

(No Model.)

W. R. PATTERSON.

METHOD OF MAKING IMPERVIOUS THE JOINTS OF THE LEAD PIPE OF
ELECTRIC CABLES.

No. 369,121.

Patented Aug. 30, 1887.

Fig. 1.

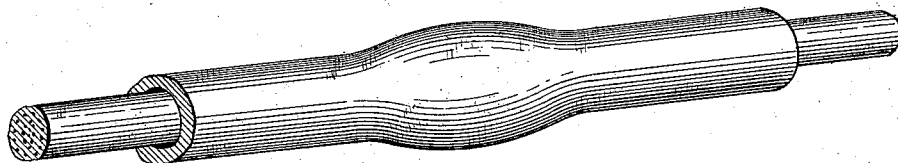
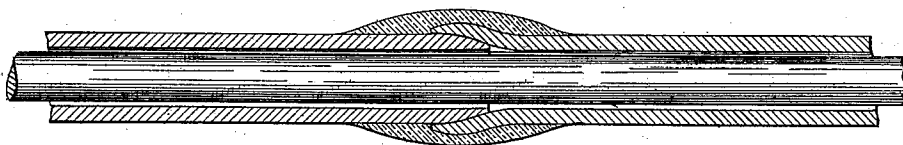


Fig. 2.



Witnesses.

Saml B. Dover.

Arthur Holladay

Inventor.

William R. Patterson.

By George P. Barton
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM R. PATTERSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN ELECTRIC COMPANY, OF SAME PLACE.

METHOD OF MAKING IMPERVIOUS THE JOINTS OF THE LEAD PIPE OF ELECTRIC CABLES.

SPECIFICATION forming part of Letters Patent No. 369,121, dated August 30, 1887.

Application filed September 7, 1885. Renewed July 14, 1887. Serial No. 244,263. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. PATTERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in the Method of Making the Joints of the Lead Pipe of Telegraph Cables Impervious, (Case 50,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is to render the wipe-joints of the lead pipe of telegraph-cables impervious to moisture.

Heretofore plumbers, after wiping a joint, have rubbed a piece of rosin thereon to fill any small crevices that might remain.

My invention consists in applying a compound to the joints, preferably after the core has been drawn in, and at the same time exhausting the air in the pipe, so as to draw the compound by suction into any crevices that may have been left accidentally in the joints. I preferably use collodion or shellac dissolved in ether.

In the drawings, Figure 1 is a perspective view of the joint of a lead pipe of a telegraph-cable with the core of wires drawn therein. Fig. 2 is a sectional view of the same.

I am not able to illustrate the collodion or other compound painted thereon and by internal suction drawn into any minute openings that may remain after the joint has been

wiped. This suction I produce by closing up one end of the pipe and by means of an air-pump attached to the other end exhausting the air. After the air is exhausted, or while it is being exhausted, I paint all the joints with the compound, and thus fill any minute openings that may have been accidentally left in wiping the joints. The ether or other solvent evaporates and leaves the pores filled.

Gun-cotton and shellac will not dissolve in the hot paraffine or other insulating material, and, besides, their melting-point is high. They are therefore especially adapted to be used in my process. The solvent should be one that is easily vaporized.

There are other compounds that might be used with good results, and I therefore do not limit myself to the substances named.

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

The method of making tight and impervious the joints of the lead pipe of a telegraph-cable, which consists in applying a compound to the outside of the joint and exhausting the air within the pipe, and thereby drawing the compound into the openings in the joint, whereby the openings are filled, substantially as and for the purpose specified.

In witness whereof I hereunto subscribe my name this 20th day of August, A. D. 1885.

WILLIAM R. PATTERSON.

Witnesses:

GEORGE P. BARTON,
W. A. KREIDLER.