

# THE TORCH

NEWSLETTER OF THE BLOW TORCH COLLECTORS ASSOCIATION

- FIRST QUARTER 1996 -

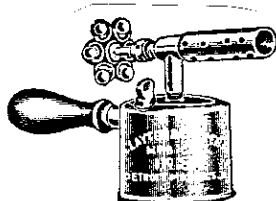
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- THIS NEWSLETTER MAY BE REPRODUCED WITH CREDIT GIVEN TO THE SOURCE -

## NOTES FROM THE EDITOR:

I trust everyone survived the onslaught of the winter of '95. The Pacific Northwest was especially hard hit this year with more rain and wind than I have seen in a number of years. The good news is that, during the inclement weather, I was able to "catch up" on my torch buffing and had more time for torch hunting in the Seattle and surrounding area.

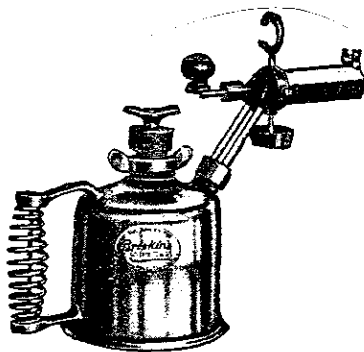
My wife, Janet, and I traveled to Charlotte, NC just a few weeks ago to visit an ailing relative and also to attend the Metrolina Antique Show just north of the city. They advertised over 5000 vendors, but I suspect a much small number were present and I would compare it to the antique shows in Brimfield, MA. I was obviously looking for torches and did find one treasure, a #8, ½ pint Clayton & Lambert torch for \$15, a real bargain.



Clayton & Lambert Co.  
#8 ½ pint, Circa 1910

All in all, I came across very few torches, and what I did find were not of any collectable value. If you recall, I featured an article in the March '95 newsletter on the elusive ½ pint torches. I have been looking for years for one of the ½ pint models and my perseverance finally paid off. The torch is in mint condition and polished up to an almost new appearance. My next goal is

finding a **Brookins Manufacturing Co. pint torch**. I am aware of only one torch collector that owns a Brookins pint torch, **Mark Pedersen**, in Mill City, OR. Mark, be sure to call me when you are ready to sell. Is there anyone else out there that owns a Brookins torch?



Brookins Manufacturing Co.  
Circa 1923

It is with great sadness that I announce the passing of one of our torch collectors, **Jim Clough**, from Winchester, IL. Jim was featured in the last newsletter as having, in addition to a very modest torch collection, one of the largest soldering iron collections, totaling over 1200 pieces. Jim's widow, Jo was kind enough to sell me a few of Jim's torches, including a very large 2 - 3 qt. all metal torch with no markings. By the construction I would guess a very early O. Bernz. I would encourage you to contact Jo Clough, RR #1, Box 199, Winchester, IL, 62694-9743 if you have any interest in the soldering irons or other wood working tools.

Our collecting group continues to grow with well over 50 members covering 21 states, Australia, and now France. We recently added **Philippe touillet** from Gattieres, France, a small town outside of Nice along the Mediterranean Sea. Philippe has **1500 torches** in his collection, predominately European, with approximately

100 made in the US. Also joining our torch group is **Ron Johnson, Sr. & Jr.**, like father, like son. The Sr. has close to 600 torches and the Jr. has approximately 75 torches with a lot of catching up to do. Another noted addition includes **Bob Davis**, a former employee of **The Turner Brass Works** in Sycamore, IL. Bob has provided some great torch paper and also has a modest collection of, as you would guess, Turner torches. Other members recently added include **Frank Krantz**, **Owen Minnick**, **Charles Monthy**, **Richard Unger**, and **Ron Webb**. Welcome aboard, everyone!!!

There was a great response from the last newsletter that featured cleaning & buffing techniques. A number of members submitted additional ideas that are included in the attachments. **Dave Kolb** not only provided cleaning & restoring suggestions but included information on sources for replacement torch hardware. **Dick Sarpiolus** sent in information on making replacement blow torch parts that is also enclosed. While Dick is an avid torch collector, his true love is the '57 Chevy that he is painstakingly restoring. Also, **Frank Krantz** submitted torch paper on the **EVERHOT MFG. CO.** that included a short interesting story. What I really found interesting was the *Position Wanted* ad: the all around telephone man with 5 years experience and wife! I guess having a wife in the 1920's helped in securing a job!

Many of you sent in photos and they were greatly appreciated. Interesting photos on European & Australian torches from **Harry Goff**, our Australian connection. **Philippe Touillet** provided a number of great photos of European torches as well as one photo of 20 various torches recently purchased at a flea market in France. **Dick Bernard** sent in a large number of photos of his collection that includes a very interesting piece that Dick identifies as a **LUMEN**, made in Poland with a brass top and copper tank and appears to be similar to a large

alcohol lamp. A beautiful piece in excellent condition.

**Thank all of you for your torch paper submittals, photos, comments, and phone calls.**

#### My research .....

in blow torch history continues in obtaining data on pre 1900 patents and torch paper. I have secured additional copies of pre 1900 torch patents from the US Patent office in Washington DC. Much of my research has been concentrated at the Technical Library at the University of Washington in Seattle where they have an extensive collection of patent books that date back to the 1800's. In spite of the thousands of patents issued, I have been quite successful in tracking down numerous patents with just the patent year or the manufacturer's name.

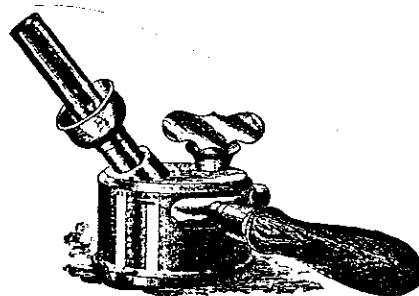
The late 1800 & early 1900 patents are the main areas of my interest in an attempt to identify the source of some of the earlier torch designs. A blow torch is not always a blow torch in the eyes of the inventor or manufacturer. It is interesting to note some of the different names given to torches that only complicated matters during my research. Some of the more common names assigned to blow torches include:

Blow torch  
Blotorch  
Blow pipe  
Torch  
Blow lamp  
Brazing apparatus  
paint burner  
Hydrocarbon torch  
Soldering iron  
Gasoline torch  
Gasolene torch  
Kerosene torch  
Vapor burning lamp  
Plumber's torch  
Electrician's torch  
Quick generating torch  
Auto torch  
Vest pocket blow torch  
Hand torch

The biggest problem area is with blowpipes. The name not only covers many types of blow torches, but also includes a blowpipe that one would actually blow air through to increase the intensity of a flame, as well as various types of acetylene torches that were, in the early days, also referred to as blowpipes. Then there are always all of the manufacturer's trade names that are as numerous as there are manufacturers.

After I purchased my one and only **Vulcan torch** at the Brimfield MA antique show last year, I starting my quest for any

information on the unusual looking torch. The only reference that I have ever encountered was printed in the Otto Bernz plumbers tool catalog, circa 1910. The Vulcan torch is not mentioned in a later O. Bernz catalog dated 1916 and one can only wonder why the torch was dropped from distribution. Also noted in the 1916 catalog is the fact that the #8 torch was also discontinued and was replaced by the #9 torch. The #9 torch was manufactured with a steel tank that was heavily copper plated and had a capacity of  $\frac{3}{4}$  pint.

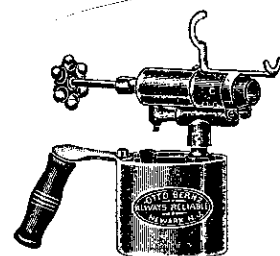


**Vulcan Torch circa 1910**

What I find interesting about the unusually named torch is that it carries two patent dates, April 4, 1893 and April 19, 1892 and I am impressed that both dates are prominently displayed. I find it odd that there is no mention of the manufacturer anywhere on the torch, only the patent dates and the statement: Mfgd in the USA is stamped into the metal.

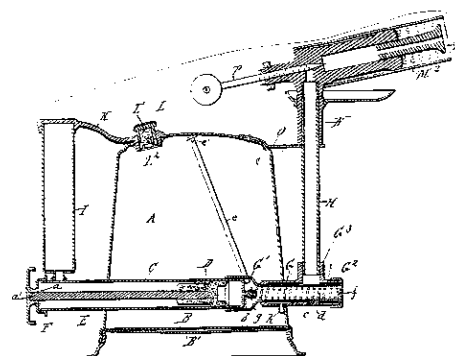
I researched the patent dates and ordered the patent copies from the US Patent office. The Vulcan torch closely resembles the April 4, 1893 patent and I suspect that the Vulcan primarily carries the patent due to the internal vent tube arrangement. It is difficult to determine where the April 19, 1892 patent fits into the picture. I have read the patent in detail with no apparent connection to the torch.

The arrangement of the Blowpipe described in the patent is quite bizarre considering the vapor tank positioned above the main tank and wick arrangement. I have enclosed both patents for your reading pleasure. I would be very interested in hearing from anyone who also owns a Vulcan torch, especially if a manufacturer is noted on the torch or if different patent dates are displayed. Also, I would be most interested if anyone has any paper on Vulcan torches such as an ad in a trade catalog.



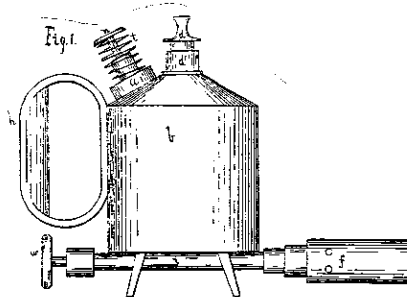
**#9 Otto Bernz  $\frac{3}{4}$  pint Pumpless  
Circa 1916**

The earliest torch patent that I have uncovered to date is a Wellington torch with a patent date of June 15, 1886. From the description there appears to be an abundance of parts that added to the cost of production as well complexity of operation. Also, with many components bring a higher risk of failures and malfunctions.



**Wellington Torch Circa 1886**

I do have an earlier patent dated October 3, 1882, however, the patent describes a paint burner. While the paint burner could be used as a blow torch, I suspect that it would be difficult as the flame nozzle exited the tank from the bottom.



**Paint Burner Circa 1882**

**See you all in the next issue.  
Have a great summer and happy torch  
hunting !!!**

## CLEANING AND RESTORING BLOWTORCHES.

I suppose a book could be written on the cleaning techniques just for blowtorches alone. I will just list some that I have used, discarded or still use.

When I started to clean and polish my first blowtorch, the only knowledge I had was what I had gained in some of my early years preparing to put a finish on a rifle or shotgun, known as bluing. To prepare the steel, one had to get the steel highly polished so it resembled chrome plating. From there you used a hot solution to remove any oil or fingerprint marks, then plunging it into the hot bluing solution. A final cool water rinse, and oil dip to seal the pores, and presto a new-looking rifle.

Blowtorches presented quite a different approach to refinishing. Initially, they are almost always covered with 50 plus years of soot, oil, dirt and/or corrosion. I tried dissolving the grime with gasoline. Not much help. I tried buffing it off with a wire wheel. Not much better. I tried other solvents like acetone, lacquer thinner and even engine cleaner and carburetor cleaner. Of these, acetone worked the best. I even tried heavy duty engine degreasers.

I then tried what most people probably do, use Muriatic Acid. I tried this for quite a while using a 50/50 acid/water mix, but ultimately it just proved too messy and time-consuming. I wrote to a company about this problem, and they not only could supply me with the right chemicals to do the job, the drawback was that I would have to receive approval from the Environmental Protection Agency and get a hazardous waste listing number before they would sell to me. Then the solution when disposed of, would have to be sent to or picked up by a qualified disposer, or be treated in such a way to be able to discharge it directly into the sewer system. This proved to be more of a bother than it was worth.

This company did provide me with information that seemed to help. First spray the blowtorches with EASY OFF oven cleaner. Like other chemicals, this was also slow and time-consuming. The acid dips are messy, and then you have to neutralize the acid with another solution, then dry everything out before starting to polish. And what if you missed a spot on the inside? The tank could corrode from the inside out somewhere in the near future.

So it was back to proven methods, by hand. I tried buffing compounds from the start of the operation. Start with a "coloring" type of compound and then work up to the final finish compound. But I still had a need to get things done quicker. All of these old methods I thought would save me time, didn't, and I wound up with only one blowtorch per day that was finished. So the quest went on for a better solution to the problem.

For my personal preference, I found the use of a sand-blaster just the tool I needed. I had used a pressure sand blaster when it comes to heavy rusted items. It can't be beat. But on brass items it pits the metal too much. Then I tried one of those cheap type you can use with an air compressor and a bag of sand. This worked much better, but what do you do when it rains, or snows, or is too cold or too hot? Then there is the cleaning up of the sand that is all over everything. There was only one next step. A sand blasting cabinet. I bought a cheap one from Harbor Freight out of California. It really doesn't do that bad of a job. Although now that I know that I want to go this route, I plan to invest in a better one. It has just enough pressure to remove the most stubborn dirt and corrosion. I can blast carefully around those precious decals with out removing them as happens with a wire wheel at times. The brass tank buffs up easily, and on the bronze parts all I use to finish them with is a fine wire wheel.

After everything is polished, painted, and put back together, I put a coat of oil on the main valve stem and oil the pump leather. Then I put on rubber gloves, (I use the disposable examination gloves doctors and dentists use) I take a rag with Acetone on it and wipe off all the metal parts. Then I follow up with a clean soft rag and a coat or two of clear lacquer. I made the mistake early on of trying to use ACRYLIC LACQUER. In about a month or so this stuff flakes off or is easily chipped or scratched. I now use an automobile type of lacquer with much better results. And if I sometimes spray on too heavy of a coat and it runs, I take another Acetone soaked rag and wipe the old finish off and re-spray in a matter of minutes. This is what I found the factory used originally, and again, less work, especially when it comes to waxing them which I have also tried.

I don't know how much time it takes other people to polish their blowtorches. In the beginning, I used to get one done per day from start to finish in a 5 to 6 hour session. I can now do about 4, average, sometimes 5 in the same time period.

#### DISASSEMBLY AND REASSEMBLY OF BLOWTORCHES.

When I first started out cleaning and polishing my blowtorches, I felt that I wanted them to be as clean on the inside as well as the outside. If only for my own sake I had an urge to use one or just fire it up to see what it could do, I had to have it as it came from the factory.

So how do you take one apart? It looks easy enough, but what do you do about those stubborn main valve stems, and the passage screws? Some have filtering screens in the supply pipes, and what do you do when the wick pulls apart or is gone altogether? Or if the leather is gone from the pump or the check valve? The supply of these parts are long gone. However with a little ingenuity one can come close to what was used originally.

I first started out using brute strength. This resulted in broken or mangled screws and supply pipes. I then tried heat. It works, but your average hardware store propane torch does not get hot enough to do a good job, and here again we need to cut down on the time it takes to complete a job. If you are a welder and possess an oxy-acetylene torch this is very good but it does tend to overheat things unless you are real good at it. I have met this halfway. I use what is called a PRESTO-LITE torch commonly used by plumbers. While not cheap, it is less expensive than an oxyacetylene outfit, and smaller. This torch uses an acetylene/air mixture and I wouldn't be without one. Inquiries can be made at any welding supply house, and sometimes there are used ones to be had for a decent price. So when a mangled screw won't budge, I clamp a small VISE-GRIP on it, heat around it, work it back & forth and it comes out easily.

The question of pump leathers has been mentioned. I too wanted to find a source of these, and found one in Rockford, Illinois. But, I never followed up on it after I received their catalog. The smallest one they list is for a cylinder 1-inch in diameter at a price of \$1.20 each. If you needed 100 of them it gets to be expensive.

So, I found a way to make my own. Leather can be found anywhere. Buy it at a shoe repair store or save your old shoes and remove the tongue. It is about the right thickness and you get quite a few out of an old work shoe. Here again I tried to trace around a metal washer then cut it with a scissors. No way. Now what? I needed some sort of punch. I found it. In a catalog called HARBOR FREIGHT TOOLS there is a 15 piece gasket punch set. I first use a revolving leather punch tool for the center hole, then find the punch with the diameter I want and simply punch out a disc. I then soak it in NEATSFOOT OIL, then assemble it on the pump shaft and carefully tuck the edges into the pump body. Instant pump restoration. If time is not a factor, instead of trying to get the edges in evenly, assemble the pump leather as above, then push it into the pump body upside down. Leave it for a day or two, pull it out and turn the leather over and then put it into the pump body. With some trial & error it will become easier to put a pump together.

The next two items are easy ones. The first one is the small filter screen in the top of the pipe. Some are fine brass screen, some are made of stranded wire. I found the right size mesh screen at a hardware store. It is especially made to filter water from gasoline. The torches I find with twisted wire in, I discard it and replace it with the brass screen.

For the wick at the bottom of the supply tube, I have found that pure cotton knitting yarn works well, and gasoline does not affect it. The polyester yarns may look better, but I don't know if it resists gasoline or not. I do know that any high heat will melt it, so I don't use it in my blowtorches. I take this yarn and wind it loosely on a 12 inch board, then cut one end to remove it. Then I take about 5 or 6 of the strands of yarn and fold them in half, and use a small wire with a hook at one end and pull them all through the lower supply tube. If the original wick didn't have anything to help keep it in the supply tube, I make a small ring from an old spring,

loop it through the new wick and then pull it snugly into place. Until I can find a better source for wicks, I am very satisfied with this arrangement, and it works, if one cares to really use a gasoline blowtorch.

My next project is to somehow get a supply of top hooks. These are easily broken and quite a few torches of mine are missing this item. And, they are all different. Some may look alike, but sometimes the threaded portion is large, sometimes small, and of course all of the thread pitch is not the same. I have no expertise when it comes to casting brass. And to contact a business that does, I have a feeling this little item will be very expensive. I plan on trying to cast some myself. Somehow.

Last is the decal that is bad or missing. So far I haven't found a company that makes the old cellophane soak & slide off type, all they seem to make today are the vinyl sticky back kind and I for one do not want these on my blowtorches. Somewhere in these United States of America someone makes the old type or has the machinery and knowledge to do so.

Dave Kolb, January 27, 1996.

## MAKING REPLACEMENT PARTS FOR YOUR BLOWTORCHES

I don't hesitate to buy blowtorches with missing parts, if the price is low enough, as I figure that some parts can be easily duplicated or replaced and the remainder can be used as a spare parts source for restoring or replacing parts on other torches in my collection. Here's what I do to solve the problem of a few frequently missing parts:

*Soldering Iron Hooks.* These parts are often missing or broken off. To replace them, I first buy, at the local hobby shop, 12" lengths of 3/16" brass rod. I coil this rod around a piece of 3/4" diameter steel pipe I happened to have. I then cut the coil so I have a number of "C" shaped pieces. I flatten them out and file the ends round. I then take a common brass bolt, thread size to fit the hole in the top of the blowtorch, usually no. 10 or 12 thread. Or, the hole in the burner top can easily be drilled and tapped out to suit whatever brass bolt you have to work with.

I use bolts with a round head or preferably a hex head that I've rounded off in my small hobby lathe. I file a slot across the head of the bolt with a round file to accept the C-shaped brass rod. Having a helper hold the brass rod in place with a pair of pliers, I braze the rod to the bolt head. Using brass brazing rod and filing the joint a bit if necessary, the resulting part looks almost like a one piece casting. I do the brazing with a Bernzomatic model OX-2500 Tote Torch, with oxygen and propane cylinders. It provides plenty of heat for the brazing. After polishing the new soldering iron hook, it looks good to me; certainly better than not having the missing part in place on an otherwise complete blowtorch.

*Pump Handles.* To replace a missing pump handle on any type of torch, try a good hardware store (I use Home Depot) with a large selection of drawer pull brass knobs. They're available in many different styles, shapes, and sizes. Most are tapped 8-32, but being brass, they're easily drilled out and tapped to suit. They come lacquered, but I wire brush and buff them for the plain brass finish to match the rest of the torch. They're not truly authentic, but again, they look good and are a lot better than not having a pump handle on an otherwise nice torch.

*Pump Shafts and Leathers.* If the entire pump handle, shaft, and leather diaphragm are missing, I'll still buy the torch. I've found several torches that have had a tire valve stem soldered in place of the pump handle; apparently an air compressor was used to pump up the torch instead of manually pumping it up. I unsolder the air valve and replace it with a shaft made on my small hobby lathe from a piece of 1/4" brass rod. I'm sure it could be done with a piece of steel rod but the brass is easier for me to machine and thread. I turn down each end and thread it, usually 10-32 or so, and use a brass drawer pull for the pump handle. To replace the missing leather, I cut a small circle from 1/8" thick rubber or neoprene, mounting it on the other end of the shaft with two washers and a nut. The neoprene disc is sized for a tight fit in the pump cylinder; it can still be pumped up and down, and that's authentic enough for me.

*Control Knob.* I haven't found a way to replace the black bakelite knobs used on most blowtorches. I've thought of making a rubber mold and casting a duplicate handle from epoxy resin with black coloring added, but haven't tried it. But there is a way to replace a missing steel cast type handle. I've bought, at antique places, several old steel outside water spigot valve knobs; in the right size, they look just about like the cast knobs on old torches. I've then had my son weld the steel handle to the end of the needle valve. Painted black or red, they look fine on the torch.

**Submitted by Dick Sarpolus**

(No Model.)

J. N. PEEBLES.  
BLOWPIPE.

No. 473,197.

Patented Apr. 19, 1892.

Fig. 2.

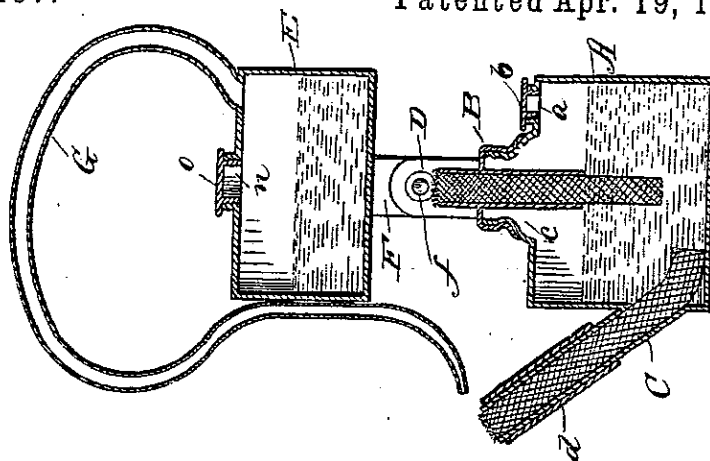


Fig. 1.

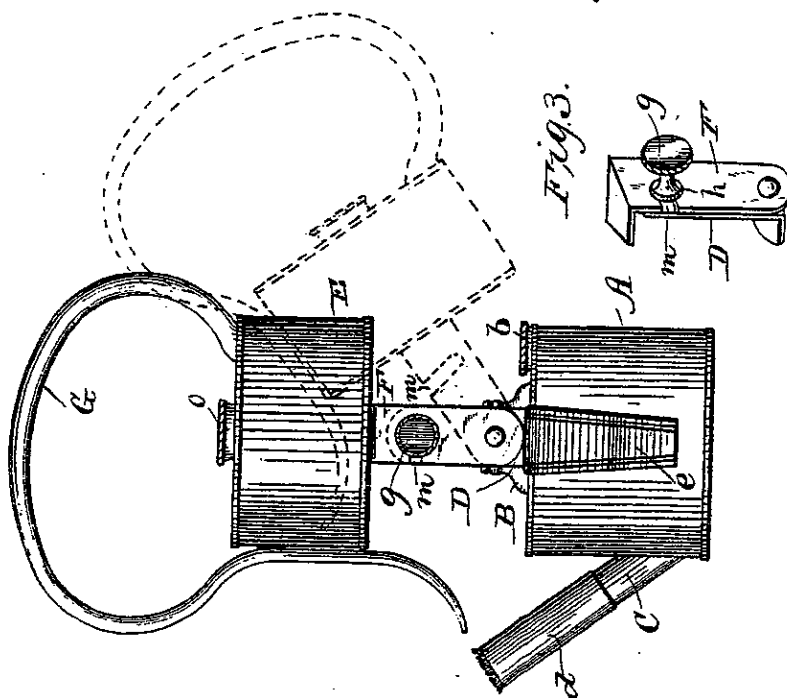
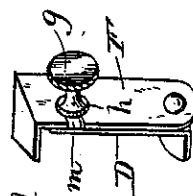


Fig. 3.



Witnesses  
M. E. Bowen  
J. R. Stuart

Joseph N. Peebles, Inventor  
by W. A. Redmond  
Attorney

(No Model.)

2 Sheets—Sheet 1.

F. RHIND.  
VAPOR BURNING LAMP.

No. 494,938.

Patented Apr. 4, 1893.

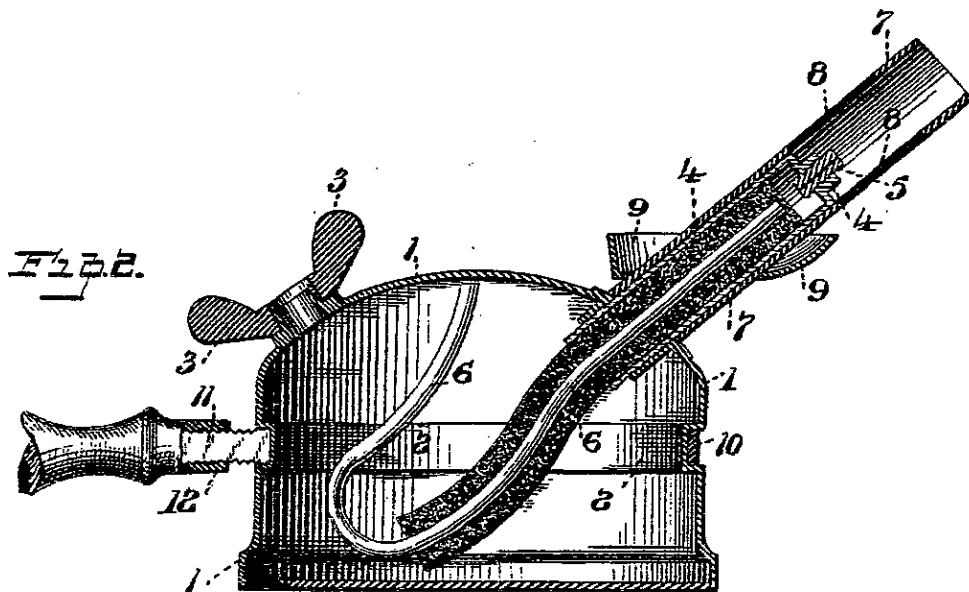
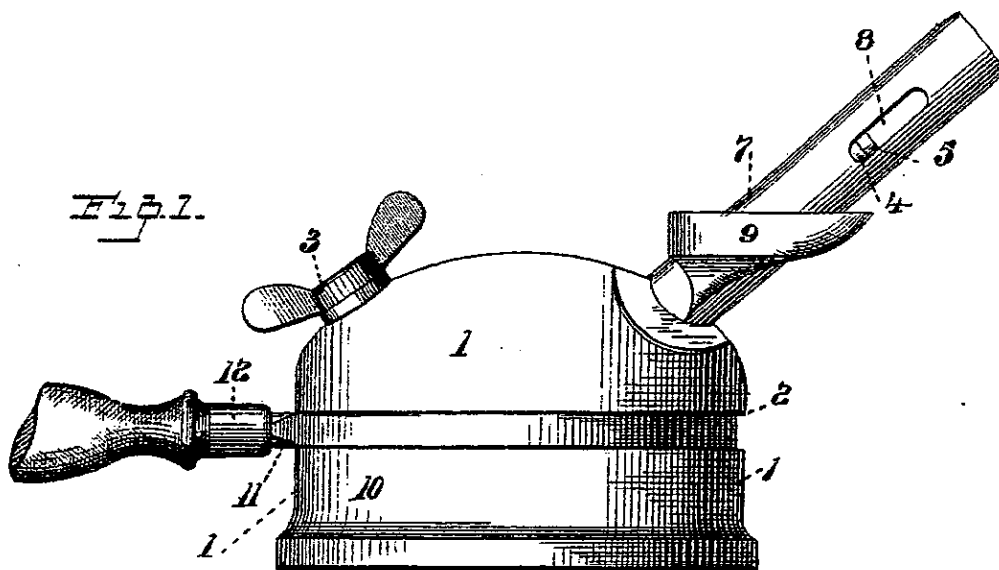
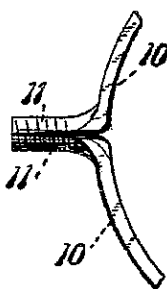


Fig. 3.

WITNESSES

A. J. Tanner.

C. M. Newman



INVENTOR

Frank Rhind,

by O. H. Hubbard

his Attorney