No. 896,053. PATENTED AUG. 11, 1908.

J. J. BOUCHARD & I. A. BRAVIN.

PIPE, ROD, AND WIRE CABLE CLAMP OR COUPLING.

APPLICATION FILED AUG. 30, 1906. RENEWED JAN. 3, 1907.

Fig. 1.

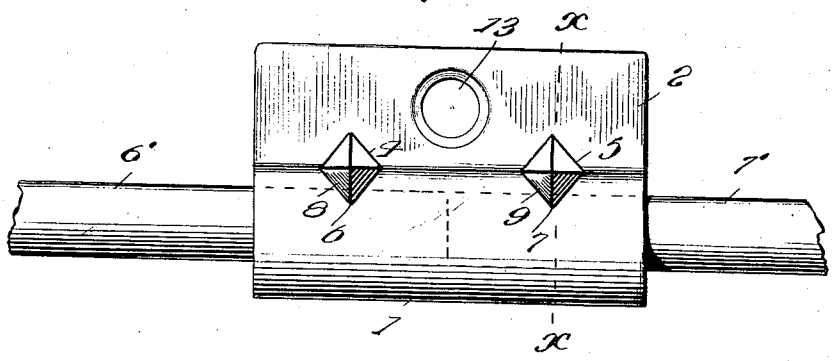


Fig. 2.

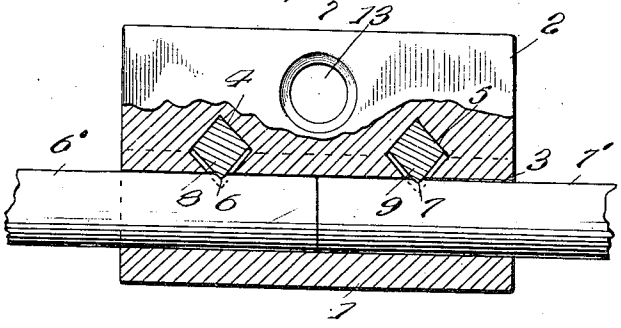


Fig. 3.

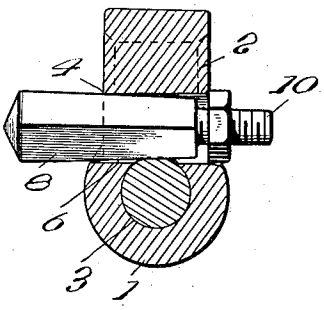


Fig. 5.

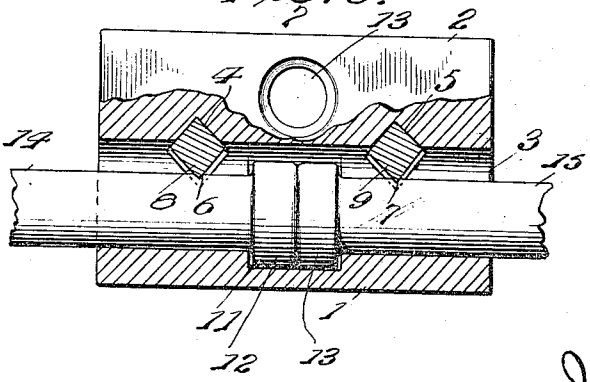
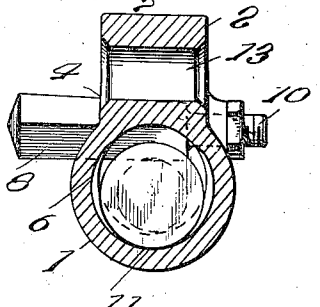


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN J. BOUCHARD AND ISAAC A. BRAVIN, OF BRADFORD, PENNSYLVANIA.

PIPE, ROD AND WIRE-CABLE CLAMP OR COUPLING.

No. 896,053. Specification of Letters Patent. Patented Aug. 11, 1908.

Application filed August 30, 1906, Serial No. 332,720. Renewed January 3, 1907. Serial No. 409,240.

To all whom it may concern:

Be it known that we, JOHN J. BOUCHARD and ISAAC A. BRAVIN, citizens of the United States, residing at Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Pipe, Rod, and Wire-Cable Clamps or Couplings, of which the following is a specification, reference being had therein to the accompanying drawing.

Our invention relates to improvements in rod clamps.

The object of our invention is to provide means by which the broken ends of pipes, rods, or wire cables may be readily clamped together and firmly held. The device being applicable at any place and readily applied.

Another object of our invention is to provide a more simple, cheap and effective device of this character.

In the accompanying drawings, Figure 1, is a side elevation of the improved coupling. Fig. 2, is a longitudinal vertical sectional view. Fig. 3, is a transverse vertical sectional view taken on the line x—x of Fig. 1. Fig. 4, is a transverse vertical sectional view showing the rods or wires provided with heads, and Fig. 5, is a longitudinal horizontal sectional view of Fig. 4.

Referring now to the drawings, 1 represents an elongated cylindrical-shaped socket having its lower side provided with a solid flat vertical portion 2, formed integral with the cylinder. The cylinder is preferably made of cast metal and cast in a single piece, as will be hereinafter more fully described. The cylindrical socket is provided with a longitudinal centrally arranged opening 3 which extends entirely therethrough, and is for the reception of the two ends of the rods, bolts, or cables to be coupled together.

The vertical portion 2 of the coupling is provided with two transverse horizontal openings 4 and 5 which are so arranged that they intersect the opening 3 of the cylindrical member. These openings, as shown, are of an angular form, and preferably square, having the lower angles or corners 6 and 7 of the two openings intersecting the longitudinal opening or socket, as shown.

The two ends of the bolts, rods or cables 6′ and 7′ to be fastened or coupled together, are inserted within the opening 3 from opposite ends of the socket, until the two ends thereof abut each other at a point approximately at the center of the socket. The openings 4 and 5 being arranged as shown, adjacent to the ends of the sockets: When the rods, bolts, or cables are in this position, the bolts 8 and 9 are inserted in the transverse openings 4 and 5. The bolts or holding means are of a shape to correspond to the openings 4 and 5, and are slightly tapered towards the ends, and are provided with a screw-threaded portion 10. The wedges or bolts 8 and 9 are driven into openings, and the sharp upper corners engage the inner ends of the bolts, rods, or cables to be coupled, and bite into the same. Placed upon the opposite screw-threaded end of the bolts on the opposite side of the socket from which the bolts are inserted, are nuts 10 which, when tightened up, draw the bolts inwardly into the openings and cause the upper sharp edges thereof to bite deeper into the bolts, rods, or cables to be coupled, and firmly hold the two ends of the rods, bolts, or cables within the socket, and positively prevent the same from being pulled out of the socket.

In the form shown in Figs. 4 and 5, we have shown the sockets with an enlarged portion 11 at one side of the center, in order to receive the heads 12 and 13 of the bolts 14 and 15 when it is desired to couple the two headed ends of the bolts together, or in coupling any headed members.

In all the figures, the lower vertical flat portion of the socket is provided with a central transverse opening 13 by means of which the coupling can be attached when it is desired to do so.

Having thus described our invention, what we claim and desire to secure by Letters Patent, is:—

1. A coupling, comprising a socket having a longitudinal opening therethrough with a central enlarged portion at one side, and angular transverse openings intersecting the longitudinal opening, headed members within the longitudinal opening, and having their heads within the enlarged central portion, angular tapering keys passing through the transverse angular openings and having one corner thereof engaging the members within the longitudinal openings, and nuts on the ends of said keys on the opposite side of the coupling from which the keys are inserted.

2. A coupling, comprising a socket having a longitudinal opening therethrough with a central enlarged portion at one side, and angular transverse openings intersecting the longitudinal opening on the opposite side

from the central enlarged portion, headed members within the longitudinal opening and having their heads within the enlarged central portion, angular tapering keys passing through the transverse angular openings and having one corner thereof engaging the members within the longitudinal openings, and a separate means carried by the small ends of each key for tightening and holding the same within the transverse openings.

3. A coupling comprising a socket having a longitudinal opening therethrough with a central enlarged portion at one side, and angular transverse openings intersecting the longitudinal opening on each side of the central enlarged portion, bolts having heads of a size to pass within the longitudinal openings, angular tapering keys passing through the transverse angular openings and having one corner thereof engaging the bolts and forcing the heads thereof downwardly within the enlarged portion, and a separate means carried by the small end of each key for tightening and holding the same within the transverse openings.

4. A coupling comprising a socket having a longitudinal opening therethrough with a central enlarged portion at one side, bolts having heads of a size to pass within the longitudinal opening and means carried by the socket on the opposite side from the enlarged portion for forcing and holding the heads within said enlarged portion.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN J. BOUCHARD.
ISAAC A. BRAVIN.

Witnesses:
JOHN KAHLE,
CHARLES F. HILLWIG, Jr.