



# Museum of Stone Tools

## Eoliths

Eoliths (literally ‘dawn stones’) were once thought to be the earliest stone tools. They are now known to be examples of natural fracture—not deliberately fashioned tools—and, as such, are rarely a topic of modern archaeological research. However, in the late 19th and early 20th centuries, eoliths were central to the developing field of stone artefact analysis. The 30-year controversy over whether they were natural or cultural in origin was exceptionally heated—a ‘raging vortex’ (Sollas 1911)—in certain quarters, particularly in Britain.



*Eoliths of various types.*

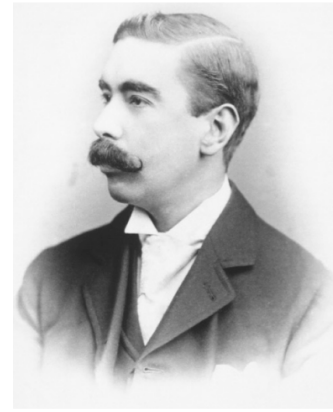
For instance, one adherent to eoliths, discussing an eolith skeptic in a 1913 letter to a colleague, stated

*The . . . one [eolith] type—the rostro-carinate—is a great argument for the unbeliever. I want to ram and stuff him with that one type (in O’Connor 2003:259).*

This is because eoliths were often collected from flint gravels dating as early as the Miocene, far earlier than obvious human-made tools such as handaxes, so the implications were profound. Eoliths were discovered in association with the fraudulent Piltdown fossils, and, given their respectability at the time, were thought to lend credence to the find (Spencer 1988). Indeed, creationists today insist that eoliths are deliberately-fashioned tools that undermine the science of human evolution because they are found in such old geological deposits.

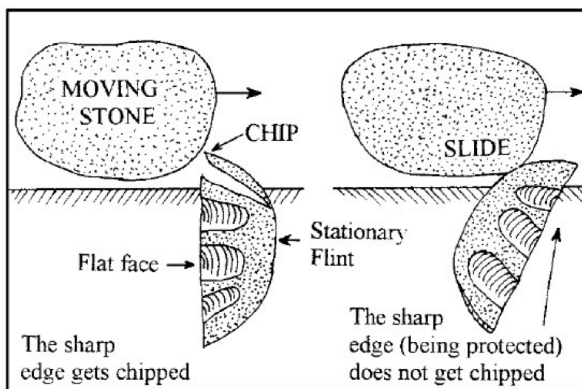
## *Eoliths, continued ...*

The French archaeologist Marcellin Boule (1905) was the first to argue that eoliths are, in fact, examples of natural fracture. Boule's critique was followed soon after by research from Samuel Hazzledine Warren (1905, 1913, 1914). Warren's studies are particularly important in the history of stone tool studies—and archaeology generally—because he was among the first to apply experiments and hypothesis testing to resolve a question about prehistory (Grayson 1986).

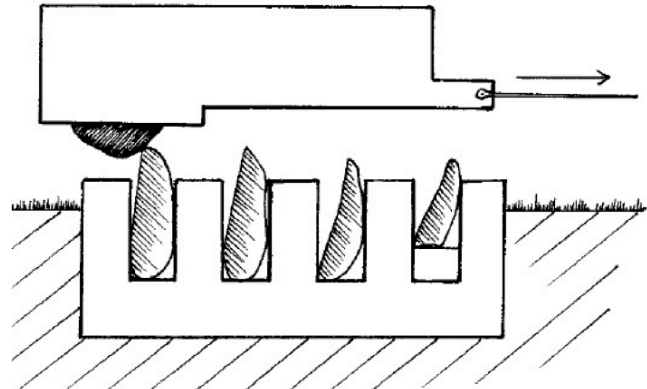


*Samuel Hazzledine Warren.*

Warren also linked the results of his experiments to observations of natural fracture in the field. The design and results of those early experiments clearly identify some of the natural forces that can mimic deliberate stone-flaking.



*Warren's model for how stones might be flaked by natural processes, such as glacial movement or tumbling in a riverbed.*



*Warren's experimental shed, designed to test his ideas about natural fracture.*

## ***Please cite this information sheet as . . .***

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