A Simplified Method of Cleaning Used Bands

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One task in an orthodontic practice that is particularly laborious and irksome unless accomplished by proper methods is that of cleaning appliances after they have been used in mouths. Still more important is the fact that without proper methods the appliances are often not thoroughly cleaned. The writer wishes to submit a method which has proved effective and has saved many hours of tedious work in his practice.

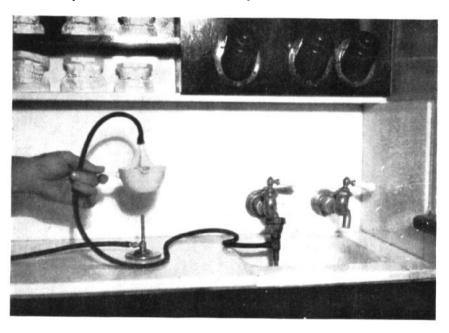


Fig. 1. Illustration of the apparatus described in the text.

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Procedure

All the bands and arches belonging to one patient are united by stringing the bands on the arches. A tag made from a piece of band material, having a number assigned to that patient, is attached to them to identify the appliances. The ends of the arches are then joined together with a stainless steel ligature. If it is not desired that the arches be cleaned, string the bands on a stainless steel ligature. As many appliances can be processed at one time as desired, the limitation being only the capacity of the equipment used. Place the bands in a porcelain crucible, and over it invert a glass funnel of proper size to act as a hood, for the purpose of removing and disposing of noxious fumes. Connect the funnel by means of a rubber hose to an ejector valve, which may be obtained at a chemists' supply store. This is connected to the cold water faucet in your sink, (Fig. 1). The vacuum

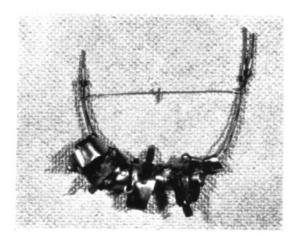


Fig. 2. Appliance cleaned and boiled as described in the text.

thus created draws the fumes from the dish into the stream of water where they are cooled, partly absorbed, and washed away. Cover the bands with water, add a generous amount of lye and boil thoroughly. Drain off and cover the bands with pure hydrochloric acid and boil again. This will cleanse them perfectly, (Fig. 2).

To avoid liberating acid fumes when the hot acid is being poured out of the dish, first carry the dish with the cover still in place to the sink, and let water run down the sides of the funnel into the dish. This will cool and dilute the acid to the degree that it can be safely poured off without ill effect. For bands only, or if the arches may be distorted, a test tube with vented rubber cork connected in the same way may be used.

The success of this process is probably due to the fact that the acidresisting fats, mucin and other organic matter which accumulate from use in the mouth are saponified, or otherwise broken down into inorganic substances which are no longer resistant to the action of HCl.

The action upon the cement adhering to the bands is not known to the author. He does, however, know that the cement disappears in the process; also that the installation of this method of band-cleaning has done much to improve the disposition of his assistant, and has saved many of her working hours for other duties.

Don'ts

Don't flame the bands before processing. It creates a carbon residue which is resistant to chemical action.

Don't use inferior or too weak acid, or use it more than once.

Don't expect the best results if precious and base metals are processed at the same time.

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