

J. T. DUFF.
 THREAD PROTECTOR FOR PIPE.
 APPLICATION FILED OCT. 24, 1907.

912,944.

Patented Feb. 16, 1909.

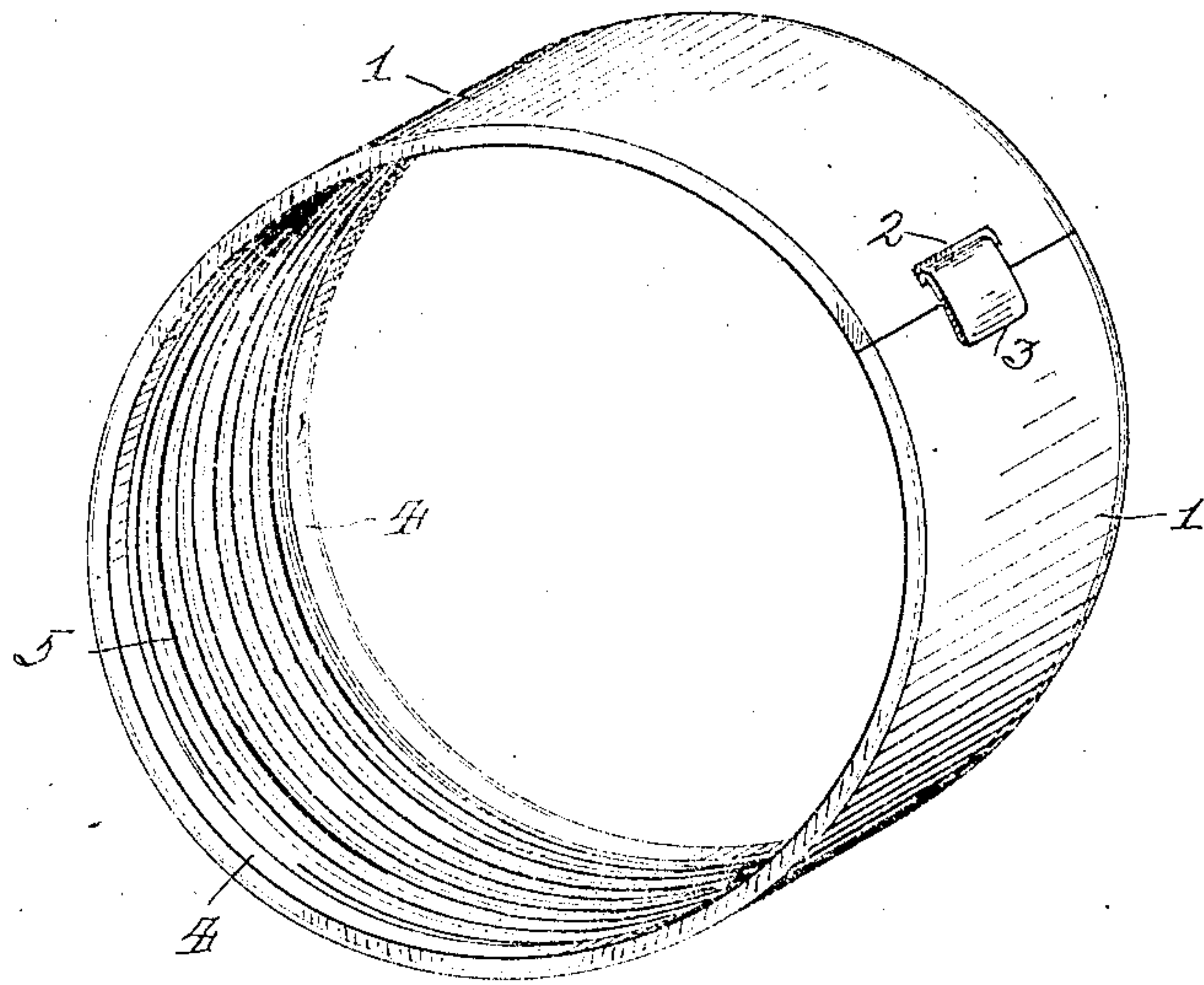


Fig. 1

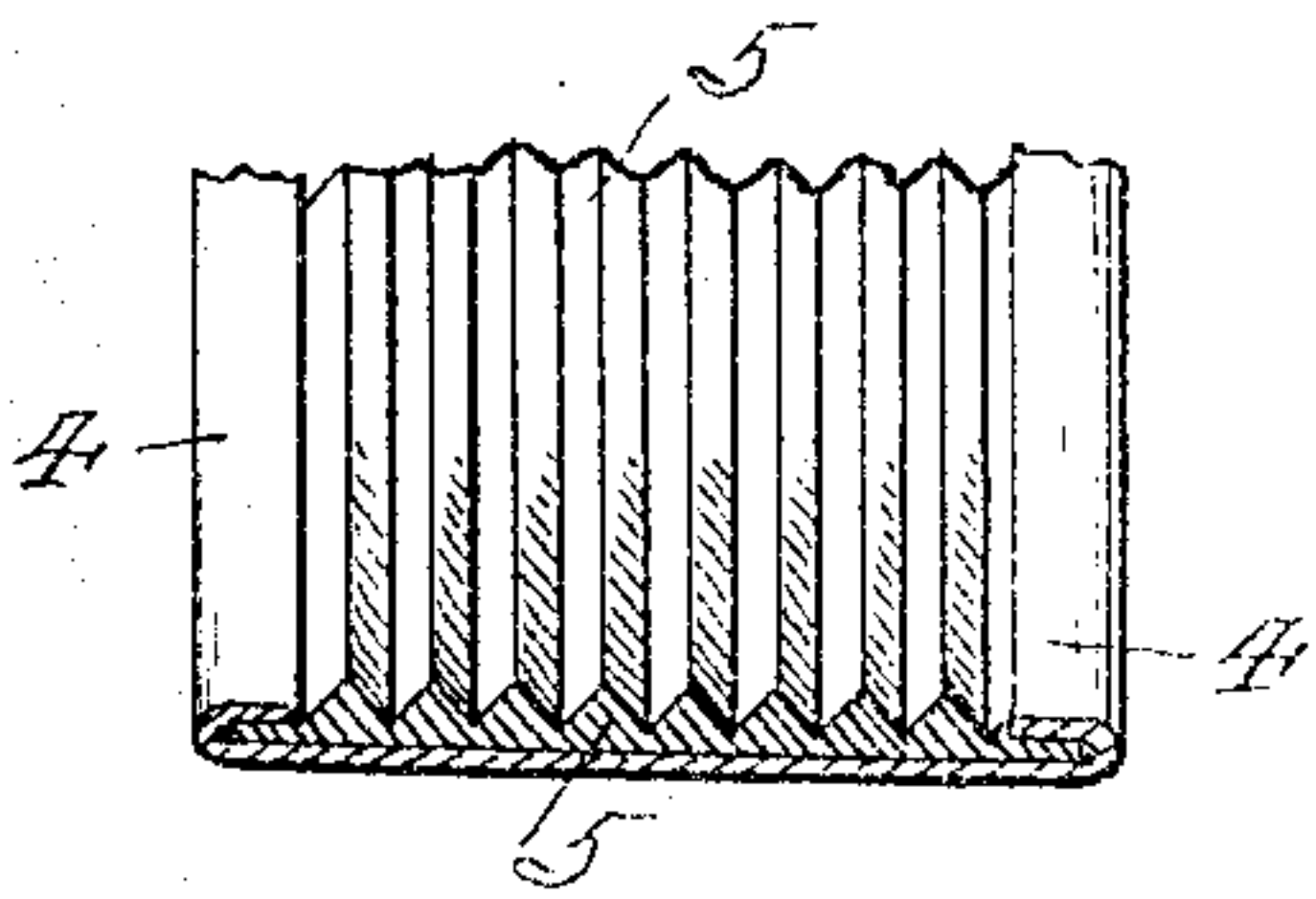


Fig. 2

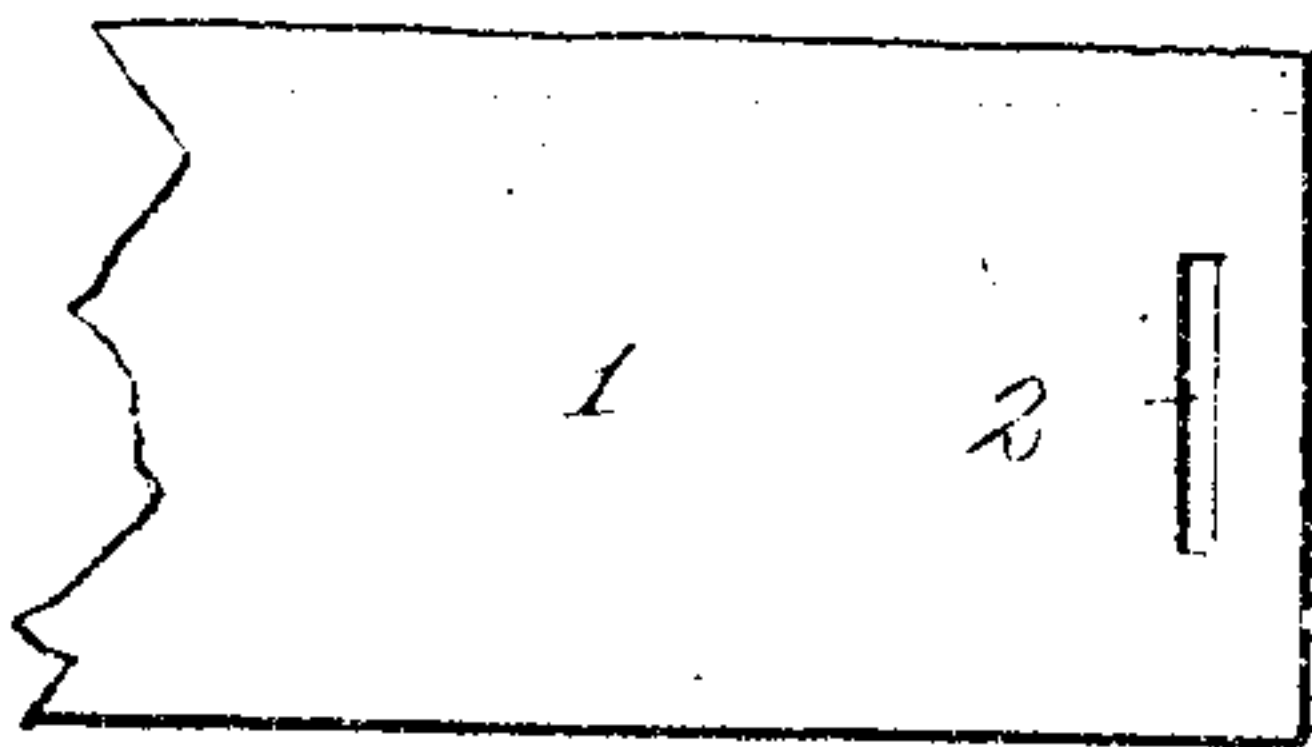


Fig. 3

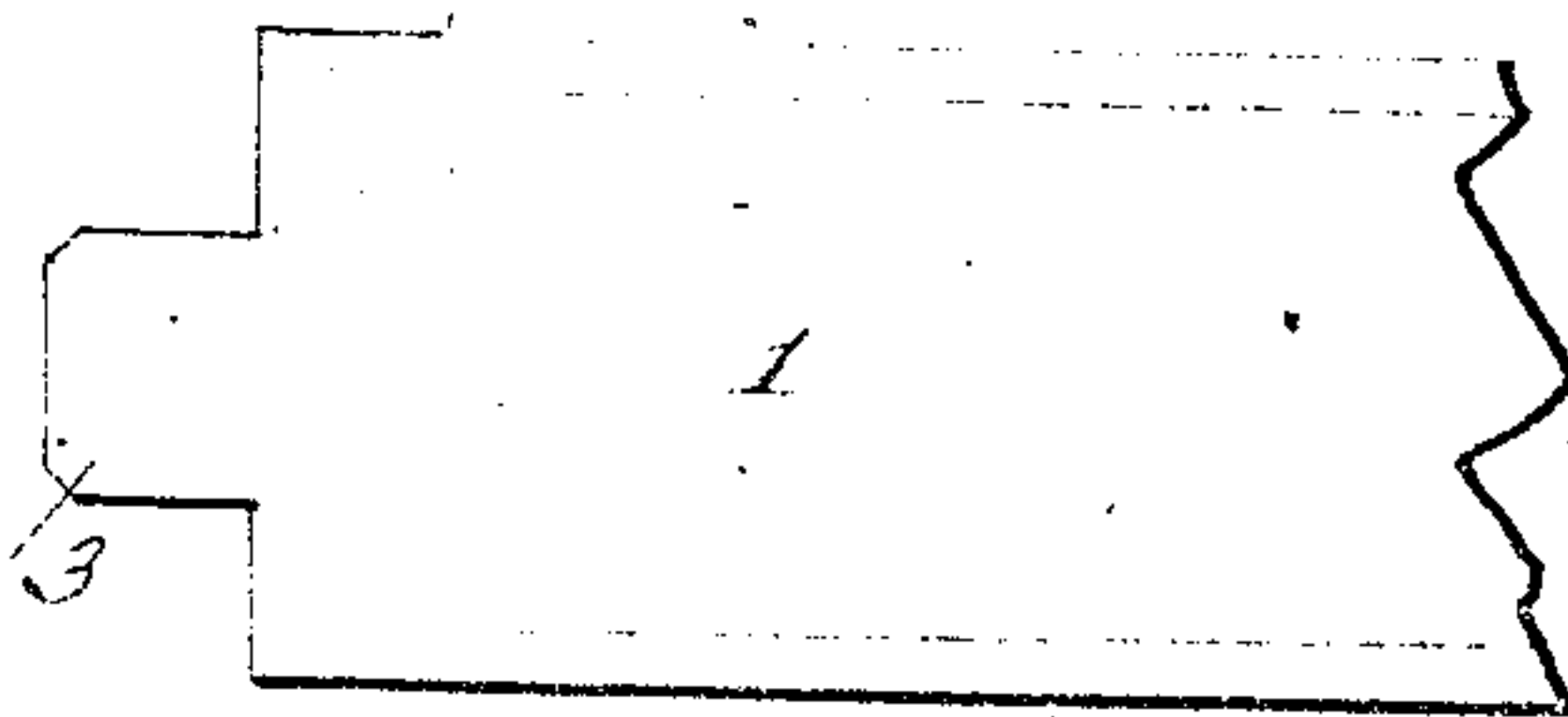


Fig. 4

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UNITED STATES PATENT OFFICE.

JOHN T. DUFF, OF PITTSBURG, PENNSYLVANIA.

THREAD-PROTECTOR FOR PIPE.

No. 912,944.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed October 24, 1907. Serial No. 398,924.

To all whom it may concern:

Be it known that I, JOHN T. DUFF, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Thread-Protectors for Pipe; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a new article of manufacture and it comprises a thread protector for pipe or tubes, and it consists of a thin strip of metal bent in the form of a ring, means for attaching the meeting ends of said strip, a lining composed of a yielding and flexible substance attached within said ring, means for holding said lining in position, and the invention further consists in the details of construction and combination of parts, as will be fully described hereinafter.

In the shipment of wrought iron or steel pipes or tubing having threaded ends, it is necessary to protect said threads against injury. This has been done by short sections of threaded pipe screwed over the threads and in various other ways. To avoid this threading of the protector and to form the same in such manner that it will not be necessary to screw the protector on or off the pipe, is the principal object of my present invention.

Another object of the invention is to so form the protector, that the same may be pressed or driven on the end of the pipe and to provide a means whereby said protector may be easily removed from the pipe.

In the accompanying drawings;—Figure 1 is a perspective view of my improved thread protector for pipes or tubes, the same being constructed and arranged in accordance with my invention. Fig 2 is an enlarged cross section of a portion of the same, showing the form of the soft, yielding or flexible lining and means for confining the same in position. Fig. 3 is a plan view of one end of the metallic strip from which the outer ring or casing is formed, showing the slot to engage with a tang or tongue formed on the other end of said strip. Fig 4 is a plan view of the other end of the strip, showing the tongue for engagement with the slot of the opposite end.

To put my invention into practice, and thereby form a thread protector that may be driven or pressed upon the ends of pipe for protection, I provide a thin strip of sheet metal of a suitable width and length to suit the diameter of the pipe for which it is intended, and form one end thereof with a tongue 3, and the other end with a slot 2, suitable for entering said tongue, and bending the same backward to form a hook when the two ends of the strip 1 are brought together, to form said strip in annular form, as will be best seen by reference to Fig. 1, of the drawings. Prior to bending the strip 1, into annular form, a strip of corrugated soft yielding flexible substance, such as soft rubber, felt, cloth or suitable paper, of the same length as the strip 1, but of less width, is cemented or otherwise attached to the inner side of said strip 1, and the edges of the metallic strip 1 flanged or bent over (as at 4, Fig. 2) to engage with the edges of the rubber or other soft yielding material 5. These flanged edges 4, of the ring strengthen and stiffen the article when in annular form and at the same time serve as a further means of confining the lining 5, and holding the same rigidly in place.

These protectors, constructed as above described, are of a greater diameter at one side than the other, to form a tapering inside surface to correspond to the taper formed on the threaded ends of the pipe for which they are intended.

In operation, the protector is simply driven or pressed over the threads of the pipe and when it is desired to remove said protector, the tongue is bent back to its normal position, at which time the protector may be easily removed.

Various slight modifications and changes may be made in the details of construction without departing from the spirit of the invention. Therefore I do not wish to confine myself to the construction, shown and described, but wish to claim all such modified forms as will come properly within the general scope of the invention.

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

A thread protector for pipes comprising an outer casing formed from a strip of sheet metal, a flexible tongue and a slot for attaching the ends of said strip to form a ring and said ring being slightly tapered, a lining

within said casing and adhesively secured to the inner face thereof, opposite flanges carried by the casing and bent inwardly to contact and retain the lining from displacement, said lining having a longitudinally corrugated inside surface and composed of a soft yielding flexible substance.

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

JOHN T. DUFF.

Witnesses:

HILL BURGIN,

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