

C. H. MILLER.
FLEXIBLE ELECTRIC CONDUIT.
APPLICATION FILED JULY 25, 1907.

942,789.

Patented Dec. 7, 1909.

Fig. 1.

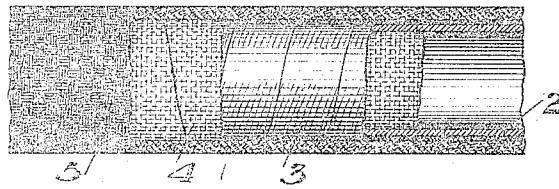


Fig. 2.

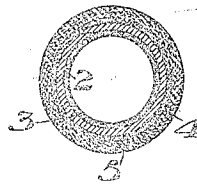
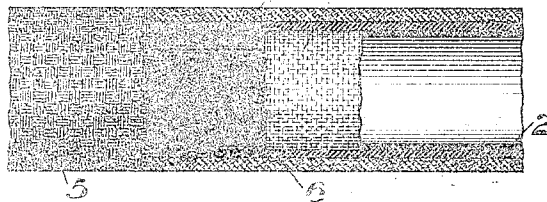


Fig. 3.



WITNESSES

W. W. Swartz
R. A. Baldwin

INVENTOR

Charles H. Miller
by Roswell C. Ames, Counselor
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES H. MILLER, OF WEST PITTSBURG, PENNSYLVANIA, ASSIGNOR TO SAFETY-ARMORITE CONDUIT COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

FLEXIBLE ELECTRIC CONDUIT

942,789.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed July 25, 1907. Serial No. 385,519.

To all whom it may concern:

Be it known that I, CHARLES H. MILLER, a citizen of the United States, of West Pittsburg, in the county of Lawrence, Pennsylvania, have invented a new and useful Flexible Electric Conduit, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation partly in section showing one form of my invention; Fig. 2 is a cross section of the same; and Fig. 3 a detail view of a modified form.

My invention relates to the class of flexible electric conduits, and is designed to provide a cheap, simple and durable structure which may be flexed and yet have the desired stiffness.

In carrying out my invention, I form on a mandrel an inner composition layer. This may consist of oilcloth with a longitudinal seam, whether sewed or not, or may consist of a woven tubular fabric. In either case, I preferably employ an inner composition lining 2, though I may employ a rubber tube, but the oilcloth or composition lining may be omitted if desired. Where oilcloth or a composition lining is used, I preferably spread or sprinkle soapstone or a smooth powder or material over its inner surface to prevent any clinging tendency. Around this lining I wind helically a wooden strip or strips 3, preferably of reed or ratan. This wooden layer may then be saturated with a fireproofing compound or not as desired. Over the wound wooden strip or strips is placed a muslin wrapping 4, which may be either helically wound or provided with a longitudinal seam. 5 is a tubular woven or braided fabric which is formed over the spirally wound wooden strips and muslin, and this tubular fabric is preferably saturated with a waterproofing composition. The cotton or material for braiding or weaving the tubular fabric may be treated to fireproof it before it is formed into the tube and the strips 3 may be formed of paper or like material instead of wood.

In the modification shown in Fig. 3, the wooden or ratan strip or strips are omitted, and the inner casing 2, is covered with a cementitious tube 6, helically wound or

otherwise secured thereon, and over this tube is formed the tubular woven or braided fabric 5.

The advantages of my invention result from the use of the wooden wound strips, which give high resistance to puncture, and at the same time allow of flexing, while giving the tube the desired stiffness.

Other variations may be made in the form and arrangement of the conduit without departing from my invention.

I claim:

1. A flexible electric conduit containing a woven or braided tubular fabric and a flexible spirally wound wooden strip; substantially as described.

2. A flexible electric conduit containing an inner smooth composition lining, a covering consisting of a helically wound strip of reed or ratan, and a wrapping for the strips; substantially as described.

3. A flexible electric conduit having an inner fabric covered with composition, a spirally wound wooden strip inclosing the same, a wrapping for the wooden strips, and a woven or braided fabric inclosing the same and saturated with waterproofing compound; substantially as described.

4. A flexible electric conduit having an inner fabric covered with composition, a spirally wound wooden strip inclosing the same and impregnated with fireproofing material, a wrapping for the wooden strips, and a woven or braided fabric inclosing the same and saturated with waterproofing compound; substantially as described.

5. A flexible electric conduit having an inner oilcloth lining, a covering of helically wound wooden strips, a cloth wrapping for the strips, and braided or woven fabric suitably waterproofed and inclosing the same; substantially as described.

6. A flexible electric conduit containing an inner smooth composition lining, a covering consisting of a helically wound wooden strip, a wrapping over the same, and an inclosing tubular woven or braided fabric; substantially as described.

7. A flexible non-metallic electric conduit, comprising an inner flexible tube, a spirally wound wooden strip inclosing the same, and a covering for the wooden strip; substantially as described.

8. A flexible non-metallic electric conduit, comprising an inner flexible tube, a spiral winding of reed or ratan surrounding the inner tube, and an outer covering; substantially as described.

9. A flexible non-metallic electric conduit, comprising an inner non-metallic lining tube covered with a composition to render the lining non-clinging, a covering consisting of

a helically wound strip, and an outer inclosing tube of fabric; substantially as described.

In testimony whereof, I have hereunto set my hand.

CHARLES H. MILLER.

Witnesses:

JOHN MILLER,
H. M. CORWIN.