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How Hoop Skirts Led to Tape Measures

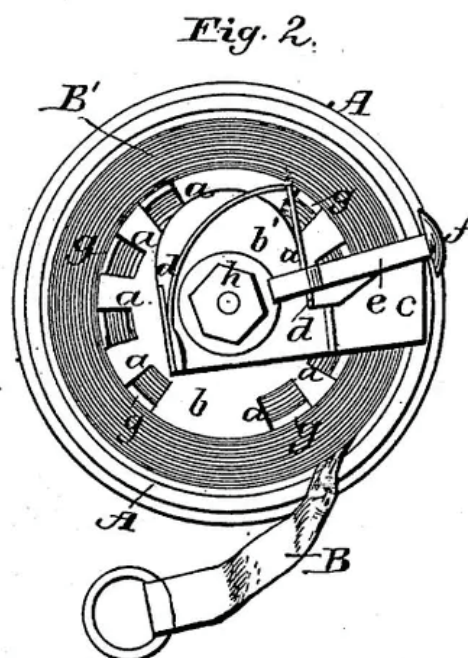
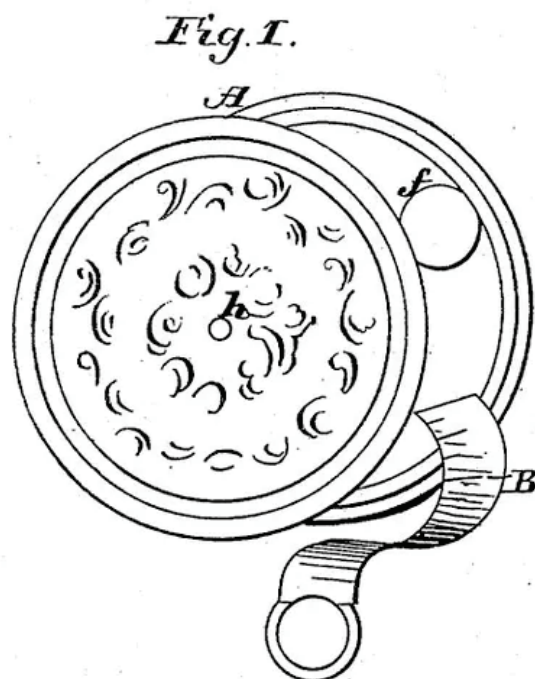
Eighteenth-century ladies would recognize some things about the modern contractor's tool

Kat Eschner

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The July 14, 1868 patent for a tape measure included these two drawings. [U.S. Pat. No. 79,965](#)

In the nineteenth century, new technologies allowed skirts to blossom as never before—which in turn sparked other innovations, not always expected.

The first patent for a steel tape measure was granted in Britain in 1829, [writes](#) Randy Alfred for *Wired*. It belonged to a “flat wire” maker named James Chesterman. Flat wire was used in fashion as well as industry, writes Alfred.

Perhaps its best-known fashion use was to create the almost absurdly large bell silhouettes found in hoop skirts called crinolines. “A really fluffed-out, layered hoop skirt could use 180 feet of wire,” Alfred writes—so making flat wire was big business from the mid 1850s to the late 1860s, when crinoline hoop skirts had fallen out of fashion, in part because of a [horrifying series of fires](#).

Chesterman turned more towards marketing his “Steal [sic] Measuring Chain,” [writes](#) *Collectors Weekly*. The “chain” was a reference to the lengthy, heavy chain used by surveyors, even though what Chesterman was manufacturing was a lighter and less bulky metal tape.

Chesterman’s tape measures, which cost \$300 in today’s money, according to Alfred, were contained in a donut-shaped leather case, [writes](#) the National Museum of American History. Chesterman continued to [tinker with his design](#) after its original patent, refining it. But it took another inventor—this time an American—to take the tape measure to the next level, [writes](#) Connecticut History.

On July 14, 1868, a Connecticut man named Alvin J. Fellows patented the spring-click tape measure. The difference between his tape measure and the ones that came before was a “spring-click,” in the words of the patent, that allowed the user to lock the tape measure when it was extended, “so as to hold the tape at any desired position.” Fellows claimed that because installing the spring-click required a complete recombination of the other inner components of the tape measure, he had created a new tape measure—not just a specific improvement on Chesterman’s design.

He wasn’t the only American to get in on the game, writes *Collectors Weekly*. In 1871, just a few years later, a Long-Island based company called Justus Roe & Sons began offering “Roe’s Electric Reel.” But although tape measures are ubiquitous in the trades today, they didn’t take off quickly. It wasn’t until the mid-twentieth century that the tape measure overtook the folding wooden carpenter’s ruler, writes Alfred.

“Because it was expensive, this type of measuring tape did not immediately replace folding wooden rulers but it was the basis for the locking steel tape measures used today.” Connecticut History writes.

As for the fashion world, the age of metal tapes wasn’t entirely over: the bustle remained in vogue.

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