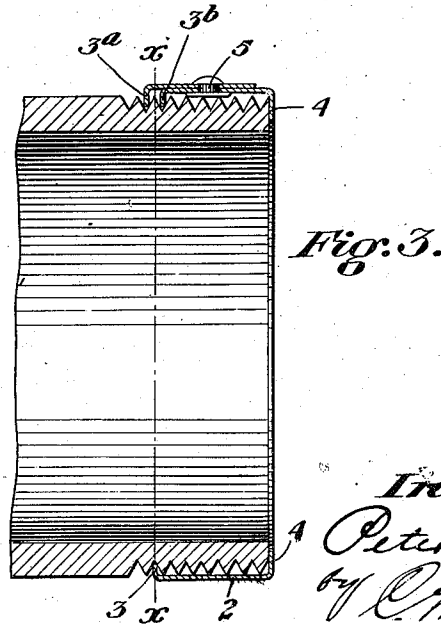
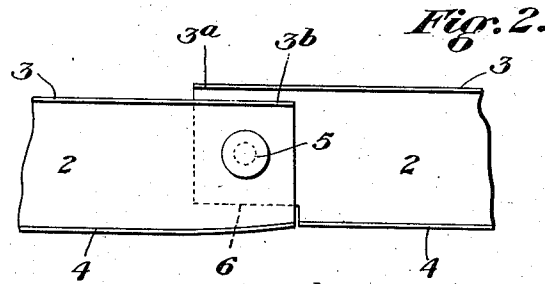
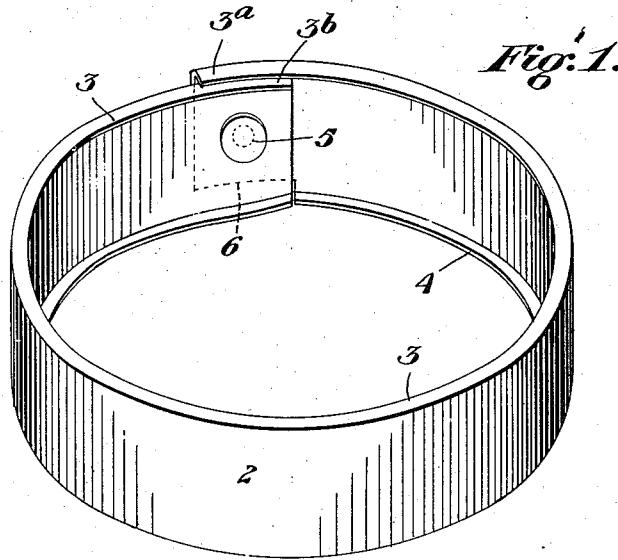


P. J. SHRUM.
 THREAD PROTECTOR.
 APPLICATION FILED AUG. 16, 1909.

966,610.

Patented Aug. 9, 1910.



Witnesses:
 Chas. S. Ledy.
 Harry Sims.

Inventor:
 Peter J. Shrum
 by C. M. Clark
 his attorney

UNITED STATES PATENT OFFICE.

PETER J. SHRUM, OF MONACA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO COLONA MANUFACTURING COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

THREAD-PROTECTOR.

966,610.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed August 16, 1909. Serial No. 512,967.

To all whom it may concern:

Be it known that I, PETER J. SHRUM, a citizen of the United States, residing at Monaca, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Thread-Proteectors, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention consists in an improvement in thread protectors for the threaded ends of pipes, tubing, rods, etc., and has for its object to provide a simple, cheap and easily adjusted device which can be screwed over the threads. In protectors of this class considerable difficulty is experienced in applying the device to the threads by reason of the uncertainty in engaging the thread of the pipe by the front end of the outer flange, resulting in delay, binding and marring of the threads.

The particular object is to improve that class of protectors made of sheet metal having spirally arranged deflected flanges for engagement of the thread by providing an initial thread engaging flange in advance of the rear terminal of the same flange, off-set from it by the gage of one thread, and lapsing beyond it, in the manner hereinafter described.

In the drawings:—Figure 1 is a perspective view of the device. Fig. 2 is a partial inner plan view showing the joint construction. Fig. 3 is a longitudinal sectional view through the end of a pipe provided with the protector.

The protector is made of a circular band of sheet metal 2, flanged inwardly at the front as at 3 for engagement with the threads and at the back as at 4 for limiting its travel and protecting the end of the pipe. The band 2 is secured by its ends, which overlap, by a rivet 5 and off-set an amount equivalent to the gage of the thread of the pipe for which it is designed, thereby separating the front flanges 3 to the same extent. The rear flange 4 is cut away for clearance sufficiently far back to make the joint, as indicated in dotted lines at 6, and either of the ends of rear flange 4 may be bent up to match the end of the opposite abutting flange, or both flanges may be bent toward each other in order to match, as desired. The sole function of the rear flange is to

cover the end of the pipe and incidentally to stiffen the ring.

By overlapping and off-setting the ends of the ring as shown, the outer end 3^a extends some distance beyond the rear terminal of the inner end 3^b with the intervening thread space, so that when that portion of the flange 3 beyond the overlapping outer terminal 3^a is laid against the front thread of the pipe and the device is rotated, the terminal 3^a is positively guided into exact engagement with the thread each time, avoiding any uncertainty or improper engagement or jamming, and the protector, when thus properly initially inserted, may be turned over the threads for its full length, as shown in Fig. 3. Said figure clearly shows the side-by-side arrangement of the flange terminals 3^a and 3^b providing the thread-engaging space, the flange 3 at the opposite side being exactly halfway between them and engaging between the threads, as indicated by the line *x, x*.

The device may be made in any desired sizes, care being taken to properly gage the space between the overlapping flanges to suit the gage and to provide ample overlap to make a good joint and to extend the initial flange end well beyond the rear terminal of the adjacent spirally arranged continuation of the single flange.

What I claim is:—

1. A thread protector consisting of a ring of sheet metal having overlapping ends secured together and provided with a continuous spirally arranged thread-engaging flange having terminals overlapping and off-set from each other, substantially as set forth.

2. A thread protector consisting of a ring of sheet metal having overlapping ends secured together and provided with a continuous spirally arranged thread engaging flange having terminals overlapping and off-set from each other, and provided with a limiting flange at its other end, substantially as set forth.

3. A thread protector consisting of a ring of sheet metal having front and back flanges, the back flange being cut away for clearance, one end of the ring overlapping the other and off-set laterally a distance equaling the width of one thread, and a securing rivet connecting said overlapping ends, substantially as set forth.

4. A thread protector consisting of a ring
of sheet metal having front and back flanges,
the back flange being cut away for clearance,
one end of the ring overlapping the other
5 and off-set laterally a distance equaling the
width of one thread, a securing rivet con-
necting said overlapping ends, the flange
terminals at the other side from the off-set

flange terminals being abutting and regis-
tering, substantially as set forth.

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

PETER J. SHRUM.

Witnesses:

C. M. CLARKE,

CHAS. S. LEPLEY.