This invention relates to nail-cleaning appliances, and has for its object to provide an improved construction of nail-cleaning appliance especially designed for quickly removing extraneous matter from beneath the tips of the finger nails, each nail being separately treated.

A nail-cleaning appliance according to our invention comprises a stock having an end which forms an external transverse rest for the pad of the finger, and a series of flexible projections, for example a series of tufts of short bristles or a series of chisel-headed rubber studs, disposed in a curve on or adjacent to the rim of said end, said projections being inwardly inclined and forming an upstanding boundary to said external transverse rest so that, when the pad of the finger tip is placed across said end so as to rest thereon or in a concavity therein, the flexible projections enter beneath the tip of the finger nail and, by partially revolving the stock to and fro while it rests against the pad of the finger tip, any extraneous matter beneath the nail tip is readily removed. The support for the pad of the finger tip may comprise a disc mounted so as to be free to revolve in the end of the stock. The stock may be provided with a polishing pad.

The accompanying drawings illustrate nail-cleaning appliances in accordance with our invention. In the drawings, Figure 1 is a top plan, Figure 2 a vertical section and Figure 3 a bottom plan of one example; Figure 4 is a top plan and Figure 5 an elevation of another example; and Figures 6, 7 and 8 and Figures 9, 10 and 11 are similar views to Figs. 1, 2 and 3 respectively illustrating further examples. All the figures are drawn to an enlarged scale for clearness, being about twice actual size.

Referring to the drawings, in the example illustrated in Figs. 1, 2 and 3, the appliance comprises a stock a in the form of a hollow truncated cone similar in size to a sewing thimble. Short stiff bristles b, c are firmly attached to the rim of the opening at each end of the stock so as to project beyond said end in a slightly inwardly-inclined direction as shown. The bristles extend around about half of the circular rim of the opening at each end of the stock, and are inserted in sockets in the rim and secured therein by wires d and adhesively or otherwise anchored. A ring such as e may be inserted into the opening in the stock to hide the ends of the wires as shown at the upper end of the stock.

The stock may be of any convenient length, and may be composed of stiff rubber, celluloid, composition, metal or other suitable material. The bristles b and c at the two ends of the stock provide brushes of different sizes very suitable for cleaning different sized finger nails.

In the example illustrated in Figs. 4 and 5, the stock a is solid and bristles b are provided at one end. This end is formed with a concavity f of sufficient depth to receive the pad of the finger tip when it is placed across the stock as indicated in dot-and-dash lines at g in Fig. 4. The ends of the wires d securing the bristles b are received in a groove h around the stock, and the bristles are inwardly inclined towards the centre of the concavity f.

The example illustrated in Figs. 6, 7 and 8 is similar in form to that illustrated in Figs. 4 and 5 except that the support for the pad of the finger comprises a disc j provided, if desired, with a conical boss k which serves to steady the finger tip when using the appliance. The disc j is free to revolve in the recess f in the end of the stock, and is prevented from leaving said recess by pins m engaging a groove n around the disc. The bristles b are inwardly inclined, and ring o is inserted in the groove h to hide the wires d which secure the bristles. p is a soft pad of washleather or other suitable material for polishing the nails, said pad being fitted into a recess in the end of the stock remote from the bristles b.

In the example illustrated in Figs. 9, 10 and 11, the stock a is substantially cylindrical and has a conical bore a'. Inwardly-inclined chisel-headed studs b' of stiff rubber or other suitable material are substituted for the short stiff bristles b, and the concavity f is eccentric of the end of the stock. Polishing pads
$p^1$ and $p^2$ are provided externally and internally of the stock.

In use, the finger tip is laid across the end of the stock $a$ so that its pad rests thereon or in the concavity $f$ or $f'$ as indicated in dot-and-dash lines at $g$ in Figs. 4 and 10, and the stock $a$ is partially rotated to and fro about the pad of the finger. In the construction illustrated in Figs. 6, 7 and 8, the stock $a$ revolves about the disc $f$ which supports the pad of the finger tip.

The curvature of the series of tufts $b$ or $c$ forming the brush or of the studs $b'$ is approximately the same as that of the tip of the nail, any divergence being compensated for by the pliability of the tufts or studs. Moreover, the shape and position of said tufts or studs are such that, when the finger is applied as indicated in Figs. 4 and 10, the pad of its tip centres itself on the end of the stock, and the tufts or studs automatically find their way under the tip of the nail. The size of the appliance permits of it being carried in a vanity case or in the pocket ready for use at any time.

Our improved nail-cleaning appliance is suitable for use dry or with water, and either with or without soap or other cleaning or polishing material. The polishing pads $p^1, p^2$, $p^3$ are intended for application to the face of the nail for polishing it in well-known manner.

What we claim and desire to secure by Letters Patent is—

1. A nail-cleaning appliance comprising a stock having an end which forms an external transverse rest for the pad of the finger, and a series of flexible projections disposed in a curve adjacent to the rim of said end, said projections being inwardly-inclined and forming an upstanding boundary to said external transverse rest so that, when the pad of the finger tip is placed on said rest, said flexible projections enter beneath the tip of the finger nail and, by partially revolving the stock to and fro while it rests against said pad, extraneous matter beneath the finger nail is readily removed.

2. A nail-cleaning appliance comprising a stock having an end which forms an external transverse rest for the pad of the finger, and a series of tufts of short bristles disposed in a curve adjacent to the rim of said end, and a shallow concavity in said end to receive the pad of the finger tip, said tufts being inwardly-inclined and forming an upstanding boundary to said concavity so that, when the pad of the finger tip is placed across said end to rest in said concavity, said bristles enter beneath the tip of the finger nail and, by partially revolving the stock to and fro while it rests against said pad, extraneous matter beneath the finger nail is readily removed.

3. A nail-cleaning appliance comprising a stock having a series of tufts of short bristles disposed in a curve at one end thereof adjacent to the rim of said stock, and a concavity in said end to receive the pad of the finger tip, and a disc mounted so as to be free to revolve in said concavity, said tufts being inwardly-inclined so that, when the pad of the finger tip is placed across said end to rest in said concavity, said bristles enter beneath the tip of the finger nail and, by partially revolving the stock to and fro while it rests against said pad, extraneous matter beneath the finger nail is readily removed.

4. A nail-cleaning appliance comprising a stock having a series of tufts of short bristles disposed in a curve at one end thereof adjacent to the rim of said stock, and a concavity in said end to receive the pad of the finger tip, and a disc mounted so as to be free to revolve in said concavity, said tufts being inwardly-inclined so that, when the pad of the finger tip is placed across said end to rest in said concavity, said bristles enter beneath the tip of the finger nail and, by partially revolving the stock to and fro while it rests against said pad, extraneous matter beneath the finger nail is readily removed, said stock being also provided with a polishing pad.

In testimony whereof, we affix our signatures.

WILFRID INGRAM WRIGHTSON.
VICTORIA WRIGHTSON.