3. Thoreau’s Pencil

One defender of the pencil against the encroaching computer is Bill Henderson. Henderson is no countercultural terrorist hermit like Ted Kaczynski. He is a mainstream literary figure, director of the Pushcart Press, which showcases some of the best American contemporary short stories, essays and poems. Yet Henderson has a problem with technology: he doesn’t like computers. In 1993 Henderson founded the Lead Pencil Club, a place where like-minded people could express their dislike of the new technology and celebrate the good old ways of writing.

Looking for literary precedents to support his anti-computer stand, Henderson applauds the fact that in the very first chapter of *Walden*, Henry David Thoreau
disparaged the information superhighway of his day, a telegraph line connecting Maine to Texas. As Thoreau put it, “Maine and Texas, it may be, have nothing important to communicate” (1849). To top it off, Henderson boasts, Thoreau wrote his anti-technology remarks with a pencil that he made himself (Henderson 1994).

Most people don’t want to smash computers. And they don’t go to the other extreme of putting them on refrigerators. They simply accept computers for what they can do, which is a lot, and grumble or panic when they break down, which is often. Others, like Henderson, wax nostalgic for pencils, or see romance in the quill pen. Not too many people miss writing on clay tablets. Not all the old ways are good ways.

The pencil may be old – the first pencils appeared in Europe in the sixteenth century – but like the computer today and the telegraph in 1849, the pencil is a communication technology. Bill Henderson concedes as much when he adds that Thoreau’s father founded “the first quality pencil [factory] in America.”

Samuel F. B. Morse, the developer of the telegraph, was lucky that Thoreau was no Ted Kaczynski. The only letter bombs Thoreau sent from his cabin on Walden Pond were literary ones. Kaczynski built his cabin in Montana to get as far away from neighbors as possible. But Thoreau’s Walden getaway was just a stone’s throw from his home in Concord, and he left his cabin frequently to dine with the Emersons nearby. Nor was Thoreau the complete Luddite that Bill Henderson would have us believe. He was, instead, an engineer, and although Thoreau went to the woods to get back to the simple life, while he was there he behaved like an engineer as well as a philosopher, surveying, mapping, and sounding Walden Pond by day, exposing human folly and speculating on the meaning of life at night.
Moreover, Thoreau didn’t make pencils because he considered them simpler than telegraphs, or because he was old-fashioned. Rather, Thoreau designed pencils for a living: when he wasn’t vacationing at Walden, pencils were his day job, one he took seriously. Instead of waxing nostalgic about a golden age when pencils consisted of little more than a lump of graphite on a stick, Thoreau sought to improve the wood-cased pencil of his own day by developing a cutting-edge manufacturing technology. And he did so because he needed the money.

In Thoreau’s America, a good pencil was hard to find, and until Thoreau’s father and uncle began making pencils in the New World, the best ones were imported from Europe, where their manufacture was a proprietary secret as closely guarded as any Microsoft computer code. The Thoreau family money came from the earnings of their pencil company, and Henry Thoreau not only supported his trip to the Maine woods and his sojourn at Walden Pond with pencil sales, he himself perfected some of the techniques of pencil-making that made Thoreau pencils profitable best-sellers.

The wood pencil may seem a simple device in contrast to the computer, but although it doesn’t use electricity and has no moving parts, it too is an advanced technology. The common No. 2 pencil represents a subtle complexity dressed in apparent simplicity. According to Henry Petroski (1990), an engineer who has written the definitive history of pencil making, the wood-cased pencil is a paradigm of the engineering process. A pencil builder needs to solve two essential problems: blending graphite and clay so that the “lead” is neither too soft nor too brittle; and getting that lead into the wood case so that it doesn’t break when a writer sharpens the point or presses down on paper to write with it.
As Petroski explains, pencil technologies involve advanced design and manufacturing techniques: powdering the graphite; mixing it with various clays; baking and curing the mixture; extruding it to form the “lead”; and preparing and finishing the wood casings. To do this requires a knowledge of dyes, shellacs, resins, clamps, solvents, paints, woods, rubber, glue, ink, waxes, lacquer, cotton, drying equipment, high-temperature furnaces, abrasives, and mixing (Petroski 1990, 12). These are not simple matters. A pencil enthusiast can’t just go out to the garage workshop – or a cabin in the woods – and make a pencil.

Frank Remington (1957) reports that to produce the modern wood pencil requires forty different materials and 125 different production steps. Remington estimated that it would cost a 1950s do-it-yourselfer more than $50 to craft that pencil. That’s $447.30 in 2008 dollars (http://www.minneapolisfed.org/index.cfm). Not only that, but Thoreau’s pencils weren’t exactly cheap. Pencils were more expensive commodities in the 1840s than they are now, and Thoreau pencils, among the most expensive at the time, went for 75 cents a dozen, or 6.25 cents apiece. That comes to $2 a pop in 2008 dollars. In Thoreau’s day, a single Thoreau No. 2 could go for as much as 25 cents, a price that Ralph Waldo Emerson found high (it’s about $8 today), though he still endorsed his friend’s product. A recent online price check showed Staples selling No. 2 wood pencils for as little as 3.9 cents each, proof, if we need it, that pencils, like computers, get cheaper over time.

**Thoreau and pencil technology**

It is true that Thoreau, who was a philosopher as well as an engineer and businessman, rejected modern improvements like the telegraph as worthless illusions. In *Walden* he
calls them “pretty toys,” merely “improved means to an unimproved end” (Thoreau 1849). But as Petroski points out, Thoreau didn’t have much to say about pencils. He even omitted them from the list of items that he took into the Maine woods, though Emerson remarks that Thoreau never went anywhere without notebook and pencil, so it’s likely that Thoreau carried a pencil on his twelve-day excursion in order to record his thoughts. Despite his own silence on the subject of pencils, Thoreau devoted ten years of his life to improving pencil technology at his family’s pencil factory.

In one of his most famous essays, Emerson argued for self reliance. Thoreau practiced self-reliance not just by building a cabin at Walden Pond, but also by building a better pencil. As Petroski tells it, the pencil industry in the nineteenth century was buffeted by such vagaries as the unpredictable supply of graphite, dwindling cedar forests (cedar proved the best wood for pencil casings), protective tariffs, and, for much of its history, an international consumer preference for British-made pencils. All of this affected John Thoreau and Co., manufacturers of pencils. Until the nineteenth century, the best pencil graphite (called *plumbago,* from the Latin, ‘to act like lead’) came from Borrowdale, in the Cumberland Valley in England. There were other graphite deposits around the world, but no other ore was as pure as Borrowdale’s. Impure graphite crumbled or produced a scratchy line. In the later eighteenth century, the Borrowdale graphite deposits began to run low, and exports were curtailed. After the French Revolution, with his supply of English graphite embargoed, the French pencil-maker Nicholas-Jacques Conté learned to produce a workable writing medium by grinding domestic graphite, mixing it with clay and water, and forcing the mixture into wooden
casings which were then baked to harden the lead (this account of pencil history draws largely on Petroski 1990).

This process allowed the French to produce their own pencils instead of importing them, and it also permitted manufacturers to control the hardness of the lead, which in turn controlled the darkness of the mark made by the pencil. The more clay, the harder the lead, and the lighter and crisper the mark; less clay in the mix produces a softer lead, which in turn gives a darker, grainier line. So successful was Conté’s process that the name Conté became synonymous with pencil, and Conté crayons are still valued by artists. In Nuremberg, Staedtler mixed ground graphite with sulfur. He and rival pencil maker Faber eventually experimented with more effective clay and graphite mixtures, as Conté had, and like Conté, their names are still found on pencils made today.

The superiority of Borrowdale graphite was evident to American consumers, who regularly preferred the English imports that used pieces of pure plumbago to domestic brands, whose low-quality graphite had to be ground and mixed with bayberry wax, glue, or other binders. In 1821 Charles Dunbar discovered a deposit of reasonably good plumbago in Bristol, New Hampshire, and he and his brother-in-law, John Thoreau, went into the pencil business in Concord, Massachusetts. By 1824 Thoreau pencils were winning recognition. Their graphite, while better than most of the local ore, was not as pure as Borrowdale, and since the Conté process was unknown in the United States, American pencils, though cheaper than imports, remained inferior.
Although the original Borrowdale mine closed in 1890, the British art supply company Derwent still makes a high-end line of art pencils using Cumberland Valley graphite. An ad for the pencils reads, “Experience the exquisitely smooth flow of fine graphite from the Cumberland Valley in England. Derwent’s Graphic Pencils are made from the finest quality graphite and purest clays for a smooth line. They are ideal for crisp, detailed illustrations or tone drawings.” Derwent also sells chunks of natural graphite for sketching. [Photograph by the author]

Image 9. Top of a box of John Thoreau & Co. drawing pencils [From the Walter Harding Collection (The Thoreau Society Collections), Courtesy of the Thoreau Society and the Thoreau Institute at Walden Woods.]
Henry Thoreau set about to remedy this deficiency, to put American pencils first in the hearts of American consumers. Thoreau began his research in the Harvard Library, but then, as now, there was little written on pencil manufacture. William Munroe also made pencils in Concord, and Thoreau knew the importance of keeping industrial secrets from the competition. So while he described in minute detail how much he spent to outfit his Walden cabin, Thoreau never revealed what he learned from his reading about pencil-making, or what he figured out through trial and error and his own intuition.

We do know some of the changes Thoreau introduced. He designed a grinder that used puffs of air to separate out the finest graphite powder. He then mixed this pure graphite not with wax but with clay, like Conté. Thoreau also experimented with pencil casings, though this endeavor was less successful. Most pencil makers still use a traditional two-piece wood casing. They place the extruded lead between two grooved cedar strips and glue the halves together. There is a story that Thoreau invented a long, thin drill so that the hardened graphite and clay mixture could be inserted directly into one-piece wood casings, but it’s not clear that the Thoreaus switched to this difficult
method of getting the lead into the wood. In any case, Thoreau’s improvements, combined with the high import duty that America imposed on British pencils after the War of 1812, led to great demand for Thoreau-brand pencils.

Nostalgists frequently claim that the old ways were better because they were more natural. While the members of the Lead Pencil Club fetishize the pencil as “responding directly to the mind” (Henderson 1997), Thoreau did not ascribe transcendent value to pencils. As Petroski sees it, Thoreau’s goal was simply to make money. Once he developed the best pencil of his day, Thoreau actually claimed that he saw no sense in trying to improve on his design.

It is easy for us to think of Thoreau only as a romantic who lived deliberately, disobeyed civil authority when he thought it wrong, and single-handedly turned Walden Pond into a national historic site (it’s actually a Massachusetts State Reservation). But Thoreau underwrote these activities by deploying his expertise as an engineer and marketing expert. Even though his pencils were the best, Thoreau acknowledged that he couldn’t compete with new German imports from Faber, who made reasonably good pencils for a lot less money. As pencil competition grew, shaving his profit margin, Thoreau stopped pushing pencils and began selling his graphite wholesale to electrotypers because this proved more lucrative. But he also kept making small quantities of pencils just to hide from his competitors the fact that the main focus of his business had shifted (Petroski 1990, 122).

A cynic might say that Thoreau, despite his own technological expertise, belittled Morse’s telegraph because he thought that it would threaten the family business. It is more likely, though, from the absence of references to pencil-making in any of his
writings, that Thoreau honestly thought pencils were better for writing than electrical impulses, and he simply kept his business life and his literary life in separate compartments. In any case, Thoreau’s resistance to the telegraph didn’t stop that project. Nor have the new developments in communication – the telegraph, the telephone, the typewriter, and the computer – dampened the demand for pencils. Faber-Castell, the largest of the world’s major pencil producers, makes over two billion pencils a year (http://www.faber-castell.de/17199/The-Company/The-Company-of-today/Facts-and-Figures/index_ebene3.aspx). That should be good news for the Lead Pencil Club.

The first laptop

One story surrounding the development of pencil technology asserts that the first use of graphite, or wad, as it was called in the Borrowdale area of Cumberland where it was first discovered in the mid-sixteenth century, was to mark sheep. Even if this is true, the earliest commercial use of graphite was not for writing, but to as molds for cannon balls. Even so, it was also immediately apparent that graphite was good for making marks that were both highly visible and easily erased. It was probably woodworkers and not shepherds or armorers who were the first to put graphite into holders for easier use. For one thing, woodworkers had the know-how and the tools to create these early pencils. They also had an incentive: the pencil made it much easier to mark wood for cutting, drilling, and joining. Before the pencil, cabinet makers scratched cut marks into wood with an awl or knife. But these techniques, which some still use today, leave an indentation in the wood which has to be removed from finished surfaces. Pencil marks don’t mar the wood, and they are easily erased with rubbing or light sanding (sanding is
preferable since erasers tend to smear the mark, which is why carpenter’s pencils don’t come with erasers).

Even if cabinet makers did develop pencils primarily for their own use, it was obvious that the pencil was an important writing tool, and it quickly became the first laptop. This portable, self-contained writing instrument let writers get up from their desks and work anywhere without having to carry messy ink bottles, which were always prone to spilling or drying out, and a supply of goose feathers. Travelers didn’t have to take cumbersome travel desks with them if they wanted to write on a hillside or at an inn. Artists – who were still mixing their own pigments – could leave their bulky paint boxes, their brushes, and their turpentine in the studio and still be able to sketch wherever they happened to be. And pencils quickly found a home in classrooms as well.

The Borrowdale graphite discovery probably occurred some time between 1550 and 1560, and in just a few years naturalists and artists were using pencils in the field. As Petroski reports, the first picture of a modern pencil appears in a book on fossils, gems, and a whole lot else, written by the encyclopedist Konrad Gesner (1565, see illustration below). The graphite holder in the illustration has a knob at one end, allowing it to be tied to a notebook, a further convenience for the pencil’s “end users.”
The enthusiastic reception that the first pencils enjoyed in turn prompted pencil makers to find better ways of packaging graphite to meet the demand for more and better pencils. Placing the graphite into a wood case seemed the best way to go for several centuries: when this was done well – and it was often a technological challenge – the wood kept the brittle graphite from shattering or breaking off, and it minimized graphite stains on writers’ fingers or clothes.

Shaving the wood to expose the graphite and sharpen its point was not a big obstacle for writers already used to pointing their quills with pen knives (the steel pen did...
not come into wide use until 1830, when mass production of steel nibs began in England. And while the pen had to be dipped into ink every few words, slowing down the writer and interrupting the flow of ideas, a pencil could run for pages on a single pointing. Not only were pencils more convenient than pens, they also made writing faster.

Computers are often credited with speeding up writing as well, to the point where critics actually fault the computer for making writing too easy. Seduced by speed, these critics warn, writers may pay less attention to what they are doing, and writing quality deteriorates. Perhaps early adherents of the older ways of penmanship complained that the newfangled pencil made writing too fast and was leading to a similar decline in prose, but if they did, none of those complaints has managed to survive. In fact, the pencil may be the one writing technology that has never been openly attacked by advocates of the good old ways.

In the twentieth century, pencil makers, seeking to distinguish their pencils as better than competing brands, not to mention other popular writing instruments like fountain pens and ball points, boasted of their product’s word-processing capacity. Eagle’s Mirado pencil could write a line thirty-five miles long (Petroski 1990, 310; presumably, individual mileage may vary). This sounds impressive but is hard to visualize, so Faber framed its claim in the more familiar terms of unit cost: their Mongol pencil was good for 2,162 words per penny (Petroski 1990, 304).

The pencil is even faring well in the age of the computer. It is true that the computer is establishing a strong presence in test-taking, long the home of the ubiquitous No. 2 pencil, and even though the GRE, GMAT, Praxis, TOEFL, and other common standardized tests are abandoning pencils for computers, according to pencil maker
Dixon Ticonderoga, pencil sales are up. While the company won’t disclose exact figures — secrecy is still the rule in the pencil industry — they acknowledge producing more than 90 million No. 2 pencils in 1998. Not shy about product placement, the company boasts that the artist Norman Rockwell sketched with Dixon pencils (omitting the salient fact that Dixon commissioned Rockwell to paint pictures for the company) and that George Lucas drafted the first episode of “Star Wars” with a classic yellow Dixon Ticonderoga No. 2 (Obejas 1999).

Joseph Dixon, the company’s founder, made his first pencil in 1829 in Salem, Massachusetts, though he wasn’t a Thoreau competitor. Dixon’s company focused on other graphite products and didn’t really become a player on the American pencil scene until after the Civil War. Nonetheless, today the company’s mission statement, which could double as a motto for the Lead Pencil Club, implies that its pencils, pens, markers and crayons are superior to computers because they are a natural, effective, even transcendental means of expression:

More than a writing and art products company, Dixon Ticonderoga is a company that empowers people to take conscious and subliminal thoughts — facts, ideas and dreams — and preserve them using tools that are simply extensions of themselves. [dixonusa.com]

Eraserhead

The computer has changed drastically in the past twenty years. 1980s computers like the IBM 8088 that I started with are now museum pieces. Even if they still work, they’re useless for today’s storage- and speed-hungry applications. Pencils have changed too, though much more slowly. The pencil assumed its modern form in the eighteenth
century: a rod of graphite encased in wood. Since then, technological changes to the pencil have been important but subtle. Better compounds ensured better lead consistency, fewer broken points and more uniform grading of pencils from hard to soft. Improvements in preparing and gluing woods made pencils easier to sharpen. Finishing techniques created brand identity through distinctive colors and markings. As we learned from Thoreau’s experience, branding is important to pencil manufacturers, though aside from Norman Rockwell and George Lucas, most writers probably don’t notice what kind of pencil they pick up. But there was one major change to the modern wood pencil that everybody noticed. In the mid-nineteenth century, American manufacturers learned to attach the eraser to one end of the pencil using a brass ferrule or socket (http://www.officemuseum.com/pencil_history.htm).

One of the advantages that pencils had over pens was that pencil marks could be erased. Erasers became popular in the late eighteenth century as West Indian gum elastic, or India rubber, reached Europe. In fact that substance, actually the resin of ficus or hevea plants, was called rubber because of its ability to rub out pencil marks. Erasers were sold as separate cubes, and people carried them along with their pencils. The one-piece American pencil, with point on one end and eraser on the other, was initially greeted with suspicion, in part because only low-quality pencils first sported built-in erasers. The American upgrade never really caught on in England or Europe, where pencils and erasers are still commonly sold separately.

According to Petroski, some American teachers also objected to erasers, even on the better-quality pencils, because in their opinion, configuring pencils this way would adversely affect writing ability. 2,500 years ago Plato warned his fellow Athenians that
the new technology of writing would weaken human memory. But after millennia spent writing things down, people still keep vast quantities of information in their heads, not just the data, formulas and procedures they need for work and school, but also song lyrics, sports statistics, jokes, phone numbers, family stories, and assorted strings of trivia.

Nonetheless, we still fear that new communication technologies will sap our intellectual strength. Just a few years ago, math teachers complained that if students were allowed to use calculators, they’d never learn to add and subtract without resorting to technological help. The first calculators – expensive items, to be sure – were banned from classrooms. But now calculators are inexpensive – some are almost as cheap as mechanical pencils – and they do much more. Many math teachers now require them, and they’ve become must-use tools on standardized tests like the SAT and ACT.

About the same time that schools began encouraging the purchase of the calculators that they had once prohibited, my university introduced computers into writing classes. At the time, instructors hotly debated whether to tell students about the spell-check programs on their word processors. The fear was that if students knew about spell checkers, they would become dependent on the technology and forget how to spell. The teachers decided to hide the spell checker, but on the first day of the semester, the hackers in the class found the spelling checkers anyway, and the rest is history. Now writing teachers expect their students to spell check before they turn their papers in.

Even the deceptively untechnological pencil became a victim of the wrath of educators who feared the impact of new technologies. For much of their history, American schools allowed no crossing out. Once students put pen or pencil to paper,
there was no turning back. What pupils wrote was not just indelible, it was what they were graded on. The educational philosophy was “think before you write,” an ideal that few students, or their teachers, ever achieved.

When the pencil with its own built-in eraser came on the scene, some teachers wanted to ban it from the classroom, arguing that students would do better, more premeditated writing if they didn’t have the option of erasing and revising. The anti-eraser group argued that if the technology makes error correction easy, students will make more errors. Other teachers feared the impact of erasers not just on student cognition, but on student health as well: children might chew on the ends of the new eraser-equipped pencils even more than they already chewed on their all-wood pencils (Petroski 1990, 179).

Just as students won the battle of the calculator and the spell checker, American students won the short-lived school eraser wars. Nowadays it’s hard to find a pencil without an eraser. Artists prefer eraserless pencils because they use many different grades of pencils and several different types of erasers in their work. Golfers also use pencils without erasers. There may be an issue of trust there. The only other place where crossing out, or at least self-correction, is not permitted today is the spelling bee, which is in itself a throwback to the good old days of American education: once a speller says a letter, it can’t be taken back. Everywhere else, students, and writers in general, in fact just about everyone but golfers and spelling bee champs, are expected to erase, cross out, delete and do their words over till they get them right.

In fact, writers depend so much on their erasers that they frequently throw away their pencils when the eraser wears down, long before they run out of graphite, for
without an eraser, the pencil’s usefulness seems gone. Writers have warmed to the computer as a composing tool because it permits infinite revision; digitized erasing doesn’t wear out the paper or smudge the text; and no matter how many changes one makes, the revised text always looks like a finished product. Of course these advantages can also be drawbacks: with computers it’s harder to compare multiple versions of the text, and clean copy may look like professional writing without actually being professional in its content.

Although the history of the pencil is a history of popular and technological successes – cheap pencils mean cheap access to writing tools – and the anti-computer crowd champions the pencil without considering its actual complexity, there is also a strong prejudice against pencils and pencil writing.

For one thing, because they’re cheap and ubiquitous, pencils are often overlooked and undervalued as cultural artifacts. Petroski observes that old tools, clothes, furniture, pots and pans, and other scraps of everyday life are often written about, preserved in museums or sold in antique shops. But old wood pencils are not. Even on eBay, where just about everything is on offer, a search for antique pencils comes up empty. In addition, because pencil marks are erasable, the myth has grown up that writing in pencil is like writing with vanishing ink. As a result, many people assume that pencils are only good for first drafts of documents, not final copies.

It’s a common but mistaken assumption as well that checks, contracts, and other legal or official documents aren’t valid if they’re signed in pencil. Many pencil manufacturers stress that pencil documents and signatures are legal everywhere unless specifically prohibited, but despite these disclaimers on pencil makers’ web pages, the
universal preference for ink as a vehicle for “important” texts doesn’t change. Even so, this anti-graphite prejudice hasn’t put a dent in pencil sales, which top 14 billion a year, world-wide.

Thoreau’s complaint about the telegraph shows that even engineers can be suspicious of new technologies, and no one can safely predict the directions that technology will take. As Thoreau feared, the telegraph eventually did permit people in Maine and Texas and just about everywhere else to say nothing to one another, as well as to convey important information. In turn, Samuel F. B. Morse, who patented the telegraph and invented its code, saw no use for an even newer device, Alexander Graham Bell’s telephone. Morse refused Bell’s offer to sell him the rights to the telephone patent because he was convinced that no one would want an invention that was unable to provide any permanent record of a conversation. As these minutes from a Western Union meeting where investing in telephony was discussed make clear, others agreed that this was a problem:

Bell’s instrument uses nothing but the voice, which cannot be captured in concrete form…. We leave it to you to judge whether any sensible man would transact his affairs by such a means of communications. In conclusion the committee feels that it must advise against any investment whatever in Bell’s scheme. [Minutes of a Western Union meeting, circa 1880. www.russell.whitworth.com/quotes.htm]

Many telegraphers were skeptical of the new voice competition, but their comments also reveal a deeply ingrained cultural bias that sees writing as more significant than speech. One of Thomas Edison’s motivations for inventing the
phonograph was to remedy this deficiency in the telephone, though sound recording succeeded not because it could preserve phone calls for posterity, but because of its potential for entertainment. As it turned out, despite the hesitation of some investors, the telephone was an almost instant success, in large part because it mimicked conversation, a communication form we use comfortably every day without written back-up.

Whether computers will one day be as ubiquitous and as invisible as pencils, and as taken-for-granted, is an intriguing question. They are certainly becoming more important in offices than telephones, and the cell phone, the technology phenom of the 1990s, is trying to capture an even bigger share of the hi-tech market by becoming more computer-like, letting callers surf the Web and send written messages across the ether.

Ask most people what they mean by technology today and they are likely to reply that it has something to do with computers. Some may also complain that computers have taken over the workplace and the home. It’s impossible to represent a contemporary office in film or on television without showing a computer on a desk. Computers are becoming common furniture in the home as well, to the point where their absence may already be more noticeable than their presence.

We have a way of getting so used to the technologies of writing that we come to think of them as natural rather than technological. We assume that pencils are a natural way to write because they are so old – even though they’re actually newer than pens – because we have come to think of them as being old. We form Lead Pencil Clubs to revive the old ways, and we romanticize do-it-yourselfers who make their own writing equipment, and even their own paper, because, the Unabomber notwithstanding, home-
made has come to mean ‘better than store-bought.’ And some of us believe manufacturers’ claims that the pencil is an extension of the body and a gateway to the mind, though many of today’s students, the first all-computer generation in the United States to reach college, actually think the keyboard, not pens or pencils, offers a hard-wired connection to their inner thoughts.

Despite the common tendency to romanticize the good old ways, Bill Henderson was wrong to place Thoreau among the antiquarians and nostalgics. Considering his engineering know-how and his penchant for social criticism, I’m sure that were Thoreau alive today, he would not be writing to the Times with a pencil of his own manufacture. He had better business sense than that. More likely, he would be keyboarding his complaints about the information superhighway on a personal computer that he assembled from spare parts in his garage.
Image 12. Thoreau, the great American idealist and iconoclast, was as concerned with branding, marketing, and the bottom line as any robber baron, captain of industry, or present-day Microsoft executive. [www.psymon.com; used by permission]