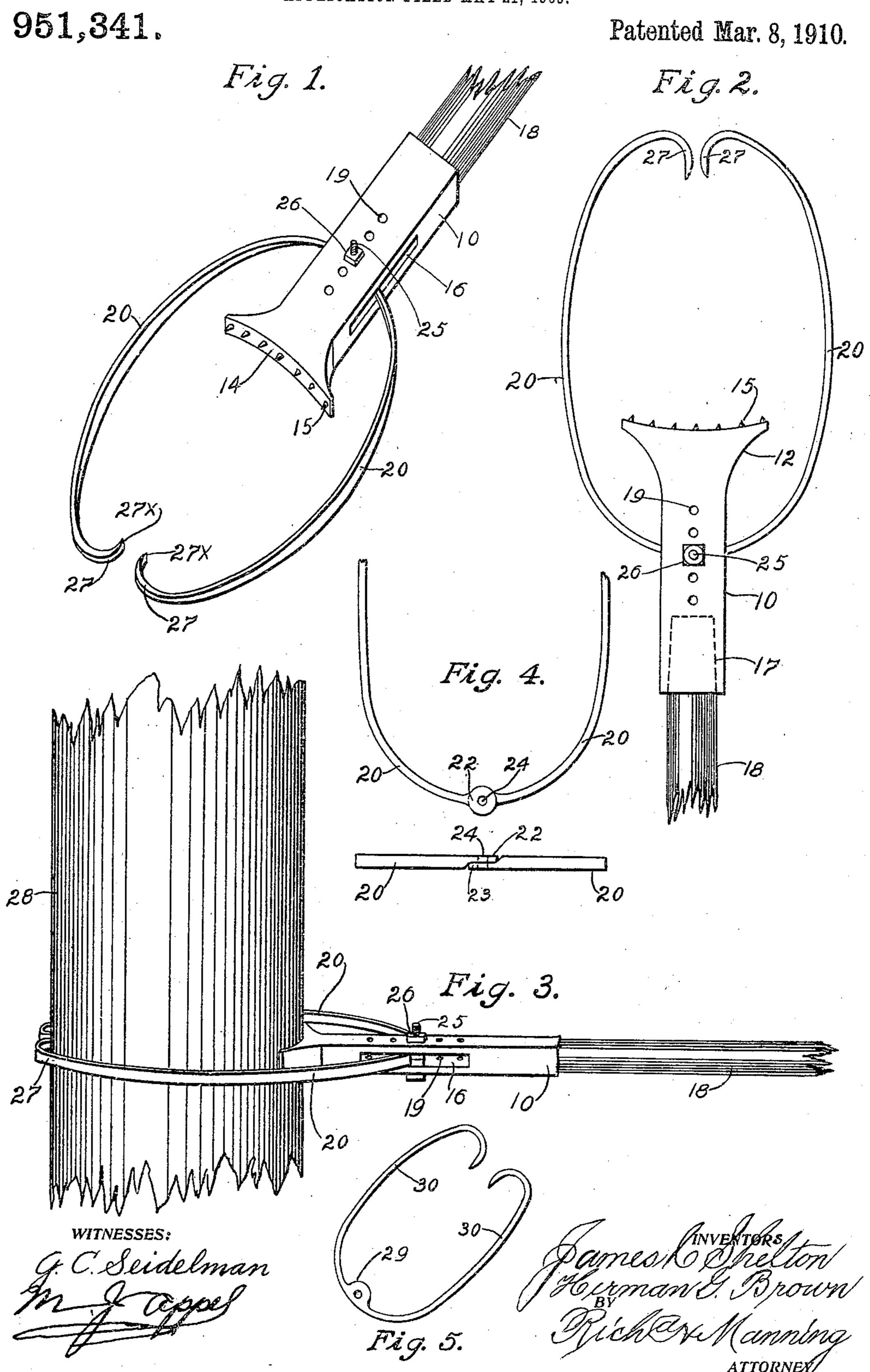
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GRAPPLING IMPLEMENT FOR TURNING POLES.

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GRAPPLING IMPLEMENT FOR TURNING POLES.

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To all whom it may concern:

Be it known that we, James C. Shelton and Herman G. Brown, citizens of the United States of America, and residents of Excelsior Springs, in the county of Clay and State of Missouri, and Hiawatha, in the county of Brown and State of Kansas, respectively, have invented certain new and useful Improvements in Grappling Implements for Turning Poles; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others to make and use the same, reference being had to the accompanying drawing, forming a part of this specification.

The object of the invention is a grappling instrument or tool for facilitating a turning movement to masts and poles, and particularly to poles supporting telephone and telegraph wires when the poles are being set in an upright position, within the excavation prepared therefor, and adjustment in position is required. Secondly, to adjust the implement to the size of the body to be grasped.

The invention consists in the novel construction and combination of parts, such as will be first fully described and then specifically pointed out in the claims.

In the drawings: Figure 1. is a view in perspective of the invention. Fig. 2. is a plan view of the same. Fig. 3. is a perspective view of the invention, as applied to the mast or pole. Fig. 4. is a detail plan and end view, respectively, of the hinged portions of the grappling arms. Fig. 5. is a view of a modification of the grappling arms.

Similar numerals of reference indicate corresponding parts in all the figures of the drawing.

Referring to the drawing, 10 indicates the body of the tool or implement, which consists of a straight bar or lever, of sufficient width and thickness and of considerable length. Upon the inner end of the bar are laterally extended feet 14, the sides of said bar inwardly from said feet being curved inwardly as at 12. The inner surfaces of said feet 14 are curved inwardly in the arc of a circle. In said curved surface, of the end of the feet 14, are small, outwardly extended pointed pins 15. These pins are arranged in

position in series, at slight distances apart, 55 in the surfaces of feet 14.

Extending transversely through and lengthwise the bar 10, a short distance inwardly from feet 14 is an opening 16. In the outer end of the bar 10 is a socket 17, in 60 which socket is extended one end of a bar or handle 18. 19 indicates perforations extending vertically through the portion of bar or lever 10, having the opening 16, and intermediate the vertical side portions of the bar, 65 these perforations being arranged at suitable distances apart, in the longitudinal direction of the bar.

20 indicates the grappling arms, which consist of narrow spring bars, preferably 70 made from spring steel and curved outwardly, the two arms forming a figure elliptical in shape. The inner ends of the arms 20 are cut away horizontally, or halved at 21, and upon said halved ends are the 75 upper and lower leaves 22 and 23, respectively, which are perforated at 24, the perforation extending through both leaves, which leaves form a hinge joint, as further described. The inner, perforate ends of the 80 arms 20 are extended within the opening 16, of the bar 10, and in such a position that the perforation 24, in the leaves 22 and 23 is in a vertical line with, or registering with the perforation 19, in the bar 10, the for- 85 ward ends of the arms extending forwardly past the forward ends of the bar 10, to a position in which the forward ends of the arms are adjacent to each other. Through the said perforations 24 and 19 is extended 90 a screw-threaded adjusting bolt 25, upon which bolt is a nut 26, the bolt 25 forming the pintle to the hinged leaves 22 and 23.

The forward ends 27, of the arms 20, are bent in a curved line inwardly in the direc- 95 tion of the curved surface 14, of the inner end of bar 10, the said inner portions 27, of the arms, being inclined from the opposite sides or surfaces of the bars or arms to a sharp impaling point as at 27^{\times} .

In the employment of the implement to the service of turning poles to which it is most applicable, the arms 20 are turned upon the hinged joint and bolt or pintle 25, outwardly, in which position the arms are adjusted relatively to the circumferences or girth of the pole or mast, in which adjustment the nut 26 is removed from bolt 25 and the bolt moved from the body 10, of the implement, and the hinged joint of the arms 20, and the jointed ends of the arms moved in the opening 16, either forward or 5 back to a position in which arms 20 will encompass the pole or mast, within a circle concentric with the curved surface of the feet 14, on the inner end of the lever 10, in which adjusted position the bolt 25 is replaced in the registering perforations in the body of the implement, and the hinged joint of the arms 20 and the nut 26 secured to the bolt.

The arms 20 being open, the feet 14, of the bar or lever 10 are placed against the surface of one side of the pole to be turned, the projections 15 on the feet 14 being forced into the post, to obtain a firm grasp or hold, and the arms 20 brought toward 20 each other, and the ends 27 set a short distance apart, as seen in Fig. 3, in which position of the arms 20, the points 27*, of said arms, grip the surface of the post upon the other side of the pole to that grasped by the end of the body 10, of the implement. When power is applied to the outer end of the lever to move said end laterally, the feet 14, act as fulcrums upon the object to be turned.

Instead of providing a hinge joint for the lever arms we may weld the parts of the joints together, or make the inner ends of the arms integral with a perforate plate 29, as seen in Fig. 5. The arms 30, of the modification, may be re-adjusted in the opening 35 16, of the body 10, of the implement, in the same manner as described of the arms 20, in Fig. 1. The arms 30 are sprung outwardly by the operator, when applied to the pole, and may be given more or less flexibility, as the occasion requires.

Such other modifications may be employed

as are within the scope of the appended claims.

Having fully described our invention, what we now claim as new and desire to 45

secure by Letters Patent is:

1. In a grappling implement the combination with separate outwardly curved grappling arms having engaging outer end portions, a straight bar or lever to which the 50 said arms are pivoted whose inner end extends within the compass of the circle inclosed by said arms, and is provided with oppositely and laterally extended feet, adapted to form bearings or fulcrums in 55 the lateral movements of the outer end of the said lever.

2. A grappling implement consisting of a straight bar or lever having oppositely and laterally extended inwardly curved feet on 60 its inner end, and an opening extending in the longitudinal direction of and in the said end of said lever and located inwardly from said feet, said lever having perforations extending through said opening, out-65 wardly extended outwardly curved spring grappling arms having inwardly extended engaging portions at their outer ends, and perforate halved portions, or leaves on the inner ends of said arms adapted to be ex-70 tended within said longitudinal opening in the said lever, and an adjusting pivot bolt.

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