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# A SIMPLE METHOD OF ENHANCING ASPECTS OF OBSIDIAN TOOLS FOR MACRO-PHOTOGRAPHY

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In the photography of obsidian tools at low magnification, problems can occur from the reflection and flaring of light from their conchoidally fractured surfaces. This can often obscure important details. A method which resolves this problem was discovered in a section of Treatise on Invertebrate Paleontology, in which a volume by Bassler contained a section on the photography of molluscs (1953:G20).

The method consists of employing the simple apparatus shown in Figure 1. Two test tubes are partially filled with concentrated hydrochloric acid and concentrated ammonium hydroxide solution respectively. Air is bubbled through these by blowing gently into the connected inlet pipes. Vapours from the two solutions are expelled together at the two small outlet pipes whose ends have been drawn out into fine jets. Ammonium chloride sublimate is formed and expelled by these vapours. The obsidian artefact is held at an appropriate distance (usually about 10 cm) from the jets and a thin matt coating will begin to form on the surface.

With a little practice the density of the sublimate coating can be carefully controlled, with a variation in colour from a very thin light blue (usually satisfactory) to a thicker matt ivory white. The coating eliminates any flaring of light even when a flash is used (for example see Gillies, 1981:56). The coating is soluble, and can be washed off under running water. Consideration should first be given to the presence of organic residues on the used edges of obsidian tools, as these could be contaminated by the process. After use, the apparatus should be cleaned and dismantled so as to avoid slow formation of blockages in the inlet/outlet pipes.

The apparatus devised by Bassler for coating molluscs so they may be photographed has thus also been found to be a simple and inexpensive means of enhancing the photographic perspective of glossy black obsidian tools. Problems of lighting and flare are thereby eliminated.

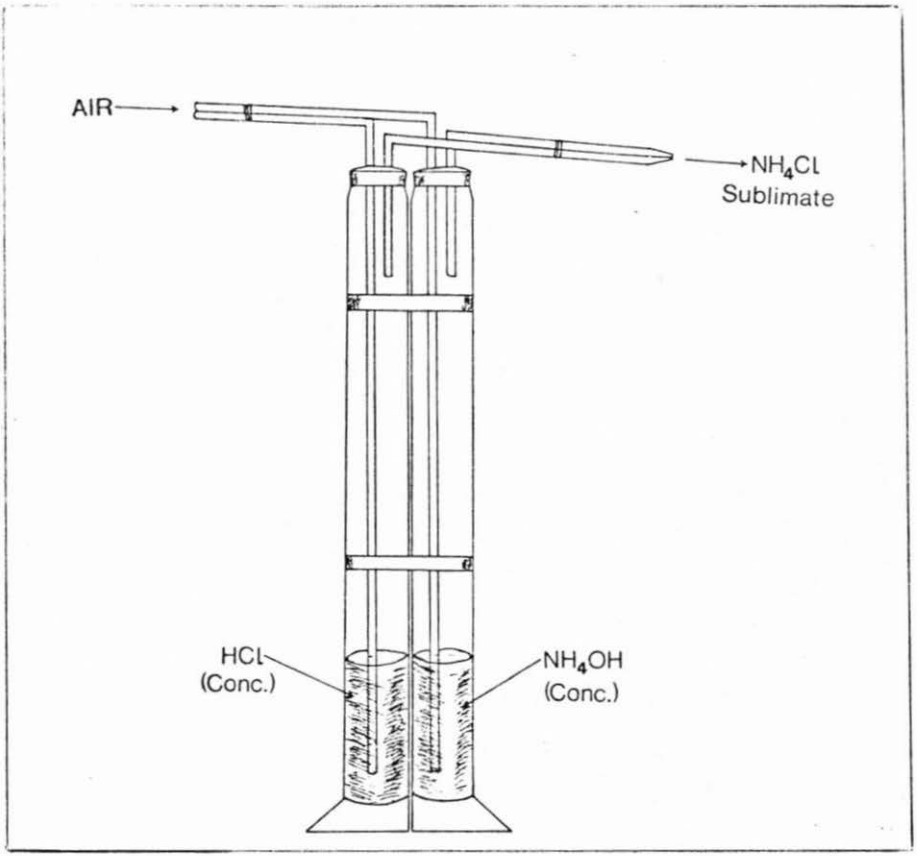


FIGURE 1. Apparatus for coating obsidian tools so as to enhance their photographic perspective (from Bassler, 1953:G20).

References

Bassler, R.S. 1953 Bryozoa. Part G, in Treatise on Invertebrate Paleontology, Moore, R.C. (Ed.). University of Kansas Press and Geological Society of America.

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