Lost Technology: The Pen Nib

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Pen Nibs

A film that I loved when I was growing up was Atlantis: The Lost Empire. The idea that a civilization from days past had technology far advanced seemed so surreal yet so plausible. Now it would be hard to imagine that something of the past would be of higher quality than today with our advanced technology, but with pens, that is not far from the truth. Pens are such an innocuous everyday object that is being slowly pushed out of society by computers and phones, yet they have such a fascinating history.

While ballpoint pens dominate the current market with the BIC Cristal being considered "The Most Successful Product Ever Made," pens of the past are far more interesting (Medium, 2026). Just look at the massive communities that have been built around the shared passion of collecting varieties of pens from past ages, such as r/fountainpens with over 218k active members. This enthusiasm is what drives many pen producers to still produce fountain and dip pens in all shapes and sizes, often with a modern spin. The market size for fountain pens is about USD 685.17 billion in 2025, according to Market Reports World, and is only projected to grow larger in the next few years (2026). The fountain and dip pens of today, however, are vastly different from pens made half a century ago. Improved technology and historical insight should improve the overall writing experience of fountain pens and nibs, yet many *stylophiles* are dissatisfied. The purpose of this paper is to gauge public perception of vintage vs modern nibs and see what differences could be causing this difference in perception.

Birth of the Steel Pen

Although there are some accounts of pens being made of metal dating back to the 15th century, the steel pen only began to take shape in the 18th century. Much of early pen development was confined to Britain and the Americas. The first pioneer of steel pens was Jacob Wise, “the first person known whose primary product as a manufacturer and as a businessman was the steel pen” (Pennant, 2017). His pens were exceptionally popular in the early 1800s, spreading all the way to the colonies in America, reaching the ears of Thomas Jefferson. These early pens, however, were hardly an upgrade to the traditional quills that many still used. Complaints of writing quality were the norm alongside dissatisfaction with the lack of flexibility and softness, but praises about increased durability and cheaper production, offsetting some of the criticism.

Example of a “Three Slit Pen,” still in use in the modern day. Photo courtesy of John Neal Books

At the same time in the colonies, Peregrine Williamson also began producing steel pens independently after difficulties with refining the quill pens he used to his liking. His first pens suffered many of the same problems as Wise’s, namely stiffness and subpar writing quality. However, in 1806, he began experimenting with the shape of the pen nib, adding two slits to the pens to increase the flexibility of the tines, which carry the ink to the page. In 1808, Williamson began advertising this as a “Three Slit Pen” and was granted a Patent in 1809. This pen proved exceptional in both durability and writing quality, which was the main complaint received from Wise’s Pens. It was at this point that steel pens took over quills in terms of quality, with even Thomas Jefferson changing over to the new writing medium.

Production and Industrialization

Wise and Williamson were both producers of the revolutionary steel pen, yet they were both producing it on a small scale. In fact, most early producers before 1820 were predominantly working in workshops, with most of the pen creation done by hand. It was only in the early 1820s that screw presses began to be integrated into the process of cutting out blanks, marking the start of industrialization. In Birmingham, James Perry set up one of the first large workshops in the world and implemented the screw press into production. Alongside him, also in Birmingham, Joseph Gillot began to experiment with different forms of machinery to automate steel nib production. This unique environment allowed for explosive improvements in the production process, eventually leading to the mass production of inexpensive pens in an increasingly literate population. By the mid 1800s, the school children of America were "as familiarly acquainted with Joseph Gillott as with Noah Webster," showing the great success in industrialization of the pen trade (Pennant, 2021).

Manufacturing flourished from then until about the late 1930s. This was considered the golden age of steel pens, where steel pens enjoyed a large market and allowed for increasing innovation. Pen nib durability concerns were solved with the introduction of iridium tipping, a practice still used on gold nibs in the modern day. Furthermore, varieties of pen nibs increased to cater to different audiences. A common alternative pen nib type was the stub. First developed by Esterbrook in 1871 as the No. 161, this pen nib became a favorite among students who wanted to write fast while still imitating the writing style of a traditional flex nib. The stub nib has a flat head, so it can produce both thick and thin lines depending on how you angle the pen, very similar to traditional pens. It's a popular option offered by many pen producers even today. The turned-up nib was another alternate pen nib option that was developed by Esterbrook during this

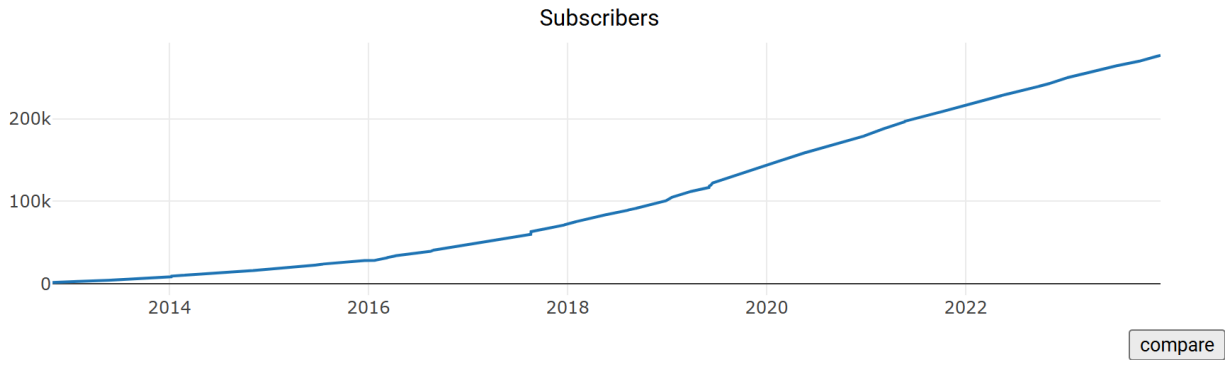
time period to cater to those who needed to write more efficiently. The tip being turned up made it less sharp against the paper and allowed writers to write faster and more easily.

Decline

From the 1930s to the late 1900s or early 2000s, nibbed pens had a huge drop in popularity primarily due to the introduction of the ballpoint pen. Although other writing instruments were introduced during this time frame, such as the typewriter in 1868, they could not beat the convenience of fountain pens or dip pens. However, the ballpoint pen was different in that it was a direct, cheaper writing instrument, which forced many nib pen producers out of the market. Two of the largest producers, Esterbrook and Turner & Harrison, stopped producing dip pens completely. Although Esterbrook continued producing fountain pens, Turner & Harrison was dissolved in 1952 (The Steel Pen, 2017). Soon, the ballpoint pen became the standard writing tool in much of the world. In America, a ballpoint pen became the standard government pen in 1968 and has held onto that position for 55 years. In all other parts of life, it was much the same, as dip pens and fountain pens were slowly pushed out of office places, schools, and homes. Pens such as the BIC Cristal, introduced in 1959, were far too cheap and accessible to pass up on, selling for $0.29, which was about $2.50, accounting for inflation. Although that seems pricey in the modern day, the most popular pen at the time was a Parker 51, and the cheapest version of that was $12.50, which converts to $117.17 in 1954 (qaaf, 2016). Considering a single fountain pen could buy almost 50 ballpoints, which had a decent lifespan of their own, for many, the choice was obvious. Nib pens became a relic of the past, used scarcely by only hobbyists or professionals.

Modernity

Although it would seem that the ballpoint pen and newer communication technologies, such as phones and computers, would render nibbed pens obsolete, there has been a recent reemergence in fountain pens and dip pens. The exact year for this reemergence is hotly debated, but around the very late 1900s and early 2000s. Companies such as Kaweco and Conway Steward came back and began producing again in the late 1900s, and existing companies ran revival campaigns like Pelikan's Souverän revival (Csxbot, 2025). Furthermore, the community was becoming more prominent around this time with the start of the Washington DC Fountain Pen Supershow in 1992. In the early 2000s, communities moved online with the introduction of the Fountain Pen Network in 2004 and many others afterwards. To my knowledge, the largest forum currently is r/fountainpens with over 218k members, but there are many others, such as FPN with over 100k members. A graph showing the growth of r/fountainpens is seemingly exponential in the 2010s. From 2016 to 2020, the member count doubled every two years, jumping from 29k members in 2016 to 72k members in 2018 and over 140k members in 2020 (subredditstats, 2023).



Graph from subredditstats of r/fountainpens

There are many reasons for this growth, but the most popular reason that circulates around the community is that people are growing wary of the constant electronic use in life. As a Makoba blog puts it, “One of the key factors contributing to the renewed interest in fountain pens is the desire for a break from the constant digital noise and distractions that surround us.” (2024). For many, a routine of devices from morning to night can feel suffocating, and traditional pen and paper can feel like a break from that prison. Ironically, the internet has also driven increased popularity to the hobby. Social media has been a major contributor to calligraphy and nib pen outreach. A major way social media grows the community is through the use of hashtags such as #fountainpens, #seriousnibbage, and #fountainpenaddict. Users like smurlgurl state that “I found that was the best way to find accounts I was interested in,” and grow the community naturally. Outside of forums and social media, online shopping has made the hobby especially accessible, allowing those interested to pick and choose from a growing collection of pens varying in size, shape, and even nib style. According to Market Report World, 40% of fountain pen sales now happen through e-commerce platforms, a large fraction of total global sales.

In terms of production, the main development was the increased involvement of technology in the nib-making process. The overall steps of making a steel nib haven’t changed much, still involving a series of basic steps: cutting, imprinting, shaping, slitting, and polishing. As previously mentioned, around the early 1820s, the cutting process was mostly automated, and by the 1850s, the basic shape, including the piercing at the top of the slit and side slits, was all done by one machine. Although the main slit was usually still hand-cut, as technology improved, humans were also replaced in this aspect. In the modern day, most companies use complete automation for stainless steel nibs. Steel nibs made by machines are more consistent, with little margin for error, and much cheaper and faster than human labor, so companies opt for this

method of creation. While some gold nibs are still hand-produced, “it’s slower, and it’s not as repeatable,” even if it can occasionally be better in writing quality (Richardspens, 2005). Even aspects like quality control for nibs are being slowly replaced. In the mid 1800s, every nib had to pass through inspection and flexibility tests before being packaged and shipped. However, in certain companies, such as LAMY, writing tests are also conducted by machines so they can speed up the number of pens they can test at a time without additional costs (Goldspot pens, 2020). There are still companies that hand test their nibs, including FountainPenRevolution, whose owner hand tests every nib that goes out, but they seem to be the minority.

The Modern Nib

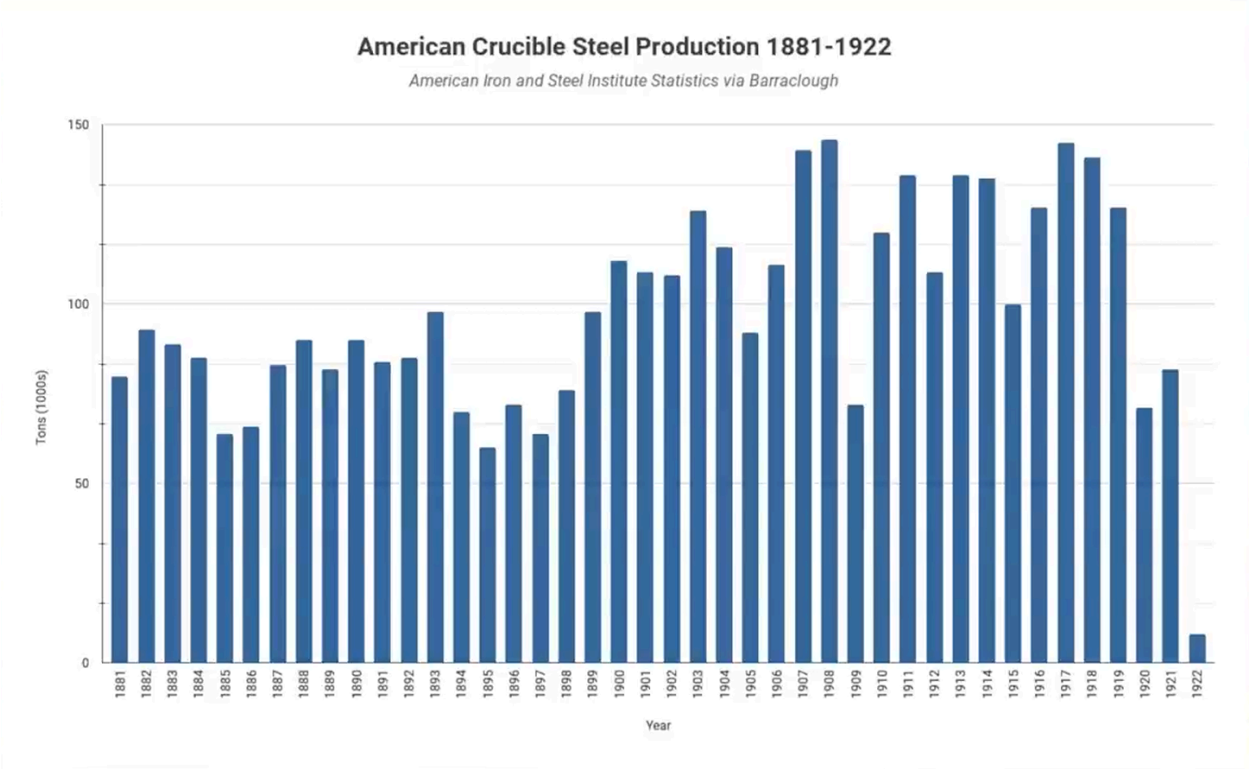
While the production process of nibs may not have changed much over the last two centuries, the average modern pen nib is vastly different from pen nibs of the golden era. There are countless reasons, but the next section will go into a dive into each major change as well as the reasons why the change was made.

Materials

Throughout history, nibbed pens have been seen as long-lasting pens. Even in the beginning, Thomas Jefferson gave up better-feeling quill pens for steel pens due to their longevity. In the golden age, this was just as true with many companies offering lifetime warranties alongside their fountain pens to prove their quality craftsmanship. Considering nibs were used daily in many professions, the material for these pens was carefully selected to be both flexible and durable. From the start of manufacturing until the 20th century, cast steel, the highest grade of Sheffield crucible steel, was the gold standard for pen nibs in both the Americas

and Europe (Pennant, 2021). Sheffield crucible steel was different from other steel in that it was often purer, with higher carbon diffusion within the steel. Using a glass flux to remove impurities and allowing for longer times to melt and cool down, the process to make Sheffield steel yielded steel higher in quality and more durable than even later processes, such as the Bessemer process in the 1850s.

In 1913, stainless steel was created by Harry Brearley, which became a serious competitor. Although changes were not apparent at first, stainless steel began to take over the market in mass around World War II. After World War I, the cost of electricity came down to a point where electric furnaces were often more efficient than crucibles. Thus, electronic furnaces replaced the crucibles in Sheffield and all over the world, and by the 1950s, the crucible furnace was extinct (smallworkshopco, 2018). Electronic furnaces were too cheap and could still produce decent-quality steel. Stainless steel simply had too many advantages over crucible steel, both in the production process and material-wise. Stainless steel was rust-prone, which was quite important for many nib producers, considering the nib is constantly in contact with ink and possibly water if you wanted to clean the nib. It was also more resistant to the more corrosive inks of the past. Although iron gall inks would corrode many steel pens, “modern stainless steel nib[s] will also be never affected,” similarly to gold nibs (Pterodactylus, 2013). Otherwise, production was also more convenient because stainless steel was more automatable, which was preferable for many companies. Sheffield steel required a delicate, but labor-intensive, process in which 100-pound crucibles filled with metals were lowered into a furnace at over 1600° C, then pulled out when the crucible was semi–solid. This was one of the major reasons why this process was never automated (Working Wooden Planes, 2023).



Graph courtesy of Working Wooden Planes

Though there are many benefits of stainless steel nibs, in terms of writing quality, stainless steel seems like a sidegrade to cast steel. Cast steel retains the edge on durability and "can handle large amounts of stress without breaking down." (The Piping Mart, 2023) This was often useful back in the day, when the majority of pens were flex pens, which required a lot of strain from being pressed down on every letter. However, this is no longer than the norm, so the slight edge that cast steel had is no longer present. The inconvenience of needing manual labor and being more expensive, while not having some of the benefits that stainless steel has made cast steel obsolete in the pen market and in general.

Manifold Nibs

In previous sections, I covered that in the golden age of pen making, there was much innovation and experimentation. During the time, and all the times before, flexibility was one of the preferred traits in pens. This stems from their ancestors of quill pens and the preferred writing system of the time. Quill pens were flexible, which suited the cursive scripts of the past. Thus, when steel pens were being produced, almost all of them were flexible. Most major developments for the pen were to increase the flexibility, such as the three slit nib, and overall, nib flexibility was valued. Even nibs such as stub nibs, which were rigid, wanted to imitate the likeness of flex nibs in terms of writing style.

However, this all changed with the introduction of the ballpoint pen in the early 1900s and a coincidental emergence of a new writing system. Print handwriting was originally a precursor to cursive. Originally known as ball and stick writing, it first gained traction in Europe and slowly migrated to the Americas in the early 1900s. By the 1940s, public schools began to teach and use print for the first two grades of schooling, and over the next 40 years, cursive was slowly disregarded as an essential thing taught in schools (cursiveandmore). The path of the ballpoint pen was similar as it slowly took over the Americas throughout the 1900s. From offices, schools, and even the government, the ballpoint pen and print became the norm. This had a side effect of decreasing paper quality. Carbon paper became widespread in the 1920s and could soak the copious amount of ink that the flex pens would put onto the paper (Nishimura). All these factors completely changed the landscape for steel pens in the 1900s.

Now that the main competitor to steel pens was the ballpoint pen, and the new writing system did not care for variation in line thickness, steel pens had to adapt. That's why most steel pen companies transitioned from traditional flex pens to manifold nibs, which were rigid nibs

that imitated the effect of writing with a ballpoint pen. By the end of the 1920s, US companies like Parker produced the majority manifold nibs. According to Nishimura, Parker made 80% manifold nibs and 20% flexible nibs. Manifold nibs were better equipped for writing on the carbon paper that was prevalent for their cheaper cost, even if the quality was lower. Over the next century, this trend continued, and modern pen companies such as TWSBI, founded in 2009, exclusively produce manifold nibs.

The reason why I did not say that stainless steel nibs were not a downgrade from cast steel nibs was for this cultural shift in stationery preference. Although stainless steel flex nibs can be regarded as lesser than cast steel flex nibs, when considering manifold nibs, the difference was not apparent enough for it to matter. There was no need to put any strain on the pen, and generally, the recommendation is not to put stress on the nib at all. Most steel pens are expected to glide across the paper, writing fine lines with the only pressure being the weight of the pen, so any consideration of stress was void. The advantages of stainless steel in the automation ease and rust resistance shone through, and in the modern day, most pens are manifold and made of stainless steel.

There is a tiny caveat in that the industry of dip pens still mainly revolves around flexible nibs. Dip pens are pens usually used by calligraphers who practice scripts that require variety in pen width, so flexible nibs are required. Though the dip pen industry is still quite large, dip pens are impractical in everyday use, requiring both an ink bottle and specialized paper to ensure that the strokes do not feather or bleed. Although cast steel would probably be better for dip pens, allowing them to last longer and write better, dip pens have such a small market within the already small calligrapher/stationery community, so there is little incentive for producers to

appeal to them by reviving a dead metallurgical process. Besides, dip pen nibs are swapped out quite often, so stainless steel's cheap cost makes the most sense for most manufacturers.

Quality Control

Manifold nibs were quickly adapted not only because of the changing times but also due to the ease of production. For manufacturers, manifold nibs were easier and more consistent to produce because they had fewer moving parts. Nibs became simpler because any changes to improve the flexing of the nibs were reverted, such as the side slits on the three slit pen design. Simpler designs meant that the manufacturing could be automated more easily. If producers needed any more incentive, rising manual labor prices pushed manufacturers to push towards automation even faster. Although automation did make nibs more consistent, that did not mean that quality control should have been sacrificed, as it is in the modern day.

In the 1800s to early 1900s, factories would have quality control at every step of the process. Nibs that did not meet the standard were recycled or put into second-grade nib boxes sold at a discount. Every nib was flexed and tried before it was packaged into boxes. Although this meant that the amount of nibs passed through was lowered, the average nib could be argued to be of a higher quality, considering the stringent checks. The reason for this level of scrutiny was the fact that steel pens were often luxury items with lifetime guarantees. Every pen was expected to be able to write well for a lifetime, and any malfunction would cost the manufacturers in profit. Thus, it was more efficient for them to ensure only the most polished nibs would be put into the public.

However, in the modern day, that expectation has changed. The Nib Section has an episode titled: QC Controversies: Nakaya, Visconti, TWSBI that summarizes the issue pretty

well. It discussed a strange modern pen company trend of having defects and seemingly lower quality control standards, outlining two major companies: Visconti and TWSBI. Both Visconti and TWSBI are notorious for having subpar quality control, and the podcast makes some interesting points about why quality control is diminished. One of the major reasons is cost. For many companies, such as TWSBI, replacing the defective part of the product, like the cap cracking, was often more cost-saving than hiring quality control on a mass scale. Even the nib itself is often not that expensive for these companies to produce, being made of stainless steel, and replacing a nib would be cheaper than increasing quality control. Unlike before, fountain pens are no longer lifetime pens but more of a hobby that you collect. Going onto community boards, you will hardly find users with a single-digit number of pens, and it's because the culture around pens has shifted. Quality control does not have to be top-notch anymore, and pen companies know this.

Expert Opinion

Although the modern pen and the vintage pens seem like distant relatives, they are still often compared against each other. Asking around the community for opinions, professionals seem to prefer vintage nibs over modern nibs. Former white house calligrapher Pat Blair claims that "vintage nibs are way better," and even for newer nibs, she seeks out the older ones. Apparently, older versions of Gillott 303s "last much longer, and are very smooth to write with." Her guess is that there has been a change in metal as the newer pens seem to have a blueish tint and are much lower in quality. They are more scratchy, and quality control seems to have faltered, with many nibs having misaligned tines in the boxes. Dip pen nibs are usually

mass-produced and are around a dollar per nib, so quality control could be lacking, especially when they can be replaced so easily.

However, the same cannot be said about fountain pen nibs, yet both experts I've talked to have admitted to the superiority of vintage nibs. The two points that historian Andrew Midkiff brought up to justify the superiority of past nibs are that the metal was superior and handwork in the modern day is lacking. The metal is an obvious culprit, as mentioned previously, but I find the arguments for handwork to be compelling. Although machines can be more precise in most things, it seems that, for pen nibs, humans have a seemingly lower tolerance for mistakes with nibs. In the past, nibs were disposed of in every step if they were deemed inadequate, so the pen nibs at the end of the line were deemed of the highest quality. Much different from today, where pen nibs are often only thrown at the very end of the process after the machines have done most of the work. His example of slipping tolerance is the amount of grinding done on modern nibs. In the past, pens would "get a pass or two on an emery wheel to put a grind across the axis of the pen," where they would be grinded to perfection by professional toolsmiths. However, after World War I, human labor became increasingly expensive, so grinding was seen as a costly step that was either limited or removed completely. Grinding ensures smoothness of the nib and tines while still allowing for fine lines, and was an essential step in the manufacturing process. Less human intervention and quality control mean lower quality nibs, which could explain why modern nibs are seen as less than optimal for professionals.

Finally, the owner of FountainPenRevolution, Kevin Thiemann, has stated that "It is impossible to compete with some of those old 'wet noodle' nibs. Ours are about as close as you can get to them that I am aware of, though." One of the reasons he proposed was that vintage nibs are a lost craft. Aside from the lack of production of cast steel, grinding or forging

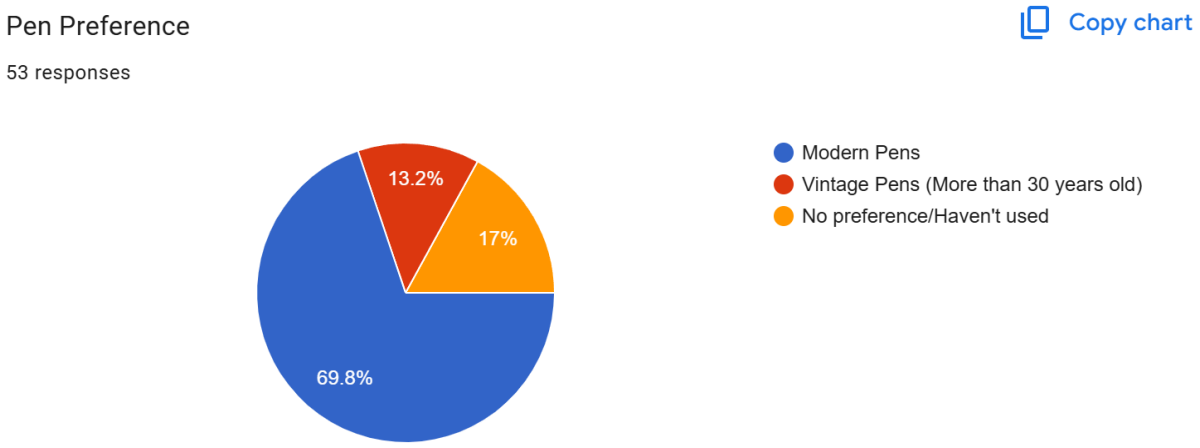
techniques might have also been lost during the nib depression in the 1950s. Since the two largest nib producers stopped or severely limited production of nibs, many nibmeisters were most likely laid off and never passed down their skills to the next generation. Reverse engineering these nibs through goldsmiths and nibmeisters would be far too time-consuming and "prohibitively expensive." There simply isn't a large enough incentive for the creation of a new nib.

Modern Opinions

Now, what does the public think? Data is extremely limited, as there is a relatively scarce amount of vintage nibs in the modern day, and most pens with a vintage nib are quite pricey. I decided to run a poll on r/fountainpens to achieve the maximum number of respondents and to reach as many people who have tried a vintage nib as possible. In the end, I received 53 responses and a general idea of the opinion of fountain pen users. Within the poll, I decided to ask 5 questions to try to gather data.

The first question received 52 responses and was asking about nib preference. The options given were: stiff nibs, flex nibs, no preference, and the option to type. Although many chose to add additional options for specific pen types, I categorized them more generally into the two archetypes or no preference. Results came out to be 22 preferred stiff, 17 preferred flex, and 13 had no preference in nib type. This question aimed to gauge community sentiment surrounding nib types and whether they preferred the manifold nib or flex nibs as a whole. It also served to see if there was still a market for flex nibs, even in an age where ballpoint pen-type stationery dominates the market, and it seems there is.

The second question received 53 responses and was asking about pen era preference. The three options given were Modern Pens, Vintage Pens (More than 30 years old), and No preference/Haven't used. Although admittedly vintage pens should have been characterized as way older than 30 years, I wanted to categorize anything before the major revivals as vintage, before pen manufacturing started to prosper again. The public seems to overwhelmingly like modern pens over vintage pens, 69.8% preferring modern pens, 13.2% preferring vintage pens, and 17% having no opinion. Even if I had categorized vintage pens as even older, it would have made little difference in the favorable opinion towards modern pens. I expected there to be a preference towards modern pens, considering slightly more people preferred stiff nibs; however, an overwhelming majority was not what I expected. Furthermore, when looking into individual responses, many put their preference for flex nibs, but also a preference for modern pens. This struck me as interesting because all the data points at modern flex nibs are inferior to vintage flex nibs, but many users still preferred modern flex nibs.

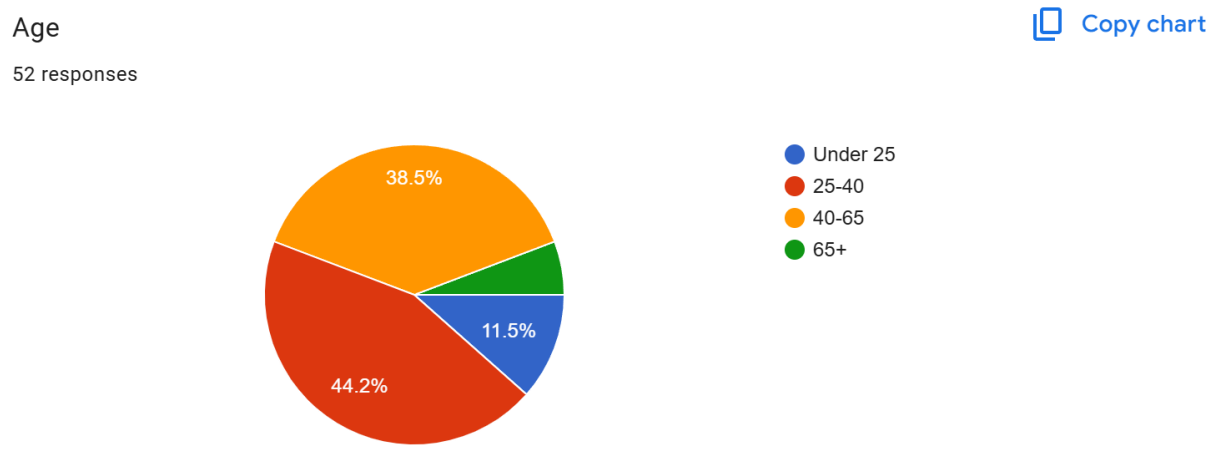


The next question received 47 responses and was an open-ended question asking why they chose their preferred pen era. One of the main reasons mentioned was the convenience of modern pens. Since most parts of vintage pens are out of production or aged, good-quality parts

and replacements are more expensive or harder to find. 23 of the 47 responses mentioned concerns about replacing parts or accessibility. Considering that about 50% respondents cited this as a major reason, it is clear that this impacted their decision-making more than pen nib quality. Though this question was less useful, it produced some valuable insights into preference. Quotes like “I like modern pens because they are generally replaceable if something goes wrong. I can bring them anywhere without worrying too much. Vintage pens have better flex for calligraphy purposes though.” and “I like both vintage and modern pens and have several in each category. Some were new when I bought them, but have become vintage since then. I value vintage pens for their design and workmanship. I like contemporary pens for their availability, affordability, and ease of servicing or repair.” illustrates the comparative advantages that each style of pen brings. Lots of users seemed to have evaluated the pen as a whole from a practical standpoint, and that could explain the overwhelming advantage of modern pens. Convenience often trumps writing quality for users, as seen by many switching to ballpoint pens due to low prices and replaceability, so it makes sense that the majority of people cite pricing and accessibility as their main deciding factors.

Question four was about the age range to see if nostalgia might have had an impact on pen preference. I split the age range into under 25, 25-40, 40-65, and 65+ to see if those who grew up with vintage nibs would like them more. Surprisingly enough, people on the younger end who didn’t spend much time with these vintage nibs seemed to like them more. Of the 7 people who put a preference for vintage nibs, four people came from the 25-40 range, two people came from the 40-65 range, and one person decided to stay anonymous. It is a small sample size to do analysis, but I still find it intriguing that there are twice as many people from younger generations preferring vintage nibs compared to older generations, disproving that nostalgia

plays a large role in pen preference.



Finally, I asked about the writing system/education, believing it to be a major contributing role in what people would like to write with, but unfortunately, this question is going to be scrapped because many misunderstood, and not much data was ascertained. Writing systems in school, such as learning cursive, had seemingly no correlation with preference, and many simply put their education level (Master's, College Graduate). My hypothesis is that children haven't had access to tools such as fountain pens or dip pens in school for at least half a century, so not many people grew up and used steel nib pens. Thus, writing education doesn't impact their preference as much as it would seem.

Overall, the key takeaway from my polling is that convenience plays the largest role in deciding pen types. Although vintage nibs may have had an edge in writing quality, the convenience of modern nibs is too tempting to pass up, even if there are trade-offs. Writing education, nostalgia, and even nib type seemingly don't matter much in the eyes of convenience and make minute differences in decision-making.

Modern Vintage Nibs

Well, if vintage nibs are so great, why don't companies just recreate them? Well, some have tried. One of the most successful examples was the Leonardt EF Principal, a modern recreation of the Gillott No 1 Principality developed around the mid to late 1850s by Joseph Gillott (BrainWalkerCalligrapher, 2020). In 2003, Brian G. Walker had the idea of replicating a vintage nib due to the poor quality of dip nibs at the time. Most companies were uninterested in the idea until D. Leonardt & Co Ltd considered it. Brian G. Walker had to sacrifice one of his Principalities and a Gillott 604EF for the company to reverse engineer, and the creation of the Leonardt EF Principal was born. It became an instant hit and has since outsold every other pointed pen nib on the market. Although it is a very nice nib and at a decently cheap price point at $2.25 per nib (compared to vintage principalities sitting at over $30 per nib), the quality was still lacking with all our better technology and reverse engineering. BrianWalkerCalligrapher states that, "It really is impossible today to match the absolute perfection of the original Principality simply due to the disappearance over time of many of the old hand-made skills." Even if we have improved technology, some skills are lost to time. If these techniques were lost during the dark ages of steel nibs, we may never recover them unless an extraordinary amount of time, effort, and resources are dedicated to a market that isn't large enough to justify. This was also one of the more successful stories with many other manufacturers attempting vintage recreations, only to be severely lacking in quality. In short, as historian Andrew Midkiff puts it, "Until these conditions change, I don't think we'll get a maker of steel pens to manufacture to the same standards and quality of 100+ years ago."

Conclusion

The history of the steel pen is a fascinating one. It is almost reminiscent of ancient stories about advanced civilizations and their lost technology to a certain degree. Steel pens had their high in the 1800s, only for everything to change in the 1900s. Turning into almost a dying craft with the overtaking of ballpoint pens and print handwriting, handworking techniques, steel crafting, and even the essence of flex nibs were lost and replaced with modern, automated, stainless steel, manifold nibs. Now, as fountain pens and dip pens are experiencing a resurgence in an increasingly digital age, it is important to know the wants of the community. Polling proved that convenience trumps all else, including writing quality, and it seems the future of fountain pens relies on it being increasingly accessible to the mainstream public. As much as vintage nibs may feel better in terms of writing quality, there are too many aspects missing for them to be recreated in the modern day. From the lack of incentives stemming from contentness of modern nibs to the obscene resources needed to reverse engineer and recreate handworking techniques, vintage nibs will be a relic of the past that will most likely stay an exclusive product for the passionate.

Works Cited

BCL-2, et al. “Pen Damage from Iron-Gall Inks?” *The Fountain Pen Network*, 28 Sept. 2013, www.fountainpennetwork.com/forum/topic/253239-pen-damage-from-iron-gall-inks/. Accessed 10 May 2026.

Binder, Richard. “To The Point: Steal the Steel.” *Richard's Pens*, 1 Aug. 2005, www.richardspens.com/ref/ttp/steel.htm/. Accessed 10 May 2026.

Csxbot. “What caused Fountain Pen Revival?” *r/fountainpens Reddit,* August 2025, https://www.reddit.com/r/fountainpens/comments/1ms454q/what_caused_fountain_pen_revival/. Accessed 10 May 2026.

Fountain Pen Market Size, SWOT, Competitive Trends & Forecast 2033, www.verifiedmarketreports.com/product/fountain-pen-market-size-and-forecast/. Accessed 10 May 2026.

“The Evolution of Cursive.” *Cursive and More*, www.cursiveandmore.com/history. Accessed 10 May 2026.

“How It’s Made: LAMY 2000 Fountain Pen.” *Youtube*, 2020, How it's made: LAMY 2000 Fountain Pen. Accessed 10 May 2026.

Jyotirmoy, and Roz Partido Chantengco. “The Renaissance of Fountain Pens - Why They’re Making a Comeback in the Digital Age.?” *Makoba*, The Renaissance of Fountain Pens - Why they're making a comeback in the Digital Age?

Accessed 10 May 2026.

Midkiff, Andrew. “THE INDUSTRIALIZATION of the STEEL PEN TRADE PART 1: ORIGINS.” *The Steel Pen*, 2021, thesteelpen.com/wp-content/uploads/2025/02/2021-1-IndustrializationOfTheSteelPenTrade.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “THE INDUSTRIALIZATION of the STEEL PEN TRADE PART 2: INSIDE A STEEL PEN FACTORY ” *The Steel Pen*, 2021, https://thesteelpen.com/wp-content/uploads/2025/02/2021-2-IndustrializationOfTheSteelPenTrade.pdf Accessed 10 May 2026.

Midkiff, Andrew. “THE INDUSTRIALIZATION of the STEEL PEN TRADE PART 3: INSIDE A STEEL PEN FACTORY” *The Steel Pen*, 2021, https://thesteelpen.com/wp-content/uploads/2025/02/2021-2-IndustrializationOfTheSteelPenTrade.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “Thomas Jefferson’s Pen Maker 1 – 1800-1830” *The Steel Pen*, 2018, https://thesteelpen.com/wp-content/uploads/2025/02/2018-3-Peregrine-Williamson-1-1800-1820.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “Thomas Jefferson’s Pen Maker 2 – 1800-1830” *The Steel Pen*, 2019, https://thesteelpen.com/wp-content/uploads/2025/02/2019-1-Peregrine-Williamson-2-1800-1820.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “Thomas Jefferson’s Pen Maker 3 – 1800-1830” *The Steel Pen*, 2019, https://thesteelpen.com/wp-content/uploads/2025/02/2019-2-Peregrine-Williamson-3-1800-1820.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “In the Beginning: Esterbrook Part 2 – 1861-1952” *The Steel Pen*, 2023, https://thesteelpen.com/wp-content/uploads/2025/02/2023-2-EsterbrookPart2Midkiff.pdf. Accessed 10 May 2026.

Midkiff, Andrew. “The Ages of the Pen” *The Steel Pen*, October 23th 2017, https://thesteelpen.com/2017/10/23/pen-history-the-ages-of-the-pen/. Accessed 10 May 2026.

Nick. “Sheffield Crucible Steel, End of an Era.” *The Small Workshop*, The Small Workshop, 18 Aug. 2023, Small Workshop UK. Accessed 10 May 2026.

Nishimura, David. “Why Are Most Vintage Pen Nibs Fine and Firm?” *VintagePens.Com*, vintagepens.com/FAQhistory/fine_firm.shtml. Accessed 10 May 2026.

Patil, Ayman. “The Most Successful Product Ever Made.” *Medium*, 12 Jan. 2026, aymanpatil.medium.com/the-most-successful-product-ever-made-763ca4fc9491. Accessed 10 May 2026.

PodBean Development. “Episode 7 Qc Controversies Nakaya Visconti Twsbi.” *Podbean.com*, 23 Aug. 2017, thenibsection.podbean.com/e/episode-7-qc-controversies-nakaya-visconti-twsbi/. Accessed 10 May 2026.

“r/fountainpens stats”, 2023 https://subredditstats.com/r/fountainpens/. Accessed 10 May 2026.

The Piping Mart. “Cast Steel vs Stainless Steel – What’s the Difference?” *The Piping Mart*, 20 Jan. 2023, Cast Steel vs Stainless Steel - What's the Difference. Accessed 10 May 2026.

Tylecote, R. F. (1992). A History of Metallurgy, Second Edition. London: Maney Publishing, for the Institute of Materials. p. 146 Accessed 10 May 2026.

“Sign in The True Story of Cast Steel (Was Bessemer a Liar?) .” *Youtube*, 30 Apr. 2023,

https://www.youtube.com/watch?v=e4CuRtwoMEI. Accessed 10 May 2026.

Walker, Brian G. “The Leonardt EF Principal Nib and The Walker Fine Writer.” *Brian G. Walker Calligrapher*, 1 Sept. 2020, briangwalkercalligrapher.com/nibs/. Accessed 10 May 2026.

Wfaulk. “How Much Did Pens Cost in the Old Days?” *r/fountainpens Reddit,* 2018, https://www.reddit.com/r/fountainpens/comments/9j9iim/how_much_did_pens_cost_in_the_old_days/. Accessed 10 May 2026.