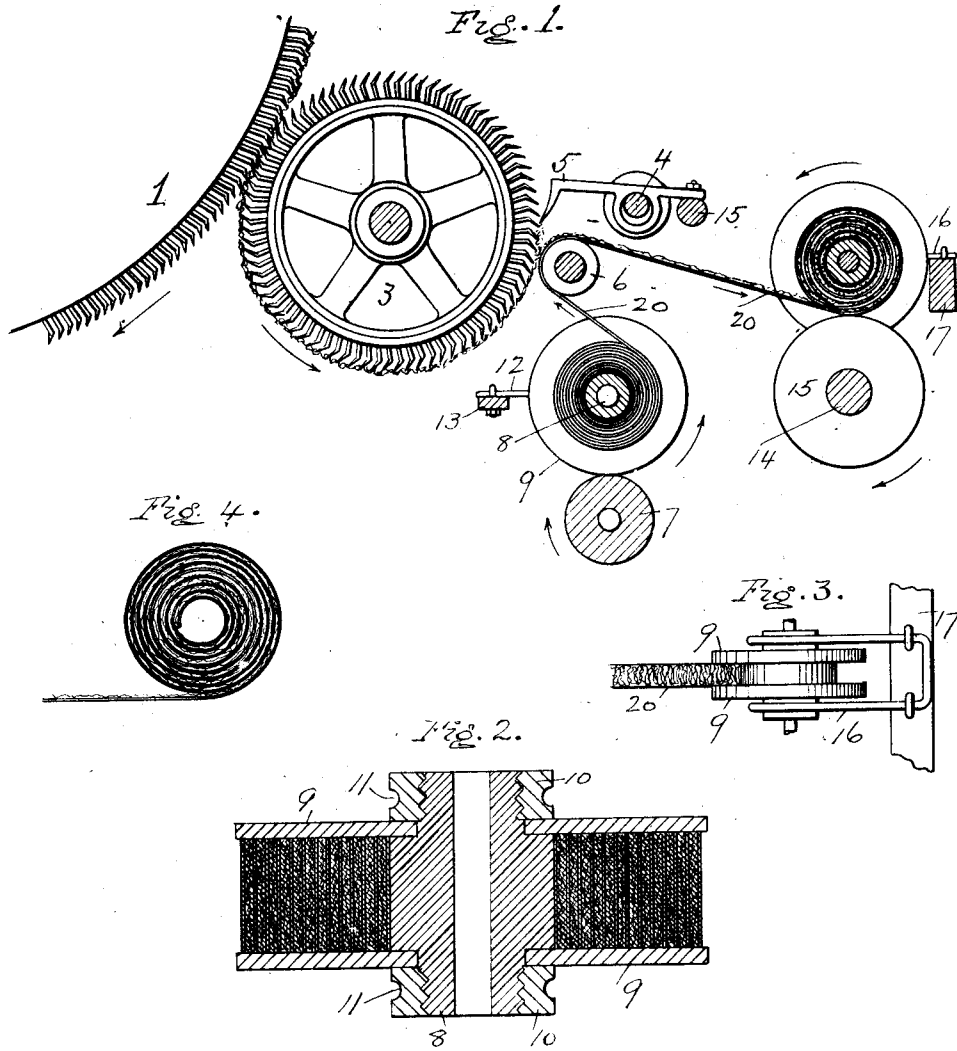


H. L. OWEN.
 MEANS FOR APPLYING COVERINGS TO WIRES.
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1,053,108.

Patented Feb. 11, 1913.



Witnesses:
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UNITED STATES PATENT OFFICE.

HARRY LUKE OWEN, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

MEANS FOR APPLYING COVERINGS TO WIRES.

1,053,108.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Original application filed January 20, 1909, Serial No. 473,245. Divided and this application filed March 25, 1911. Serial No. 616,814.

To all whom it may concern:

Be it known that I, HARRY LUKE OWEN, a citizen of the United States, residing in Schenectady, county of Schenectady, New York, have invented Improved Means for Applying Coverings to Wires, of which the following is a specification.

This invention relates to a means for facilitating the application of asbestos fibers to wires in forming insulated electric conductors.

According to my invention I am able to receive the asbestos fiber directly from the carding machine upon a suitable temporary backing of conveying material, upon which it is deposited in the same state as delivered by the doffer rolls thus retaining its flocculent condition. This temporary backing is a flexible, ribbon-like sheet, which with the deposited flocculent asbestos is, wound up into a coil on a reel or bobbin, so that it may be stored for future use or inserted directly into the wire-covering machine for application of the asbestos upon the wire.

In the accompanying drawing, Figure 1 is a partial sectional elevation of the delivery end of a carding machine showing the method of preparing the coil of asbestos fiber on its backing; Fig. 2, is a section of the reel and coil on a larger scale; Fig. 3, is a plan view of a part of the machine shown in Fig. 1; and Fig. 4, is a side view of the roll of asbestos on its ribbon-like backing when removed from the bobbin.

In Fig. 1, the main carding drum is indicated by 1, while one of the set of doffer wheels is indicated at 3. In the rear of the set of doffer wheels 3, I place an eccentric or cam shaft 4, to impart a vertically reciprocating motion to the combs 5, which are carried by a shaft 15, one comb being supplied to cooperate with each of the doffer wheels 3. On a lower plane and adjacent to said combs 5 is rotatably mounted an idler roll 6, over which the tapes 20 of any suitable material, are drawn, while below said roll 6 is mounted another idler roller 7, upon which rests the flanges of the unwinding reels. Each of these reels is made up of a hollow hub or spindle 8 and the removable flanges 9 which are held in place on the reduced ends by the circular nuts 10, screw-threaded upon the ends of said spindle 8 and formed each with a groove 11 in its periph-

ery. The reels are detachably detained in place lengthwise of the supporting shaft by the friction springs 12 which are secured to the cross-bar 13 and have their free ends engaging the grooves 11 of the reel spindle. Thus the reels are permitted to be rotated as the tape is unwound therefrom. The springs 12 are placed in positions each to retain a tape reel opposite a doffer wheel. At the rear of the combs I provide another set of tape reels of similar construction and interchangeable with those of the first set, but these reels of the second set are for winding up. Under this second or winding up set of reels is mounted the driven shaft 14, upon which are keyed or otherwise secured the frictional driving wheels 15 designed to run in contact with the tape 20, and between the flanges 9 of the winding reels for the purpose of revolving said reels and winding the tape thereon. Said winding reels are detachably detained in place on their supporting spindles by the friction spring 16 mounted upon the cross-bar 17.

It will thus be seen that a reel of tape secured in place on its supporting spindle by the springs 12 will have its outer end brought up over the roller 6 and thence to the winding reel driven by the shaft 14 so that said tape will be wound up on said winding reel by the action of the friction disk 15. The directions of movements of the several moving parts are indicated by the arrows in Fig. 1. As the tape 20 is thus transferred from one reel to the other, the combs 5 are reciprocated by the revolution of the shaft 4 and the asbestos fiber is thereby combed from the doffer wheel 3 down upon the traveling tape 20, which is being wound with the deposited asbestos upon itself on the winding up reel. The asbestos fiber is retained and protected by the successive coils of said tape 20 which serve as a temporary backing therefor. When the reel is filled it can be readily removed from the machine and transferred to a suitable wire-covering machine for application of the asbestos fiber to the wire. When emptied of the fiber and its ribbonlike support the reel can be returned to the carding machine to be refilled.

From the foregoing description it will be seen that any suitable width of tape may be employed and that the asbestos fiber will be

deposited thereon in a perfectly even state and the thickness of the deposit upon the tape may be regulated by the speed at which the tape is made to travel.

5 I do not in this application intend to claim either the mechanism for or the method of preparing the roll of the ribbon-like support carrying the asbestos as they form the subject of my application for patent filed January 20, 1909, Serial No. 473245 of which this application is a division.

I claim as my invention;

1. As a new article of manufacture, a flexible sheet or ribbon-like support, having

a web of flocculent asbestos fiber detachably 15 supported thereon.

2. As a new article of manufacture, a flexible sheet or ribbon-like support, having a web of flocculent asbestos fiber detachably supported thereon, the ribbon and web being 20 rolled up into a ball or reel.

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

HARRY LUKE OWEN.

Witnesses:

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