C. H. MILLER.

CONDUIT FOR ELECTRIC WIRES.

APPLICATION FILED JULY 25, 1907.

942,788.

Patented Dec. 7, 1909.

Fig. 1.

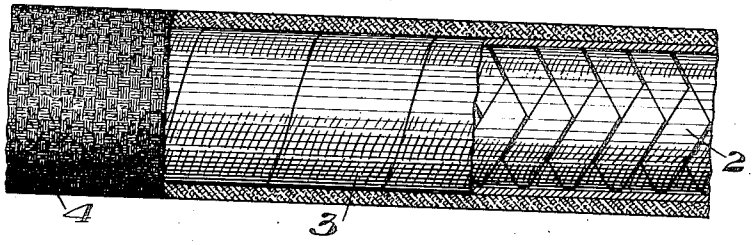


Fig. 2.

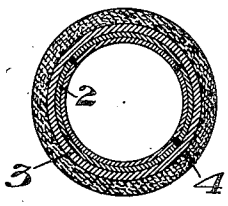
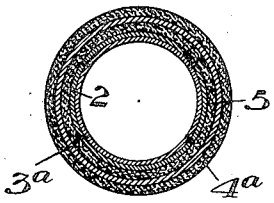


Fig. 3.



WITNESSES

W. W. Swartz

R. A. Baldeson.

INVENTOR

Charles H. Miller

by Bakewell, Byrnes & Lamber

his Attorneys

UNITED STATES PATENT OFFICE.

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

CONDUIT FOR ELECTRIC WIRES.

942,788. Specification of Letters Patent. Patented Dec. 7, 1909.

Application filed July 25, 1907. Serial No. 385,518.

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 Conduit for Electric Wires, 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 improved conduit; Fig. 2 is a cross-section of the same; and Fig. 3 shows a modified form.

My invention relates to the class of flexible conduits, and is designed to provide a strong, simple and durable structure of this character which may be cheaply made and will present a smooth inner surface.

In Figs. 1 and 2, I show the conduit as having an inner lining 2, of woven paper. This woven paper is formed on a mandrel and consists of helically wound strips of paper extending in opposite directions and interwoven or braided so as to form a tubular structure. Thus one strip runs over the strip running in the opposite direction, under the next, over the next, and so on.

3 is a layer of helical paper or wooden strip or strips wound over the braided paper tube; and 4 is a tubular or woven braided fabric, inclosing the helical paper winding and saturated with a waterproofing compound. 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 winding may be formed of wooden or other strips instead of paper strips.

In Fig. 3, I show a similar view except that the woven or braided paper tube is first covered with a tubular woven or braided fabric 5, over which is wound the helical paper strip or strips 3^a, 4^a being the outer woven or braided tubular fabric. In this case, both tubular fabrics are preferably saturated with waterproofing compound, and the outer fabric may be coated with mica flakes, or other non-inflammable material, if desired, to make the conduit more fireproof. This mica will become embedded in the composition.

The advantages of my invention result from the woven inner layer of paper strips, in connection with a braided or woven tubular fabric. This gives a smooth inner layer and also the requisite stiffness and flexing qualities.

Variations may be made in the form and arrangement of the parts without departing from my invention.

I claim:—

1. A flexible conduit for electric wires, having an inner lining of woven or braided strips, the weft and warp strips being spirally wound in opposite directions; substantially as described.

2. A flexible conduit for electric wires, having an inner lining of woven or braided strips, the weft and warp strips being spirally wound in opposite directions, and a waterproofed tubular braided or woven fabric around said inner layer; substantially as described.

3. A conduit for electric wires, having an inner lining of woven or braided paper strips, the weft and warp strips being wound in opposite directions, a succeeding layer of spirally wound strip, and an outer braided or woven tubular fabric saturated with a waterproofing compound; substantially as described.

4. A conduit for electric wires, having an inner lining of woven or braided paper strips, the weft and warp strips being spirally wound in opposite directions, a succeeding layer of spirally wound strips of paper, and an outer braided or woven tubular fabric saturated with waterproofing compound; substantially as described.

5. A conduit for electric wires, having an inner layer of woven or braided paper strips, the weft and warp strips being wound spirally in opposite directions, a tubular woven or braided fabric surrounding said inner layer, a spirally wound paper strip surrounding the fabric, and an outer woven or braided tubular fabric, both of said fab-

rics being saturated with a waterproofing compound; substantially as described.

6. A conduit for electric wires having an inner lining of woven or braided strips of paper, the weft and warp strips being wound spirally in opposite directions; substantially as described.

In testimony whereof, I have hereunto set my hand.

CHARLES H. MILLER.

Witnesses:
JOHN MILLER,
H. M. CORWIN.