E. P. FOX.
WELL TUBE.
APPLICATION FILED DEC. 1, 190

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THE NORR'S PETERS OF PROTO-UTHOL WASHINGTON O A

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Fig. 2. 2 SHEETS-SHEET 2. Inventor Edward P. Fox:

UNITED STATES PATENT OFFICE.

EDWARD P. FOX, OF LAKE ARTHUR, LOUISIANA.

WELL-TUBE.

SPECIFICATION forming part of Letters Patent No. 726,418, dated April 28, 1903.

Application filed December 1, 1902. Serial No. 133,438. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. Fox, a citizen of the United States, residing at Lake Arthur, in the parish of Calcasieu and State of 5 Louisiana, have invented new and useful Improvements in Well-Tubes, of which the following is a specification.

My invention relates to well-tubes, and has for one of its objects to provide a well-tube 10 which is not liable to be deteriorated by salt, potash, or other chemicals in water, and is therefore particularly adapted for use in the marshy rice-lands of Louisiana and Texas.

Another object is to provide a well-tube 15 composed of tubular sections adapted to be readily connected in a strong and durable manner precedent to being driven into the ground.

The invention will be fully understood from 20 the following description and claims when taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical section illustrative of the manner in which my improved well-tube 25 is driven in the ground; Fig. 2, an end view of one of the sections comprised in the tube; Fig. 3, a view, partly in elevation and partly in section, of the tube-section, the sectional part of said view being taken on the line 33 30 of Fig. 2; and Fig. 4, an enlarged detail view of one of the wood strips comprised in the tube-section.

Similar letters of reference designate corresponding parts in all of the several views of

35 the drawings, referring to which— A is the lower section of my improved welltube, and B an intermediate section, of which latter any suitable number may be employed. The said sections, respectively, comprise a cir-40 cular series of vertical wood strips of keystone form in cross-section, Fig. 2, and galvanized or copper wire C, tightly coiled about the circular series of wood strips and connected at its ends thereto by staples a, Fig. 45 3, or other suitable means. The wood strips of the lower section A are lettered b and c, the strips c being arranged between and extending above the strips b, so as to form projecting tongues c'. The wood strips of the 50 intermediate section B are lettered d and e,

the strips d, extend not only above but also below said strips d, so as to form projecting tongues e' at the upper and lower ends of the section.

As shown in Figs. 1 and 3, the lower section A is provided with openings f and g for the admission of water, the openings f being formed in the wood strips and the openings g between said strips. The lowermost inter- 60 mediate section B is also provided, by preference, with openings fg, and when desired all of the sections embodied in the tube may be provided with such openings.

In placing my improved tube in the ground 65 the section A is driven into the ground until its tongues c' alone project above the ground. The section B is then placed on the section A, with its lower tongues e' between the tongues c', and the joint thus made is wrapped with 70 wire, as indicated by h, and the ends of the wire are secured by staples a or other suitable means. The driving of the tube is then resumed until the upper tongues e' of section B alone project above the ground, when an- 75 other section (not shown) is placed on and secured to the section B in the manner described. This operation is repeated until a sufficient length of tube is sunk in the ground.

The upper end of the tube may be formed 80 by a section similar to the section B without involving a departure from the scope of my invention. I prefer, however, to form the upper end of the tube of a section similar to section A, but inverted so that its smooth end 85 will be uppermost.

It will be readily appreciated from the foregoing that notwithstanding the facility with which the sections may be connected the connection is a strong and durable one and well go calculated to stand the shock and strain incident to the driving of the tube and to hold the sections together for an indefinite period.

In virtue of the tube being formed of wood and galvanized or copper wire it is not liable 95 to be deteriorated by salt, potash, and other chemicals present in the water, and hence will last much longer than metal tubes, which corrode and become useless after a short period of use.

Inasmuch as my improved tube is not liable and the strips e, which are arranged between I to be affected by salt, potash, or other chem-

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icals in water, it is especially adapted for use in the marshy rice-lands of Louisiana and ${f Texas.}$

I prefer to drive the tube into a hole bored 5 in the ground to the depth desired, and I also prefer to use a work-pipe in the tube incident to the sinking of the latter. When the tube is thus to be placed in the ground, it is provided at its lower end with a valve, (not ro shown,) and the work-pipe is supplied with water made thick with mud. Sections of the work-pipe are connected at the same time as the sections of tube and the tube is packed throughout its length with sawdust. The 15 tube is turned by any suitable means until it is sunk to the depth desired, when the workpipe is withdrawn and the sawdust washed out of the tube.

> Having described my invention, what I 20 claim, and desire to secure by Letters Patent, is—

1. The herein-described well-tube made up of sections, each of which consists essentially of a circular series of wood strips of keystone

form in cross-section, arranged with their re- 25 duced portions inward, and having openings: for the admission of water, and a piece of wire coiled about the series of strips, covering the openings therein, and secured to the strips; the alternate strips of each section ex- 30 tending beyond the other strips thereof to form tongues, and the sections being superposed with the said tongues interlocked.

2. A well-tube comprising a circular series of wood strips of keystone form in cross-sec- 35 tion, arranged with their reduced portions inward, and having openings for the admission of water, and a piece of wire coiled about the series of strips, covering the openings therein, and secured to the strips.

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

EDWARD P. FOX.

 $: \mathbf{Witnesses:}$

J. C. Hober, FRED E. JONES.