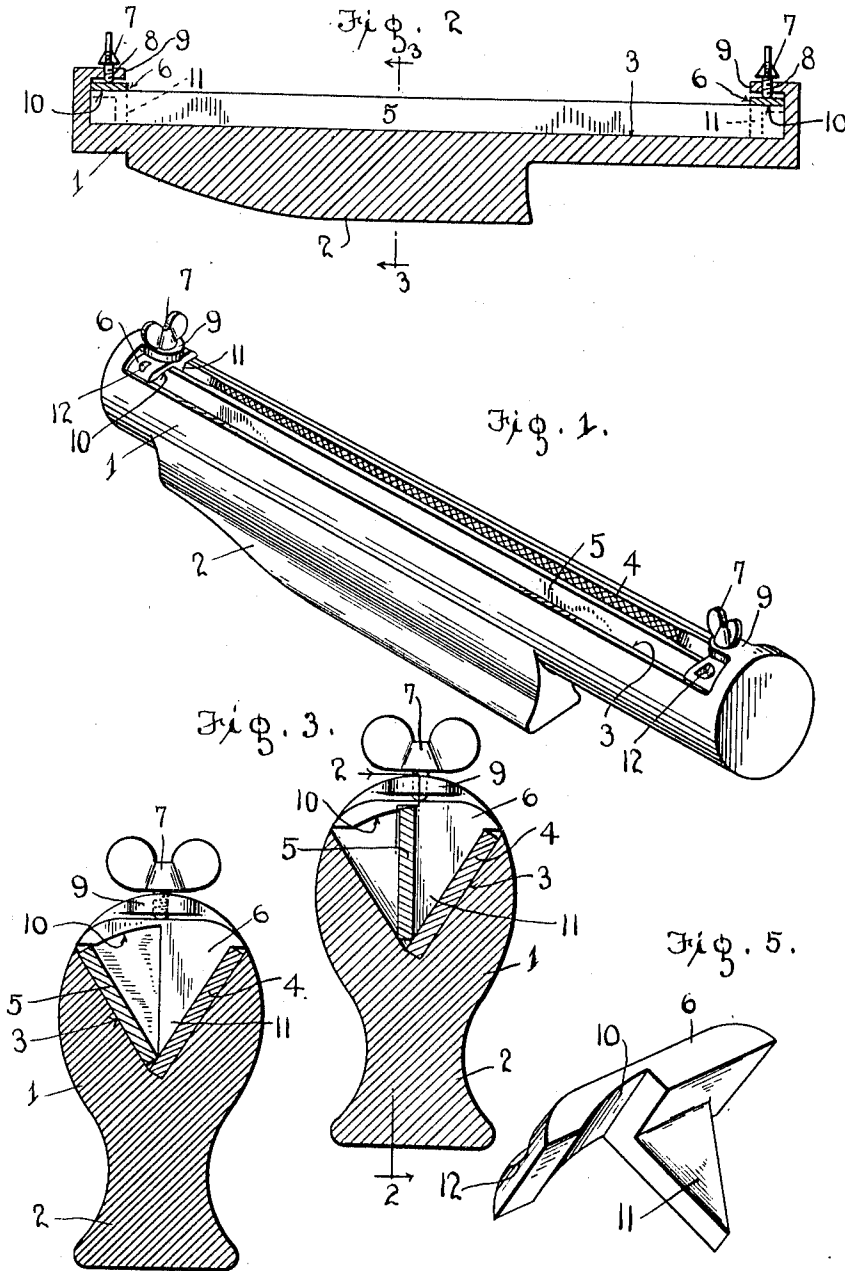


W. LANING.
HORSESHOE CALK SHARPENER.
APPLICATION FILED SEPT. 5, 1911.

1,035,712.

Patented Aug. 13, 1912.



Witnesses
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Fig. 4.

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UNITED STATES PATENT OFFICE.

WESLEY LANING, OF GLOVERSVILLE, NEW YORK.

HORSESHOE-CALK SHARPENER.

1,035,712.

Specification of Letters Patent.

Patented Aug. 13, 1912.

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To all whom it may concern:

Be it known that I, WESLEY LANING, a citizen of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Horseshoe-Calk Sharpeners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in sharpeners for horse shoe calks and other objects.

One object of the invention is to provide a sharpening device of this character by means of which the calks of horse shoes may be readily sharpened without removing the same from the animal's foot.

Another object is to provide a sharpening or filing device having an improved construction and arrangement of file holding mechanism whereby one file may be adjustably held thus enabling the calks or other objects to be filed at any desired angle.

With these and other objects in view the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of the improved calk sharpener; Fig. 2 is a central vertical longitudinal section thereof on the line 2—2 of Fig. 3; Fig. 3 is a vertical cross sectional view on the line 3—3 of Fig. 2 showing the adjustable file of the sharpener in one position; Fig. 4 is a similar view showing the adjustable file in another position; Fig. 5 is a detail perspective view of the file holding member of the tool.

In the embodiment of the invention, I provide a tool holding casing 1 which is preferably elliptical or oval shaped in cross section and may be of any suitable length. On one side of the casing 1 is formed an offset or extension which provides a handle or projection 2 whereby the device is operated. The projection 2 has its sides curved or concaved longitudinally to facilitate the grasping of the handle by the operator, thus enabling a firm grip to be obtained on the device. In the opposite side of the casing 1 from the handle 2 is formed a longitudinally disposed substantially V-shaped groove or recess 3 in which are adapted to be arranged

the files or sharpening tools 4 and 5 of the device. The files 4 and 5 are preferably flat and the file 4 is held at all times in rigid engagement with one of the inclined walls of the V-shaped recess 3 of the casing by means of suitable tool holding devices hereinafter described. The file 5 which is arranged in the opposite side of the recess 3 is adapted to be adjustably secured at any desired angle with respect to the file 4 by means of said tool holding devices whereby calks or other objects may be filed at different angles.

The tool holding devices hereinbefore referred to comprise clamping plates 6 which are disposed across the outer edges of the recess 3 of the casing and are clamped into operative engagement with the outer edges of the files 4 and 5 and with the edges of the recess 3 by clamping screws 7 which are engaged with threaded apertures 8 formed in lugs or ears 9 on the ends of the casing, said lugs or ears 9 projecting over the ends of the recess 3 as shown. In the inner sides of the clamping plates 6 on one side of the centers thereof are formed curved or beveled notches 10 and on the inner sides of the plates adjacent to the inner ends of said notches 10 are formed inwardly extending wedge shaped file engaging lugs 11 which project inwardly between the files 4 and 5 in such position that the inclined angular edges of the lugs are engaged with the outer side of the file 4, thus clamping or forcing the latter into rigid engagement with the adjacent inclined side of the recess 3 as clearly shown in Figs. 3 and 4 of the drawing. It will thus be seen that when the clamping screws 7 are screwed inwardly that the clamping plates 6 and lugs 11 will be forced into operative engagement with the file 4, thus holding the latter in position in the casing. When the clamping plates are thus arranged the beveled or curved surfaces 10 thereof will engage the outer edge of the file 5 and will thus rigidly clamp the latter in any position or at any angle to which the same may have been adjusted between the square sides of the lugs 11 and inner ends of the recesses 10 and the adjacent angular side of the recess 3 as clearly shown in Fig. 3 of the drawing. By thus adjustably securing the file 4 it will be seen that the angle of the work receiving space between the files 4 and 5 may be varied thus enabling the devices to be employed for sharpening calks or other objects having

surfaces disposed at different angles. By arranging the file or tool holding devices as herein shown and described, said devices may be readily slipped inwardly from beneath the lugs 9 after the clamping screws 7 have been released, thus permitting said devices and the tools to be quickly and easily removed and replaced when desired. In order to facilitate the shifting of the tool holding device from beneath the lugs 9, the plates 6 of said device have formed in their outer surfaces adjacent to the ends thereof thumb receiving notches 12.

In the operation of the device the file 5 is first set to the desired position for engagement with the work after which the handle 2 is grasped and the inner surfaces of the files applied to the calk or other object whereupon the tool is forcibly held in engagement with the object and reciprocated, thus quickly sharpening or filing down the sides of the objects to a sharp edge. While the device is designed particularly for sharpening the calks of horse shoes without removing the latter from the feet or hoofs of the animal, it is obvious that the device may also be employed for sharpening or filing other objects having angular or beveled surfaces.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as shown.

Having thus described my invention, what I claim is:

1. A sharpener for horse shoe calks comprising a casing having a longitudinally disposed angular recess formed therein, sharpening tools disposed in said recess, and removable tool holding devices spanning the recess, and positioned to engage said tools and rigidly secure them in adjusted positions in the recess.

2. A sharpening device for horse shoe calks comprising a casing having a tool receiving recess, an adjustable tool mounted in said recess, a clamping plate engaged with the outer edge of said recess and said tool and having formed on its inner face a curved recess for engagement with said adjustable tool to hold it in adjusted position.

3. A sharpening device for horse shoe calks comprising a casing having a tool receiving

recess, an adjustable tool mounted in said recess, a clamping plate engaged with the outer edges of said recess and said tool and having formed on its inner face a curved recess for engagement with said adjustable tool to hold it in adjusted position, and a wedge-shaped lug formed on the inner face of said plate adjacent the recess therein, and means for locking said plate in operative position.

4. A sharpener for horse shoe calks and the like comprising a casing having formed in one side a longitudinally disposed V-shaped recess, a handle formed on the opposite side of said casing, lugs formed on the ends of the casing and having formed therein threaded passages, stationary and adjustable files arranged in said recess, clamping plates arranged across the outer edges of the recess beneath said lugs and adapted to engage the outer edges of said files whereby said adjustable file is held in its adjusted position, means on said plates to engage and rigidly hold said stationary file in an operative position, and clamping screws arranged in the threaded apertures of said lugs and adapted to be screwed into operative engagement with said clamping plates whereby the latter are forced into engagement with the files.

5. A sharpening device for horse shoe calks comprising a casing having formed in one side a V-shaped longitudinally disposed tool receiving recess, a handle arranged on said casing, stationary and adjustable files arranged in said recess, clamping plates adapted to be engaged with the outer edges of said files, said plates having formed in their inner sides adjacent to one side of the center thereof curved or beveled recesses adapted to engage and hold said adjustable file in its adjusted positions with respect to said stationary file whereby the angle of the space between said files is varied, wedge shaped lugs formed on the inner sides of said plates adjacent to the inner ends of the recesses therein, said lugs being adapted to engage the stationary file whereby the latter is held in rigid engagement with one side of the recess in the casing, and means to force said clamping plates into operative engagement with said files.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WESLEY LANING.

Witnesses:

D. M. NEWTON,
CARL E. LANING.