Oct. 20, 1953 W. E. FLEMING 2,655,774

SKATE HOLDER

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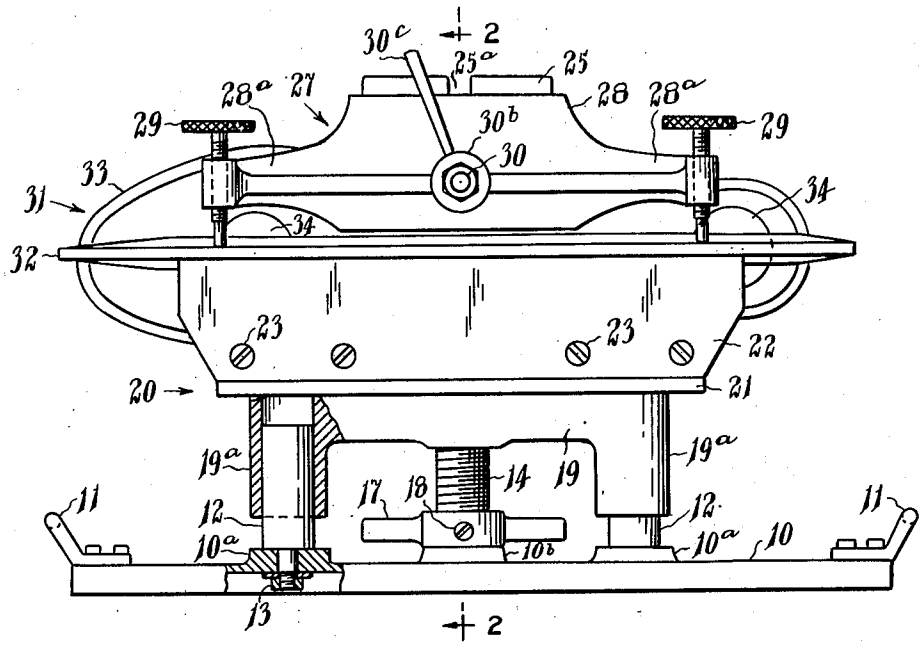


Fig. 1.

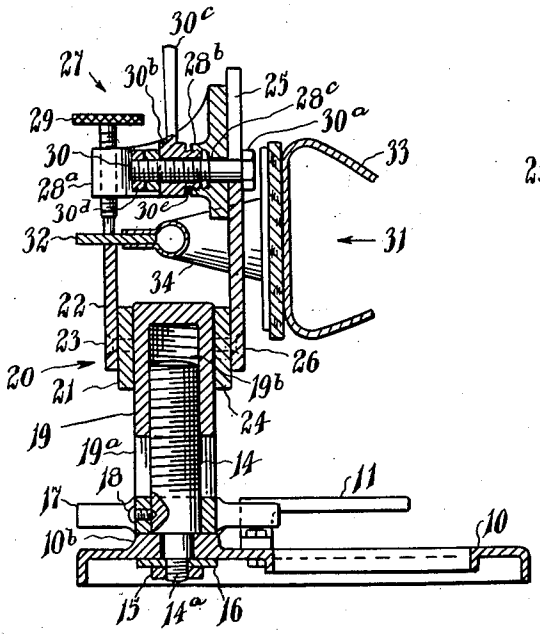


Fig. 2.

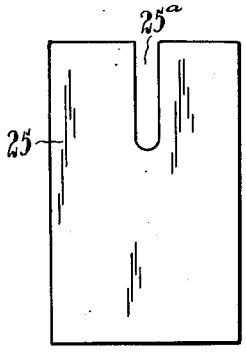


Fig. 3.

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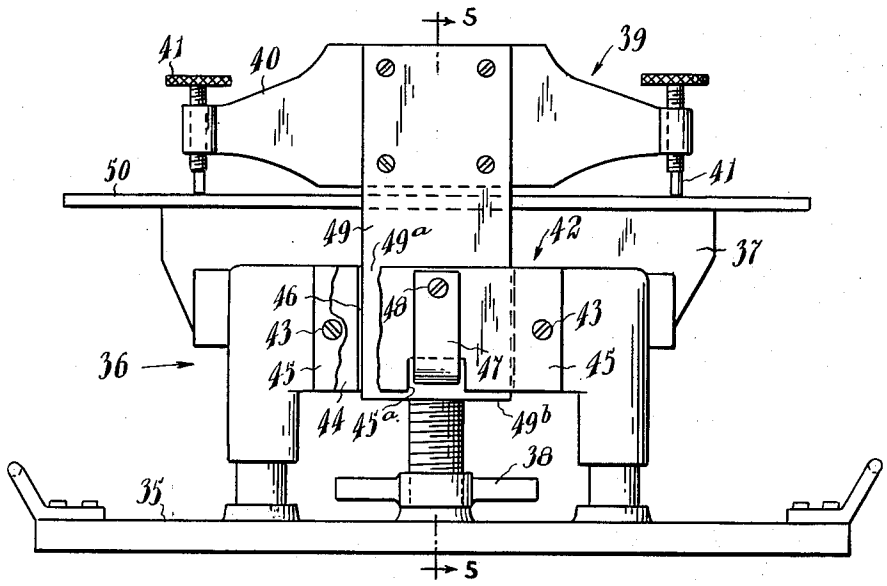


Fig. 4.

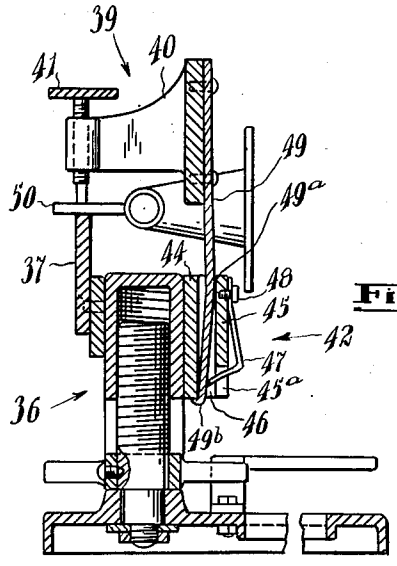


Fig. 5.

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SKATE HOLDER

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8 Claims. (Cl. 51—228)

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This invention relates to a skate holder to be used for sharpening skates.

The majority of holders which are commonly employed to grip skates for sharpening embody C-clamps which necessitate folding up the top of the boot of the skate before the skate can be placed in position within the C-shaped supports for sharpening.

It is the object of this invention to provide an improved skate holder which does not necessitate folding the boot and in which the skate can be clamped speedily and firmly.

According to this invention this object is accomplished by a skate holder having a standard provided with clamping means, and a clamp member is removably associated with the standard. When a skate is to be placed in the holder, the clamp member is removed, the blade of the skate is placed on the clamping means of the standard, and the clamp member is again secured to the standard to clamp the skate in position.

In the drawings which illustrate one embodiment of this invention, and in which like reference numerals indicate corresponding parts in the several views:

Fig. 1 is a front elevation, partly in section, of a skate holder;

Fig. 2 is a section taken on line 2—2 in Fig. 1;

Fig. 3 is a front elevation of a support member;

Fig. 4 is a partly broken away rear elevation of another skate holder; and

Fig. 5 is a broken away section taken on line 5—5 in Fig. 4.

The skate holder illustrated in Figs. 1 and 2 has a base 10 to which are affixed carrying handles 11. A pair of upright posts 12 pass through bosses 10a in the base 10 and are secured to the base by nuts 13. A threaded rod 14 having a threaded end 14a of reduced diameter, passes through a similar boss 10b in the base, and is held by a nut 15 and washer 16 on the threaded end 14a; the rod 14 is free to turn in the boss 10b. A hand wheel 17 is rigidly secured on the rod 14 by a set screw 18.

A casting 19 forms part of a standard generally indicated by reference numeral 20. The casting has a pair of tubular legs 19a slidably engaged with the posts 12, and has a tapped hole 19b receiving the threaded rod 14. Turning the hand wheel 17 raises or lowers the standard 20 which is guided by the posts 12 and the rod 14.

The other parts of standard 20 are a spacer 21 and a lower clamp member or bearing plate 22, which are secured to one side of casting 19 by screws 23, and a spacer 24 and support member 25, which are secured to the other side of the casting by screws 26. The support member 25 comprises a plate having a guide or slot 25a at one end, as shown most clearly in Fig. 3.

An upper clamp member, generally indicated

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by reference numeral 27, comprises a yoke 28 having a pair of arms 28a which carry clamping screws 29 at their ends. The yoke 28 has a boss 28b at its central portion, and a hole 28c is drilled through the yoke and boss, the hole in the boss being enlarged and tapped. A bolt 30, having a head 30a, passes through the hole 28c. A locking nut 30b, to which a handle 30c is rigidly attached, is slipped onto the bolt 30, and lock nuts 30d are screwed onto the end of the bolt. The locking nut 30b has an axial boss 30e threadably engaged in the boss 28b of the yoke.

Figs. 1 and 2 show how a skate, generally indicated by reference numeral 31, is clamped on the skate holder. The skate has a blade 32 secured to a boot 33 in the usual manner by a pair of tubular supports 34. One side of the blade 32 is placed on the bearing plate 22, with the support member 25 passing between the tubular supports 34. The clamp member 27 is then placed over the skate, the bolt 30 sliding in the slot 25a until the clamping screws 29 rest on the blade 32. The locking nut 30b is then screwed outwardly against the lock nuts 30d, thus pulling the head 30a of the bolt 30 against the support member 25 and thereby tightening the yoke 28 against the support member. The clamping screws 29 are then screwed down to hold the blade 32 tightly against the bearing plate 22. Turning the hand wheel 17 serves to adjust the elevation of the blade relative to the usual abrasive wheel (not shown) for sharpening the skate.

When the skate has been sharpened, it may be removed from the holder by simply screwing the locking nut 30b into the boss 28b, thereby releasing the clamp member 27 so that it can be lifted off.

Another embodiment of this invention is shown in Figs. 4 and 5. This embodiment has a base 35, a standard generally indicated as 36, a lower clamp member 37 secured to the standard, a hand wheel 38 for raising and lowering the standard, and an upper clamp member generally indicated as 39 and comprising a yoke 40 and clamping screws 41, all of which are substantially the same as the corresponding parts of the first embodiment shown in Figs. 1 and 2; however, the means for engaging the upper clamp member 39 to the standard 36 are different and will now be described in detail. On the opposite side of the standard from the lower clamp member 37, a support member generally indicated by reference numeral 42 is secured to the standard by means of screws 43. The support member comprises two plates 44 and 45 secured one against the other, but in the inner plate 44 a vertical channel or guide 46 is cut away to form an open passage between the plates. An L-shaped leaf spring 47 is secured at one end by means of a screw 48 to the outer plate 45, and the other end of the spring projects through a

cut-away portion 45a of the outer plate and into the passage or guide 46. The yoke 40 is substantially the same as the yoke 28 of the first embodiment shown in Figs. 1 and 2, but does not have a boss corresponding to the boss 28b or a bolt hole corresponding to 28c; instead, a resilient catch member 49 is secured to the back of the yoke and depends therefrom. The lower part of the catch member is bent forwardly, forming a transverse heel portion 49a across the back of the catch member. A hook 49b is formed across the lower end of the catch member.

The upper clamp member 39 is engaged with the standard by inserting the catch member 49 in the guide 46 and pushing the clamp member downwardly until the hook 49b engages the lower edge of the plate 44. The spring 47 holds the catch member in engagement with the standard. The heel portion 49a of the catch member rests against the outer plate 45, and a blade 50 can be securely clamped against the lower clamp member 37 by screwing down the clamping screws 41. The upper clamp member 39 is easily removed by loosening the clamping screws 41 and tilting the upper clamp member forwardly, thus rocking it on the heel portion 49a and disengaging the hook 49b from the lower edge of the plate 44. The catch member 49 can then be withdrawn from the guide 46.

It is obvious that skate holders constructed in accordance with this invention can be used to clamp the skate quickly and firmly without the necessity of folding the boot.

It is thought that the construction and use of the invention will be apparent from the above description of the various parts and their purpose. It is to be understood that the forms of the invention herewith shown and described are to be taken as preferred examples of the same and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention as defined in the subjoined claims.

What I claim as my invention is:

1. A skate holder comprising a base, a pair of substantially vertical posts on the base, a standard slidable on the posts, and screw means rotatable in the base and the standard for adjusting the position of the standard relative to the base, the standard having a bearing surface, a yoke removably engageable with the standard, the yoke having clamping screws adapted to bear adjustably on a skate to secure the skate firmly between the clamping screws and the bearing surface of the standard, and the standard and the yoke having means independent of the clamping screws for removably securing the yoke to the standard.

2. A skate holder comprising a base, a post on the base, a standard slidable on the post, screw means rotatable in the base and standard for sliding the standard on the post, the standard having a bearing surface and a support member the support member having a slot, a yoke having a locking bolt extending through the yoke and slidable in the slot for removably securing the yoke to the support member, and clamping screws in the yoke for clamping a skate against the bearing surface.

3. A skate holder comprising a standard having clamping means, a yoke removably engageable with the standard, the yoke also having clamping means, means for adjusting the clamping means of one of the standard and the yoke in order to secure a skate firmly between the clamping means of the standard and the yoke, and a catch on one of the standard and the yoke, the catch having a hook removably engageable with the other of the standard and the yoke for removably securing the yoke to the standard.

4. A skate holder comprising a standard having clamping means, a yoke removably engageable with the standard, the yoke also having clamping means, means for adjusting the clamping means of one of the standard and the yoke in order to secure a skate firmly between the clamping means of the standard and the yoke, a catch secured to the yoke, the catch having a hook removably engageable with the standard for removably securing the yoke to the standard, and a resilient member secured to the standard and adapted to hold the catch in engagement with the standard.

5. A skate holder comprising a standard having clamping means, a yoke removably engageable with the standard above the standard, the yoke having clamping screws adapted to be tightened downwardly against a skate to secure the skate firmly between the clamping screws and the clamping means of the standard, and a catch depending from the yoke and having a hook engageable with the standard for removably securing the yoke to the standard, the hook being drawn into firm engagement with the standard as the clamping screws are tightened.

6. A skate holder comprising a standard having clamping means, a yoke removably engageable with the standard, the yoke having clamping screws adapted to be tightened downwardly against a skate to secure the skate firmly between the clamping screws and the clamping means of the standard, and a catch on the yoke removably engageable with the standard for removably securing the yoke to the standard, the catch having a portion adapted to bear against the standard and rockable thereon to disengage the catch from the standard.

7. A skate holder comprising a standard having clamping means, a yoke removably engageable with the standard, the yoke having clamping screws adapted to bear at their ends on a skate to secure the skate firmly against the clamping means of the standard, a catch on the yoke removably engageable with the standard, the catch having a portion adapted to bear against the standard, and the standard having a resilient member adapted to hold the catch in engagement with the standard.

8. A skate holder comprising a standard having clamping means, a base, screw means for adjusting the position of the standard relative to the base, a yoke removably engageable with the standard, a catch on one of the standard and the yoke, the catch having a hook removably engageable with the other of the standard and the yoke for removably securing the yoke to the standard, the yoke also having clamping means, and means for adjusting the clamping means of one of the standard and the yoke in order to secure a skate firmly between the clamping means of the standard and the yoke.

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