

M. H. BIGSBY.
METAL JOINTING.

APPLICATION FILED JUNE 21, 1904.

Fig. 1.

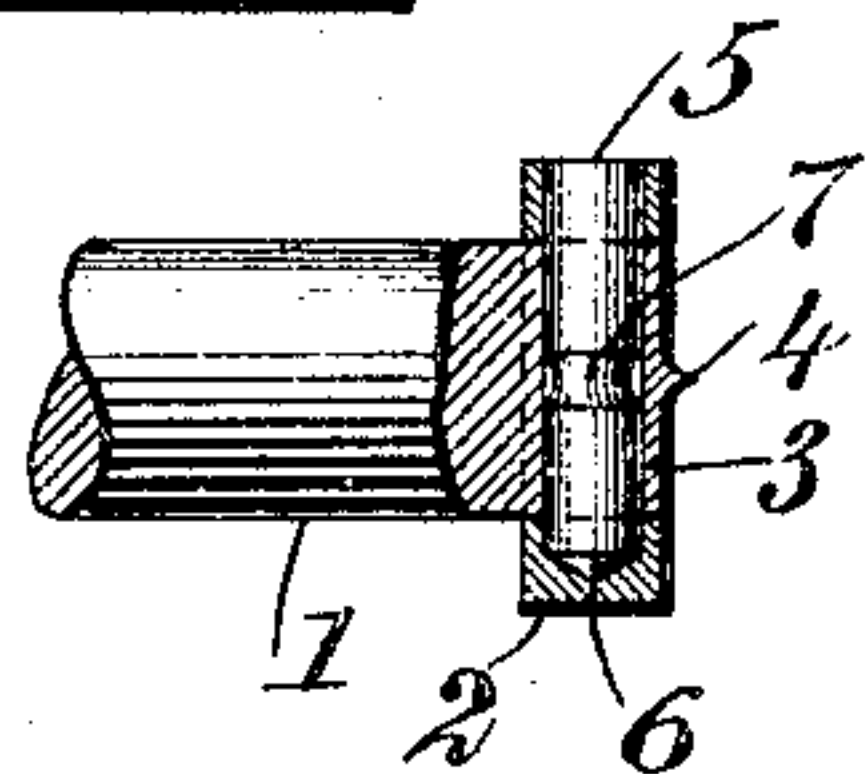


Fig. 2.

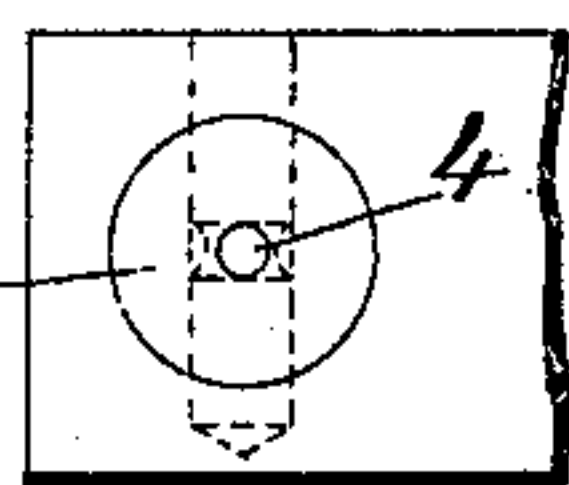


Fig. 3.

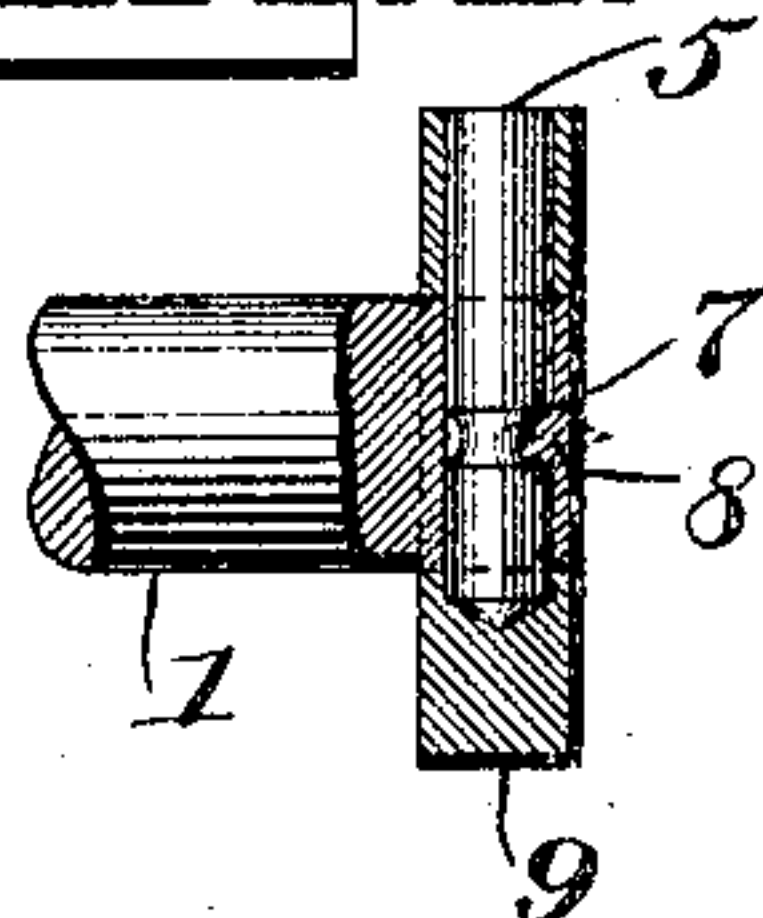


Fig. 4.

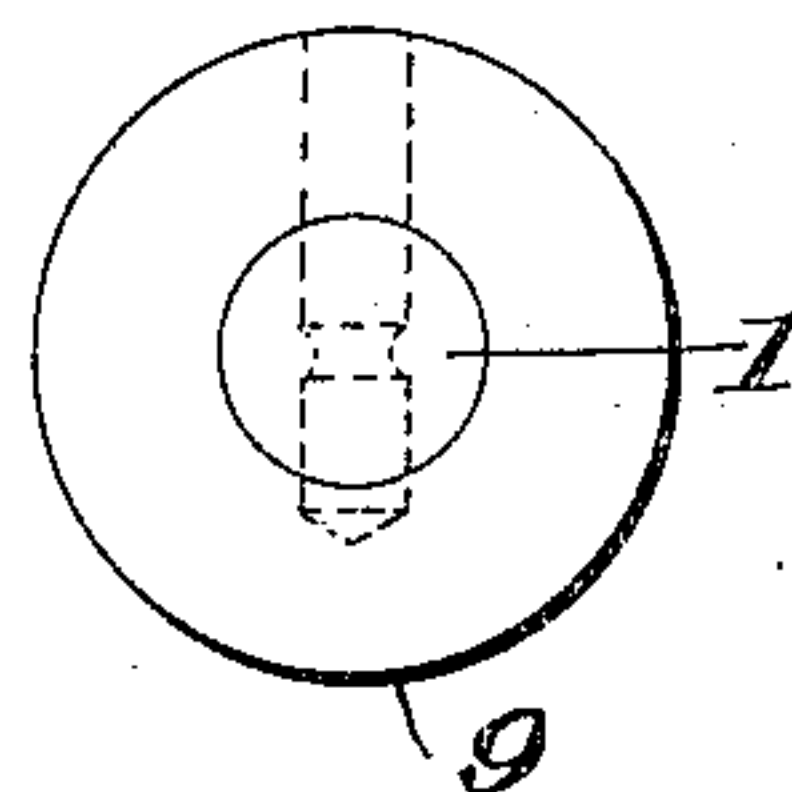


Fig. 5.

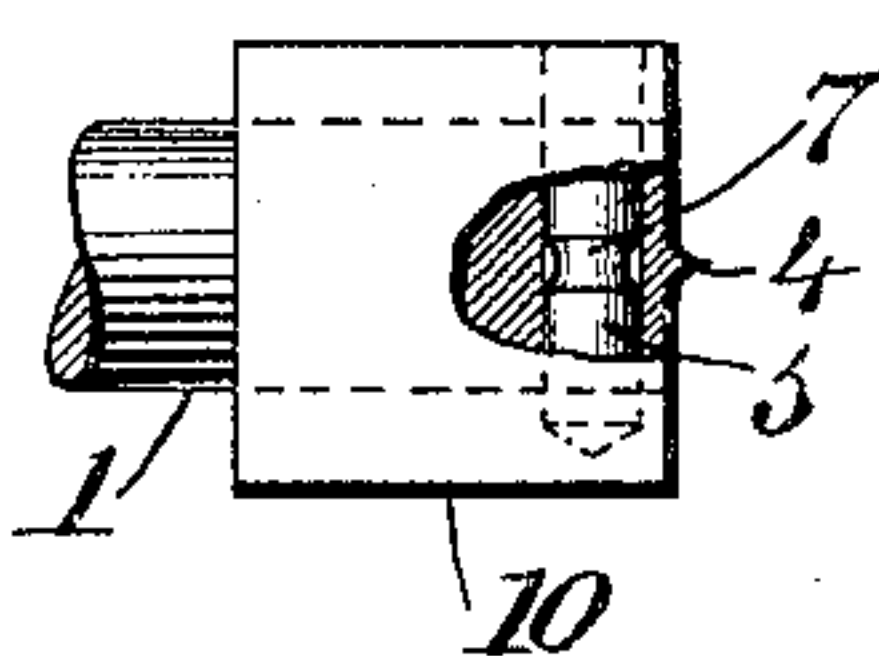


Fig. 6.

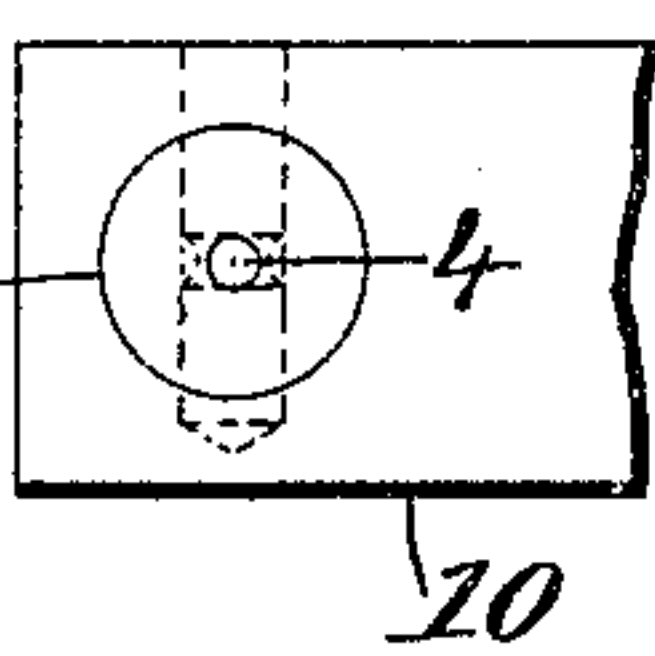


Fig. 7.

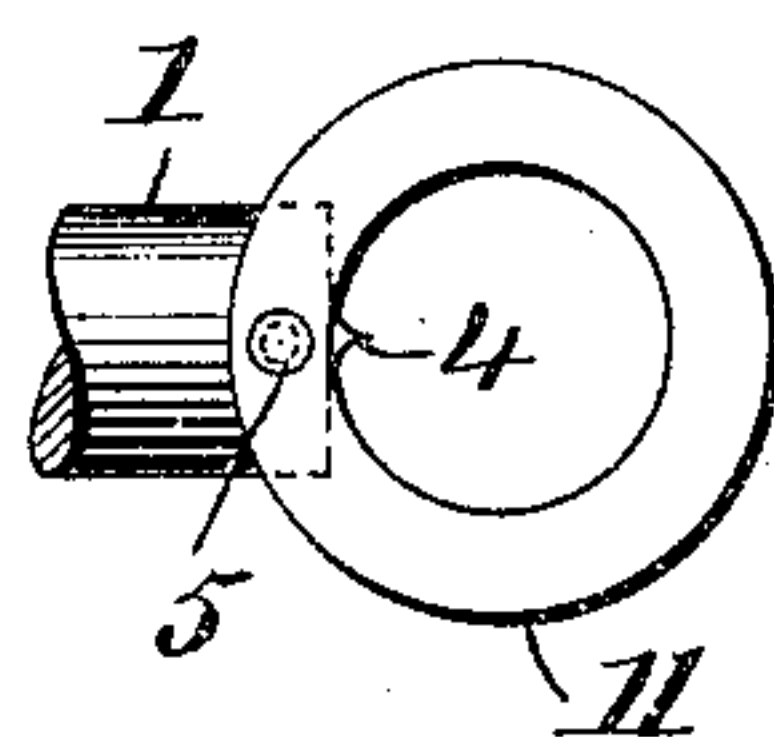


Fig. 8.



Fig. 9.

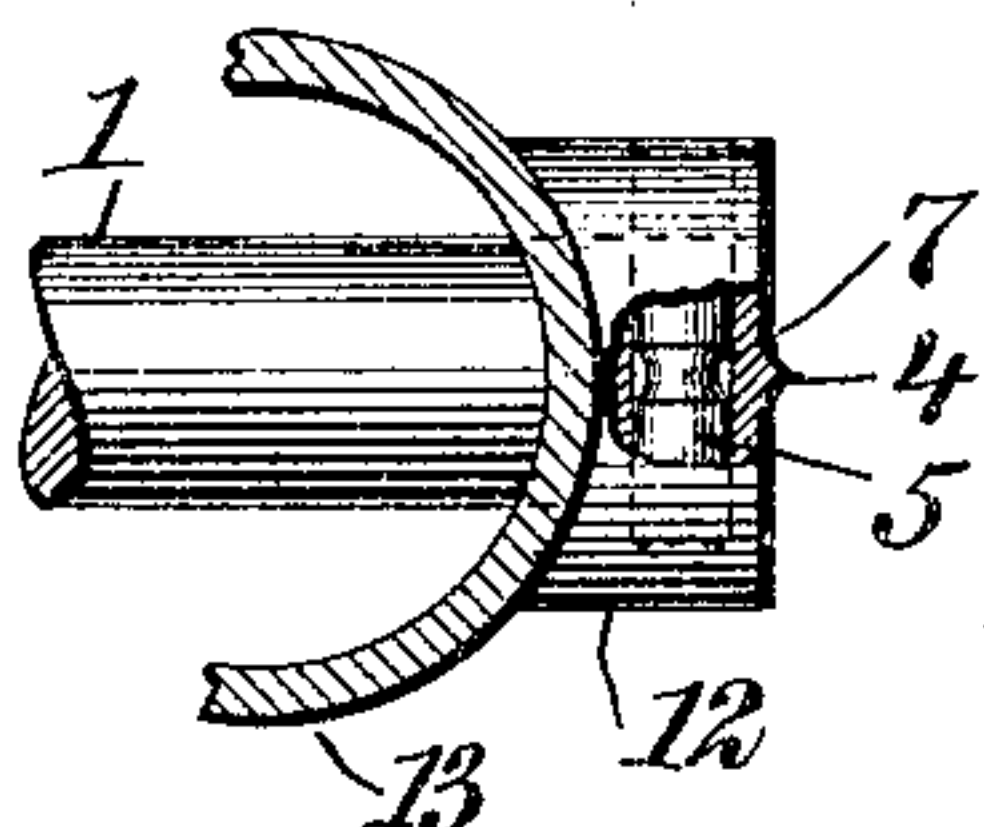


Fig. 10.

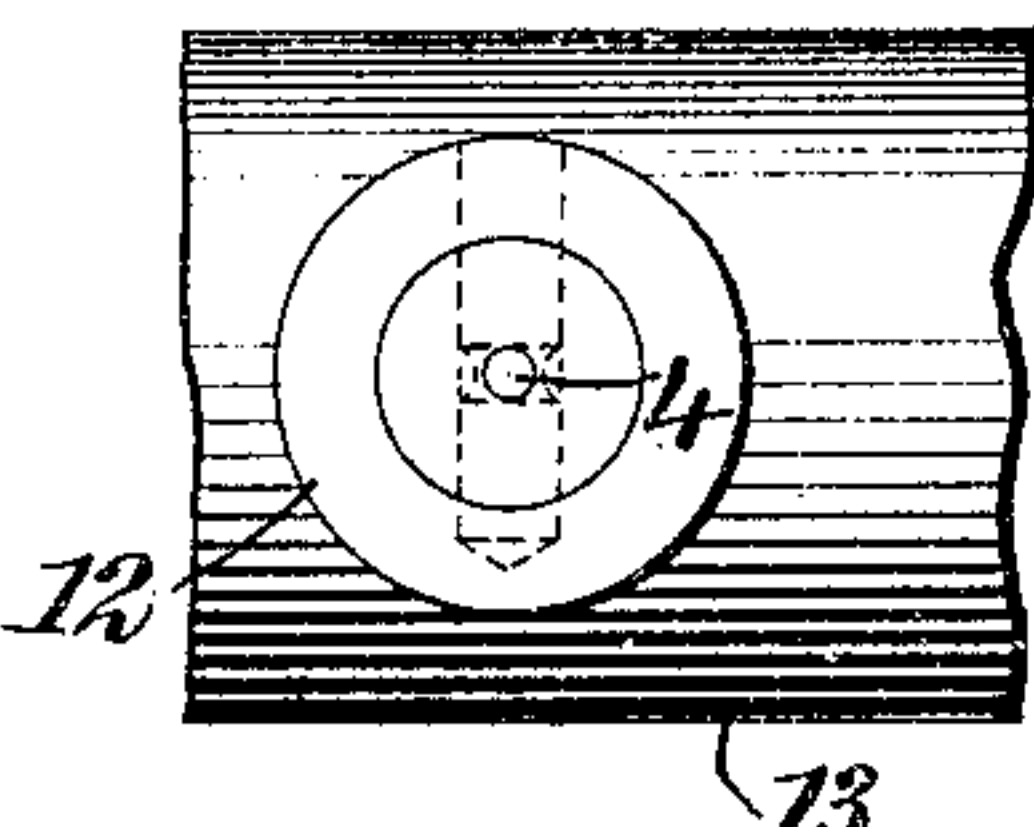


Fig. 11.

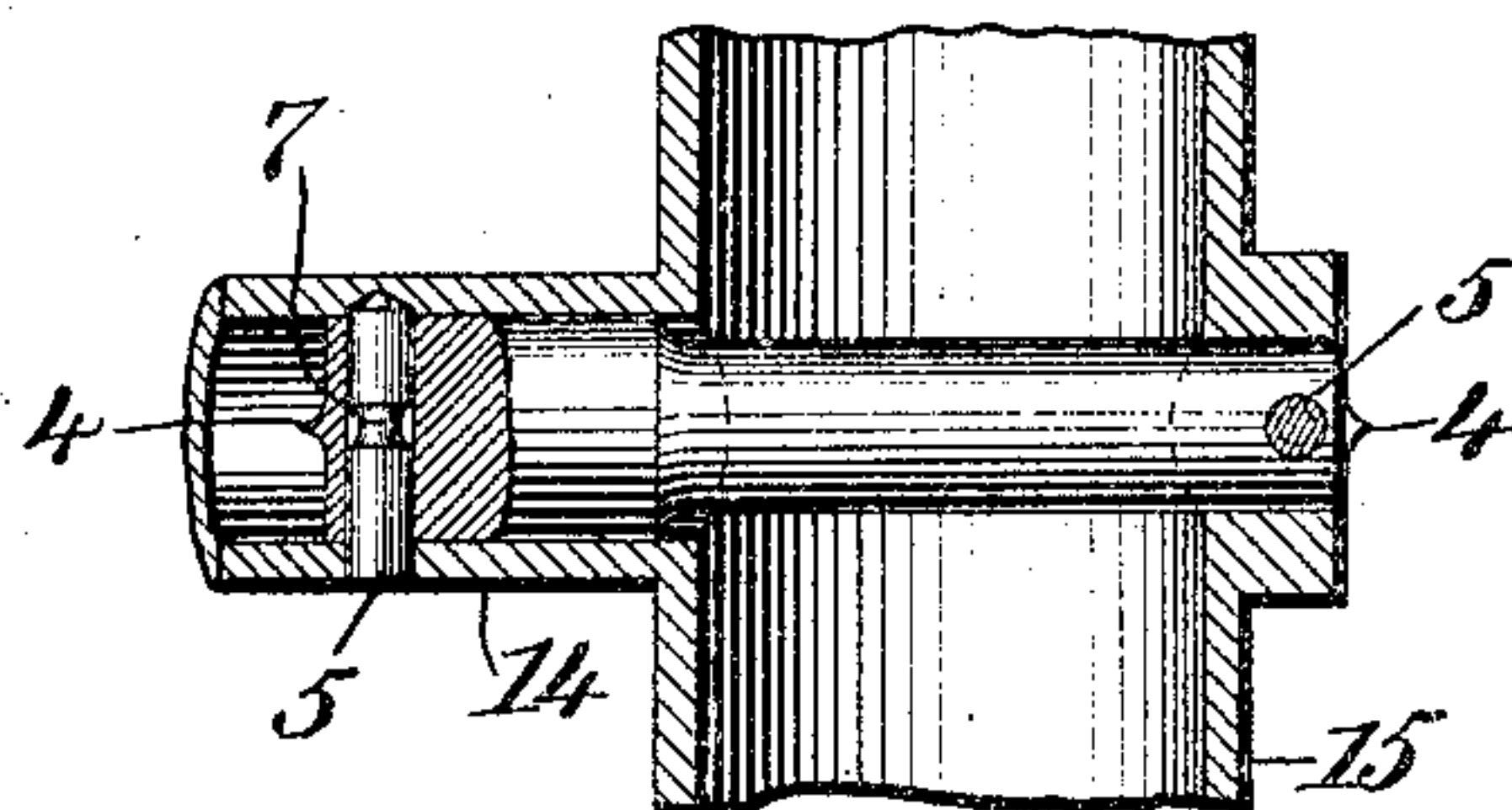


Fig. 12.

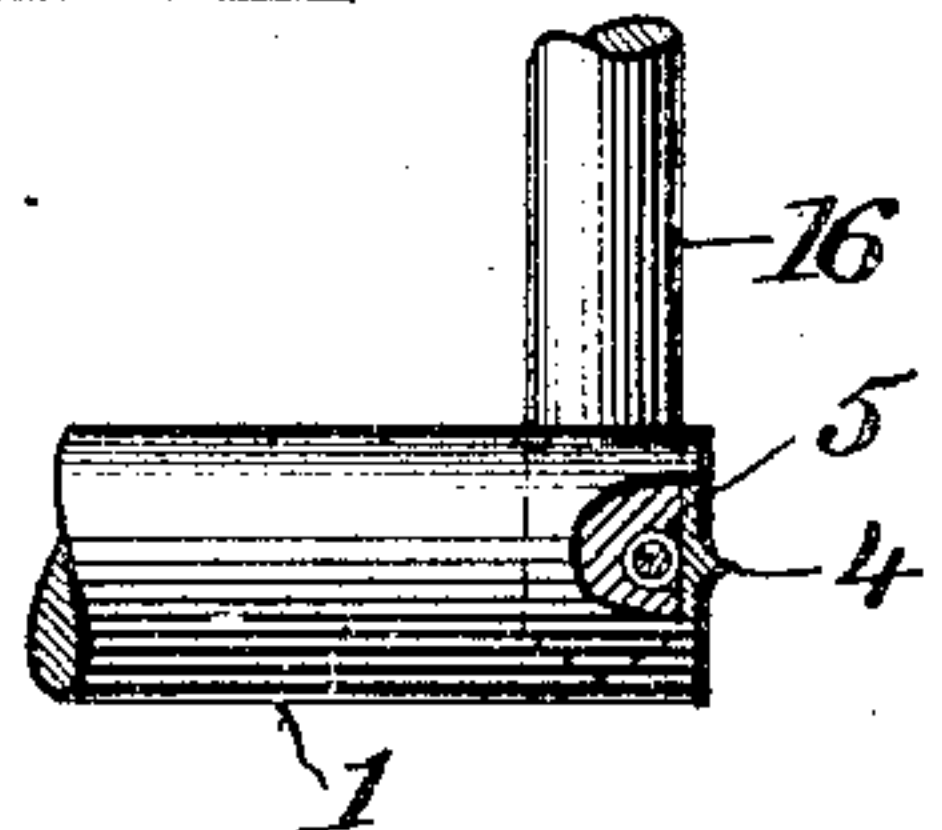


Fig. 13.

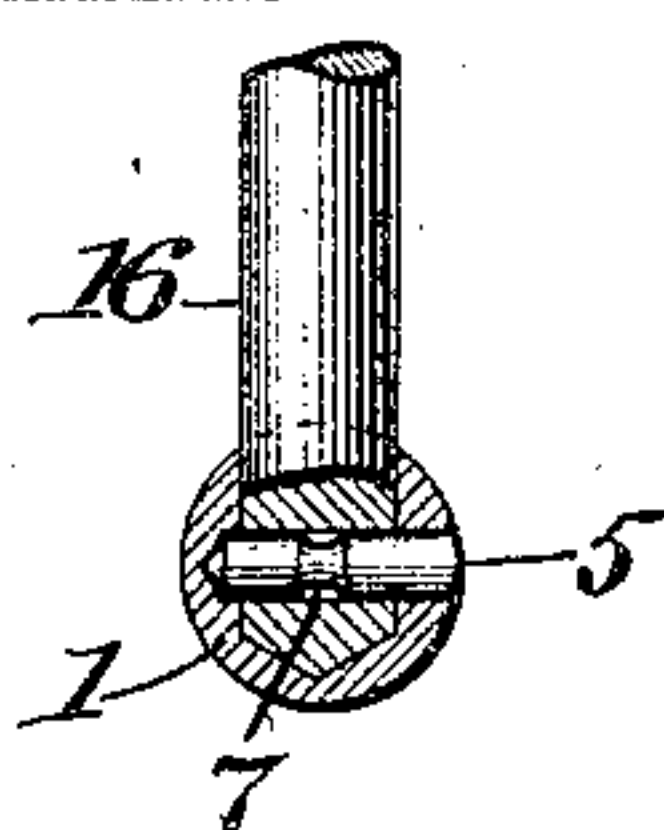


Fig. 14.

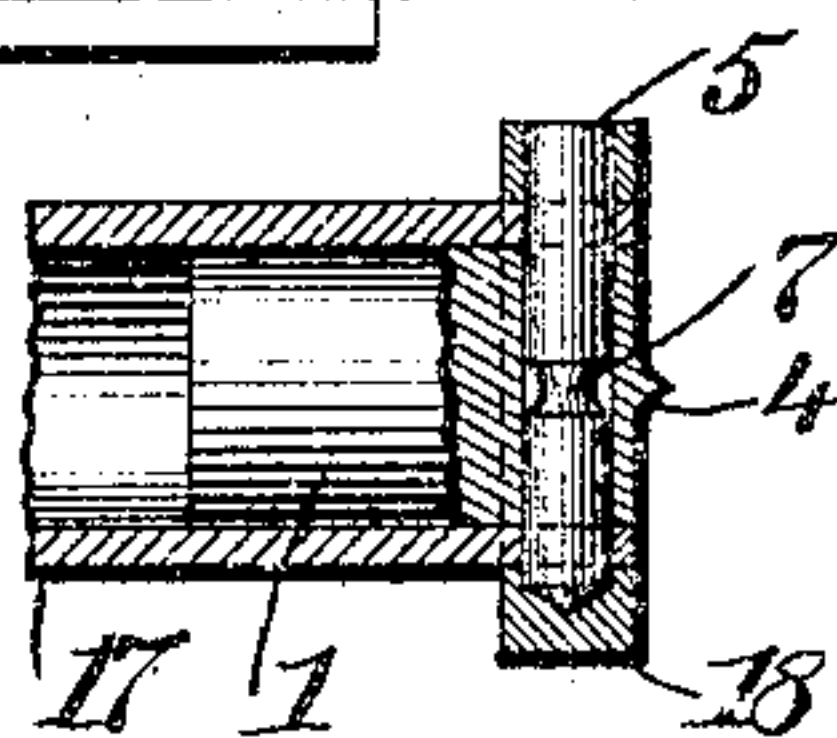
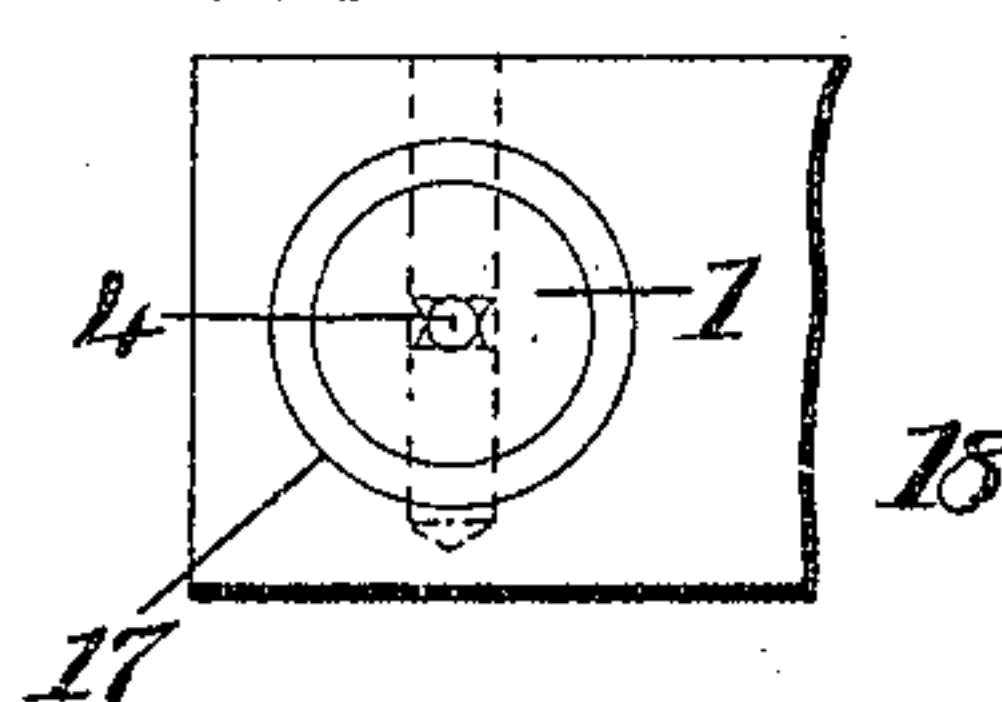


Fig. 15.



WITNESSES:

L. Almquist.
E. P. Ingerson

Fig. 16.

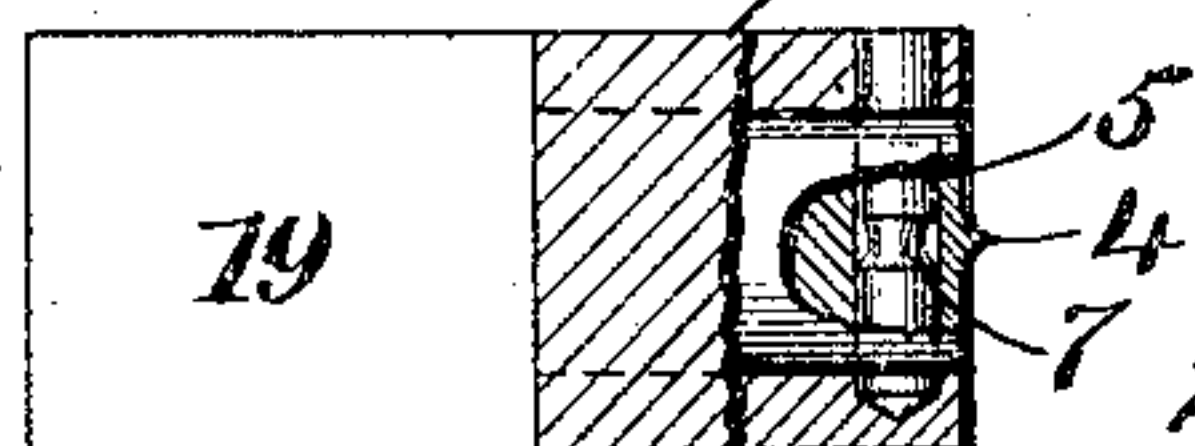
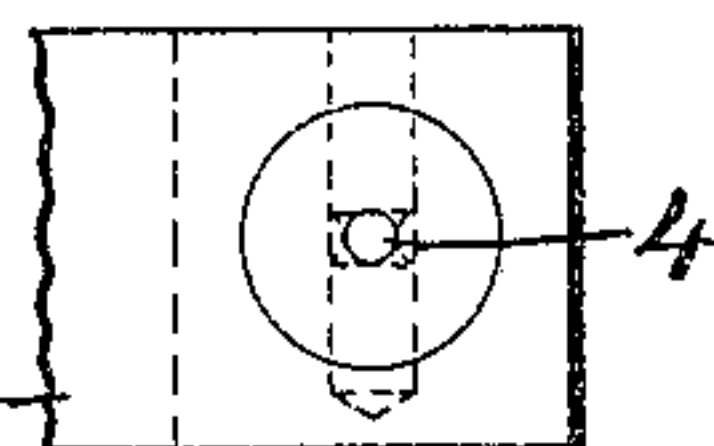


Fig. 17.



INVENTOR

Myron H. Bigsby

BY

Wm. H. Bigsby

ATTORNEYS

UNITED STATES PATENT OFFICE.

MYRON HOUGHTON BIGSBY, OF MONMOUTH, ILLINOIS.

METAL JOINTING.

SPECIFICATION forming part of Letters Patent No. 789,790, dated May 16, 1905.

Application filed June 21, 1904. Serial No. 213,475.

To all whom it may concern:

Be it known that I, MYRON HOUGHTON BIGSBY, a citizen of the United States, and a resident of Monmouth, in the county of Warren and State of Illinois, have invented a new and Improved Metal Jointing, of which the following is a full, clear, and exact description.

This invention relates to improvements in means for jointing or securing together two metallic members, the object being to provide a simple means for connecting two metal members together while in a cold condition, the invention being particularly adapted to cold-rolled steel or finished metal designed to be plated or polished.

I will describe a metal jointing embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figures 1 and 2 are respectively sectional and face views showing my invention as jointing a round rod and a rectangular bar. Figs. 3 and 4 show the jointing of a rod to a disk. Figs. 5 and 6 show a rod or pin member secured to a square bar. Figs. 7 and 8 show a rod-and-ring connection. Figs. 9 and 10 show a rod or pin connected to a tube. Fig. 11 shows a pin or rod secured in two connected tubular members. Figs. 12 and 13 illustrate two round rods connected by the invention. Figs. 14 and 15 show a tube as connected to a bar, and Figs. 16 and 17 show two rectangular members as secured together.

Referring to the drawings, 1 designates a pin or rod inserted in an opening formed in a rectangular bar 2. The pin or rod 1 is provided with a transverse perforation 3, which is near the end, so as to form a comparatively thin wall at the end, which is reinforced by a thickened portion or projecting lug 4. The bar 2 is also provided with a transverse perforation registering with the perforation 3 and extending from both ends of the perforation 3. The wall at the inner end of the perforation in the bar is tapered correspondingly to the taper of the drill, and a jointing-pin 5

is placed in the perforations and has its end correspondingly shaped, as indicated at 6. The jointing-pin 5 has an annular channel 7, into which is to be forced by pressure on the lug 4 the metal at the end of the pin or rod 1. This pressure will force the metal into a part of the channel, as indicated at 8 in Fig. 3, and when thus forced in a smooth surface will be presented at the end of the pin or rod, obviating filing, grinding, or polishing, as obviously there is no scale or dirt that results in hot welding.

In Figs. 3 and 4 the pin or rod is indicated as secured by the jointing device to a disk 9, and Figs. 5 and 6 show the pin or rod as secured to a rectangular bar 10, while in Figs. 7 and 8 the pin or rod is indicated as attached to a ring 11.

In Figs. 9 and 10 a bolt-head 12 is illustrated as attached to the rod or pin by means of the jointing device to secure the rod or pin to a curved device 13.

In Fig. 11 the rod or pin is indicated as secured at one end by means of the jointing device within a tube 14 and at the other end in a tube 15, connected to the tube 14 and at right angles thereto.

In Figs. 12 and 13 a round rod 16 is indicated as secured to the rod or pin 1, while in Figs. 14 and 15 the pin or rod 1 is inserted in a tube 17 for securing the same to a rectangular bar 18.

In Figs. 16 and 17 two rectangular rods 19 and 20 are indicated as secured together by means of the jointing-pin. In this instance the rod 19 has its end rounded to engage in the circular opening in the rod 20.

While I have shown but a few examples of jointing devices or articles that may be connected by my invention, it is obvious that there are many other forms of connections that may be made.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A method of jointing a metal member having a transverse perforation, and a second member having an opening to receive the first-named member and also having a perforation in alinement with the perforation in the first-named member, consisting in forming a pro-

jection on the inner member, then placing a pin in said perforations, the said pin being provided with a circumferentially-disposed channel, and then by pressure on said projection forcing a portion of the first-named member into said channel.

2. A joint for metal members comprising two members one of said members being seated in the other member, the said members having alined perforations, and a pin arranged in said perforations having an annular channel to receive a depressed portion of the inserted member.

3. In a joint for metal members comprising two members one of said members being seated in the other member, the said members having alined perforations, the said seated member having a thickened or outward projection

on a thin wall of its perforation, and a pin arranged in said perforations and provided with an annular channel to receive a portion of the inserted member upon forcing inward said projection.

4. The combination with two metal members one inserted into the other, the said members having alined perforations, of a pin inserted in said perforations and having an annular channel, and a portion of the inserted member depressed into said channel.

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

MYRON HOUGHTON BIGSBY.

Witnesses:

JUDD HARTZELL,

HALLIE WENDELL BIGSBY.