

Matthew B. Crawford. (2009). *Shop Class as Soulcraft: An Inquiry Into The Value of Work*. 246 pages.

"This book is concerned with the experience of making things and fixing things ..and to consider what is at stake when such experiences recede from our common life ...our increasing manual disengagement." Matt Crawford

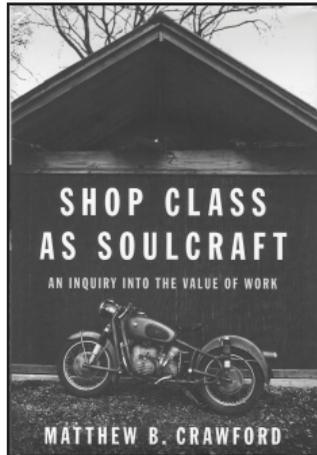
What do you say about a guy with a Ph.D. that knows the difference between cam lobe centerline and overlap? Wowser bowser! A guy who actually reads Tocqueville but knows how to repair a clutch because he owns a motorcycle repair shop? Now we're cooking with gas. Where's his book?

This is not a teacher's insider story: Matt had only a brief high school teaching experience where he admits "I would have loved to set up a Ritalin fogger, for the sake of order." What he brings to the book (besides a sense of humor) is a highly tuned sense for how people interact with the man-made world and how that affects their view of their place in the world.

Crawford likes to minimize the impact of his extensive college education, but I bet that's where he learned about "metacognition," that is, the act of "stepping back and thinking about your own thinking." Here Crawford absolutely shines, and the clarity with which he interprets thinking is what provides the stable ground to explore all the important questions surrounding the value of work, shop classes and the material world.

Chapter headings provide a sneak preview of his approach: The Separation of Thinking from Doing, To Be Master of One's Own Stuff, The Education of a Gearhead, The Contradictions of the Cubicle, Thinking as Doing. I especially liked his discussion of the importance of failure, the often unforgiving nature of the mechanical world when incorrectly approached, and how schools strive to "edit it out of the educational process." The truth is, from oil wells in the ocean to table saws in the shop, things can go horribly wrong in a hurry.

What sells this book is Matt's ability to offer something for both the person who works with their hands and those who don't. For those who don't, it is a convincing argument to start. For those who do, there is a really neat pencilled drawing of how to measure valve spring tension with calipers, a bench vice and a bathroom scale.



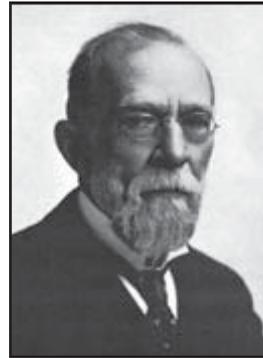
Pioneers of Technology

Calvin M. Woodward
(1837-1915)

"My educational creed I put into six words: *Put the whole boy to school.*" Dr. Calvin Woodward

Dr. Calvin Woodward was one of the earliest and most influential proponents of including shop classes in public schools. As professor of mathematics in 1868 at Washington University, he found his students in applied mechanics had difficulties visualizing the forms of the principles under discussion. He figured it would help to have them work out the forms in wood, but found to his dismay that they didn't know how to use simple tools.

From that experience he was convinced to move training in handcrafts down from college to the secondary school level and in 1879 put his proposal into practice by opening the first Manual Training School in St. Louis. Borrowing from the Russian system, students came to the art of tool use in two phases: 1) basic experiences to learn tool use and techniques and 2) completion of a project using the new skills that would transition them from "instruction" to "construction." The purpose of this education was not to teach a trade, and the project was not expected to have a market value that would fund the program.



The arguments about the purpose and proper place of "manual arts" started at once and have never left. A telling example is in the changing titling of the subject from manual arts to industrial arts to vocational education to technology education to (today) career and technical education.

Some people, such as A.P. Marble, superintendent of public schools in Worcester, Massachusetts, were opposed to teaching shop in schools saying that "there is no information stored up in plow handles and steam engines but there is information stored up in books." Others, like the philosopher and leading voice of pragmatism in American education, John Dewey, thought that shop was important but argued that the project should not be the final goal of the process but the starting point ... that creativity was just as important as technical skills and that the child should learn the "natural wholes" before working with the specific parts.

The disagreement and controversy still continue to this day as people try to get a conceptual grip on the proper place and intersection of working with the hands and working with the brain. Thanks, Woodward, for getting it all going.

Quarter Inch Drive

A quarterly newsletter for friends and graduates of Tom Hull's shop programs

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The late Bud Compton, of Compcop Logging, willed his largest "bullblock" to the Pirate Shop, and student Hanna Britton welded and painted raised letters in tribute. Last catalogued by Skookum Co in 1978, this 900 lb High Lead Block with its manganese steel sheave and chrome nickel shackle and swivel was "built in every way for high speeds, heavy loads and continuous operation." Next to the bullblock are Bud's cheese blocks and loading tongs.

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