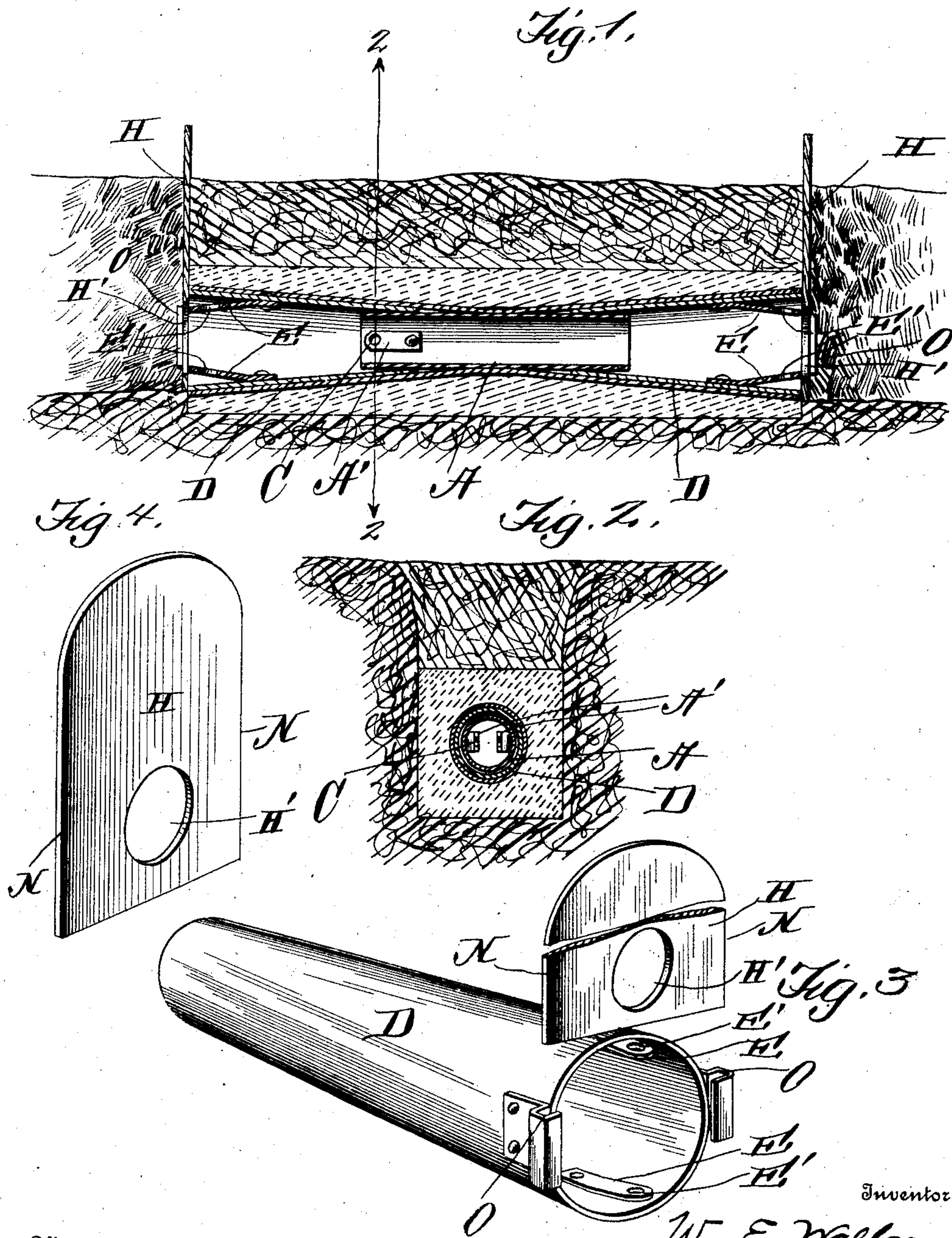


No. 879,340.

PATENTED FEB. 18, 1908.

W. E. WALLACE.
CORE FOR MAKING CONCRETE CULVERTS.
APPLICATION FILED SEPT. 17, 1907.



Witnesses

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WILLIAM E. WALLACE, OF WEST MIDDLESEX, PENNSYLVANIA.

CORE FOR MAKING CONCRETE CULVERTS.

No. 879,340.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed September 17, 1907. Serial No. 393,370.

To all whom it may concern:

Be it known that I, WILLIAM E. WALLACE, a citizen of the United States, residing at West Middlesex, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Cores for Making Concrete Culverts; and I do hereby 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful apparatus for making culverts of cement and comprises a core having preferably a central cylindrical portion over which tapering sections telescope and provided with means for withdrawing the sections after the cement has set, means being provided for preventing the cement from running out of the ditch or channel in which the culvert is being made.

The invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a longitudinal sectional view through a culvert showing the core with the cement filled in about the same. Fig. 2 is a cross sectional view, and Fig. 3 is a detail perspective view of the sections of the core. Fig. 4 is a detail view of an apertured plate designed to be held at the end of a funnel-shaped section.

Reference now being had to the details of the drawings by letter, A designates a hollow cylindrical portion of the core which has ears A' fastened to the inner surface thereof, said ears being provided with apertures C, whereby an instrument of any kind may engage the same for the purpose of withdrawing the hollow section of the core after the cement forming the culvert has set.

D—D designate two end sections of the core, which sections are funnel shaped and their inner ends of such a shape as to telescope over the ends of the section A. Projecting from the inner surface of each of the funnel-shaped sections D are the ears E, apertured as at E' and provided for the similar purpose that the ears upon the section A before described are provided.

H—H designate plates which are held in

any suitable manner to the flaring end of the sections D, preferably by the flanges N engaging the grooves O formed at the outer flaring ends of the sections D. Each of the plates H is provided with an opening H' therein, so that any water within the core may make exit or run through the opening before the core has been withdrawn from the culvert. In order that the cement or concrete may not adhere to the outer surface of the core, I preferably wind about the core sections of building paper.

In operation, a ditch is formed where the culvert is to be built and the sections of the core fitted together and leveled up, the plates being adjusted one at each end of the flaring sections, after which the cement or concrete is filled in about the core section, the plate preventing any of the cement or concrete from running by the ends of the core, thereby confining the same until the material is set. After the culvert has become thoroughly set, the plates may be removed and any kind of instrument well adapted for the purpose may be employed to engage the ears of the tapering sections which are first withdrawn, after which the central section may be easily withdrawn in the same manner. After the sections of the core have been withdrawn, it will be noted that a culvert having enlarged openings at the ends is afforded, thereby giving ready access for the water to enter as well as be discharged therefrom.

What I claim is:—

A core apparatus for making concrete culverts comprising a cylindrical section, an apertured ear fixed to the inner surface thereof, funnel-shaped shells within which the ends of the said cylindrical section project, apertured ears fixed to the inner circumference of said funnel-shaped shells, oppositely disposed grooved flanges fixed to the outer circumferences of the funnel-shaped shells at the end thereof, an apertured plate adapted to engage said grooves and be held thereby against the end of the funnel-shaped shell, as shown and described.

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

WILLIAM E. WALLACE.

Witnesses:

A. C. LINEBERGER,
W. S. MARSHALL.