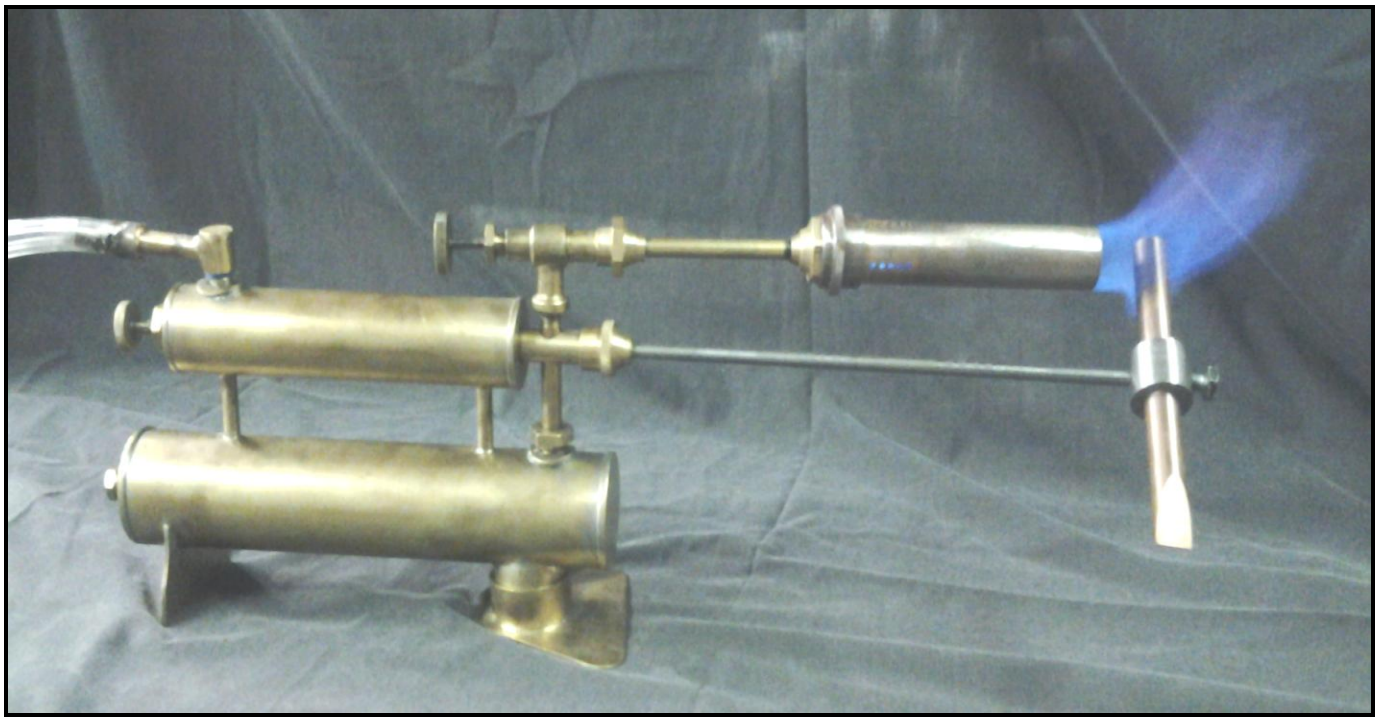
THE TORCH

NEWSLETTER OF THE BLOW TORCH COLLECTORS ASSOCIATION
Issue #58 March 2014



A John S. Hull Soldering-Iron Heater created by **Mike Gratz**, see page 3.

A Schaefer Beyer Auto Torch, from the collection of Ted Maire.

NEW MEMBERS

Dave Pangrac of Decatur, Illinois has had blow torches in his tool collection for over twenty years, but just recently started to actively collect them. His interest in blow torches started when he was just a kid watching his dad use a blow torch. He was fascinated with how it worked and the sound that it made. "*I enjoy the beauty and intricacies of design and functionality. I really got interested in blow torches after observing* ***Charles Smith's*** *postings on eBay and then purchasing some of his torches."* Dave also collects all types of non-electric soldering irons, soldering iron charcoal furnaces and gas furnaces; all types of old antique tools with a focus on woodworking tools and antique kitchen utensils. Dave is also a member of the Mid Western Tool Collectors Association.

Terry Stevens of Alpena, Michigan

Altug Yamac of Los Angeles, California

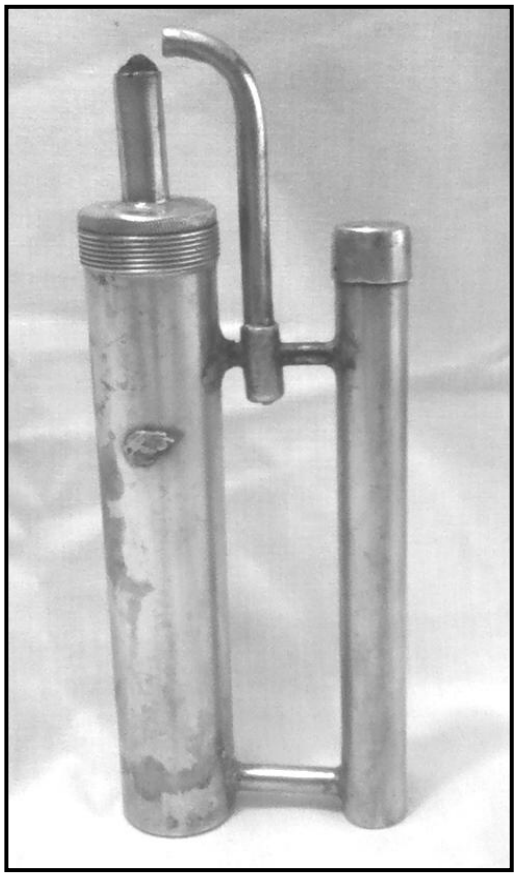
WELCOME ABOARD!

♦ ♦ ♦ ♦

NOTES FROM ALL OVER

Wayne Poapst was following the bidding on eBay for a Wellington Automatic Torch being sold by **George Bittner**. Bidding started at $345 and sold for $797 after only two bids. We are curious as to who the successful bidder was…a BTCA member? Also, we inadvertently listed Wayne's name as William Poapst under the 5-year members listing in the last newsletter…sorry 'bout that Wayne.

Maurice Jernstedt recently purchased an unknown torch form **Charles Smith** and upon cleaning it up found a manufacturer's name engraved on the tank lid: Mackie-Lovejoy Mfg. Co Chicago, Ill, Pat. Jan 16, 1899 & Oct 31, 1899. At first Maurice thought that he had uncovered a new torch manufacturer, but after further research by **Graham Stubbs**, it was determined that the "torch" was a homemade unit cleverly fashioned from a Mackie-Lovejoy bicycle air pump. ►►►►



Maurice also acquired two 5-star torches, a "SELF-HEAT" Dobbins Mfg. Co. torch that is missing the hollow soldering iron tip, and a Clayton & Lambert Plumbers Combination Torch, No. 101, as shown on page 129 in Vintage Blowtorches.

You may not be aware that there is the largest model railroad museum in the US and one of the largest in the world that is located in San Diego, CA…and BTCA member **Mike Thornhill** is one of the volunteer HO scale operators. The San Diego Model Railroad Museum is located in Balboa Park and has an interesting website worth visiting; WWW.SDMRM.ORG. You can also search the Internet for San Diego Model Railroad Museum videos where you will find many interesting videos on YouTube. If you happen to be in San Diego on a Wednesday or Thursday when Mike is at the museum, you might talk him into giving you a behind-the-scenes tour of the facility.

Michel Duval sent in a note on a recent purchase. "*You know that I like all items relative to blow torches. I purchased the Porcelain Thermometer advertising the Hardin Lavin Co of Chicago. It depicts a female plumber with plumbing tools and an unidentified US blow torch. The seller indicated that it dates from 1910-1920s. It measures 6 inches x 2.5 inches.*"

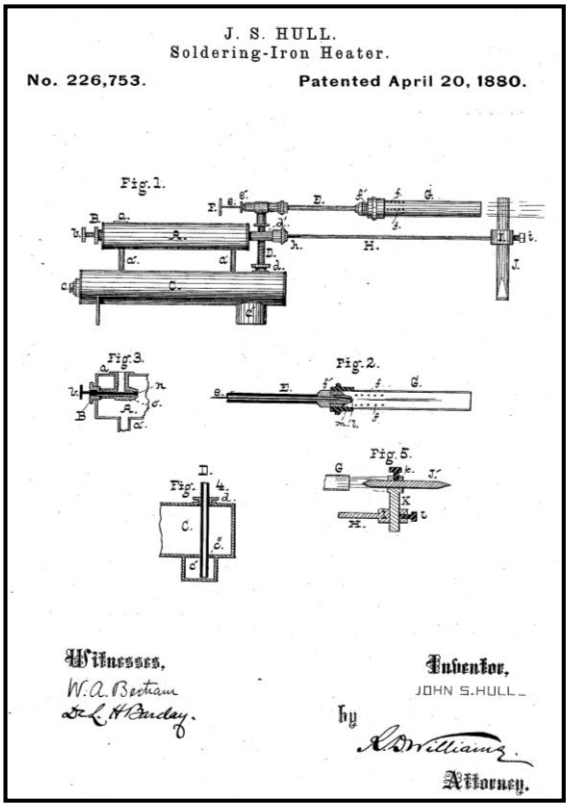
Blowlamp Society and BTCA member **Chris Naylor** has created a website with an initial focus on blowlamps from the Canadian maker Butler. You can find Chris's website at http://blowlamp.co.uk. Included in the website is a comprehensive list of Butler blowlamps and a company history, as well as background on other Canadian makers.

♦ ♦ ♦ ♦

A MAN AND HIS SCULPTURES, PART III

By **Mike Gratz**

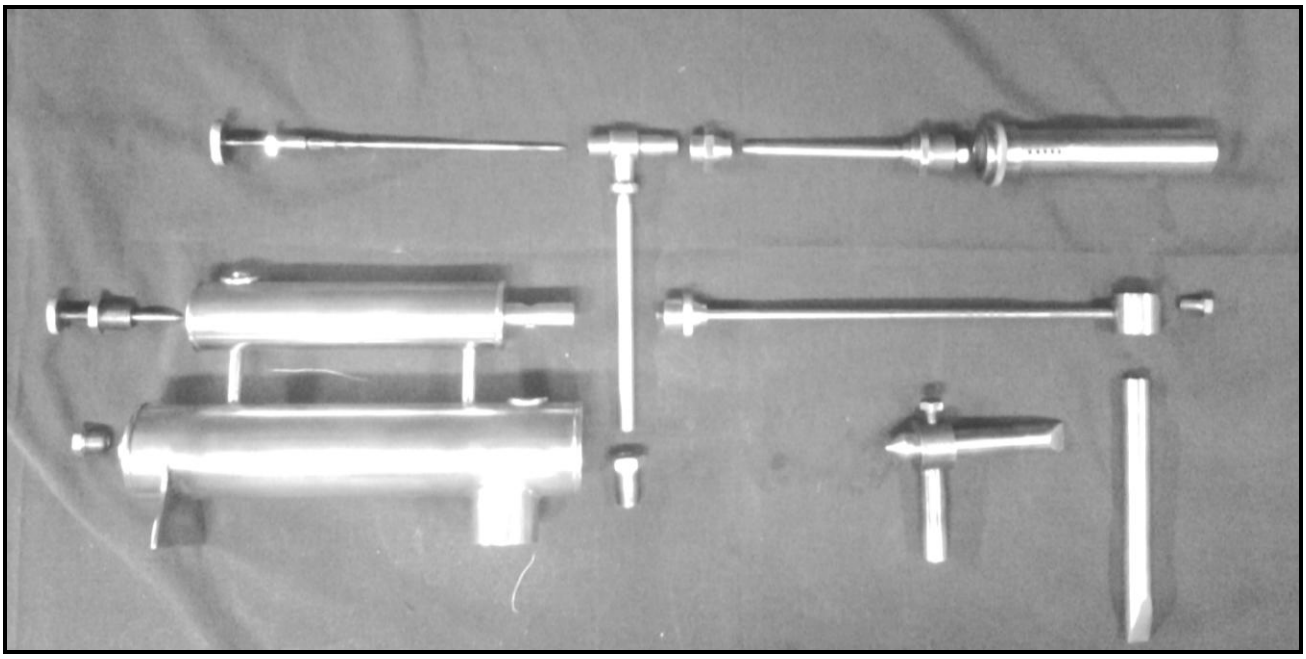
Editor Comments: This is the third torch "sculpture" that Mike Gratz has created. It is a replica of the J.S. Hull, April 20, 1880 patent no. 226,753, Soldering-Iron Heater. Mike produced the Hull Soldering-Iron Heater from raw materials and followed the patent description to include all four patent functions.


J. S. HULL.
Soldering-Iron Heater.
No. 226,753. Patented April 20, 1880.
Fig. 1.
Fig. 3.
Fig. 2.
Fig. 4.
Fig. 5.
Witnesses,
W. A. Bertram
L. H. Bandy.
Inventor,
JOHN S. HULL.
by
Attorney.

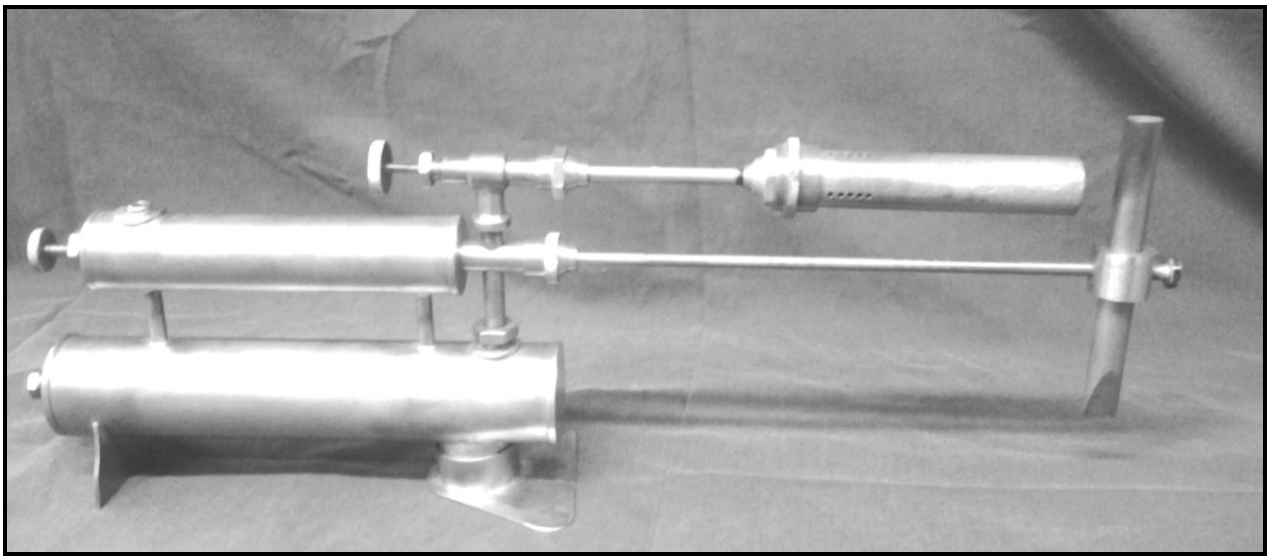
This is also a tribute to John Summerfield Hull who can reasonably be stated to be the father of the American blow torch. His inventions from 1866 through 1878 demonstrate a progression of principles, which combine to make a single, hand-held tool with all the features, which we attribute to a self-contained blow torch. The American blow torch, as it existed at the end of the nineteenth century, is a direct successor to John Hull's inventions. You can read the entire article on John Hull in THE TORCH newsletter, issue no. 32, page 3.

"In the patent letter, Hull states that the air chamber 'A' furnishes a convenient handle. Therefore, I decided to make the air chamber 1.5 inches in diameter, giving a scale factor of 4:55. This resulted in a two inch diameter for the fuel tank, a one inch diameter for the burner, a ¼ inch rod for the iron holder, and a 1/16 inch pipe for the burner supply tube."

"The overall length of the Hull torch is twenty two inches and the height is seven inches. Construction took approximately two hundred hours over several months. I also constructed a display stand, seen in some of the photos, since the torch does not stand by itself with the fuel tank empty."



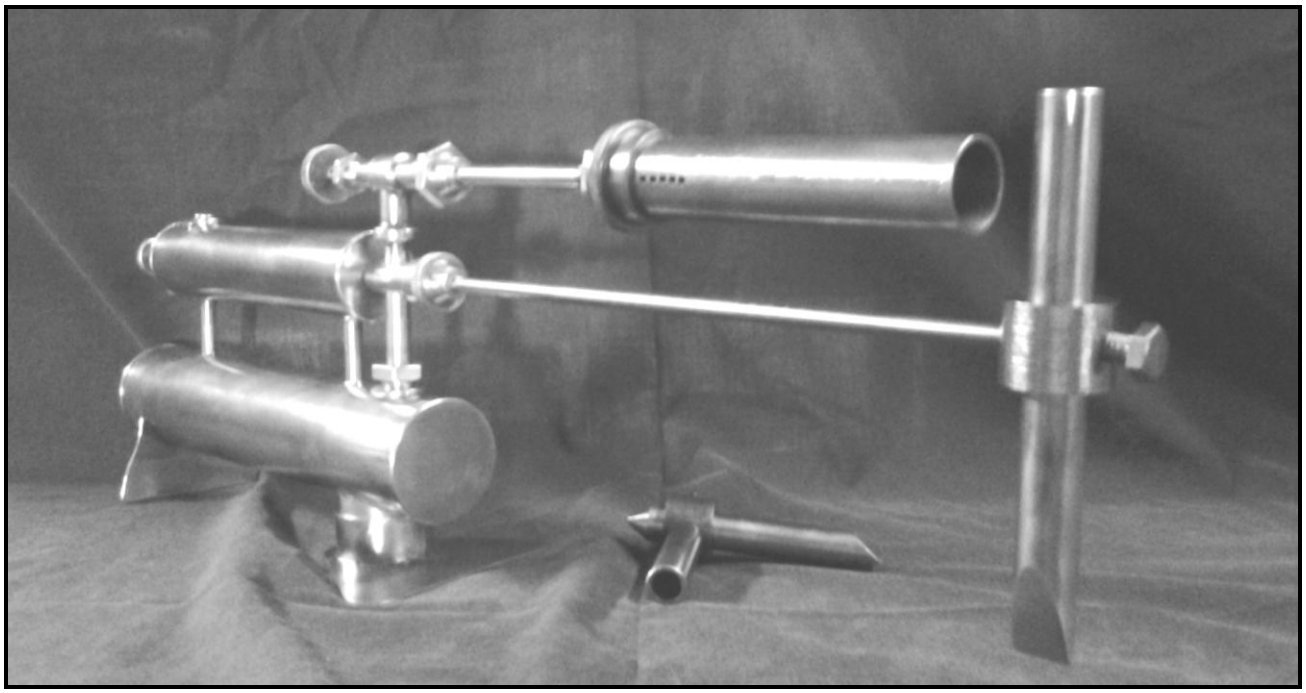
"The construction was straight forward since much of the torch consists mostly of pipes, tubes, and caps. I had never heard of 1/16 inch pipe, but I was able to purchase taps and dies for threading, so I machined my own pipe used for the burner supply tube."



"In addition to the burner shown in the photos, I constructed three different test burner shells to determine what design was needed for a good burner flame. The patent data provided no indication of the burner or orifice design information. The test burner shells were made with different hole patterns which lead me to resize the fuel orifice to a very small .014 inch diameter. My final burner/orifice design worked well and provided a good flame."

"The torch consists of an air chamber connected to the top of the fuel tank with two stand pipes. The fuel tank supplies fuel, via a well, to the vertical tube that is connected to the fuel control valve. The control valve turns a long needle valve that seats in the .014 orifice in the entrance to the burner. The vertical fuel supply tube can rotate in the gland nut above the well."

"The soldering iron holder threads into a lug connected to the front of the air tank and is locked in place with a knurled nut. The end of the soldering iron holder is a ring that holds the ⅝ inch diameter vertical copper or the axial copper attachment."



John Hull's patent description of the torch operation:

Liquid fuel must be poured into the fuel tank through the port in the rear of the tank and the cap is replaced and tightened. Then a separate air pump is screwed into the threaded port on the top rear of the air tank. The valve on the air tank is then opened and the air is pumped into the fuel tank until a suitable pressure is reached, and then the air valve is closed and the air pump is removed. The air tank pressurizes the fuel tank via the two connecting pipes. Air pressure forces fuel from the fuel tank well up the vertical pipe to the burner control valve. The torch would be ignited by heating the copper coupling at the head of the burner nozzle with an auxiliary heat source. When the burner head was judged to be hot enough, the fuel valve would be opened to light the burner. The control valve would then be adjusted to give the desired flame intensity.

"I made a hose barb that screws into the air port to run the torch on propane gas. The gas flows through the air tank with the valve open, then into the fuel tank and up to the burner where it is ignited. As a precaution, I rolled up a length of fine brass screen and put it in the vertical fuel supply tube to prevent a back fire from reaching the propane tanks. I use propane because I feel it is less dangerous than gasoline and does not leave an odor."

"The Hull torch was designed to heat a vertically mounted soldering copper with a chisel point. Hull's description of the soldering copper positioning is vague, but I interpreted it to mean that the copper could be canted as desired for a particular job and the flame rotated to impinge on the top of the copper. Hull also described an attachment to install an axial soldering copper. The copper has a conical aft point and a chisel soldering tip as shown laying flat just below the torch in the photo above."

♦ ♦ ♦ ♦

EARLY AUTO TORCHES, PART 1

By **Ted Maire**

*"I began collecting blowtorches over forty years ago. I had accumulated a relatively large amount of torches and there were more torches than I had room to store. I don't think this is unusual for any collector. Several years ago I decided to sell off a majority of them and take my grandson (BTCA member **Ned Maire**) to Disney World in Orlando, Florida. I did, however, want to keep some torches and continue collecting. I didn't want to get into the same situation I was in before so I thought it would be a good idea to narrow the scope of my collection."*

"One of my first acquisitions was an early one pint Schaefer & Beyer auto torch (right). Early auto torches were always my favorites, and I like their design and the quality of their workmanship. I also found them to be one of the easiest types of torches for me to restore. Since I have a lot of experience with soldering and some auto body and sheet metal repairs, it has been easy for me to completely disassemble the tanks, repair the dents, dings, bulges, etc. and then solder everything back together."

"Several years ago I made the decision to collect only early auto torches with bronze castings serving as the top and bottom of the tank. My decision was based on how much I like them; how easy it is for me to restore them; the fact that they take up less room than a canister style torch; and that there is a very limited amount of early auto torch models. I felt I could complete a collection in a relatively short period of time since I already had quite a few models. I estimated that there were less than twenty five early auto torch models, and of that amount, there were several that I knew I might never come across or be able to afford."

HISTORY

"The auto torch was conceived in the very early 1900s in response to a new market, the automobile. Torch manufacturers recognized the need for a thinner tank to fit into tight spots such as between chassis members and areas between the engine and radiator. Prior to 1909 there were very few automobiles and trucks on the road. There were a large number of vehicle manufacturers, but each produced only a small amount of vehicles. In 1909, it all changed when Henry Ford began producing the Model "T" on an assembly line with standardized interchangeable parts."

The White Mfg. Co model #16 auto torch on the left was manufactured prior to 1905 and is, therefore, one of the earliest to enter this market. In 1909 Ford had produced 10,660 model "T" automobiles. In 1916 they produced 501,462 and in 1920, 941,042. The total production of model "T" cars from 1909–1927 was 14,689,520. The market for this style of torch had grown by leaps and bounds beginning in 1909 and well into the mid to late 1930s. Torch manufacturers responded to this market with corresponding increases in production of auto style torches."

"In order to sell to other markets, Bernz also marketed this style torch as: "Easy to use in a crowded space and convenient to carry in a tool kit."

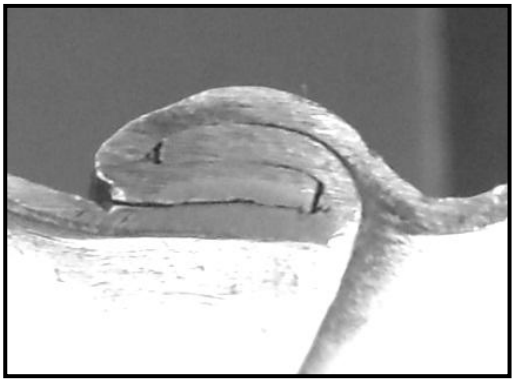
"Early auto torches sold for significantly higher prices than the standard canister models. They had substantially more bronze in their components, were much heavier than a typical one-pint torch, and were also more durable. In my opinion, much more attention was given to these torches during the production process and they are the Cadillac of blowtorches."

"In the 1930s, other less expensive style auto torches began to be produced and eventually replaced the early elegant auto torches. Production of the early style auto torch probably ended somewhere in the late 1930s. The great depression also impacted sales of these pricey torches in the 1930s."

TORCH CONSTRUCTION

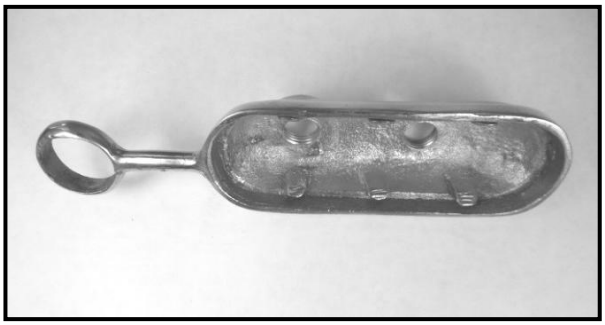
"The three major components of the early auto torch tanks are a bronze cap, a thick sheet brass center section, and a bronze base."

"The picture to the right demonstrates these three major tank components. This particular tank is from a C&L model no. 48. The sheet brass for the fuel tank was probably shaped over a form to give it the proper oval shape. The two ends were bent into opposing hook shapes, latched together, and then pressed tightly in either a power or hand press. You can see the individual hooks and the flat portion on the outside of the tank, caused by the press, in the picture below."



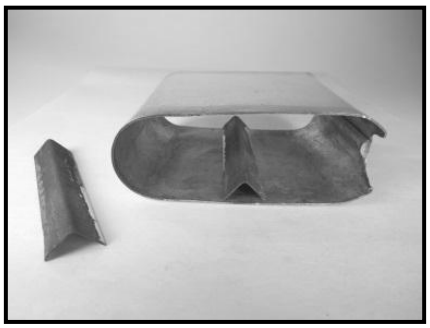
The inside of the tank is at the top of the picture on the left and the outside at the bottom. After the seam was pressed tightly together, both the inside and outside seams were soldered to prevent leakage (I removed the solder for picture clarity). The three components were then assembled and the seams around the top and bottom bronze castings were soldered together."

"Some manufacturers such as Schaefer & Beyer, and Bernz had raised guides built into the castings so that the tank would fit snuggly and stayed in place when the components were soldered. The upper bronze casting on the right is from a Schaefer & Beyer auto torch. Note also that the upper pump support is part of the casting. This is a very unusual feature. The only other manufacturer I have seen that had this feature on an auto torch is Baum & Bender. The Baum & Bender auto torch is unlisted in the two BTCA publications. It will be described later in this article."



"Bernz made several innovations to the basic tank construction. In their early auto torches, they used four brass pins to secure the bronze castings to the center section and add extra strength. Each end cap used two pins. The holes were drilled by hand and not always uniform from side to side. These pins also held the components in place and simplified soldering the parts together."

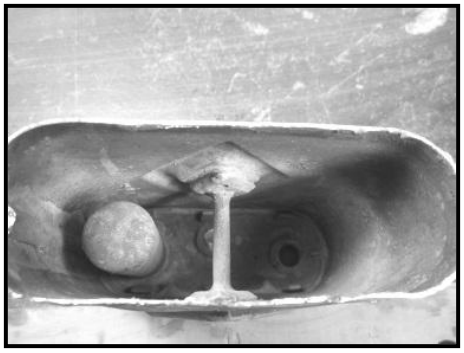
"The picture to the left shows these pins and the corresponding holes in the tank and lower casting. The picture is of an early Bernz model #5 tank. Bernz was also aware that one of the problems with auto style torches was that the sides of the tank sometimes bulged out with use. I'm not sure if this was caused by over pressurization of the tank or minor explosions being created inside the tank due to a back flash from the feed tube. Bernz states that their torches were: "Properly braced on the inside to prevent bulging". They accomplished this in two ways."



"The picture to the right shows a method used on a flat sided tank. Two triangular shaped bars (braces) were used inside the tank, one on each side. They were soldered to the inside of the tank the entire length of the brace and on both sides of the brace."

"Some Bernz torches had an embossed diamond pattern pressed into the sides of the tank as seen in the photo below left. These torches utilized a dumbbell shaped brace with two diamond shaped ends."

"The picture on the left shows a Bernz model #6 with a tool kit in the tank and the diamond pattern on the side. The picture to the right shows the inside of this torch with the brace placed between the raised surfaces of the diamond pattern on the inside of the torches' tank. The brace was soldered at both ends. I have also seen this brace used on a flat sided torch."

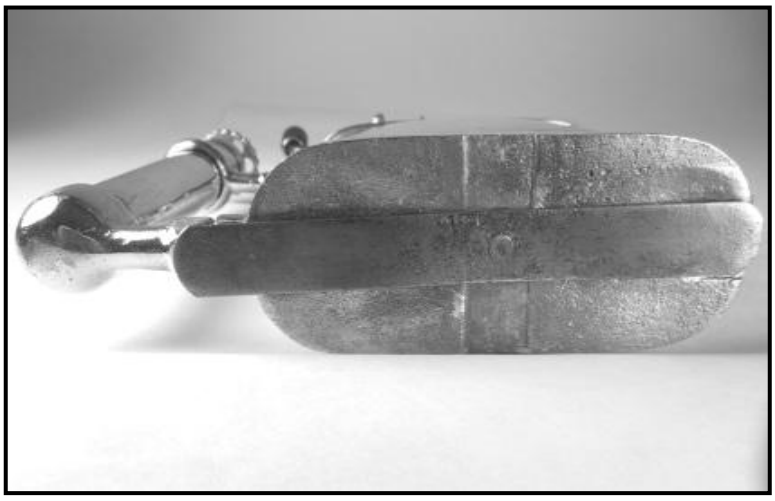


"Auto torches are very thin (narrow) and have a high center of gravity. They are easy to tip over and would be hazardous to use without a method of stabilization. The early White model #16 mentioned earlier, had no means of stabilizing the torch, it just had a flat bottom. Manufacturers realized early on that there was a need to add some sort of device to the bottom of the tank to add support. The later model Turner-White #16 on the right has the spring steel fold-out support that was typically used by Turner. To add the support, the bottom of the lower casting was recessed (made concave) and a pin was cast into the center."

"A hole was drilled into the steel support and the support was fitted onto the pin. The top of the soft bronze pin was then hammered and flattened to keep the support from coming off the pin."

"Bernz used the same method to stabilize their torches. The Bernz supports are actually longer than those of other manufacturers using this method."

"In the picture of a Bernz auto torch to the right, you can see that the hole in the stabilizing bar was drilled off-center so that one side would fit just to the front edge of the tank and the other would come to rest under the lower pump support in the rear."



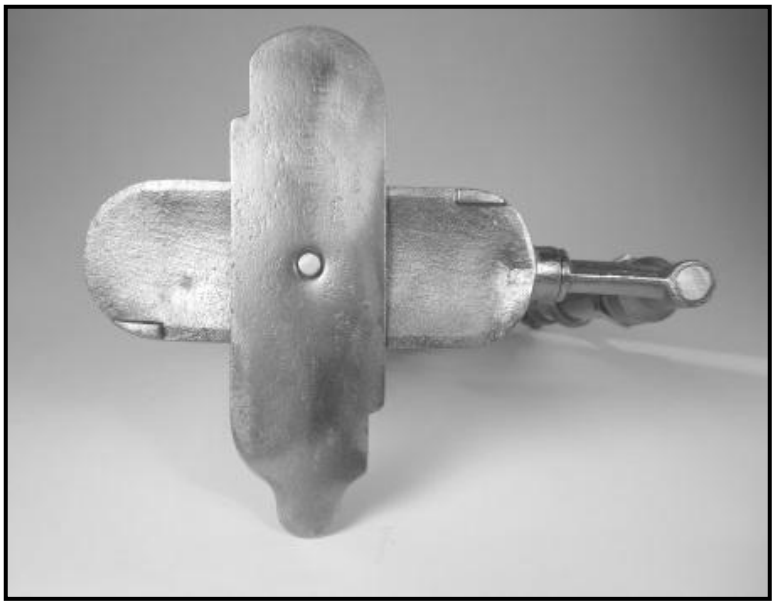
"Detroit Torch Co. also used the spring steel support for their auto torches. Like the Turners, the hole was in the middle and there was an even amount of material on each side."

"The difference in the supports on Detroit auto torches was that they were held on by a screw and washer. The washer was slightly thicker (higher) than the support and fit inside the hole in the support. When the screw was tightened down, the support was able to spin easily around the washer (see picture to the left)."

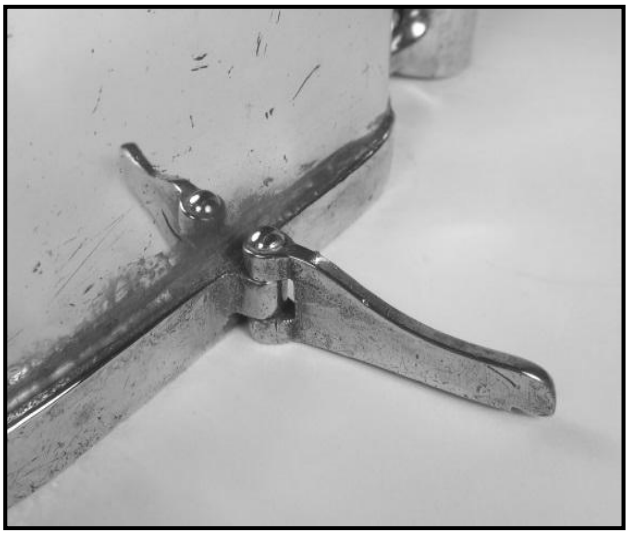
"The American Stove model #41 to the right uses the same style fold out spring steel support as Turner. It is, however, significantly wider and when closed completely covers the bottom of the torch."

"Raised areas on opposing corners of the bronze casting provide "stops" for the support. This support seems to provide the greatest amount of stability."

"Schaefer & Beyer and Diener used methods very similar to those of Turner to stabilize their auto torches."



"Ashton and Clayton & Lambert used a method different from all others. They had a little bronze fold out support on each side of the bronze base as seen below."



"The support was secured to the base in a hinge fashion with a brass pin that had a rivet style head. The C&L model #47 in the picture to the right utilized this type of support. I'm not sure whether or not these little feet (as I call them) served the purpose better than the spring steel method. I do know that I find it much more attractive. In general, Ashton and C&L always made similar model torches. The torches and components were remarkably alike. This is clearly reflected in their auto torches."

Editor's note: Part 2 of EARLY AUTO TORCHES will be printed in THE TORCH, #59, June, 2014.

♦ ♦ ♦ ♦

Hibbard, Spencer, Bartlett & Co.

By **Ted Maire**

"I recently found a C&L model #47 auto torch on eBay. I was attracted to it because the pump assembly was significantly different than any C&L auto torch I had seen before. At first I thought it might have been a torch that was made up of components from different torch brands. After some research I discovered that the torch was exactly the same as one offered in a 1913 Hibbard, Spencer, Bartlett & company catalog. Below is a picture of the catalog page heading, and on the next page is a photo of the catalog listed torches and the torch after restoration."


HIBBARD, SPENCER, BARTLETT & CO. 2465

GASOLINE TORCHES.

The pick from the best work of the leading torchmakers. The experienced torch user knows the economy in time, trouble, and delay saved by specifying the higher grade of torches.

No. P47. No. P48

No. P47—AUTOMOBILE, *pint size*, 1⅞ in. thick×5 in. long and 5 in. high, fitted with an especially light burner, yet sufficient to generate a powerful blue flame, automatic pump forming part of handle, tank fitted with brackets to prevent overturning, w't 4⅜ lbs., each..... DAE $7.50

No. P48—*Pint size*, burner fitted with hook and support for holding soldering coppers, otherwise same as No. P47, w't 5¼ lbs.....each DDJ 8.00

ONE IN A BOX.

"It is interesting that there are obvious differences between this torch and a standard C&L no. 47. Yet, the catalog displays the C&L logo and model number on the picture of the torch in the catalog advertisement. This appears to be a Hibbard, Spencer, & Bartlett torch made specifically for Hibbard by Clayton and Lambert. It could be that HS&B was simply looking for a less expensive auto torch to be sold exclusively through their catalogs."

"Originally, I thought that this torch might fall into the category of "private brand labeled" torches which I personally categorized into three different types:"

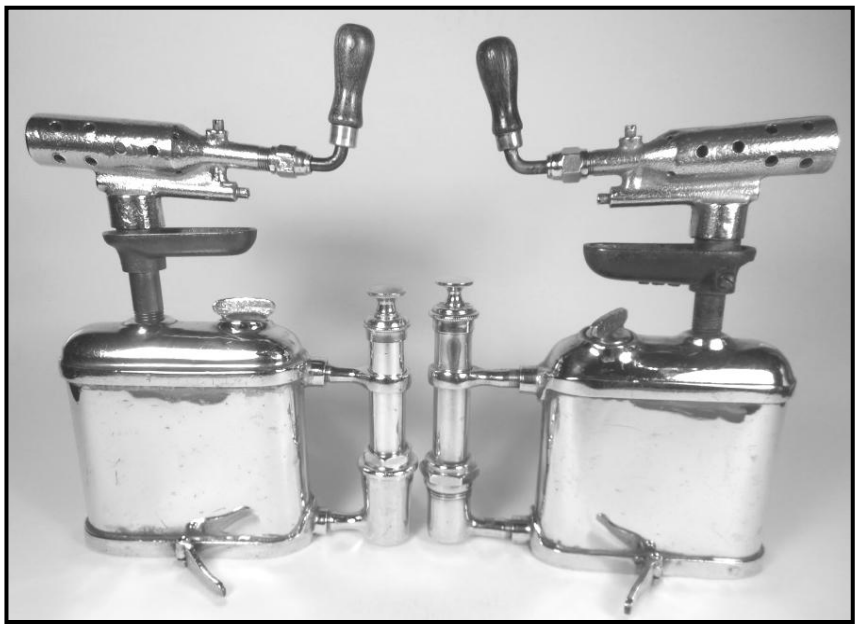
- *"Early private brand labeled torches that were exactly the same as the original manufacturer's, with the retailer's label attached."*
- *"Later on brand labeled torches were very similar to the original manufacturers with only subtle differences such as the removal of the manufacturer's identifying marks, a different pump knob, or a different filler plug. At all times, they included the retailer's label."*
- *"In the late 1920s torches were made by the manufacturer to each major retailer's specifications. They differed significantly from the manufacturer's product line and in many cases it was difficult to determine the source manufacturer. Information published in Vintage Blowtorches indicates that this change took place in 1929 for Sears and in 1928 for Montgomery Ward."*

"It should also be noted that prior to 1929 major retailers such as Sears and Montgomery Ward sold a multitude of torches without attaching their own brand label. They assigned their own unique catalog numbers and in most cases there was no reference to the originating manufacturers or model numbers in their catalogs."

"There is no indication that the Hibbard P47 was ever private labeled by HS&B. In the catalog ad pictured earlier, the torch retains the C&L logo, much unlike ads in Sears and Montgomery Ward catalogs. Based on the 1913 date of the ad, it could be assumed that this torch was just a typical C&L model 47 but at a cheaper price. However, closer examination reveals that the pump assembly does vary from the standard Clayton and Lambert model 47."

"The differences between this torch and a standard Clayton & Lambert model 47 auto torch are significant. They can be found both on the exterior of the torch as well as the interior. With a quick glance you can see that there are differences. It is not until you tear the torch down into its component parts that you actually see the extent of differences."

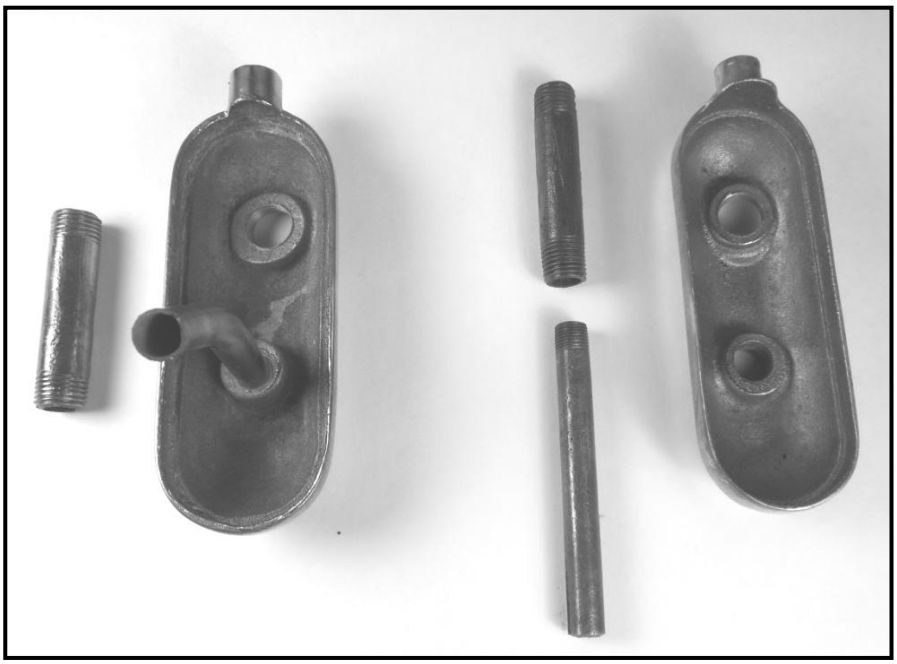
"The picture below right is of two C&L model 47 torches with different pump assemblies. The torch on the left side has the nut on the bottom of the pump cylinder screwing into the lower support which is threaded on the inside. The torch to the right side has the nut screwing onto the lower pump support that is threaded on the outside. These are the only two types of pump assemblies I have ever seen on C&L model 47 torches. The pump assembly on the Hibbard version is obviously dramatically different."



"Another external difference for a Hibbard torch is that the fill plug top has a hole in it….see the torch photo on page 11. I have never seen this feature on any model C&L auto torch."

"Internally there are many significant differences. In the picture below left, the components of the upper bronze casting and feed tubes for the Hibbard torch are on the left. The components of a typical C&L model 47 are on the right."

"The components for the Hibbard are much simpler. The outer feed tube is threaded on both ends and the internal feed tube is simply a brass tube soldered to the cast bronze tank cap. The components of the C&L 47 on the right include the outer feed tube which is threaded on the outside of both ends of the tube."

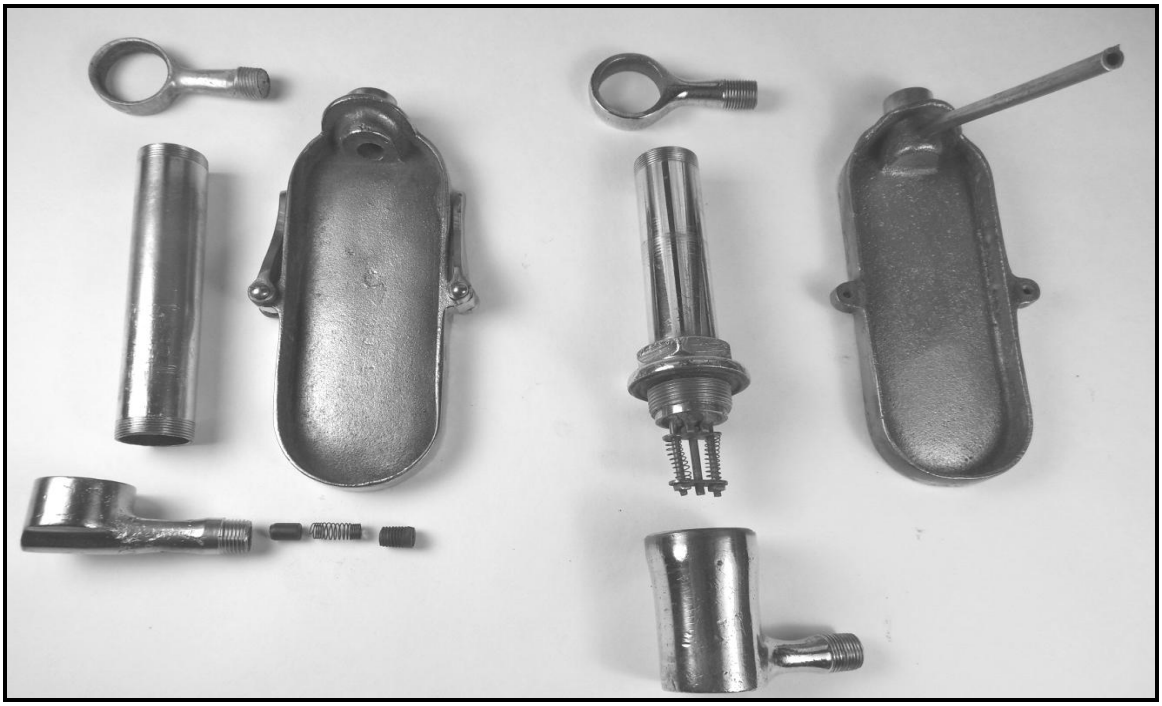


"It is also threaded on the inside of the lower end. This is to accommodate the internal feed tube that is threaded on one end and screws into the bottom of external feed tube."

"The bronze caps are also different. The C&L 47 has a lip below the threaded section that the upper pump support screws into. This covers more of the seam on the back of the torch. This "lip" is missing from the Hibbard casting. The two castings are not the same."

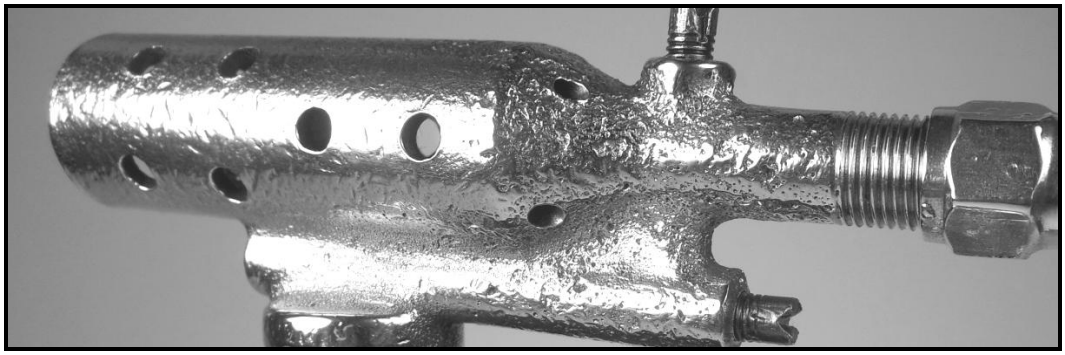
"Other components are also dramatically different. All the pump assembly components and supports differ. The lower bronze casting appears to be the same but it was not machined in the same way for the two different torches."

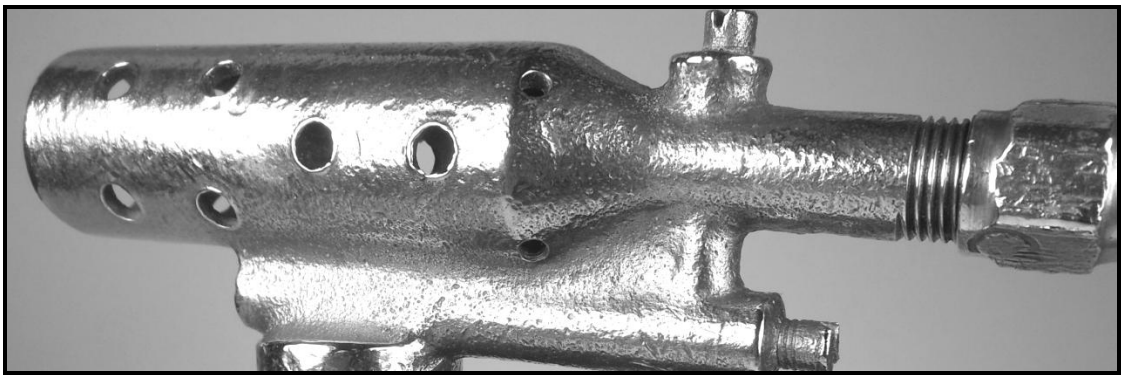
"In the picture below the Hibbard components are on the left and the C&L 47 components are on the right. In comparison, the Hibbard components appear much simpler and it is likely that they would be significantly less expensive to manufacture."



"There were also other external differences that are more of a cosmetic nature. The burner on the Hibbard is of poorer quality. It's very rough and pitted. It is especially pitted toward the rear of the burner. A typical C&L auto torch burner is relatively smooth and has clean lines."

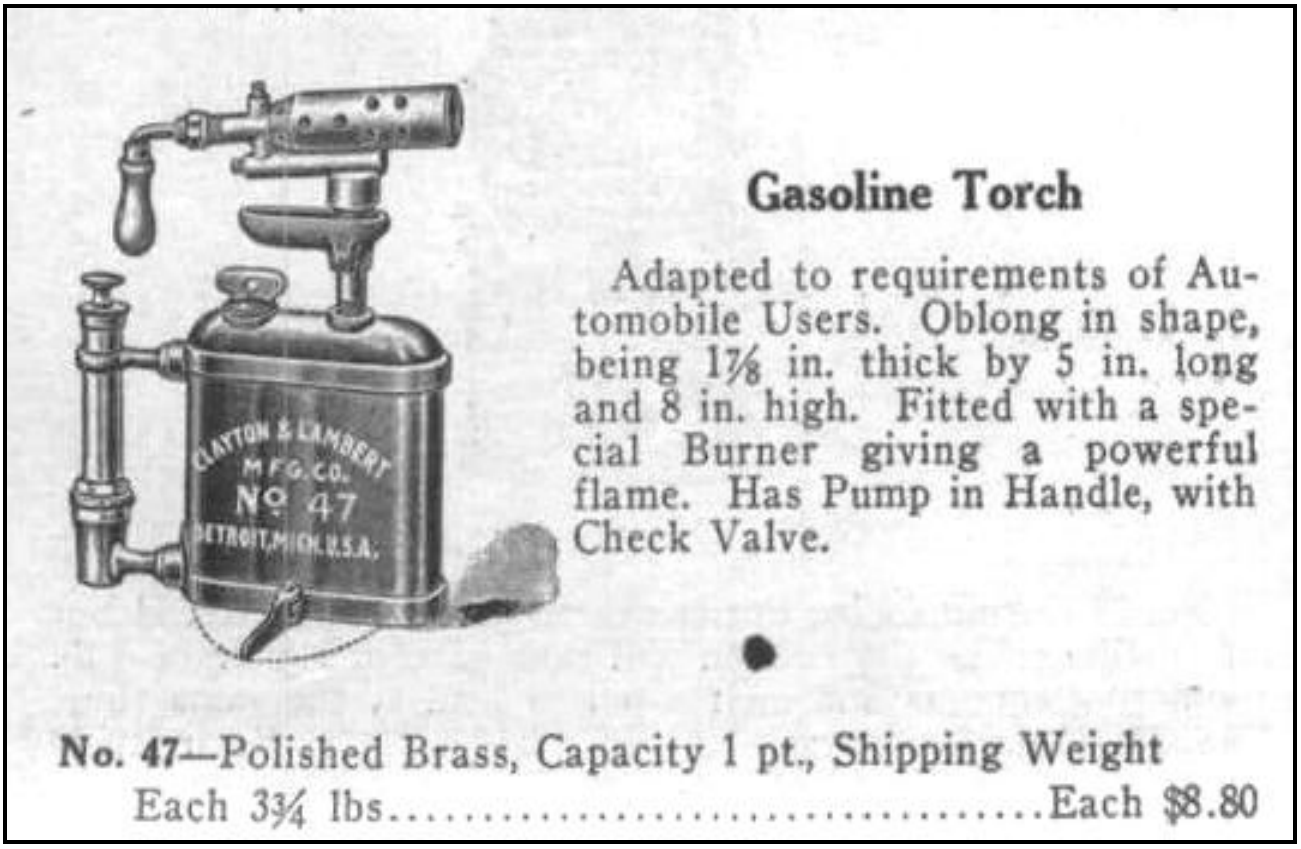
"In the pictures below the Hibbard burner is on the top and a typical C&L burner is directly below it. This could be just a coincidence since it is the only Hibbard P47 that I have ever seen, but I don't believe so. Based on all the other cost saving efforts that have been taken in the creation of the Hibbard torch, I truly believe that lesser quality castings were reserved for this Hibbard catalog version."





"I have checked many other catalogs and this was the only Hibbard P47 that I could find. Hibbard, Spencer & Bartlett did offer other C&L model 47 torches in catalogs later than the 1913 catalog in which I found this torch. I could not find any earlier catalogs. All the later torches appeared to be the more typical C&L model torches with standard components. I found a standard 47 in a 1918 HS&B catalog listed as catalog # R47P."

"In almost all cases where I have seen a C&L 47 or 48 in a retailer's catalog, the fill plug has had a hole in the top. Other than this Hibbard, I have never owned a model 47 or 48 having a fill plug with a hole in it. Below is an example of a large Hardware retailer's ad for a standard model 47. Note the hole in the top of the fill plug."



"It seems probable to me that this P47 torch was made exclusively for Hibbard by C&L. The quality of this torch is significantly less than that of a standard C&L model 47. The cost to manufacture this torch must also have been significantly less than that of a standard C&L 47. It has substantially less parts and requires much less machining. I find it interesting that C&L made a torch of obviously lesser quality than their standard product and allowed HS&B to display their logo on the torch in their catalog. It also should be noted is that this torch retains no C&L related markings. Typically a C&L model 47 will have the "47" stamped on the bottom of the lower pump support or the top of the pump knob."

"Since I only collect early auto style torches, I do not get many opportunities to purchase a brand-labeled torch. I may have in the past and not known it. I'm sure there have been many that were exactly the same as the original manufacturer's model with just the retailer's label applied. If it was not a soldered on brass label, the chances of it surviving are not good. It was a good experience to tear this unusual auto torch apart and discover its nuances. No worries, I did put it back together. Hopefully I will someday find a C&L model 47 or 48 with a hole in the fill plug."

♦ ♦ ♦ ♦

TED'S CORNER

BTCA member **Ted Maire** is an avid torch collector, but also an experienced restoration expert. This is one in a series of Ted's helpful restoration tips since so many members do restoration work on blow torches and other similar items. We always welcome feedback and would like to hear from members regarding these restoration tips.

Welcome to **TED'S CORNER**.

BUFFING AND POLISHING

In the past I have sold many torches that I have restored. Several buyers have told me that they also restore torches but did not achieve the same results that I do after buffing. I thought it might be a good idea to pass that information along to our members.

I use a ½ horsepower motor with a ½" arbor and 6" buffing wheels. I took the motor out of an old refrigerator about 30 years ago. I have had only two motors in over sixty years. As I mentioned in previous tips, I do most of my work outside. I made the motor portable by bolting it to a two foot long wooden 2x6. The 2x6 also gives me the addition height that enables me to use 5" and 6" buffing wheels. I use a "C" clamp to secure it to my work bench (an old picnic table).

On the non-ferrous metals I use two different grades of buffing compounds. I use a different set of buffing wheels for each. After I have cleaned the metal thoroughly, I first use a brown buffing compound "Dico Tripoli 531-TC6". This is a medium grade and will remove blemishes, high spots, shallow scratches, etc. It also gives the part the preliminary polish.

After that, I change wheels and use a finer grade buffing compound: "Dico 531-WR1" to polish the parts. This compound is white in color and gives it the high luster.

I don't think there is a particular technique involved. I just make sure I have covered the part evenly. For small items such as the nut at the back of the burner, I attach it to the burner for buffing. I always make sure that the buffing wheel would turn it in the direction required to tighten the nut. If I buffed it in the opposite direction, the wheel would loosen it and it would potentially fly off. For fuel tanks, I usually place two buffing wheels on the arbor. This gives me a wide surface to work with.

When I am buffing, I put a plastic recycle container behind the wheel to catch any item that might slip out of my hands. Some pieces are small and could easily get lost. The plastic container does a good job of catching them and preventing damage.

After the parts have been buffed there is still a lot of residue on them from the buffing compound. The compound gets into all the small holes and cracks in the parts. I clean them with a liquid solvent to remove the compound. I prefer to use paint & lacquer thinner since it works well and dries fast. I usually just brush it on and then clean the parts with a dry rag. For parts like burners that have a lot of irregular surfaces, I use a toothbrush or a nylon detail brush to clean the parts with the solvent.

The final step is to hand polish the parts with Simichrome polish. I find this polish is the best and it doesn't leave a residue like Brasso, Noxon, etc. It is also good for polishing painted surfaces. It acts in the same way a very fine "Rubbing Compound" would work on automobile painted surfaces. I use it on torch painted wood handles all the time.

I recommend wearing rubber gloves for all the above processes. I should have started a long time ago since this stuff is so tough on your skin!

♦ ♦ ♦ ♦

CUTAWAY & SALESMAN'S MODELS

By **Graham Stubbs**

One of the first torches that I added to my collection more than twenty years ago was this cutaway sample of a Bernz Model 87. It was said to have come from a hardware store, where it was used as a sample on the counter to show off the inner construction and workings. The cutaway modifications were very professionally done, possibly at the factory.

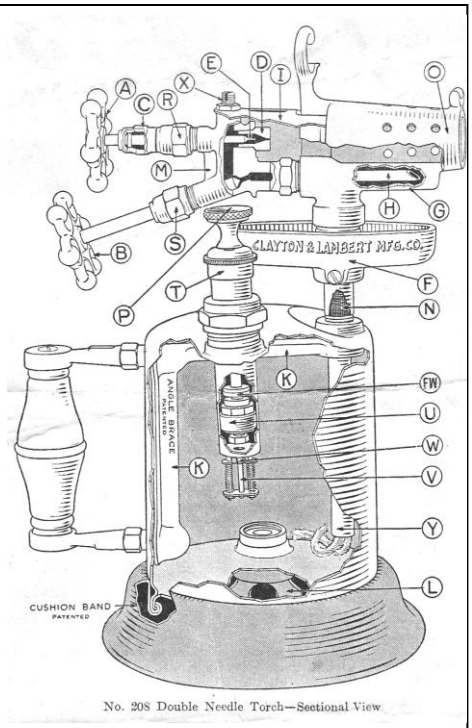
Since that time I've looked for more of these samples, but without success.

However, here are photographs of such cutaway salesman's samples from BTCA members who have generously provided them for use in *THE TORCH,* together with two of the line drawings used in vendor catalogs to explain the internal construction.

Does anyone have the capability to modify blowtorches in this way? I'm sure that there would be a ready market for them among torch collectors!

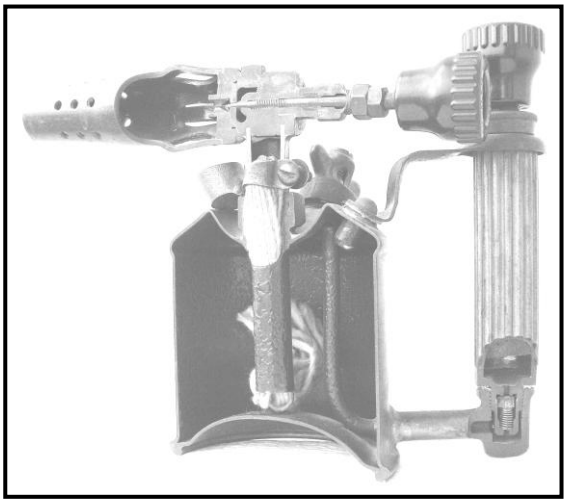
BERNZ No. 87
CUTAWAY SAMPLE

WALL No. 3341
CUTAWAY SAMPLE
(Photo Charles Smith)

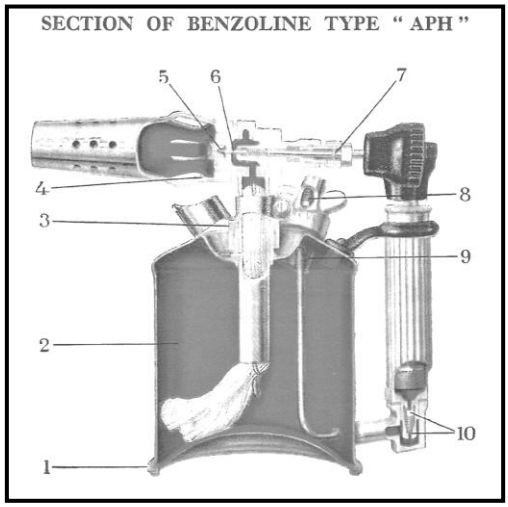


No. 208 Double Needle Torch—Sectional View

C&L No. 208
c1927 Catalog



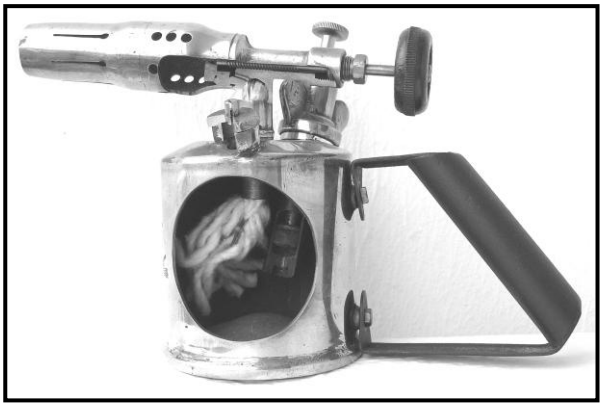
SIEVERT TYPE "APM"
CUTAWAY SAMPLE
(Photo Michel Duval)



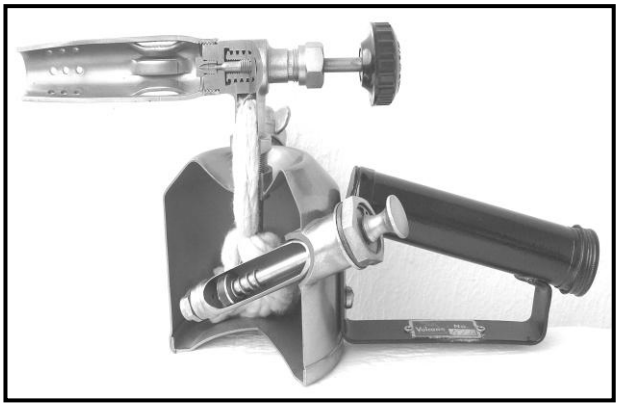
SIEVERT TYPE "APH"
CUTAWAY DIAGRAM
1934 Catalog

SAMUEL HEATH & SONS (UK)
ONE-PINT BLOWLAMP
CUTAWAY SAMPLE
(Photo Bob Prichard)

BARTHEL 390 BLOWLAMP (GERMANY)
CUTAWAY SAMPLE
(Brought to UK Collectors
meeting Oct. 2012 by John Tingle)



M. LEJEUNE M35 BLOWLAMP (FRANCE)
CUTAWAY SAMPLE
(Photo Michel Duval)



VULCANO 424 BLOWLAMP (GERMANY)
CUTAWAY SAMPLE
(Photo Michel Duval)

TURNER OVAL LABELS

By **Graham Stubbs**

Turner Brass Works used the same 2½ x 1¼ inch oval outline and red background for labels applied to various brand-labeled torches.

From left to right in the photos below, these one-quart Turner-manufactured torches are labeled:

TRU-TEST brand of True Value hardware (see page 137 of *Vintage Blowtorches*).

QUALITY CHAMPION PRODUCTS brand of Turner Brass Works. (See page 99 of *Vintage Blowtorches*)

STANDARD was a 1920s brand of Turner Brass Works. (See page 250 of *More Vintage Blowtorches*). It's not clear if this example was a Turner brand torch, or was made for another retailer.

CLAYTON & LAMBERT No. 33 Torch

By **Charles Smith**

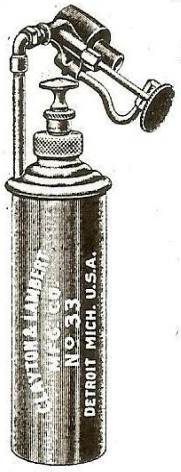
As you know, I have been paging through old issues of the trade journal *American Artisan and Hardware Record*. I've recovered two illustrated articles on the C&L No. 33 Torch; two articles only and no advertisements. Each article addresses a different variety of the No. 33, much as what was recovered from *The Metal Worker* and shown on page 122 in *Vintage Blowtorches*.

The July 12, 1902 issue carried an article and illustration of a type of the No. 33 torch having a non-flaring base and "simplified" burner and control mechanism. Only eleven months later, this journal had an article about a wholly different type of the No. 33. I can find no explanation why, just that the design was changed.

On a side note, I have neither of these torches in my collection and I cannot recall ever seeing one for sale. Do any BTCA members have either of these C&L No. 33 models?

NO. 33 TORCH.

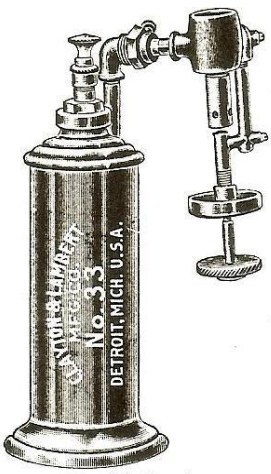
The accompanying cut shows the No. 33 torch manufactured by the Clayton & Lambert Mfg. Co., Detroit. Mich. They will be found just the thing for inside wiring, removing putty from sash, light brazing,and a thousand other things which will suggest themselves to any mechanic who sees it. The torch is light, self-contained, can be carried in the pocket, and is ready for use instantly. It lights with a match. The tank is supplied with a pump so that air pressure can be applied, making blue blast flame which, while small and running to a fine point, is intensely hot. The burner hangs on a swivel so that the flame can be thrown in any direction, is a powerful generator, consuming but little gasolene, and will save the user its cost in a short time.



No. 33 Torch.

NO. 33 TORCH.

The accompanying cut shows the No. 33 torch manufactured by the Clayton & Lambert Mfg. Co., Detroit, Mich. It is very serviceable for inside wiring, light brazing, removing putty from sash, etc. The flame is blue, running to a small point, and is free from smoke. The burner hangs on a swivel, so that the flame may be thrown in any direction, and is fitted with a needle point which controls the flame. This torch is easily lighted, as the burner can be heated with a match so that it is ready for work. This firm will be pleased to send a descriptive catalogue to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."



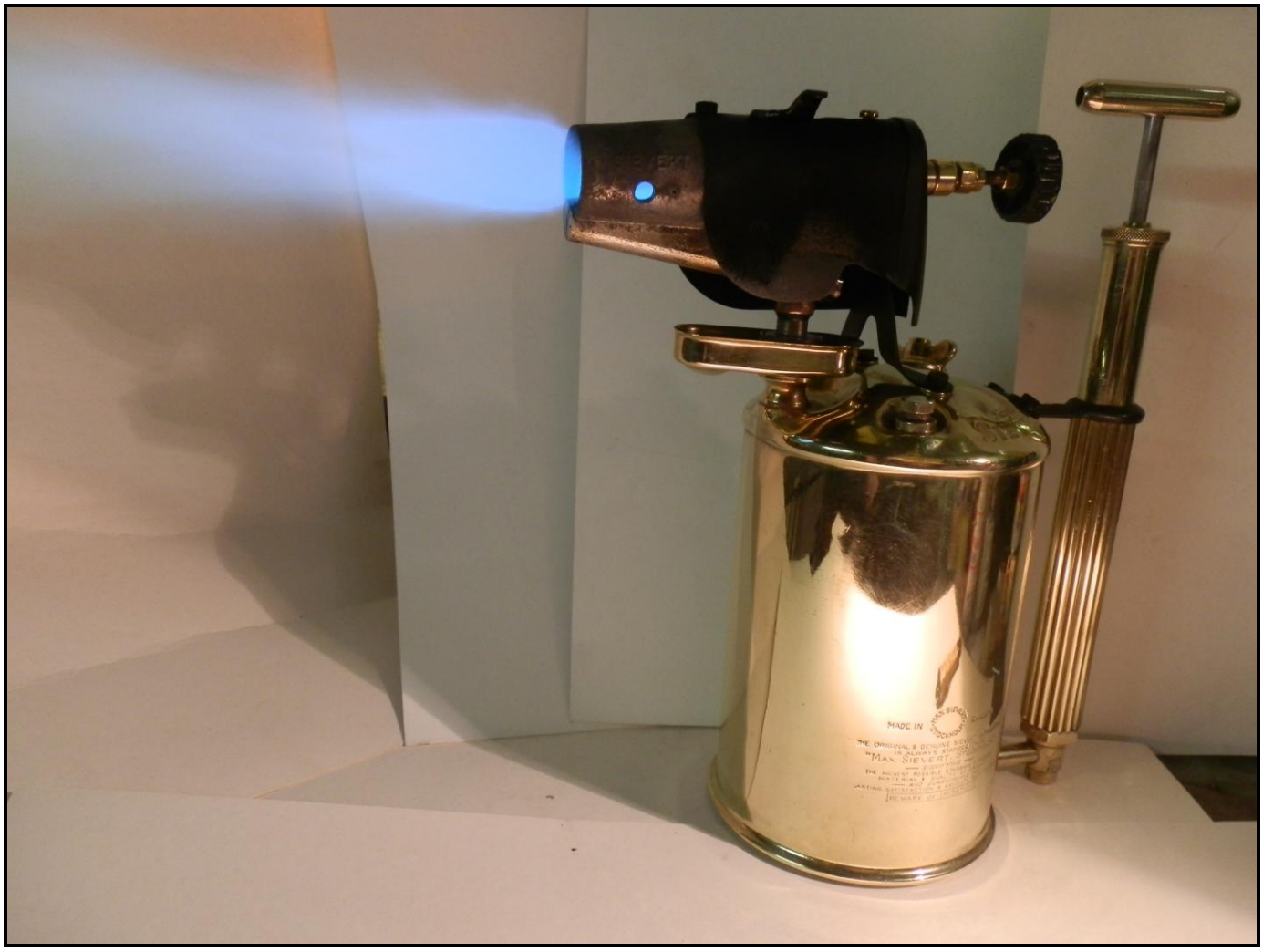
No. 33 Torch.

♦ ♦ ♦ ♦

CLASSIFIED ADS

Ted Maire would like to purchase the following auto torches…condition is not important as long as they are complete; a missing wood knob is not a problem:
C&L # 47 double needle without a soldering iron hook, page 81 of More Vintage Blowtorches.
Turner #325, page 425 Vintage Blowtorches.
Turner #418 without a soldering iron hook, page 425 Vintage Blowtorches.
You can contact Ted at 201-652-6718 or tedamaire@aol.com.

James Wyatt recently purchased a Quickmeal blow torch; however, it has an incorrect burner. Anyone with a spare burner should contact James at james.wyatt1978@btinternet.com.



A two liter Sievert No. 257 Blow Lamp, from the collection of **Patrice Faye.**

THE TORCH

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Editor **Ronald M. Carr**
Contributing Editor **Graham Stubbs**

THE PURPOSE of BTCA is to preserve the history of blow torches and related equipment, to encourage the identification, classification, and exhibiting of such equipment, also to promote the study and better understanding of operation, purpose, and application.

Membership in BTCA is open to any person sharing its interests and purposes. For membership information, write to: Blow Torch Collectors Association, 6908 April Wind Avenue, Las Vegas, NV 89131, email to: BTCA@cox.net, or by phone: 702 395-3114.

THE TORCH encourages contributions from anyone interested in our purpose. Articles can be submitted in any format and should include supportive literature whenever possible. All submittals should be sent to BTCA at the above address.