H. TERHUNE.

STEAM HAMMER GUIDE.

APPLICATION FILED JULY 7, 1920.

1,382,571. Patented June 21, 1921.

Fig. 1.

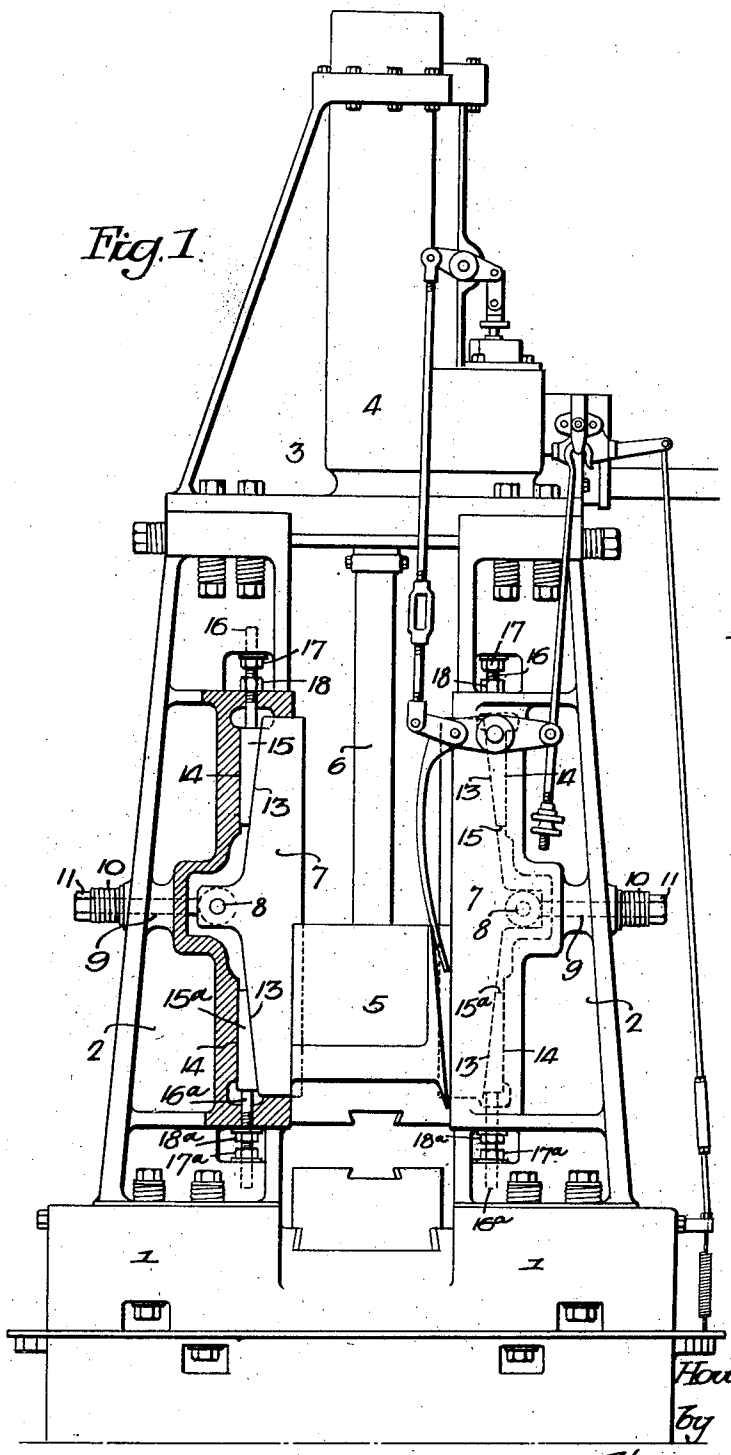
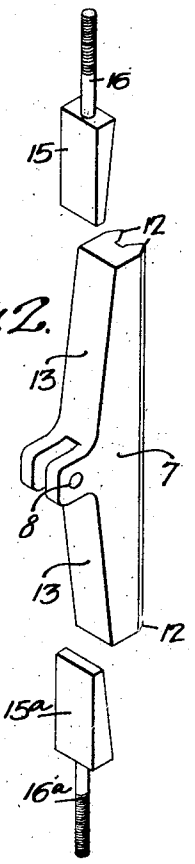


Fig. 2.



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STEAM-HAMMER GUIDE.

1,382,571. Specification of Letters Patent. Patented June 21, 1921.

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To all whom it may concern:

Be it known that I, HOWARD TERHUNE, a citizen of the United States, residing in Cleveland, Ohio, have invented certain Improvements in Steam-Hammer Guides, of which the following is a specification.

My invention relates to certain improvements in means for adjusting the guides of steam hammers.

The object of the invention is to provide adjusting means in which an extended bearing is obtained and also to provide an adjusting means operable from each end of the guides so that accurate adjustments can be made.

In the accompanying drawings:

Figure 1 is a view in elevation of a steam hammer with a part in section to illustrate my invention; and

Fig. 2 is a detached perspective view showing the guide and two wedges.

1 is the base of a steam hammer on which is mounted the standards 2 carrying the overhead structure 3 including the cylinder 4. 5 is the sliding hammer head and 6 is the plunger rod connected to the head and to a piston in the cylinder 4. 7—7 are guides for the head. These guides are pivotally connected at 8 to a bolt 9 which passes through the standards 2. A spring 10 is located on this bolt between the nut 11 and the frame so that the guide is yieldingly supported. The guide is held against longitudinal movement by the ends of the recess in the standards 2 in which each guide is mounted. The face of the guide has two V-shaped projections 12, Fig. 2, which enter grooves in the hammer head 5, in the present instance, although the shape of these connections between the guides and the hammer head may be varied without departing from the essential features of the invention.

The back of each guide 7 is beveled, one end being beveled in one direction and the opposite end being beveled in the other direction. Back of these beveled surfaces is a straight bearing-surface 14 on the frame.

15 is a vertical wedge located between the bearing surface 14 and the beveled surface 13 at the upper end of the guide 7. This wedge has a threaded stem 16 on which are two nuts 17 and 18, which are located in a recess in the frame so that, on backing off one nut and turning the other in the opposite direction, the wedge can be driven between the two surfaces 13 and 14 so as to project that portion of the guide 7.

15ª is the lower wedge made similar to the wedge 15 and has a stem 16 on which are nuts 17ª and 18ª. The lower wedge can be adjusted in the same manner as the upper wedge. When the two wedges are adjusted together, then the entire guide 7 is moved toward the center of the hammer, the spring 10 yielding sufficiently for this purpose. When it is desired to move one end of the guide a greater distance than the other to take up the wear, only one wedge may be moved forward and, if necessary, the other can be retracted.

In some instances, where a steam hammer is used for certain classes of work, and where the work is being hammered off center, then one side of the hammer guides is liable to wear away faster than the other side. By constructing the guide-adjusting means in the manner set forth, the guides can be readily adjusted to take up the wear. As the wedges are of considerable length, they have full bearing on the backs of the guides, making a substantial support for the guides.

I claim:

1. The combination in a steam hammer, of a standard; a guide pivotally mounted on the standard; a hammer head; means for reciprocating the head; a wedge located back of each end of a guide; and means for adjusting the wedges.

2. The combination in a steam hammer, of two standards spaced apart; a hammer head located between the standards; means for reciprocating the hammer head; a recess in each standard; a guide in each recess for the hammer head, said guides being yieldingly pivoted at the center; a bearing face on each standard on each side of the pivot, the back of each guide being beveled at each end; a vertical wedge mounted between each end of each guide and the bearing face, each wedge having a stem; and nuts on each stem for longitudinally adjusting the wedges.

3. The combination in a steam hammer, of two standards spaced apart, each standard having a longitudinal recess; a hammer head; pivoted guides for the head located in the recesses in the standard; a longitudinal wedge between each end of each guide; a bearing face in the recess; and means for adjusting the wedges.

HOWARD TERHUNE.