

[54] NAIL FILE

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[57] **ABSTRACT**

The present invention relates to a nail file comprising a pair of file members backed with perforated plastic layers respectively and an adhesive mixed with a hardener, to connect the said pair of file members, wherein the said nail file has upper and lower filing surfaces on both sides thereof and the said adhesive becomes itself a core between the entire rear surfaces of said pair of file members. The nail file according to the present invention has the advantages that by proper selection of the kind and quantity of the hardener and by proper adjustment of the width of the core the product can have desired rigidity, flexibility and resiliency to match finger nails of a variety of configurations.

4 Claims, 1 Drawing Figure

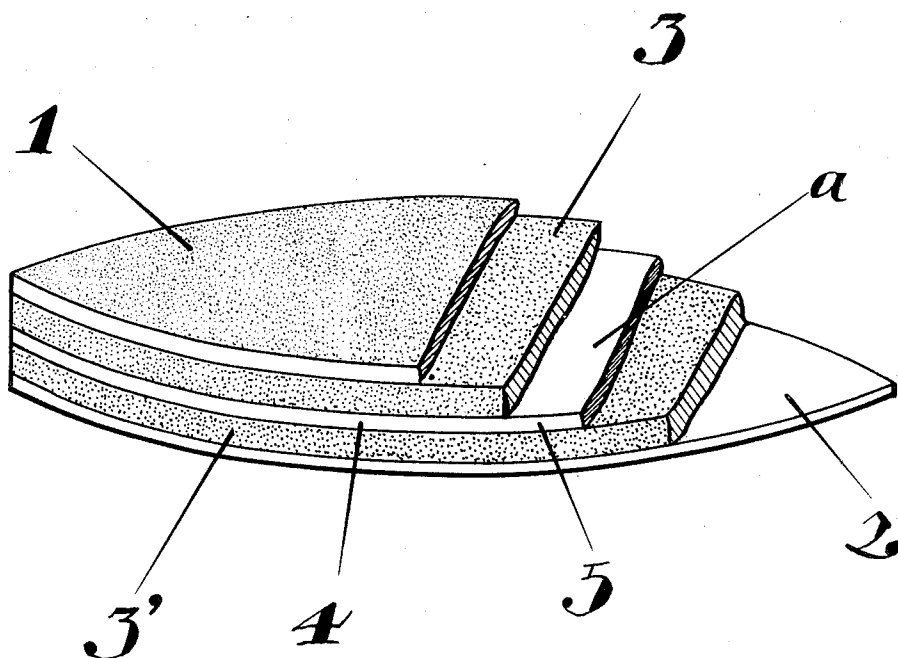
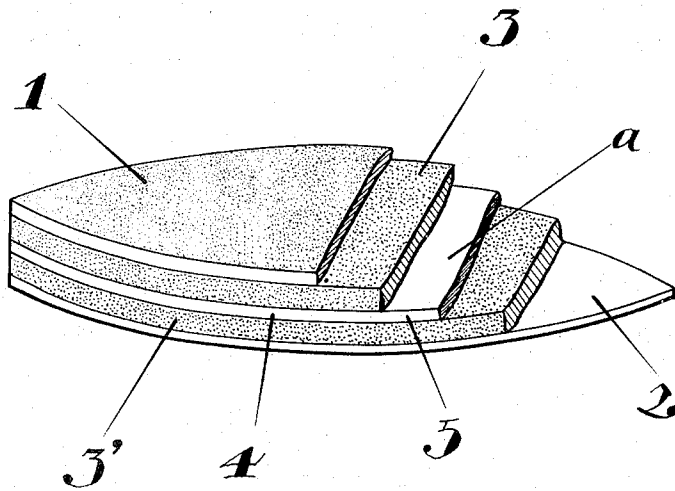


Fig. 1



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NAIL FILE

The present invention relates to a nail file, and more particularly to a nail file provided with upper and lower filing surfaces on both sides thereof, without a separate core other than an adhesive.

The present invention comprises a pair of file members made of emery paper or cloth backed with resilient perforated plastic layers respectively and a specific adhesive to connect said layers together to form a nail file having upper and lower filing surfaces. The adhesive is mixed with hardening materials such as talc, lime powder, flocks and asbestos, etc. and is applied in such a manner that a core of desired width is formed between the upper and lower file members backed with perforated plastic layers.

Heretofore, in the case of the conventional nail file of this kind a separate core member was used between the rear surfaces of both upper and lower file members to be stuck thereto, with a suitable adhesive. Accordingly, the finished product lacked flexibility or rigidity, as the case may be, due to the nature and kind of the core member used.

On the other hand, the nail file of the present invention is characterized in that since a specific adhesive is used as a substitute for the core member as aforesaid it is possible to obtain a finished nail file of desired flexibility and rigidity by selecting the proper kind and amount of the hardener to be mixed and kneaded with the adhesive and by adjusting the width of the core to be formed by the adhesive, and to give the nail file a longer life.

Accordingly, an object of the present invention is to provide a nail file comprising a pair of file members made of emery paper or cloth backed with resilient perforated plastic layers, and a specific adhesive without using a core member separately.

Another object of the present invention is to provide a nail file of desired flexibility and rigidity which is well matched to fingernails of a variety of configurations.

Still another object of the present invention is to provide a nail file which is capable of being manufactured in a single process of sticking the file members without using a specific core.

The present invention will now be explained in detail with reference to the accompanying drawing in which FIG. 1 shows a perspective view of a nail file according to the present invention partly in section.

Referring to FIG. 1, a pair of file members 1 and 2 comprise a sheet of rough emery paper or cloth, of lower count and a sheet of fine emery paper or cloth, of higher count respectively, backed with resilient per-

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forated plastic layers 3 and 3' such as polyurethane, polystyrene or polyvinyl chloride. The file members 1 and 2 are stuck together by an adhesive 5 with their rear surfaces facing opposite to each other thereby forming a finished nail file having both upper and lower filing surfaces. The adhesive 5 contains a hardener 4 comprising any mixture of talc, lime powder, alumina, mica, diatomaceous earth, glass powder, flocks and asbestos well mixed and kneaded to become suitable for the adhesion of plastic materials selected from polyester, neoprene or vinyl. In sticking together the said file members 1 and 2 the adhesive may be so used that it becomes itself a core of desired width having sufficient resiliency, flexibility and rigidity between the entire rear surfaces of the said both file members, that is, the plastic layers 3 and 3'.

Thus, the nail file of the present invention has, as explained above, various advantages that by proper selection of the kind and quantity of the hardener as well as by proper adjustment of the width of the core to be formed by the adhesive a product of desired rigidity and flexibility can be obtained, that since the formation of the core and adhesion of the plastic layers are made in a single step the manufacturing process becomes quite simple, and further that due to the rigidity and flexibility of the core and the resiliency of the plastic layers the product can be well matched to a variety of configurations of finger nails whereby nail polishing can be done quite efficiently.

What I claim is:

1. A nail file comprising a pair of file members backed with resilient perforated plastic layers respectively and an adhesive mixed and kneaded with a hardener to connect the said pair so that the said nail file has upper and lower filing surfaces on both sides thereof and the said adhesive becomes itself a core between the entire rear surfaces of said pair of file members.

2. A nail file as claimed in claim 1 wherein each of the pair of file members is made of a sheet of emery paper.

3. A nail file as claimed in claim 1 wherein each of the pair of file members is made of a sheet of emery cloth.

4. A nail file as claimed in claim 1 wherein the adhesive is well mixed and kneaded with a hardener comprising any mixture of talc, lime powder, alumina, mica, diatomaceous earth, glass powder, flocks and asbestos.

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