J. H. BOYE.

KNIFE SHARPENER.

APPLICATION FILED FEB. 21, 1912.

1,038,484.

Patented Sept. 10, 1912.

Fig. 3.

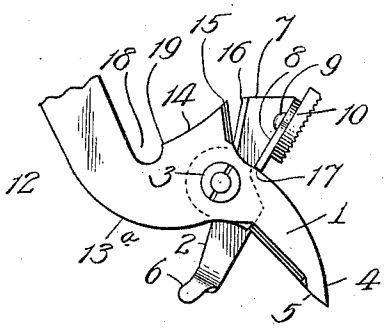


Fig. 1.

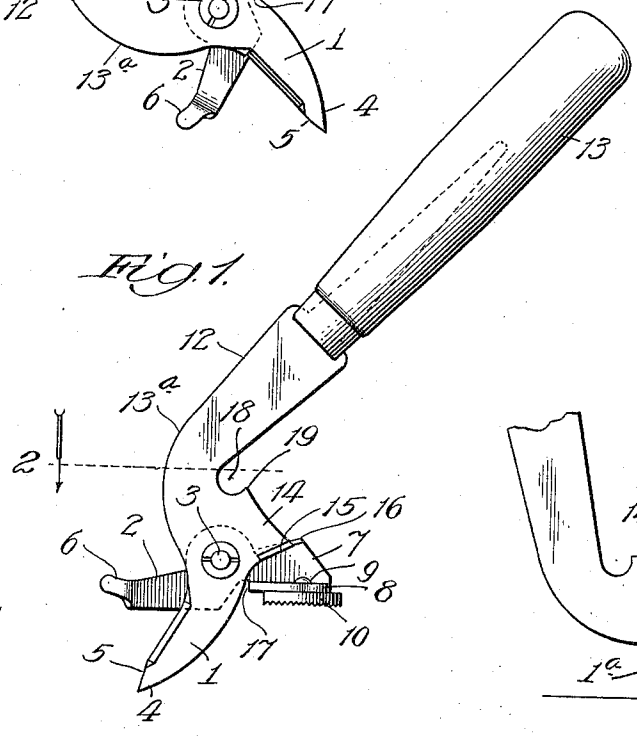


Fig. 4.

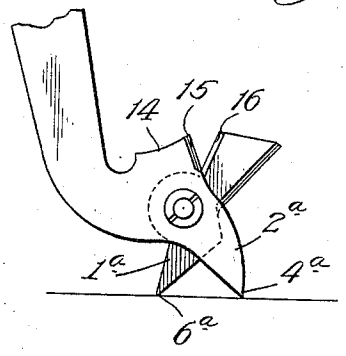
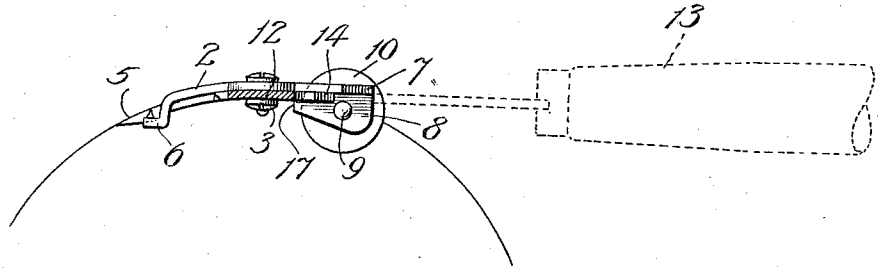


Fig. 2.



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UNITED STATES PATENT OFFICE.

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KNIFE-SHARPENER.

1,038,484. Specification of Letters Patent. **Patented Sept. 10, 1912.**

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To all whom it may concern:

Be it known that I, JAMES H. BOYE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Knife-Sharpeners, of which the following is a specification.

My invention relates particularly to knife-sharpeners; and my primary object is to provide an improved article of this character.

The invention is preferably embodied in a combination implement adapted to serve as an improved can-opener, adapted to serve also as a knife-sharpener and adapted to serve also to remove bottle-seals of the crown type.

The invention is illustrated in its preferred embodiment, in which—

Figure 1 represents a side elevational view of my improved implement; Fig. 2, a section taken, as indicated, at line 2 of Fig. 1; Fig. 3, a broken side elevational view of the device in wide-open condition and resting on the points of its blades to enable it to serve as a knife-sharpener; and Fig. 4, a similar view showing the device provided with blades of modified form.

In the form illustrated in Figs. 1 to 3, inclusive, the implement comprises a handle-equipped shearing-blade 1, and a handleless shearing-blade 2. These blades are united by a pivot 3 and their operative portions are preferably curved laterally, as appears from Fig. 2. The blades are beveled on their outer surfaces at their shearing-edges. The blade 1 has a penetrating point 4 which is blunt or rounded on its upper surface at 5, to prevent tearing the tin. The blade 2 has its front end equipped with an inwardly offset member 6 which is adapted to overlie the blade 1 when the blades are closed; and said plate 2 has a heel 7 formed with an inturned flange 8 at its lower edge. To the flange 8 is secured by a pivot 9 a freely revoluble anti-skid disk 10.

The blade 1 has a shank 12 to which is secured the handle 13. The shank 12 is offset or bent edgewise to angular form, so that the two arms of the shank are at substantially right angles to each other, the curve or knee being indicated at 13ª. The arm of the shank which is adjacent to the pivot is provided with a heel 14, the lower edge of which is beveled and constitutes a sharpening edge 15. The upper edge of the heel 7 is beveled, as indicated at 16, and affords a sharpening edge which crosses or meets at an angle with and co-acts with the edge 15, as indicated in Fig. 3, when the blades are in the open position. At such time the lower edge of the blade 1 at the base-portion of the blade abuts against a shoulder 17, which constitutes the front edge of the flange 8 of the heel 7, and thus affords a stop. In this condition the angle between the sharpening edges 15 and 16 is suitable for the purpose of sharpening a knife. While the implement is being used for this purpose the point ends of the blades may rest upon a table while the knife is drawn through the angle formed by the sharpening edges 15 and 16. Thus, the blades serve as supports for the sharpener, and it will be noted that a firm support for the sharpener is thus afforded, and at the same time the handle 13 is so disposed as to be out of the way during the sharpening operation, the handle, of course, being firmly grasped by the operator. If desired, the angle between the sharpening edges may be changed, by slightly closing the implement, before the points are caused to bear upon the table.

At the junction of the heel 14 with the upper arm of the shank 12 and on the under side of the shank is provided a recess 18 which so intercepts the rear edge of the heel 14 as to afford a hook 19. When desired, the implement may be employed for removing bottle-seals of the crown type. This is accomplished by resting the lower edge of the upper arm of the shank 12 on the bottle-cap, bringing the hook 19 into engagement with the downturned flange of the bottle-cap, and pressing downwardly upon the handle, in which operation the shank 12 fulcrums on the cap, while the hook 19 serves to dislodge the cap. In the operation of removing a seal thus, the remote edge of the seal is first lifted from the bottle, so that any of the contents which may escape under pressure may be directed away from the operator.

In using the device as a can-opener it is operated on the shearing principle.

In the modification shown in Fig. 4, the blades are designated 1ª and 2ª; otherwise, the construction is as above described, ex-

cept that the flange 8 and anti-skid device 10 are omitted. In the modified form, the device is not adapted to serve as a can-opener. The manner of use in the modified form will be readily understood from Fig. 4, being similar to the use of the first-described form.

The improved device can be manufactured cheaply and is an exceedingly useful implement.

The foregoing detailed description has been given for clearness of understanding only and no undue limitation should be understood therefrom.

What I regard as new and desire to secure by Letters Patent is—

1. An implement of the character set forth, comprising a pair of pivotally-connected blades, having extremities adapted to rest on a table, said blades having heels provided with knife-sharpening edges, which form an angle with each other when the blades are open, one of said blades having means enabling the implement to be grasped and held while the extremities of its blades rest on the table.

2. An implement of the character set forth, comprising a handle-equipped blade, having an extremity adapted to serve as a support, and having a heel provided with a knife-sharpening edge, and a handle-less blade pivoted to said first-named blade and having an extremity adapted to serve as a support, and having also a heel provided with a sharpening edge co-acting with said first-named sharpening edge, said sharpening edges crossing each other at an angle when the blades are in open condition.

3. An implement of the character set forth, comprising a handle-equipped blade having an extremity adapted to serve as a support, and having also a heel provided with a beveled edge, a handle-less blade pivoted to said first-named blade and having an extremity adapted to serve as a support and having also a heel provided with a beveled edge, said beveled edges adapted to serve as knife-sharpening edges, and means for limiting the opening of said blades.

JAMES H. BOYE.

In the presence of—
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