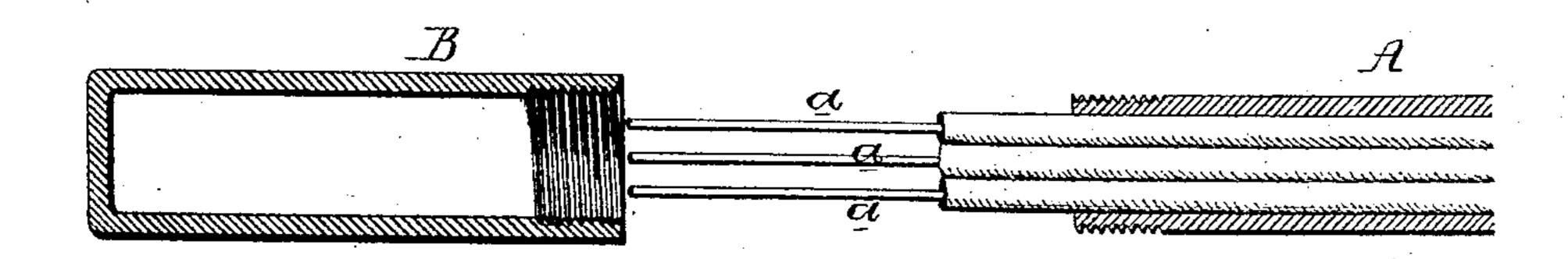
## D. BROOKS.

## UNDERGROUND TELEGRAPH

No. 184,329.

Patented Nov. 14, 1876.

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Witnesses, In My Skidmonest Harry Smith David Brooks Syhis attorneys Howson and son

## UNITED STATES PATENT OFFICE.

DAVID BROOKS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN UNDERGROUND-TELEGRAPHS.

Specification forming part of Letters Patent No. 184,329, dated November 14, 1876; application filed April 24, 1876.

To all whom it may concern:

Be it known that I, David Brooks, of Philadelphia, Pennsylvania, have invented an Improvement in Preparing Telegraph-Wires for Underground Use, of which the

following is a specification:

The object of my invention is to prepare for transportation and sale lengths of insulated telegraph-wires for ready laying under ground; and this object I attain as hereafter described, reference being had to the accompanying drawing, the figure in which represents, in section, part of a tube containing a group of telegraph-wires with their protecting cover ready for adjustment.

A is a tube, which should be of an internal diameter proportionate to the number of insulated wires which it has to contain, suitable tubing for the purpose being such as is used

for gas distribution.

The wires a are clothed with fibrous material, which is impregnated with an insulating substance, by preference with paraffine. The tube, which may be of the same length as those used for gas, is heated to the degree at which paraffine melts, and is then placed in a vertical or inclined position, and, while still

hot, melted paraffine is poured into the elevated end, so that it will flow into the tube, fill all the interstices, and add to the secure insulation of the clothed wires. These wires must project from each end of the tube, as shown in Fig. 1; and, in order to protect these exposed wires during transportation, I screw onto each end of the tube a shorter tube, closed at the outer end, and long enough to contain the said projecting wires. The tube, thus prepared, is now ready for sale and use, and for transportation with others to the point where the wires have to be laid.

I claim as my invention—

As a new article of manufacture, a metal tube containing one or more clothed wires, embedded in insulating material, and having their projecting ends protected by a removable tube, B, closed at the end, as set forth.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

DAVID BROOKS.

Witnesses:

ELLWOOD T. DEETZ, HARRY SMITH.