

(No Model.)

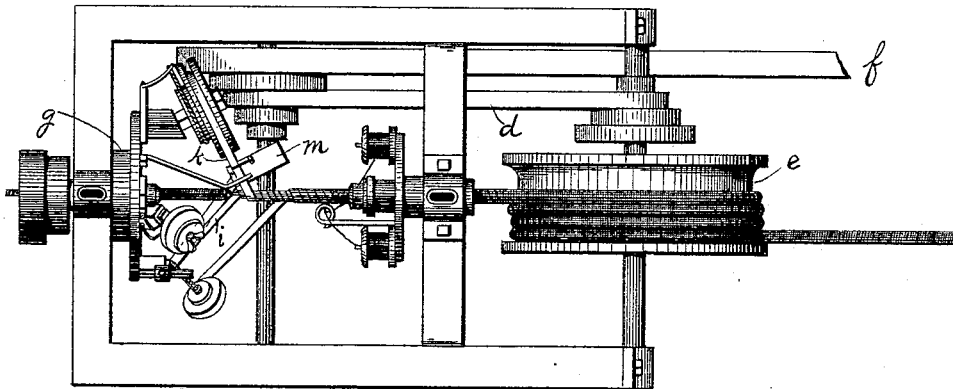
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MACHINE FOR WINDING LEAD TAPE UPON TELEGRAPH CABLES.

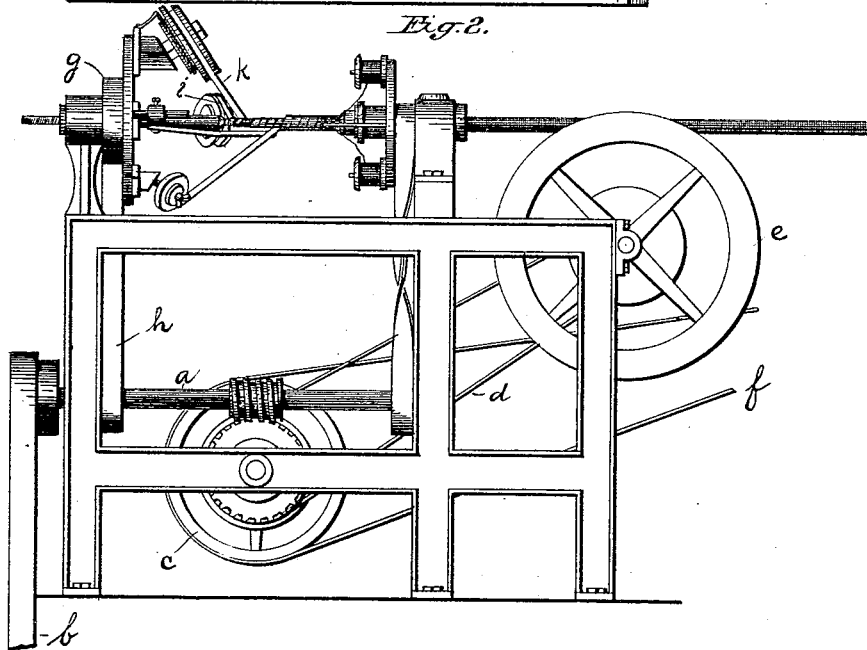
No. 346,433.

Patented July 27, 1886.

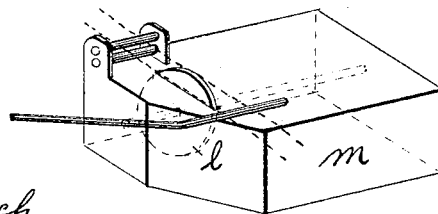
*Fig. 1*



*Fig. 2.*



*Fig. 3.*



Witnesses:

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# UNITED STATES PATENT OFFICE.

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MACHINE FOR WINDING LEAD TAPE UPON TELEGRAPH-CABLES.

SPECIFICATION forming part of Letters Patent No. 346,433, dated July 27, 1886.

Application filed April 6, 1885. Serial No. 161,328. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS P. DUPLAIN, 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 Machines for Winding Lead Tape upon Telegraph-Cables, 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.

My invention relates to machines for winding cables with lead tape and applying shellac thereto, so that the lapped joints of the lead tape may be protected.

My invention is illustrated in the accompanying drawings, in which Figures 1 and 2 are top and side views, respectively, of my machine. Fig. 3 is a detailed view of the shellac-wheel.

The core of insulated conductors to be covered is placed upon a reel and drawn through the tape-covering machine, after which the finished cable is taken up by a second reel, which is driven by suitable mechanism. I have not deemed it necessary to show either of the reels, as they are constructed in the well-known way and form no part of my invention.

The worm-shaft *a* is driven by a belt, *b*, or in any other suitable manner. By means of the worm-gear the driving-pulley *c* is kept in motion. The belt *d* from one of the driving-pulleys serves to drive the tension-drum *e*, by means of which the cable is carried through the machine. The belt *f* may extend to the reel (not shown in the drawings) which takes up the finished cable. The cable is thus kept moving from left to right, as shown in the drawings, and as it passes through the machine is covered with the paper and lead tape.

The bobbins for the tape and the shellac-wheel are all carried upon the revolving head *g*, which is driven by the belt *h* from the main shaft.

The paper tape *i* is first wound upon the

core with edges abutting, so as to lie smooth and form an even surface for the next covering of lead tape, *k*, which is wound from a bobbin carried by the revolving head.

The lead tape is of such width and wound on at such an angle that it may lie smooth and break joints or lap at the edges.

By means of the shellac-wheel *l*, over which the lead tape is carried, shellac is applied to the joints of the lead tape. The shellac is carried in the receptacle *m*, which is closed on all sides except a slot in the top, through which wheel *l* projects, as shown in Fig. 3, the wheel fitting close enough in the slot to prevent the shellac from leaking out as the receptacle is revolved about the core of conductors upon the revolving head *g*.

I claim—

1. The combination, in a machine for winding tape upon telegraph-cables, of the revolving head *g*, a bobbin carrying the lead tape mounted thereon, the receptacle carrying the shellac, and the shellac-wheel, over which the lead tape is guided, whereby the lead tape is wound onto the cable and shellacked at the same time, substantially as and for the purpose specified.

2. The combination, in a machine for covering telegraph-cables, of a revolving head provided with bobbins for the tapes, a shellac-wheel, and receptacle for the shellac, whereby the cable is covered and the joints of the lead tape shellacked as the cable passes longitudinally through the machine.

3. In a cable-covering machine, the combination of the revolving head, the bobbins for the tape, and a receptacle for the shellac, which revolves around the core of conductors and shellacs the tape as it is wound onto the cable.

In witness whereof I hereunto subscribe my name this 1st day of April, A. D. 1885.

FRANCIS P. DUPLAIN.

Witnesses:

EUGENE E. PRUSSING,  
F. H. McCULLOCH.