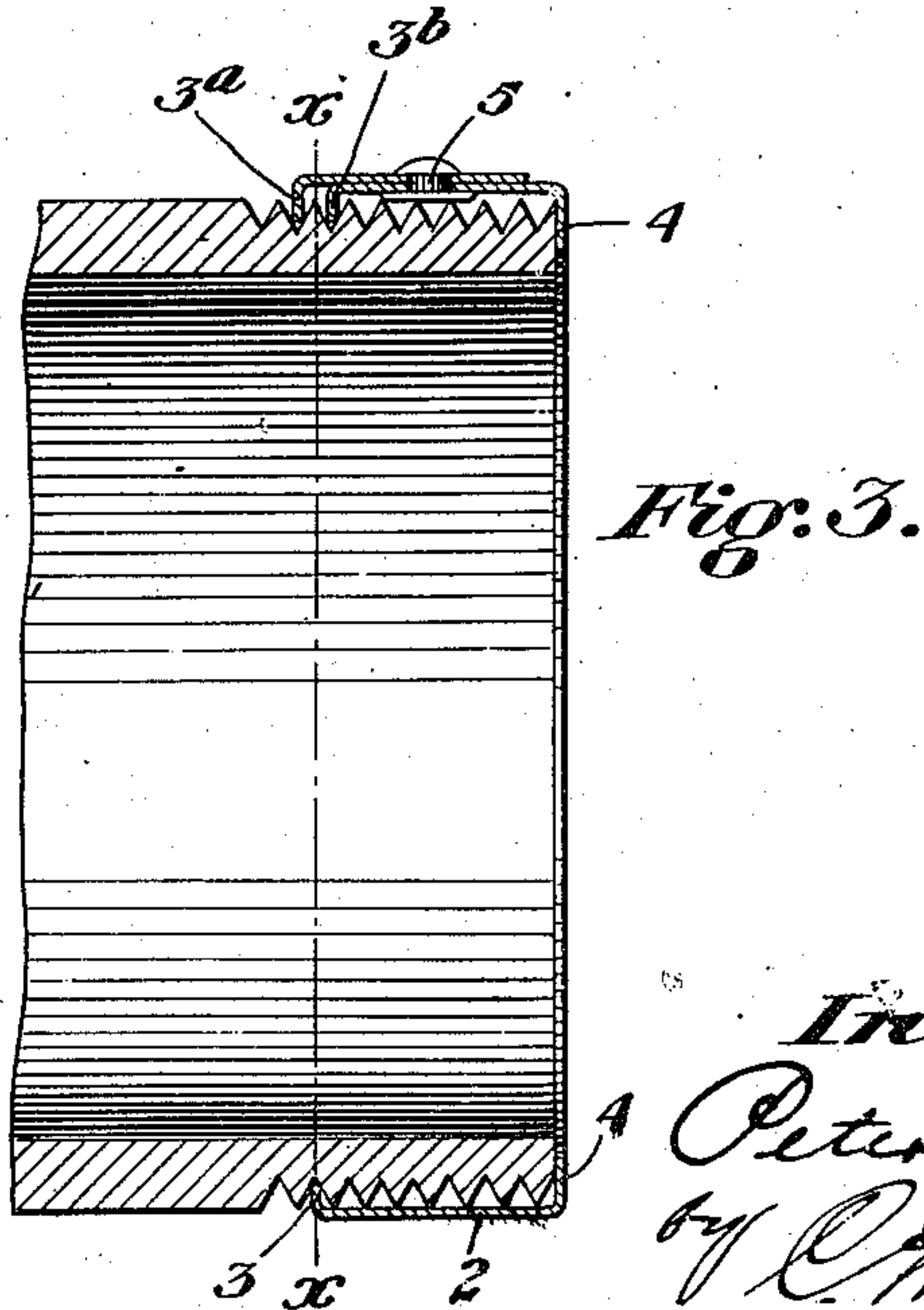
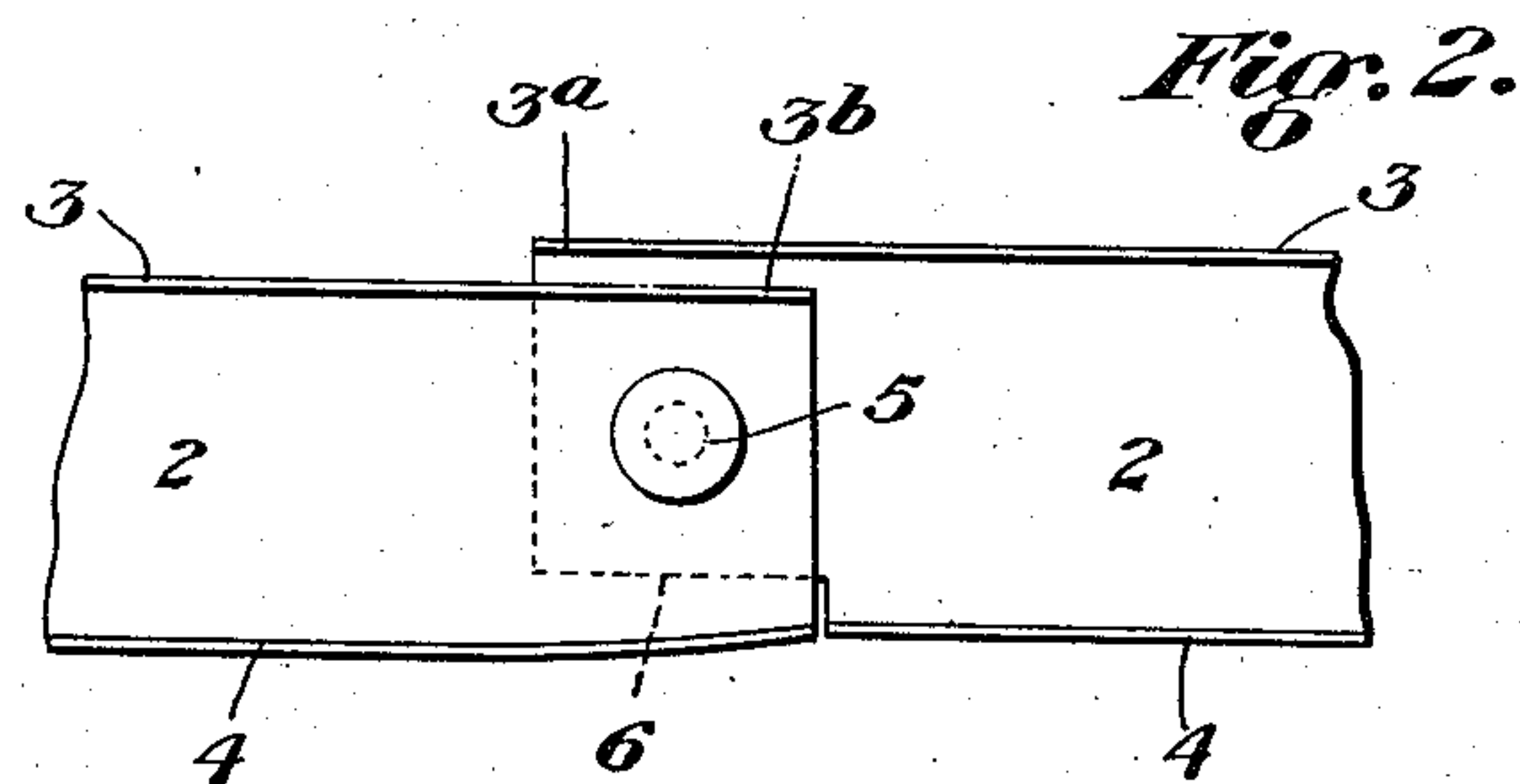
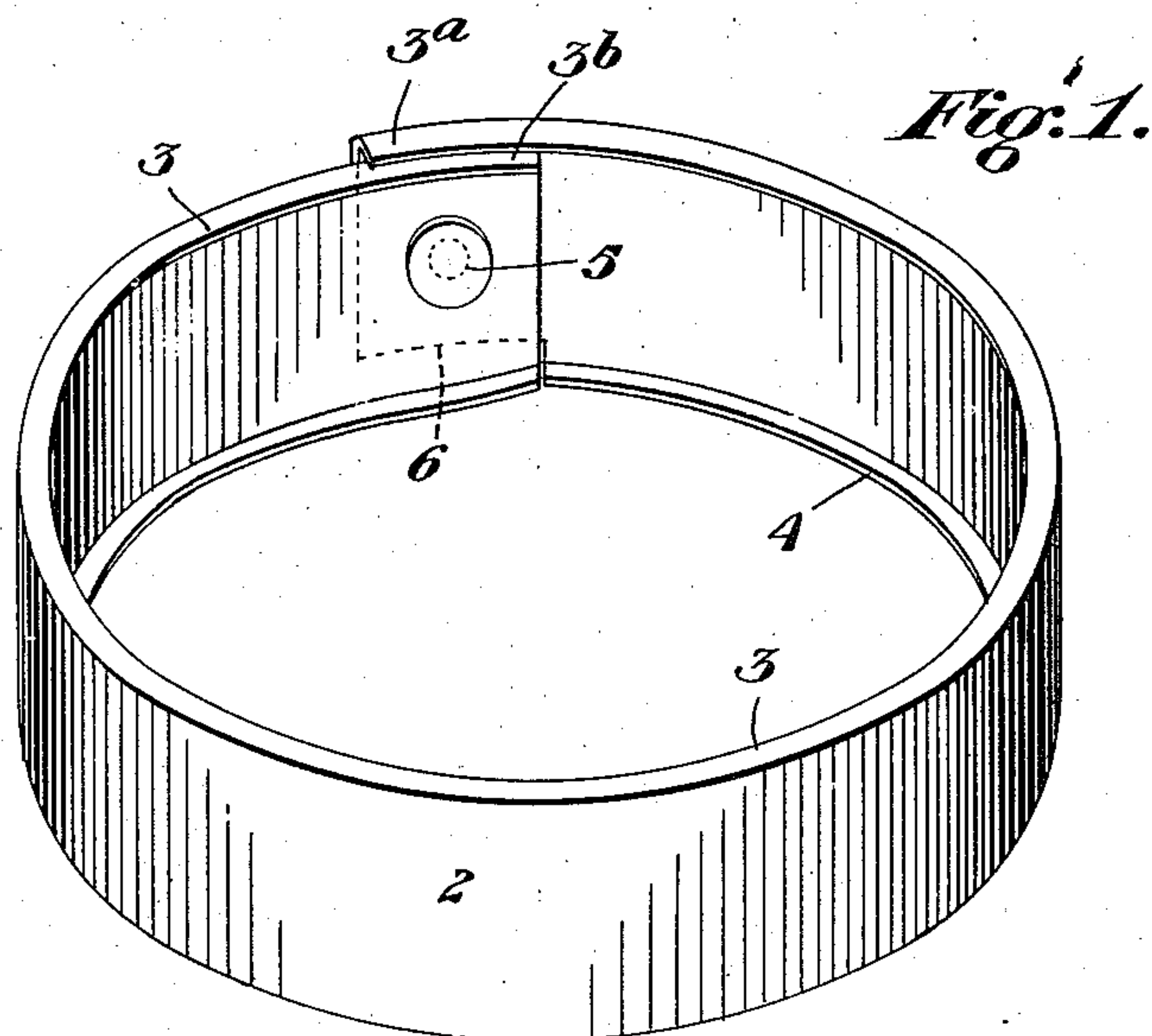


P. J. SHRUM.  
 THREAD PROTECTOR.  
 APPLICATION FILED AUG. 16, 1909.

966,610.

Patented Aug. 9, 1910.



*Witnesses:*  
 Char. S. Lyley.  
 Harry Jones.

*Inventor:*  
 Peter J. Shrum  
 by C. M. Clarke  
 his attorney



# UNITED STATES PATENT OFFICE.

PETER J. SHRUM, OF MONACA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS,  
TO COLONA MANUFACTURING COMPANY, OF PITTSBURG, PENNSYLVANIA, A COR-  
PORATION 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-Pro-  
5 protectors, of which the following is a specifica-  
tion, reference being had therein to the ac-  
companying drawing.

10 My invention consists in an improvement  
in thread protectors for the threaded ends of  
pipes, tubing, rods, etc., and has for its ob-  
ject to provide a simple, cheap and easily  
adjusted device which can be screwed over  
15 the threads. In protectors of this class con-  
siderable difficulty is experienced in apply-  
ing 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, re-  
20 sulting in delay, binding and marring of the  
threads.

The particular object is to improve that  
class of protectors made of sheet metal hav-  
ing spirally arranged deflected flanges for  
25 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 lap-  
ping beyond it, in the manner hereinafter  
30 described.

In the drawings:—Figure 1 is a perspec-  
tive view of the device. Fig. 2 is a partial  
inner plan view showing the joint construc-  
tion. Fig. 3 is a longitudinal sectional view  
35 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  
40 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  
45 pipe for which it is designed, thereby sepa-  
rating 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 in-  
dicated in dotted lines at 6, and either of the  
50 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 55  
to stiffen the ring.

By overlapping and off-setting the ends of  
the ring as shown, the outer end 3<sup>a</sup> extends  
some distance beyond the rear terminal of  
the inner end 3<sup>b</sup> with the intervening thread 60  
space, so that when that portion of the flange  
3 beyond the overlapping outer terminal 3<sup>a</sup>  
is laid against the front thread of the pipe  
and the device is rotated, the terminal 3<sup>a</sup> is  
positively guided into exact engagement 65  
with the thread each time, avoiding any un-  
certainty or improper engagement or jam-  
ming, and the protector, when thus properly  
initially inserted, may be turned over the  
threads for its full length, as shown in Fig. 70  
3. Said figure clearly shows the side-by-  
side arrangement of the flange terminals 3<sup>a</sup>  
and 3<sup>b</sup> providing the thread-engaging space,  
the flange 3 at the opposite side being ex-  
actly halfway between them and engaging 75  
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 80  
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. 85

What I claim is:—

1. A thread protector consisting of a ring  
of sheet metal having overlapping ends se-  
cured together and provided with a continu-  
ous spirally arranged thread-engaging flange 90  
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 se-  
cured together and provided with a continu- 95  
ous spirally arranged thread engaging flange  
having terminals overlapping and off-set  
from each other, and provided with a limit-  
ing flange at its other end, substantially as  
set forth. 100

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 105  
width of one thread, and a securing rivet  
connecting said overlapping ends, substan-  
tially 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. 10

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

PETER J. SHRUM.

Witnesses:

C. M. CLARKE,

CHAS. S. LEPLEY.