

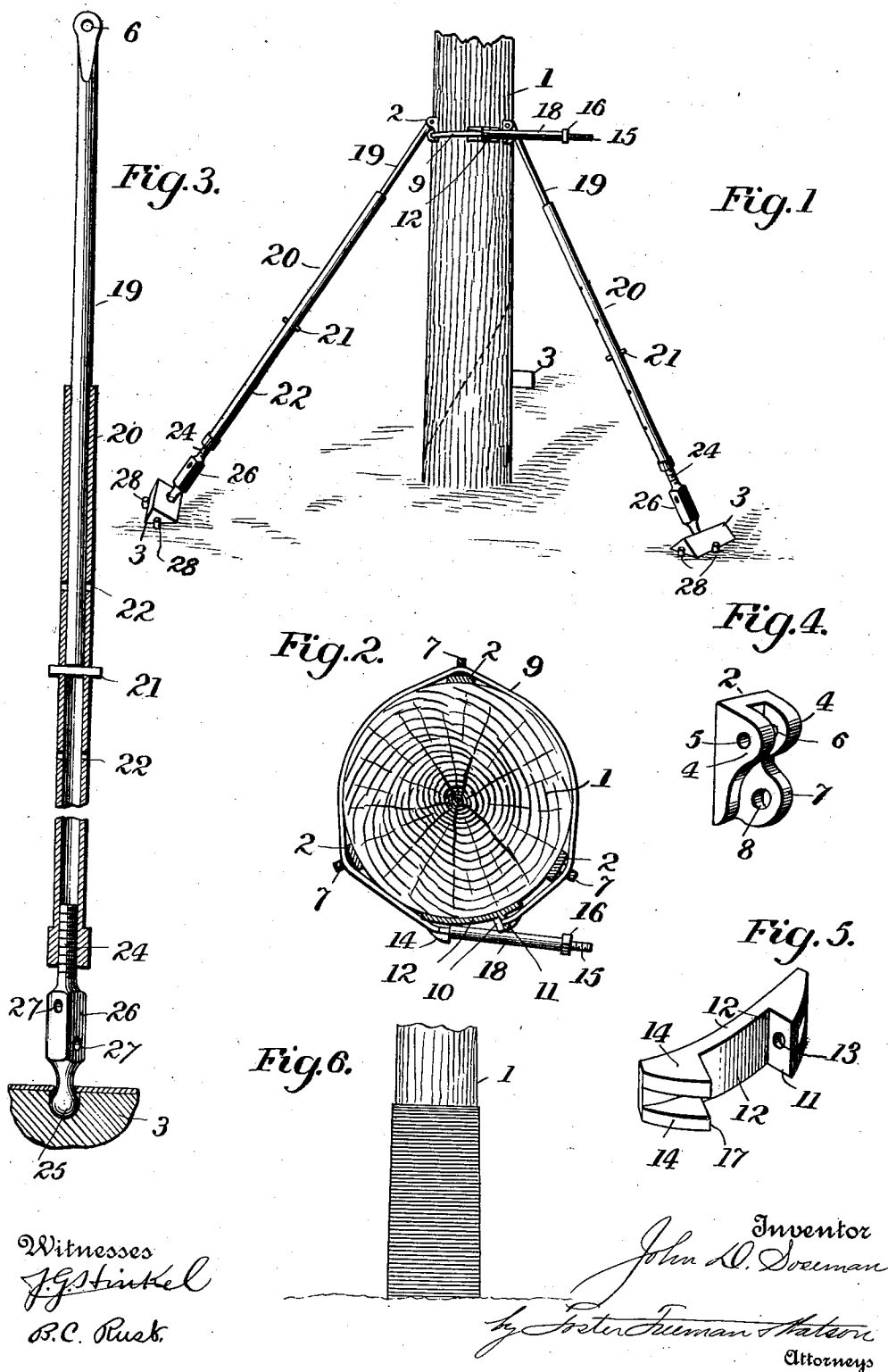
No. 826,124.

PATENTED JULY 17, 1906.

J. D. SOSEMAN.

MEANS FOR SPLICING TELEGRAPH, TELEPHONE, AND OTHER POLES.

APPLICATION FILED SEPT. 2, 1905.



UNITED STATES PATENT OFFICE:

JOHN D. SOSEMAN, OF MONROE, WISCONSIN.

MEANS FOR SPLICING TELEGRAPH, TELEPHONE, AND OTHER POLES.

No. 826,124.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed September 2, 1905. Serial No. 276,861.

To all whom it may concern:

Be it known that I, JOHN D. SOSEMAN, a citizen of the United States, residing at Monroe, in the county of Green and State of Wisconsin, have invented certain new and useful Improvements in Means for Splicing Telegraph, Telephone, and other Poles, of which the following is a specification.

The present application relates to a device primarily intended for use in repairing telegraph, telephone, and other poles.

One of the great sources of expense incident to maintaining a telephone or telegraph line is the necessity for frequently replacing the lower sections of the poles or the parts embedded in the ground, which become so weakened by the action of moisture thereon as to not furnish a proper support for the upper wire-carrying section.

In a majority of cases when a pole has to be replaced the larger part thereof is perfectly sound and could be used for an indefinite time if the lower section thereof could be restored to its original condition.

I have invented a method of repairing such poles, which consists in substituting for the lower damaged section of the pole a stub of proper length, which is firmly secured to the body of the pole. Material suitable for such stubs can be readily had at a very small expense, and by following the plan invented by me the cost of maintenance of a telephone or telegraph line may be materially reduced.

In carrying out my method I provide an adjustable support by means of which the pole can be firmly maintained in an upright position while the necessary excavation is made about the base thereof and while the rotten or otherwise damaged lower section is removed and replaced by a sound stub. This improved supporting device forms the subject of my present invention and is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a section of a telephone or telegraph pole with my improved supporting device applied thereto. Fig. 2 is a horizontal sectional view, on an enlarged scale, through the pole and the clamp at the upper end of the supporting device. Fig. 3 is a longitudinal sectional view, on an enlarged scale, of one of the legs of the device. Figs. 4 and 5 are respectively detail views of one of the supporting-blocks and of the grip-block of the clamp. Fig. 6 illustrates one manner of

securing a new stub to the body of the pole from which the lower damaged section has been removed.

Referring to the drawings, it will be seen that the device comprises a clamp adapted to engage a pole and to be supported by a plurality of extensible legs each connected at its upper end to a supporting-block 2, forming a part of the said clamp and having at its lower end an expanded base or shoe 3.

Each of the supporting-blocks 2 is provided at its upper end with a pair of projecting ears 4, between which the upper end of one of the legs is adapted to extend, said leg and block being pivotally connected by a suitable bolt extending through aligned apertures 5 6, formed, respectively, in said ears 4 and the upper section of the leg. Below the ears 4, and preferably in alinement with the space between them, each supporting-block is provided with an ear 7, having an aperture 8 formed therein, and through such apertures 8 of the said blocks extends a chain or cable 9 of such length as to completely encircle the pole.

At one end the chain or cable 9 is provided with a head or enlarged section 10, which is adapted to engage a projection 11 on a grip-block 12, the cable 9 extending through a passage 13, formed in the projection 11, as shown in Figs. 1 and 2. The inner face of the grip-block 12 is concaved, so as to fit against and conform closely to the surface of the pole to which it is applied, and on its outer face, at the opposite end thereof from the projection 11, said block is provided with two projecting ears 14, forming between them a passage through which the cable 9 is adapted to extend. The section of the cable 9 adjacent the opposite end thereof from the head 10 is threaded, as at 15, and on such threaded section is screwed a suitable nut 16. Between the nut 16 and the faces 17 of the lugs 14 on the grip-block 12 may be arranged a sleeve 18. It will be understood that sleeves 18 of different lengths may be employed to adapt the device for use with poles of different diameter. The cable 9 is intended to be of sufficient length to encircle the largest poles employed, and in connection with smaller poles it will of course be necessary to interpose between the lugs 14 and nut 16 a sleeve 18 of suitable length. By turning the nut 16 on the threaded section 15 of the cable the latter will be drawn close against the pole 1 and

in connection with the blocks 2 and 12 form a clamp engaging the pole so tightly as, in connection with the legs connected thereto, to hold the pole in proper vertical position, even if it be divided, for example, in the manner indicated by the dotted line in Fig. 1 and the lower section removed. If desired, the inner faces of the blocks 2 12 may be roughened or provided with relatively sharp edges or projections adapted to positively engage the pole.

Each of the legs of the device consists of two main sections which are telescopically connected. The upper section 19 may be formed from a solid rod or bar of metal and have its upper end properly shaped to fit between the ears 4 of the supporting-block 2, as previously described. The lower end of the section 19 extends into the tubular section 20 and is supported at the desired height by a cross-pin 21, adapted to be passed through either pair of a series of apertures 22, formed in said tubular section, the lower end of the section 19 being preferably grooved to conform to the exterior of the pin 21. The tubular section 20 of each leg is adjustably connected to the shoe or base 3. As shown, a threaded rod 24 is connected at its lower end by a ball-and-socket joint 25 with the shoe 3, and said rod 24 extends into and engages a suitable internal thread at the lower end of the section 20 of the leg. The rod 24 is provided near its lower end with a section 26, which is preferably made of polygonal cross-section, so as to be readily engaged by a wrench, by means of which the rod may be rotated to lengthen or shorten the leg connected therewith. In the said section 26 may be formed transverse apertures 27 to receive a suitable bar or lever for use in turning said section, as desired.

The manner of using the device hereinbefore described will be readily understood. When it is necessary to replace the lower end of a pole, the device is securely clamped to the pole at a suitable elevation and the legs are extended to the required length, so as to form a firm support extending from the clamp to the surface of the ground. It will be seen that the legs are of such length that their lower ends will be situated at a considerable distance from the pole, so that the necessary excavation can be made after the support is in place or the excavation may be made prior to connecting the device with the pole. If the adjustment provided by the pin 21 and apertures 22 is not sufficient to produce exactly the length required, the further adjustment is effected by turning the threaded rod 24.

After the device has been properly attached to the pole to form a firm support therefor the necessary excavation is made and the pole divided, preferably on a diagonal line, as indicated in Fig. 1. The line of cut will be

effected by a suitable gage, and the stub to be substituted for the lower section of the pole will have its upper end formed to correspond to the lower face of the upper section of the pole. After the stub has been inserted in the excavation from which the original lower section of the pole has been removed it is securely united with the body of the pole in any suitable manner. As shown in Fig. 6, one method of connecting the stub to the body of the pole is by a series of closely-adjacent wrappings of wire. Various means for connecting the stub and pole together may, however, be employed.

The tubular leg-sections 20 may be of any desired length and, if desired, may each be made in several lengths suitably connected. To prevent any possible slipping of the shoes 3, stakes or pins 28 may be driven into the ground about each shoe or the several shoes connected by a chain or similar means.

While the form of the invention illustrated in the drawings includes three legs, it will be evident that the device may have a greater or less number, as required. Ordinarily it is preferred to employ three; but in case the pole to be repaired should be situated close to a building it might be impossible to use more than two legs, a block or other suitable spacing device being interposed between the building and pole to prevent the latter from moving in that direction.

The supporting-blocks 2 may be arranged reversely to the position shown in Figs. 1 and 4—that is, with the ear 7 above the ears 4—if desired.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The herein-described device for the purpose specified, comprising a pole-clamp adapted to be fitted to or removed from operative position by movement in a direction transverse to the length of a pole, and a plurality of extensible legs connected with said clamp.

2. The herein-described device for the purpose specified, comprising a pole-clamp, adapted to be fitted to or removed from operative position by movement in a direction transverse to the length of a pole, and a plurality of extensible legs extending downwardly and outwardly from said clamp, and each having an enlarged base or shoe at its lower end.

3. The herein-described device for the purpose specified, comprising a clamp adapted to be detachably secured in position on a pole and adjustable to engage poles of different diameters, and a plurality of legs connected with said clamp.

4. The herein-described device for the purpose specified, comprising a clamp adapted to be detachably secured in position on a pole and adjustable to engage poles of different

diameters, and a plurality of extensible legs connected with said clamp.

5 5. The herein-described device for the purpose specified, comprising a pole-clamp, a plurality of legs adapted to extend downwardly and outwardly from said clamp, and a shoe or base adjustably connected with each leg, the face of each shoe to which the leg is connected forming an acute angle with the lower face or surface thereof.

10 6. In a device for the purpose described, the combination of a pole-clamp comprising a plurality of separated blocks and a cable connecting said blocks and adapted to secure them to a pole, and a plurality of legs each pivotally connected to one of said blocks.

15 7. In a device for the purpose described, the combination of a pole-clamp, a plurality of legs connected with said clamp, a base or shoe for each leg, and an adjusting-screw between each leg and the base or shoe therefor.

20 8. In a device for the purpose described, the combination of a pole-clamp, a plurality of legs connected with said clamp and each having a socket-opening through its lower end, a shoe or base-piece for each leg, a screw connected to each base or shoe and extending into the socket in the leg, and a nut

mounted on the screw and supporting the leg at the desired elevation thereon.

30 9. In a device for the purpose described, the combination of a pole-clamp, a plurality of legs each comprising two telescoping sections one pivotally connected with said clamp and the other connected with a suitable shoe or base-piece, and means for adjusting both sections of either leg longitudinally relative to its said shoe or base-piece.

35 10. In a device for the purpose described, the combination of a plurality of separated supporting-blocks, a cable extending through a passage in each of said blocks, and adapted to encircle a pole, a grip-block with which one end of the cable is engaged and provided with a passage for the other end of the cable, means for drawing the cable through said blocks and holding it in the desired position, and legs each pivotally connected at its upper end to one of the supporting-blocks.

40 45 50 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN D. SOSEMAN.

Witnesses:

JOHN D. DUNWIDDIE,
ANNA BALTZER.