July 21, 1931. R. W. LORD 1,815,414

STRAP CLAMP AND BLOCK

Filed April 15, 1930

Fig. 1.

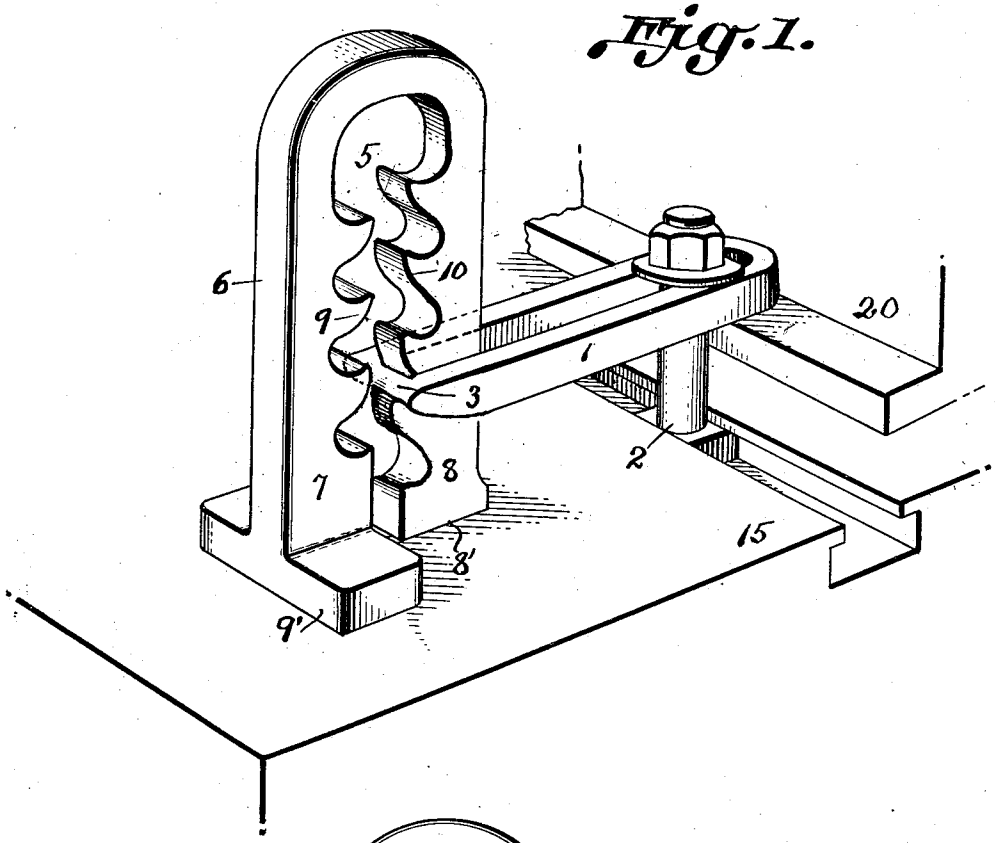
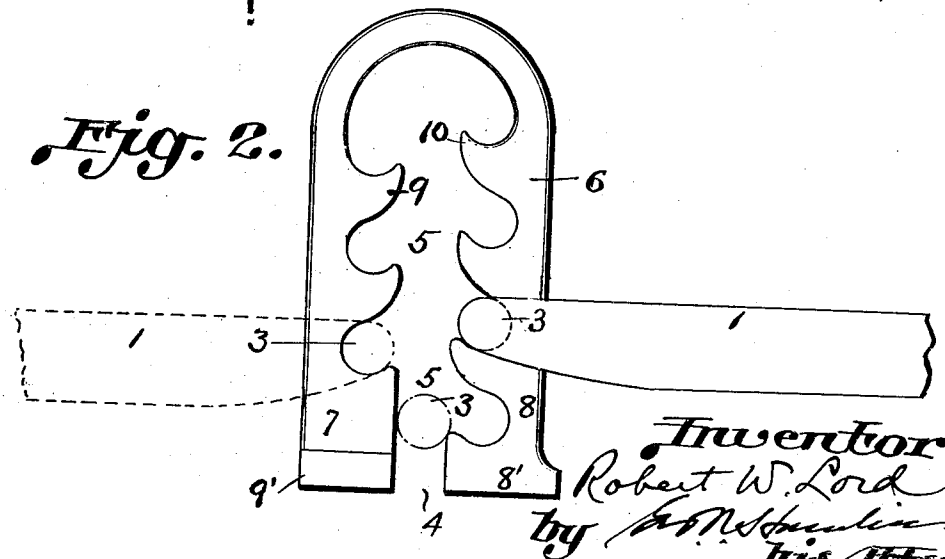


Fig. 2.



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UNITED STATES PATENT OFFICE

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STRAP CLAMP AND BLOCK

Application filed April 15, 1930. Serial No. 444,541.

This invention is an improvement on the work holders set forth in my United States Patent No. 1,085,816 dated February 3, 1914, and British Patent No. 11,173 of May 13, 1913.

The object of the present invention are, first, to provide an improved block and strap combined in a novel manner by which the strap may be quickly and easily detached from the block to enable substitution of a strap of lesser or greater length, without requiring the detachment of any part of the block or strap, although the strap and block are so related that they will not accidentally become detached from each other; second, to provide an improved block possessing the foregoing features which will have an additional novel feature preventing it from tipping over when in use; third, to provide a block which requires no attachment to the bed or platen of the planer, shaper or other metal working machine on which the device is used; fourth, to make provision for a relatively wide base on only one leg of the block which, while affording stability to the block, will not interfere with the adaptability of the strap to be readily attached to, or disengaged from, the block.

A general object of the invention is the provision of an improved combination of strap and block comprising but two pieces, adapted to take the place of several pieces. possess stability when holding the work, and also designed to permit interchangeability of one strap for another strap.

The foregoing objects, and others which will appear hereinafter, are accomplished by the provision of the improvements illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view showing the strap and block in use on the bed or platen of a metal working machine; and

Fig. 2 is a side elevation of the strap and block, illustrating the reversibility thereof and also the manner in which the cross piece of the strap may be engaged with, or disengaged from, the block.

The strap 1 has an integral cross piece 3.

The strap 1 is of elongated open-U-shape, thus permitting the locking of the work-fastener bolt 2 in any position along the length thereof, as in my aforesaid patents.

The bed or platen of the planer or shaper or other metal working machine, appears at 15, the work being shown at 20.

The improved block 6, instead of having a closed bottom as in my aforesaid patents, or merely an open bottom, as shown in Fig. 3 of the aforesaid British patent, is provided not only with a gap or opening 4 through the bottom thereof, but also has means, hereinafter described, which affords stability and prevents the block from tipping over without, however, interfering with the adaptability of the strap 1 to be disconnected therefrom. The slot 4 leads to the open part 5 of the block and being of a width slightly less than the diameter of the cross piece 3, prevents the accidental detachment of the strap 1 from the block 6 and yet enables said strap to be detached by the user, merely by springing the legs 7, 8, of the block to a slight extent sufficient to permit the passage through the opening 4 of the cross piece 3.

One of the legs 8 is of the same thickness at its bottom as the thickness of the block 6 but the other leg 7, has a foot 9′ which is integral therewith and extends crosswise in relation to the plane of the block 6 to afford a wide bearing which prevents the block from tipping over when being used.

The thickness of the leg 8 at its foot 8′ being no greater than that of said leg, the strap 1 can be readily passed from said foot.

The steps 9 and 10 are different heights, as proposed in my aforesaid patents.

The invention is not limited to the use of both rows of steps 9 and 10.

Inasmuch as the part 3 will not accidentally pass through the opening or slot 4, the work holder is unitary in the sense that the strap and block are always connected and ready for use. By reversing the strap, as shown by dotted lines in Fig. 2, a finer adjustment of the strap is possible, as explained in Patent 1,085,816.

What I claim is:

1. In a work holder, the combination with a block having an open interior provided with strap-engaging means, said block being

provided with a gap or opening extending from the said open interior to the exterior thereof, of a strap straddling the block and having a locking cross-piece extending through the open interior of the block and adapted to engage the aforesaid strap-engaging means, said gap or opening being of slightly less width than the thickness of said cross-piece, thereby normally preventing passage of the cross-piece through the gap but permitting disconnection of the strap from the block by slightly springing the parts of the block away from each other to permit passage of the cross-piece through the gap.

2. In a work holder, the combination with a block having an open interior provided with strap-engaging means, said block being provided with a gap or opening extending from the said open interior to the exterior thereof at its bottom, thereby providing two legs, one of the legs having a foot extending laterally from the free end thereof, whereby stability of the work holder is insured when it is in use, of a strap straddling the block and having a locking cross-piece extending through the open interior of the block and adapted to engage the aforesaid strap-engaging means, said gap being of slightly less width than the thickness of said cross-piece, thereby normally preventing passage of the cross-piece through the gap but permitting disconnection of the strap from the block by slightly springing the legs of the block away from each other at their bottoms to permit passage of the cross-piece through the gap.

In testimony whereof I affix my signature.

ROBERT W. LORD.