

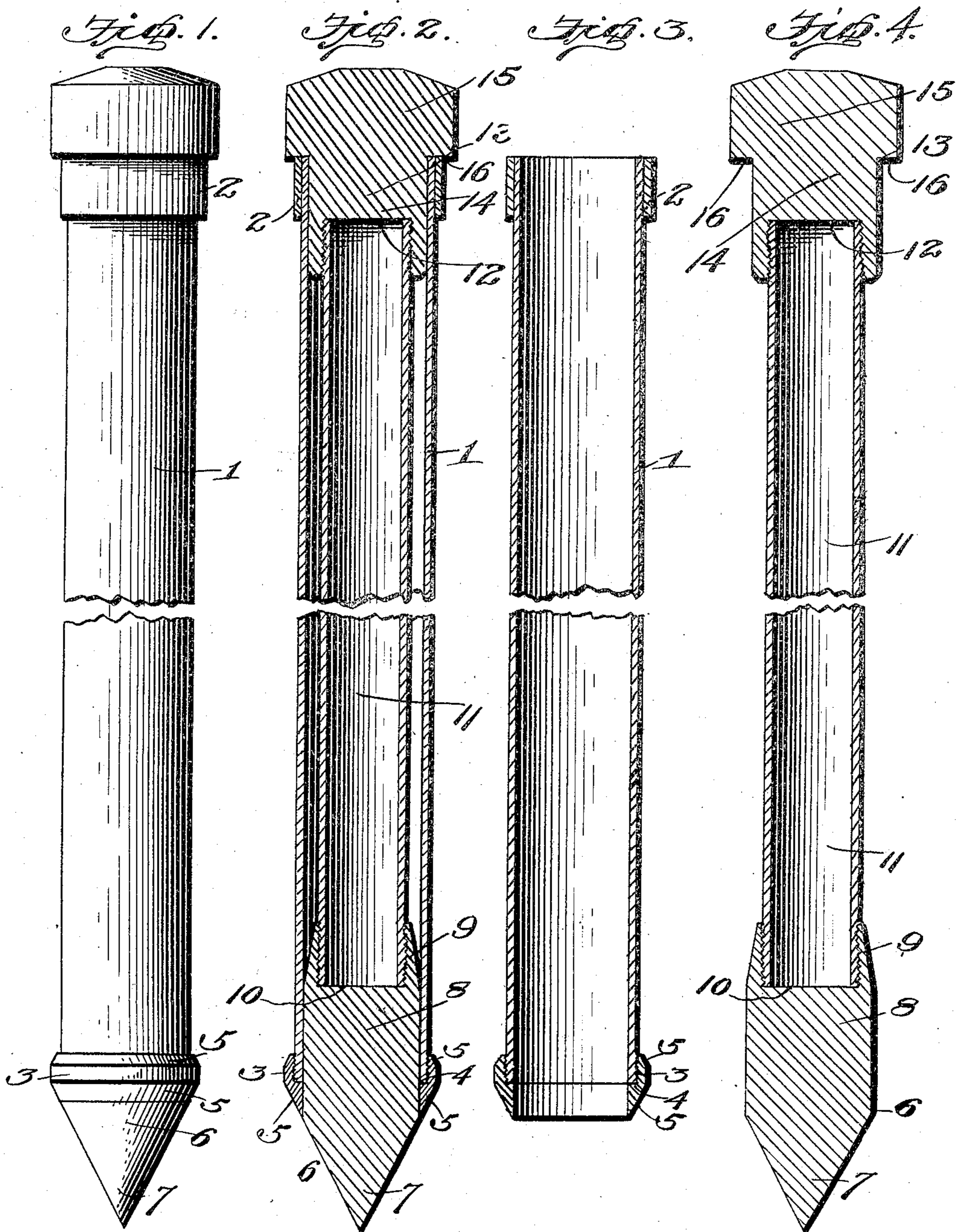
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W. T. McCLINTOCK.

DEVICE FOR FACILITATING DRIVING HOLLOW PILES OR PILES.

APPLICATION FILED SEPT. 22, 1904.



Witnesses

C. H. Gressbauer

C. H. Gressbauer

Inventor

W. T. McClintock

by

A. B. Wilson

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM TOBIAS McCLINTOCK, OF SEWICKLEY, PENNSYLVANIA,
ASSIGNOR OF ONE-HALF TO A. A. COHILL, OF McKEESPORT,
PENNSYLVANIA.

DEVICE FOR FACILITATING DRIVING HOLLOW PILES OR PIPES.

SPECIFICATION forming part of Letters Patent No. 790,910, dated May 30, 1905.

Application filed September 22, 1904. Serial No. 225,508.

To all whom it may concern:

Be it known that I, WILLIAM TOBIAS McCLINTOCK, a citizen of the United States, residing at Sewickley, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Devices to Facilitate Driving Hollow Piles or Pipes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to devices for facilitating the process of driving hollow piles or pipes into the ground; and the principal object of the invention is to provide a removable core and driving-head for a hollow pile or pipe which is designed to be driven with the hollow pile or pipe into the ground, said core and head being removable therefrom after driving and leaving the pile or pipe in the ground.

Another object is to provide a device for facilitating the process of driving metal pipes or concrete piles, comprising a driving-point, a driving-head, and an intermediate connection, said parts forming a core for the pipe to be driven and removable therefrom after the pipe has been driven.

These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the pipe to be driven and the removable core in place within said pipe. Fig. 2 is a central vertical section of the same. Fig. 3 is a similar view of the hollow pile or pipe. Fig. 4 is a like view of the removable core.

Referring to the drawings by numerals for a more particular description of my invention, the numeral 1 designates the hollow pile or pipe to be driven into the ground, said pipe having a strong iron band or hoop 2 surrounding its upper end and a thick ring or annulus 3 secured to its lower end. The ring 3, as shown, is provided with an interior shoulder 4, and above the shoulder the ring is threaded for connection with the lower end of the pipe

1, the lower edge of said pipe resting upon the shoulder 4, said ring being beveled at its upper and lower edges, as at 5.

It will be understood, of course, that pipes of less diameter or pipes of sufficient thickness not requiring the strengthening band and ring may be readily driven by means of my invention.

The core designed to fit within the pipe to be driven comprises a solid steel point-section 6, having a conical lower end 7, a plain cylindrical body portion 8, and an inwardly-beveled upper end 9.

A socket or recess 10 is formed in the upper end of the point-section, and a tube or pipe 11 is attached by a threaded connection at its lower end within the socket 10. The upper end of the pipe 11 is seated in a threaded socket 12, formed in the lower end of the driving-head 13, said driving-head having a plain body portion 14 and an enlarged head 15, a shoulder 16 being formed on said head between the body portion 14 and the head portion 15.

To drive a pipe with my improved device, the core is placed within the pipe to be driven, the shoulder 16 resting upon the upper edge of the pipe 1 to be driven. The point 7 is started in the ground and a pile-driver or other means may be employed for driving the device into the ground. When the pipe has been driven as far as desired, the core is lifted out of the pipe 1, leaving a good clean casing or pipe in the ground.

My device is comparatively simple in construction and has been found reliable and efficient in operation, while the cost of production is slight, owing to the fact that the core may be used many times without injury.

Various changes in the shape, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device to facilitate the process of driv-

ing hollow piles or pipes, comprising a core having a solid conical point-section, a pipe connected thereto, a driving-head connected to said pipe and provided with a shoulder, and
5 a hollow pile or pipe surrounding the core substantially as described.

2. A device of the character described, comprising a solid point-section having a threaded socket in its upper end, a pipe secured in
10 said socket, a solid driving-head secured to the upper end of said pipe, a shoulder formed on the head, and a hollow pipe or pile substantially as described.

3. A device of the character described, comprising a socketed point, a socketed driving- 15 head, a pipe connecting the head and point, in combination with a pipe provided with strengthening-bands at its opposite ends, substantially as described.

In testimony whereof I have hereunto set 20 my hand in presence of two subscribing witnesses.

WILLIAM TOBIAS McCLINTOCK.

Witnesses:

C. W. KIESTER,
J. M. REDMOND.