G. A. ESTEL.

WELL AUGER POINT.

APPLICATION FILED APR. 25, 1911.

1,025,967. Patented May 14, 1912.

Fig. 1.

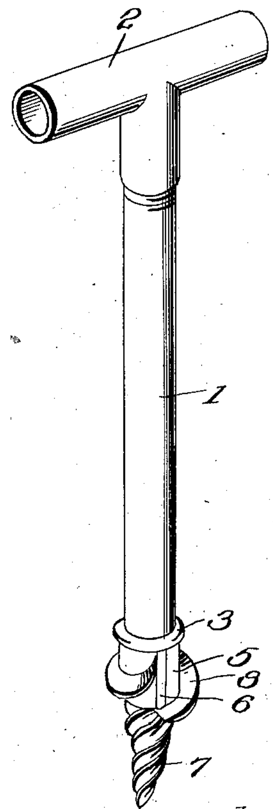
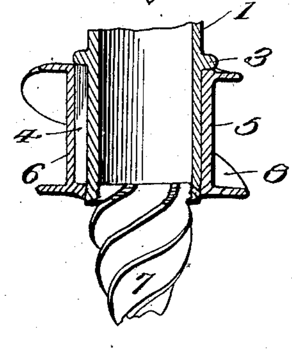


Fig. 2.



Witnesses

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GOTTFRIED A. ESTEL, OF JACOB, ILLINOIS.

WELL-AUGER POINT.

1,025,967. Specification of Letters Patent. Patented May 14, 1912.

Application filed April 25, 1911. Serial No. 623,267.

To all whom it may concern:

Be it known that I, GOTTFRIED A. ESTEL, citizen of the United States, residing at Jacob, in the county of Jackson and State of Illinois, have invented certain new and useful Improvements in Well-Auger Points, of which the following is a specification.

This invention has relation to well auger points, and has for its object to provide a simple structure which may be quickly and easily operated or manipulated for the purpose of boring a pump well.

With the above object in view, the structure includes a pipe section provided at its upper end with a hollow T which may be used as a handle or a sleeve through which a bar may be inserted, the said pipe section being provided at its lower portion with a circumferential rib and a longitudinally disposed spline. A sleeve having a slot is adapted to slip upon the lower end of the pipe section with the slot receiving the spline, the said sleeve being adapted to abut at its upper edge against the said rib. A spirally disposed blade is located upon the outer periphery of the sleeve and an auger point is inserted in and carried by the lower end of the pipe section.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a perspective view of the well auger point; and Fig. 2 is a sectional view of a portion of the same.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The well auger point includes a pipe section 1 provided at its upper end with a hollow T 2 which may be used as a handle or through which a bar may be inserted for the purpose of rotating the section 1 and its attachments. The section 1 is provided in the vicinity of its lower end with a peripheral annular rib 3, and the said section is provided upon its outer side below the rib 3 with a longitudinally disposed spline 4. A sleeve 5 is adapted to slip upon the lower end of the section 1 and abut at its upper end against the rib 3. Said sleeve is provided with a longitudinally disposed recess or socket 6 which receives the spline 4. An auger point 7 is inserted in and carried by the lower end of the pipe section 1.

To operate the device the auger point 7 is inserted into the ground and the pipe section 1 is rotated by the use of the handle 2. As the point 7 and the blade 8 cut through the earth the section 1 is sunk therein and the earth cut by the point 7 and the blade passes upward. The earth that is cut by the blade 8 is sufficiently loosened to permit the pipe 1 to sink readily. When the pipe 1 is sunk to a sufficient depth the handle 2 is unscrewed and a pump is placed on the pipe 1 in its stead. Also additional pipe sections may be connected with the section 1 by removing the handle 2 and replacing it on a newly connected pipe section. In this way pump wells can be sunk quickly, with less effort and less broken threads than usually attends driving wells. When it becomes necessary to withdraw the pipe section 1, the sleeve 5 with the blade 8 slips off from the lower end of the section 1 and remains in the earth. The auger point 7, however, being separate from the sleeve 5 and carried by the pipe 1 will withdraw with the said pipe. The only loss in pulling the pipe 1 from the earth is the sleeve 5 and blade 8. In order to prevent the adhesion of the sleeve 5 to the pipe 1 by rust a suitable anti-rust material may be used as a lining.

Having thus described the invention, what is claimed as new is:

1. A well auger point, comprising a pipe having a peripheral rib and provided with a longitudinally disposed spline, a sleeve adapted to receive the end of the pipe and abut against the rib, said sleeve having a slot which receives the spline, a spirally disposed blade carried by the sleeve, and an auger point carried by the pipe.

2. A well auger point, comprising a pipe having a peripheral rib and provided with a longitudinally disposed spline located between the rib and the end of the pipe, a

sleeve adapted to receive the end portion of the pipe and abut against the rib, said sleeve having a slot which receives the spline, a spirally disposed blade carried by the sleeve, and an auger point carried by the pipe and being less in diameter than the inside diameter of the sleeve.

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

GOTTFRIED A. ESTEL. [L. S.]

Witnesses:
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