

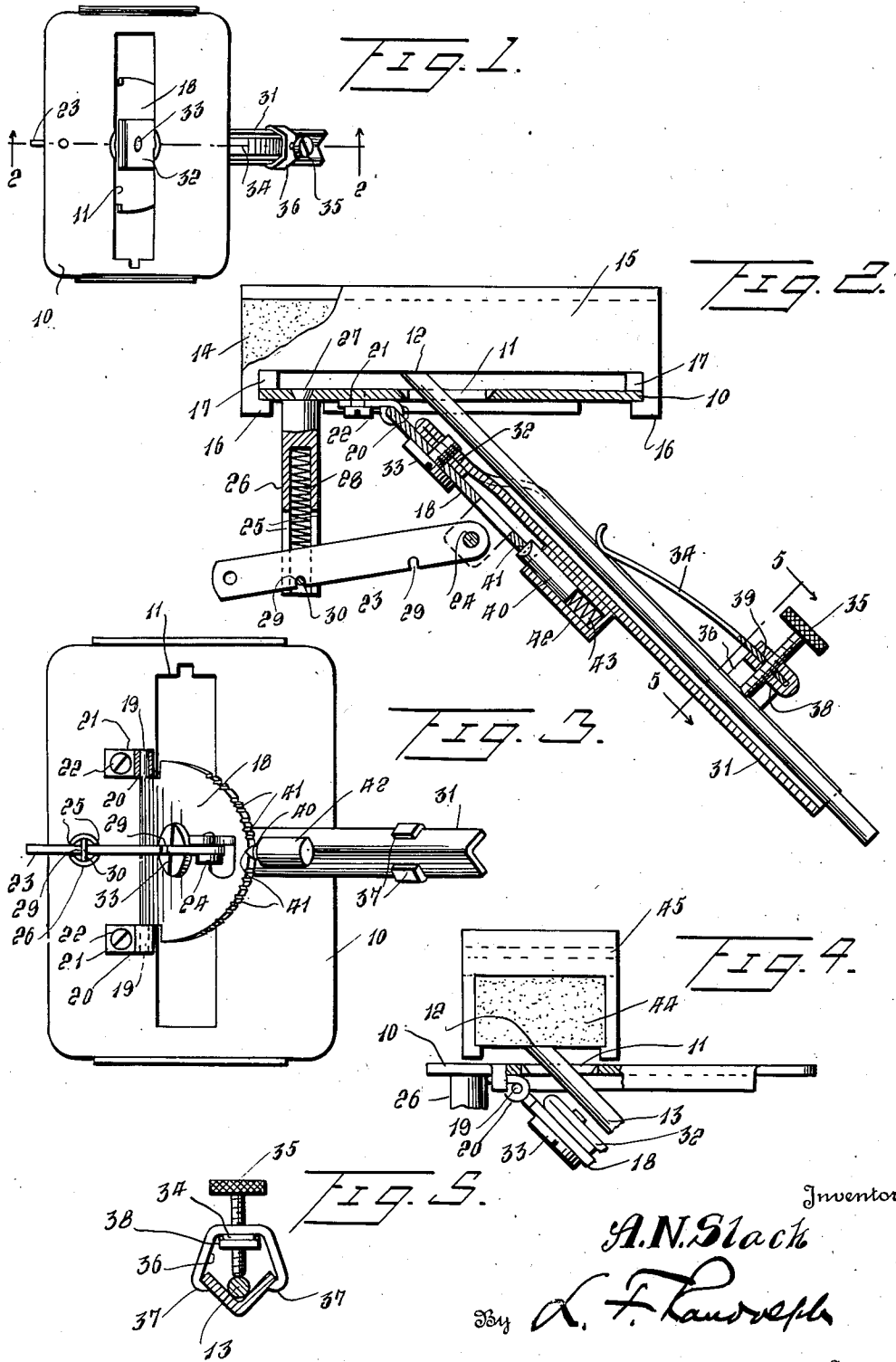
June 30, 1942.

A. N. SLACK

2,287,910

TOOL FOR HOLDING DENTAL INSTRUMENTS FOR SHARPENING

Filed Oct. 3, 1940



Inventor

A. N. Slack

By *A. F. Landwehr*

Attorney

UNITED STATES PATENT OFFICE

2,287,910

TOOL FOR HOLDING DENTAL INSTRUMENTS
FOR SHARPENING

Albert N. Slack, Bakersfield, Calif.

Application October 3, 1940, Serial No. 359,612

3 Claims. (Cl. 51-220)

This invention relates to a device to hold instruments, particularly dental instruments, while the same are honed or otherwise sharpened.

It is especially aimed to provide a construction having means to hold the dental or other instruments at various angles and adjustments.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawing illustrating an operative embodiment.

In said drawing:

Figure 1 is a plan view of the device;

Figure 2 is a view of the device in vertical section taken on the plane of line 2-2 of Figure 1, and including a hone or sharpening member;

Figure 3 is an inverted plan view of the device;

Figure 4 is a fragmentary end elevation of the device, showing the use of a different form of hone, and

Figure 5 is a cross sectional view taken on the line 5-5 of Figure 2.

Referring specifically to the drawing wherein like reference characters designate like or similar parts, the device comprises a table or plate 10, for instance rectangular as shown, which has a central longitudinal slot 11, above which the cutting or work edge 12 of a dental or other instrument or article 13 is adapted to be positioned so that a hone or other sharpening member 14 may be moved thereover, such member usually being carried by a holder 15, having hooks 16 engaging opposite edges of the plate 10 so that the hone will be guided during the sharpening operation. Wooden or other spacers 17 are provided between the hone and table. The edge 12 initially extends above the plane of the top of the spacers and as sharpening progresses, such tool or instrument 13 is moved from time to time above such plane.

A segmental apron 18 has pintles 19, whereby it is hinged or pivoted in the barrels 20 of brackets 21, fastened by screws or the like 22 to the under surface of the table 10.

Said apron 18 is adapted to be adjusted and held at any desired permissible angle since a link 23 is pivoted thereto at 24 and passes through slots 25 in a depending hollow post 26 fastened at 27 to the table 10. An expansive coil spring 28 is housed within the stud 26 so as to urge the link 23 downwardly and cause engagement of any of a series of notches 29 with a pin 30 carried by the stud, to thereby enable adjustment of the apron 18 and fastening thereof in adjusted positions, it being understood that the link 23

is adapted to be raised at its free end against the tension of the spring 28, in order to move the link through the slot to cause registry of the notches 29 with pin 30 and consequent adjustment of the apron.

A holder member 31 is doubled at one end 32, and pivotally connected by a screw or the like 33 to the apron 18. The major portion of the holder member 31 is preferably angular as shown so as to better center and position the instrument 13, which is adapted to be removably disposed therein and frictionally clamped in place by a spring metal finger 34. Such tool is also adapted to be tightly clamped in the holder member through the adjustment of a screw 35. Said screw 35 is screw threaded in a U-shaped saddle 36 and the terminals of the saddle are welded as at 37 to the holder member 31. It will be noted that the portion of the saddle in which the screw 35 is threaded, includes a returned lug 38. One end of the spring finger 34 is disposed between said lug and remainder of the saddle and includes an opening 39 through which the screw 35 passes so as to position the spring finger against displacement.

The holder 31 is adapted to be swung on its pivot 33 so that edge 12 may be sharpened at the proper angle. Such member 31 is held at various angles or adjusted positions through the engagement of a latch 40 with any of a series of notches 41 provided in the convex edge of the apron 18. Said latch 40 slides in a barrel 42 carried by the holder 31 and is urged into engagement with the apron by an expansive spring 43 therein. It is clear, that when the member 31 is moved on its pivot 33, that the latch 40 will automatically be displaced from the engaged notch and slide over the edge of the apron 18 and reengage any desired notch thereof.

In Figure 4, a modified form of sharpening means is suggested. In this form, the hone 44 is carried by a holder 45 which does not have engagement with and guidance by the table 10, it being necessary of course to allow clearance between the lower extremity of the holder for the sharpening or removal of metal from the instrument 13 incidental to sharpening.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:

1. A device of the class described having a table provided with a slot through which an article to be sharpened is adapted for projection, an apron depending from the table, a holder mem-

ber for the article adjustably carried by the apron, a saddle on the holder member, securing means mounted by the saddle for engagement with the article, consisting of a binding screw threaded to the saddle, a spring finger engage- 5 able with the article and through which the screw passes, said saddle including a lug disposed beneath said spring finger.

2. A device of the class described comprising a table having a slot through which an article 10 to be sharpened is adapted for projection, an apron pivoted to the table, holder means on the apron for the article, a post depending from the table, a link pivoted to the apron and passing through said post, interengaging notch and pin 15 means between the post and link, and spring

means mounted by the post urging engagement of the notch and pin means.

3. A device of the class described comprising a table having a slot through which an article to be sharpened is adapted for projection, an apron pivoted to the table, holder means on the apron for the article, a post depending from the table, a link pivoted to the apron and passing through said post, interengaging notch and pin means be- 10 tween the post and link, said holder means consisting of a holder member pivoted to the apron, said apron having a convex edge provided with notches, and latch means carried by the holder member coacting with said notches.

ALBERT N. SLACK.