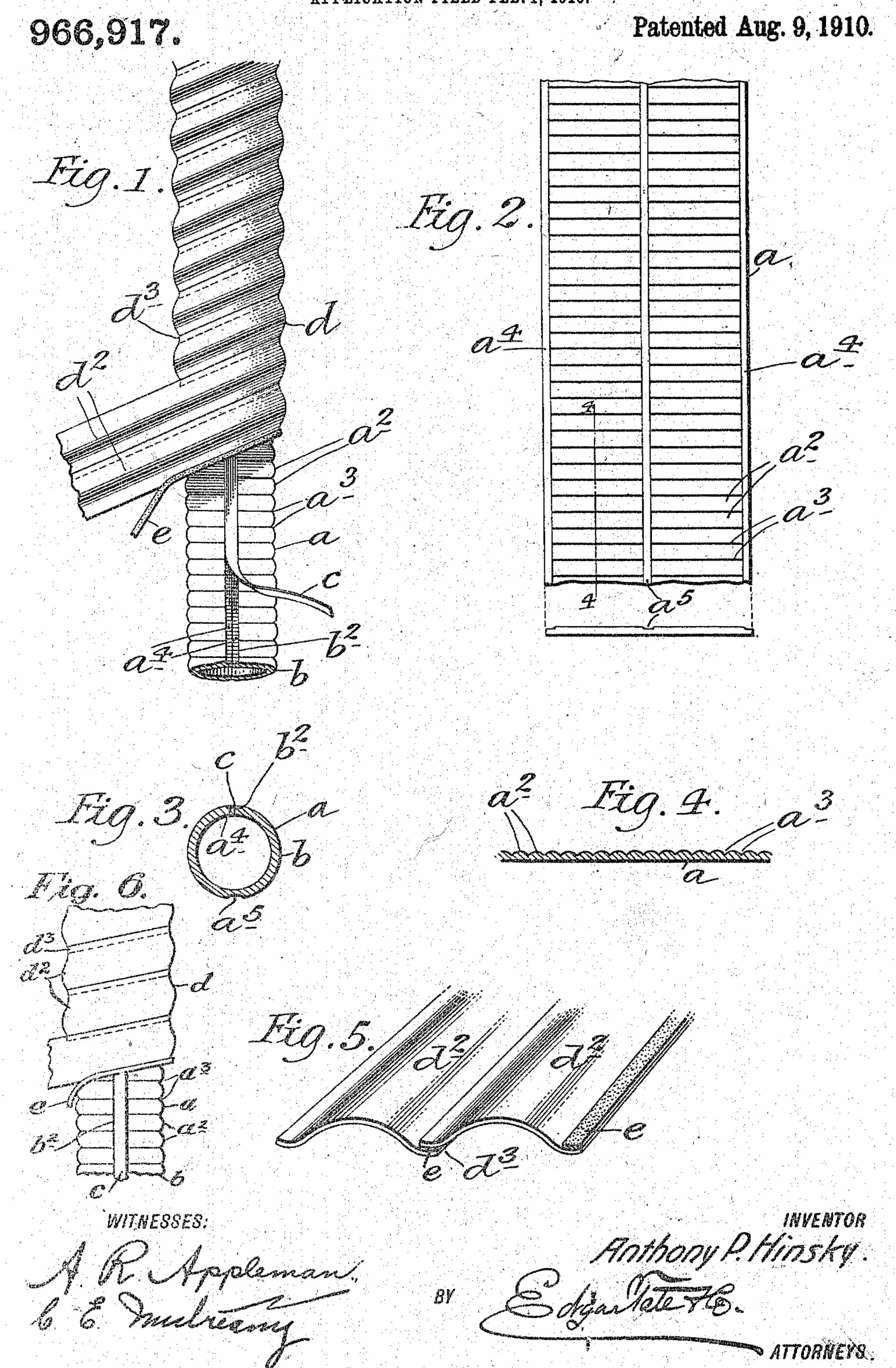
A. P. HINSKY.
INSULATING CONDUIT FOR ELECTRIC WIRES OR CONDUCTORS.
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UNITED STATES PATENT OFFICE.

ANTHONY P. HINSKY, OF BROOKLYN, NEW YORK.

INSULATING-CONDUIT FOR ELECTRIC WIRES OR CONDUCTORS.

966,917.

Specification of Letters Patent. Patented Aug. 9, 1910.
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To all whom it may concern.

Be it known that I, ANTHONY P. HINSKY, a citizen of the United States, and residing at Brooklyn, in the county of Kings and 5 State of New York, have invented certain new and useful Improvements in Insulating-Conduits for Electric Wires or Conductors, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to conduits for electric wires or conductors and the object thereof is to provide an improved device of this class through which electric wires or conductors may be passed in the usual manner and which will thoroughly cover or protect said wires or conductors; a further object being to provide a conduit of the class specified which is tubular in form and which passes a high degree of flexibility, and which is also smooth and even on its inner side so as to facilitate the passage of

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views and in which:—

electric wires therethrough.

Figure 1 is a perspective view showing my improved electric conduit and showing the method of its construction; Fig. 2 a plan and end view of a strip of fibrous material which I employ in the construction of my improved electric conduit; Fig. 3 an end view of a tube formed from the fibrous strip shown in Fig. 2, said tube being also shown in Fig. 1; Fig. 4 a partial section on the line 4-4 of Fig. 2; Fig. 5 a perspective view of a metal strip or strips which, in practice, are wound on the fibrous tube shown in Figs. 2 and 3, said strip or strips and the method of their winding on the fibrous tube being also shown in Fig. 1, and Fig. 6 a view similar to Fig. 1 but showing a modification.

a strip a of fibrous material, said strip being composed of paper pulp or similar material, or said strip may be composed of pasteboard or a thick heavy paper, and said strip may be of any desired length, and the transverse dimensions thereof are such, in practice, as to form, when folded longi-

tudinally, a tube b of any desired transverse dimensions. The strip a may be from a sixteenth of an inch to an eighth of an inch in thickness according to the size of the tube to be formed therefrom, and in practice the 60 outer side of said strip, or the side which forms the outer side of the tube, is corrugated transversely as shown at a² to form corresponding transverse grooves a³ the object of which is to render the completed 65 tube or conduit flexible and elastic.

The transverse corrugations a² do not, in the form of construction shown, extend entirely across the strip a but terminate adjacent to the opposite side edges thereof so as 70 to form narrow strips a4 which are not corrugated transversely, and when the strip a is folded longitudinally to form the tube δ the edge portions a4 which are not corrugated transversely form a longitudinal 75 groove b^2 in the outer surface of said tube, at the point where the side edges thereof are brought together, and in this groove is placed a narrow strip c of rubber or fibrous material saturated with an insulating and 80 preservative compound, and the tube b is also treated in a similar manner, and the complete tube when so formed is thus rendered impervious to water or other liquid substances and is made water and air tight. 85

The material employed for saturating the tube b or the strips a and c, when the latter is composed of fibrous material, so as to render the same impervious to moisture or liquids and at the same time to give said 90 conduit or tube the requisite insulating qualities may consist of any of the liquid compositions now used for this purpose and the application and use of which are well known.

After the tube b has been formed and prepared in the manner described I place thereon, in the manner shown in Fig. 1, a flexible and elastic casing or covering d composed, in the form of construction 100 shown, of two narrow strips d^2 of metal placed together as shown in Fig. 5 and wound on the tube b in spiral form, this operation being performed by means of suitable machinery or by hand if desired. 105 The metal strips d^2 are bent or curved longitudinally so as to form, in cross section, a curve which is substantially similar to an ogee curve and in practice two of said strips are placed together so that the edge of one 110

overlaps the edge of the other and a narrow strip e of rubber, or fibrous material, treated with an insulating and preservative compound is placed between the overlapping edges of said strips and when the said strips are wound on the tube b in the manner shown and described they form a flexible metallic casing for said tube, and together with said tube form a flexible conduit for the purpose specified, the casing d of which is water and air tight

is water and air tight.

Although I prefer to place two of the

strips d^2 together in forming the casing d of the tube b as shown and described it will be apparent that a single metal strip d^2 may be employed for this purpose as shown in Fig. 6 of the drawing, said strip being curved in transverse section and the edges thereof overlapped and interlocked when helically wound on the tube b in such man-

ner as to render said conduit freely flexible at all points.

In the form of construction shown the fibrous strip a from which the tube b is formed is provided centrally and longitudinally with a narrow strip a across which the transverse corrugations a do not extend but this feature of the construction is not an essential element and may or may not be employed, and other changes in and modifications of the construction described may be made, within the scope of the appended

claim, without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention what 35 I claim as new, and desire to secure by Let-

ters Patent, is;—

A flexible tubular conduit for electric wires or conductors composed of an inner fibrous tube formed by folding a strip of 40 fibrous material so that the side edges thereof abut, said strip of fibrous material being corrugated at an angle to its opposite side edges, the said side edges where they abut being overlapped by a narrow strip of 45 fibrous material which closes and seals the space between said edges, the said tube of fibrous material being inclosed by a helically wound metal strip curved in cross section so that one edge of said strip overlaps the 50 other and a fibrous strip placed between said overlapping edges, all of said fibrous parts being treated so as to render them impervious to moisture or liquids and so as to render said conduit water-tight.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this

29th day of January 1910.

ANTHONY P. HINSKY.

Witnesses:

C. E. MULREANY, B. M. RYERSON.