

Identification of Flints by Use of the Binocular Microscope¹

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(Abstract)

In certain favorable localities, primitive man worked flints extensively and used the material for the making of arrowheads and other artifacts. Such material is often found widely distributed in the old village sites of the surrounding regions. Thus, it is important to the archeologist to be able to identify it as, by so doing, he can often determine the distribution of the ancient people and locate their trade routes.

As flints differ considerably in their physical characteristics and accessory minerals, it is possible, by using a binocular microscope, to identify rapidly and accurately the flints from any particular locality. This has not been done generally by archeologists, up to the present time, because of their inability to obtain the necessary training in petrology.

In making such a study, it is necessary to work out a special list of characteristics to be used in the identification. So far, the 20 following have been selected: color; luster; feel; openings (shape, depth, color of linings, etc.); banding (of colors, openings, etc.); quartz crystal masses (size, openings in, surrounding bands); fissures (shape of, filling arrangement); faulting (amount, arrangement, wall appearance); mottling (color, arrangement, and size of spots); chipping (long or short, curved); effervescence; transparency; penetration (apparent depth); fossils (spicules, spines, crinoid stems, etc.); inclusions (shape, color, etc.); flow lines (arrangement, color, etc.); odor; patina (color, depth, etc.); weathering (color, depth feel, etc.); fracture (straight, wavy, concentric, etc.).
