

“Grindstones – Their Actual and Possible Uses”

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art, science, mechanics, chemistry, and manufacturers

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<http://quarriesandbeyond.org/>

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“The grindstone is of so ancient and common use that for the one the ‘memory of man runneth not to the contrary,’ and for the other its employment is already considered circumscribed. Yet the grindstone is capable of doing a much larger share of the work in the manufactory and machine shop than is usually accorded to it. On the farm its sole use is the sharpening of implements, from the carving knife down to the hoe and plowshare, but in the shop it is employed for grading the surfaces of metals – cast and wrought iron, steel, and some other of the obdurate metals. It is used either dry or wet, revolving swiftly or slowly.

“Stones for grinding purposes are found in England, Scotland, Sweden, France, Nova Scotia, Ohio, and Michigan. Most of those, however, used in the East are from Nova Scotia and Ohio. From a practice of many years we prefer those of Nova Scotia to the Ohio stones because of their more even composition and genial grit. We are told, however, by one of the first saw manufacturers in the country that the artificial stones made by the Ransome process in Trenton, N.J., are superior to either in homogeneousness of texture and good grit. He uses them in preference to the others, although their first cost is somewhat greater.

“One great trouble with the natural stones is the presence of spiculae, of hard, flinty substances standing out toward the circumference and resisting every legitimate effort for their removal. When a stone is found to contain these spikes of flint or obsidian the cheapest way is to discard it – roll it out of the shop, - for so long as it remains it will be a perpetual torment. Chipping off the obdurate spike, by the cold chisel is only a temporary expedient, as it will be sure to show itself again. A stone containing these hard spots is not fit for use in the shop; it will prevent any good work and be a permanent annoyance.

“Much of the time and the cost of tools spent on the dressing, and even finishing of castings and forgings, which are now expended at the vice and by the use of cold chisel and file might be saved by a judicious use of the grindstone. It is singular that this ready means of abrading surfaces of metals and preparing them for after processes should occupy the very lowest place among the tools of a shop. Yet it is the fact that the grindstone, even when used only to give an edge to tools, is the worst kept appliance. The reason, we believe, is that its capabilities and possible uses are unknown. Why it should be so we are at a loss to conjecture. It may be made capable of saving much time now employed by skilled and costly labor and much waste of files and similar expensive tools. Many jobs generally submitted to the slow action of the planer might, by the more rapid action of the grindstone, be fitted for the after processes of the filer’s art, with just as perfect satisfaction in the finished work.”

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For further information and photographs of grindstones, visit some of the following links:

Grindstones in Nova Scotia – Sandstone Quarries

<http://www.novascotia.ca/nsarm/virtual/menmines/quarries.asp>

Earliest history of coal mining and grindstone quarrying at Joggins, Nova Scotia, and its implications for the meaning of the place name “Joggins,” by Howard J. Falcon-Lang, Department of Earth Sciences, Royal Holloway, University of London.

<http://journals.hil.unb.ca/index.php/ag/article/view/11166/11939>

Grindstone Island, New Brunswick

<http://www.lighthousefriends.com/light.asp?ID=1145>

Amos Peck Seaman “The Grindstone King,” Nova Scotia (including a tombstone made from a grindstone)

<http://ns1763.ca/cumberco/seamanmon.html>

Grindstones produced in Berea, Ohio, on Wikipedia

http://en.wikipedia.org/wiki/Berea,_Ohio

How Grindstones are Made (Berea, Ohio), on the Lost Art Press Blog

<http://blog.lostartpress.com/2013/06/28/how-grindstones-are-made/>

Grindstones, on Ohio History Central

<http://www.ohiohistorycentral.org/w/Grindstones>

Michigan’s Grindstone City as Grindstone Capital of the World, on Midwest Guest

<http://www.midwestguest.com/2011/03/michigans-grindstone-city-as-grindstone-capital-of-the-world.html>

Grindstone City History & Grindstone Quarry, presented by Randall Schaetzl

<http://web2.geo.msu.edu/geogmich/Grindstones.htm>

Peak District National Park Photo: Grindstones everywhere, England, on Trip Advisor

http://www.tripadvisor.com/LocationPhotoDirectLink-g186354-i49885465-Peak_District_National_Park_England.html

Grindstone, on Wikipedia

<http://en.wikipedia.org/wiki/Grindstone>