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S. L. PILLAR

POLE FOUNDATION

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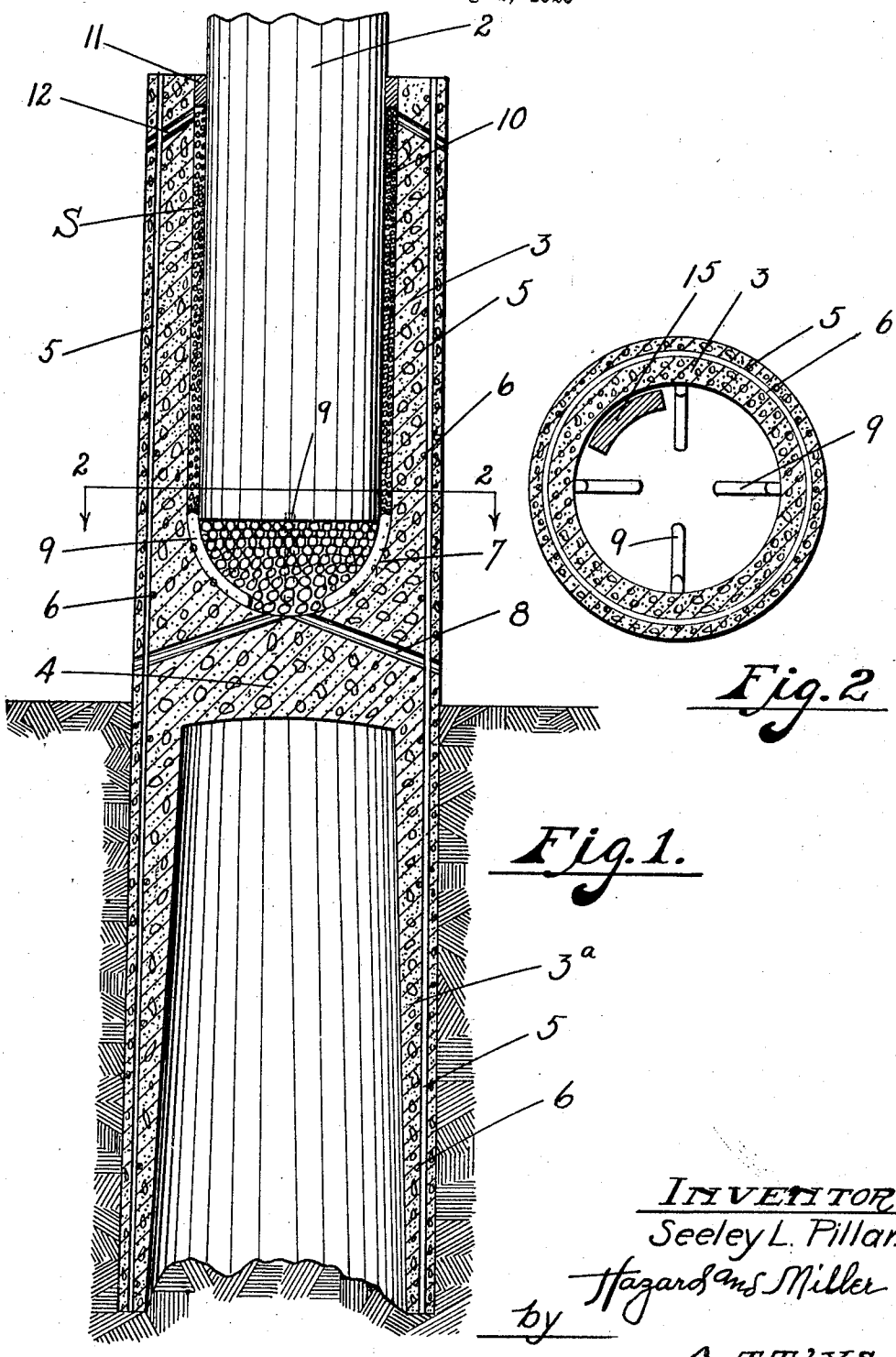


Fig. 1.

Fig. 2

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UNITED STATES PATENT OFFICE.

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POLE FOUNDATION.

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To all whom it may concern:

Be it known that I, SEELEY L. PILLAR, a citizen of the United States, residing at Claremont, in the county of Los Angeles and State of California, have invented new and useful Improvements in Pole Foundations, of which the following is a specification.

This invention relates to a support and foundation for telephone, telegraph and other wooden poles.

An object of the invention is to provide a method and means for preserving wooden poles set up in the open and therefore being subjected to various climatic conditions.

There is an old and well-known practice to paint and impregnate the ground end of poles with various wood preservatives. My present object is to provide a method and means whereby the pole to be protected is sustained in an upright position wholly above the ground level. An object also is to provide for the circulation of air upwardly about the lower end of a pole while it is firmly supported in and on a foundation which includes a ventilated part projecting above the ground.

Another object is to provide a pole foundation and support of monolithic form and which has a ventilated pocket to receive and firmly hold the pole.

An object is to provide a ventilated pole foundation of substantially integral construction and which has means for providing for the escape of moisture which may collect in the foundation around and upon the encased lower end of the pole.

Other objects and advantages will be made manifest in the following specification of an embodiment of the invention illustrated in the accompanying drawings, wherein:

Fig. 1 is a central longitudinal section of the foundation supporting a pole.

Fig. 2 is a cross section on line 2—2 of Fig. 1.

By my present invention the lower end of any wooden pole 2 which is to be erected in the open and therefore subject to all climatic conditions, is firmly supported by a foundation structure which preferably consists of a monolithic column having a suitable length and transverse sectional form according to the given pole to be erected. The foundation as shown includes an upper hollow socket part 3 and for purposes of economy a hollow lower end part 3^a which latter is to be implanted in the ground, usually in an upright position. Between the socket part 3 and the lower part 3^a of the foundation there is provided a transverse web 4 thus forming a closure between the hollow portions 3—3^a. While the foundation may be made in various methods and of various materials, the preferred form consists of a concrete monolith having any suitable reinforcing fabrication as longitudinal bars 5 and circular or helical wires 6.

The socket chamber is preferably of a diameter not less than one inch larger than the diameter of the largest pole to be set in the foundation and so thereby provide an annular space S substantially entirely around the pole. The lower end of the socket chamber has a basin or collecting bottom surface 7 and from the bottom of this leads a plurality of drain and ventilated passageways 8. These passageways are shown as substantially radially disposed and downwardly inclined so as to effectively drain away any moisture that may collect in the bottom of the socket chamber. The socket bottom is also provided with a plurality of ribs or beads 9 extending substantially radially and forming means for supporting the bottom end of the pole 2 up away from the bottom surface of the socket chamber and thus insuring a sufficient passageway around the lower end of the pole for any moisture in the chamber to drain down to and from the bottom of the pocket, and air circulation.

It is desirable not only to provide for the draining of the moisture from the socket chamber or pocket but it is also desirable to provide for the circulation of air in the socket and thus prevent the pole from being subjected to decomposition by moulding action. To that end after the pole has been set in the pocket a substantial means is introduced into the remaining space between the pole and the pocket wall to form a support for the pole and at the same time produce interstices for the circulation of air around the pole end. In some localities where there is little rain or snow or sleet, the air may be permitted to rise from the bottom of the pocket and out through the top of the socket, passing through the interstices provided by the pole supporting

means, which as here shown, consists of granular fragments such as gravel 10 or other suitable substitute.

In some localities it may be desirable to close the head of the socket 3 by a water proof medium to form a seal 11 between the pole and the crown of the foundation. Such a seal may consist of tar, asphaltum or any other convenient or desired water proof material. In order to provide for circulation of air in cases where the crown of the foundation is sealed at 11, air vent apertures 12 may be provided. It will be seen therefore that the pole is firmly supported by the gravel or equivalent filling in the socket 3 and is spaced from the wall of the socket and is therefore subjected constantly to the circulation of air which will evaporate any small quantity of moisture which may collect, and any excess quantity will naturally gravitate to the bottom 7 of the socket and thence run off through the drain passageways 8. These passageways are located above the grade or ground level in which the foundation may be set so as to be always open for the escape of water and passage of air. The gravel or granular bodies in the bottom of the basin are preferably of such size as not to be dislodged and pass out through the passageways 8.

There may be cases in which the bottom end of the pole may be jacketed by a body of asphaltum or asphaltum and sand rammed in the socket 3 of the foundation.

From the above it will be seen that I have provided a method and means for supporting and preserving wooden poles erected in the open air and subjected therefore to varying climatic conditions.

It is obvious that in cases where there is a material difference in the diameter of a pole and of a socket chamber, solid supporting shims or blocks 15 may be introduced about the inserted pole to provide for rigidity of support.

The foundations, it is understood, may be made in various sizes and proportions according to different poles, posts and other wooden members which are to be supported.

Further embodiments, modifications and variations may be resorted to within the spirit of the invention.

What is claimed is:

1. In combination, a pole foundation having a socket portion disposed above ground level, there being inwardly extending beads at the bottom of the socket and a pole loosely supported in said socket portion, said socket portion being provided with apertures permitting the circulation of air about the encased end of the pole.

2. A pole foundation consisting of a concrete monolith having a socket at its upper end to receive a pole, means for ventilating the socket and granular means forming interstices about the encased pole in the socket.

3. A pole foundation including a column-like member having a socket portion at its upper end from which leads drain and venting passageways at the bottom and means in the socket forming a jacket about the inserted end of a pole and supporting the same in the pole socket.

4. A pole foundation including a column-like member having a socket portion at its upper end from which leads drain and venting passageways at the bottom, the bottom of the socket being provided with lug portions provided for ventilation around the lower end of the pole when inserted.

In testimony whereof I have signed my name to this specification.

SEELEY L. PILLAR.