

J. McGRANIGHAN.
 PILE TUBE.
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986,819.

Patented Mar. 14, 1911.

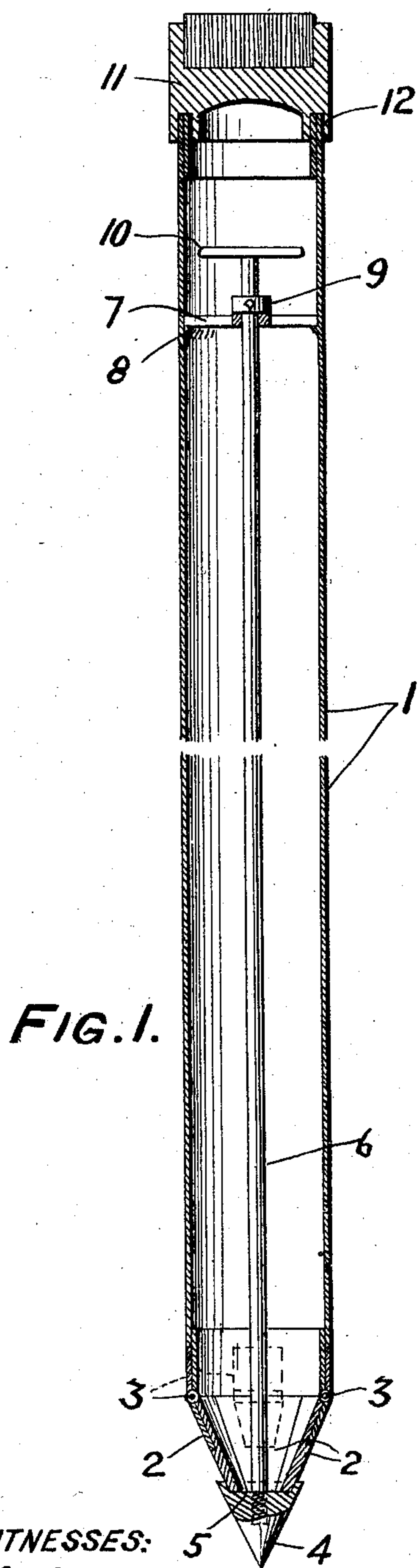


FIG. 1.

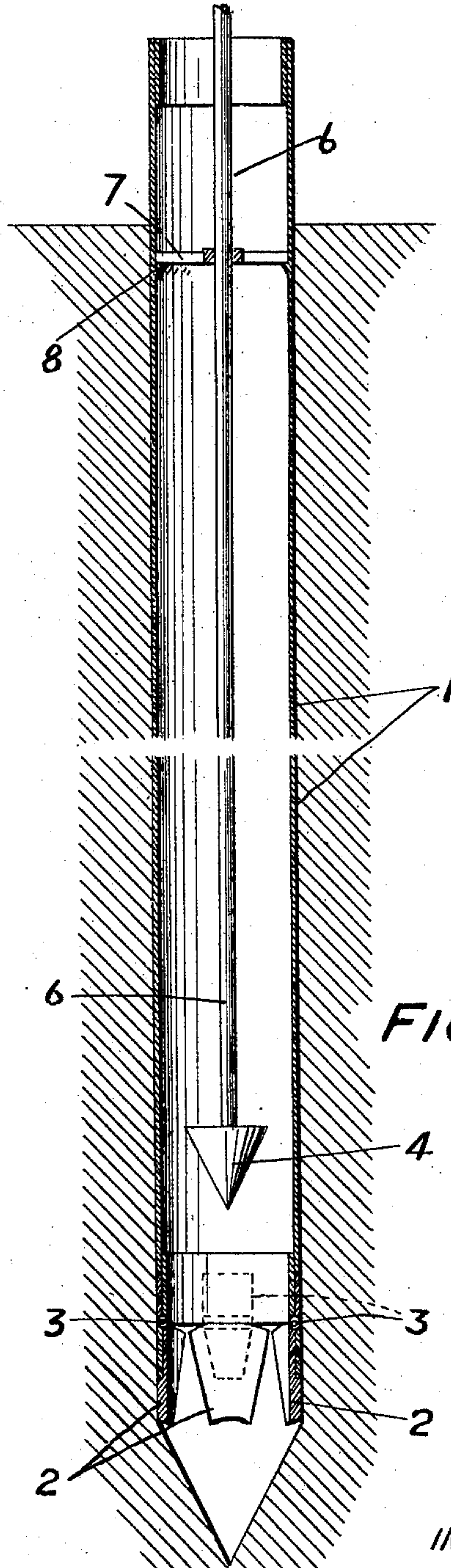


FIG. 2.

WITNESSES:

Robt. H. Kitchel.
Jos. G. Wanning Jr.

INVENTOR

John McGranighan

BY

Charles N. Butler
 ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN McGRANIGHAN, OF ROXBORO, PENNSYLVANIA.

PILE-TUBE.

986,819.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN McGRANIGHAN, a citizen of the United States, residing at Roxboro, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Pile-Tubes, of which the following is a specification.

My invention relates to pile tubes which are driven to provide for the insertion of piles; and it comprises, in its preferred form, a hollow barrel having hinged end sections, in combination with a point adapted to hold the sections closed, and means for holding the point in engagement with the closed section and withdrawing it between the open sections through the barrel.

The object of my invention is to provide a pointed, readily driven and removable form or temporary casing through which the point can be withdrawn after driving and the pile can be inserted or built up while the tube is in place or partially withdrawn.

In the accompanying drawings, Figure 1 is a sectional elevation of a pile tube embodying my improvements in the relation for driving, and Fig. 2 is a sectional elevation of the same representing the position of the driven tube with the point in process of removal.

As shown in the drawings, my invention comprises the metal tube 1 having the truncated cone sections 2 connected with the lower end thereof by hinges 3. The conical point 4 is provided with a socket 5 in which the lower truncated ends of the sections 2 are engaged and by which they are held together. A rod 6 passes through a spider 7, which rests upon lugs 8 formed within the tube 1, and is provided with a collar 9 which bears upon the spider. This rod has a cross or T-head 10 by means of which it is turned, and its threaded lower end is screwed into the top of the point 4, the latter being drawn up by the rod through the engagement of the collar thereon with the spider. A cap 11 is provided with a channel 12 which fits the top of the tube, the cap receiving the impact of the blows by which the tubular casing, thus constructed and assembled, is driven. When this tube or casing 1 has been driven to the proper depth, the cap 11 is removed, the rod 6 is turned to permit the point 4 and the cone section 2 to separate

and the tube is raised sufficiently to permit these sections to expand, when the point, rod and spider are lifted from the tube, which is left in the position shown in Fig. 2. It will be understood that this tube, thus opened at its bottom and freed of the interior parts, acts as a casing in which a pile can be inserted or constructed. The pile being inserted or constructed and the tube finally removed, the parts are brought into the relation shown in Fig. 1 for redriving.

Having described my invention, I claim:—

1. A pile construction comprising a tube having hinged sections, a removable point adapted for holding said sections together, said point being adapted to pass through said tube, and means engaging said point for holding it in engagement with said sections and drawing it through said tube.

2. A pile construction comprising a tube having hinged bottom sections, a point having a socket adapted for engaging said sections and holding them together, said sections being adapted to expand when detached from said point, and said point being removable through said tube, and a means comprising a rod in said tube engaging said point to hold it on said sections and draw it through said tube.

3. A pile construction comprising a tube having cone sections hinged to the lower end thereof, a conical point having a socket adapted for engaging the free ends of said sections, said point being adapted to pass through said tube, a rod engaged to said point and disposed within said tube, and means for supporting said rod.

4. A pile construction comprising a tube having truncated cone sections hinged to the lower end thereof, a conical point having a socket adapted for engaging the free ends of said sections, said point being adapted to pass through said tube, a rod engaged to said point and disposed within said tube, and means for supporting said rod.

In witness whereof, I have hereunto set my name this 2nd day of November 1910, in the presence of the subscribing witnesses.

JOHN McGRANIGHAN.

Witnesses:

JOS. G. DENNY, Jr.,
C. N. BUTLER.