

The Davistown Museum
The Ancient Dominions of Maine: An Archaeology of Tools
The Industrial Revolution (1865f.): Classic Period of American Machinist's Tools
Hegemony of the New England Toolmakers

The period between 1840 and 1865 was a time of rapid industrial change that culminated in the Civil War. By the end of the Civil War the world of the toolmaker and the tool user had changed radically and would never be the same. The key event in the florescence of the Industrial Revolution was the direct process production of steel by the Bessemer method, soon supplanted by the more flexible modern Siemens open hearth method, which allowed quality control production of countless alloy steel variations. There was a vast increase in the variety of tools in the tool kits of the machinists and woodworkers who worked after the Civil War. The mass production of steel permitted the continued rapid growth of both railroads (iron rails soon become steel rails) and the factory system that supplanted and gradually made obsolete the small workshops of the mill towns of rural America, including Liberty and Montville. The final display area of the "Archaeology of Tools" is devoted to illustrating some of the tools typical of the new tool kits that began supplanting the implements produced by the blacksmiths and small forges in the earlier maritime culture of Maine and New England. The transitional and patented planes and the classic machinists tools in the Museum exhibits are important historical artifacts illustrating cultural change as well as esthetically interesting sculpture objects.

Despite the full onslaught of the Industrial Revolution, shipbuilding continued in Maine, especially in the larger parts of Penobscot Bay, Waldoboro, Damariscotta, and Bath. A golden age of exquisitely designed and constructed schooners and downeasters supported a flourishing industry of Maine edge tool and agricultural equipment manufacturers, but the most important developments in manufacturing technology, including edge tool and hand plane production occurred in southern New England, where the classic period of American toolmaking overlapped with Maine's lingering maritime culture.

The sojourn of America's first machinists in Maine, Darling, Bailey, and Schwartz, was brief. The florescence of the classic period of machinist tool manufacturing was in southern New England. The maritime culture of Maine was in decline. The final sections of the exhibition of the Davistown Museum's "Archaeology of Tools" illustrates the rapid emergence of new types of meticulously designed and constructed tools.

Martin Donnelly, in his introduction to the classic period of American Machinist Tools, provides this summary of machine tool production in the early years of the Industrial Revolution; a final footnote to the hegemony of New England's maritime culture.

The Classic Period of American machinist tools... [is] that period of time from shortly before the American Civil War to the beginning of the First World War when, in response to tremendous economic growth and technological advancement, there was an incredibly rapid increase in the number of manufacturers and marketers of machinist tools. A great number of companies and individuals, producing all manner of products, grew and prospered, marketing elaborately conceived and artistically machined hand tools for those skilled workers who manned the engines of industry. As the end of this Classic Period approached, the vicissitudes of the emerging economy, which brought periodic recessions or 'panics', together with the need to compete on a national, rather than regional, scale, had served to eliminate nearly all of those many companies. Certain industry leaders, particularly the L.S. Starrett Company of Athol, Mass., and the Brown Sharpe Mfg. Company of Providence, R.I., were the principal survivors, in many cases (particularly that of Starrett) buying out the other companies as the businesses of those companies foundered. As this Classic Period came to an end, standardization of design and minimization of embellishment became the rule, largely as a result of the demands of mass production. In many cases, tools included in the Starrett product line at the end of this period continue to be produced in essentially the same form today.

During the Classic Period, however, as new companies competed for a share of the business in a dynamic market, a tremendous number of well-made precision tools, many of them protected by patents and decorated with artistic knurling, were marketed by a competing group of firms and a substantial number of individual entrepreneurs. Many of these tools and their makers failed to survive in an increasingly competitive environment, and, as companies reduced the number of products offered in the face of inadequate business success, certain elaborately embellished and mechanically ingenious tools of a very high quality... were cut from the product lines.

The many tools in the museum collection dating after 1865 illustrate the vigorous growth and evolution of the classic period of American toolmaking, documented in volume 8 of the Davistown Museum "Hand Tools in History" series.

Principal Machinist Tool Manufacturers of the Classic Period: <http://www.davistownmuseum.org/TDMV/toolMfg.htm>

Edge Tools - American Made Cast Steel

32405T1 **Countersink** DTM

Cast steel, 5 5/8" long, 3/4" wide, signed "PATENDED" "JAN 23, 1877." "D.J. ADAMS" "KITTERY, ME." and "R.L. MARKS".

The Directory of American Machinery and Tool Patents lists this as patent number 186,513 for an improvement for countersinks and also shows the patent diagram at:

<http://www.datamp.org/displayPatent.php?number=186513&type=UT>. It is unknown who manufactured the countersink. R.L. Marks was probably an owner. A countersink is a tool used to make a hole with the top part enlarged so the head of a screw or bolt will lie flush with or below the surface.

Maine Made Tools

72002T2 **Level** DTM MH

Wood (cherry?), 12" long, 1" wide, signed "E. T. BURROWES CO." "PORTLAND, ME." on brass plate, 1910 (?).

A mundane late example of an everyday household tool made by one of Maine's most prolific toolmakers.

http://www.davistownmuseum.org/pics/72002t2_p1.jpg

<http://www.davistownmuseum.org/publications/volume10.html>

Measuring Tools

Up until the 1850s most every foundry producing machinery for the burgeoning Industrial Revolution manufactured their own hand tools. Up to this time, the art of measurement was not very precise; it wasn't until

1856 that JR Brown invented the first micrometer. Most of the early machinery built for the water mills of southern New England were worked by hand and eye, with hand filing and primitive measurements the primary techniques available. After 1860, small companies like the J Stevens joined JR Brown, later Darling, Brown & Sharpe and other flourishing machine shops to begin the mass production of precision hand tools that were so necessary for the accurate construction of the complex factory machinery of the Industrial Revolution. In this context, in Davistown Plantation, time stopped.

21201T11 **Adjustable caliper** DTM

Steel, 6 1/8" high, signed "J. Steven A & T Co. Chicopee Falls Mass".

This signature is one of three variations listed in DATM (Nelson 1999, 757) for this prolific maker of bits, calipers, dividers, levels, machinist tools and guns, 1864 - 1903. In 1903 they were bought out by L.S. Starrett.

TJS1301 **Adjustable calipers (3)** DTM

Cast steel, 3 1/4", marked "US 48610568" on wrench.

<http://www.davistownmuseum.org/pics/tjs1301.jpg>

51100T14A **Adjustable die stocks (2)** DTM

Cast steel, 10 7/8" and 14 3/8" long, signed "J. M. King & Co. Waterford, NY".

DATM (Nelson 1999) lists this company in Waterford from 1887 - 1910. They made dies, pliers and taps; these tools are encountered frequently.

101701T16 **Adjustable diestock** DTM

Cast steel, 13 5/8" long, signed "J. M. King & Co. Waterford NY No 42".

Interestingly, DATM (Nelson 1999) lists a Daniel King in Waterford, NY, as making dies (1876 - 1895) and several J Kings as making planes. Was this tool made after 1900?

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Status Location

42602T6	Adjustable dividers	DTM	
<p>Steel, 8" long, signed "J Stevens A & T Co Chicopee Falls Mass USA". Formerly the J Stevens & Company, they changed their name to Stevens Arms & Tool Co. in 1886. Always a prolific maker of guns, their hand tools are sought after examples of the classic period of American machinist's tools.</p>			
81101T18A	Adjustable dividers	DTM	
<p>Steel and brass, 5 3/4" long, signed "Peck Stow & Wilcox" and "6". Peck Stow & Wilcox began operations in Southington, CT, in 1870 (to 1950). For details on their predecessors and history, see DATM (Nelson 1999) pg. 610. An excellent example of the quality of a major producer of tools during the florescence of the classic period of American machinist tools.</p>			
83102T9	Adjustable dividers	DTM	
<p>7" long, signed " L W POND" and "WORCESTER MASS PAT'd Sept'26 1867". Lucius W Pond made calipers, dividers, and machinists' tools from 1859 - 1884. This caliper is a very uncommon tool. It was patented by Edward Wright and also later made by the Wright Machine Co. of Worcester. Pond's primary products were large machine tools, primarily planers (Nelson 1999, 627).</p>			
102100T4	Bevel	DTM	
<p>Cast steel, 3 1/8" long, unsigned.</p>			
30202T6	Bevel square	DTM	
<p>Steel, 6 1/2" blade, 7" blade guide with 2" adjustable nut, signed "Alworth Bevel Square Rule ___ as made by Stark W____ss USA PATENTED Aug 7, 1888". DATM (Nelson 1999) lists a Stark Tool Co. in Waltham, Mass, operating between 1862 - 1902. They were issued a patent for a spring chuck jeweler's lathe and their lathes turn up occasionally in the Boston area. Neither Cope nor DATM list an Alworth. This particular design for a bevel square and this maker's mark have not been seen before by the curator. http://www.davistownmuseum.org/pics/30202t6.jpg</p>			
102800M8	Caliper	DTM	MHC-K
<p>Steel, 5" long, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102800M5	Caliper	DTM	MHC-K
<p>Steel, 6" inside, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102800M6	Caliper	DTM	MHC-K
<p>Steel, 6" outside, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102800M7	Caliper	DTM	MHC-K
<p>Steel, 6" outside, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102800M4	Caliper	DTM	MHC-K
<p>Steel, 9 1/4" long, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102800M3	Caliper	DTM	MHC-K
<p>Steel, 11 3/4" long, signed by owner "W.F. Blake". http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102100T3	Calipers	DTM	
<p>Cast steel and brass, 3" long, unsigned.</p>			
121805T26	Calipers	DTM	
<p>Steel, 4 7/8" long, signed "E R Wharton". No E. R. Wharton is listed in DATM (Nelson 1999). http://www.davistownmuseum.org/pics/121805t26_p2.jpg</p>			

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Measuring Tools

Status Location

TJR3001	Calipers	DTM
Drop forged iron or steel, 10 1/2" long, unsigned.		
102100T2	Calipers	DTM
Cast steel, 6" long, signed "Boker". DATM (Nelson 1999) lists an H. Boker & Co., but does not list it as using only Boker as the mark. The working dates are 1837-1969. It was the US affiliate of a German company and imported most of its tools until purchasing the Valley Forge Cutlery Co. in 1899. http://www.davistownmuseum.org/pics/51100t6.jpg		
111001T4	Calipers	DTM
Cast steel, 4 7/8" long, signed "L. W. Pond Worcester Mass PAT. Sept 24, 1867". DATM (Nelson 1999) lists this maker as Lucius W. of the Pond Machine Co., who made larger machine tools, primarily planes. An exceedingly rare signature on a caliper.		
090508T4A	Calipers	DTM
Steel, 5 1/2" long, signed "GEO. PLUMPTON" with an X trademark.		
31908T29	Calipers	DTM
Steel, 7 1/2" long, signed "C DELSTEN & SON" and "C & S".		
102800M2	Calipers	DTM
Drop forged steel, 13 1/2", unsigned.		
111900T14	Center finder	DTM
Steel, 6 5/8" long with a 6" pivoting arm, signed "The L S Starrett Co Athol Mass USA". DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co. http://www.davistownmuseum.org/bioStarrett.htm		
091608T2	Compass	DTM
Steel, 10 1/2" long including the two adjustable 2" long extensions, signed "SULLIVAN'S PAT" "MAR 9, 1880". The angle of the legs can be changed by two locking mechanisms at the ends. The markings on this tool are particularly crisp and clear; the tool is in fine condition. We haven't seen this model of calipers before; this is an uncommonly encountered tool as evidenced by the fact that it is listed in DATM (Nelson 1999) without location, dates of operation, or the first name of Sullivan. DATM also notes obviously incorrect dates of 1980 as well as 1890 on previously reported specimens. Further information on the identity of Sullivan would be greatly appreciated.		
32708T46	Compass/caliper/divider	DTM
Metal, 7 1/2" long, 8" wide when open, signed "THE L S STARRETT Co" and "ATHOL MASS U.S.A.". Laroy S. Starrett Co.'s working dates were from 1880 - 1994. http://www.davistownmuseum.org/pics/32708t46-1.jpg http://www.davistownmuseum.org/bioStarrett.htm		
122002T1	Dividers	DTM
Steel, 4" long, signed "Stevens & Co.". DATM (Nelson 1999, 757) contains historical information on Joshua Stevens & Co.		
111900T7	Dividers	DTM
Steel, 3 3/8" long, signed "B.S. Mfg Co Prov. R.I. USA". Brown & Sharpe, a major competitor of Laroy Starrett in Athol, MA; The first mass produced micrometer was designed by J. R. Brown in 1856. http://www.davistownmuseum.org/bioBrownSharpe.htm		
1302T3	Dividers	DTM
Cast steel, 5 1/2" long, signed "Mfg by Charles B Fay Springfield Mass USA". Prior to starting his own company, Fay worked for Steven Arms & Tool Co., J. Stevens & Co. and L S Starrett. "Fay assigned a number of patents to both Starrett and Stevens while working for them." DATM (Nelson 1999, 274). He had his own company from 1884 - 1887 then sold his business to L S Starrett.		

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Measuring Tools

Status Location

111900T12 Dividers

DTM

Steel, 3 13/16" long, signed "Starrett Athol Mass".

DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.

<http://www.davistownmuseum.org/bioStarrett.htm>

121201T2 Dividers

DTM

Drop forged malleable iron, 6 3/8" long, signed "P S & W co.".

This is the mark of the famous Peck Stow & Wilcox Co. of Southington, CT, which was organized in 1870 through the merger of a variety of companies. A major manufacturer of fine hand tools during and after the classic period of American tool manufacturing. DATM (Nelson 1999, 610) contains extensive historical information on this company.

041505T32 Double calipers

DTM

Steel, 8" long, 3 1/2" wide, signed "J. HOOD".

DATM (Nelson 1999) lists a John Hood Co. of Boston as a maker of farrier's hoof levels. There is a William J. Hood Mfg. Co. of Rhode Island, circa 1889, that made hand and bench screws. We have not previously seen any J. Hood measuring tools.

<http://www.davistownmuseum.org/pics/041505t32.jpg>

111900T9 Double square

DTM

Steel, 4" rule, signed "No 13", "The L.S.S. CO.", and "HARDENED NO 1".

The accompanying bevel blade is not available. DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co. of Athol, MA.

<http://www.davistownmuseum.org/pics/111900T9.jpg>

<http://www.davistownmuseum.org/bioStarrett.htm>

22603T1 Engine rule

DTM

Steel, 36" long, 10" wide, 8" high, signed "DAVID W MANN COMPANY" and "102" on a paper label.

Follow the bio link to see the photographs of this tool. It is located in the Banks Garage, ask the person on duty for directions to find the tool and also the documentation in the CSET library.

<http://www.davistownmuseum.org/BioPics/Mann2.JPG>

<http://www.davistownmuseum.org/bioMann.html>

31908T35 Framing square

DTM

Steel, 24" long, 14" wide, signed "S. HAYES" "PATENT" "WARRANTED" and "STEEL".

There is no S. Hayes in DATM (Nelson, 1999).

83102T5 Gauge guide

DTM

Paper mounted on board, unsigned.

This gauge guide is printed on two sides and lists the following standards: USG (United States Standard Gauge), TDG (Twist Drill & Steel Wire Gauge), SWG (Stubs Wire Gauge), B&S (Brown & Sharpe or American Standard Wire Gauge), BWG (Birmingham or Stubs Iron Wire Gauge), NWG (National or Roebbling or Washburn & Moen Gauge) and MWG (Music Wire Gauge).

30101T1 Gear tooth vernier caliper

LPC MHC

Steel in leather box, 4 1/15" long, 4 1/4" high, signed "Brown & Sharpe Mfg. Co. Providence RI USA 20.2DP".

Representative of the florescence of the New England toolmaker and L. S. Starrett's principal 20th century competitor. The English measure caliper is an uncommon LBS product.

<http://www.davistownmuseum.org/pics/30101t1.jpg>

<http://www.davistownmuseum.org/bioBrownSharpe.htm>

72002T4 Height gauge

LPC MH-I

Steel, 10" high, 6" scale, signed "L S Starrett Co. Athol Mass USA" "Athol Mass" "Made in USA" "No 354", 1900.

A fine boxed example of a late classic period machinist tool formerly owned by the Raytheon Co.

102501T1 Inclinometer level

LPC

Cast steel and brass, 6" long, 14/16" wide, 2 1/2" high, 2" diameter meter, signed "DAVIS LEVEL & TOOL Co" and "PAT.SEP 17, 1867" with owner's signature "J.F. McCABE".

This tool is also referred to as a mantle clock level. DATM (Nelson 1999, 214) has historical information on this company.

http://www.davistownmuseum.org/pics/102501t1_p3.jpg

<http://www.davistownmuseum.org/bioDavis.htm>

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Status Location

102503T2	Inside calipers	DTM
<p>Steel, 9 1/8" long, signed "D. E. LYMAN".</p> <p>There is no D. Lyman listed in DATM (Nelson 1999). This heavy duty caliper -- the steel is unusually thick -- is almost certainly made by its owner for his own shop use. It predates the era of factory made tools -- its quality would not be practical to duplicate in a large production.</p>		
111900T5	Inside calipers	DTM
<p>Steel, 5", signed "STARRETT ATHOL MASS USA".</p> <p>DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.</p> <p>http://www.davistownmuseum.org/bioStarrett.htm</p>		
111900T6	Inside calipers	DTM
<p>Steel, 2 3/4" long, signed "B.S. Mfg Co Prov. R.I. USA".</p> <p>Inside calipers is used to measure the diameter of a cylindrical hole. They have rounded tips that are bent away from each other.</p> <p>http://www.davistownmuseum.org/bioBrownSharpe.htm</p>		
62202T8	Inside calipers	DTM
<p>Malleable forged steel, 3 7/8" long, signed "Murphy".</p> <p>No Murphy is listed by DATM (Nelson 1999) as a maker of calipers. Who was Murphy? Where and when did he make calipers? The style of the calipers is mid- to late-19th century.</p> <p>http://www.davistownmuseum.org/pics/62202t6.jpg</p>		
41302T11	Inside calipers	DTM
<p>Cast steel, 3 1/2" long, 1 3/8" wide when closed, signed "J. Stevens A & T Co. Chicopee Falls Mass PAT March 9 1886".</p> <p>These are finely made beveled spring calipers. Joshua Stevens, one of the principle tool manufacturers of the classic period, worked in Chicopee, MA, from 1864 to 1903. Numerous patents are listed, they changed their name to Stevens Arms & Tool Co. in 1886. This company had a close association with the Davis Level & Tool Co. of Springfield, MA (1875 - 1892) with respect to the R. Hathaway patented square (4 Dec. 1866). DATM (Nelson 1999) pg. 757 and 214.</p>		
TJG1001	Lathe tool holder	DTM
<p>Drop forged iron? With steel cutter, 6" long with 2" long 1/4" cutter, signed "MACHINISTS TOOL CO PROV. R.I. PATENTED MAY 26, 1868".</p> <p>This machine made tool is characteristic of the arrival of the era of mass produced hand tools.</p>		
71903T9	Level	DTM
<p>Cast iron and brass, 9" long, signed "L. S. Starrett & Co Athol Mass Pat Applied For".</p> <p>This appears to be the first model of this particular size level.</p>		
13102T1	Level	DTM
<p>Rosewood and brass, 8" long, 1" wide, signed "STRATTON BROTHERS GREENFIELD MASS" and "PATENTED JULY 16 1872 OCT 4 1887" and "No 10" on the end.</p> <p>http://www.davistownmuseum.org/pics/13102t1-3.jpg</p>		
41203T1	Line level	LPC
<p>Cast iron and brass, 3 1/2" long, signed "MANUFACTURED BY L.L. DAVIS SPRINGFIELD MASS" and "37 1/2".</p> <p>Leonard L. Davis made levels and planes in Springfield, MA, 1867-1875, before changing the name of his company to Davis Level & Tool Co. (1875 - 92). An excellent example of one of the most sought after pocket or line levels by one of the most distinguished manufacturers of the classic period of American machinist's tools.</p> <p>http://www.davistownmuseum.org/pics/41203t1_p2.jpg</p> <p>http://www.davistownmuseum.org/bioDavis.htm</p>		
41801T13	Machinist's rule	DTM
<p>Steel, 2 15/16" long, signed "HOPE & Co. PROV. R.I." on one side and "SPRING STEEL" on the other.</p> <p>DATM (Nelson 1999) lists Hope & Co. as making engraving machines in 1868. No mention is made of making any other tools. A rare find from the early years of the Industrial Revolution.</p>		
JTS1001	Machinist's square	DTM
<p>Drop forged steel, 3" by 1 1/2", touchmark "JHM".</p>		

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Status Location

63001T12	Machinist's square	DTM
<p>Steel, 2 5/8" long, 2 1/8" blade, signed "The LSS Co Athol Mass No 20". A classic example of Starrett's finest product. DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co. http://www.davistownmuseum.org/bioStarrett.htm</p>		
32708T62	Marking gauge	DTM
<p>Brass, rosewood, and metal plate, 7" long, unsigned. http://www.davistownmuseum.org/pics/32708t62-1.jpg</p>		
41801T10	Marking gauge	DTM
<p>Steel, 2 11/16" long, unsigned. This tiny machinist's gauge is highly unusual in its diminutive size. Probably owner-made.</p>		
31808SLP23	Marking gauge	DTM
<p>Mahogany with brass inlay, 9" long, signed "PAT. AUG. 5, 1873". http://www.davistownmuseum.org/pics/31808slp23-3.jpg http://www.davistownmuseum.org/pics/31808slp23-1.jpg</p>		
TJS2201	Measuring device	DTM
<p>Cast steel, 4 5/8" long, signed "STALL & ATHERTON BROCKTON, MASS". A very rare mark.</p>		
102503T1	Measuring gauge	DTM
<p>Steel, 7 3/8" long, with an 8" long velvet and leather case, signed "Boulet's Fine Tool Works Sebago Lakes Maine" "PAT OCT 2 1900 SEPT 10 1901 FEB 25 04". It also has an owner's mark in script "T. Keech". It is accompanied by three small attachments whose purpose is not clear. http://www.davistownmuseum.org/pics/102503t1a.jpg http://www.davistownmuseum.org/publications/volume10.html</p>		
31808SLP7	Mitre square	DTM
<p>Steel, brass, and wood, signed with obscured mark "____YN" and "____NE" and "CFW" on the handle. http://www.davistownmuseum.org/pics/31808slp7-1.jpg http://www.davistownmuseum.org/pics/31808slp7-2.jpg</p>		
31808SLP27	Mortising gauge	DTM
<p>Wood and brass, 8" long, 7" long gauge, unsigned. http://www.davistownmuseum.org/pics/31808slp27-1.jpg http://www.davistownmuseum.org/pics/31808slp27-2.jpg</p>		
32802T10	Outside calipers	DTM
<p>Cast steel, 6" high, signed "W. E. TRUFANT Whitman Mass PAT Apr 18 03". This unusual caliper includes a small 4" scale welded to the casing. An extremely rare late classic period machinist's tool. The maker is not listed in DATM (Nelson 1999). Did Trufant not begin making tools until after 1900? http://www.davistownmuseum.org/pics/32802t10.jpg</p>		
32802T1	Outside calipers	DTM
<p>Steel, 4" high, signed "Pat. Jan 4 1887" with obscured maker's mark. The maker's mark would probably be: Davis Level & Tool Co. Springfield, Mass. http://www.davistownmuseum.org/pics/32802t10.jpg http://www.davistownmuseum.org/bioDavis.htm</p>		
041505T35	Outside calipers	DTM
<p>Steel, 8 5/8" closed, signed "H. A. ELLIS" and "J. P.". There is no H. A. Ellis in DATM (Nelson 1999). Possibly these are signed by the owner. http://www.davistownmuseum.org/pics/041505t35.jpg</p>		

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41801T1	Outside calipers	DTM	
<p>Steel, 4 1/2" long, signed "Athol Machine Co. Athol Mass. U.S.A.". Originally formed by Laroy Starrett in 1868, he sold Athol in 1878. It became a competitor to L.S. Starrett Co. and he purchased it back in 1905. In "about 1882 they [Athol] either bought or founded the Standard Tool Co. as an integral division making machinist tools." DATM (Nelson 1999) pg. 40. DATM (Nelson 1999) pg. 751 contains historical information on L. S. Starrett Co.</p> <p>http://www.davistownmuseum.org/bioStarrett.htm</p>			
111900T8	Outside calipers	DTM	
<p>Steel, 2 3/4" long, signed "B.S. Mfg Co Prov. R.I. USA".</p> <p>http://www.davistownmuseum.org/bioBrownSharpe.htm</p>			
111900T4	Outside calipers	DTM	
<p>Steel, 5", signed "L S S Co. ATHOL MASS USA" with an owner's signature "M. E. Weed". DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.</p> <p>http://www.davistownmuseum.org/bioStarrett.htm</p>			
111001T40	Parallels	DTM	
<p>Steel, 2 1/2" long, unsigned.</p> <p>A precision sculpture object from the classic period (or later) of the Industrial Revolution.</p>			
102800T7	Pencil compass	DTM	
<p>Drop forged steel, 6 5/8" long, signed "WT. ATHERHEAD PATENT. REISSUED FEB 18 187?". No such patent is listed in the patent annex of DATM (Nelson 1999) for any years of the 1870's, nor is any Atherhead listed in DATM. This makers imprint has never been noted before.</p> <p>http://www.davistownmuseum.org/pics/51100t6.jpg</p>			
102904T21	Radius gauge	DTM	
<p>Steel, 10 1/2" wide, 6" diameter swivel, 7 1/2" high gauge on 5 1/2" x 3" raised platform, signed "VINCOTOOL CO." "DETROIT MICH." "PAT. JUNE 5-1934" "PAT. NO. 1961242" "Set diamond from this face" on gauge post.</p> <p>An interesting and rare sculpture object from the post-classic period of the Industrial Revolution. One of the most modern tools in the museum's collection.</p> <p>http://www.davistownmuseum.org/pics/102904t21_p1.jpg</p>			
102800M11	Rule	DTM	MHC-K
<p>Steel, signed "DB&S" and by owners "W.F. Blake" and "W. Cross".</p> <p>http://www.davistownmuseum.org/bioKnoxEngine.htm</p>			
102100T18	Rule	DTM	
<p>Cast steel, 6" long, signed "J. R. BROWN & SHARPE PROVIDENCE R. I. U,S, ST'D". This signature precedes the later B S Mfg. Co. (Brown and Sharpe).</p> <p>http://www.davistownmuseum.org/bioBrownSharpe.htm</p>			
111900T1	Rule	DTM	
<p>Steel, 12" long, signed "L.S. STARRETT ATHOL MASS USA TEMPERED No 4". DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.</p> <p>http://www.davistownmuseum.org/bioStarrett.htm</p>			
111001T5	Rule	DTM	
<p>Cast steel, 12" long, marked "Tool Co" with a star and also marked "Spring Steel". The star is the signature of the Star Tool Co. DATM (Nelson 1999) lists Star Tool Co. in Middletown, CT, 1867-1883 with another location in Providence, Rhode Island (1870-71). It manufactured bevels, levels, marking gauges and squares.</p>			
31808SLP18	Sliding T bevel	DTM	
<p>Steel blade, brass trim, and laquered rosewood handle, 10" long, 6 5/8" long handle, signed "STANLEY" "RULE & LEVEL Co" "NEW BRITAIN. CONN" "U.S.A." and "PAT. 9-6-04".</p> <p>http://www.davistownmuseum.org/pics/31808slp18-1.jpg</p> <p>http://www.davistownmuseum.org/bioStanley.htm</p>			

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Measuring Tools

Status Location

31808SLP19 Sliding T bevel

DTM

Steel blade, brass trim, and rosewood handle, 6" long, 4 1/2" long handle, signed "MADE IN U.S.A.".

<http://www.davistownmuseum.org/pics/31808slp19-1.jpg>

<http://www.davistownmuseum.org/pics/31808slp19-2.jpg>

TJR2203 Square

DTM

Cast iron or steel, 12" x 8", illegible mark.

11301T3 Square

DTM

Steel, 15 5/8" long, 1 7/8" wide with a 7 1/2" arm extended to 8 1/4" wide at blade joint, signed "J B Jopson".

No Jopson is listed in DATM (Nelson 1999). Could this be an owner's mark?

111900T3 Surface gauge

DTM

Steel, 2 1/8" x 1 7/16" base, 4 3/8" arm, unsigned.

An essential component of the tool kit of the tool and die maker, constructor of the machines that then made other tools.

21201T12 Surface gauge

DTM

Steel, 1 1/2" long, 1 9/16" wide, 1 3/8" high, signed "V Oby".

Veikko Arne Oby (b. Worcester, MA 1916, d. 2/25, 2000), of Finnish descent, worked in Whitinsville, MA, and the Watertown Arsenal. This satin steel surface gauge, though not signed by its manufacturer, is similar to L.S. Starrett Toolmaker's surface gauge model 56A with 4" spindles. A contemporary L.S. Starrett catalog indicates this tool "is used in layout work for scribing lines on vertical or horizontal surfaces. A groove in the base adapts it for use on cylindrical as well as flat surfaces." This exquisite tool is a late example of the florescence of the classic period of American machinist tools and is indicative of a proud machinist's careful use of a finely crafted Starrett tool or his meticulous reproduction of the same tool -- a possibility since Starrett surface gauges are rarely unsigned. Every hand tool has its own inscrutable history of manufacture and use.

<http://www.davistownmuseum.org/pics/21201t12.jpg>

<http://www.davistownmuseum.org/bioOby.htm>

41203T4 Surface gauge

LPC

Steel, 4 1/8" long arm with a 1 7/16" wide by 2 3/8" long bar, signed "J. Stevens A & T Co" "Chicopee Falls Mass USA".

A classic example of the exquisite workmanship of the classic period of American machinist tools.

http://www.davistownmuseum.org/pics/41203t4_p3.jpg

041505T33 T square

DTM

Steel and brass, 7 1/2" long, 3 1/2" wide, signed "C. EGGE".

Maker C. Egge was a Boston toolmaker and inventor of die engineering equipment, ca. 1880s. He is not listed in DATM (Nelson 1999). This tool was purchased in Worcester, MA, by Liberty Tool Co. in March, 2005, from a descendent of one of his customers for die engineering equipment (C. D. Evan Co, Allston, MA) who fondly recalled the man who made this one-of-a-kind tool.

<http://www.davistownmuseum.org/pics/041505t33.jpg>

101701T7 Tap drill gauge

DTM

Cast steel, 4 1/2" long, signed "Made by STERLING ELLIOTT NEWTON, MASS, USA", 1890 - 1910.

No such company is listed in DATM (Nelson 1999) but it does list "Elliott" as the maker of a tap drill gauge with a date of 1895 and no other information. The curator was born in Newton, MA, and after 31 years in the tool business, has never seen this marking before. A very rare signature. The sizes 2 - 24 appear hand stamped, they are slightly off center.

41302T5 Tapered gauge

DTM

Steel, 6 1/8" long, 7/16" wide, signed "N. 270 The L. S. Starrett Co. Athol, Mass USA".

Calibrated in millimeters and in hundredths of an inch. The maximum thickness this gauge measures is 0.150 inches. DATM (Nelson 1999) pg. 751 contains historical information on L. S. Starrett Co.

<http://www.davistownmuseum.org/bioStarrett.htm>

914108T2 Thickness gauge

DTM

Steel, 6 1/2" long, 6" long blades, signed "EINAR HANSON" "-TOOLS-" "WORCHESTER. MASS" and owner's mark "F. W. PAGE".

Folded inside are 8 blades marked: 2, 3, 4, 6, 8, 10, 12, and 18.

41801T15 Tool and die maker's jig

DTM

Steel, unsigned.

Was this owner made? It was acquired along with the marking gauge (41801T10).

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Status Location

101701T15 **Tool and diemaker's square**

DTM

Steel, 1 1/2" long, signed "Sawyer Tool Mfg Co Fitchburg Mass USA Hand", between 1894 - 1912.

This exquisite tool was made before this company moved to Ashburnham, MA in 1912. They later became the Almond Mfg. Co. in 1915 (Nelson 1999, 692). This tool illustrates the beauty and durability of hardened case steel.

TJG1003 **Toolmaker's buttons**

DTM

Metal, 4 1/2" long, signed "STARRETT ATHOL MASS NO. 494-D".

DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.

<http://www.davistownmuseum.org/bioStarrett.htm>

111900T13 **Toolmaker's buttons**

DTM

Steel, 2 5/16" long, signed "Starrett Athol Mass USA No 494.B".

DATM (Nelson 1999, 751) contains historical information on L. S. Starrett Co.

<http://www.davistownmuseum.org/bioStarrett.htm>

100400-8 **Trisquare**

DTM MHC-K

Drop forged steel(?), Brass, and rosewood, 7 1/2" long, 5 1/4" high, signed "S A JONES & CO HARTFORD CON".

DATM (Nelson 1999, 430) lists Solomon A. Jones & Co. in Hartford, CT, 1838-1841 as making bevels, marking gauges, rules, and squares.

72002T8 **Wire gauge**

DTM MH-I

Cast steel, signed "Lacene Mfg Co. Manchester NH".

Was this wire gauge made after 1900? If not a wire gauge, what is it?

Miscellaneous Items

102800M **Machinist's tool box**

DTM MH-K

Wood, brass and steel, 22 3/4" long, 12 1/2" wide, 10 3/4" high, signed by owner "W.F. Blake".

A piece of Maine history, this tool box was formerly owned by Ken Milliken, Lincolnville, ME. Blake was once one of the chief machinists for the Knox Engine Co.

<http://www.davistownmuseum.org/bioKnoxEngine.htm>

Miscellaneous Tools

041505T38 **Die**

DTM

Steel, 2 5/16" by 2 5/16" top, 2 3/4" high, signed "G. S. PAGET" "CO." "-BOSTON-" and "WOOD".

The die stamps: "ALBEMARLE" "GOLF CLUB" "INCORPORATED 1800" and has a thistle mark. There is no Paget listed in DATM (Nelson 1999). This die was formerly owned by C. D. Evans Co. of Allston, MA, a button maker from Boston. Our curator grew up just down the street from the Albemarle golf course in Newtonville, MA.

http://www.davistownmuseum.org/pics/041505T38_p2.jpg

http://www.davistownmuseum.org/pics/041505T38_p1.jpg

30202T7 **Machinist jack**

DTM

Steel, 4 7/8" long, extends to 8", unsigned.

Probably this is a home shop made tool.

30202T13 **Tap stock**

DTM

Steel, 5 1/2" long, signed "Card US No 0".

This diminutive tool is a product of one of New England's most important late classic period manufacturer's of taps, dies and related tools. DATM (Nelson 1999) lists S. W. Card Mfg. Co., which was located in Mansfield, MA, as operating between 1874 - 1908 before being bought out by the Union Twist Drill Co. of Athol. The factory building in Mansfield still stands.

<http://www.davistownmuseum.org/pics/30202t13.jpg>

<http://www.davistownmuseum.org/bioCard.htm>

11301T10 **Tapping stock**

DTM

Cast steel, 4 1/2" long, signed "S. W. Card Mansfield Mass".

<http://www.davistownmuseum.org/bioCard.htm>

Shipwrights' and Mariners' Tools

032203T7 **Wire gauge**

Status Location
DTM

Steel, 3 1/2" diameter, signed "J. R. BROWN & SHARPE" "PROVIDENCE R.I." "STANDARD WIRE GAUGE" with bird trademark and "BS TRADE MARK".

The Directory of American Toolmakers (Nelson 1999) lists J. R. Brown, a predecessor of Brown & Sharpe, as working from 1853 - 1866, but continuing to use this mark after that date on some tools. This is a typical tool in the increasingly complex tool kit of a c. 1880 shipyard worker.

http://www.davistownmuseum.org/pics/032203T7_p3.jpg

<http://www.davistownmuseum.org/bioBrownSharpe.htm>