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Two rare broad axes from Dover, New Jersey

By Ivan Raupp

The Town of Dover, New Jersey was settled in 1722. It was then known as "Old Tye". The area around it had vast surface outcrops of iron ore that initially were free for the taking. Over ensuing years, Dover became a blossoming center for the manufacturing of iron and steel products. Dover officially became a town in 1869 after separating from Randolph Twp. It had a population of 2200 in 1883.

The following story is background for two rare broad axes that I purchased. Martin Donnelly listed a broad axe in his April 2018 Nashua tool auction. He indicated that it was made in Dover, New Jersey by William A. Dickerson. Martin does good research. So, being born and raised in Dover, his description immediately got my attention. Dickerson is a venerable Dover family name with roots extending back to the Dickerson iron mines of the Revolutionary War era. It was one of the earliest mines in operation in the colonies. It was news to me that Dickerson made axes in Dover.

Some months later, Donnelly hosted another auction. This auction was "online" during the time of COVID. To my amazement, he listed another broad axe made in Dover, New Jersey. This axe was made by Elias Guarrigus. Much to my delight, I was able to purchase this axe as well. I decided to see what I could discover about these two axe makers.

The story of Dover iron is long, complex, and rich with ancient family names that enliven the pages of New Jersey history!

John Jackson built a forge on Granny's brook in 1722. His enterprise lasted until 1753 when he went bankrupt.

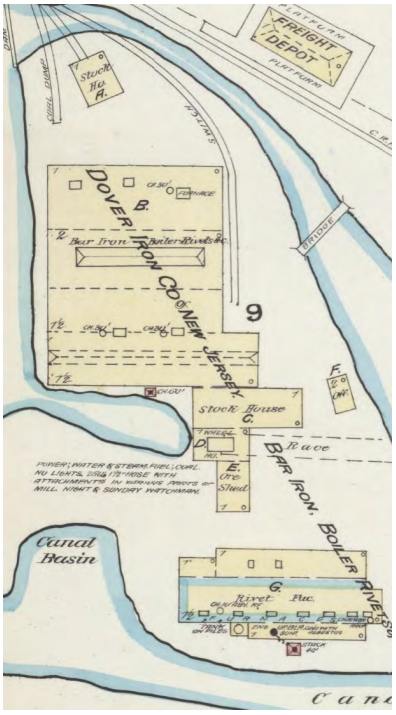
In 1745, Joseph Shotwell, the son-in-law of Jackson started the Quaker Iron Works along the Rockaway River. There Shotwell dammed the river creating the Mill Pond and processed iron until 1757.

Josiah Beeman was the next iron master. He worked on the north side of Dover from 1757 until he was bought out by Israel Canfield in 1792.

Canfield with his partner Jacob Losey set up a major forge, nail factory, rolling mills and slitting mills. Their business prospered until the depression that followed the close of the War of 1812. Being deeply in debt to New York bankers Henry McFarlan and Joseph Blackwell, Canfield and Losey abandoned the operations in 1817.

McFarlan and Blackwell of New York bought the shuttered factory at auction and held it in trust. In 1830 William Scott leased the factory from these trustees and carried on with the business.

Dover Iron Company 1884



Henry McFarlan took over the business in 1832. It included a rolling mill, a spike machine, rivet machine, steel furnace and foundry. McFarlan and Blackwell re-named the company the "Dover Iron Works" and produced much of the equipment and tools needed to dig and construct the Morris Canal. During this time, Dover grew from a small hamlet into a large village (incorporated in 1827) and eventually to a large industrial town by 1869.

In 1869, following the Civil War, the plant closed because business was very slow.

(Continued on pg. 3)

November 5, 2023 - CRAFTS Meeting: Rich Veit" All the Best Goods for America: Tools and Cargo from the Amity Shipwreck (1824), Manasquan, New Jersey"

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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 $15 for the membership year of July 1 through June 30. Membership fees may be sent to: Stew May, 300 Winston Dr. Unit 1909, Cliffside Park, NJ 07010 (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 12 P.M.

The TOOL SHED

Published four times a year for members of CRAFTS of New Jersey. **Articles, especially about early tools and trades, are encouraged and may be sent to the Editor. Email—ivanraupp@aol.com**

President's Corner

Greetings all CRAFTS members!

I hope that you have survived the heat of the recent Summer and are looking forward to the more comfortable weather of Fall.

Please plan to attend the CRAFTS Picnic on September 10th at beautiful Camp Tecumseh. The Directors have planned a fun and interesting day for you. Complete information is on the web site: craftsofnj.org.

We will be meeting at a different place on the Tecumseh campus this year. There are ample shaded outside spaces for tool selling if the weather is good. If it is raining, we will set up inside a beautiful large building called the Tabernacle. Signs will guide you there. If a hurricane is expected we will postpone to the following Sunday. Information will be posted on the CRAFTS web site and on the Facebook site.

Thank you for your attendance and continued support. I invite you to offer your suggestions for improving the club. Your participation is invited and encouraged. We need you!

We invite new authors and new content. Please help us by contributing your knowledge and tool related experiences by writing an article or two for the "Tool Shed". Presentations are invited as well. If you have suggestions let your voices be heard!

Check the CRAFTS Web Site! New Features have been recently added. Home (craftsofnj.org)

Happy tool collecting!

Ivan Raupp

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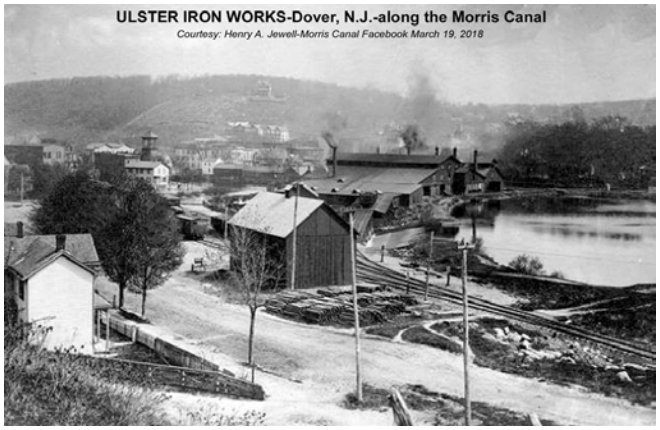
In 1880 Henry McFarland sold the factory to Judge Francis S. Lathrop who was also a receiver of the bankrupt Central RR of NJ. Lathrop then formed a corporation from stockholders of the railroad and capitalized it with $200,000. After refurbishing the buildings and making other improvements the business flourished once again.

"In Dover, the depression began to break when Judge Francis S. Lathrop and four other interested parties, including Mayor George Richards, purchased the shuttered mill ('Iron Era,' 1/31/1880, p. 2) and became The Dover Iron Company."

In 1884, the Ulster Iron Works of Saugerties, New York moved their operations to the Dover plant to be near the canal and railroads. In 1903, they purchased the plant and renamed it the Ulster Iron Works of Dover.

In 1923, ground was broken for a new $100,000 factory, including a building for drilling hollow stay bolts for locomotive boilers and a warehouse for box making, packing, and shipping. At its peak, the Ulster Iron Works employed 450 men.

Ulster sold the works to J.A. Williams in 1935 and by 1950, the plant shut down for lack of business. In 1951, the main buildings of the works were torn down, and the land cleared for the eventual construction of the Dover Shopping Center. For over 200 years, the Iron Works of Dover served the nation with some of the finest Iron products and materials ever produced bearing the tag "Made in Dover".



So, who were Garrigus and Dickerson?

The first blacksmith in Dover is presumed to be Jesse King. He worked at his shop on Prospect Street in the latter part of the 18th century. Several of his many children and grandchildren also became blacksmiths.

Contemporary with Jesse was another early blacksmith, William Ford. William was also a machinist. Elias Guarrigus (1798-1870) was trained by William Ford. He became the blacksmith at the Dover Iron Company and served for 25 years. William A. Dickerson (1813-1898) was also trained by William Ford. He succeeded Elias Guarrigus as the blacksmith for the Dover Iron Company and worked there for over 50 years.

The Dover Iron Company was an early U.S. manufacturer using the "puddling" process to refine pig iron into wrought iron. The pig iron raw material was sourced from the nearby Boonton furnaces. The puddling process uses broken pieces of pig iron as raw material. The ore is carefully heated in a reverberatory furnace that keeps the melting iron secure from contamination from gases in the burning coal. The melting iron requires highly skilled experts who take the iron through various stages of refinement. The finished product is high quality wrought iron with low levels of carbon, silicon, sulfur, and phosphorus. These elements can render a batch of wrought iron worthless through contamination by a faulty melting processes. Well-made wrought iron is very malleable and tough. It forges and machines well. It is highly resistant to corrosion. It was widely used by railroads, canals, and in bridge construction.

So, happily, I have two axes made in the middle years of the 19th century by known blacksmiths in my home town.

In an interesting side note both Elias Guarrigus and William A. Dickerson were contemporaries of a nearby noted axe making family, the Willian McKinnon family of Rockaway, New Jersey. Axes by each maker are pictured below.

(References: 1. Ulster Ironworks Brochure on Scribd.com Dover NJ - Ulster Iron Works | PDF | Manmade Materials | Metalworking (scribd.com) , *2. History of Morris County, New Jersey, with illustrations and biographical sketches of prominent citizens and pioneers.* New York: W.W. Munsell & Co., 1882. Munsell's History of Morris County (usgenwebsites.org) 3. Dover, New Jersey: The Iron Era, 1872-1905 Chronological Historical Essays Researched and Edited By byic W. Bulfinch, Ed. D. Dover Area Historical Society)

Wm A. Dickerson (front view)

Wm A. Dickerson (stamp view)

Wm A. Dickerson (back view)

E. Garrigus (front view)

E. Garrigus (stamp view)

E,.Garrigus (back view)

W. McKinnon (front view)

W. McKinnon (stamp view)

W. McKinnon (back view)

Axes by: W. McKinnon, Wm A. Dickerson, E. Garrigus compared (front view)

The Dover and Rockway axes pictured here were made during the middle years of the 19th century. Even though volume steel making was emerging as a new technology, all of these axes had steel "laid on" only at their bits.

Dover and Rockaway are adjacent towns in Morris County New Jersey. Both towns featured furnaces and forges. Both towns had factories that supplied tools to the many mines and railroads that were widely established in this iron region in North Jersey.

Gizmo: The Cunneen Hacksaw

Ed Rentsch

A metal cutting hacksaw is an indispensable tool in anyone's kit, and generally they are pretty standard in form. A while back, I took notice of an odd looking type that was intriguing just to look at with an angular shape not seen on any other tool and having dual tensioning knobs in a gunmetal center casting. Over time, I've investigated further and found that there was quite a bit more to it than meets the eye.

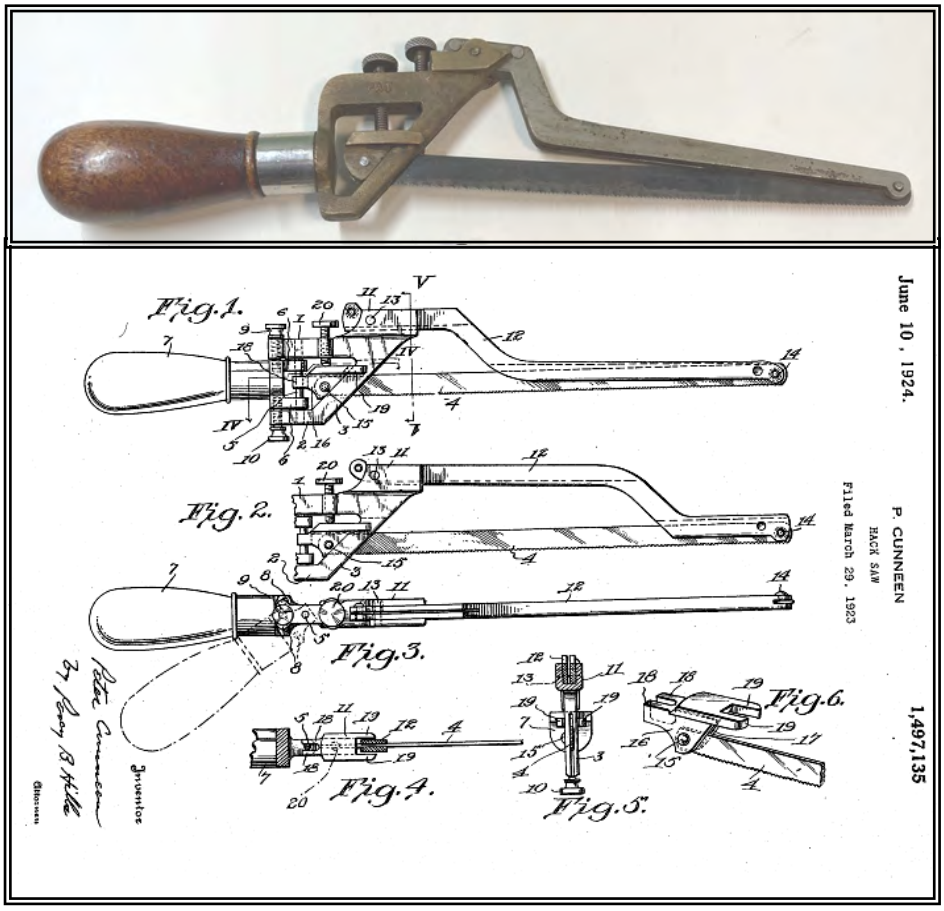


Figure 1. Example of the Cunneen needle nose hacksaw at top with 1924 Patent figures. Simply titled as Hack Saw, the patent shows details of the unusual tensioning design and the two alternate frame configurations.

The saw was patented in 1924 by Peter Cunneen of New Rochelle, NY and was likely quite unique among metal-cutting saws of the time. Cunneen, who immigrated to America from Ireland with his parents in 1865, was a plumber and a steamfitter who certainly was familiar with trying to cut pipe, bolts and other metal parts in tight spaces. He holds multiple patents for early 20th century washing machinery, scrubbers and dishracks. He must have worked in installation and repair of this type of equipment and became inspired to invent his own. I have not been able to determine whether any of his washing inventions were manufactured. By 1925, the census lists his profession as "inventor".

His hacksaw is an interesting example of a useful gizmo whose idea had to have come to him on the job. The design was apparently thought to be marketable enough that he was able to start the Cunneen Manufacturing Co. in New Rochelle NY to produce his tool. Thus, the 1930 census lists him as "Tool Manufacturer".

You may have seen one of these in your travels, they are not common but appear from time to time. Their appearance makes them stand out at least as a curiousity but, with a good blade, these tools can be quite functional for tasks that often present problems for hacksaws of the more familiar form. A key feature of this saw is that it's frame can be reconfigured as a bow frame saw or a close quarter needle nose saw (See Figure 1). The needle nose configuration is particularly notable since the blade is stiffened by the frame over it's whole length allowing the entire 8 1/2" blade to be in tension for shallow cuts. The change of form is accomplished by unpinning and reversing the upper arm.

Based on the patent and my personal observations, there are at least five manufactured variants of the saw. In my opinion, the saw in Figure 1 is the earliest type. It is marked Cunneen Co and just says Pat on the opposite side. This type looks like the top figure of the patent but cannot be converted to the middle configuration because of the way the back frame is made, two pieces riveted together. It features a straight wooden handle mounted on a gunmetal frame with a gunmetal sliding piece riding on an inclined member. The slide has a pin on which one end of the blade is mounted. The other end of the blade is mounted on a pin at the far end of a steel frame made of two stamped pieces riveted together. The blade fits into a notch created between the two steel pieces and goes through a corresponding notch in the cast center section to mount on the sliding piece. A thumbscrew at the top of the frame presses the slide downward to put the

blade in tension. A second thumbscrew depresses the heel of the steel frame to raise the tip of the saw and again add tension.

The patent shows an extra hole at the nose for a mounting pin in the alternate configuration, however the actual saw in Figure 1 has no extra holes for mounting pins. Figure 2 shows the first saw and two other variants for comparison. The frame of the middle saw has been changed to extend a protruding stub at the nose and to add an extra hole position to mount the end of the blade such that it allows for both needle and bow sawing. In the needle configuration, the added stub will fit under the first tensioning screw. The Cunneen Co name is in a recess on the center section of this saw and I have seen an identical one where the mold for this cast piece was filled to omit the name.

The third saw in Figure 2 is generally similar but now carries the name Quad instead of Cunneen and the gunmetal body is now a grayish cast alloy with the shape changed to introduce a slight downward slope to the straight wooden handle. This change appears to give a somewhat better transfer of thrust to the cutting teeth, probably reducing fatigue. It is not clear why the Cunneen name became deleted or changed to Quad. I might have guessed that Cunneen sold the rights to produce the saw at this point except that his name will reappear on the final version of the Quad, shown in Figure 4.

Possibly the short trade name was chosen to be easier to remember in hopes of increased marketing appeal. Quad suggests four of something, maybe forms, features or uses. In math, quad refers to a second order function—one containing a variable raised to the power of two. This suggests to me that the name was chosen as descriptive of the variability between the two forms. The original patent also shows a pivoting handle which added to the two frame configurations would get to three features, but I have never seen a Cunneen saw made with the pivot. His next version is also called Quad and does have more features.

In 1931, Cunneen received a patent for another saw which was manufactured under the name Quad and marked with Cunneen Mfg Co. See

Figure 2. Three types of Peter Cunneen's patented saw. Top is the earliest marked with the patent date, middle is first transformable model marked with Cunneen's name, bottom is first Quad model . Note the protrusion at nose of the lower two saws, not present on the upper saw.

Figure 3. Depiction of frame disassembly of the middle saw in Figure 2 showing reversal from bow hacksaw to needle nose hacksaw. Note that protrusion previously at nose now rests under the head of the first tensioning screw.

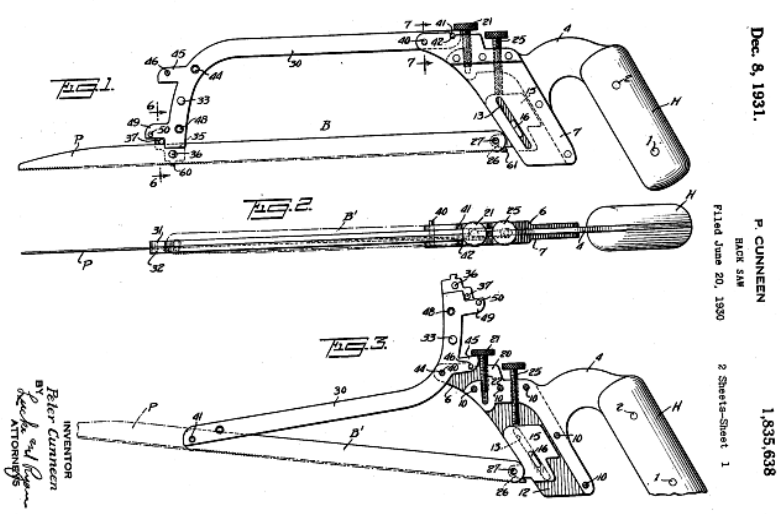


Figure 4. 1931 patent for QUAD pistol grip saw and transformation from bow frame to needle nose saw. Note that the upper frame mount for the needle configuration has two positions.

Figure 4. This one retained the two tensioning screws and the sliding blade mount but did away with the straight wooden handle in favor of a more familiar pistol style grip with hard rubber pads. The frame can still be reversed to make either a needle saw or a bow saw. Other features include the addition of extra mounting points so that the blade can be mounted on the outside of the frame, rather than in between two halves, for flush cutting. For added versatility, the blade may also be mounted on it's side to cut perpendicular to the plane of the frame. With the exception of the screws, the whole thing is now made of stamped components and there are two protrusions at the nose allowing the frame to be pinned in a third position.

The patent goes on for 6 pages and calls out no fewer than 15 separate claims including the use of a long blade with appropriate mounting hole as a saber saw.

In practice, any of Cunneen's hacksaws require some dexterity and a willingness to deal with the time it takes to disassemble, re-align holes and re-assemble it. The pins holding the frame are captive as built but it is easy to imagine they wear and work loose over time, creating a lot of frustration. Even so, the saw must have been a modest success through the 1930's.

Peter Cunneen accumulated 7 patents that I found and died in 1940 at 78. Production of his saw appears to have ended at that time.

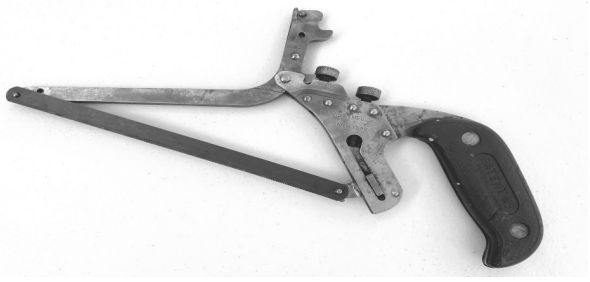


Figure 5. Upper frame pinned in second position for shorter blade, also raising handle relative to the cut.

Figure 6. Bow configuration with blade mounted sideways.

A Blast at the Hagley Museum

Ed Rentsch

Fall will come before too long and you may want to get away for a day. How about a visit to a gunpowder factory village! You won't be taking home any new tools but will learn a lot while spending a day in an idyllic wooded setting along the Brandywine River. The Hagley museum just outside Wilmington in Delaware tells the story of how an immigrant from France gave us the means to fight the War of 1812 with domestic munitions. While many may associate the name with Nylon, Tyvek homewrap, or other chemically engineered products, the DuPont family held a prominent place in our nation's history through their development of gunpowder manufacturing in America.

Eleuthere I. Dupont had some experience as a chemist in France but had come to America thinking of making his way in agriculture in Virginia. Instead, entry into the Powder business was pursued upon discovery of a need and opportunity. Prior to 1802, all the black powder in America came from England. In that year, DuPont bought a property along the Brandywine which was situated where the river had a relatively steep descent suitable for a mill dam to produce water power. To construct the factory and village, a substantial loan was obtained through his father's connections in France. An adjacent tract was purchased which once was referred to as "Hagley" after an English estate. DuPont's enterprise was called the Eleutherian Mills, but it is the Hagley name that has carried forward to today's museum.

Figure 1. Hagley museum main building, a former cotton mill

Figure 2. DuPont Home dating from 1802

The Museum consists of 235 acres with tram lanes through forested property connecting rolling mill buildings, a machine shop, waterworks, a powder yard, a school, the DuPont home and various other buildings to the main museum building. There is also the Hagley Library which is accessed separately. Among the library's materials are the histories of DuPont and many other companies. The museum features dioramas of mill workings, the gun powder manufacturing process, and the village itself, as well as other related material. There is also a floor devoted to the technologies advanced by the DuPont company over the years. To best take in all the aspects of the exhibits, a tram ferries visitors to various stops across the property. Docents provide commentary and demonstrations including the water turbines, the rolling mill, the machine shop, and the firing of gunpowder. The rolling milli is the first of it's kind in America

Atop a hill above the Brandywine, visitors to the fine DuPont ancestral home and garden receive an orientation on the history of the mills and the family. The house is furnished for the period but is not excessively formal in view of it being part of the working factory village. The large barn near the house contains a variety of carriages and antique cars including a DuPont automobile.

For the tool inclined visitor, the machine shop is a restored water powered facility with several of the machines demonstrated throughout the day. A gate is opened to allow water from the mill race to enter a turbine which is coupled by gears

Figure 3. Demo of line shaft driven Brown and Sharpe milling machine with indexed advance for cutting gear teeth

and a long belt to drive the line shafts in the shop. It appears that most of the tools are maintained ready to run. A big focus of the museum is the use of water to power equipment and the

Figure 4. Author in the Coopers workshop.

mechanical advantage obtained through gearing.

The DuPont barn also houses a cooper's shop which is a reproduction of what must have been an essential trade producing powder kegs in large quantity. This small shop is representative of several that were in the yards and while not capable of volume, it offers a nice representation of the tools involved. Note the rope spool with locking tang and lever at the far end of the bench, presumably to clamp keg staves (Figure 4).

Interwoven with the story of Hagley is the sobering truth that making gunpowder is fraught with risk. The combination of willow charcoal, sulphur (brimstone) and potassium nitrate (saltpeter) is inherently volatile. Also, the powder produced was accumulated until an economical volume could be

Figure 5. Mill race canal and Rolling Mill buildings

Figure 6. A pair of 8 ton rolling wheels crush charcoal, sulphur and saltpeter into powder behind a stone blast shield

shipped. The workers were checked for metal before entering the powder yard and wooden tools were used within the area. Nevertheless, over the course of 119 years of operation ending in 1921, there were a remarkable 288 incidents of explosions, countless injuries and sadly 228 deaths! One blast in 1890 involved a staggering 150 tons of powder killing 10 and injuring scores. Many buildings sustained severe damage. Windows were shattered as far away as Wilmington city and the blast was heard even in Philadelphia.

As noted earlier, the use of water power is evident throughout the "Powder" yard. One of the great innovations that can be seen in action at Hagley is the introduction of turbines to harness water power to run machines throughout the factory village. The steep drop of the Brandywine Creek in this area presented an ideal location to build a dam to direct some of the water from upstream into a channel running above the creek bed. This was the mill race from which gate valves could be opened to direct water downhill and back to the creek. On the way down, the water was dumped onto the top of a turbine (See Figures 7 and 8). The water rushing through the slanted vanes of the turbine is much more efficient than a water wheel in converting the potential energy of the water into torque that could be connected via gears, shafts and belts to a variety of machines.

Figure 7. A turbine of the type used to convert the gravity power of water from the mill race to torque to run the line shafts

Figure 8. Line shaft connected to a sunken turbine feeding power to grinding equipment inside an adjacent building

Figure 9. A beautiful example of an elegant DuPont automobile once produced in Wilmington.

Another evidence of DuPont's entrepreneurial energy was the foray into the automobile business. From 1919 through 1931, the DuPont Motor Company produced several high end models in Wilmington DE. The company was apparently not profitable and few of it's products remain. An exhibit of the Motor company story is housed in the barn.

Today, the yards have grown back into park-like lushness and there is only a controlled powder demonstration to be set off a few times a day to momentarily interrupt the tranquil scene.

The museum has recently installed a great exhibit of American Invention featuring hundreds of ingenious patent models of all manner of curious devices from the Hagley's large collection. The models are housed in showcases with accompanying information that can be retrieved by the visitor on a monitor display. The museum currently does not have food service since a small café was temporarily closed for pandemic safety. For more information, check out the website Welcome to Hagley Museum & Library and American Patent Models (hagley.org) .

Using Irons in Combination with a Plane Maker Working Years to Better Age/Date a Wood Plane

by Todd Hostetter

I originally wrote this article to date/age wood planes made in Lancaster County, PA; all the planes referenced were made there. As focused as I am on Lancaster County makers, I never looked at the bigger picture on this subject until I was asked to submit other articles for The Tool Shed. I have re-titled the article for and have provided a weblink referencing English ironmakers. I have also shortened the document by removing some illustrations.

The period of 1740 to 1820 in the Sheffield and Birmingham (England) metal trades showed a tremendous expansion in the number of workers and output for the cutlery & edge tool trades. One writer suggested that in 1710 there were about 1800 workers that rose to more than 5,000 a century later. In 1824, the Sheffield Local Register posted a Sheffield census number of 8,419, with an additional 130 for "country workers".

Planemakers in the United States often preferred importing their irons, opposed to using local blacksmiths or other US-made ones. Why? English ironmakers had been in the plane iron business well before any US maker and their product was superior with better edge holding properties. Pre-Revolutionary seacoast New England Colonies from about 1760 on were small hotbeds for planemaking and were closely followed by Newark (NJ), Philadelphia, Lancaster, and Reading. Only two-family shops in Lancaster County (Heiss, began in 1769) & Schauer started in 1820) were working earlier than 1824; all others were formally in business after 1821.

In the below list, the iron makers are listed chronologically. If available, general information on the shop is included, along with what maker and planes they were found in. I've also collected photos of each iron maker's mark.

The date information is especially useful when comparing it to the active dates of the individual planemakers. Here are two examples how this data can help date the plane.

1. If you own a Heiss or Schauer plane, both families were early Lancaster County makers and only had access to the earliest of iron makers. The Heiss's were out of business when father Diettrich died in 1814. Son Jacob later continued with eventually finding himself in E.W. Carpenter's shop as a journeyman. Therefore, if you find one of the Heiss planes with an iron maker in business after about 1818, it's more likely a replacement iron. The Schauer's ran their East Petersburg business from 1820 to 1843. Similarly, they used these early makers. There are several Heiss & Schauer planes reported in the list.

2. When you think about an E.W.Carpenter (EWC) plane, it would have had to be a very early plane in his career for it to have a Newbould (circa 1752-1842), James Cam (circa 1781-1838) or a P Law (circa 1787-1833) iron because EWC at the earliest, started making planes about 1821 in Lancaster, unless he made them for his cabinet making business in Baltimore (starting 1813). W. Butcher irons are very prominent in his planes and became available in 1824.

Enjoy this "directory". Nothing is written in stone (or wood or iron, as this case might be) and it's entirely possible that some of these planes were found with replacement irons.

1752-1842 **Newbould**

D Heiss; Jacob Heiss; I Schauer *5/8" Groover****; N Schauer*** *Complex Molder****; J Schauer*** *(multiples)****; EWC*** *rabbet, straight rabbet;* ***JF Bauder*** *¼" Side-Bead****)***

Samuel Newbould was a respected, prolific Sheffield, England maker of plane irons. The Newbould's built an extensive export trade to Europe and America. Samuel Newbould, Jr (1752-1842) went to America early in the 19th Century and furnished a house in New York, where he acted as resident agent for the firm. The family carried on the business for at least 80-100 years, working out of the Bridgefield Tool Works. Their irons are often found in early US planes.

1781-1838 **James Cam**

(**EWC** 3-5/16" Pilaster; EWC 5-3/8' Cornice, early career common planes by EWC - 7/8" Skewed Rebate; 1-1/2" Skewed Rebate; #5 Round; Left Snipes Bill; ½" and 5/8" pairs of Rule-Joint; T&G Coming & Going; Complex Molder; Double Sash Molding w Rosewood Knobs); **Kieffer & Auxer** T&G Coming & Going)

Originally thought to be active 1737-1837, James Cam was a maker of plane irons in Sheffield, possibly starting before 1781 and continuing until 1838. Chances are that numerous irons came to the US sometime before 1807, when the Embargo Act discouraged importation of British steel (under President Thomas Jefferson); that Embargo Act ended in 1809.

1787-1833 **P Law**

(J Schauer Dado**)**

Phillip Law in Sheffield

Sorby

(**I Schauer (1820-1843)** toted & fenced molder)

1791-1871	John Sorby,
1828-1841	Robert Sorby
1841	Alfred Sorby
1841	Frank Sorby

1823-1835 **T. Hildick** London

(EWC** #8 Round, Dovetail, Skewed Rabbet**)

A different T (Thomas) Hildick lived in Birmingham and so did an Aaron Hildick, also an iron maker.

1824-1900 **Wm Butcher**

(EWC** favored this iron maker for many planes*; **D Long** wedge-arm tongue; **Mathias Long** side-bead; **J Stamm** 22" Jointer; **JF Bauder** panel raiser**)

William Butcher was a manufacturer of edge tools, skates, saws, files, hoes, trowels, joiners' tools, and in the West Indies and Brazil, plantation tools.

*W Butcher and James Cam irons appear to be the most frequently used irons on EWC planes, with those by James Cam, being the more frequent of the two in molding planes.

1828-29 **J. Tillotson & Co**

(***Kieffer & Auxer** Double Wedge Jointer**)***

Thomas Tillotson from Sheffield. J. Tillotson (Pigot's Commercial Directory)

1828-1829 **M Bishop**

(EWC** 1" Skewed Rebate**)

Matthew Bishop (Pigot's Commercial Directory)

1825-1841 **Marshall or George Shaw**

(Jacob Heiss)

Marshall & Goerge both lived on Osborne Street in Sheffield.

1852-1873 **Humphreysville**

*(**EWC** Wedge Arm Panel Tongue (unboxed))*

Humphreysville Tool Co was making edge tools in Seymour, Connecticut from 1852 to 1904. One source says that they went out of business in 1873. Seymour was apparently called Humphreysville until 1850. Humphreysville Manufacturing Company dates to 1810. It made woolen and cotton goods and paper. Col Humphreys, for whom the town derived its earlier name, was an aide to General Washington during the American Revolution.

T**1833** **W. Ash & Co**

***(EWC** Toothing Plane)*

Ash, William & Co were manufacturers of all kinds of edge tools, brace and bits, skates, saws, and plantation tools.

1840's

Green (probably Samuel or Alfred Green of Sheffield)

***(J Schauer** Fenced Cornice)*

There were two Lancaster County blacksmiths named Green, however, neither were working when J Schauer was active **(1840-1843)**:

Edward Green in Drumore Township 1819

John Green in Conoy Township 1870

his stamp was probably from Samuel or Alfred Green of Sheffield

Hannah Green in Sheffield (1791-1825)

Samuel Green in Sheffield (1833-1837)

Alfred Green in Sheffield (1837-1846)

Charles Green in Sheffield (1841)

1840-1860 **Baldwin Tool Co**

(EWC** T & G, Patented Tongue Plane; 2-1/2" Gutter (possibly handled round**))

EWC entertained using more irons from Baldwin Tool Company as noted in his below letter of July 1st, 1856. It's unfortunate that his personal career ended after a short bout of Typhoid Fever on September 15, 1856. Because he died that same year as he wrote the letter, it's easy to develop questions - so, I might pose that his journeyman and family never knew of the letter. If they did, just maybe we would see more Baldwin irons in the successor-made planes.

Letter 4. Letter from E.W. Carpenter to Baldwin Tool Company

LANCASTER, JULY 1st, 1856

Baldwin Tool Co.
Middletown, Conn.

GENTLEMEN:—

I should have written sooner in reference to your PLANE IRONS, but wishing to give them a thorough trial, I have deferred writing until I find it necessary for me to order a further supply.

Thus far I have found them to be full as good as the best English Irons: They all cut beautifully, and some of them I tried over knots and they stood it well. My hands, as well as myself, are working on hard wood with your Irons, and they do so well that we could not wish for any thing better.

I have formerly tried Irons of American Manufacture, and they have so far failed in the temper, that I was obliged to abandon the use of them altogether., and I acknowledge that it was with some reluctance that I was induced to try yours; but I have now sent Planes with your Irons to some of my most particular customers. I have ground up and tried all of them, without finding any deficiency, and have written that I was sure they were good and would warrant every one of them.

I am very happy to find as good a Plane Iron may be made in this country as in England, and as long as your Irons maintain their present standard, I shall not desire any other.

Yours, truly,
E.W. CARPENTER, Plane Manufacturer.

From Tannehill & Warner "Letters from EWC" The Chronicle, Vol 47

1841-1868 **Thomas Mottram & Sons**

(EWC** 3-15/16" Panel Raiser**)

Thomas Mottram, of Sheffield, was a merchant and manufacturer of all kinds of edge tools, saws & steel refines. Known for his "German Steel".

1850-1870 **Providence Tool Co**

(EWC** Nosing**)

The Providence Tool Company was the outgrowth of the business ventures of two brothers. In 1834, Joseph and Jeremiah Arnold began manufacturing nuts and washers in Pawtucket. When Joseph retired, Jeremiah joined William Field, named their business William Field & Co., and moved to Providence in 1846. In April 1847 the name was changed to the Providence Tool Company.

The company is known for its ammunition production. However, in its early years, it primarily made hammers, pickaxes, marlinspikes, nuts, and bolts. In 1856, it merged with the Providence Forge and Nut Company. The Providence Tool Company was successful in supplying machine parts and tools across the nation.

Emanuel W. Carpenter tried to work at length with Providence Tool Company, but never found their quality to meet his strict quality control standards.

The following iron marks were also found in Lancaster County planes infrequently:

1833 **Graeves**

1869-1920 **Sandusky**

Brotson & Co

R Aston (Birmingham)

A R Boxer

A list of Sheffield Ironmakers 1787-1911 can be found here: https://lancasterwoodplanes.files.wordpress.com/2022/02/sheffield-edge-tool-makers.pdf?force_download=true

Congratulations!

Dan Kocaj and Janiesha Dureny are our two Micalizzi scholarship students showing pieces they made in bandsaw training with Wally Kunkel at the Mr. Sawdust School.

Recognition: Thank you Rich Veit!

CRAFTS Meeting: April 2nd 2023

Rich Veit, Professor of History and Anthropology at Monmouth University presented his findings on a Colonial era forge, that he and his team excavated in Mendham , New Jersey.

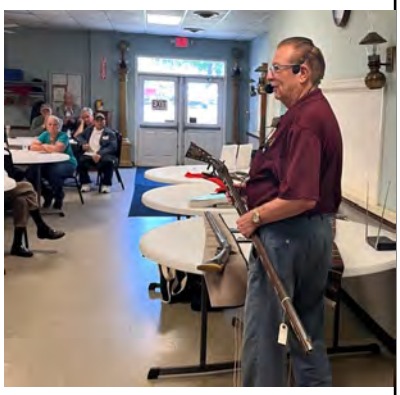
This presentation discussed the chance discovery of a well-preserved bloomery forge in Mendham, Morris County New Jersey and its documentation through archaeology and tree-ring dating. The Leddell/ Frost Forge site contained exceptionally well preserved wooden remains, including an anvil base and water wheel, which provide new information about forge layout and construction. Tree-ring dating allowed the forge to be closely dated. While the rediscovery of associated historic documents allow us to better understand the people who worked at the forge. This presentation also explores how archaeology and tree-ring dating can allow us to better understand early American industries. See Riche's presentation here:

Forging Ahead in the Somerset Hills (craftsofnj.org)

Recognition: Thank you Ron Gabel!

CRAFTS Meeting: June 4th 2023

Ron Gabel is one of the best known experts on Colonial rifles anywhere. He has focused on the Kentucky rifle for many years and is known "far and wide" as a leading authority. He has written the description, specifications, and condition reports for Kentucky Rifles for the prestigious Julia Auction House. He currently does this for the Poulin Auction House in Fairfield Maine.



Ron has many interesting stories about his work with high end collectors over his many years in the business. They include projects where he was paid to travel to private estates to evaluate collections of some of the rarest Kentucky rifles in the world.

The Metropolitan Museum of Art is one of his many clients.

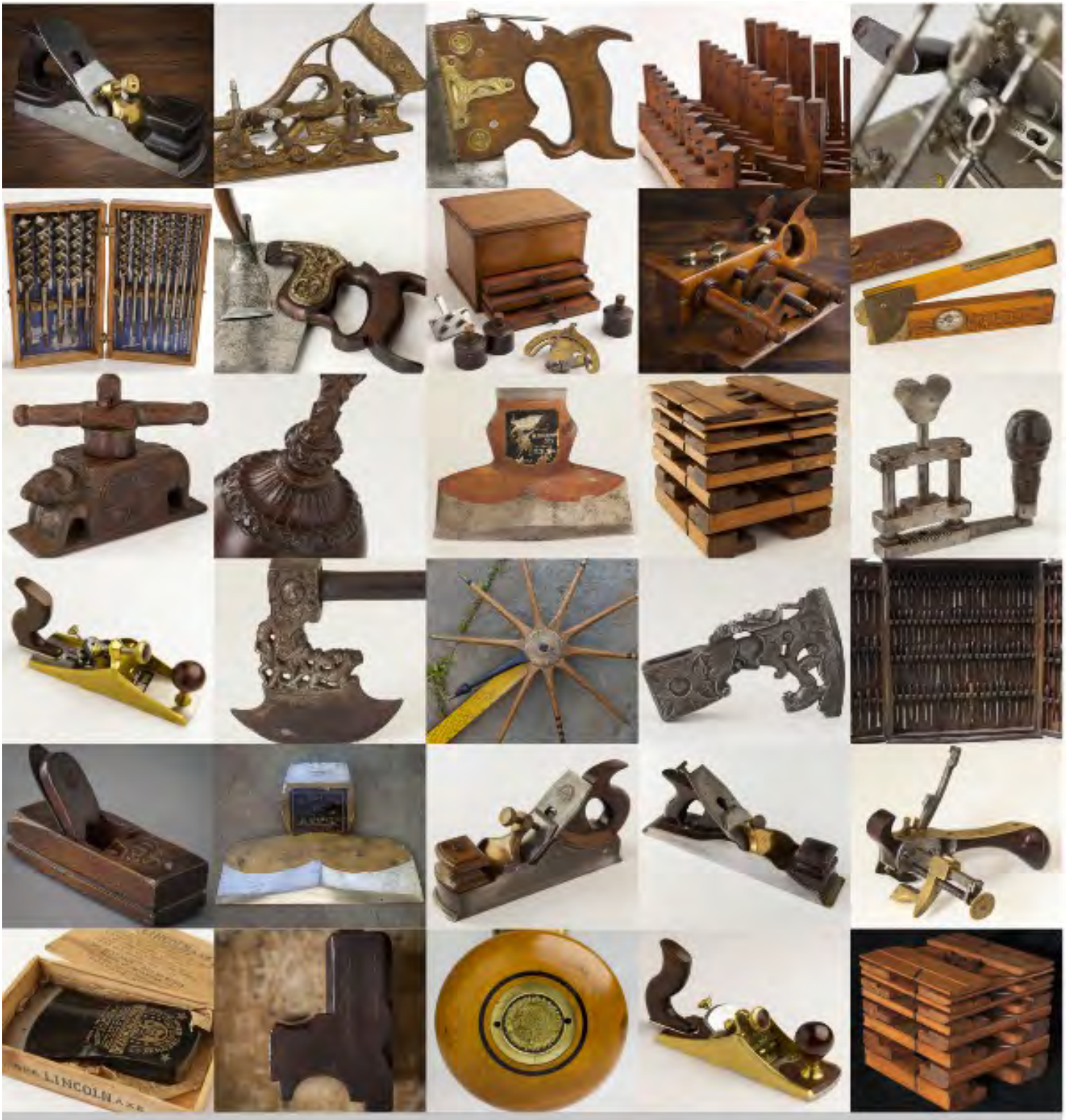
Ron has a great sense of humor and shared many interesting stories about the very colorful rifle collectors that he has worked with over his long and successful career.

Ron reminds us that a good collection features many examples of a given item. He stresses that variety is important and that identical copies of a given tool are not collections ,but accumulations.

Ron continues to offer advice and expertise to those people who are interested in knowing the history and value of their gun collections.

Welcome New Members!

Frank Canastar	Elkridge, MD
Charlie DiGangi	Merritt Island, FL
Janiesha Dureny	Branchville, NJ
Ronald G. Gabel	Slatington, PA
Craig Grodman	New Hampton, NY
John Henson	Merrill, WI
Daniel Kocaj	Rockaway, NJ
Jon Stroop	Hopewell, NJ
Christopher Trapani	Ridgewood, NJ
Russell Tropinsky	Tenafly, NJ
James Wright	Machesney Park, IL



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Tool Events:

Full list on CRAFTS Web Site Home (craftsofnj.org)

September 6-7, 2023: Martin J. Donnelly Auction (online only)

September 9, 2023: Great Planes Trading Co. Annual St. Charles Antique Tool Auction in St. Charles (St. Louis), MO

September 9, 2023: Rocky Mountain Tool Collectors Annual Meeting in Longmont, CO

September 10, 2023: Annual CRAFTS Picnic at Camp Tecumseh, NJ

September 23-24, 2023: 53rd Annual Peters Valley Craft Fair in Augusta, NJ

September 27-30, 2023: Mid-West Tool Collectors Assoc. (MWTCA) Fall Meeting in Des Moines, IA

October 1, 2023: Mid-West Tool Collectors Assoc. (MWTCA) Area P Meet in Adamstown, PA

October 3-4, 2023: Martin J. Donnelly Auction (online only)

October 5, 2023: David Stanley Auction in Osgathorpe, Leicestershire, England

October 21-22, 2023: Jacktown-Blue Mountain Antique Gas & Steam Engine Association 44th Annual Fall Harvest and Sawmill Show in Bangor, PA

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Wanted - Better planes by Grant, Marley, Alford, J.Stiles, SE Jones, C.Allen, Tobey, Oothoudt, Jamain, Douglass. E.Baldwin, Call - Joe Hauck, 908-236-2072.