Jan. 13, 1925. 1,523,328

O. C. WILSON

LOOM BEAM BEARING AND LOCK

Filed Feb. 28, 1924

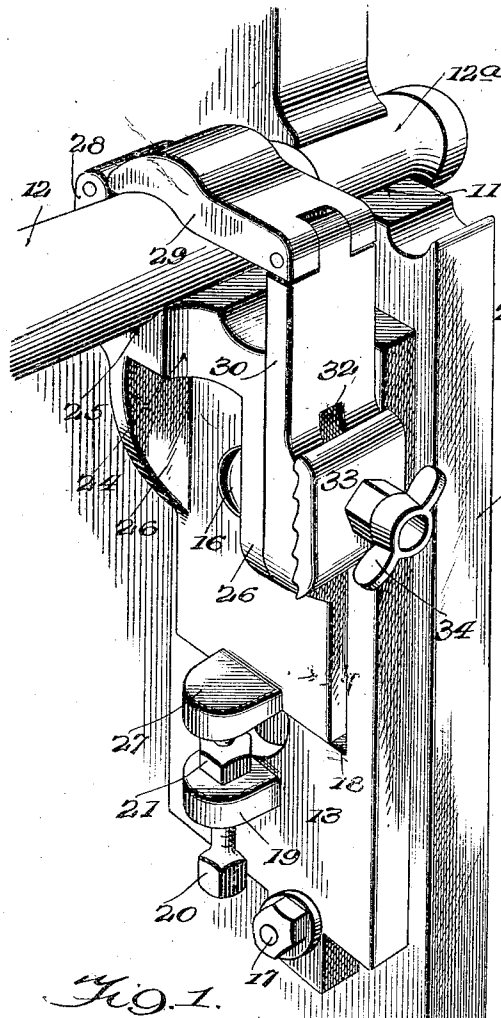


Fig. 1.

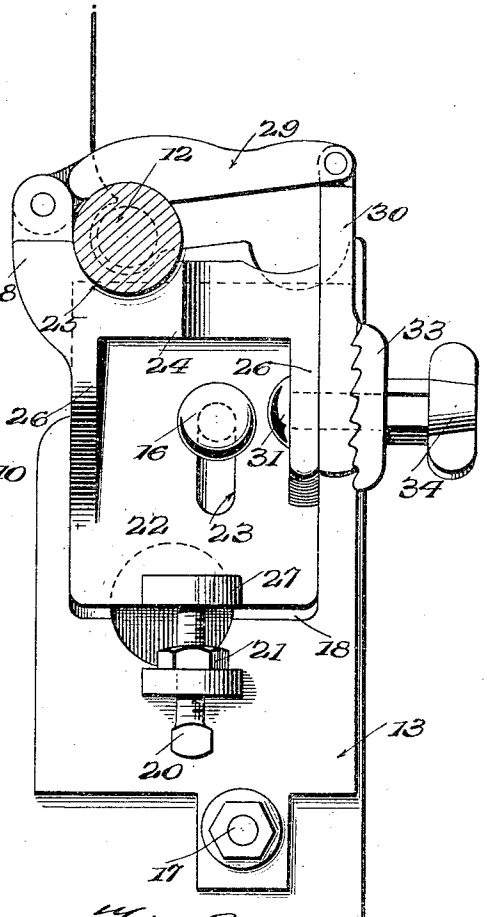


Fig. 2.

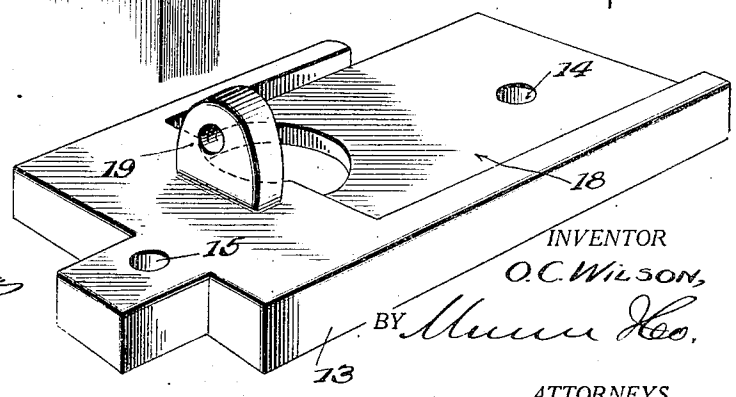


Fig. 3.

WITNESSES

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Patented Jan. 13, 1925. 1,523,328

UNITED STATES PATENT OFFICE.

OSCAR CLEVELAND WILSON, OF NEWBERRY, SOUTH CAROLINA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-THIRD TO ELBERT JACKSON DICKERT AND ONE-THIRD TO FRED ELLISOR DARBY, BOTH OF NEWBERRY, SOUTH CAROLINA, AND ONE-THIRD TO ELMER SEASE SUMMER, OF NEWBERRY, SOUTH CAROLINA.

LOOM-BEAM BEARING AND LOCK.

Application filed February 28, 1924. Serial No. 695,798.

To all whom it may concern:

Be it known that I, OSCAR C. WILSON, a citizen of the United States, and a resident of Newberry, in the county of Newberry and State of South Carolina, have invented certain new and useful Improvements in Loom-Beam Bearings and Locks, of which the following is a specification.

My present invention relates generally to shaft bearings, and more particularly to a bearing and lock for loom beams, especially those which after years of use have become so worn in their usual journals in the loom side frames as to necessitate renewal of the beams and not infrequently renewal of the frame sides. The primary object of my invention is the provision of a bearing which will avoid the necessity of renewal of these parts when worn and which may be readily and easily applied to the frame sides in such manner as to form a new bearing for the loom beam as well as a lock therefor.

A further object is the provision of a simple and inexpensive bearing by means of which the loom beam may be easily and quickly adjusted, waste avoided and more uniformly satisfactory results obtained.

With these and other objects in mind, the construction, operation and resulting advantages of my invention will be better understood by reference to the accompanying drawing, which forms a part of this specification, and in which,

Figure 1 is a perspective view, illustrating the practical application of my invention,

Figure 2 is a side view thereof, and

Figure 3 is a detail perspective view of the bearing support or body plate.

Referring now to these figures and particularly to Figures 1 and 2, I have shown a portion of one of the frame sides 10 of a loom, having the usual journal 11 for one reduced end 12^a of the beam 12. In all such apparatus there is sooner or later so much wear of the beam end side journal as to necessitate either a new beam or journal or both. It is to avoid such necessity that my invention proposes a bearing attachable to the inner face of each frame side and engageable with a portion of the loom beam at a new unworn point inwardly beyond its reduced ends 12^a.

Thus my invention proposes a bearing consisting of a cast bearing support or body plate generally indicated at 13, having openings 14 and 15 through its upper and lower central portion for the reception of connecting bolts 16 and 17 which also pass through the adjacent frame side 10 so as to securely fasten the plate 13 flatwise against the inner surface of said frame side below the usual journal 11.

The body plate 13 is reduced in thickness at its upper central portion forming a vertical guide channel 18 and has a laterally projecting lug 19 below the guide channel 18, said lug receiving upwardly therethrough a set screw 20 on which a lock nut 21 acts against the upper face of the lug to securely hold the set screw in place.

Within the guide channel 18 is a bearing bracket 22 provided at an approximately central point with a vertically slotted opening 23 which receives therethrough the inner headed end of the upper connecting bolt 16, as clearly shown in Figure 2. This bracket 22 has an upper flanged portion 24 provided with an upwardly opening concave seat 25 which receives a portion of the loom beam 12 inwardly beyond its reduced end 12^a. The upper flange 24 is reinforced by vertical webs 26 at the opposite sides of the bracket and the lower central portion of the bracket has a laterally outstanding lug 27 above the lug 19 engaged by the upper end of the set screw 20.

It is thus obvious that by loosening the upper clamping bolt 16, the bracket 22 and consquently the loom beam supported thereby, after its application in the operative position shown in Figures 1 and 2, may be raised and lowered as desired and the parts thereafter held in such position by locking the screw 20 by means of the lock nut 21.

In addition to its loom beam bearing seat 25, the upper flange 24 of the bracket 22 has, at one side of said seat, an upwardly curved arm 28 to which one end of a beam bearing lever 29 is hingedly connected, the opposite end of lever 29 being hingedly connected to the upper end of a depending link 30. This link is adapted to

engage flatwise against one of the vertical webs 26 of the bracket 22 through which a clamping bolt 31 extends. The link 30 is slotted as at 32 to receive bolt 31 and its outer face is ribbed moreover to cooperate with the ribbed face of a clamping piece 33 also disposed on the bolt 31. A wing nut 34 is preferably utilized on the bolt 31 and thus the pressure of the lever 29 on the loom beam 12 may be readily controlled, it being obvious that by this structure the beam when engaged will be locked against displacement and any tendency to jump out of the concave seat 25 will be defeated.

It is also obvious that my improved bearing and lock, in addition to saving the cost of renewing the loom beam when the usual journal wears out, will, when properly in place prevent wear on the let off motion of the loom and save expense of renewal thereof, will relieve the loom frame sides of any further wear and avoid danger of replacement, and is a practical economical device capable of easy quick mounting and will permit of ready adjustment between the beam head gear and the let off gear whereby uniformly improved results may be obtained in the weaving operation.

I claim:—

1. A loom beam bearing attachment for loom frames consisting of a body plate attachable to a loom frame and having a channel in its upper outer face and an outstanding lug below the channel, a bearing bracket movably interfitting and vertically adjustable in the channel of said plate and having a lower lug and an upper flange provided with a beam bearing seat, said bracket also having outstanding side webs at its upper portion and an arm upstanding at one side, a beam bearing lever hinged at one end to said arm, an adjustably locked member mounted through the lug of the body plate and engaging the lug of the bracket for adjusting and holding the bracket, a link depending from the other end of said lever, and clamping connections through one of the side webs of the bracket for adjustably engaging and holding the lower end of said link.

2. A loom beam bearing attachment for loom frames consisting of a body plate attachable to a loom frame and having a channel in its upper outer face and an outstanding lug below the channel, a bearing bracket movably interfitting and vertically adjustable in the channel of said plate and having a lower lug and an upper flange provided with a beam bearing seat, said bracket also having outstanding side webs at its upper portion and an arm upstanding at one side, a beam bearing lever hinged at one end to said arm, an adjustably locked member mounted through the lug of the body plate and engaging the lug of the bracket for adjusting and holding the bracket, a link depending from the other end of said lever and having a lengthwise slotted lower end and a toothed outer face, a clamping bolt through one of the side webs of the bracket and adapted to extend through the slot of said link, and a clamping plate on said bolt having teeth to engage the teeth of the link.

OSCAR CLEVELAND WILSON.

Witness:
R. L. TARRANT.