F. G. HOFMANN.

CREASING IRON.

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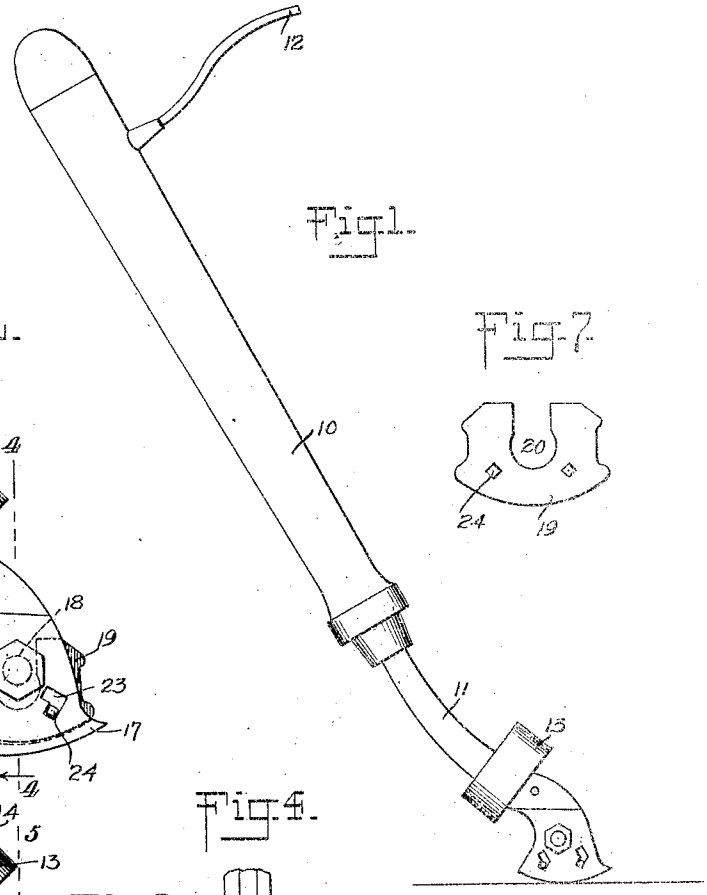


Fig. 1.

Fig. 2.

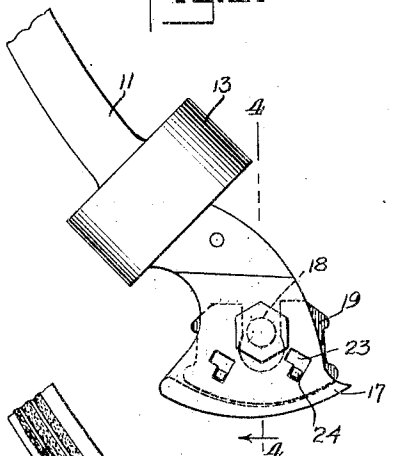


Fig. 7.

Fig. 3.

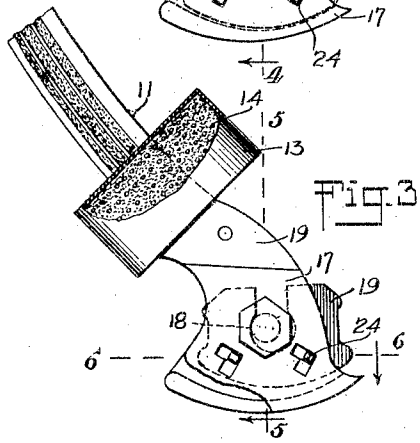


Fig. 4.

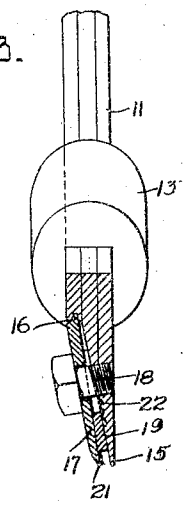


Fig. 5.

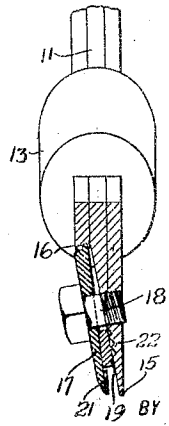
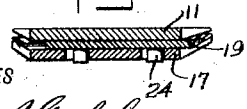


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

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CREASING IRON.

Application filed April 2, 1921. Serial No. 458,123.

To all whom it may concern:

Be it known that I, FRED G. HOFMANN, a citizen of Germany, and resident of the city of New York, borough of Bronx, county of Bronx, and State of New York, have invented a new and Improved Creasing Iron, of which the following is a full, clear, and exact description.

My invention relates to a creasing iron and aims to provide new and useful improvements in connection with a device of this character.

In leather, and other trades utilizing tools which are usually heated, to mark a groove or crease in the finished article, it is a well appreciated fact that it has been necessary to employ a separate tool for each type of crease which was to be made. Thus certain creases are merely in the nature of a "hair-line" while others are relatively broad, and still others present double lines running parallel to each other.

Aside from the multiplicity of tools necessary to permit of the type of crease desired being made, it is also appreciated that it has been necessary to utilize a heating element which would be capable of bringing the tool to the temperature desired.

Having these objects in mind, I have constructed a tool of the nature specified, which will supplant a number of the tools now in use, in that its parts are capable of being adjusted to permit of creases or grooves of different widths being made.

A further object of my invention is the construction of a device of the nature specified which shall preferably include as a portion of its body a heavy cent heating unit so that it will not be necessary to employ a heating device to bring the tool to the temperature desired.

Still another object of my invention is the construction of a creasing tool or iron which shall embody the improvements above set forth, and which shall nevertheless be extremely simple in construction and economical in manufacture.

Still other objects of my invention will appear in the annexed specification taken in connection with the attached drawings which latter present one practical embodiment of my invention, and in which;

Figure 1 is a side view of a tool constructed in accordance with my invention, and showing the same in use,

Figure 2 is an enlarged side view of the essential working part of the same.

Figure 3 is a similar view but showing certain portions broken away to illustrate underlying construction.

Figures 4 and 5 are sectional front views taken along the lines 4—4 and 5—5 and in the direction of the arrows indicated in Figures 2 and 3 respectively.

Figure 6 is a sectional plan view taken along the line 6—6 and in the direction of the arrow indicated in Figure 3 and

Figure 7 illustrates one of the details of construction forming a part of my invention.

Referring now more particularly to Figure 1 it will be seen that the reference numeral 10 indicates the handle of the iron which may be of any desired shape and material, and to which is attached a shank such as 11, at the outer end of which the tool proper is disposed.

Now with a view of providing means which will serve to produce a heavy bent unit in which no outside source of heat will be necessary to permit of its being operated, it will be noted, reference being had to Figures 1, 2 and 3 that a wire 12 may be attached to the handle 10 and extend through the same to a point adjacent the outer end of the shank 11. A collar 13 is secured to the shank at this point and this collar encloses any desirable type of electrical resistance element 14 with which current is caused to flow through its coils for obviously bringing the outer end of the shank 11 to a temperature permitting of its being utilized for the purpose stated.

It will also be noted, reference being had to Figures 4 and 5 that the construction of the iron differs from that of conventional tools of this type in that the shank 11 terminates in a beveled portion constituting a creasing edge 15. Also adjacent the upper end of this beveled face a depression is formed in the shank 11, with which a shoulder 16 forming a part of the blade 17 may co-operate to furnish a point of hinged connection of the latter with the former.

It will thus be noted that an element is provided which incorporates the edge 15 and the edge of the blade 17 co-operating together to permit of a groove or crease being made, and it will be obvious that by varying the distance existent between these two

edges, that a crease of any desired width may be made, and these elements are retained in assembled position by any suitable means such as a screw 18 extending transversely through both of their bodies.

Now with a view of retaining the edges aforementioned in their proper position it will be noted that I utilize a wedge 19 preferably constructed in a manner illustrated in Figure 7. This member is formed with a notch 20 to accommodate a screw 18, and a shoulder 21 preferably associated with the blade 17 limits the downward movement of this wedge. Also the inner face of the beveled portion of the shank 11 may be formed with a series of serrations 22 which serve to grip the wedge and prevent any movement of this element with respect to the shank and blade upon the screw 18 having been tightened.

Thus a fixed adjustment is provided, and any amount of latitude may be allowed to the ranges of adjustment which may be accomplished by simply loosening the screw 18 or other retaining element utilized, and in moving the wedge to a point at which the edges of the blade and the shank will be at the desired distance apart, and in subsequently tightening the screw 18, it being also noted that wedges of varying thicknesses may be employed to permit of one tool being capable of having its parts adjusted to cover any range of work desired.

It will be obvious that in most instances, an operator would desire to be able to duplicate certain phases of work, and to accomplish this it will be necessary to have the edges of the shank and blade in exactly the same spaced relationship as has been utilized in the original operation. With a view of permitting this being done, it will be noted, reference being had to Figures 1, 2 and 3 that in the embodiment illustrated, the tool is capable of three adjustments. This is permitted by virtue of the fact that the blade is formed with a plurality of V shaped slots 23 through which lugs 24 attached to the wedge 19 project.

Upon the lugs being moved to the position shown in Figure 2, i. e. in which the same will contact with the outer end of one of the arms of each of these slots, it will be obvious that the two edges will be as closely together as will be permitted by this type of wedge. A release of the screw 18 and movement of the wedge to a point at which these lugs will rest at the outer end of the opposite arm of each of the slots, as has been indicated in dotted lines in Figure 2, will insure the movement of the blades 17 with respect to the shank 11 which will result in the edges of these two members being spaced from one another to their maximum extent, and the intermediate position of these elements may be accomplished by moving the wedge to the position shown in Figure 3 at which the lugs 24 will rest in the crotch of the slot.

Thus I have devised a creasing iron the parts of which are constructed in such a manner as to permit of one tool being substituted for a great number of tools, as is now utilized, and furthermore the heating element described may be associated with this iron, if it is desired to overcome the difficulties set forth in the preamble of this specification.

Obviously numerous modifications of structure might readily be resorted to without in the least departing from the spirit of my invention, which I claim as:

1. A creasing iron, including a shank terminating in an edge, and a blade movably secured to said shank and adjacent the edge thereof.

2. A creasing iron, including a shank terminating in an edge, a blade movably secured to said shank and adjacent the edge thereof, and means for moving said blade.

3. A creasing iron, including a shank terminating in an edge, a blade movably secured to said shank and adjacent to the edge thereof, and means for normally preventing a movement of said blade with respect to said shank.

4. A creasing iron, including a shank terminating in an edge, a blade movably secured to said shank and adjacent to said edge, and a wedge interposed between said blade and shank.

5 A creasing iron, including a shank terminating in an edge, a blade movably secured to said shank and adjacent to said edge, a wedge interposed between said blade and shank, and a screw co-operating with said shank and blade for clamping the same, one to the other.

FRED GEORGE HOFMANN.