 and to each is attached a bar 25 for connection respectively with cords or ropes 26 and 27 by which the blocks may be moved longitudinally out of the path of the feet 20 or 21. As a convenient method of moving these slides the ropes 26 or 27 pass over suitable guide pulleys to the outer ends 28 of bell crank levers 29 pivoted to any convenient points on the car. The arm 30 of the bell crank lever forms an operating handle by which the lever may be turned, and this arm is adapted to be forced downward between spring locking latches 31 and 32 by which the lever is held in its locked position, and to disengage the lever from its latches it is provided with an auxiliary handle 33 the end 34 of which is adapted to be pressed between the spring locking latches 31 and 32 to separate them and allow the arm 30 of the lever to escape. When it is desired to permit the pole to rock as in passing under a bridge or entering a barn or in making connection with the wire, the lever 29 will be drawn downward into the position shown in Fig. 6 of the drawings, which draws upon the rope 26 or 27, thus moving either of the blocks 22 and 23 out of the path of the feet 20 or 21, and so that the pole is free to turn on its pivot. When the pole again rises the lever is released by lifting the auxiliary handle 33 allowing the lever 29 to escape from its latches and permit the sliding block to move forward. It will thus
be seen that in its normal position the trolley pole is held in substantially vertical position and will automatically adjust itself to the slight variation in the height of the trolley wire. By providing a rigid vertically arranged trolley pole and a long roller the danger of slipping from the wire is rendered less liable.

I claim:

10. A trolley pole comprising a base, a main pole pivotally connected with the base and provided on opposite edges with downward projecting feet, longitudinally movable blocks mounted in the base and normally standing beneath said feet, and means for withdrawing said blocks.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

ANTON C. KUDLA.

Witnesses:
Joseph Dupuis,
Henry Runge.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."