March 27, 1928. 1,663,605

E. MOREHOUSE

JOINT MEMBER FOR PIN STEMS

Filed Oct. 7, 1925

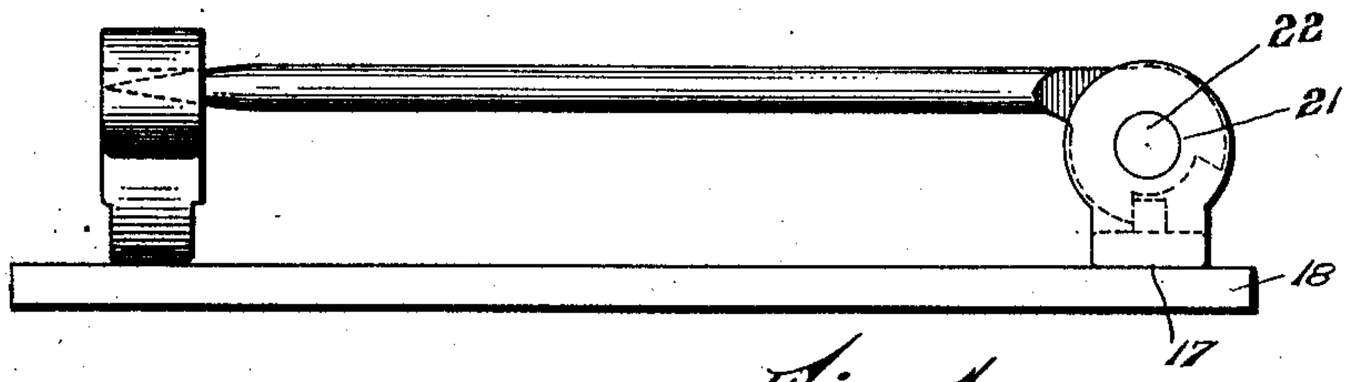



Fig. 1.

Fig. 2.

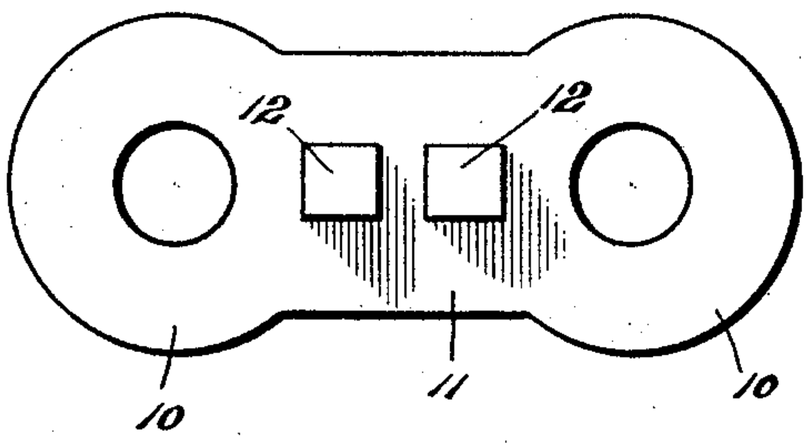
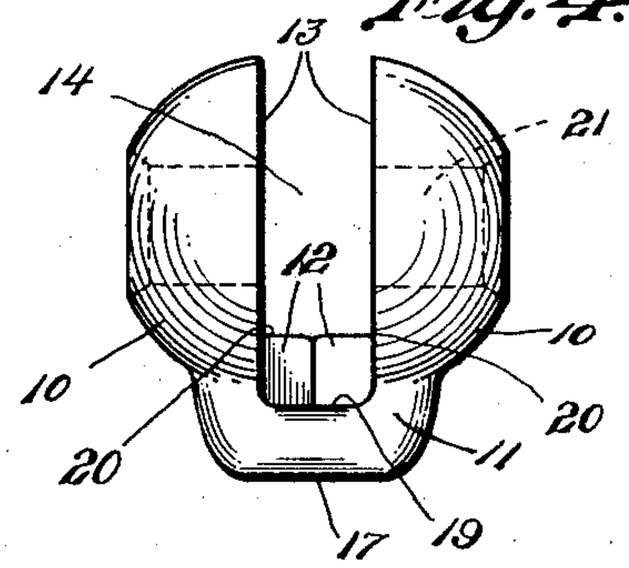



Fig. 4.



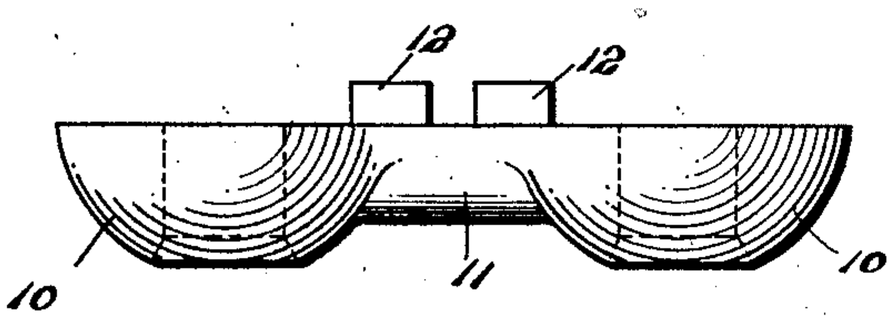




Fig. 3.

Fig. 5.

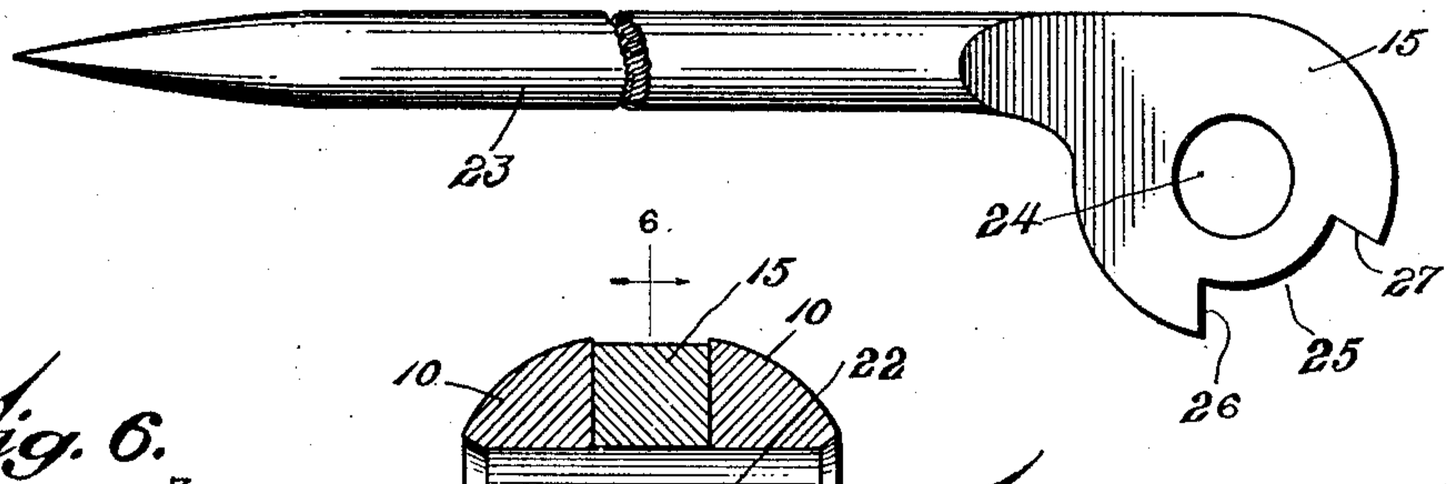
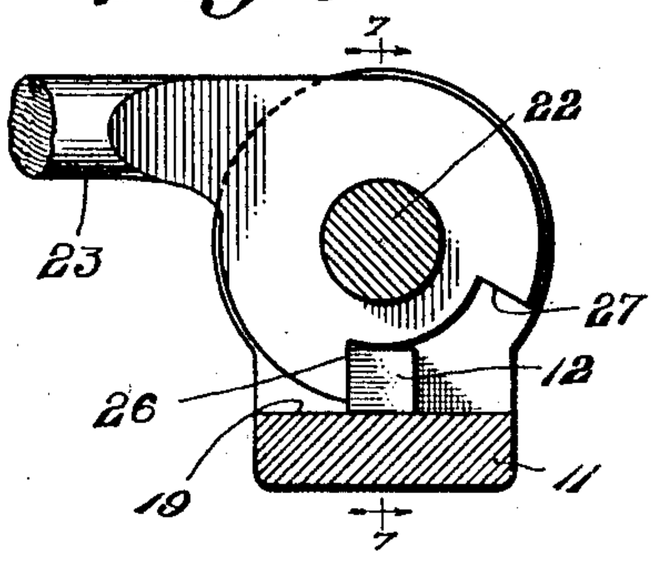



Fig. 6.



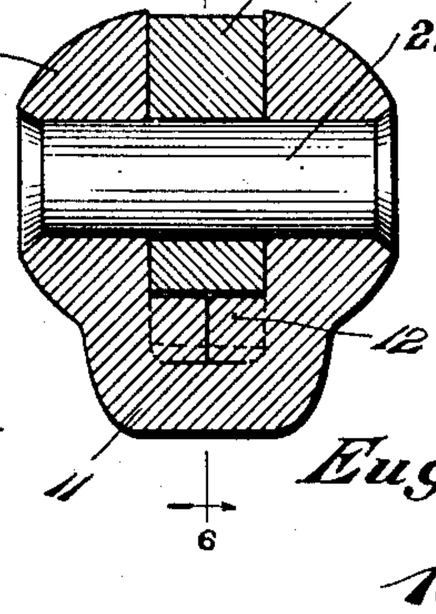




Fig. 7.

INVENTOR.
Eugene Morehouse.
BY
Barlow & Barlow
ATTORNEYS.

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# UNITED STATES PATENT OFFICE.

EUGENE MOREHOUSE, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO B. A. BALLOU & CO., INC., OF PROVIDENCE, RHODE ISLAND, A CORPORATION OF RHODE ISLAND.

## JOINT MEMBER FOR PIN STEMS.

Application filed October 7, 1925. Serial No. 61,100.

This invention relates to an improved construction of a pin stem and joint in which one end of the pin stem is pivotally mounted; and the object of this invention is to provide a joint member of this character formed of a pair of spaced ears which are connected by and bent up from an integral base bridge portion and a stop lug being formed on the inner face or faces of one or both of the ears adjacent the bridge for the purpose of providing a fulcrum stop for the pin stem.

A further object of this invention is to provide a pin stem cut from sheet stock with its head flattened and notched to form abutments for front and back stops against the lugs in the joint member when mounted therein.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a side elevation of a bar showing my improved pin-stem joint mounted thereon, the pin stem being pivotally held in the joint.

Figure 2 is a face view of the joint member in its open position as struck from the stock and showing the stop lugs formed on the side faces of its ears.

Figure 3 is an edge elevation of the blank illustrated in Figure 2, showing the stop lugs as raised from the inner faces of the ear portions.

Figure 4 is a side elevation illustrating the side ears as being bent up into operative position and the two stop lugs as extending into abutting relation from the side walls of the ears.

Figure 5 is a side elevation of the pin stem with a portion broken away showing its head as notched to straddle the stop lugs.

Figure 6 shows the pin stem as pivoted in the joint which is shown partly in section, one edge of the head-notch engaging the lug to provide a fulcrum for the pin stem.

Figure 7 is a section on line 7—7 of Figure 6.

It is found in the practical construction and operation of pin-stem joints, particularly those which are formed of precious metals, and of very small size, of advantage to strike up this joint member from a blank and to draw or raise from the surface of the face of the same a stop lug preferably formed of two parts so that when these ear portions are folded up into operative position these lugs will extend from these ears inwardly toward each other to provide a stop for the pin stem which shall have the maximum resisting strength and one which is adapted to serve both as a fulcrum stop to provide tension for the spring of the pin stem to hold it in its catch and also as a back stop but a single lug extending from but one ear may be emyployed if desired to limit the opening motion of the pin stem; and the following is a detailed description of the present embodiment of my invention and showing one means by which these advantageous results may be accomplished:—

With reference to the drawings, 10 designates the opposite side pivot ear portions of my improved joint member, which ear portions are connected together by a base bridge member 11 which is formed integral therewith, all by a swaging operation.

It is found in the construction of a blank of this character, of advantage to raise a pair of stop lugs or bosses 12 on the face of each of the inner side wall portions 13 of the ears 10. These ears are then bent up from their connecting bridge base 11 into the position illustrated in Figure 4, to provide a space 14 between them for the reception of the head 15 of the pin stem, the bottom of the bridge member also serving to form an attaching base 17 by which the joint member is soldered or otherwise attached to the base plate or bar pin 18.

By this construction it will be noted that the inner faces of these lugs are brought together so that they abut and they extend upwardly a considerable distance from the inner surface 19 of the base bridge in order to properly engage and provide a stop for the pin stem, and by being integral with the inner surfaces 13 of the ears 10 they offer a shearing resistance up to the top edge 20 thereof thus obtaining their maximum strength as they are supported all along the sides from top to bottom of the inner faces of the ears to which they are attached.

These ears are pierced as at 21 to receive the pivot pin 22 on which is mounted the head 15 of the pin stem 23. This head member is formed integral with the shank of the

pin stem, the whole being cut from a strip of sheet stock and the head being pierced as at 24 for the reception of the pivot pin 22, and its outer edge is notched as at 25 forming a stop at 26 to engage the forward edges of the lugs 12 to provide a fulcrum stop for applying a spring tension to the pin stem for holding it in its catch member, the opposite end of this notch 25 being provided with a stop wall 27 which may engage the rear edge of this lug to form a back stop to limit the opening motion of the pin stem.

By my improved construction of joint member a stop is formed for the pin stem which presents the maximum resistance to both its closing and opening actions.

The foregoing description is directed solely towards the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:

1. A joint member for pin stems formed of spaced ear portions connected by and bent up from an integral base bridge, and a pair of stop lugs formed integral with the inner face of the ear portions adjacent the bridge and extending inwardly toward each other.

2. A joint member for pin stems formed of spaced ear portions connected by and bent up from an integral base bridge, and a pair of cooperating oppositely disposed stop lugs formed on the inner side walls of said ears and inwardly from the edges thereof and extending laterally toward each other into abutting relation.

3. In combination, a joint member for pin stems formed of spaced ear portions connected by and bent up from an integral base bridge, a pair of stop lugs formed integral with the inner face of the opposite ear portions adjacent their connecting bridge and extending inwardly toward each other, and a pin stem pivotally mounted in said joint member having a notched periphery the end walls of which notch are arranged to engage the opposite sides of said lug to provide both a front and a back stop for the swing of the pin stem.

4. A joint member for pin stems formed of spaced ear portions connected by and bent up from an integral base bridge, and a stop lug formed integral with the inner face of one of the ear portions and located adjacent the bridge and inwardly from the edges of the ears and extending towards the opposite ear.

In testimony whereof I affix my signature.

EUGENE MOREHOUSE.