I'll take Patent Potpourri for a Thousand, Alex

by Joe Terry

A visitor to the Oak Hill Cemetery, Upper Sandusky's grand encampment of the departed, will undoubtedly be impressed with the number of stone markers dotting the landscape. Among the numerous tombstones populating the area is one boldly carved with the name Brinkerhoff. Many a man would pass it by like any other and pay it little heed. In death, this man's accomplishments faded with his passing, but his legacy in some small ways have carried over to the present.

Alexander "Alex" W. Brinkerhoff was born in the Quaker State on March 24, 1821. One of eight children born to Hezekiah and Jane Brinkerhoff, he was just a teen before he ever saw Ohio. In 1834, the family arrived in Wyandot County, a wilderness still frequented by wolves, bears and Native Americans. The Brinkerhoffs traveled as far as Seneca County, settling near the town of McCutchensville, straddling the border between the aforementioned counties.

Hezekiah brought his family here to farm the rich soil. There were the usual difficulties hindering that goal – trees. These needed to be felled, and so his sons set to work, axes ringing throughout the miasmic forest. This occupation was to be a turning point for Alex, though he likely had little appreciation for it at the time. A solitary malaria-infested mosquito took his health out from under him. He grew dreadfully ill and progressively enfeebled until he was unable to assist in even the slightest chore. In the rather harsh environs of Northwest Ohio, his condition quickly became a burden on his family.

With little else to do, Alex took to reading, strengthening his mind if not his body. Kindly neighbors brought him books, which he avidly studied. By the time of his recovery his family had pawned him off onto a local millwright. A year and a half into his apprenticeship a relapse of the disease nearly killed him. After a slow recovery, he took a position with a store in Greenville, Ohio, where he learned the basics of the retail trade. In 1845, he returned home and re-entered the cabinet trade.

He continued to spend his free time reading. This self education proved itself worthwhile, for in the fall of that year, he was given a teaching position in the local school. The next year, intent on furthering his abilities, he entered Ohio Wesleyan. His high hopes were dashed; two months into his studies his health again failed him.

In due course he recuperated, so much so that in 1848 he married Painesville native Martha Hall. Not long after that he was again restricted ill to his bed. His recuperation was slow, and when he was finally on his feet, he joined as a partner in a mercantile in the nearby town of Sycamore. His stay was more than just a retail adventure. He made many friends, not unusual considering having the advantage of his knowledge. He offered all comers what assistance he could with the information that he had acquired over the years.

One such fellow was Philip Perdew (Perdue). Philip was in the business of making lye, indispensable in soap manufacture. Lye was processed from wood ashes, and there were plenty of trees in the area. Mr. Perdew complained of the effort it took to make each day's product. The two gentlemen discussed the matter, with Alex making a few suggestions. These were drawn out, and Alex put his cabinet working skills to good use. He, coupled with the renderings of a local tinsmith, put together a contraption that did six times the work as the old method. It was such an improvement that the two decided to apply for a patent, which was duly granted on May 20, 1856. It also happened to be the earliest one granted to a county resident.

It was about this time that Alex moved his family to Upper Sandusky. It was a logical move, as town size was equal with its recognition. For someone intent on selling a new product, this identification could be vital to his success. Mr. Perdew is not mentioned in the venture, leaving us to assume that he sold his interest in the device to Mr. Brinkerhoff. This start generated a lifelong curiosity in inventing for Alex. Little is known of his sales of this device, but he supplemented it with other mechanisms. He received a patent in 1859; for a corn planter, one in 1861; for improvements in the shoes for the device, and then four more in 1862.

The quartet was granted consecutively, being numbers 36,333 through 36,336. The first was for a corn husker, a device he would reinvent several times over his life. The second was a joint venture between himself and Tiffin resident A.T. Barnes. It was for a fruit gatherer, a jawed mechanism

Alexander W. Brinkerhoff
circa 1884

with a long cloth tunnel that directed the fruit to a basket on the ground. The third was for another version of the corn planter, showing further refinements. The forth, another joint venture, was a field roller. His partner in this invention was A.J. Failor of Upper Sandusky.

This impressive list of patents needed capitol to help transform them from mere ideas to working machines. To this end, Alex partnered with an existing agricultural implement manufacturer, F. F. Fowler and Company. The "company" consisted of Thomas E. Beery and E.R. Wood. Together they set out to market the Brinkerhoff line of goods. Alex found the overall partnership odious and unfruitful. He and Mr. Beery left, forming their own partnership, which thrived. The old firm, now Fowler and Wicks, grew envious and sued. Brinkerhoff and Beery apparently came out the winners and carried on a nice business selling the patented corn husker. Their partnership was mutually dissolved in 1868, when Mr. Beery invested in the newly formed Wyandot County Bank. The 1860s were difficult times for Alex, for he lost his wife and one son to illness. He remarried, determined to carry on family and business.

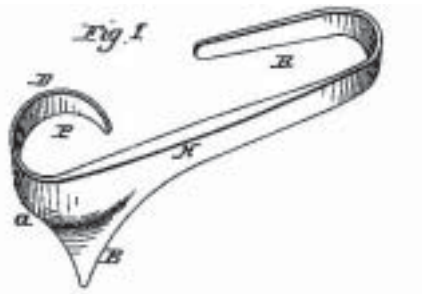
Alex was now selling his inventions as sole proprietor. He developed another tool, added to the list in 1867. This was for a one piece metal clothes pin. No report exits to say whether the item caught on or not. Mr. Beery was one of the witnesses for the device, so it seems possible it was at least manufactured. In 1872, he received a reissue on one of his earlier cornhusker patents, protecting his rights to it for many more years. He also received a patent on yet another variation on the husker. With their sales he was making a fair amount of money, enough to expand his business interests into other fields. It is interesting to note that ten year later, in 1882, he patented yet another variant on the husker, this time for one that would adjust to the user's grip (see illustrations and photo, this page).

The Brinkerhoffs (Alex and son, Milford H.) added a retail business of selling organs and sewing machines. Down the road, they also opened a queensware store in Upper Sandusky, adding a line of cutlery a few years later. Alex had now gone from an agrarian lifestyle, to a manufacturing one, to a business one. The retail life had its advantages and drawbacks. A downside was all of the writing he had to do. He grew especially frustrated with ink, or rather the lack of it. Standard inkwells of the day made it nearly impossible to get at the last little bit left in the bottom. They also were prone to tipping, and in the winter, freezing and cracking. Alex approached the dilemma as he had many others, and in doing so found a solution to his problems.

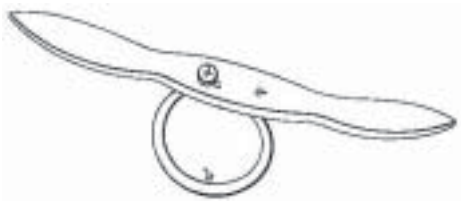
He realized that a well within a well was what was needed to always have ink available. He designed an inkwell to fit his needs, and put the idea on paper, sending it in like so many others before. The government granted him a patent on May 7, 1872. The well had several distinct features, including the depression just below the opening, as well as the sloped opening itself, which allowed the excess ink to run back into the well.

These wells were manufactured in several different sizes, numbered on the base, and are generally found in clear flint glass. The base is marked "*A.W. Brinkerhoff Pat'd May 7, 1872"*, though the author has heard of one embossed "Pat Applied For," indicating usage prior to the patent. A little insight into their manufacture was offered by Alex himself in 1873, when he was granted a patent on a special tool used in their manufacture.

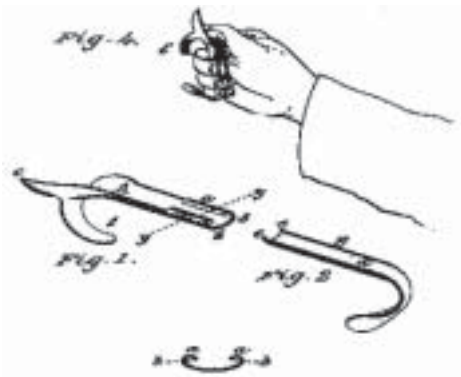
"*In the manufacture of these inkstands an iron mold is used. Into this mold soft glass is put. A plunger is then forced centrally into the mold, having on its lower end a point to form the well "a". When the plunger is withdrawn, the glass being hot and heavy about the shoulder "b" of the well, it has a tendency to run and close the well. The above described is at once put into the closing well and forced down to the shoulder "g" of the iron, which reopens and chills the glass and leaves the well permanent. The point "h" is sufficiently long to form the well, and its shoulder, coming in contact with the glass, prevents the point from penetrating too deeply. If, however, it is desired to make a hole entirely through the leg, the point "h" will be made sufficiently long to secure this end.*



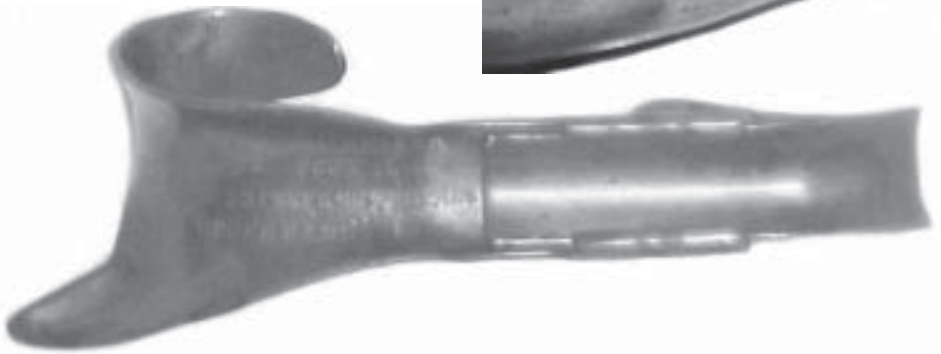
Patent #36,333, from 1862

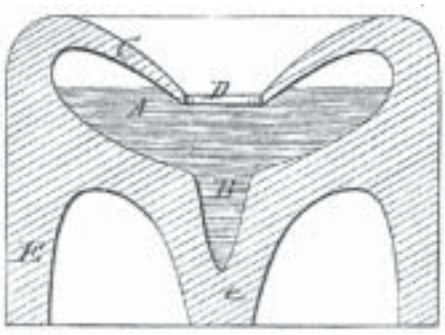


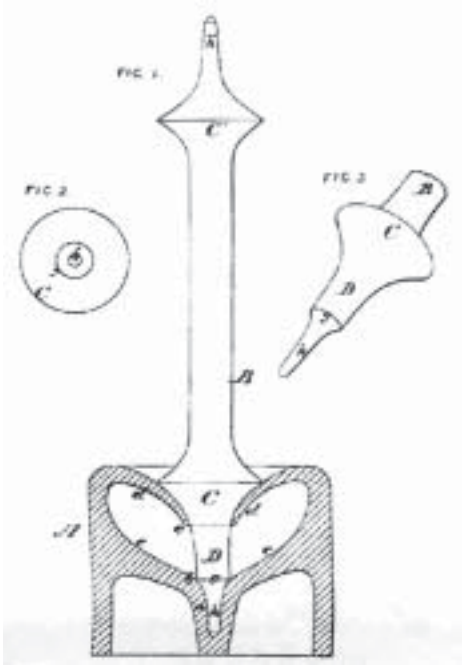
Patent #125,931, from 1872



Patent #253,970, from 1882, for an adjustable husker, as shown below. The value of the tool can be measured thusly: in 1858, in Wyandot County alone, there were 14,462 acres under cultivation of corn, producing 388,487 bushels.







Above: Illustration from the May 7, 1872 inkwell patent. **Below:** Illustration coming from the 1873 tool patent.

The glass is first discharged from the mold with the upper part in the shape like a tumbler, when the top is drawn together in an arching form and gradually pressed down…"

For an interested researcher, this provides a clue as to who made the inkwells, as in the 1870s, there would have been a limited number of glass houses using plunger molds.

If pressed on the point, the author would suggest perhaps Ravenna, Ohio, though obviously other places would as readily qualify. Today the inkwells, while neither common nor rare, command a strong collector's base, and fetch from $40-60 in prime condition.

Even as the inkwells charm today's collectors, Alex's 1876 patent intrigues even more. On March 14, he was granted one for a fruit jar closure. The concept was fairly simple, consisting of a three prong wire assembly holding a lid in place over the mouth of the jar. Perhaps buoyed by the success of his inkwell, Alex put his jar into production. It was made perchance by the same, as of yet unidentified, glass factory that made the wells. Typically, a "private mold" fruit jar was made in one or two sizes, due to the cost of having a mold cut, as well as the actual cost of manufacturing the jars, lids, and closures. Present day information on the jars is vague, but there seems to be a wide range in size; 1-gallon, 3-quart, 2-quart, 1-quart, pint and even a small jelly glass.

Even within the various sizes, there seems to have been some variations, from the numbers embossed on the jars (which serve an as yet unidentified purpose), to the lids, which have been found in both glass and metal. All variations are rare, indicating that few of any size were likely ever produced. The author has seen a facsimile of a salesman's card (see header card in title page and close-up below) for the Brinkerhoff jars, but it sheds little light on the matter.

The illustration on the card shows a fruit jar embossed with "*The Ohio Fruit Jar Company of Upper Sandusky, Ohio*." Additionally, the jars carried the patent date and "*A.W. Brinkerhoff*", and some seem to have names. "*Ohio*" and/or "*Eureka*" is embossed on certain jars. All in all, it is a wonder; with the cost of cutting all of that into the molds, that he didn't go bankrupt. Oh, wait – he did!

Up until 1877, the Brinkerhoff family was in fairly good financial condition. Recall that in addition to selling musical instruments they had added queensware and cutlery to their repertoire. In 1877, Alex suffered another physical collapse, taking him away from the business completely. A run on the banks that year tumbled his trade into a tailspin from which it didn't recover. He filed for bankruptcy protection to the tune of $16,000, a hefty sum for that time and place. While some of this was undoubtedly his retail business, one must wonder if some of his problems were the result of overextending himself on manufacturing his jars.

Left: Side view of the inwell. **Right:** A photo of the base of the inkwell. Note Alex's name and the patent date.

Jar from the salesman's card, as seen in the header of the title page. Facsimile provided by FABC member, Tom Caniff.

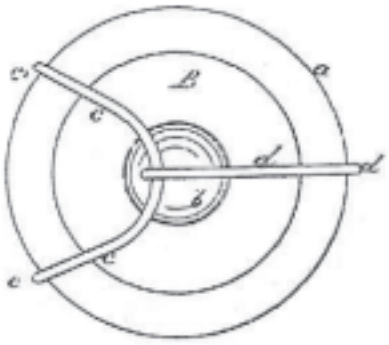


Fig 4

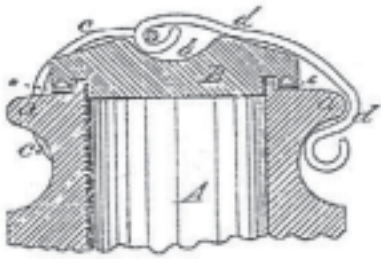


Fig. 1

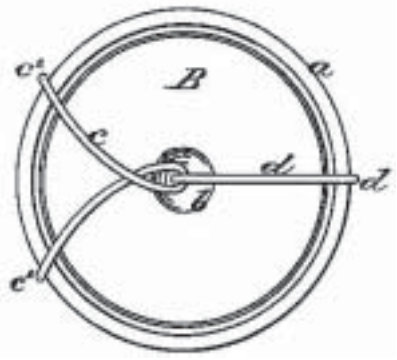
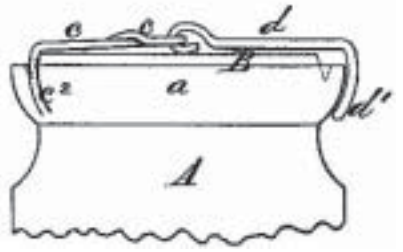


Fig. 2



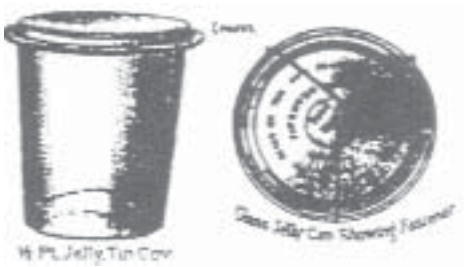
He did not let this setback deter him, and he sat down to figure new ways of supporting his family. It was perhaps the time spent just sitting that inspired him. His idea was to be another turning point in his life, though few thought it likely to last. His adopted profession, unusual at best, was not something you would expect from a man of his training, or rather the lack thereof. But nothing was ever typical with Alex.

His new job was that of traveling "physician." He became a practitioner of piles, a hero to all who suffered hemorrhoids. There are no real indicators as to why he chose this line of work, other than the possibility that it was a problem close to his...uhm, heart. If so, he likely found the treatments of the day somewhat barbaric. To this end (or his own) he investigated alternative healing.

In the long run, what he developed actually surpassed that of regular medical training. He received his first patent for this in 1880, for an improved speculum. This device was actually similar to existing designs that had not been patented. This proved to be an undoing later in the decade when the Brinkerhoffs lost a lawsuit over "infringement" of the design.

Still, what Alex was trying to do was make the whole procedure, already embarrassing, into something a little more refined and comfortable. He also developed an ointment, perhaps the real heart of his treatment. It was a mixture of carbolic acid specially mixed into a vasoline or sperm oil base. This mixture was injected directly into the sac of the hemorrhoid. For the lay person out there, carbolic acid is very toxic, and was used primarily as an antiseptic. In this case the compound stayed where it was injected, causing the tissue to die and slough off.

The ointment had to reach its objective by some means, and these were developed

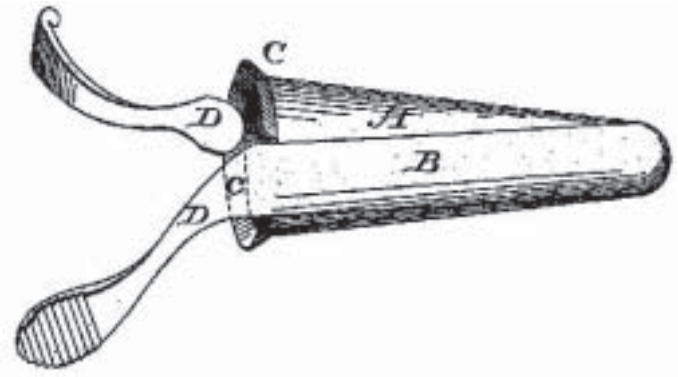


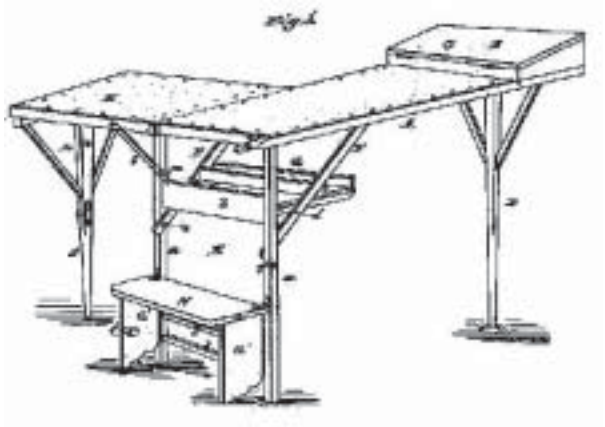
Above, the Ohio Fruit Jar jelly glass and lid from the salesman's card and an example of the actual lid, on left.

A three-quart "Eureka" jar.

A "honey" jar.

Both jars from the collection of Richard and Patty Elwood, members of the FABC.





by Mr. Brinkerhoff over the course of his practice. In 1882, he received a patent for a needle, and later for an ointment injector. He even developed a special table, which collapsed for easy travel. When unfolded the table was bent at a right angle, allowing access to the patient's affected area with greater ease. His last patent was granted after he died, in 1888. It was for a syringe, specifically devised to meet his needs.

In 1884, he was portrayed in the local history as a successful man, weighing in then at 275 pounds. His practice was said to have been going on for over six years, with a personal performance of over 80,000 operations. That is an unbelievable number, so let's break it down to more workable figures. In six years there are 72 months. That means he would have had to do 1,111 operations a month. Divide that by 30, and you get 37 a day! If he put in a ten hour day, he would have been performing one operation every 16 minutes, assuming he was doing them on Sundays as well. By the end of his life he was reported to have accomplished 100,000 of the procedures!

Mr. Brinkerhoff made many opponents in the regular medical profession, who proclaimed him nothing more than a talented fakir. It would seem that not everyone felt that way, and many of the standard practitioners adopted his methods, as attested by this newspaper advertisement, taken from a Toledo, Ohio newspaper (see illustration on the left).

Alexander W. Brinkerhoff died in Upper Sandusky on March 13, 1887. He was remembered locally; for his kindness, his enterprise and his amazing creativity. The local paper said, among its two columns devoted to him, "*The Lamp of a Useful and Busy Life is Extinguished*." Many professionals released a sigh of relief, feeling time had caught up with "yet another quack". Ironically, since his ideas and inventions found their way into the regular medical field, this would seem a distinct case of profession envy.

His obituary listed him as owner of over thirty inventions, but the author could only find listings for two dozen patents, perhaps meaning that a few didn't gain official recognition. Very few people can claim the variety that occurred during his life. He was truly a man limited only by his imagination.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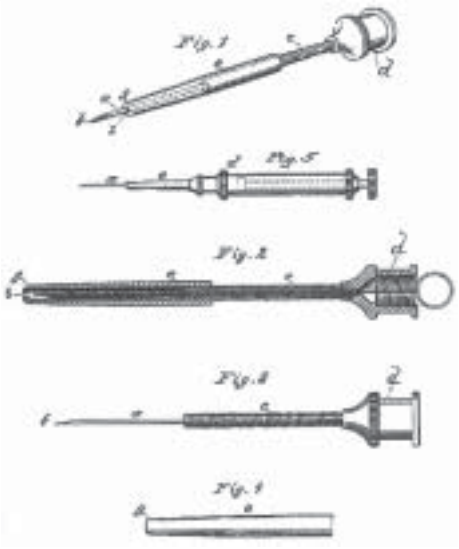

Patent list

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