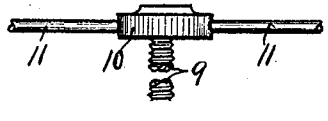
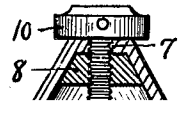
Aug. 13, 1929. A. T. GREEN ET AL 1,724,401

GROUND ANCHOR FOR GUY WIRES.

Filed July 27, 1927







Patented Aug. 13, 1929. 1,724,401

UNITED STATES PATENT OFFICE.

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GROUND ANCHOR FOR GUY WIRES.

Application filed July 27, 1927. Serial No. 208,687.

This invention relates to a ground anchor prises a substantially straight tubular sec-

For this latter purpose, the peripheral wall of the tubular section —1— is provided with a plurality of radial slots or openings —20— alined with the corresponding flukes —15— to serve as guides through which the flukes may fold and unfold as the rod —14— is moved endwise in reverse directions.

That is, the end walls of the slots or openings —20— constitute abutments against which the outer ends of the corresponding flukes are adapted to engage and by which they are deflected outwardly or inwardly according to the direction of movement of the rod —14—.

These flukes —15— are pivoted to the rod —14— at different levels so that each moves about a separate axis, some of the pivots being disposed at right angles to others so that the flukes may fold and unfold in different planes, it being understood that the openings will be arranged at different levels corresponding to the position of their respective flukes.

It will be observed that the lengths of the several flukes are substantially the same and is considerably greater than the radius of the tubular section —1— so that when unfolded to the position shown by dotted lines in Figure 1 they will project some distance beyond the periphery of the tubular section for engagement with the ground.

The upper end of the rod —14— is provided with an eye —21— adapted to be engaged by the hook —13— on the lower end of the screw —9— whereby the upward adjustment of the screw —9— will cause a corresponding upward movement of the rod —14— thereby bringing the outer ends of the flukes —15— into sliding engagement with the upper end walls of their respective slots —20— for unfolding the flukes through said openings and under the adjacent portion of the ground for firmly anchoring the tube against outward displacement from the ground after being driven thereinto.

This upward movement of the rod —14— may be continued until the shoulder —19— on its lower end engages the underside of the partition —18— at which time further upward movement will be checked and the flukes —15— will have been unfolded to a substantially horizontal position as shown by dotted lines in Figure 1, the unfolding movement of the flukes being further limited by the engagement of their lower flat sides with the lower end walls of the slots —17—.

As the screw —9— is unscrewed or turned in a direction to effect the upward movement of the rod —14— and resultant unfolding of the flukes —15— it will exert a downward pressure upon the cap —3— and upon the upper end of the tubular section —1— to hold the sections —1— and —3— in operative engagement, with the pins —6— in the slots —5— which hold said sections against relative rotation while the resistance of the tubular section —1— in the ground prevents turning of both sections during the turning movement of the screw —9—, it being understood that the engagement of the flukes —15— in the slots —20— holds the rod —14— against turning movement when the screw —9— is rotated.

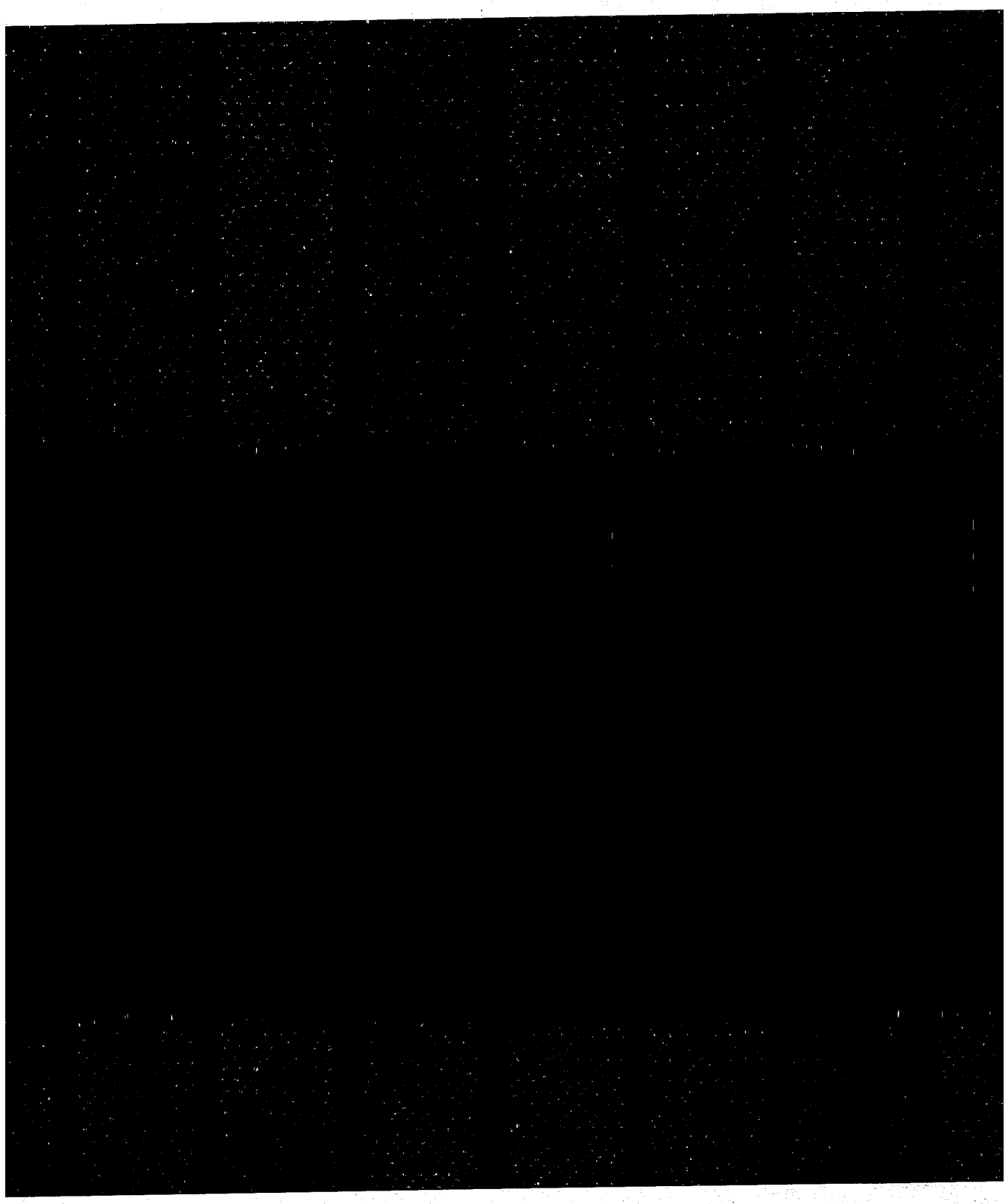
When preparing the device for driving the tube —1— with the rod —14— and flukes —15— therein into the ground, if the cap section —3— is in operative position on the upper end of the tube and the hook —13— is engaged with the eye —21— on the upper end of the rod, the screw —9— will first be screwed downwardly thereby forcing the rod —14— to the limit of its downward movement and withdrawing the flukes —15— inwardly beyond the periphery of the tube —1— and if this turning movement of the screw —9— is continued the cap section —3— will be withdrawn from the upper end of the tubular section —1— until the hook —13— and eye —21— are exposed below the lower end of the cap section —3— as shown in Figure 5 whereupon the cap section —3— with the screw —9— and hook —13— may be tilted laterally and the hook —13— disengaged from the eye —21—.

The cap section —3— with the screw —9— and hook —13— thereon is then replaced upon the upper end of the tubular section —1— with its pins —6— in the slots —5— at which time the hook —13— and eye —12— of the screw —9— will be disposed at one side of the eye —21— and its rod —14— so as to extend downwardly some distance beyond the upper end of the eye —21—.

Then the screw —9— will be screwed downwardly until its head —10— engages the upper end of the cap section —3— at which time the hook —13— and screw —9— will be free from connection with the rod —14—.

Now, by placing the tubular section —1— in an upright position with its point —2— at the location desired a sledge hammer or other pressure device may be applied to the upper surface of the head —10— which is then resting against the upper end of the cap section —3— for driving the entire device into the ground to the required depth or until the flukes —15— are a sufficient distance below the surface of the ground to effect the desired anchorage of the tubular section —1— therein when the flukes are unfolded in the manner previously described.

That is, when the tubular section —1— with the rod —14— and flukes —15— therein



are driven to the required depth into the ground the cap section —3— which is then disconnected from the rod —14— may be removed from the upper end of the tubular section —1— and the hook —13— re-engaged with the eye —21—.

After the hook —13— is re-engaged with the eye —21— the cap section —3— is brought into vertical alinement with the tu-

moved from the upper end of the tubular section —1— a guy wire or cable may be connected to the eye —21— and to the upper portion of a telegraph pole or other device which it is desired to hold in a more or less vertical position thus completing the installation of the ground anchor.

What we claim is:—

1. In a ground anchor having a tubular case and a fluke-supporting rod movable