

by Lynne Belluscio

The lease on the copier expired and I decided to upgrade. The new one is faster, easier to use, makes color copies and includes a fax machine and it only costs \$10 more a month. Everyone talks about inventions that changed the world – the television, the airplane, the computer, the smart phone ... I think the copier should be on that list.

Historically the only way to make a copy was to write another copy. There were scribes, and secretaries to do that, whether you needed a copy of something you wrote or you wanted a copy of something someone else wrote. In all the papers here at the Historical Society, we have hundreds - - probably thousands of hand written notes or handwritten transcriptions of information that someone wanted to save. It complicates matters more, if you can't read the handwriting!

Only a few years ago, I had someone volunteer to transcribe an old diary and instead of transcribing onto a computer, or even a typewriter, they simply rewrote the diary in their handwriting which was just as difficult to read as the original. There were several mechanical devices that duplicated a persons handwriting. If I remember correctly, Thomas Jefferson used one which is displayed at Monticello.

We were sitting around the table at lunch talking about the "good old days" when we had mimeograph machines and dittos. Ahh – the smell of fresh dittos! One of the great scents that the new generation has never experienced. I discovered that the Ditto (yes it should be capitalized) machine was introduced in 1910.

Teachers will remember that there was a two-page master. You could type the master or draw on it and it would produce 500 copies on the machine. Unfortunately, the Ditto ink gradually fades and any archivist will tell you that copies made on a Ditto machine cannot be preserved. Another copying process that is older than the Ditto machine was the Hectograph which was

introduced in the 1870s. It used a master, much like the Ditto machine, but the ink was transferred to a sheet of gelatin and then paper was laid on top of the gelatin to make the copy. Only 50 copies could be made with this process. I'm not sure when or where I had the chance to make copies with a Hectograph, but it might have been in college when we were learning about printing processes. I think it was also used by organizations that couldn't afford a Ditto machine. Ruth Harvie said in her attic she still has one of the gelatin sheets. We might just have to accession it into the collection.

There was also the mimeograph machine which used a cut stencil, which could be made with a typewriter - - as long as you didn't make a mistake. The mimeograph machine was introduced in 1884 by Albert Blake Dick (A.B. Dick Company). Eventually the mimeograph machine was electrified and it would make copies automatically. You didn't have to stand there and hand crank it. The advantage of the mimeograph machine was that it could make many more copies than the Ditto machine. And the stencils - which could be used over and over - would last longer than a Ditto master. I can remember the frustration when I discovered, shortly before teaching a class, that the Ditto master had dried up and I couldn't hand out the pop quiz that I had used the year before.

An other way of making copies – at least a couple at a time was to use carbon paper. I made it through high school and college, typing copies of papers on a manual typewriter with carbon paper. If you needed more than one copy, it was necessary to use onion skin paper which was much thinner. We have a lot of documents at the Historical Society printed on old onion skin paper and it is so fragile, it often falls apart.



The story of carbon paper is interesting. It was originally known as carbonic paper or carbonated paper and it was developed in the early 1800s as a way blind people could write. Carbonated paper was used as a substitute for ink, since a blind person would not know if the ink had run out or when to dip the pen into the ink.

In 1808 Ralph Wedgewood of England patented the Stylographic Manifold Writer. It was a bound book of tissue paper. A sheet of carbon paper was placed between two pieces of tissue and a metal plate was placed in back of both sheets. The metal plate provided a hard surface for the - in this case blind person - to use a stylus (instead of a pen.) Eventually this "machine" was used to make copies.

I learned that General Grant used a Stylographic Manifold Writer to write the conditions of surrender at Appomattox so that General Lee would have a copy. (I wonder if that means that Ely Parker - who was General Grant's secretary used the Manifold Writer?) And Mark Twain used a Manifold Writer to make copies of his thoughts.

The use of carbon paper would become extremely important

with the introduction of the typewriter in 1872. But then came the introduction of NCR – no carbon required paper. It was perfected and introduced by the National Cash Register Company in 1954 and is still used in cash registers and receipt books.

But all these duplicating processes are for generating copies, not for making copies of already printed material. Enter the photographic copy process and Xerox. Now you can make a copy of something that someone hands you and voila - - you have a copy. Now we can generate copies of copies. In the archival world, we make copies on archival acid free paper and those copies will last longer.

With the introduction of electronic and digital copies, another issue has come up. When do you make a "hard copy" of something? I received an e-mail the other day and before I struck the print key, it asked if I really needed a hard copy. It would be more "green" just to save the copy electronically. But it also asked if I wanted to cc. it to somewhere else. Think about it. Cc. we still use the term - - carbon copy - - yet most kids have never seen a piece of carbon paper!