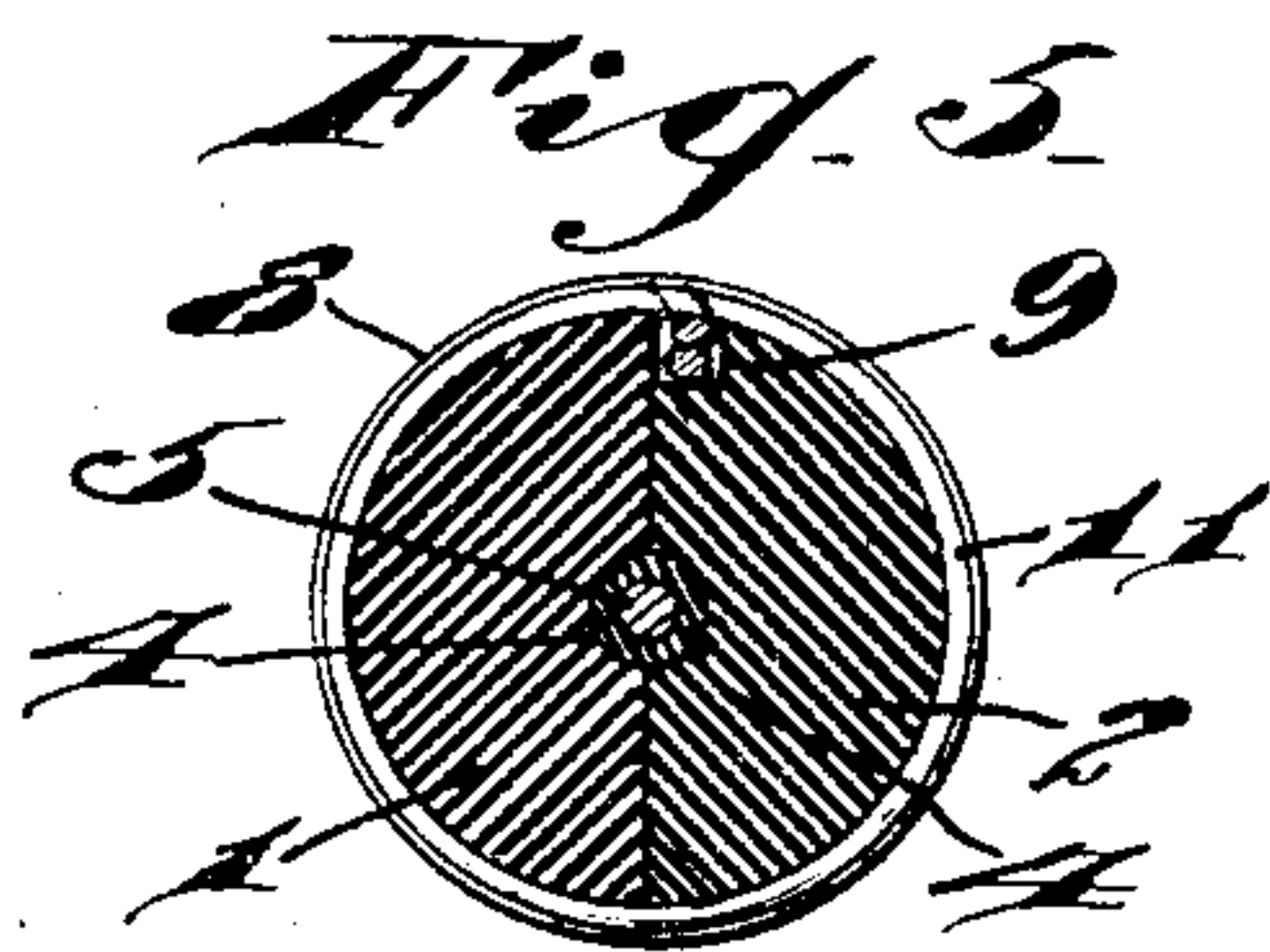
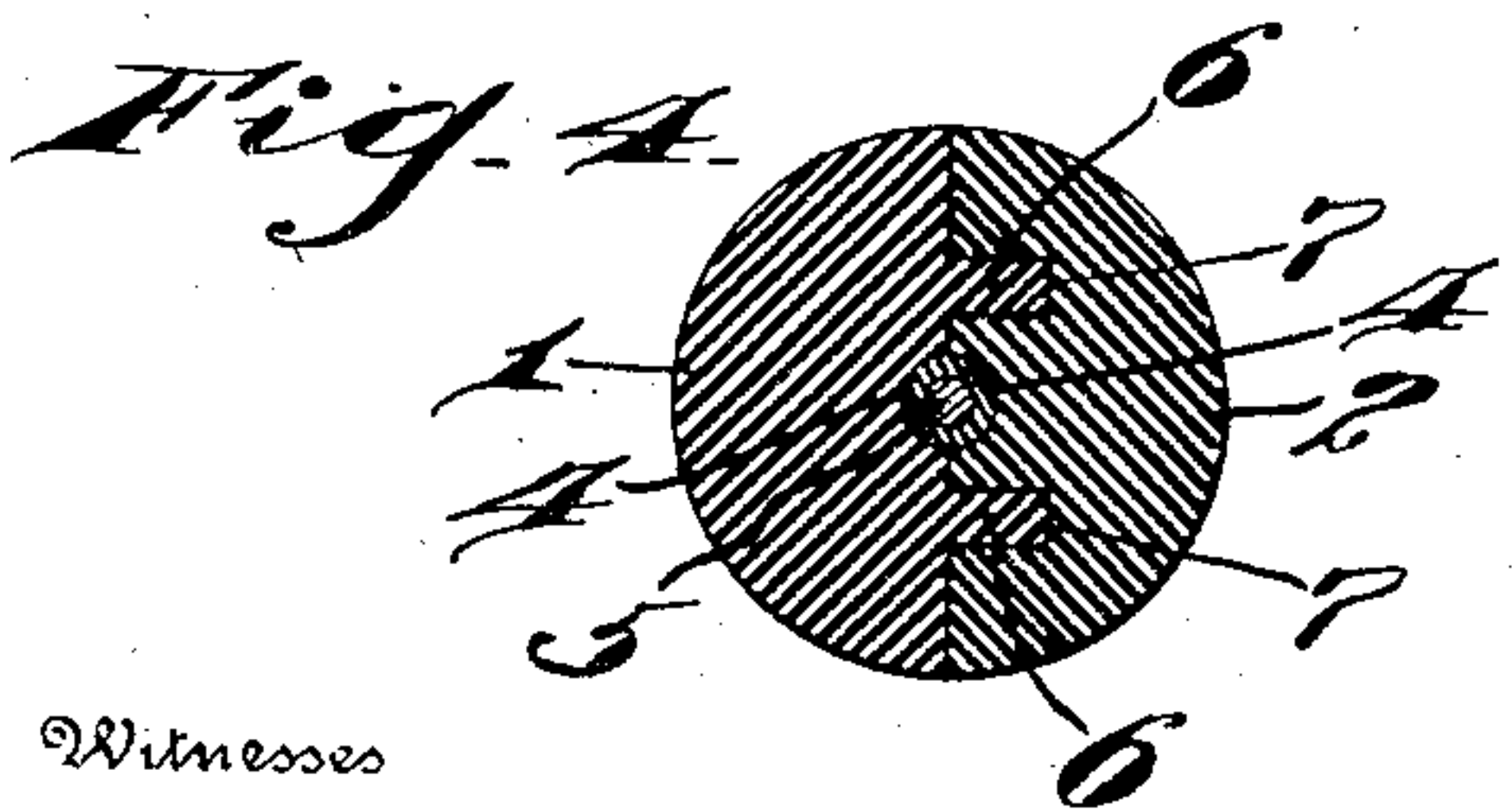
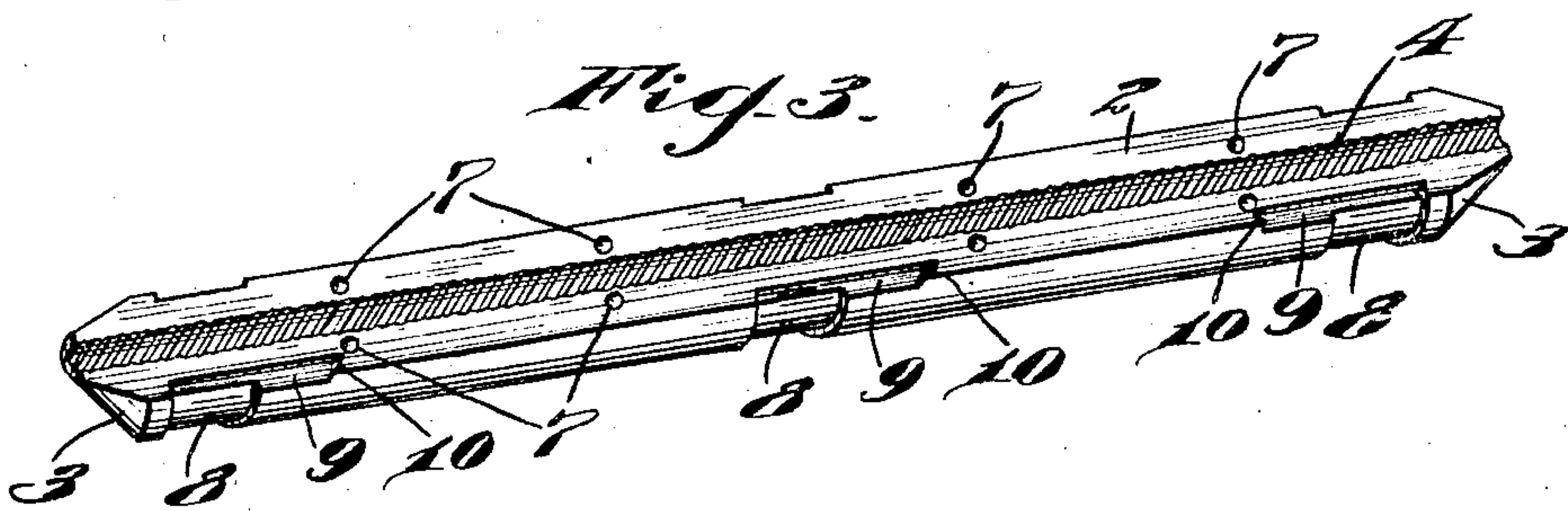
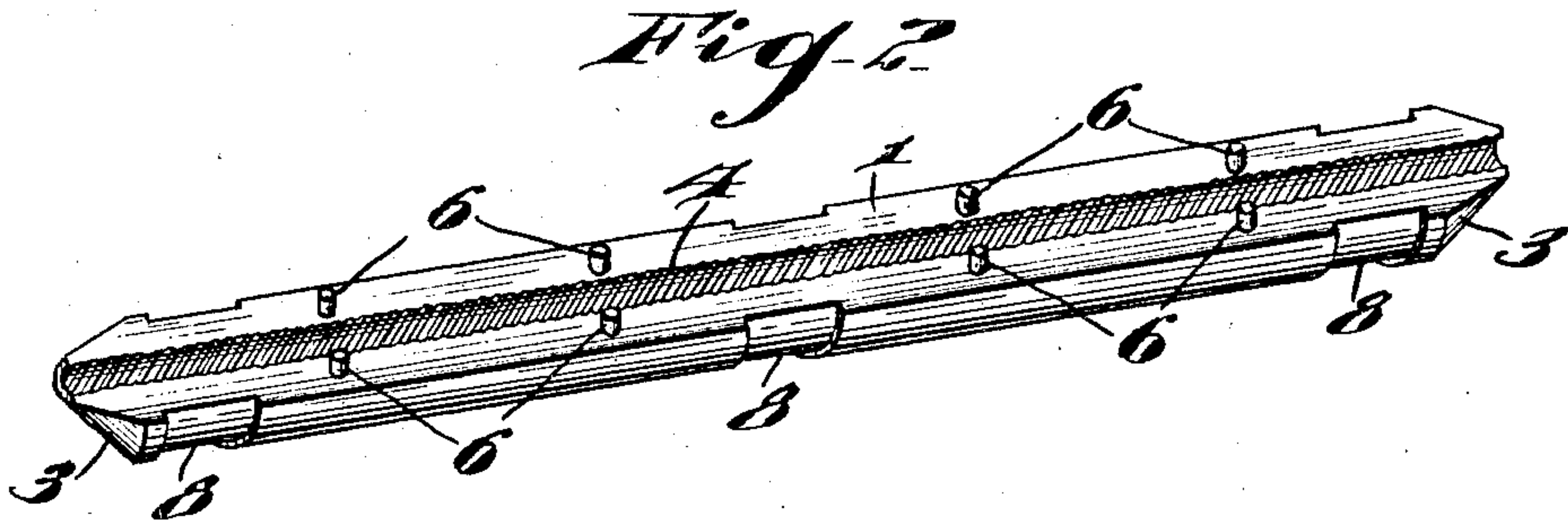
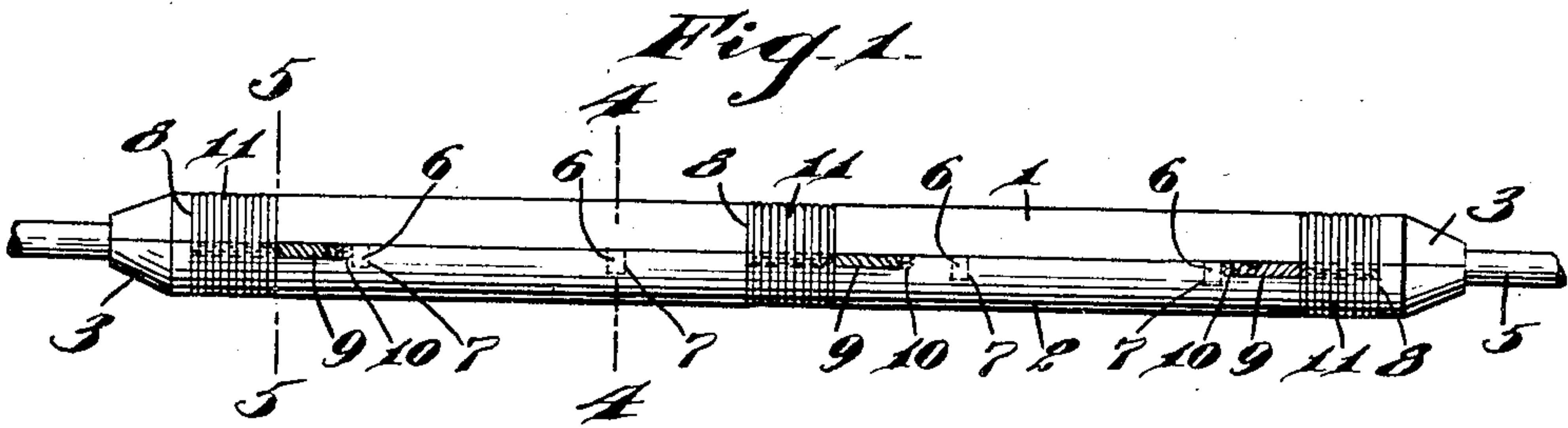


T. T. MATHER.
INSULATING TUBE.
APPLICATION FILED OCT. 14, 1909.

951,505.

Patented Mar. 8, 1910.



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UNITED STATES PATENT OFFICE.

THOMAS T. MATHER, OF EGG HARBOR CITY, NEW JERSEY.

INSULATING-TUBE.

951,505.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed October 14, 1909. Serial No. 522,632.

To all whom it may concern:

Be it known that I, THOMAS T. MATHER, a citizen of the United States, residing at Egg Harbor City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Insulating-Tubes, of which the following is a specification.

My invention relates to improvements in insulating tubes, the object of the invention being to provide a device of this character comprising two members or half sections, adapted to clamp an electric conductor between them, and effectually insulate the conductor from adjacent objects, prevent wearing of the insulating material on the conductor, where the wire passes close to a limb of a tree or other object, and is liable to be rubbed, caused by the swaying of the wire and the limb, by the wind.

A further object is to provide an improved device of this character which can be cheaply manufactured, quickly secured in place, and which is provided with grooves into which the ends of the holding-wires are projected and held against flying outward, to the damage of adjacent objects.

With these and other objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a view in side elevation, illustrating the application of my improvements. Figs. 2 and 3 are perspective views of the two members separated. Fig. 4, is an enlarged view in cross section on the line 4-4, of Fig. 1, and Fig. 5, is an enlarged view in cross section on the line 5-5, of Fig. 1.

My improved device comprises two half sections or members 1 and 2 respectively, said members being of general semi-cylindrical form exteriorly, in cross section, so that when together, the device has the general appearance of a cylindrical tube, the ends being tapered or beveled, as shown at 3, so as to remove as far as possible any abrupt shoulders which might catch and do injury. These members 1 and 2 are provided on their inner faces with longitudinal recesses or grooves 4, which when together, constitute a receptacle for the electric wire or conductor 5. The surfaces of these grooved portions 4 may be roughened in

various ways, to effectually clamp the wire 5 and prevent independent longitudinal movement of either the wire or the tube. One roughened means is shown in which the surface is corrugated, but of course, I am not limited in this particular. The member 1 is provided with a series of lugs or dowel pins 6, which are adapted to enter recesses or sockets 7 in member 2, and both of these members 1 and 2 are provided with registering annular recesses or grooves 8, three of which are shown, but I may of course employ a greater or less number. The member 2 is made with a series of longitudinal grooves or recesses 9 which intersect the grooves or recesses 8 therein but extend beyond the grooves or recesses 8, and at their ends are internally beveled forming shoulders 10 for a purpose which will hereinafter appear.

To secure the device over a wire, I preferably employ holding-wires 11, and fasten them as follows: One end of the holding-wire is disposed in the groove 9, while the other end of the wire is wound around the members of the tube, until it practically fills the groove 8, when the ends of the wires are twisted together, and this twisted portion of the wire after being cut off the proper length, is forced down into the groove 9 with its free end projected below the beveled shoulder 10, so that it cannot spring out and be in a position where it might injure adjacent objects or be broken off by the latter. A wire 11 is preferably positioned in each of the grooves or recesses 8, that is where the tube is of any appreciable length, but of course I may make the tube in various lengths and various diameters and of various materials, but preferably of insulating or non-conducting material, the material selected varying in accordance with the use to which the tube is to be put.

A great many slight changes might therefore be made in the general form and arrangements of parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A device of the character described,

comprising two members, both members having longitudinal semi-cylindrical wire-receiving grooves on their inner faces, and having beveled or tapering ends, one member having sockets in its inner face, lugs or dowel pins in the other member, positioned in said sockets, said members having registering annular grooves, holding-wires wound around said members in said last mentioned grooves, one member having longitudinal grooves intersecting the annular grooves and adapted to receive the ends of said holding-wires in said longitudinal grooves.

2. A device of the character described, comprising two members or half sections, each member having a longitudinal semi-cylindrical wire-receiving groove in its inner face, the surface of said groove being roughened, said members having annular registering holding-wire-receiving grooves, one member having longitudinal grooves intersecting the annular grooves, the ends of said last mentioned longitudinal grooves being internally beveled, holding wires wound around said members in their annular grooves, the ends of said holding wires twisted together and positioned in the longitudinal grooves, which intersect the an-

nular grooves, with their ends positioned below the internally beveled ends of said last mentioned longitudinal grooves.

3. A device of the character described, comprising two members or half sections, each member having a longitudinal semi-cylindrical, wire-receiving groove in its inner face, said members having annular registering wire-receiving grooves, one member having longitudinal grooves intersecting the annular grooves, the ends of said last mentioned longitudinal grooves being internally beveled, holding wires, each having one end positioned in a longitudinal groove and then wound around and around the members in an annular groove and over the first mentioned end of the wire, and said ends of the wire twisted together and positioned in the longitudinal groove with the extreme ends of the wire engaging the internally beveled end of said longitudinal groove.

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

THOMAS T. MATHER.

Witnesses:

R. H. KRENKEL,
C. E. PORTS.