

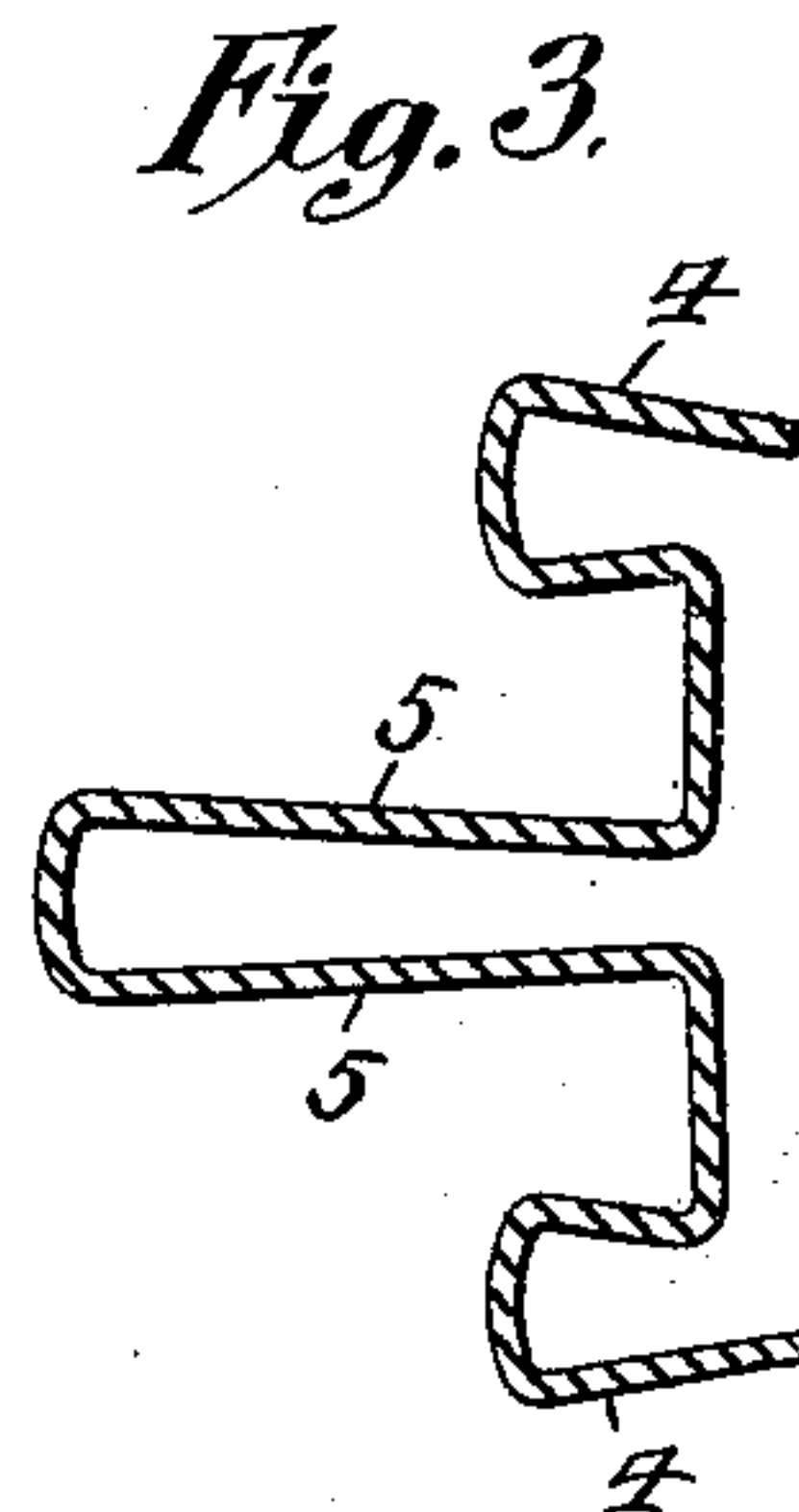
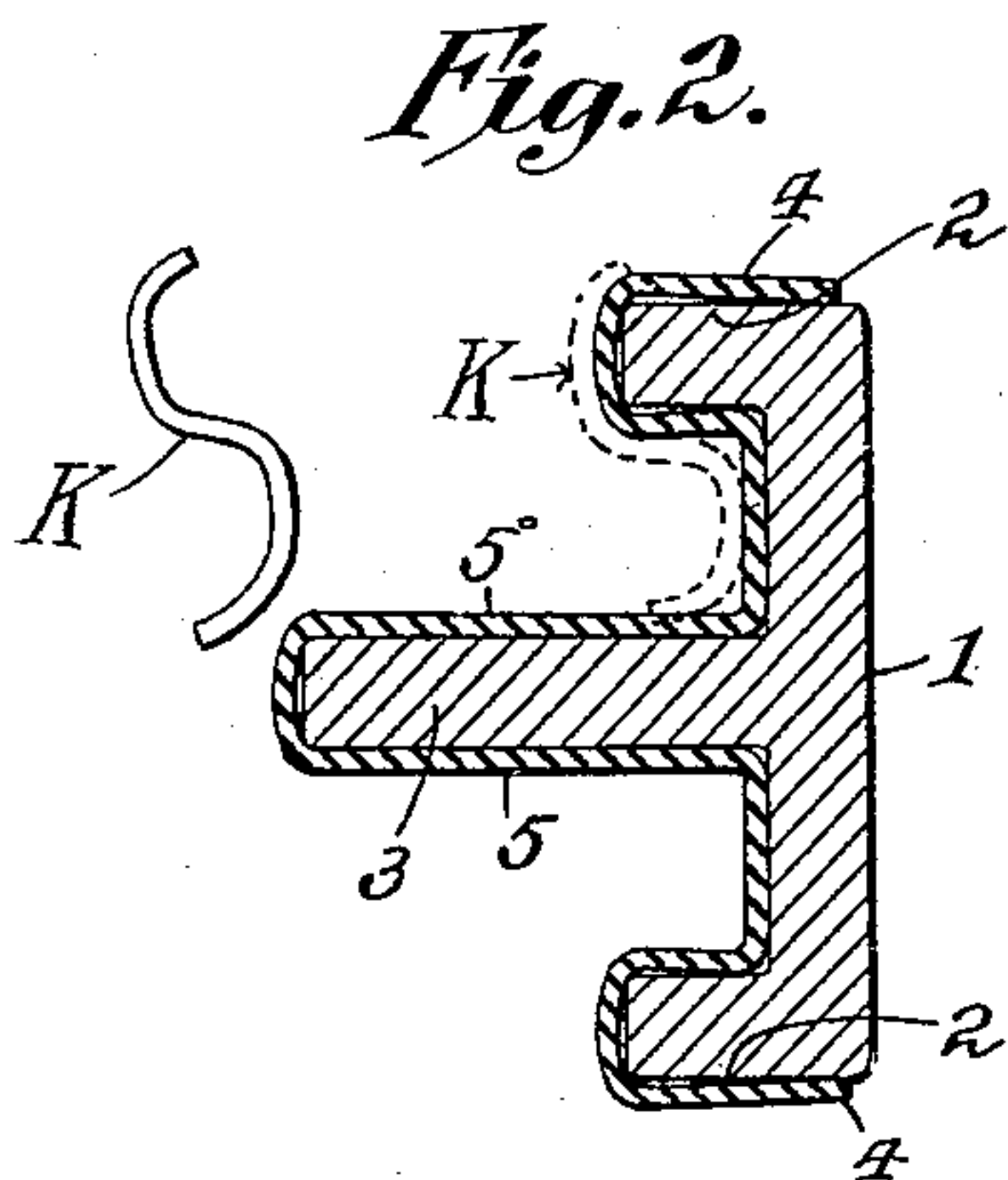
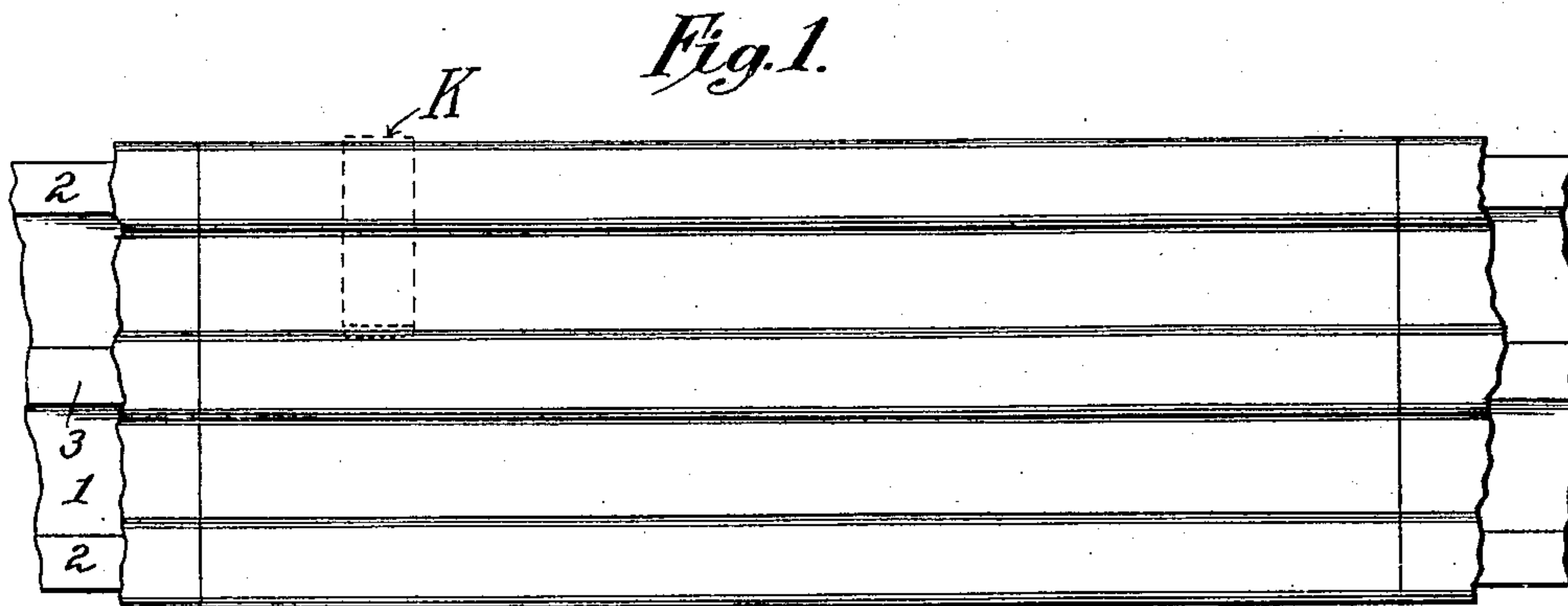
No. 873,705.

PATENTED DEC. 17, 1907.

W. H. BAKER.

INSULATING COVERING OR SHEATHING FOR CONTACT RAIL CONDUCTORS.

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UNITED STATES PATENT OFFICE.

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INSULATING COVERING OR SHEATHING FOR CONTACT-RAIL CONDUCTORS.

No. 873,705.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed October 19, 1905. Serial No. 283,389.

To all whom it may concern:

Be it known that I, WILLIAM H. BAKER, a citizen of the United States, and resident of Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Insulating Coverings or Sheathings for Contact-Rail Conductors, of which the following is a full, clear, and concise specification.

My invention relates to insulating or protective sheathings for contact rail conductors and more particularly to means for securely holding the sheathing to the rail in a manner permitting its being readily placed thereon or removed therefrom while the said rail is installed in the road-bed and without disturbing its mounting or requiring it to be disconnected.

The invention aims primarily at simplicity and economy of construction and application, and the particular features thereof are hereinafter described and pointed out in the accompanying claims.

Referring to the accompanying drawings Figure 1 represents in side elevation a portion of an ordinary contact rail as employed in modern underground trolley street car service, covered and protected by a sheathing made according to the present invention. Fig. 2 is a cross section thereof. Fig. 3 is a cross section of the sheathing as it is made and before application to the rail.

The contact rail shown in Figs. 1 and 2 is the usual form of rail commonly employed in the underground conduits of street railway systems and consists of a flat face 1, along which the contact member of the vehicle slides, two narrow side flanges 2, 2, at each margin thereof and a straight central web 3. This rail is commonly supported with the face 1 in a vertical position being held on insulated supports by its central web. The sheathing for this form of contact rail conforms to the general contour thereof, as indicated in Fig. 2, and is made of some stiffly elastic material which is insulating as well as durable. I prefer to employ a material which is made in strips or sheets of the fibers of wood-pulp, jute or similar substance, which can be given its

shape while in a relatively pliable condition and can be subsequently hardened or tempered to retain that shape in the manner of a spring clip. In shaping the strip of fibrous material, it is formed with contracted lateral or, in this case, vertical dimensions as shown in Fig. 3, so that when it is tempered or hardened the sides or marginal portions 4, 4 thereof are relatively closer together than they will be when applied to the rail, in which position they will embrace and clasp that portion of the rail designated above as the side flanges 2, 2. The portions 5, 5 also bear resiliently against the sides of the central web 3.

The sheathing is formed in sections of appropriate length to be conveniently handled and each section is capable of being freely placed upon the rail or removed from it in a direction lateral thereto without requiring any special tools or the removal or disconnection of the said rail. The sheathing, moreover, is so proportioned as to its side or marginal portions as to extend not quite up to the plane of the flat contact face 1, so as to be free from contact with the passing trolley shoes thereon. The inherent resilience or elasticity of the hardened or tempered fibers effects a clamping or clasp action upon the sides of the rail which is sufficient to retain the sheathing thereon under all ordinary conditions. Such clamping effect may, however, be augmented in special places by means of suitable metallic clamping keys K which are adapted to fit over the ends of the side flanges 2 and to be jammed inwardly into the space between that flange 2 and the web 3 as indicated by the dotted lines in Fig. 2, thereby pressing opposite sides of the sheathing closely against the rail. This form of key, it will be observed, is located entirely on the exterior of the sheathing and, therefore, does not interfere with the insulating properties thereof.

Having described my invention I claim—

1. The combination with a rail, of an insulating sheath adapted to embrace the latter, a locking piece or key clamping between portions of the rail with the sheath between the rail and said key.

2. An insulating sheath for flanged contact rails formed of hardened fibrous material conforming to a portion of the said rail and adapted to embrace the same, in combination with a metallic locking piece or key adapted to be jammed between the flange covering portions of said sheathing to press the same closely against the said flanges.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM H. BAKER.

Witnesses:

A. EDMUND LEE,
C. L. BATES.