Aug. 16, 1938. F. MOSSBERG 2,126,970

RIBLESS BEAM HEAD

Filed March 11, 1937

Fig. 1.

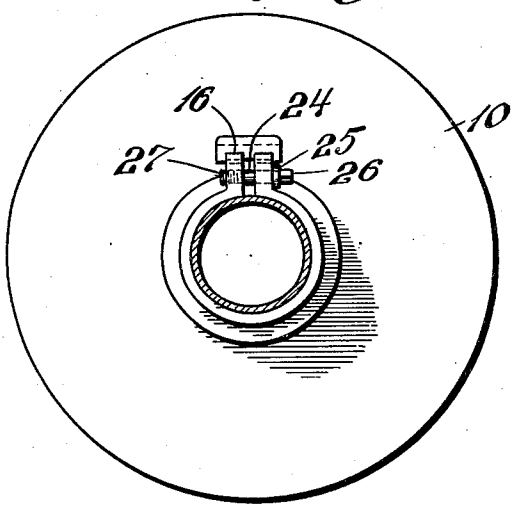


Fig. 2.

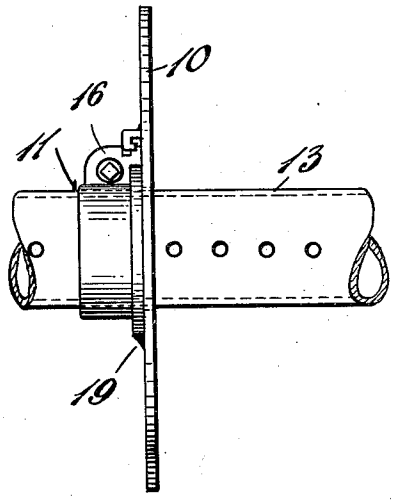


Fig. 3.

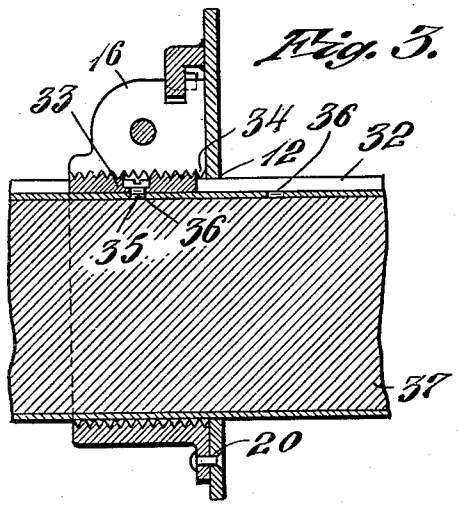


Fig. 4.

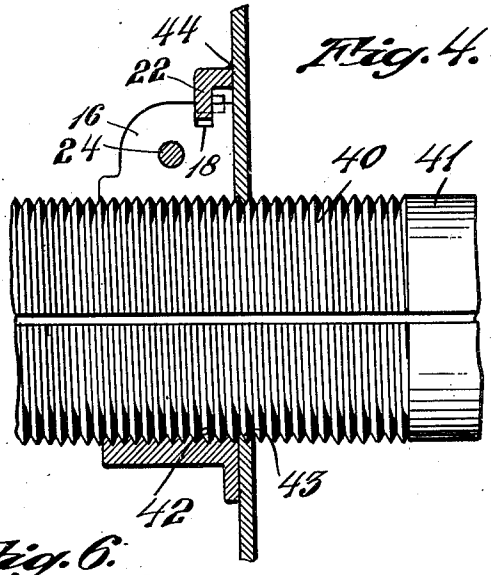


Fig. 5.

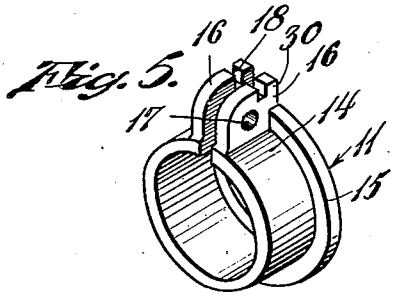
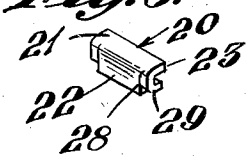


Fig. 6.



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Patented Aug. 16, 1938 2,126,970

UNITED STATES PATENT OFFICE

2,126,970

RIBLESS BEAM HEAD

Frank Mossberg, Attleboro, Mass.

Application March 11, 1937, Serial No. 130,255

3 Claims. (Cl. 242—124)

This invention relates to a beam head which is of a sufficiently heavy construction to require no ribs for strengthening the flange or face portion thereof, and has for one of its objects a more simple and less expensive construction of head and one in which there will be a freedom of contraction of the hub and yet a firm holding of the hub against the outer surface of the head for supporting the same.

Another object of this invention is the provision of a head with a hub which may have uses on various different beam barrels whether they are smooth or of the type adjusted by threaded engagement between the head and the barrel.

Another object of the invention is to hold the ears of the hub firmly against the flange and yet limit their guided contracting or expanding movement.

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 drawing:

Fig. 1 is an end view of the beam head showing the barrel in section;

Fig. 2 is a side elevation of the head, illustrating a fragmental portion of the barrel;

Fig. 3 is a sectional view illustrating the beam head modified slightly and mounted upon a different barrel than that illustrated in Fig. 2;

Fig. 4 is a view similar to Fig. 3 but showing the beam head of a little different construction mounted upon a different barrel;

Fig. 5 is a perspective view of the hub portion of the head;

Fig. 6 is a perspective view of the retaining member.

In the use of beam heads where the flange is of such structure as to be self-supporting without the use of ribs, some difficulties are often present in attaching a hub to the flange so as to permit of its freedom of movement, and in order to avoid such difficulties I have provided a hub so held against the head as to permit relative movement of the hub and flange and yet hold the hub firmly against the outer surface of the flange, and the following is a more detailed description of the present embodiment of this invention, illustrating the preferred means by which these advantageous results may be accomplished.

With reference to the drawing, 10 designates the flange portion of the head and 11 indicates generally the hub which is attached thereto. This flange is substantially a plate or disc with no supporting ribs and provided with an opening 12 for the reception of a barrel 13 to which it is to be clamped. The hub consists of an embracing arcuate band 14 having a portion 15 extending radially therefrom for engagement with the flat outer surface of the flange 10. Ears 16 are provided at the ends of the band of the hub which extend radially outwardly in spaced relation with openings 17 and also slots 18 therein, as illustrated in Fig. 5.

This hub is secured at a point diametrically opposite the ears 16 to the flange 10 by welding as at 19, or it may be secured in place by a rivet 20 as shown in Fig. 3. The remainder of the hub is free for sliding movement relative to and along the outer surface of the flange 10 and is held against the flange 10 in a slidable manner by means of the attaching member 20 which is of generally L-shape formation with right angularly extending portions 21 and 22. The edge 23 of the portion 21 is welded as at 44 to the outer surface of the flange 10, while the right angular arm 22 extends parallel to the outer surface of the flange and into the slots 18 in the ears 16, thus holding these ears firmly against the outer surface of the flange 10 and yet permitting their movement toward or from each other by sliding along this arm 22. The ears are moved by a bolt 24 having an enlarged portion 25 and annular head 26, the same being threaded as at 27 into one of the ears 16 for drawing the ears toward each other.

In order to limit the outward movement of the ears I have slitted the stock of the arms 22 as at 28 and bent inwardly fingers 29 which extend across or out of line with the slot 18 and thus engage the outer surfaces 30 of the ears adjacent the slot and limit spreading movement of the ears 16 at their point of engagement with these fingers 29.

The hub which I have provided and the flange 10 are adapted for use on various forms of beams or barrel portions, the same being particularly adapted for the three uses which I have shown herein. In Figs. 1 and 2, the barrel 13 is smooth along its outer surface with no slot for receiving a batten to hold the warp threads in place, there being provided holes in the barrel through which a group of the warp threads are passed to be retained in position in a known manner.

In Fig. 3, I have illustrated a type of barrel in which there is located a slot 32 for normally receiving a batten for clamping the warp threads in position and in this slot I have provided a

block **33** of the type generally illustrated in my Patent #1,928,387. In this case the inner surface of the hub is threaded as at **34** for engagement with this block which may be moved from place to place and held in different locations by the screw **35** in a screw hole **36**. In the structure of Fig. 3, the head will be rotated for fine adjustment along the barrel **37** of the beam.

In the showing in Fig. 4, threads **40** are provided on a barrel **41** which usually extend inwardly from the end of the barrel and the head is moved to whatever position it assumes by rotation of the head on the barrel. In this case the hub and the flange are threaded as at **42** and **43** completely through their openings in order for such threaded engagement to be made possible.

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. In a beam head, a flange having an opening therein for the reception of a barrel, a hub contacting the outer surface of the flange for embracing the barrel and having ears extending outwardly from the center and in a plane at right angles to said flange, said ears having a recess spaced from the flange, and a member fixed to said flange and having a portion extending into said recess and over a portion of the stock of said ears to hold the hub and ears against said flange.

2. In a beam head, a flange having an opening therein for the reception of a barrel, a hub contacting the outer surface of the flange for embracing the barrel and having ears extending outwardly from the center and in a plane at right angles to said flange, said ears having an outwardly opening recess spaced from the flange, and an L-shaped member fixed to said flange at a location outwardly of the ears and having one leg of the L member fixed to the flange and the other leg of the L member extending into said recess and over a portion of the stock of said ears to hold the hub and ears against said flange.

3. In a beam head, a flange having an opening therein for the reception of a barrel, a hub contacting the outer surface of the flange for embracing the barrel and having ears extending outwardly from the center and in a plane at right angles to said flange, said ears having a recess spaced from the flange, and a member fixed to said flange and having a portion extending into said recess and over a portion of the stock of said ears to hold the hub and ears against said flange, the ends of said member being provided with fingers to engage the outer surface of said ears and limit the movement of said ears apart.

FRANK MOSSBERG.