F. SOLEY.

PADLOCK SHACKLE.

APPLICATION FILED JULY 12, 1906.

899,268. Patented Sept. 22, 1908.

Fig. 1.

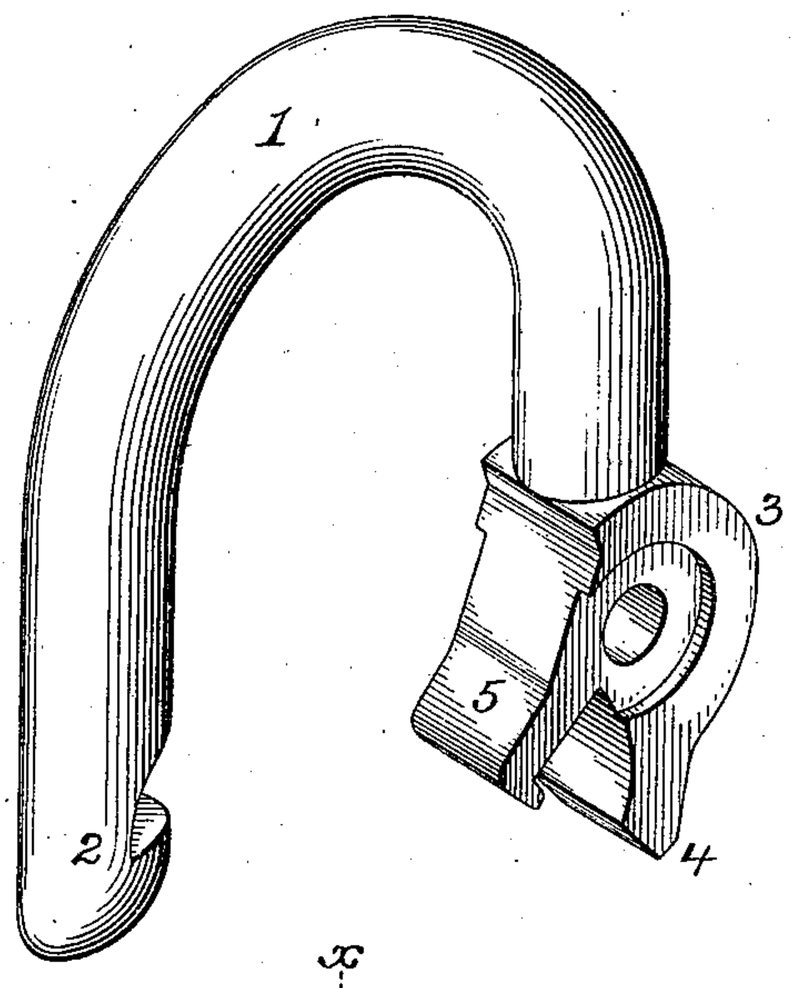

Fig. 4

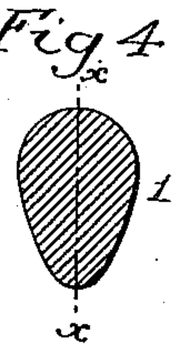

Fig. 2.

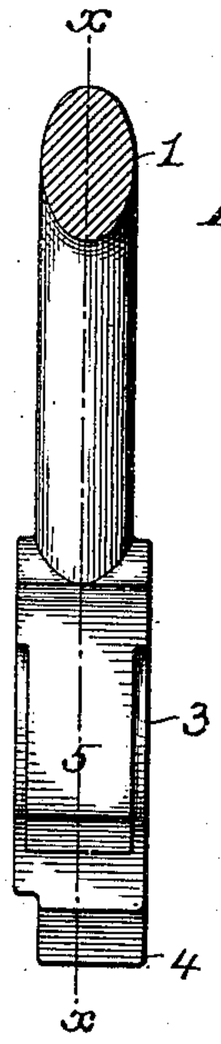

Fig. 6

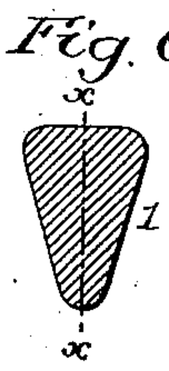

Fig. 5.

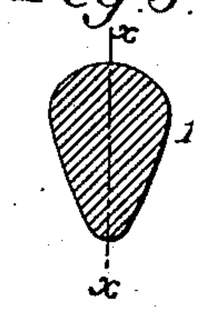

Fig. 7.

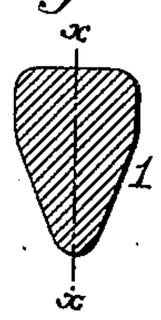

Fig. 3

Witnesses
Hamilton D. Zinn
Kate A. Beadle

Inventor
Frank Soley
by his attorneys
Smith & Brazee

UNITED STATES PATENT OFFICE.

FRANK SOLEY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO MILLER LOCK COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

PADLOCK-SHACKLE.

No. 899,268. Specification of Letters Patent. Patented Sept. 22, 1908.

Application filed July 12, 1906. Serial No. 325,828.

To all whom it may concern:

Be it known that I, FRANK SOLEY, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Padlock-Shackles, of which the following is a specification.

The object of my invention is to so construct a padlock shackle as to insure maximum strength for the amount of metal employed and reduce to a minimum the amount of labor required for its production. This object I attain in the manner hereinafter set forth reference being had to the accompanying drawing, in which

Figure 1 is a perspective view of a padlock shackle made in accordance with my invention; Fig. 2 is a transverse vertical section of the same; Fig. 3 is a sectional plan view, and Figs. 4 to 7, inclusive, are sectional views illustrating modifications of my invention.

In the drawing, 1 represents the curved bow of the shackle having at one end the notched nose 2, and at the other end the butt 3, with projecting heel 4 and tongue 5, although the character of the butt may vary, since this portion of the shackle constitutes no material part of my invention, the latter relating solely to the curved bow of the shackle, which, instead of being of circular or quadrangular cross section, as usual, presents an oval cross section, with curved surfaces throughout, the diameter of the curve at the inner side of the bow being less than the width of the bow, and the longer axis of the oval being, by preference, coincident with a plane x passing through the center of the shackle, as shown in Figs. 2 and 3. A shackle of this character has the metal so disposed as to best resist the strains to which the shackle is subjected in use, and I find that in addition to this advantage the shackle possesses the further advantage that after the rough casting has been subjected to the operation known as "tumbling", no filing or other further finishing of the same is required, the oval cross sectional form of the shackle and the relatively contracted curve at the inner side of the bow permitting better access to all parts of the same, and especially to the inner side of the bow, than is possible when said bow is of circular or other cross sectional form, my improved shackle, when removed from the "tumbler", being free in all parts from any roughness of surface, and especially from the fins on the outer and inner sides of the bow, which, in the rough casting, are due to the breaks in the continuity of the sand mold at the parting line.

The advantages of my invention may be attained by shackles having a cross sectional form other than oval, for instance by one having an egg-shaped cross section as shown in Fig. 4, or by one whose cross-sectional shape is that of a blunt wedge, as shown in Fig. 5, these shackles, however, having rounded surfaces throughout and being therefore regarded as variations of the oval type, and included within that term. The modifications shown in Figs. 6 and 7 are likewise blunt wedges, but they have flat surfaces on the outer side of the bow, and flat surfaces on the opposite sides, while retaining the general characteristics of oblong cross section, tapering from the portion of greatest width to a relatively contracted curve on the inner side of the bow.

I claim:—

A padlock shackle having a bow of oblong cross section, tapering from the portion of greatest width to a curve at the inner side of the bow, which curve is of less diameter than the width of the bow.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

FRANK SOLEY.

Witnesses:
PAUL J. MATHIAS,
A. B. MAINE.