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A. J. ROSS.

FASTENING DEVICE FOR RAIN WATER CONDUCTORS.

APPLICATION FILED MAY 18, 1906.

Fig. 1.

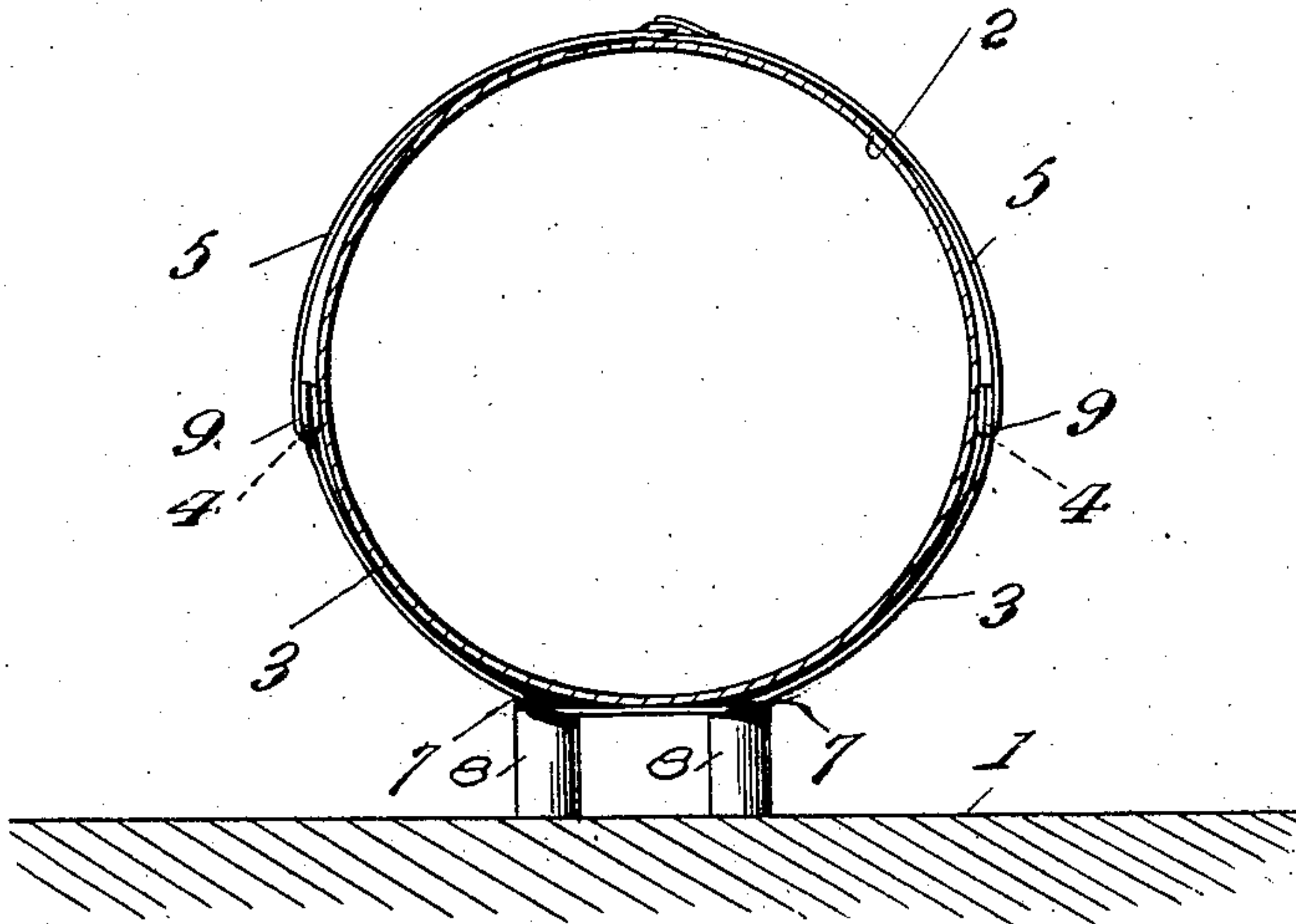
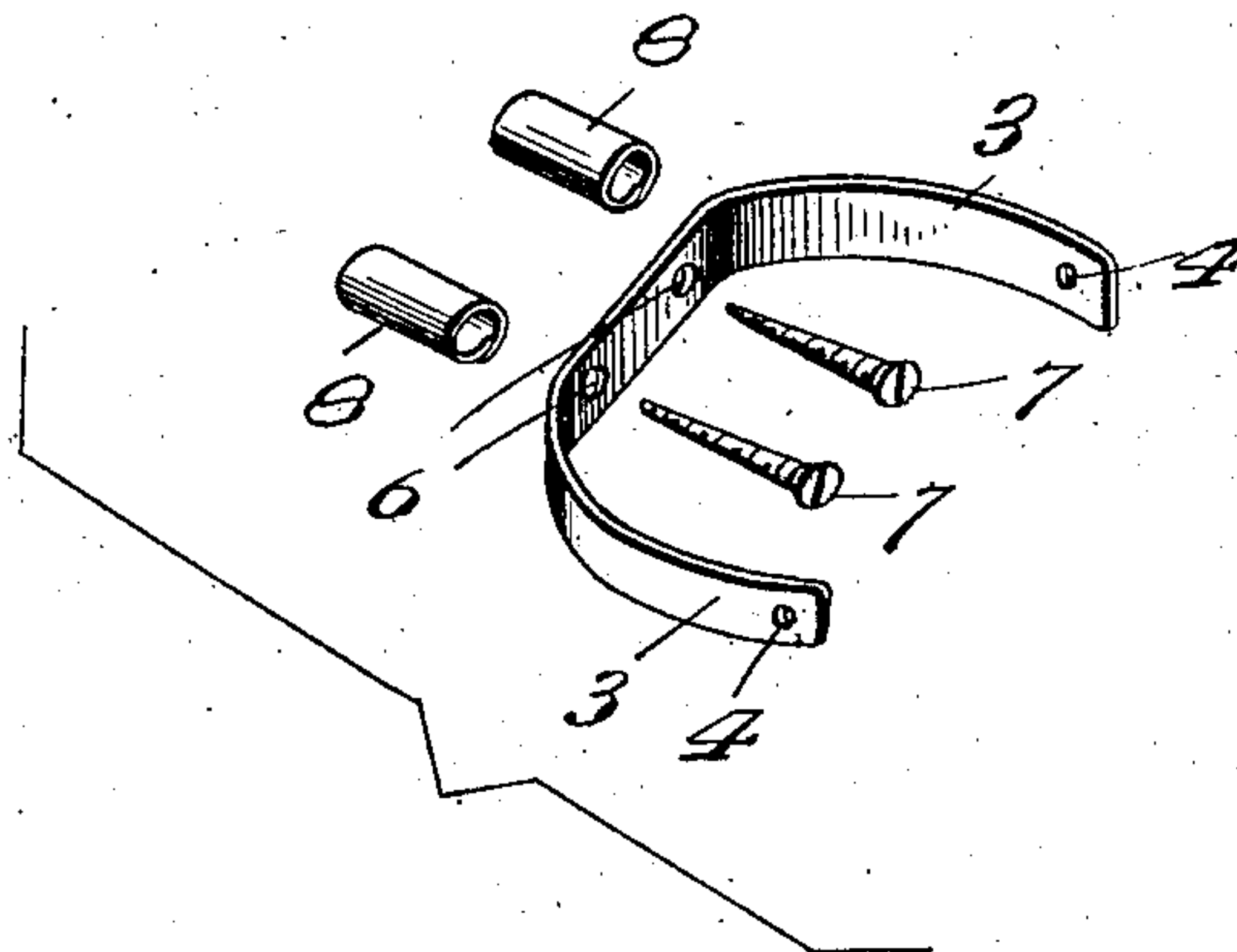


Fig. 2.



Witnesses

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FASTENING DEVICE FOR RAIN-WATER CONDUCTORS.

No. 845,578.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed May 18, 1906. Serial No. 317,520.

To all whom it may concern:

Be it known that I, AUSTIN JEROME ROSS, a citizen of the United States, residing at Cambridge, county of Henry, State of Illinois, have invented certain new and useful Improvements in Fastening Devices for Rain-Water Conductors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in pipe-fasteners; and the objects and nature of the invention will be readily understood by those skilled in the art in the light of the following explanation of the example illustrated in the accompanying drawings of a construction within the spirit and scope of my invention

An object of the invention is to provide a simple, inexpensive, effective, and improved fastening device for down-spouts or rain-water pipes on buildings which shall be of such a character and construction to permit production thereof by such simple appliances as commonly found in the ordinary tinner's shop.

A further object of the invention is to provide an improved fastening device for down-spouts or rain-water conductors arranged on the exterior of buildings to conduct the rain-water from the eaves-troughs, and which comprises a flexible sheet-metal band bent semicircular to receive the conductor, so that the band can be bent to receive conductors of various sizes, and spacing tubes or ferrules preferably formed by coiled pieces of sheet metal interposed between the building-wall and said band and through which the fastening devices pass and whereby the conductor and band will be held away from the building, the outer ends of the band being formed to receive the ends of wires which can be passed around the conductor and twisted or otherwise secured together.

The invention consists in certain novel features in construction and in arrangements and combinations of parts, as more fully and particularly pointed out and explained hereinafter.

Referring to the accompanying drawings, Figure 1 is a top plan view of a fastening, showing a conductor-pipe in cross-section and secured by the fastening. Fig. 2 is a perspective view showing the parts of the fastening separated, the wires not being shown.

In the drawings, 1 indicates the wall of a building, and 2 is a down-spout or water-conductor for carrying off water from the roof or the like.

The fastener comprises a flexible band or strip 3 of sheet metal. This band can be cut from the sheet metal—for instance, from galvanized sheet-iron—by the common appliances found in practically all tin-shops. The band is usually cut about one inch wide and of a suitable length and is then bent into a semicircular or U shape to partially embrace the conductor-pipe. The band is flexible, and hence when the fasteners are being applied the bands can be bent to meet conditions and snugly receive different-sized pipes. The bands are usually of a length to extend about half-way round the pipes. The outer ends of each band are formed with perforations 4 to receive the ends of the wires 5. At its central portion each band is also provided with usually two, more or less, perforations 6 to receive the headed fastening nails or screws 7. The perforations 6 are usually arranged midway between the side edges of the band and are spaced a suitable distance apart, and usually two nails or screws 7 are employed to secure a fastener to the wall of the building by being passed horizontally and inwardly through perforations 6 and through spacing ferrules or sleeves 8, interposed between the face of the building-wall and the inner or rear face of the band. These two sleeves 8 are spaced apart, and each receives a nail. Each sleeve or ferrule 8 is usually about an inch in length, more or less, and is formed by coiling or bending a strip of sheet metal, such as galvanized sheet-iron, into cylindrical or semicylindrical form. Each fastening-wire has a hook 9 formed at its inner end, and the wires are secured to the outer ends of the band 3 by passing the hooks from the outside inwardly through the perforations in the ends of the band.

The fasteners are first secured to the wall of the building by means of the nails or screws, the conductor-pipe is then fitted in the U-shaped bands, and free ends of the two wires of each fastener are then twisted together at the front or outer surface of the pipe. As the wires are twisted together and tightened the flexible bands are drawn tightly to the pipe, thereby most firmly and securely fastening the pipe and drawing the outer ends of the bands inwardly to the sides of the pipe. The spacing-sleeves are

so spaced and of such comparatively large diameter as to form a firm support for the nails and the pipe against lateral strain and also hold the bands and pipe away from the building to avoid marring the face of the building and to permit painting the rear face of the pipe without removing the same and without smearing the face of the building.

These fasteners can be produced complete by the ordinary tinner from stock and by appliances usually found in tin-shops, which is a great advantage in the matter of economy and convenience.

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

1. A pipe-fastener comprising a U-shaped flexible sheet-metal band having tie-wires secured to its outer ends and adapted to be twisted together and thereby draw the band to the pipe and tightly gripping the pipe within the wires and band, and securing and spacing means arranged at the central portion of the band for securing the same to and spacing the same from a support, substantially as described.

2. A pipe-fastener comprising a U-shaped sheet-metal band adapted to partially embrace a pipe and provided with tie-wire means to embrace the remainder of the pipe

and clamp the same within said band, a pair of spaced parallel spacing-sleeves interposed between a support and intermediate central portions of the band and adapted to receive securing means passed through the band and said sleeves and into the support.

3. A pipe-fastener comprising a U-shaped flexible band having perforations in its ends, wires arranged at the outer surfaces of said ends and passed in through said perforations and hooked, the free ends of the wires adapted to be twisted together at the front of the pipe, and spacing and securing means for securing the band, at its central portion to and spacing the same from a support.

4. A pipe-fastener comprising a U-shaped sheet-metal band having wires secured at its outer ends and a perforation at its central portion, a spacing-sleeve composed of a piece of coiled sheet metal, and a fastening-nail, said sleeve adapted to be interposed between the band and a support, with said nail passing through said perforation and sleeve and into said support.

In testimony whereof I affix my signature in presence of two witnesses.

AUSTIN JEROME ROSS.

Witnesses:

H. L. McMULLEN,
JAMES POLLOCK.