United States Patent [19]

Crosby

[11] **3,855,698**

[45] **Dec. 24, 1974**

[54] **ECOLOGY NAIL-CLIP RESERVOIR DEVICE**

[76] Inventor: **Kenneth R. Crosby,** 37-45 W. 20th St., New York, N.Y.

[22] Filed: **Apr. 19, 1974**

[21] Appl. No.: **462,253**

[52] **U.S. Cl.** **30/124,** 30/28

[51] **Int. Cl.** **A45d 29/02**

[58] **Field of Search** 30/28, 124, 125

[56] **References Cited**

UNITED STATES PATENTS

2,837,821	6/1958	David	30/124
2,970,376	2/1961	Kuo	30/28
2,995,820	8/1961	Pocoski	30/28
3,188,737	6/1965	Chase	30/124

Primary Examiner—Al Lawrence Smith
Assistant Examiner—J. C. Peters

[57] **ABSTRACT**

An enclosed nail clip and enclosing case operable in the closed state of the case having a case reservoir structure for the clipped nails, the clipping lever being enclosed with an exposed lever-end accessible for applying finger pressure thereto to close the clipper blades, and the casing structure providing a concavely shaped aperture following the opposing blades providing access to finger ends carrying nails to be clipped, the enclosure being openable for emptying collected clippings therefrom.

9 Claims, 7 Drawing Figures

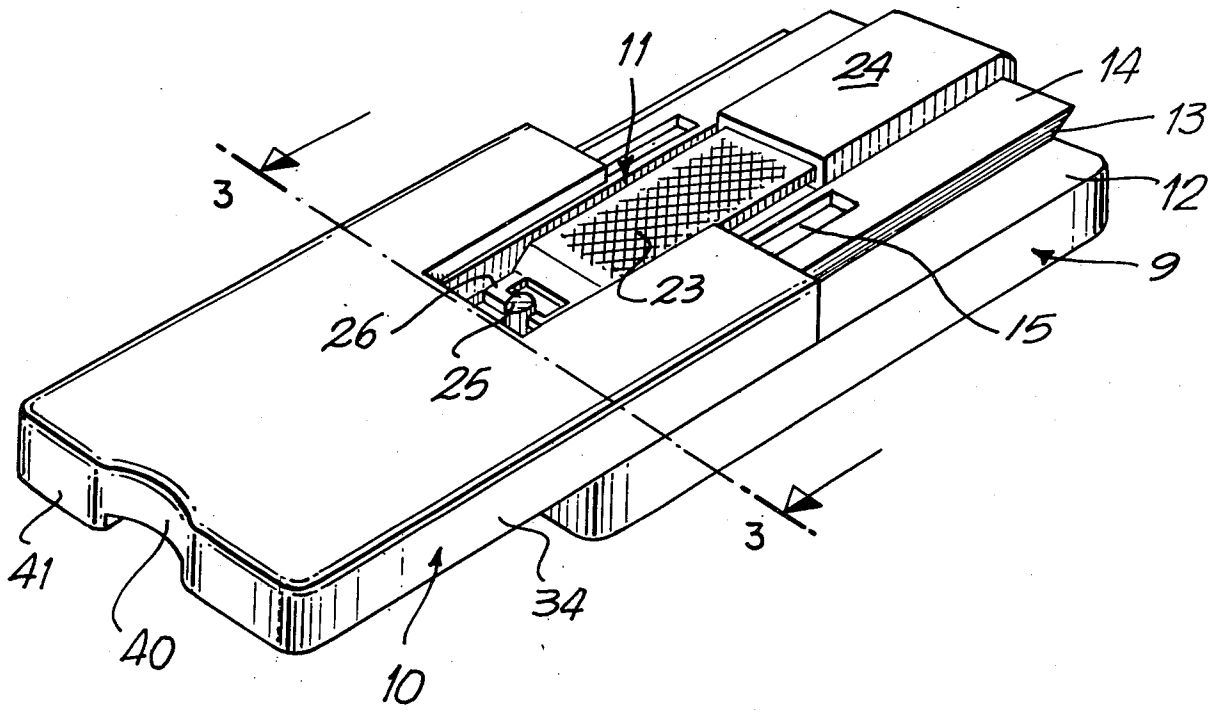


FIG. 1

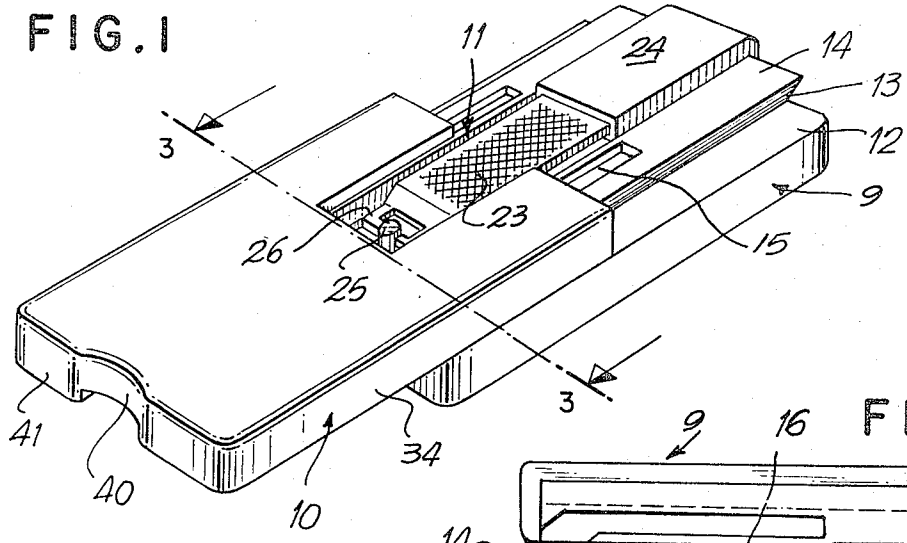


FIG. 5

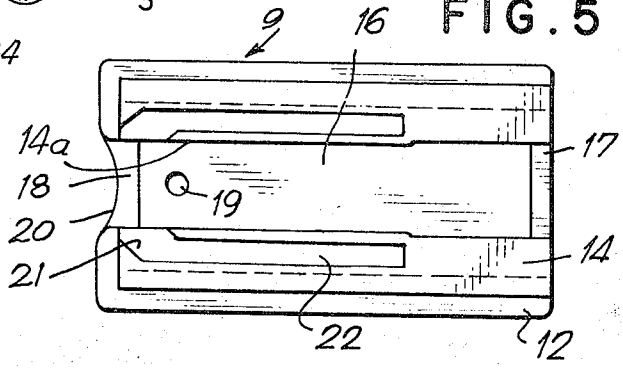


FIG. 2

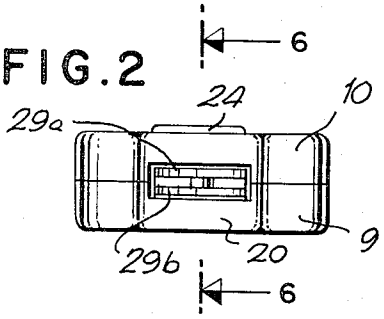


FIG. 6

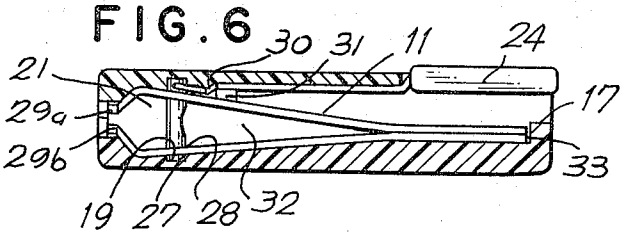
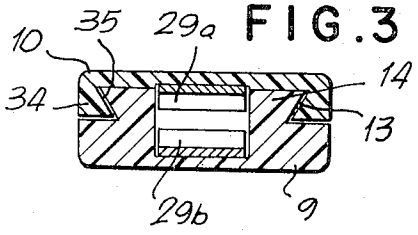


FIG. 3



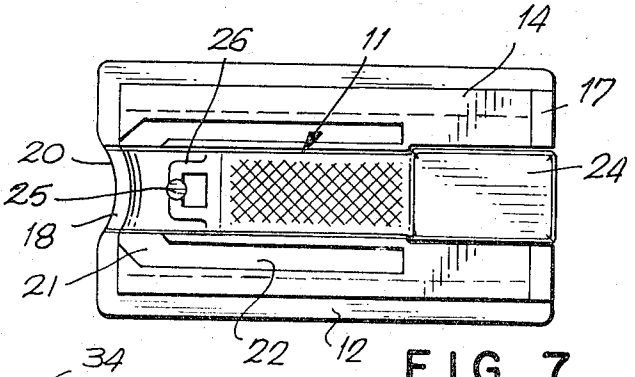


FIG. 7

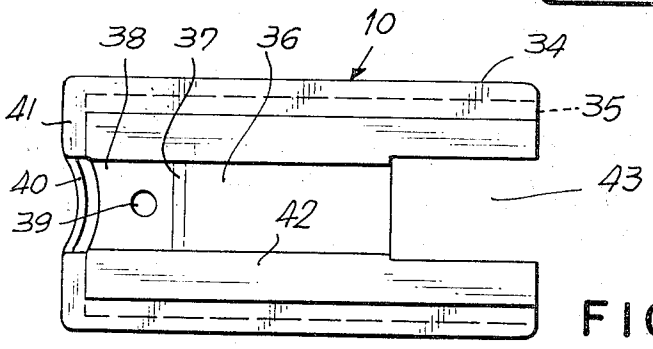


FIG. 4

ECOLOGY NAIL-CLIP RESERVOIR DEVICE

This invention is directed to a finger and/or toe nail clipper.

BACKGROUND OF THE INVENTION

Prior to the present invention, it has been common practice to clip the nails with use of the conventional vise-clipper having the lever handle which when depressed, by fulcum pressure serves to force together the opposing clipper blades, and the clipped nails fall into the chair or onto the carpet or floor or dirty-up other equally clean place where it would normally be desired to avoid such debris, and the vacuum cleaner or carpet cleaner being the usual most effective method or means for cleaning-up the mess after the clipping operation. So, to say the least, such clippers, although most convenient and efficient in neatly clipping nails without undue loss of time, is particularly untidy and therefore a problem from the standpoint of house-keeping as well as a problem or hazard healthwise, finger and toes being usually especially unsanitary. Prior clips have had lever arms that could not be operatively enclosed within a casing, and devoid of enclosing cases with such lever-concealing advantage and devoid of a casing shaped to receive a finger end, and devoid of an enclosing casing with special nail clip reservoir space, and devoid of a separable base bottom for ease in emptying the reservoir.

SUMMARY OF THE INVENTION

An object of the present invention is to overcome one or more of the difficulties, problems, and hazards of the types discussed above.

Another object is to obtain an ecological device for the efficient and effective clipping of nails while maintaining sanitation and order of the environment.

Another object is to obtain a detachable reservoir bottom to a clipper case-clipper combination, for ease of emptying clipped nails.

Another object is to obtain a convenient and portable reservoir clipper for collecting and storing and periodic disposing of clipped nails, during and after the clipping of the nails.

Another object is to obtain a enclosed clip of which the case end is shaped to receive the finger end during clipping.

Another object is to obtain a clipper avoiding above problems and difficulties and achieving the above-noted other objects, while being of simple structure and manufacture and cost of raw materials and convenient to handle relative to the clipping of finger nails and toe nails.

Another object is to embody a nail clip lever arm shaped to effectively clip while being nevertheless easily enclosed while remaining operative to clip.

Other objects become apparent from the preceeding and following disclosure.

One or more objects of the present invention are obtained by the invention as defined herein.

Broadly the invention includes an enclosing nail clipper vessel structure encasing a fingernail clip with an enclosed concealed clip lever arm remaining operative and holding the clip in a sturdy manner which avoid the shifting of the clip within the casing which shifting could cause faulty clipping or accidents in the cutting of a nail if the clip slipped during the pressing of the clipper lever, and providing access openings for each of the handle pressure-end of the lever and the clipping blades, while providing a reservoir space into which falls the clipped nails. For making possible a more sturdy and steady pressing downwardly of the end of the clipper lever arm, there is a handle mounted on the distal end of the lever of preferably a flat nature and which handle extends upwardly through the access opening thereby making the pressing of the lever more convenient and more accessible to major pressure from a pressing finger. Also, preferably the clip-blade end of the enclosing end of the casing includes a concave recess for receiving the finger end from which the nail is being clipped. The reservoir structure defines a space communicating with the recess receiving the blade-end of the clip and the casing is of a sufficiently small size and flattened shape as to make its carrying and handling easy and convenient in the hands, pockets, and/or ladies pocket book. The top is slidably detachable from the reservoir-containing bottom for easy emptying of the clipped nails.

THE FIGURES

FIG. **1** is a front-top oblique perspective view of a preferred clipper device of the present invention, in a partially opened state.

FIG. **2** is an elevation plan front-end view of the clipper of FIG. **1**, in a closed state.

FIG. **3** illustrates an cross-sectional view taken along lines **3—3** of FIG. **1**, showing the encased clipper.

FIG. **4** is an elevation plan view of the bottom face of the top to the enclosing case.

FIG. **5** illustrates a view comparable to that of FIG. **3**, but is a view of the upper face of the bottom to the enclosing case.

FIG. **6** illustrates a side cross-sectional view along lines **6—6** of FIG. **2**.

FIG. **7** is the same as FIG. **5**, except with the clip seated in the lower casing member.

DETAILED DESCRIPTION OF THE INVENTION

Describing the illustrated preferred embodiment in greater detail, FIGS. **1** and **2** and **3** and **6** show different views of the same preferred embodiment. FIGS. **4**, **5** and **7** disclose the appearance of separate parts of the case and nail-clipper.

There are slidably detachable upper member **10** and lower member **9** enclosing a clipper **11** a depressable handle **2** depressable downwardly in cut-out slot **43.** The concave recesses **16** and **36** and **38** and hole **38** flushly receive the upper and lower blades **29***a* and **29***b* snugly and flushly within the space **32.** The casing upper half shell **10** and lower half shell **9** are slidably mateable suitably by flanges **34** and **14** by **34** in space **35,** such as indicated in the cross-section of FIG. **3.** Face **42** is flat and slides on the flat face of flange **14.** FIG. **4** illustrating an elevation plan view discloses concave cutout structure **40,** and the top member step **37** shaped to fit the lever arm corresponding step as seen in FIG. **6.** FIG. **5** similarly discloses bottom member concave structure **20** in top elevation view, together with the communicating slot recess **16** and reservoir **22** which its opening **21** communicating with recess **16.** Ridge **17** backs-up the clipper end, as seen in both FIG. **5** and **6.** Flat face **12** slides against the lower surface of flange **34.**

The lever **23** carries the fulcrum projection **31.** It should be noted that it is the stepped shape of the lever

23 together with the projection 31 being spaced distantly from the post 25 which provides the essential leverage portion 26 (which includes step 30) enabling. The lever step 30 to fit against the top member step 37.

It is within the scope of the invention to make such variations and modifications as would be apparent to a person of ordinary skill in this art, including the substitution of equivalent part and/or elements, and variations thereof.

I claim:

1. A nail clip device comprising in combination: an enclosure means including a bottom member defining front and rear and opposite lateral portions and a bottom section interconnecting the portions and defining a recess in the nature of a slot extending from the front to rear portions in an upper face of the bottom member and adjacent at least one of the side portions there being defined additional recess space communicating with the recess at a front portion, the additional recess space being defined also in the upper face of the bottom member, and there being a concave recess in the front portion in a front side wall therein defined in communication with a forward end of the slot recess, and the bottom member in the base of the slot recess forward end being shaped to stably receive a bottom face of a nail clipper means; a nail clipper means including upper and lower biased-apart clipping blades and a lever post mounted in the lower blade with pivotal joining structure defined in the upper portion of the lever post, and a lever arm defining steps therein to define proximal and distal lever portions spaced apart by a step portion, there being in juxtaposition to the step portion a projection extending downwardly from the distal lever portion making contact with an upper face of said upper upper blade, a terminal end of said distal lever portion being pivotably attaching to and being attached to the pivotal joining structure such that downward pressure on a terminal end of the distal lever portion is closable together of the upper and lower blades; and an upper top member shaped to fit on top of the bottom member and to enclose therebeneath said nail clipper means and said slot recess and said additional recess and defining a through space at an end mounted over the terminal end of said distal lever portion for exterior access to press downwardly the terminal end of said distal lever portion.

2. A nail clip device of claim 1, in which a lower face of said upper top member includes an elongated recess of stepped shape extending from a forward portion thereof rearwardly to said through space such that said stepped lever arm is seatable flushly therein.

3. A nail clip device of claim 2, in which each of opposite side portions of each of the bottom member and the upper top member jointly define structure for detachably locking together in a closed state the bottom member and the upper top member.

4. A nail clip device of claim 3, in which the jointly defined structure for detachably locking together the bottom member and the top member comprises an outwardly-extending flange structure on an edge of one member and an inwardly-extending flange structure on a matching edge of the other member for each of opposite side portions, with the respective flanges running from front to rear such that the top member is slidably securably mountable on the bottom member.

5. A nail clip device of claim 4, in which each of the top member and the bottom member defines a substantially top and bottom face respectively about parallel to one-another.

6. A nail clip device of claim 5, including a series of at least two steps in the lever arm, the second step being along the distal lever portion positioned for elevating the terminal end of the distal lever portion upwardly through said through space of said top member.

7. A nail clip device of claim 6, including a handle mounted on said terminal end of the distal lever portion.

8. A nail clip device of claim 1, including a series of at least two steps in the lever arm, the second step being along the distal lever portion positioned for elevating the terminal end of the distal lever portion upwardly through said through space of said top member.

9. A nail clip device of claim 8, including a handle mounted on said terminal end of the distal lever portion.

* * * * *