

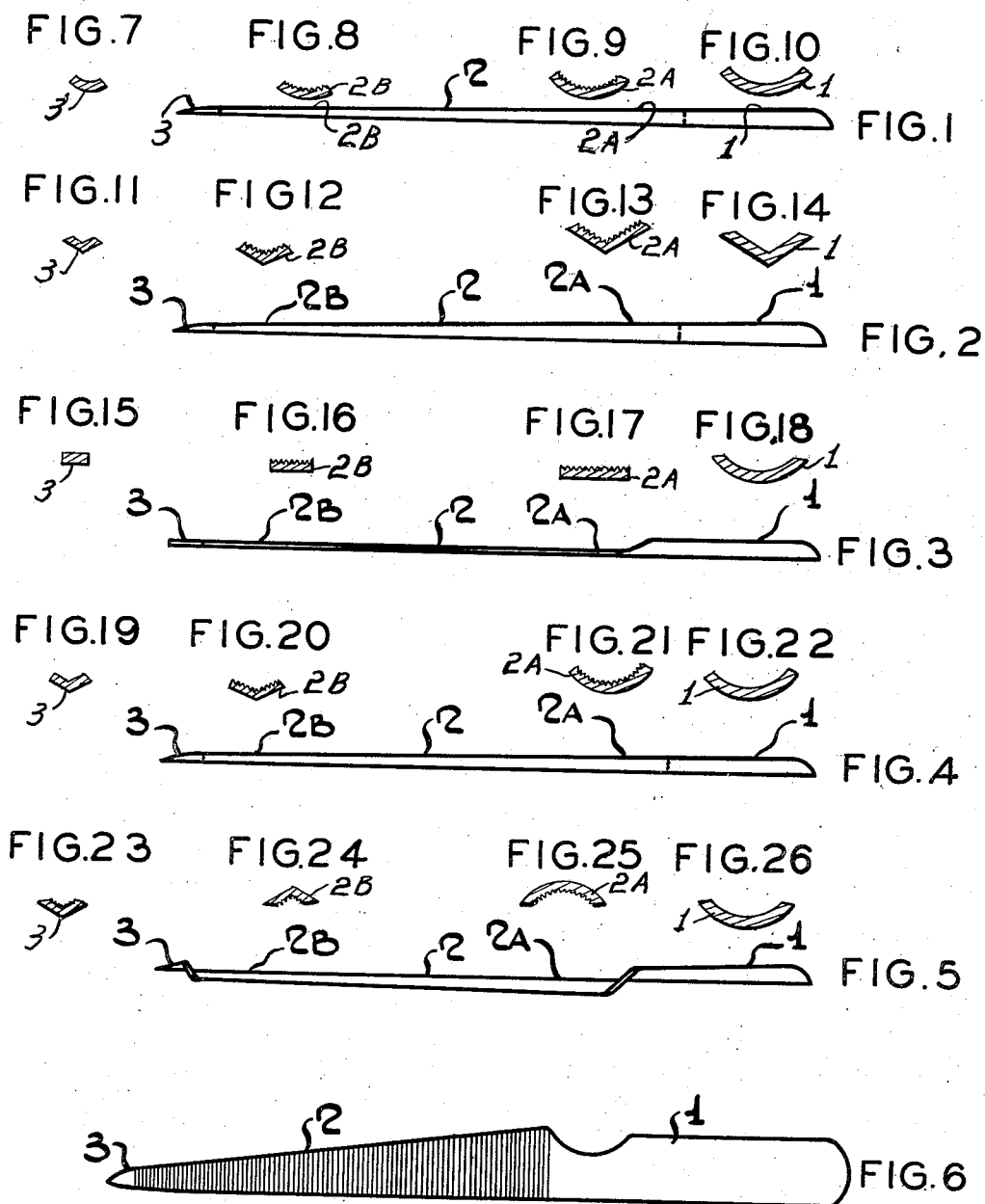
Sept. 28, 1948.

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2,450,207

NAIL FILE

Filed March 13, 1945



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UNITED STATES PATENT OFFICE

2,450,207

NAIL FILE

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Application March 13, 1945, Serial No. 582,500

1 Claim. (Cl. 132—76.4)

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This invention relates to an improved nail or manicure file. One object of the invention is to provide an improved means for holding or gripping the nail file, particularly without the unpleasant sensation of gripping an abrasive surface. Another object of the invention is to couple the improved handle or gripping means with an improved body section of the nail file, particularly designed for convenient use and better shaping of the nails.

Broadly the invention comprises a nail file made entirely of thin strip material and comprising a smooth handle having a concave transverse section and an abrasive body. This smooth or abrasive-free handle may have either a curved or an angular transverse section. The amount or degree of concavity may vary as desired within fairly wide limits, but should normally be such as substantially to fit the end of the thumb. Usually this concavity will range from a width/depth ratio of about 5:1 to about 2:1, a width/depth ratio of about 3 or 4:1 being ordinarily preferred.

The body of the nail file may be abrasive on either one side or both, and if the body portion is concave, it should be abrasive on the concave side. The degree of concavity of the body may be either the same throughout its length or may vary from the upper or handle portion, where the degree of concavity is preferably slight, down to the lower or tip portion, where the degree of concavity is preferably greater. The transverse section of the body of the file may be either curved, angular or flat, and the concavity may be in the same direction as that of the handle or opposite thereto, and in a preferred modification of the invention the file body transverse section may be curved at the upper or handle portion and may be angular at the lower or tip portion.

The point of the nail file is preferably fairly sharp and smooth, and preferably has a concave transverse section, either curved or angular. This point may be about $\frac{1}{8}$ to $\frac{3}{8}$ inch long, preferably about $\frac{1}{4}$ inch long.

The nail file or manicure file of this invention may be made of any suitable material, such as steel, glass, a stiff fine grained sand paper or emery cloth, or wood, as conventionally used heretofore, or it may be made of a strip of synthetic resin or plastic of one of the various types available on the market, having fine abrasive particles of sand or emery, etc., embedded with the desired portion of the strip. Suitable plastics for this purpose include phenol-formalde-

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hyde types, cellulose acetate, methylmethacrylate, polyvinyl acetate or a copolymer of polyvinyl chloride and -acetate, polystyrene, etc., or combinations of these. These various plastics have the advantage, that when either used alone or with an embedded strip or mesh reinforcing material made of cloth, wood, metal, or other suitable substance, the plastics may be softened with the application of only a relatively slight amount of heat and then easily shaped to the desired transverse section, either before or after embedding the abrasive particles on the desired surface portion thereof.

The objects, advantages, and details of the invention will be better understood from the following description of specific modifications, particularly when read in conjunction with the accompanying drawing, which is given for the sake of illustration, but without intending to limit the invention to the specific modifications shown.

In the drawing, in which like numerals represent like parts, Figures 1 to 5 represent elevational views of five different modifications of the invention, and Figure 6 represents a plan view of one modification of the invention. Figures 7 to 10, 11 to 14, 15 to 18, 19 to 22, and 23 to 26 represent enlarged transverse sections of 4 different portions of the nail files shown respectively in Figures 1 to 5.

Figure 1 shows a nail file having a handle 1 which is smooth and has a curved transverse section, while the body 2 is concave, also with an arcuate transverse section, and abrasive on the inner or concave surface, the upper body portion 2A having a lesser degree of concavity than the lower body portion 2B, and a point 3 which is also concave but is smooth on both inner and outer surfaces.

Figure 2 illustrates a nail file which is similar to that shown in Figure 1 except that all transverse sections are angular instead of curved. The angular concave abrasive surface of the body of the nail file is particularly well adapted to make pointed finger nails, and it should be noted that when the handle 1 has an angular concave transverse section as shown in this Figure 2, it is particularly important that this handle be smooth, which is one of the chief features of this invention, because when using a nail file of this particular type the most sensitive portion of the finger tip, usually the first two fingers and the thumb, come directly in contact with the handle, and if the latter were abrasive it would be quite irritating to the nerves of the person using the nail file.

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Figure 3 illustrates a nail file having a curved handle 1 similar to that shown in Figure 1, but the rest of the file, including the body 2 and points 3 are flat, the body being abrasive on both sides.

Figure 4 illustrates a particularly preferred modification of the invention having a curved handle 1, similar to that shown in Figure 1, and a curved upper body portion 2A (also similar to that shown in Figure 1) but combined with an angular lower body portion 2B (similar to that shown in Figure 2), and with an angular point 3. This particular combination is unique and especially valuable, because it combines the smooth curved handle 1, which is particularly adapted for using the nail file in a position perpendicular to the thumb of the hand holding the file, with a slightly curved upper body abrasive portion of the file which is desirable for rounding the sides of the nails and also, if desired, the tip of the nails, while also providing an angular abrasive lower body portion of the file adapted both for shaping pointed finger nails and also for using the nail file hurriedly without danger of the file slipping off the finger nail.

Figure 5 illustrates a nail file with a handle 1 and point 3 which are concave in one direction and a body 2 which is concave in the opposite direction.

Figure 6 shows one plan view modification suitable for any of the files illustrated in Figures 1 to 5.

In the appended claims the expression "concave transverse section" is not used in its narrow sense of meaning only a curved hollow line as in Fig. 1, but in its generic sense to also include an angular hollow line as in Fig. 2.

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It will be obvious to those skilled in the art that still further embodiments and modifications of the invention can be made without departing from the scope and spirit of the invention. It is not intended that the invention be limited to the specific modifications which have been described merely for the purpose of illustration, but only by the appended claims in which it is intended to claim all novelty inherent in the invention as well as all modifications coming within the scope and spirit of the invention.

I claim:

A one-piece nail file made of thin strip material having an angular transverse section throughout its entire length, having a substantially smooth handle and integral therewith a body portion at least the inner side of which is abrasive, the angular transverse section having a width/depth ratio between about 5:1 and about 2:1.

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The following references are of record in the file of this patent:

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