

## A Not So Short History of Writing Instruments

By

Thomas J Mullane Jr.

Writing instruments have had a very interesting history. From the days of the stylus used with wax or clay tablets to the modern gel inked ballpoint pens, writing instruments have been responsible for recording the history of mankind. Writing instruments and handwriting have formed a bond that has tied us to the ideas of our forefathers and allows us to put down our own thoughts to hopefully give those who follow us a link to our humanity.



No one actually knows when the first formal writing instruments were developed. It is generally believed that the Egyptians were one of the earliest users of a “pen” of sorts. Hieroglyphics seemed to suddenly appear in Egypt in about 3100 BC. Never has a script been so widely used - furniture, clothing, utensils, buildings and jewellery, all bearing hieroglyphic inscription for both decorative and inscriptional purposes. They were also very important to them in the afterlife with inscriptions on coffins, interiors and exteriors of tombs, funeral texts etc. The preferred writing instrument used by the Egyptian scribes was the reed brush. The brush was made from river weed that was basically smashed at one end to create what looks like today’s artist brush. It was used with small cakes of dried ink that were stored in a small bag. Because of the coarseness of the surface of the stone and papyrus that was written on, the reed brushes tended to wear out quickly. Fortunately, a ready supply was available at the bank of just about any river.



As civilization developed, so did the need for a more permanent and portable system of keeping records. Tablets of wax and clay were used to record the records and history of the emerging civilization. A more durable writing instrument was needed to write on these tablets. The stylus was developed for this task. Basically a metal (or sometime wood) rod with a pointed end, the stylus did the job it was designed for. Remember that most people could not read or

write during this period of history. Only the affluent might be educated, and only a small percentage of them. This was a period of learning, of examination, a period when man was trying to understand the world around him. Medicine had become a science as had engineering. Records of the accomplishments of the early practitioners of these “arts” needed to be able to record what they had done. Educated men (sometimes slaves), known as scribes, were invaluable in transcribing the history of early civilization. For decades, the stylus was used to transcribe the affairs of the day. Unfortunately, many of the tablets have not survived the rigors of time.

As time progressed, man developed a more suitable material for recording history. Papyrus, developed by the Egyptians, was a coarse form of paper made from river reeds. It took ink well, but was very hard on writing instruments. The Romans and Greeks developed a new material that was much easier to write on and did not destroy the new writing instruments that had been developed. Vellum, A fine parchment made from calfskin, lambskin, or kidskin. The tanned leathers were scraped thin enough to be virtually translucent. This thin leather was smooth and took the primitive inks used well. It was also sturdy enough to be archival. But man needed a new writing instrument to properly use this medium. Based on the stylus the ancient Greeks and Romans developed a new form of pen that had more of a point and could deliver ink to the vellum without leaving blobs. Of course it had to be dipped often as it was nothing more than a fine pointed stylus. Following the stylus, the Romans and Greeks developed a pen made from a hollow reed that was cut at an angle..... However, these did not prove to be as durable as the metal stylus was.



No one knows how it came about or who thought of the idea, but the next major development in writing was the quill pen. It was used by the Greeks and Romans after the development of vellum and continued in use until the development of the modern dip pen in the 19<sup>th</sup> Century. The feather quill pen was used virtually unchanged for centuries. The quill used was the flight feather of a goose or similar bird. One of the primary improvements in the use of the quill pen was the ability to write with finer small lettering. The quill was also more durable than the hollow reed, so it could serve for

a longer period of time before replacement or resharpening the tip. With the exception of some Oriental countries, the quill pen became the standard writing instrument from about 500 AD until the production of steel nibs in the 19<sup>th</sup> Century. The common term of “pen knife” that we tend to use to describe all small folding pocket knives derives from a very specific type of knife that was used to shape the nib of a quill pen and to resharpen the pen after use.



Writing had become an important part of man’s way of life after the development of the quill pen. The invention of paper, usually made from cloth scraps and later from wood pulp, made writing a more affordable means of communication. It also made it easier and less expensive for man to keep records of day to day activities. Education, however, was still not for

the masses. Education was virtually the realm of the well to do. The general populace did not know how to read or write. But, that was going to soon change. The biggest problem with the quill pen was its lack of durability. It was noted that an average English accounting office of the day might go through as many as 5-6 quill pens per employee on an average day. These pens then had to be resharpened until they were no longer fit for use. The advent of the metal nib changed all that. Metal nibs have been found in the ruins of Pompeii, which was destroyed in 79AD. However, they were extremely crudely fashioned and must have been prohibitively expensive. It was not until the 1700’s that metal nibs that were durable, smooth writing and fairly affordable came into the forefront. There are several claimants for the inventor of the steel nib. It is known that a man named Harrison was making steel nibs in Birmingham, England as early as 1780. These nibs were made by hand and were still expensive; however, they were a lot more durable and wrote a much more regular line than could be achieved with a quill pen. These steel nibs were fairly thick; it was not until 1820 that the first thin, flexible nib was developed. In the early 1800s, several nib manufactures developed a means to produce steel nibs with machinery. The cost of nibs was reduced, the quality improved and nibs of the same style all wrote the same, something that could not be said of hand made nibs. Improvements followed as time progressed, but the writer still had to dip the pen into an ink bottle every couple of words to

write. This was the big challenge. How to make a pen that would hold ink and not leak so that the traveler did not have to carry ink bottles with them.



The earliest experiment in trying to develop a self-contained pen was a hollow metal tube that the nib attached to and had a button that would allow the writer to deposit ink to the nib from the back end. However, there were some real problems with this system. Primarily, it was virtually impossible to regulate the amount of ink the button released and it caused severe blotting on the paper. It was not until 1883 that Lewis Waterman developed what would eventually be the first practical fountain pen. Waterman developed a feed system for the ink that would allow a regulated flow of ink from the hollow barrel of the pen and at the same time allow a regulated flow of air from the nib back to the barrel therefore balancing the air pressure. The earliest fountain pens did not have a filling system as we know them today. In fact the pen was nothing more than a hollow tube that held the nib and feed assembly. The section holding the nib and feed screwed into the hollow barrel. To fill the pen, the section was removed and ink was put into the barrel using an eyedropper. Hence the term eyedropper filler. Between Waterman's invention of a working nib and feed and the invention of the lever filling system by Walter Sheaffer, all kinds of filling systems were experimented with. However, it was Sheaffer that finally made the fountain pen a handy and reliable writing instrument that held a good amount of ink. Many other followed in the footsteps of these two inventors. Conklin, Parker, Wahl, Wirt, these are all names of well know pen companies from the turn of the century. Unfortunately, virtually all are gone today. Even Parker, Waterman and Sheaffer are but a shell of what they once were. The market for vintage, collectable fountain pens has soared over the last few years and more and more people have found that the fountain pen writes nicer than any ballpoint you will ever own and is less harmful to the environment and is actually physically less harmful to the writer.

Below are examples of some of the finer vintage pens that were made.

A Parker 51 Aerometric boxed set; A Sheaffer Triumph Crest Boxed set;

A Parker Vacumatic Boxed Set.



This pretty much closes the history of the writing instrument through the development of the fountain pen. After the initial development of feeds, filling systems, etal about the only other major developments came in the way of materials used for the bodies of the pens... Most early pens were made of black hard rubber, the companies then moved on to celluloids and eventually to more modern plastics like Lucite. Interestingly enough the swing has now gone back to the use of high grade celluloids in modern pen manufacture. The only other big development was the invention of the ink cartridge that allowed the user to carry a supply of ink on their person instead of relying on a bottle of ink.



In 1943 Ladislao Josef Biro and his brother Georg, Hungarian expatriated living in Argentina, invented a pen that would almost sound the death knell for the fountain pen. This new design was licensed by the British, who produced the pen for the Royal Air Force aircrews, who found they worked much better than fountain pens at high altitude. Ballpoint pens are still widely referred to as a biro in many countries, notably several European countries, the UK, Australia and New Zealand. The ballpoint became a huge success, but was not without its growing pains. The early

ballpoints did not write smoothly, they blotted ink and they had a tendency to skip badly. However, after many man-hours of research the major pen companies finally worked out the kinks and the ballpoint found its way into the hearts and minds of writers.

Today the ballpoint pen is what most people think of when you mention a pen. There have been significant improvements over the original designs and prices range from under \$1.00 to over \$1000.00 for a modern ballpoint.

That just about closes my not so short history of writing instruments.... There is just so much more to tell, but not enough space. I would recommend online searches and a visit to your local library to see what more you can learn.

*Thomas J Mullane Jr*