I think just about anyone that collects, uses or studies tools in any way will stop and take a closer look at a hand or foot powered machine when they come across one. I find them very interesting, especially when one understands the workings involved in getting the machine to work properly. Thus I find myself intrigued in the history of the machine and the company that made it during the early American Industrial Revolution.

Foot powered machines are commonly called “treadle machines”. Treadle machine is more of a generic term used for a foot powered machine. Although many times they are “treadle”, many times they are not. The most common example I give when describing a treadle machine is the treadle sewing machine because most people are familiar with them as they were very common. I describe a treadle mechanism as a platform of some type for your foot that is rocked back and forth by your foot action. The platform has a push rod attached to it that turns a fly wheel with a belt around it. This turns a wheel on the machine on the table above that powers the machine. Most foot powered machines have a fly wheel. Notice I call them a fly wheel instead of a pulley. A fly wheel is heavy cast iron that once turning provides momentum for the machine to power through its cut. Of course many are powered by a different method. For example, some of the fly wheels are powered by a rod or bar that is pushed back and forth to make it turn. Some have paddles that are pumped up and down such as W. C. Young and Seneca Falls. Some companies like W. F. & B. Barns used the velocipede or bicycle peddles method to power the fly wheel. Most hand powered machines use a crank. Many of the hand crank machines also use a fly wheel for momentum.

My first foot powered machine was a treadle scroll saw that I came across at an Allentown Pa. antique show. It was in working order with an additional grinding wheel and a chuck for drill bits, all run by the treadle. The name THE STAR, was cast into the front. The STAR line was manufactured by The Millers Falls Co. The STAR line of scroll saw was made from 1898 until 1915 and sold for $8.50.

(Continued on pg. 3)
The purpose of CRAFTS of New Jersey is to encourage interest in early trades and industries, and in the identification, study, preservation and exhibition of tools and implements used and made in New Jersey as an integral part of our heritage.

Membership in CRAFTS is open to anyone who shares the above interests. Annual dues per person or couple are fifteen dollars for the membership year of July 1 through June 30. Membership fees may be sent to: Hank Allen, 524 Haddontown Road, Glen Rock, NJ 07452 (write check payable to CRAFTS of New Jersey).

CRAFTS of NJ meetings are held at the HOST Masonic Lodge in High Bridge, NJ. Take I-78 to Route 31 exit at Clinton. Go north on Rte. 31 two miles to second traffic light at the High Bridge exit. Turn right and go about half a mile to Dennis Ave. Turn left, then straight to the Masonic Lodge (on the left). Tailgate sales in the parking lot begin at 10 A.M., meeting starts at 1 P.M.

President’s Corner

Every February we have our meeting on the same day as the Super Bowl. This February I had a “super” meeting with CRAFTS. The day started early, meeting Herb for breakfast, then heading to the parking lot tailgating. It was an unusually warm day for the beginning of February and attendance for the tailgating was well attended. As usual, all morning long members kept arriving with more tools for the tailgating. Picking dealers tables was mixed with helping members bringing tools for the upcoming auction. This meeting was a special one for me as I was giving a presentation on the Stanley bench plane type study, and wrapping it up with a workshop on tuning-up these bench planes. When the time came for the meeting to start I was happily surprised to see a full house of 60 members. The presentation went well and I was flattered as I got a round of applause at the end. Many members came up at the end of the meeting and shook my hand commenting on what a fine job I had done. I know I was a teacher for thirty years but I never received a reception like this from my students. Thanks guys!

Of importance this time of year is the approaching auction. Many members are working hard to get everything ready. Of special magnitude this year is that auction listings will be posted on the Dennis Auction web site and this will also be posted on Auction Zip. The CRAFTS auction is always the place for great antique and user quality tools. But don’t forget that also notable is the members tailgate sales before the auction. Any member can participate in selling during the pre-auction festivities so get there early as spaces fill up quickly.

Above is an example of some of the fine tools at the upcoming CRAFTS auction. This is a N. Erlandsen miter plane made for the piano makers in NY City.
Miller Falls introduced the Star Saw to meet the demand for an amateur machine more substantial than its New Rogers model. The drive wheel on the Star Saw was heavier than that of the New Rogers with the extra weight providing additional power for sawing thicker stock. The saw's arms were centered, rather than attached to the side of their support casting, providing for more efficient movement. The upper arm rode atop the frame, and the back of the lower arm passed through an opening in the frame assembly. The arrangement allowed the arms to remain parallel during operation, creating an efficient walking beam motion.

My next machine was a Goodell-Pratt lathe model No.125. Although it was far from being the treadle machine it is today, or even operational at all. I bought this one from a man who had retired the year before and was moving to Florida. He told me the lathe was his grandfathers and he remembered playing with it as a young boy. It had most of the parts for basic functions. Big nuts and bolts replaced the missing correct ones, and it was rusty and dirty. But it was a good start for a lengthy restoration.

Better known for their vast range of hand and measuring tools, Goodell-Pratt's miniature lathes and milling machine were very much an adjunct to this business, not a major part of it. The first machine in the lineage was probably a miniature treadle lathe, manufactured by A. D. Goodell at the Millers Falls Factory during the 1880s. Although the No.125 was marketed as a simple wood or metal lathe, a remarkably wide range of accessories was available from Goodell-Pratt to turn it into a small but useful metal-turning lathe that could hold collets, cut threads and mount a simple milling slide. The No.125 has a swing of 7" and a between-centers capacity of 12". It is 25" long overall, stands 11 ½” high on its twin feet and weighs 30 lbs.

Above - The Slide Rest (Part 132), with its curved-edge ways, had a longitudinal travel of 3.75" and a cross of 2.25", was described by the makers (in their usual honest style) as “a strong and thorough well-made device although not a precision tool.” Because the top slide did not swivel on its base, the assembly could not be described as a proper "compound" slide.
One of the things I like best about collecting these machines is they can be a project for me to work on for a long time. When I buy things they almost never work. I get them a lot cheaper that way. And it becomes a hobby of its own to get it up and running. I take them apart, cleaning, and fixing broken parts, often tracking down what I need. I often pick up accessories to make the machines more complete. It can be a lot of work and expense, but I have pride in them when they come out good. I have been working on this No.125 lathe for a good five years now.

The Trump Brothers scroll saw is one of the oldest treadle machines I have. Patented July 23, 1872, and then reissued November 1877. This was in bad shape and the table was missing. There was enough original paint left to allow me to repaint it as it would have looked. There were treadle tables available from Trump Bros. but the one I have is not one of them. Treadle tables like the one I used where available from different companies for you to attach whatever you might have.

Most Trump saws are driven by friction wheels, but, Trump claims in his patent that the saw can be driven by treadle or steam. George Lewis's 1877 patent shows an almost identical belt driven flywheel version which became the Seneca Falls "Challenge" treadle saw. It's unclear what relationship George Lewis and Seneca Falls had with the Trump Bros. Samuel Trump's first patent for this saw was granted July 23, 1872. The patent was reissued Nov 6, 1877 and George Lewis received his patent in the same year, claiming only the tilting table (different than Trump's version) and the blade holder. Otherwise, Seneca Falls was making a saw almost identical to that of Trump Bros.

Ad from the 1870's for the Trump Bros. saw.
My Seneca Falls metal lathe is fun just watching it go. To see the fly wheel and all the gears turning is something I enjoy. It is a No.10 lathe with 4 ½” from the bed to the center of the head stock, giving it a 9” swing with 24” between centers. There are 7 patent dates cast into the bed. The earliest one is Aug.13, 1894, and the latest is Jan. 11, 1910. For the lathe to have that 1910 date on it means it was made after that date. By 1910 electric motors were commonly used, so I believe this lathe may have been pushed to the side in favor of one with an electric motor and that is why it survived. It took me about a year to take apart every nut and bolt and sand blast, wire brush, scrape, sand; you name it, to clean the gunk off it. Then paint or oil everything and put it all back together. As far as I can tell the lathe works as good today as when it was new. Seneca Falls MFG. Co. incorporated in 1891 and operated into the 1920’s

My Goodell Improved lathe / scroll saw was made and sold by the Millers Fall Co. from 1885 and discontinued by 1922, when Millers Falls had ended production of all foot powered machines.

Continued on pg. 6
Named after the plant manager Albert D. Goodell. The Goodell Improved lathe is the upgraded version of the Companion lathe. The two were the same lathe except the Goodell Improved had a nicer finish, nickel plating and red pin striping. Both were light duty and a smaller size, meant for use by boys instead of adults. It was very important for boys to start developing their mechanical abilities. The earlier the better.

The base model sold for $10.00 and came with an emery wheel, a spindle with a small chuck for holding drill points, a large chuck for ¼ in. twist drills, a drill chuck, a wrench, and a set or drill points. For 2 additional dollars you could get the detachable scroll saw. In 1890, A circular saw attachment was also offered. The Companion model was named after the boys magazine “The Companion” and heavily advertised in that magazine, and a bit more successful because it was less expensive and being for boys, the upgrades and extra expense were not seen as necessary.

The picture at right is of the Seneca Falls Rival scroll saw I recently acquired. It is still in the condition I received it in. This is an upcoming project that will take some time to complete. I hope that it will be part of a future article.

---

**Rare Plane found in New Jersey**

Recently I was contacted by a young woodworker who wanted to show me a plane he had found. He was a student at The North Bennett Street School in Boston and needed some woodworking tools for the program he was in. He saw a Craig's List ad that listed many planes for sale as well as some other tools. He went to the Fort Lee area by the George Washington Bridge to meet the man and look over the tools. There was some good Stanley planes that fit exactly what he needed for his woodworking program. But the man wanted to sell all the tools or none. Thus he bought them all for a low price and he figured he would re-sell the tools he did not need. One of the planes was very unique with laminated wood handle and knob. He showed his instructors the plane and they were able to identify it as a Rice patent plane.

This is a very rare patented plane and just this past week I saw it featured on the front cover of The Fine Tool Journal. It was patented in 1879 by Henry Price and featured a frog assembly that was able to change the pitch angle. Jim Gerhing mentioned that the one featured on his cover was only the second one known. He did not know about the one found recently here in New Jersey. It is a perfect example of the Price patent in excellent working and cosmetic condition. It is an exceptional find and the woodworker who found it was lucky to find a buyer who appreciates the rarity of this plane—Andy D’Elia. Thus he sold the plane to the D’Elia museum and was able to purchase many more fine woodworking tools for his future profession. On the next page are many photos and descriptions of this plane.
Above is Price plane patent drawing. The plane here is very similar to the drawing.

Left top and center is front and rear views of the plane assembled. The frog has a depth adjuster like the Stanley plane with a locking cap also like Stanley except for the knurled nut to tighten.

Bottom left shows the base with the adjustable steps for changing the frog pitch angle. This stepped wedge can be slid forward or back and locked in place. As evidenced by this example these steps did not give a firm foundation and chipping of the steps and frog bolt holes can be seen. At bottom right is bottom of frog showing the small flat "hook like" flat that would sit on a step to get the pitch angle desired.
I enjoy the history that our old tools uncover. I recently obtained a Henry Disston & Son No.12 hand saw in fine condition. Now just finding a saw of this vintage and quality is a delight in itself, but there was another treat in store for me. It had an owner’s name, “Wm R. Leeds”, engraved artistically to the right of the Disston etch. I often see owners names marked on the saw plate or handle but not with the fine artistic excellence of this one. The owner that I purchased it from informed me the owners mark was of a man that was a distant cousin of Hamilton Disston and a prominent politician in Philadelphia. Thus it really intrigued me to purchase this saw and research its history further. 

This is a Disston & Son saw with a vintage of 1865 to 1871. It is the singular “Son” when Henry Disston’s son Hamilton Disston, officially joined his father in the operation of the business. Hamilton joined his father at age 15 in 1859 as an apprentice to learn all the different facets of the business. He was restless under his father’s eyes and joined the local volunteer fire company. He often would leave his work at the saw factory to fight fires. It is during this time that Hamilton became friends with his distant cousin William R. Leeds, who like many other future politicians of this time were using the many local fire departments as political training grounds. Hamilton twice joined the Union Army only to have Henry purchase his release. But Hamilton organized a Company of saw factory employees during the Gettysburg Campaign in 1863. Henry finally agreed to support the "Disston Volunteers" financially. In 1865 after the Civil War, Hamilton returned to work in his father's factory as an executive. During this time he also became active in local Philadelphia politics.

William R. Leeds ancestors came to America from England in the 1670s. Leeds is one of the most omnipresent names in southern New Jersey history, due to the family's early settlement of the area. Jeremiah Leeds served as a lieutenant in the Gloucester County Militia during the Revolutionary War, and married Judith Steelman, a member of another prominent Southern New Jersey family and the granddaughter of one of the first people to own land on Absecon Island, where the modern-day Atlantic City now stands. Jeremiah Leeds owned more than 1,000 acres of land here known as Leeds Plantation. Chalkley S. Leeds served as Atlantic City's first mayor. Henry Disston married Mary Steelman in 1843 whose grandmother was Margaret (Leeds) Steelman. These family ties were so strong that Henry Disston erected a large sawmill in Atlantic City in 1872, which spurred the building of homes, hotels, and business houses and started Atlantic City on its way to becoming one of America's most popular playgrounds. He built for himself a large home there, which was for many years one of the show places of the Jersey shore, and which did much to maintain the character of the vicinity.

During these times Hamilton Disston became involved in local Philadelphia politics. Although never elected to public office, Hamilton Disston served for a time as the City's Fire Commissioner and became the City's first Fairmount Park Commissioner in the 1870's. Hamilton's social venue became one of Republican politics. Besides using politics as a fruitful social outlet, the firm was staunchly in favor of the protective tariff on imported goods, and Hamilton was sure to make his Republican allies aware of this. In 1875, he was the Ward Leader of the City's 29th Ward. It became clear that Hamilton Disston virtually controlled Republican nominations in the City during the 1870's and 1880's. Early alliances with the City Gas Works "Czar" James McManes as well as William Leeds, and David Lane - who were known as the "Big Four", controlled Republican nominations and appointments to city positions, which reaped bountiful political rewards. Hamilton was also Vice President of the powerful Philadelphia Union Republican Club, with William R. Leeds being President. Thus Leeds was not only his distant cousin but also his friend and partner in Philadelphia politics during this time. William R. Leeds was such a prominent Republican politician.
during this time that a Wm. R. Leeds Association was formed for promoting Republican agendas.

In 1878 when his father Henry Disston died Hamilton took over the company as the controlling family member. A little over a month later on April 26th President Rutherford B. Hayes visited the Disston plant and was so impressed that he expressed a desire to return for a private tour of the establishment. During his visit a rough piece of steel was offered to him for inspection, and Hamilton Disston told him a saw would be made from it and presented to him before his departure. Forty-two minutes later, he received the finished hand-saw with his name etched on the blade. It seems possible that Hamilton also presented this top of the line No. 12 saw to his distant cousin and political friend, William R. Leeds, years earlier.

Lastly the friendship and ancestral relationship between the Leeds and Disston’s were so strong, that the Leeds name carried on in the Disston family. In fact the last Disston to apprentice in every department of the saw works and act as President of Disston Saw Works was William Leeds Disston during the 1940’s thru early 1950’s.

In the publication – Portraits of the Heads of State Departments & Legislature of Pennsylvania 1893-94 is this Profile of William R. Leeds.

“WILLIAM R. LEEDS, one of the Representatives of the Tenth district (Sixth and Tenth wards), of Philadelphia, has, for a generation, been one of the principal leaders of the Republican organization in that city, where he was born on January 31, 1837. His father was a tailor. When eleven years old the boy's public school training ended, and he became employed in the wholesale grocery business, in which he remained until appointed a letter carrier by Postmaster Walborn in 1861. A year later he was made superintendent of the letter carriers at the Dock Street post office. In 1864 he was appointed a deputy sheriff by Sheriff Henry C. Howell, and was given charge of the personal estate sales. President Grant appointed him collector of internal revenue for the Second Congressional district in 1869, and in 1870 he was elected sheriff of Philadelphia by a 6,889 majority. His chief deputy, Enoch Taylor, was subsequently chosen sheriff by 29,000 majority. Mr. Leeds was a trustee of the Philadelphia Gas Works continuously from 1866 until the amended city charter took effect, in 1887. He was chosen, in 1864, chairman of the Republican City Campaign Committee, and re-elected every year until 1869, when he resigned during his candidacy for sheriff. In 1877 he was again elected to the Republican City Committee, and in 1880 again made the chairman, which position he held until 1887, when he was once more the Republican nominee for sheriff, with A. J. Maloney as the Republican candidate for city controller. The Republican ticket was defeated, Charles H. Krumbhaar being elected sheriff and Colonel Robert P. Dechert re-elected controller. Mr. Leeds was a member of the House of Representatives in 1887 and 1891, but, in the latter term, resigned to accept the United States marshalship for the Eastern district of Pennsylvania, to which he was appointed by President Harrison. He resigned the marshalship shortly before being re-elected to the present House of Representatives. He has been a member of the Union League for twenty-five years, a member of the Union Republican club since its organization in 1869, and was president of the club for ten years after 1882. He was a delegate to several Republican National Conventions, being with the one in Cincinnati, 1876, when he voted first for Hartranft and then for Hayes, for President. Governor James A. Beaver wrote, in 1887: "There is no man in office, or that has held office, elected on the Republican ticket, within a quarter of a century, but that owes to Mr. Leeds a debt of gratitude. There is not a Republican voter interested in the success of Republican principles and Republican candidates and party supremacy in state and nation but is under obligation to the skillful, tireless, courageous and faithful labors of William R. Leeds." For his famous work, lasting over a year, in managing the successful contests which ousted Democratic officials who claimed to have won in the elections of 1868, Mr. Leeds, who declined pecuniary compensation, was the subject of eulogistic resolutions adopted by the Union League.”

Sometimes it is amazing the story an antique tool can tell with a little research.
Folding Rule What's It?

We're calling this a modified 'what's it?' since on one hand it resembles in every way a 4", 4 fold, square joint, boxwood and brass rule - with middle plates. On the other hand it is extremely diminutive and completely blank - no maker name, no numerals, no graduations or embellishment marks. The legs are each exactly 1"L x 9/32"W x 5/32"D (compare it to the penny).

Have you ever seen one of these? If so: what it is? why it was made? who made it? and what it was used for? If you have any information, or would simply like to venture a guess, please contact Stew May at <stewart.may21@gmail.com>.

---

CRAFTS MEMBER WINS AWARD FOR FISHER & NORRIS ANVIL MUSEUM

The New Jersey Roebling Chapter of the Society of Industrial Archaeology presented their 2015 Annual Award to Mr. Joshua Kavett. It was presented for his extra-ordinary work in preserving and curating the history of the Fisher & Norris Anvil Company. The award was presented on October 24, 2015 at the Annual Symposium in Patterson, NJ by Bierce Reilly. This is the twelfth award since its inception.

Congratulations to Josh for his energetic work in preserving the history of this New Jersey company. We hope to have a CRAFTS meeting soon at his remodeled museum.
Plane Crazy - Mix or Match?
By Joe Hauck

Antique tools like many other antique categories have suffered over the last eight years. One of the bright spots is the demand for tools that can be used by hobbyist woodworkers. Hopefully their interest will spread someday to other tools. Users are looking for good simple wooden planes such as bead planes, hollows and rounds, dadoes, and tongue and groove pairs. Prices for common makers in excellent condition like, Union Factory, Auburn, Ohio Tool and others are as high as ever. These tools are available and still useable with a little fine tuning. Auction prices indicate that buyers are willing to pay a premium for runs of planes. A set of eight matched beads will run around $200 or more approaching $30 apiece. A set of 18 hollows and rounds by different makers (called harlequin sets) will still cost $300. While matched sets by the same maker and with the same owner mark on all can be triple that. In our previous issue our president wrote about a contemporary planemaker who will be making H&R sets so there is demand.

So how do you complete a run? When Marianne needs another dinner plate for her china set she contacts Replacements, a piece of silverware can be acquired from Silver Queen. We collectors and users must scour the auctions, internet, flea markets and yard sales hoping to fill the gaps. It would be nice to be able to have a matching service for tools. It isn’t that farfetched, with the internet people from all over can interact. As an example, a year ago I wrote about buying a lot of NY planes at the CRAFTS auction. The lot had a beautiful E. BALDWIN bead and follow which matched one I already owned. But also in the lot was a Josiah King bead with the same owner’s mark like five others that I bought years ago. Just two months ago I found another Baldwin gothic bead on eBay. It was a different size than the two I owned and pricey at that. I decided to check the owner’s other listings and there it was, another Applewood hollow by Ward of NYC with the same owner marks as four I already own! The interesting thing was that the seller was in Washington state, these things obviously move around. So now I have five that match after twenty some odd years. At this rate perhaps my grandchildren will complete the set.

Well we can’t expect someone to start carrying a huge inventory of planes to facilitate this, although there are some folks who do deal in all manner of Stanley plane parts. I discussed the issue with our president and our webmaster and we will try to do something to accommodate this on our website in the membership section. At present you do need to register an ID and password for access to that page. Lest you think this won’t bear fruit I am reminded of the most valuable match ever made, and it was accomplished before the internet. One of our members acquired a unique patented shoot board by Joseph Jones of Newark, NJ. Back then Lambertville yielded many treasures. The price was high and the plane was missing. Three years later another CRAFTS member saw a plane for sale by yet another of our members at a tool show. (Our members get around as much as the tools do!) It was quite unusual but member number two thought it might fit the shoot board he had been shown by member one. The two owners were put in touch and the match was perfect. The price of the plane was nine times the cost of the board, but now he has an extremely fine and rare piece.

Presently I am looking for the “missing siblings” from a terrific run of six rosewood beads by B. Sheneman & Bro. of Philadelphia. Owners marks are Montgomery and Meredith. They are owned by my good friend Chuck Granick. He purchased four at a Brown auction and several weeks later a dealer produced two more, all have the same owner’s marks. The condition is excellent with a striking contrast between the dark rosewood and the boxwood. The others are probably sitting in someone’s collection.

By the way I now have three Gothic beads by E.Baldwin ½”, 5/8”, and ¾”. I would be very interested in any other sizes by this maker.
TOOL EVENTS

Mar. 12 – Patina Dealer Sale & Auction, Damascus Fire Hall, Lewis Dr. Damascus, MD. 703-819-6880.
Apr. 3 – Crafts Meeting, High Bridge, NJ, takeadip@optonline.net.
Apr. 16 – Crafts Auction, Oldwick Fire House, Rt 523, Oldwick, NJ Steve Zluky 908-534-2710.
June 5 – Crafts of NJ Monthly Meet, Masonic Lodge, High Bridge, NJ, Bob Garay, takeadip@optonline.net
June 25 – M-WTCA Area P Meet, Adamstown, PA, 2800 North Reading Road, Starked@aol.com, 717-367-5207

WANT ADS

WANTED – Member’s email addresses. If you have not been receiving email notices from Stew May or dues acknowledgements from Hank Allen, please send your email address to hankallen@verizon.net.
HELP WITH TOOL COLLECTIONS – A retired shop teacher, I can assist you with tool collection. Finding buyers for your tools. Call Bob Garay (973) 398-5875 or email takeadip@optonline.net.
VINTAGE TOOLS for woodworking, machining, leather working and more. See us at New England area tool meets, online at www-TimelessToolsandTreasures.com or email jane@janebutler.com.
NEED HELP disposing of your tools or home items? Entire or partial house clean-outs available. Call Steve Zluky at 908-534-2710.
JIMBODETOOLS.COM – The largest antique tool website on earth buying and selling fine antique tools. Call Jim at 518-537-8665 or email jim@jimbodetools.com.
WANTED – Molding planes made of apple wood, & better molding planes from Hudson River valley makers. Joe Hauck 908-236-2072.
THE TOOL EXCHANGE –Australia’s home of fine old tools for sale. Our website has over 18,000 photos of tools. We ship to over 30 countries. www.toolexchange.com.au
WVTOOLS: CRAFTS member and eBay seller concentrating on bitstock tools and more.
CHECK OUT – Tom Lamond’s yesteryearstools.com, an internet magazine on hand tools, their makers and their markings.
WANTED - Bell System tools and electrician’s pliers. Ted Davidson 609-731-6915