Catalog of the Museum of Faceting Technology



Winter 2025

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Justin K Prim

Lyon, France Winter 2025

Timeline of the Museum of Faceting Technology



Beginnings

The Museum of Faceting Technology project began in February of 2018. At first, it was devised as a personal collection, but the scope quickly changed as more machines were acquired and donated. As the collection grew, it started to become a tangible representation of the worldwide culture of gemcutting.

Many of the American machines were acquired in 2022 as I spent the year driving across the country researching the history of American gemcutting. As I made my way across the country, I acquired machines and vintage books relating to the history of American gemcutting. The majority of the French machines were acquired after we moved to France in 2023 and I started exploring the small towns, antique shops, and online sales platforms in the historical gemcutting regions of France.

Over seven years, the museum has acquired 123 machines, faceting heads, handpieces, and accessories from 24 different countries. The end goal will be to have at least one example of each machine from every historical epoch of faceting history, from each country which has a faceting story to tell.

The goal of this catalog is to serve as a guide to the history and localities of faceting machines. All the information that came with each machine has been preserved and when possible, historical data on the machine type and manufacturer has been added.

Acknowledgments

This collection could not have been assembled without the generosity of our donors. The majority of these machines have been donated for free or trade. Some have been offered at extremely low prices in order to support this project. We thank each and every one of our friends and machine donors.

Special thanks to Michael Holmes for the catalog design and layout and to Victoria Raynaud for the continuous support in this project.



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Jambpeg Machines

24 machines

The jambpeg style of cutting emerged in France at the beginning of the 19th century and quickly spread throughout Europe before spreading to gemstone cutting hubs in Southeast Asia, North America and South America.

Today, the jambpeg style of faceting machine has the widest global reach and it's likely that the majority of the world's gemstones in the 20th and 21st centuries are being cut on some variation of a jambpeg machine.

First Generation Éventions



Country of Origin France
Date Made 1808/1810s
Date Acquired June 7, 2024

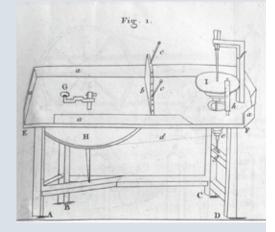
Acquisition Notes | Purchased from lady In Les Moussieres

Notes

These items were already in the house when they bought it. Belonged to the gemcutting family that lived there before.

Historical Notes

These are the only wood eventions I've seen with this cylinder shape as opposed to a cone shape. The shape matches the illustration in Brard's 1808 book, which is the earliest depiction of a jambpeg. Due to this, I believe these to be first generation French jambpegs.



1808 Illustration from CP Brard's book "Les Tailleurs Pierres Fine"

Première Évention



Country of Origin	France
Date Made	1820s
Date Acquired	May 5, 2023
Acquisition Notes	Traded with Valerie Duraffourg

Notes

From the collection of Gilbert Douffourg.

Historical Notes

Made in Jura, comes from La Pesse, 1800s, made of boxwood, very hard wood, originally acquired from a lapidary family in La Pesse around 1988.

Première Évention



Country of Origin France

Date Made 1830-1880

Date Acquired August 1, 2019

Acquisition Notes Donated by Maxime Ruelle

Notes

Traded for a handpiece plate.

Historical Notes

This is the original style of French jambpeg that was developed in the 1800/10s and was first described in Les Tailleurs Pierres Fine by C.P. Brard in 1808. We find one of the last references to this kind of old style jambpeg in La Vie des Pierres Précieuses, 1939. By 1939, only very old cutters would still have been using the premiere Évention. The name Évention is said to be a corruption of "invention"

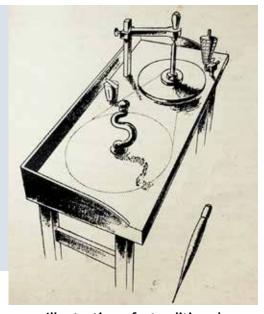


Illustration of a traditional French évention jambpeg from La Vie des Pierres Précieuses, 1939

Double Jura Bench



Country of Origin	France
Date Made	After 1885
Date Acquired	December 1, 2018
Acquisition Notes	Purchased from an antiques dealer in Geneva

Notes

Included 2 Évention, a cutting and polishing lap, a box of dops, powder boxes, photo. Dealer bought it from the wife of a deceased lapidary. She bought it 3 years before we got it Next to this city: Lons le Saunier. 100 cm by 103 cm by 98 cm tall.

Historical Notes

This is the later style of French Évention that Daniel Chambre tells us was developed in the Jurassian hills in 1880. There are many depictions of this style of machine between 1900 and 1980. Jura was a major cutting center for France and the entire region was filled with cutters working at home as well as cutters working in local workshops and factories.



Late 19th century photo of Jura lapidaries using the new Évention.

Wood Baton Mechaniques



Country of Origin	France
Date Made	1885ish
Date Acquired	May 5, 2023
Acquisition Notes	Traded with Valerie Duraffourg

Notes

From the collection of Gilbert Duraffourg. Originally acquired from a lapidary family in La Pesse around 1988.

Historical Notes

This seems to be the earliest form of the mechanical stick, made of wood, and simply made. The type of plastic mechanical stick used in Thailand today is directly modeled off this one.

Simple Mechanical Case



Country of Origin	France
Date Made	1890s?
Date Acquired	June 11, 2024
Acquisition Notes	Purchased from Gemmes-Pierres.Com (Gérard Vaubourg)

Notes

It comes from High Jura in Lons le Saunier where I worked with one of the best workers in France more than 30 years ago but who has since died... Mr Martial Barbe."

Historical Notes

This is a very early Mechanical case that has 8 sides but no movable index like later models.

French Machines/Accessories



Country of Origin France
Date Made 1890s/1900s
Date Acquired June 7, 2024
Acquisition Notes Purchased from lady In Les Moussieres

Notes

3 Eventions, 3 Premiere Eventions, Table Cutter, Drip Tank, Cobbing Hammer, Belt, Pulley Dops, 2 Cobbing Shears, Diamond Tang, Stone holder, machine parts.

Historical Notes

These items were already in the house when they bought it. Belonged to the gemcutting family that lived there before.

Lot of Lapidary Accessories



Country of Origin France

Date Made ?

Date Acquired May 31, 2024

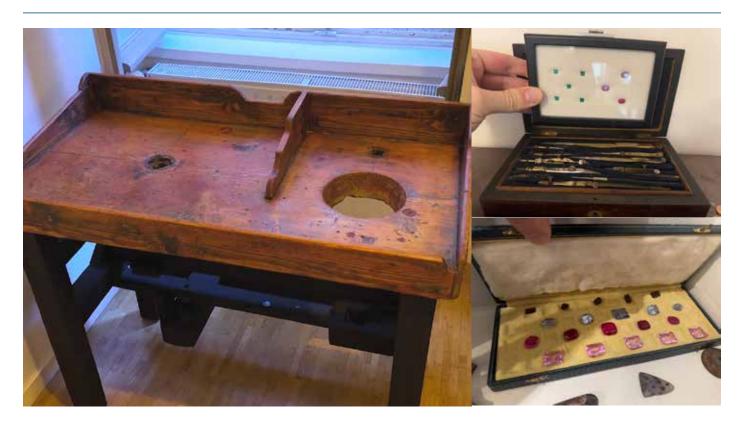
Acquisition Notes Purchased from Leboncoin User: Kéké

Notes

Shipped from Plouider, France: calipers, stone sieve set, scoop, dop wax, small tweezers, glass jar maybe used as dopping lamp.

Historical Notes

French Bench/Accessories



Country of Origin
Date Made
Date Acquired
Acquisition Notes
Purchased from diamond cutter In Saint Claude

Notes

Single bench with aqua colored paint, includes: evention, two mechanical sticks, visor, loupe, calipers, gauge, square wrench, magnifier, ring sizer, two sets of tweezers, scales, calipers, two laps.

Historical Notes

Purchased in Saint Claude. Belonged to the guys Uncle who used it from the 1940s-1980s in Lyon, but before that it came from ?Lamoura?

French Handcrank Table



Country of Origin France
Date Made 1920s?
Date Acquired January 16, 2025
Acquisition Notes Purchased from Leboncoin User: Peplouse

Notes

Includes Bench, 1 jambpeg, 2 mechanical sticks, 2 laps, extra lap spindle, hand crank, green glass or synthetics, diamond sifters, wood dops, wood mechanical stick gears, diamond tang weight, 2 mechanical sticks, diamond tang, table cutter.

Historical Notes

Purchased from a guy in Lons Le Saunier.

Évention Barillet



Country of Origin
Date Made 1920-1930
Date Acquired April 14, 2023
Acquisition Notes Purchased from Martin Viala

Notes

Purchased from an antique dealer in Saint Claude, France (Jura).

Historical Notes

Also known as "Barillet de Longchaumois" (Longchaumois being one of the lapidary villages).



Jules Gauthier using a later version of this type of machine in the 1940s or 1950s.

Larger Évention Barillet



Country of Origin France
Date Made 1920-1930
Date Acquired May 14, 2024

Acquisition Notes | Purchased from Barbe couple

Notes

Included Table cutter, 2 mechanical cases, and a dozen dops with sapphires half cut on them for this specific machine

Historical Notes

Purchased in Septmoncel from an elderly couple who might be the last lapidary descendants in Septmoncel. Martin has details in his notebook and I recorded the conversation in French.



Jules Gauthier using a later version of this type of machine in the 1940s or 1950s.

Double Baton



Country of Origin
Date Made 1925
Date Acquired May 5, 2023
Acquisition Notes Traded with Valerie Duraffourg

Notes

Originally acquired from a lapidary family in La Pesse around 1988

Historical Notes

Someone made it to make matched pairs and then Dalloz took the idea for synthetic mass production, more info in French book from 1925,

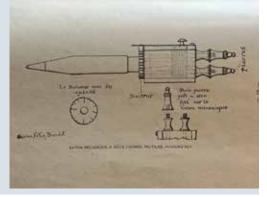


Illustration of the double baton from L'industre Lapidaire book (1925)

New York Jambpeg



Country of Origin United States

Date Made 1930s

Date Acquired July 15, 2023

Acquisition Notes | Donated by Dr. Carole Ann Janßen-Ellrich, Nee Supp

Notes

Belonged to her father, Carl W.A.Supp P.E., A.I.P.G (1915-1983). "He learned lapidary skills from Rudi Kaplan, Certainly sometime before WWII he was given this jambpeg- I assume by Kaplan"

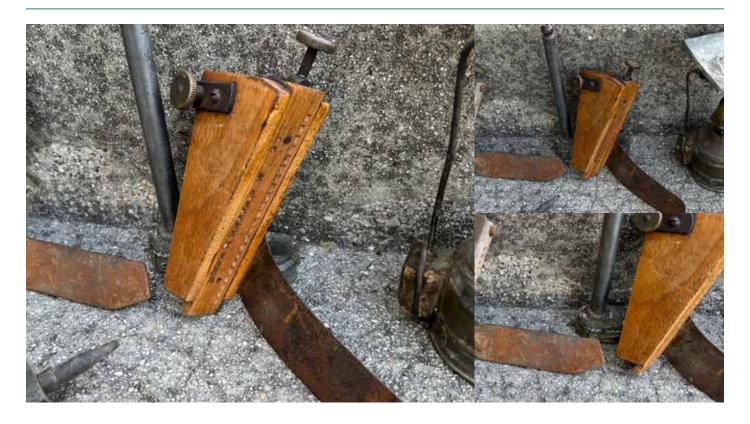
Historical Notes

This is a British style of Jambpeg and indicates that British cutters were very influential on the early New York lapidary industry.



An image of a New York jambpeg cutter from Whitlock's The Art of the Lapidary (1926)

Évention (Wood)



Country of Origin
Date Made 1930s?
Date Acquired May 5, 2023
Acquisition Notes Traded with Valerie Duraffourg

Notes

Originally acquired from a lapidary family in La Pesse around 1988. From the collection of Gilbert Douffourg

Historical Notes

Made from a softer wood than boxwood and the hole plate can be changed when it wears out,

Chas Matthews Jambpeg Head



Country of Origin England
Date Made 1940s

Date Acquired | June 8, 2023

Acquisition Notes | Donated by John Taylor And Peter Rome

Notes

One of the old Chas Matthews Jambpeg heads, as old as the 1940's, they told me.

Historical Notes

Gifted to my by Peter and John, the final two cutters of Chas Matthews, a few weeks before the company closed in 2023.



A 2018 photo of the Chas Matthews team.

Metal Évention



Country of Origin	France
Date Made	1930s?
Date Acquired	May 5, 2023
Acquisition Notes	Traded with Valerie Duraffourg

Notes

Originally acquired from a lapidary family in La Pesse around 1988. From the collection of Gilbert Duraffourg.

Historical Notes

Just the skeleton of the Evention,

German Jambpeg



Country of Origin	Germany
Date Made	1980s/90s?
	November 1, 2019
Acquisition Notes	Donated by Herbert Schmidt

Notes

This came from a German gemcutter living in Bangkok. It was previously used in a German cutting factory.

Historical Notes

Until the 1870s, cutters in Germany were using traditional water wheel powered sandstone grinding wheels. In 1875, a local gem cutting factory asked Czech cutter Gustav Postler to teach the local German cutters how to cut using the Bohemian machines and techniques. This introduction of new technology helped to transform Idar-Oberstein into the modern cutting center that it has become today. With the introduction of horizontal cutting tables, quadrant handpieces, and copper polishing laps smeared with emery powder, the German gem cutters, who had adopted the word "lapidaries" from Postler, could now cut "hard stones" such as Rubies and Sapphires and bring more work and therefore more income into the cutting mills.



Early German Handcrank table with Jambpeg Head

German Jambpeg



Country of Origin Austria

Date Made 1990s?

Date Acquired February 1, 2019

Acquisition Notes Purchased from Baier's Enkel, Vienna

Notes

This was purchased in a lapidary shop in Vienna. It's unknown when this was manufactured in Germany and imported to Austria or whether it was made in Austria.

Historical Notes

An exact duplicate of the German style jambpeg heads.



Early 1900s German cutting factory using Jambpeg

Modern German Jambpeg



Country of Origin
Date Made 1990s?
Date Acquired February 1, 2019
Acquisition Notes Donated by Gerd

Notes

This was donated by a gemcutter in Germany who brought it to the Inhorgenta show, Munich, in 2019 and handed it off to the museum.

Historical Notes

This is the modern style German jambpeg with has a better manufacturing quality than the old style and also has a fine adjustment knob on top.



1970s photo of a modern German cutting station

Wykoff Jambpeg



Country of Origin	United States
Date Made	1990s?
Date Acquired	August 1, 2023
Acquisition Notes	Donated by Stephen Challener

Notes

Stephen purchased it at an estate sale in Raleigh, NC in 2018

Historical Notes

From Wykoff's website:

Assembly Kit For Ready-Made Faceting Machine

You can be faceting beautiful gemstones within a half hour after opening this package - and for far less than you'd expect to pay. Truth is, you really don't need to invest from \$2,000 to \$10,000 to see if you'd like to facet gemstones. You can obtain for slightly over \$100 an all-metal assembly kit for a professional level model of the Gerald Wykoff's famed and patented Calibrated Jamb Peg. Within minutes - not hours - you can be faceting magnificent commercial grade gems of your choice.

1994 Patent for a Jambpeg from Wykoff

What makes a jamb peg so fascinating (and the reason why the world's top professionals have preferred a jamb peg for the last 600 years) is the speed, simplicity and excellent results. Fact is, you can learn to use a jamb peg in about 4 hours (or 4 stones) and cut a finished, high quality gem in 1/3rd the time of an expensive protractor machines.

Tukata



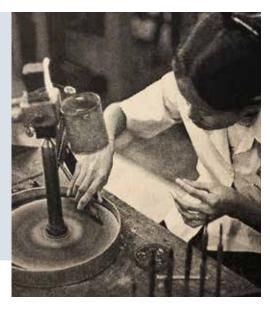
Country of Origin	Thailand
Date Made	2018
Date Acquired	August 1, 2019
Acquisition Notes	Purchased from Somsit., Ltd, Bangkok

Notes

Purchased brand new from the manufacturer, Somsit Ltd in Bangkok.

Historical Notes

This is a Thai adaption of the 1880s style French Évention jambpeg head. It has been told to me that a family in the 1960s started making these in Bangkok and it became the dominant cutting machine style in Thailand, allowing Thai cutters to cut more quickly than other cutting centers around the world.



1976 Photo of Thai cutter using the Tukata jambpeg

KMT Som



Country of Origin	India
Date Made	2022
Date Acquired	December 31, 2022
Acquisition Notes	Donated by KMT

Notes

Donated in exchange for a review video

Historical Notes

Design descended from the Israeli faceting machine, which in turn is descended from the French jambpeg.

Fralap



Country of Origin	France
Date Made	2023
Date Acquired	October 5, 2023
Acquisition Notes	Purchased from Fralap, Antoine Teixeira

Notes

Brand new! Later added to this with the table cutter, preformer, new water drip, splash guard height extention, and 6 sided stick in May and June 2024

Historical Notes

One of two current manufacturers making French style jambpeg machine for home and hobby use. Both of these machines are designed in design and lineage from the ADLAP machines of the early 2000s.



ADLAP Faceting Machine



Handpiece Machines

44 machines

The handpiece style of faceting machine evolved from diamond cutting tools. We find the first handheld tools for cutting both diamonds and colored stones developing in the late 14th century. There is a clear and simple evolution in diamond cutting tools from then until now, though the same can't be said for the colored stone handpieces.

We can find many moments in faceting history where the colored stone handpiece has come into fashion and then later faded into historical obscurity. Today the handpiece is the least popular type of machine used in the gemcutting industry. Sri Lanka is the dominant cutting culture that utilizes handpieces, though we also see them used in the Czech Republic, Afghanistan, Pakistan, Myanmar, Thailand, Russia, and sparingly the United States.

Wooden Diamond Tang



Country of Origin Belgium

Date Made 1800s?

Date Acquired July 1, 2018

Acquisition Notes Donated by Maxime Ruelle

Notes

Included two dop heads; one mechanical and one the traditional lead type.

Historical Notes

This large wood tangs began to be used in the middle of the 1500s and were only slightly modified throughout the centuries until the 1900s when all metal, mechanical tangs mostly replaced them.



Wooden tang as seen in the 1555 manuscript by Adam Lonitzer, Naturalis historiae opus novum.

Holtzapffel Goniostat



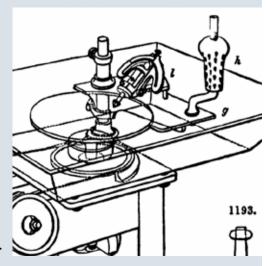
Country of Origin	
Date Made	1850s?
Date Acquired	September 1, 2020
Acquisition Notes	Purchased from Jon Sauer via ebay

Notes

Included wooden storage box with boxes for polishing powders

Historical Notes

This device is first mentions in Charles Holtzapffel's Turning and Manipulation vol 3 in 1850. The book which is primarily about lathe turning gives a 90 page chapter about gemcutting on the jamb peg. The author also describes how to modify one of his "goniostat" handpiece devices to receive a mechanical index gear and a dop to hold the gemstone. Without the modification this device is used for precise grinding and shape of chisel heads on a lathe. Once it's adapted for gems, it's the precursor to the American style of gemcutting with angles, indexes, and a cheater.



Goniostat modified for gemcutting as seen in Holtzapffel's Turning and Manipulation Vol 3, 1850

Quadrant Handpiece



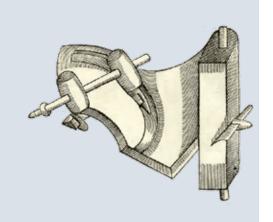
Country of Origin	Czech Republic
Date Made	1940s?
Date Acquired	February 1, 2020
Acquisition Notes	Donated by Ivan Andrasi

Notes

Czech machine is about 50 years old. The original owner brought the handpiece from Turnov to Kremnica. Cutting teacher from Turnov went to teach at the art school in Kremnica. Belonged to Ivan's father in law.

Historical Notes

The Bohemian was developed around 1599 and was popular in Prague by 1609. Between 1609 and the 20th century, the handpiece evolved several times, first with feet instead of a vertical mounting pole, and later with various type of gears. This gear type is one of the last generation handpiece styles.



Earliest depiction of a Bohemian quadrant handpiece from deBoodt's Gemmarum et lapidum historia, 1609

Scott Faceter



Country of Origin
Date Made
Date Acquired
Date Acquired
Acquisition Notes
Purchased On Ebay: Eryandtswhatnots, Claysburg, PA

Notes

"I'm not exactly sure of it entire history. It came from south central pa. I'm not the first owner. I really do not know much more than that. "

Historical Notes

The Scott Faceter is the precursor to the modern Raytech Machine and is the first handpiece and platform type machine that we see in American machine history.



Lee Facet Head



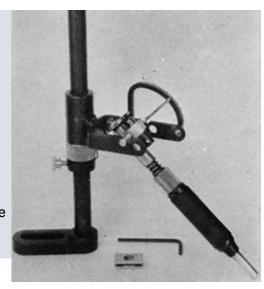
Country of Origin	
Date Made	1950s
Date Acquired	August 1, 2018
Acquisition Notes	Donated by Derek Katzenbach

Notes

Included Dops and extra index gears

Historical Notes

The Lee Lapidaries Faceting Head was developed around 1947. It was one of the first mass manufactured American faceting machines and is unique in that it's designed around handpiece that sits in a hanger instead of a typical mast design. Vintage Lee machines are regularly seen in the used lapidary market in the 2010s.



Advertisement photo for Lee head from Lapidary Journal, April 1952

Lee Bathtub Setup



Country of Origin | United States

Date Made

1950s

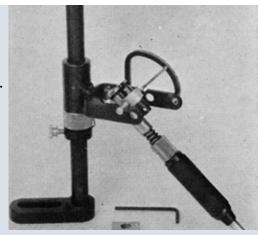
Date Acquired

February 8, 2023

Acquisition Notes | Purchased from Doug Albrecht

Notes

Purchased in Tucson. Doug acquired it in Columbus, Ohio around 1994. Doug acquired it from a cutter named Ralph. Included mast, hand piece, water drip, and instructional manual. A rare full setup.



Advertisement photo for Lee head from Lapidary Journal, April 1952

Angoora Handpiece



Country of Origin	Khambhat, India
Date Made	1950s?
Date Acquired	February 1, 2018
Acquisition Notes	Donated by Jayesh Patel

Notes

Family Heirloom from the Patel family.

Historical Notes

These handpieces were already in use in Mogok in 1927.

Naftule Handpiece



Country of Origin	Switzerland
Date Made	1950s/60s?
Date Acquired	January 1, 2018
Acquisition Notes	Donated by Nicolas Francfort

Notes

Purchased from Naftule in 1992

Historical Notes

It seems that Naftule started developing machines in the middle of the 20th century alongside or in collaboration with Bunter. These machines are specially designed to cut small, precise stones for the Swiss watch industry.

Thanaasuwa



Country of Origin Sri Lanka

Date Made 1950s/70s

Date Acquired October 1, 2020

Acquisition Notes Donated by Sterling Lapidary

Notes

Purchased from Afker Deen in Beruwala who collects old faceting gear and reassembles them into complete, working, and restored machines. This handpiece came from Beruwala and was used by lapidaries in the "colonial era."

Historical Notes

These type of handpiece originally became popular in Prague in the 17th century. From there they spread to France and England. It's unknown how they came to be used in Sri Lanka.



Photo of a traditional Sri Lankan cutter using a Thanaasuwa handpiece and Banku Pattalya machine in 1941

O'Brien Handpiece and Mast



Country of Origin **United States**

Date Made

1950s

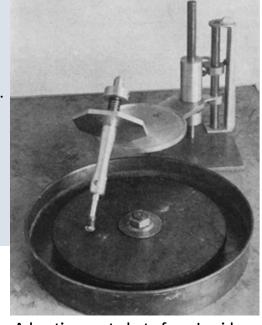
Date Acquired

October 21, 2022

Acquisition Notes | Donated by Barbara Franke

Notes

This machine originally belonged to Bud Kassahns from El Cajon, Ca. He had a shop called Ye Old Facet Shack. The Franke's of the Facet Shoppe in Bremerton, WA acquired them from him years before when he retired. Bud has stones he cut in the Smithsonian.



Advertisement photo from Lapidary Journal, December 1948

O'Brien Professional



Country of Origin
Date Made
Date Acquired
Acquisition Notes

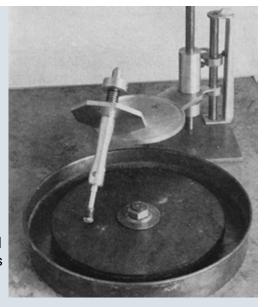
United States
1967ish
November 1, 2020
Purchased from Doyle Boyington

Notes

Included a second handpiece and the O'Brien How to Cut Gems Book. Was told "I have owned the machine for about 30 years. I bought it used. I modified the motor to arbor so I could get a different speed. I don't use it. I didn't do much to change it from original. I had it as part of a collection of machines. I only cut a couple of stones on it. The reason I got it is to all to my collection of machines."

Historical Notes

The O'Brien machine was in the first generation of mass produced American machines. The earliest reference to the machine seems to be from 1949. The machine is interesting because it is designed around a handpiece instead of a mast and is likely the first mass produced handpiece that was made in America.



Advertisement photo from Lapidary Journal, December 1948

Swedish Handpiece



Country of Origin	Sweden
Date Made	1970s?
Date Acquired	December 1, 2020
Acquisition Notes	Donated by Anders Lyckberg

Notes

Handmade. There was a machine base as well but too heavy to ship. Included Dops and Index Gears

Baby Bunter



Country of Origin	Switzerland
Date Made	1970s (Early)
Date Acquired	October 1, 2019
Acquisition Notes	Donated by Thibault Leclerc

Notes

Was told "I think that the size of the machines was thought for the size of small stones for watchmaking, it is in my opinion the reason for the other small size, the engines were fixed on the table and on the new machines the engines are integrated in the machine, I think that it is also a reason for the change of size"

Historical Notes

According to Swiss records, Bunter SA was founded in 1951.

Registre commerce

Inscription au registre du commerce 01.03.1951

Forme juridique Société anonyme

Siège social de l'entreprise Versoix

Statut de l'entreprise actif

Registre du commerce



Company Registration information for Bunter

Simplified Edus Handpiece



Country of Origin	Germany
Date Made	1970s/80s?
Date Acquired	October 1, 2020
Acquisition Notes	Purchased from Instituto Gemologico Espanol, Spain

Notes

This handpiece came from a Gemology school in Madrid that also had a gemcutting course. In 2020, they discontinued the course and sold all the gear. Included a 2nd handpiece and the preformer attachment for the base

Historical Notes

The EDUS (Erich Dern und Sohne) company belonged to Mr. Erich Dern in Idar-Oberstein. He began selling diamond powder in 1955 and by 1972 he was making selling machines. In 1972 he made an automatic faceting machine, copied from Swarovski in Austria. In 1980 he sold the company. The new company was renamed ALGE and simplified the machine. They continued selling until the death of owner, Mr. Kretchmer. Wilfried Neumann, a former ALGE employee bought the stock and continued selling the machines until his death in 2008.

Faceting Classroom in Madrid

EDUS Machine and Handpiece



Country of Origin	Germany
Date Made	1975 (Before)
Date Acquired	May 1, 2018
Acquisition Notes	Purchased from Ray Metrick via ebay

Notes

Included dop set, stepdown converter, and transfer block. Seller told me "It belonged to the father of the man I bought it from. The base of the machine is solid and in good shape but in my opinion is not as precise as the hand piece. It is made with the precision German machinists are noted for. There are so many adjustment points available, you can put any facet exactly where you want it mechanically."

Historical Notes

The EDUS (Erich Dern und Sohne) company belonged to Mr. Erich Dern in Idar. He began selling diamond powder in 1955 and by 1972 he was making selling machines. In 1972 he made an automatic faceting machine, copied from Swarovski in Austria. In 1980 he sold the company. The new company was renamed ALGE and simplified the machine. They continued selling until the death of owner, Mr. Kretchmer. Wilfried Neumann, a former ALGE employee bought the stock and continued selling the machines until his death in 2008.

G&W Diamond Tang



Country of Origin Israel

Date Made 1978 (After)

Date Acquired January 1, 2020

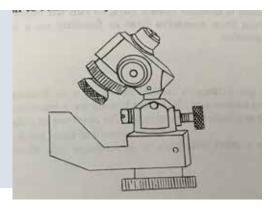
Acquisition Notes Donated by Don Williams

Notes

"The hand pieces came from an old jewelry store in Georgia."

Historical Notes

This is the modern mechanical type diamond tang that replaced the old fashion wooden tangs of previous decades and centuries.



Closeup illustration of the Diamond tang head from The Art of Diamond Cutting, 1994

Imahashi Double Indexing Handpiece



Country of Origin
Date Made 1980s
Date Acquired June 1, 2018
Acquisition Notes Donated by Simon Bruce Lockhart

Notes

This handpiece was collected from old Bangkok cutting factory closed in 1980s. I was later told "This handpiece is made specifically to resume of the polishing of faceted stones. We adjust to the degree and then we go up or down on the handpiece according to the existing facet. It is a lot easier than taking the adjustment by the right side throttle. For later adjustment there is a cheater on the left side and on the back right on the foot there is a diagonal adjustment."

Historical Notes

This machine was patented by Imahashi in Japan in 1980. According to the patent, the purpose of this handpiece is to enable double indexing by primary indexing and secondary indexing. The design enables the accurate parallel vertical adjustment of the body of the indexing device.

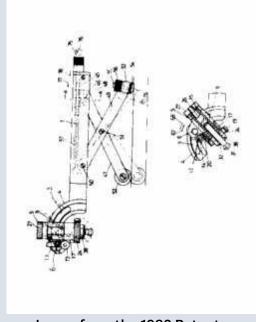


Image from the 1980 Patent

Single Rail Bunter



Country of Origin Switzerland
Date Made 1980s

Date Acquired | February 17, 2024

Acquisition Notes | Traded with David Nassi

Notes

Gifted in Exchange for driving machines across country. Machine came from Phoenix where is was owned by (see video). He got them around 2000 and they came from ... (see video)

Raytech Shaw



Country of Origin **United States**

Date Made

1980s?

Date Acquired

February 1, 2022

Acquisition Notes | Purchased from Tim Davison

Notes

New in original box with all accessories. Water damaged. Picked up in Sweetwater, Texas.

Historical Notes

In 1974, the Scott Faceter was modernized to become this version of the Raytech Shaw



A 1976 ad from Lapidary Journal

Raytech Shaw Handpiece



Country of Origin	America
Date Made	
Date Acquired	June 1, 2018
Acquisition Notes	Donated by Simon Bruce Lockhart

Notes

This came from an old Bangkok cutting factory closed in 1980s . The handpiece was still in the original box and plastic so basically it was New Old Stock.

Historical Notes

Louis Eaton Shaw invented and patented the Scott Faceter in 1961. Originally the J. Scott Company manufactured the equipment. Years later, Raytech Industries was granted manufacturing rights, and the name was changed to the Raytech Shaw. In 1974 the equipment was modernized (U.S. Patent # 2,724,220) This is the second version of the Scott/Raytech Shaw handpiece. This version came out in 1975 and continued until the companies was sold to Rick Scott in 2006, when he modified the handpiece slightly making a third version.

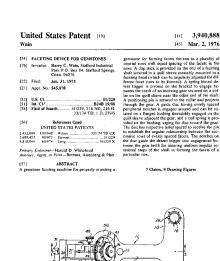


Illustration from 1975 Patent

Bunter Machine



Country of Origin Switzerland

Date Made 1980s?

Date Acquired July 1, 2017

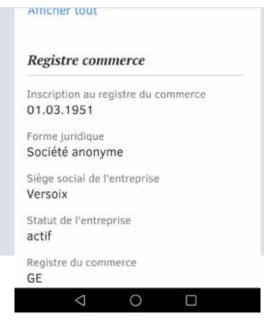
Acquisition Notes Purchased from Thibault Leclerc

Notes

This machine was purchased from a gemstone and diamond cutter in Geneva who purchased it a few years before from a Geneva based jeweler and setting company. The green lap dressing tool was later donated by George Seremetis. The machine included 3 Swiss-made polishing laps, and 2 cutting laps that are specific to the Bunter machine.

Historical Notes

According to Swiss records, Bunter SA was founded in 1951.



Company Registration Information

Bunter Handpiece with Cheater



Country of Origin Switzerland

Date Made 1980s?

Date Acquired July 1, 2017

Acquisition Notes | Purchased from Thibault Leclerc

Notes

Part of the Bunter Machine Purchase. This is one of two handpieces that came with this machine. The other handpiece is now paired with the Baby Bunter. This handpiece is the pinnacle of Bunter technology, having incorporated fine adjustment knobs for the angle and cheater, features which were not included on earlier handpieces.

Early version of Bunter handpiece with no cheater knob

Historical Notes

According to Swiss records, Bunter SA was founded in 1951.

Melee Cutting Machine



Country of Origin Korea

Date Made 1990s

Date Acquired | August 1, 2020

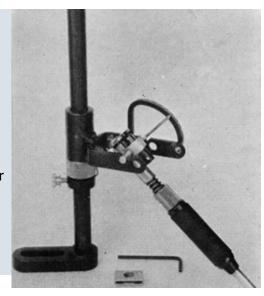
Acquisition Notes | Donated by Karim Guerchouche

Notes

Came from a now defunct cutting factory in Thailand. ON LOAN

Historical Notes

This design is based off of the Lee faceting machine design from 1950s America. The design was modified in Korea in the 1990's for the fast production of CZ in round melee sizes. Later when the demand for CZ went down it was re-purposed to cut other kinds of melee stones. Today it can be seen being used in Sri Lanka, combined with Thai style dual band copper and iron laps.



Advertisement photo for Lee head from Lapidary Journal, April 1952

Imahashi Faceter P



Country of Origin Japan

Date Made 1980s?

Date Acquired February 1, 2019

Acquisition Notes Donated by Anders Lyckberg

Notes

Historical Notes

In the 1980's, Mr. Imahashi came to Sri Lanka and purchased one of the simplified Sterling handpieces from Universal Gems and took it back to Japan and made a copy of it which they now sell as the "Faceter P" as opposed to their "Faceter C" which has the original cam head for preforming This copy of a copy makes an interesting circular point in the machine designs as they bounce back and forth between Japan and Sri Lanka and says a lot about why there were never any copyright issues across companies.

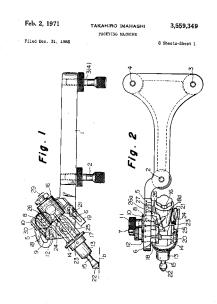


Illustration from 1968 Patent

Quadrant Handpiece

(ШТЫРЕВОЙ КВАДРАНТ)



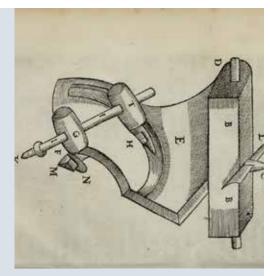
Country of Origin
Date Made 1990s?
Date Acquired July 1, 2018
Acquisition Notes Purchased from Dmitri Petrochenkov

Notes

I was told that these are now very old fashioned in Russia and only very old cutters use them. New cutters either use the diamond tang handpiece or a mast machine, homemade or imported. It's likely that this design came to Russia from the Czech Garnet cutters, possibly during Soviet times.

Historical Notes

Until 1924 the lapidaries worked as individual craftsmen on their own hand or treadle machines. Despite the primitive methods they used, Russian lapidaries turned out some beautiful stones and lost very little weight in the cutting. After 1924 a certain amount of mechanisation was introduced, although they continued to work on individual electrically-driven tables.



Earliest depiction of a Bohemian quadrant handpiece from deBoodt's Gemmarum et lapidum historia, 1609

Catalog of the Museum of Faceting Technology — Page 60

Swedish (Swiss Style) Handpiece



Country of Origin Sweden

Date Made 1990s/2000s

Date Acquired February 1, 2020

Acquisition Notes | Donated by Anders Lyckberg

Notes

Homemade machine from Sweden, donated by a Swedish mineral dealer.

Historical Notes

This is a homemade version of the Bunter handpiece. With some attractive details like the honeycomb pattern on the dop tightening knob.



The Bunter design that this handpiece was based upon

Vargas Fac-A-Gem



Country of Origin United States

Date Made 1990s

Date Acquired August 6, 2023

Acquisition Notes | Purchased from Llyn Monroe

Notes

Llyn Monroe was one of the last students of Glenn Vargas in Thermal, Ca. She said this was one of the last machines that he made. She said when she joined the faceting group, Martha Vargas was still alive and she died in 2000, so this machine must be from the late 90s.

Historical Notes

Glenn and Martha started teaching faceting at University of Texas (UT) in 1976, and it's likely this is when they started making machines.



1977 Image of the machine

Lap Lap



Country of Origin	United States
Date Made	1990s?
Date Acquired	February 3, 2023
Acquisition Notes	Donated by Michelle Shearer

Notes

According to the paper that came with it, this was produced Lahr Enterprise in Mount Vernon, Ohio, 1992. These were donated to the Fallbrook Gem And Mineral Society in Fallbrook, Ca before I acquired them from Society member Michelle..

Lap Lap



Country of Origin	United States
Date Made	1992
Date Acquired	February 3, 2023
Acquisition Notes	Donated by Michelle Shearer

Notes

According to the paper that came with it, the handpiece was produced Lahr Enterprise in Mount Vernon, Ohio, 1992. These were donated to the Fallbrook Gem And Mineral Society in Fallbrook, Ca before I acquired them from Society member Michelle.

T Model Hand Facetor



Country of Origin **United States**

Date Made

1990s?

Date Acquired

February 3, 2023

Acquisition Notes | Donated by Michelle Shearer

Notes

These were donated to the Fallbrook Gem And Mineral Society in Fallbrook, Ca before I acquired them from Society member Michelle. Includes book and info card.



Mountain Gems Handpiece



Country of Origin **United States**

Date Made

2000s

Date Acquired

October 16, 2022

Acquisition Notes | Purchased from Mountain Gems Shop

Notes

Made and sold locally in Vancouver, Canada. Related to the Lap Lap handpiece that I think is from the Seattle area.

Angoora Handpiece



Country of Origin	Pakistan
Date Made	2000s?
Date Acquired	April 1, 2018
Acquisition Notes	Donated by Waqas Ahmed

Notes

Historical Notes

The typical handpiece style for Pakistan and Indian cutters. Similar to the Burmese buffalo horn handpiece and the Thai handpiece. No angles or indexes, just a crude rotation of the wooden dop and a visual adjustment by the cutter.

Handpiece From Seattle



Country of Origin
Date Made 2000s
Date Acquired October 19, 2022
Acquisition Notes Donated by Keith Wyman

Notes

A handpiece made in the Seattle area. Looks similar to the Lap Lap and the Mountain Gems handpiece. Includes a whole cutting and polishing kit of different grit and metal plates so you can cut and polish anytime anywhere. Keith acquired this from Charlie Moon who acquired it from a local jewelry who was using it, possible to repair customer stones.

Modified Diamond Tang



Country of Origin	Russia
Date Made	2000s?
Date Acquired	July 1, 2018
Acquisition Notes	Purchased from Dmitri Petrochenkov

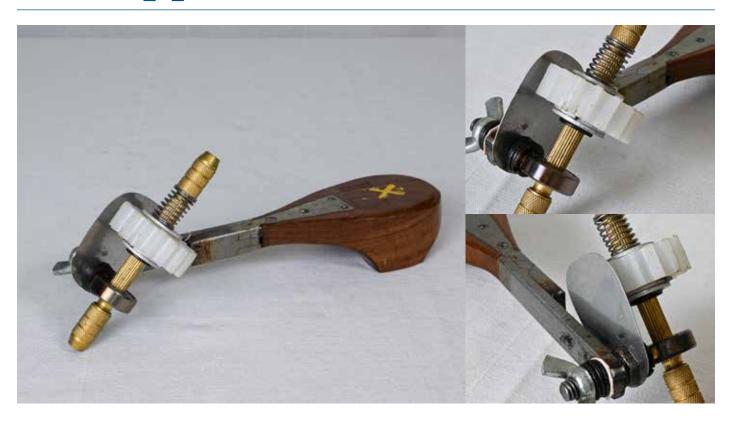
Notes

Many Russian cutters adapt these for colored stone use. I was told "someone set the diamond tool to the handle, which is put on the shaft, so that the angle does not change during the grinding of the stone"

Historical Notes

Originally a lightweight diamond handpiece, this has been adopted to colored stones and has become one of the predominant cutting machine styles in Russia. Very light weight and includes a spirit level in the handle.

Pineapple Cutter



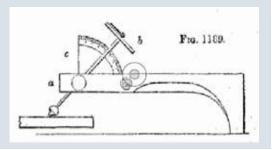
Country of Origin	Thailand
Date Made	2010s
Date Acquired	September 1, 2020
Acquisition Notes	Purchased from Rojana, Chanthaburi

Notes

A special, modern style Thai handpiece from Chanthaburi. The Index gear is designed for cutting the Portuguese cut, or as it's know in Thailand , the Pineapple Cut (Sapparad Cut). Rojana also sells difference variations of this design

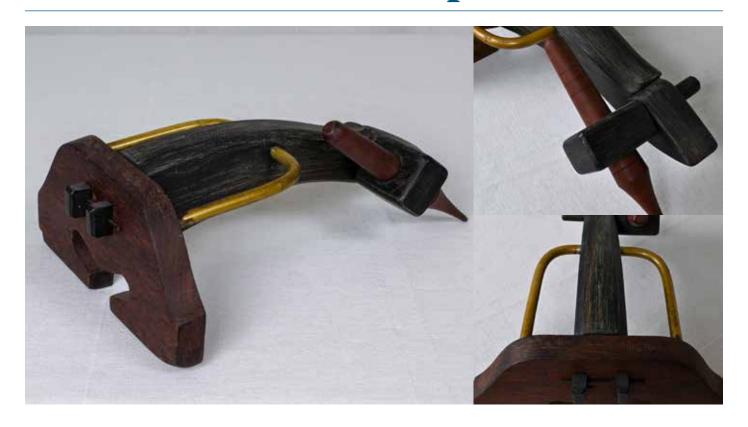
Historical Notes

This design is almost identical with a handpiece design attributed to a Geneva cutter in 1850. This 1850 model is the first handpieces of it's type, obviously based off of a diamond tang but modified with a simple way to keep track of "indexes" and also with a angle vernier added.



"Geneva" handpiece as depicted in 1850 Turning and Manipulation Vol 3

Buffalo Horn Handpiece



Country of Origin Mogok, Myanmar

Date Made 2018

Date Acquired May 1, 2018

Acquisition Notes Purchased via Thazin Han

Notes

Made from Buffalo Horn. Purchased Brand new in Mogok.

Historical Notes

The design for this handpiece is extremely similar to the Thai handpiece as well as the angoora handpiece. It's likely that all these crude handpiece designs are descended from Dutch diamond cutting tangs.



The Burmese cutting station, Mogok, 2016

Handpiece with Big Round Protractor





No Image Available



Country of Origin	United States
Date Made	2020s
Date Acquired	December 9, 2022
Acquisition Notes	Donated by Karl Minehart

Notes

"I bought it on ebay April of 2020 for \$59 and when it arrived I took one look at it and put it back in the box.

Large Thai Handpiece



Country of Origin	Thailand
Date Made	2018
Date Acquired	June 1, 2018
Acquisition Notes	Purchased from Somsit., Ltd, Bangkok

Notes

One of the two standard types of faceting machines in Thailand. This type of handpiece is also used in Cambodia.

Historical Notes

"The origins of the modern Thai cutting industry can be traced to the arrival of a Dutch lapidary named L.W. Zerner in the late 1940s. Zerner was a diamond cutter, and thus the equipment he introduced were diamond cutting tools of that era. If one examines the photos below, one can see an uncanny resemblance to the lapidary tools of the diamond cutter, with a hand-held tang (the device that holds the stone and controls the angles) and a scaife upon which the actual polishing is done. This equipment is quite different from that used in other countries to cut colored stones, because it is designed for cutting diamonds." - Ruby & Sapphire, Richard Hughes

The Handpiece in Action, 2017

Sterling ST-08



Country of Origin
Date Made 2018
Date Acquired February 1, 2018
Acquisition Notes Purchased from Sterling Gems & Lapidary

Notes

Purchased new from the company for use at the Institute of Gem Trading in Bangkok

Historical Notes

Sterling Gems & Lapidary company was started by Palitha Aponsu in 1982. Palitha's father was the chief draftsman of the mechanical department in the local university. Palitha was an engineer by training who had studied gem cutting at the Gem Bureau in Ratnapura under Badra Marapana. He saw a photo of the Imahashi handpiece in the late 1970s and constructed a simplified version of it in 1979 under the name Serendib In 1984, Palitha began manufacturing several types of cutting machines.



A first generation Sterling machine in the early 1980s

Sterling-Speed Controller (Prototype)



Country of Origin
Date Made 2019
Date Acquired August 1, 2019
Acquisition Notes Purchased from Sterling Gems & Lapidary

Notes

This model features modern upgrades to the machine that Sterling has been making since the early 1980s. A speed controller and RPM readout have been added to the machine. This is the prototype version with the readout mounting in a house on top. The readout was later built into the machine. This prototype also includes the newly developed cheater handpiece with has a radial vernier



Historical Notes

Sterling Gems & Lapidary company was started by Palitha Aponsu in 1982. Palitha's father was the chief draftsman of the mechanical

department in the local university. Palitha was an engineer by training who had studied gem cutting at the Gem Bureau in Ratnapura under Badra Marapana. He saw a photo of the Imahashi handpiece in the late 1970s and constructed a simplified version of it in 1979 under the name Serendib In 1984, Palitha began manufacturing several types of cutting machines.

Chinese Handpiece



Country of Origin	China
Date Made	2019?
Date Acquired	August 1, 2019
Acquisition Notes	Donated by Luana

Notes

Made of pink plastic "because pink is stronger". Came with a 2nd handpiece,

Historical Notes

This machine style is a cheap copy of the American O'Brien machine from the 1940s. It was likely developed in the 1990s in China. The machine has been made cost efficient by making the index gear out of plastic. Over time the corners of the handpiece curve from use making each cutters handpiece unique to his body.



Gemstone Cutting in Guangzhou, China, 2017

Thai Prototype Handpiece



Country of Origin	Thailand
Date Made	2020s
Date Acquired	April 3, 2023
Acquisition Notes	Donated by Baastian Bas

Notes

Thai handpiece with a simple index gear and cheater foot. Built as a prototype and design perfected in later models

Fable Handpiece



Country of Origin	
Date Made	2020s?
Date Acquired	June 28, 2023
	Purchased from Ross Spalti

Notes

"The handpiece was part of the purchase of an imahashi base. The seller was from Canada. I am a beginner at this. I used it about six months before switching to a Sterling with a cheater. I thought it would be easier to use. I didn't care for the adjustments."

Simple Sri Lankan Handpiece



Country of Origin Sri Lanka

Date Made 2024

Date Acquired June 4, 2024

Acquisition Notes Purchased Via Maxime Ruelle

Notes

Made for me from a local manufacturer near Galle



Mast Machines

50 machines

The mast style of faceting machine is the product of the American amateur cutting community. Being divorced from the apprenticeship traditions of Europe, the pioneer American cutters had to reinvent the tolls and techniques of cutting for themselves.

What we find is a radically different approach to faceting from everything that has come before. The mast machine is meant to be a mechanical assistant to the cutter and very much relies on mechanical functions to cut the stone at specific angles, rotational indices, and with specific and record-able height settings.

Though the mast machine style is the newest of the three, we see it being used all over the world, predominately by the hobby community but also occasionally by professional cutters in America, Europe, South America, and Asia.

F.A Marcher Mast



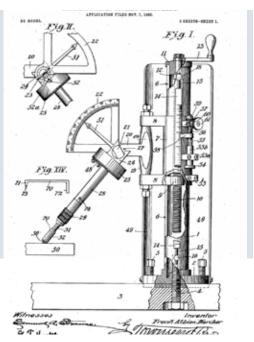
Country of Origin	United States
Date Made	Possibly 1904
Date Acquired	January 1, 2020
Acquisition Notes	Donated by Mark Oros

Notes

Purchased from ebay. Speculated to be from the early 1900s. Came from an ebay seller in Oceanside, California which matches the patent story very well.

Historical Notes

There are no identifying marks on this machines. It's obviously of the early American style but doesn't seems to match any known manufacturer. It very closely matches this 1903 faceting head patent from F.A. Marcher in Los Angeles.



1904 Patent for a visually similar faceting head

Johns Gem Cutter



Country of Origin United States

Date Made 1900s

Date Acquired October 1, 2022

Acquisition Notes Donated by Barbara Franke

Notes

This machine originally belonged to Bud Kassahns from El Cajon, Ca. He had a shop called Ye Old Facet Shack. The Franke's of the Facet Shoppe in Bremerton, WA acquired them from him years before when he retired. Bud has stones he cut in the Smithsonian.

Saw identical one with base in Fallbrook club. (These photos are of the one in Fallbrook, Ca)

The Age Old Art Green Circuits 10 Now Made here Will A fine from the fine for the

1936 pamphlet advertising the Johns Gemcutter

Historical Notes

One of the first American faceting machines that was commercially available as a stand alone machine.

J. Harry Howard Collection



Country of Origin United States

Date Made 1935-1970

Date Acquired January 30, 2025

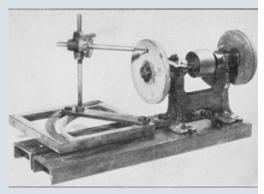
Acquisition Notes | Donated by the McKissick Museum

Notes

An amazing, historical collection of the workshop of James Harry Howard. Includes three machines mounted to a metal bar, plus 40 boxes of his lapidary possessions from when he died in the 1962.

Historical Notes

This collection was donated to the McKissick Museum in January 1968 by Louise Howard. Was stored in the McKissick Museum Archives (University of South Carolina) in Columbia, SC until I inherited it in 2025



A photo of the machine from Howards 1935 book, Handbook for the Amateur Lapidary

MDR Master (1st Gen)



Country of Origin United States

Date Made 1940s

Date Acquired October 24, 2022

Acquisition Notes | Purchased from Mark S Sirota

Notes

This machine originally belonged a cutter named Tony Swaton in Burbank, Ca. He acquired it in an estate sale around the late 90s or 2000. It was originally built in a desk. Mark acquired it to learn to facet but it wasn't in good condition so he donated it to me. Machine acquired in Los Angeles.

Historical Notes

The MDR is one of the first mass-produced mast machines ever made

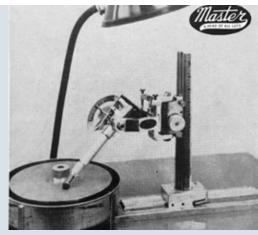


Image of the MDR Master from 1951

MDR Master (2nd Gen)



Country of Origin United States

Date Made 1940s

Date Acquired March 1, 2020

Acquisition Notes Purchased from Mac and Debra McClain

Notes

From Missoula Montana. Mac bought many local machines to make a faceting school.

Historical Notes

The addition of the fine height adjuster add on makes this second generation.

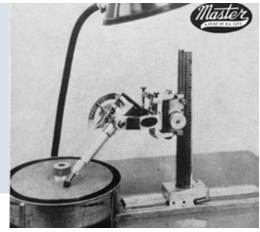


Image of the MDR Master from 1951

Gilde Gem Cutter



Country of Origin	United States
Date Made	1940s (Late)
Date Acquired	January 1, 2019
Acquisition Notes	Purchased from Gary Kratochvil

Notes

Was told this one is Post WWI because it has a radial vernier. Was told the Pre-WW1 models don't have the radial vernier.

Historical Notes

Sold as a complete outfit for cabochons, faceting, and sawing. Needs an external motor. \$25 in 1946. Built like a tank and painted to match one.

GILDE GEM CUTTER. We now offer this compact portable outfit to the home cutter. Write for details and new catalog listing over one hundred varieties of rough. Also all kinds of supplies. Gem Exchange, Lake Bluff, Ills.

MINERAL SETS—24 Colorful Minerals (identified) in 1x1 compartments—Postage paid, \$3.50. Prospector's Set of 50 Minerals (identified) in 1x1 compartments in cloth reinforced sturdy cartons, Postage paid \$5.75. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, Calif.

MONTANA MOSS Agates in rough for gem cutting, direct from diggings, \$1.00 per pound, prepaid. Nels Christofferson, Richey, Montana.

Machine Advertisement from Desert Magazine, June 1946

"Golden" Taylor Faceting Head



Country of Origin
Date Made 1908 (or 1940s)
Date Acquired May 1, 2018
Acquisition Notes Donated by Tom Moore

Notes

Was told this machine head is from 1908 though it doesn't appear that Taylor was around at that time. Was told that it isn't American, it's British and was sold in several versions, the last being the Taylor Golden. Was told not to be confused with the old American Tailor from Fresno California 1940-1960 though it looks identical to the 1948 ad for the Taylor head.

First owner: Dr. John Pruitt Sr Second owner: Dr. John Pruitt Jr

Third owner: Tom Moore

Fourth owner: Museum of Faceting Technology

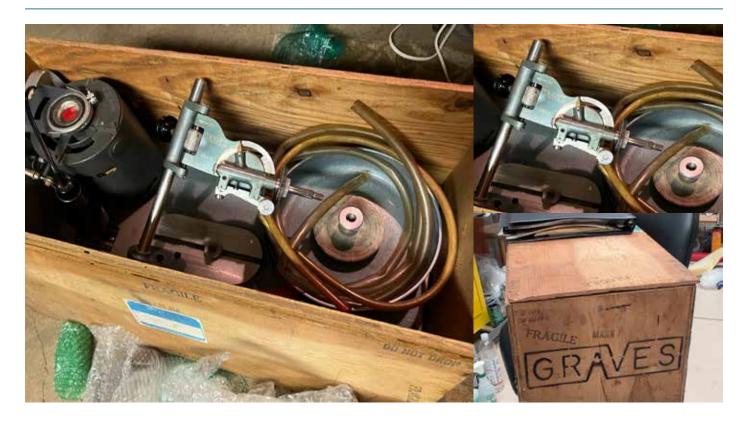
Historical Notes

American manufacturer started in the early 1940s. British manufacturer details unknown.



Advertisement photo for Taylor head from Lapidary Journal, October 1948

Graves Mark 1



Country of Origin United States

Date Made 1940s

Date Acquired October 29, 2022

Acquisition Notes Donated by Tim Thomas

Notes

This is a first generation Graves machine in the original wooden crate. This machine belonged to the father Karl Citek. Karl is a professor at Pacific University in Forest Grove, Or. Karl inherited when his father passed away and kept it in storage. Tim acquired it from Karl to donate to me. Machine acquired it in Portland, Or.

Historical Notes

Graves is the first mass-produced faceting in America, debuting in the late 1940s.



A 1940s photo of the first generation Graves.

Roby Buchanan Quadrant



Country of Origin United States

Date Made 1940s

Date Acquired November 30, 2022

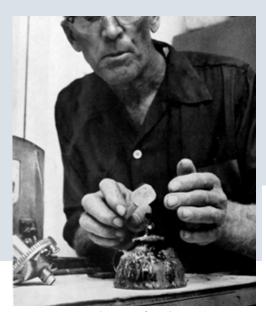
Acquisition Notes | Purchased from Ebay: Timecollectors Ray Metrick

Notes

Ebay- "I acquired it from an old rock hound with a bunch of other equipment and material a while back. It is from an old rock shop (Roby's in North Carolina) that went out of business years. Ago." Purchased from Same guy as Edus machine.

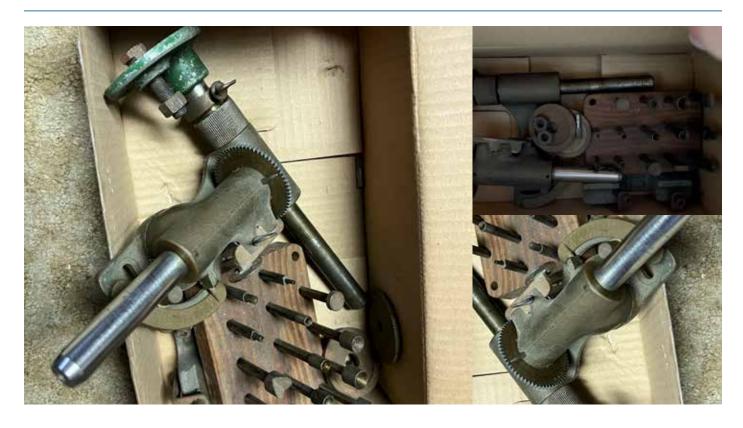
Historical Notes

Roby Buchanan was a notable gemcutter from North Carolina. His machine is based on the machines of Loren Merill in Maine and also related to the machines of J Harry Howard in design style.



A 1959 photo of Roby using an identical machine

Allen Head



Country of Origin United States

Date Made ?

Date Acquired October 1, 2022

Acquisition Notes | Donated by Barbara Franke

Notes

This machine originally belonged to Bud Kassahns from El Cajon, Ca. He had a shop called Ye Old Facet Shack. The Franke's of the Facet Shoppe in Bremerton, WA acquired them from him years before when he retired. Bud has stones he cut in the Smithsonian.



A 1949 ad photo of the Allen Machine

Taylor



United States
1950s?
January 1, 2022
Donated by ?

Notes

Purchased during my year of traveling across America, but I didn't write down who it came from.

Bathtub Cabbing Machine



Country of Origin **United States**

Date Made

1950s?

Date Acquired

March 1, 2022

Acquisition Notes | Purchased from James Southard

Notes

He acquired it from a storage shed. Acquired in Colombia, Sc.



Country of Origin United States

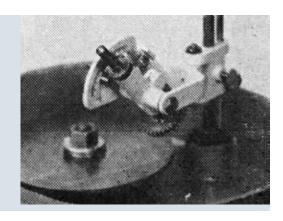
Date Made | 1950s

Date Acquired June 13, 2022

Acquisition Notes | Purchased from Bill Manning

Notes

Facebook



Similar to this 1952 photo of the B&I Gem Maker head

B&I Gem Maker



Country of Origin **United States**

Date Made

1950s

Date Acquired

October 19, 2022

Acquisition Notes | Purchased from Keith Wyman

Notes

He purchased in a used shop. Included the base only. Acquired in Seattle, Wa.



A 1954 photo of the B&I base.

B&I Gem Maker



Country of Origin	United States
Date Made	1958?
Date Acquired	March 23, 2021
Acquisition Notes	Donated by Allen Whitehead

Notes

At 74 years of age I am very much a product of this era of machine. My father bought this new when I was 5-6 years old and was a prolific rock hound and instilled the bug into me as well. Most of my life it was contained to just finding pretty rocks until I got involved in jewelry making and made more use of my knowledge of rocks and began cutting cabs, I learned to facet an a Sapphire machine and was self-taught using the Vargas books. I later got an UltraTech and got into Long & Steele.

Vintage Homemade Mast



Country of Origin	United States
Date Made	1950s?
Date Acquired	March 1, 2022
Acquisition Notes	Purchased from Jordan Pride

Notes

From Michigan on Facebook. Originally had a bench but I only took the mast.

Historical Notes

"We are selling our antique lapidary machine, it has an 8" wheel and the diamond coated polishing wheel was recently put on it. It is in working condition. The motor is an antique, brand is International Harvester Co. Out of Chicago. We believe it is from the 1930s or 1940s. The top half of the machine has no visible brand name, we believe it was constructed from a kit and is possibly older than the motor. Please keep in mind the motor is almost 100 years old, sold as is. *The base has wheels." It's also a gemstone faceter which includes the brass dop sticks you see in the photos

B&I Gem Maker



Country of Origin | United States

1950s Date Made

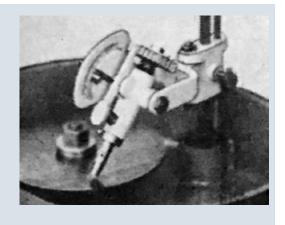
Date Acquired

October 22, 2022

Acquisition Notes | Purchased from Derek Hermsen

Notes

This machine belonged to Raymond Lang, that grandfather of the guy who donated it. He passed away in 2007. He used this for decades before replacing it in the 1980s with a Facetron. Acquired in Seattle.



A 1952 photo of the B&I

Franz Eisle (Exacta Prototype?)





No Image Available



Country of Origin	United States
Date Made	1950s
Date Acquired	September 1, 2024
Acquisition Notes	Donated by David O'Connor

Notes

I have a faceting machine I bought in late 1950's early 1960's. It is the first and only machine produced by a German (?) Machinist in California - Franz Eisle. It has his name plate on it and I think it may have been the prototype for the Exacta machine. It is the only one he produced before he passed away. I probably bought this machine in the 1958-9 range when I was about 10 years old. I was interested in rocks and dinosaurs and started my own little business making tumbled stone jewelry about that time. With the money I made from that, I started to buy more equipment - hence this machine. When I was faceting with this unit, I think I was either the or one of the youngest faceter's in the country. I believe this is the only unit Franz sold directly to a customer before his untimely death. This was pretty much verified by a call to his wife a number of years ago. I

Exacta by Zamex Inc



Country of Origin
Date Made
Date Acquired
Acquisition Notes

United States
1960s
March 27, 2020
Donated by Blake (archaic_revival)

Notes

Historical Notes

info about the photo

Covington Faceting Machine



Country of Origin	United States
Date Made	1950s/60s
Date Acquired	February 1, 2023
Acquisition Notes	Purchased from Matthew Groves

Notes

"This came from the collection of Gene Hunton. He was a long-time tool collector here in Springfield, MO. He died early this year, I believe." After he died, his daughter sold it to Matthew and then I acquired it in Springfield, Mo.

Gemlap



Country of Origin

Date Made 1960/70s

Date Acquired November 1, 2020

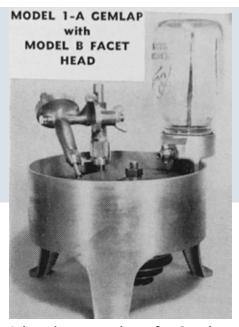
Acquisition Notes Purchased from Pedro Novaes

Notes

Belonged to Antonio Fares Borges in Brazil, included preformer.

Historical Notes

The machine was developed in the mid 1940s and there were many models such as the Model B in the historical photo. This model might possibly be Model A.



Advertisement photo for Gemlap from Lapidary Journal, October 1949

Graves Mark 1



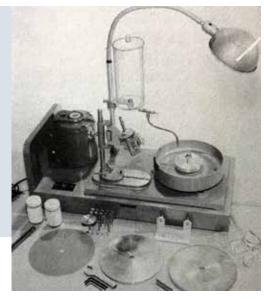
Country of Origin	United States
Date Made	1960s
Date Acquired	January 1, 2018
Acquisition Notes	Purchased from Christopher Kirfman

Notes

This head is an early model which does not have a cheater under the index gear.

Historical Notes

Graves started in 1946 with the MK1. Graves is the longest running American machine manufacturer; 74 years from 1946-2020. In early 2020 the company slowly stopped making machine and by 2021, the Graves company completely closed.



Advertisement photo for the Graves machine from Gemcraft 5th Ed., 1966

Ultratec V2



Country of Origin	United States
Date Made	1960s
Date Acquired	August 1, 2020
Acquisition Notes	Donated by Philippe Ressigeac

Notes

ON LOAN. Serial Number: L711. Joe Rubin has confirmed this serial number indicates the machine was made before Ultratec was sold by Stanley

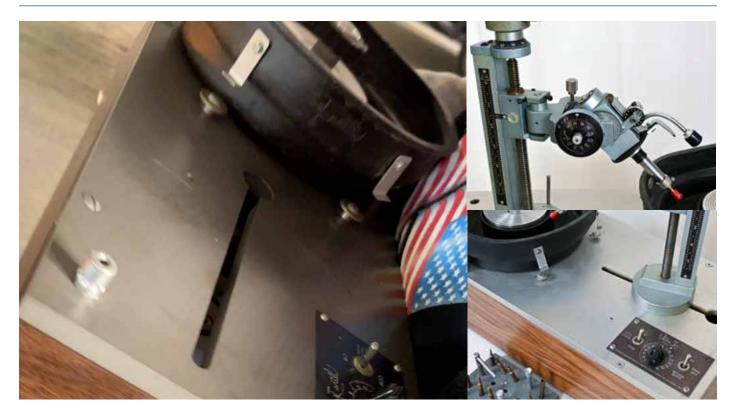
Historical Notes

The Ultra Tec Faceting Machine was invented by an aerospace laboratory technician and amateur faceter, Howard Stanley. Howard Stanley's love of faceting led him to the development of the first Ultra Tec faceting machine. Not being satisfied with the faceting machines of the day, Howard set about designing a better and more accurate faceting machine in his garage workshop in the early 1960s. He incorporated many revolutionary design features in the first prototype, which he patented. In 1965, the "Stanley Lapidary Company" began selling Ultra Tec V-2 faceting machines commercially to the public. Mr. Stanley remained active in the company until 1970 when he sold the Stanley Lapidary Company to aerospace engineers, Joe Rubin and Warren Haines. Howard Stanley retired after the sale of the company and unfortunately died about five years later.



Advertisement photo for Ultratec head from Gems and Mineral, August 1966

Ultratec V2



Country of Origin	United States
Date Made	
Date Acquired	February 1, 2022
	Donated by Greg McGinnis

Notes

Belonged to a friend of Greg's who brother had died. He acquired it and then I acquried it from him in San Antonio, Tx. The mast had been restored by Ultratec

Historical Notes

The Ultra Tec Faceting Machine was invented by an aerospace laboratory technician and amateur faceter, Howard Stanley. Howard Stanley's love of faceting led him to the development of the first Ultra Tec faceting machine. Not being satisfied with the faceting machines of the day, Howard set about designing a better and more accurate faceting machine in his garage workshop in the early 1960s. He incorporated many revolutionary design features in the first prototype, which he patented. In 1965, the "Stanley Lapidary Company" began selling Ultra Tec V-2 faceting machines commercially to the public. Mr. Stanley remained active in the company until 1970 when he sold the Stanley Lapidary Company to aerospace engineers, Joe Rubin and Warren Haines. Howard Stanley retired after the sale of the company and unfortunately died about five years later.



Advertisement photo for Ultratec head from Gems and Mineral, August 1966

Geogem with Gem Master Base



Country of Origin England
Date Made 1970s

Date Acquired | March 29, 2022

Acquisition Notes | Purchased from Jim Edmondson

Notes

Notes in video"

Historical Notes

Gem Master base by M. L. Beach, of Twickenham, England. Geogem (British) faceting appliance, comprising a sophisticated head on a mast, swivellable upon a stand.



A 1974 photo from the book Working With Stones

English Queen



Country of Origin England

Date Made 1969

Date Acquired November 21, 2020

Acquisition Notes | Donated by Douglas Sawchuck

Notes

"I got it in the 80's from Ray Virtue, a member of the Nipissing Lapidary Club in North Bay, ON. It seemed very old from that perspective. When he passed and his wife sold it to me." Acquired in Canmore, Canada. Included table adapter, transfer block and two copper laps.

Historical Notes

The "English" line of faceting machines seems to the be the house brand of Gemrocks Ltd in London. They sold one other faceting machine as well as tumblers and cab machines. According to the 1969 ad:



A 1969 advertisment photo from Lapidary Journal

Weight 20 lbs. Overall length 1'6* Width 1'3". Height 1/2". 64 tooth Index Gear. Positive angle stop. Course and fine height adjustment. Positive dop location. Master lap unit running on ball-bearings greased and sealed for life. Designed to operate with 1/6th h.p. motor, at 500 r.p.m. Complete with 1 syringe diamond cutting compound, 60 microns, 2 copper laps, 1 wooden lap, transfer jig, 6 plain and 8 shaped dops, including pulleys and belt but excluding motor. Otherwise ready to operate — ONLY \$130 F.O.B. London

Homemade Mast/Base/Motor



Country of Origin
Date Made 1960s?

Date Acquired December 5, 2022

Acquisition Notes Donated by Mike Harkleroad

Notes

Acquired in San Diego, Ca. Previous owner acquired in one year prior and believes it to be from the 1960s but not sure. Previous owner knows the previous owner before him who knows where he got it, so there might be more information to be dug up about this machine. Appears to be home made with hard stop, interesting indexing system and height control.

Sapphire



Country of Origin United States

Date Made 1967 or 1968

Date Acquired February 1, 2022

Acquisition Notes | Donated By Michael Gray, Mendocino, CA

Notes

This is machine that Michael learned on in the 1960s. His dad's business partner Bill Forester used it for a while and then they got it back and he's had it ever since.



A 1967 illustration of the Sapphire machine

Prismatic Accura-flex



Country of Origin United States

Date Made 1970s

Date Acquired October 19, 2022

Acquisition Notes | Donated by Keith Wyman

Notes

Keith acquired this from Charlie Moon, and it's possible that Charlie acquired this from Fred Van Sant. Acquired in Seattle, Wa.

Historical Notes

Prismatic machines were made by Douglas Hoffman, who later went on to start Polymetric machines



A 1968 Ad for Prismatic

Prismatic Selectra-Matic



Country of Origin United States

Date Made 1970s?

Date Acquired January 20, 2022

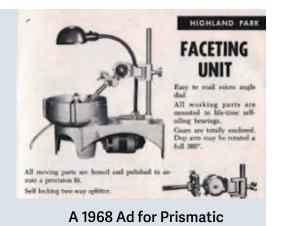
Acquisition Notes Donated By Matthew Vilhauer

Notes

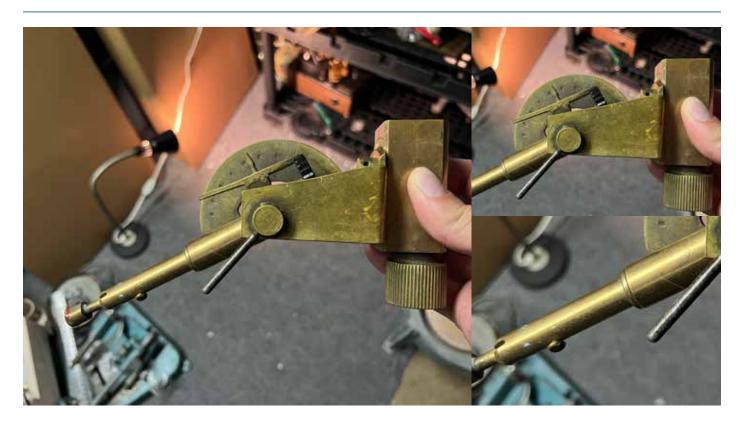
"This was part of an estate I bought a long time ago in Spokane, WA. Purchased from a 70-80 year old guy who died in 2005. I'm pretty sure this machine has not been used in 40+ years." Picked up in Vancouver, WA.

Historical Notes

Prismatic machines were made by Douglas Hoffman, who later went on to start Polymetric machines



Unknown Mast Head



Country of Origin	United States
Date Made	1970s?
Date Acquired	July 1, 2022
Acquisition Notes	Purchased from Brett Leighton

Notes

Purchased in Paris, Maine. Previous owner acquired in May of 2022 from Robert Alexander Boudin, from Topsham Maine. He died in 2011 and was the original owner.

Sinkankas' Giant Machine



Country of Origin United States

Date Made 1970s?

Date Acquired | August 6, 2023

Acquisition Notes | Purchased from Jim Parrish

Notes

Included many giant laps. The machine was originally on a base, but I couldn't take the base due to it's size. It was also crudely made. After John Sinkankas died, his wife was getting rid of the machine and Jim, their old neighbor took it and stored it for about 20 years until I acquired it.

Historical Notes

This machine was used to cut many of the large faceted stones in the Smithsonian.



This is one of the giant stones in the Smithsonian that was cut on this machine

AgateMaster



Country of Origin	Australia
Date Made	1970s?
Date Acquired	December 9, 2023
Acquisition Notes	Purchased from David Papaux

Notes

Bought from Gemcutter in Geneva: "I have it since around 3 years from one of my Spanish customer, This mast was bought from him in Barcelona"

Robilt Machine



Country of Origin
Date Made 1970s?
Date Acquired July 6, 2023
Acquisition Notes Purchased from Fifi Russel

Notes

The machine belonged to Dr. Lionel Russel. He purchased it possibly in the 1970s and own it until he passed away in July 2020. Acquired in London, England.

Robilt M2



Country of Origin	Australia
Date Made	1975
Date Acquired	March 25, 2021
Acquisition Notes	Donated by George Seremetis

Notes

Previous owner told me "I bought it in 1976 so it should be an early 70's or late 60's. I was only 16 years of age then. I remember going to their factory in Bay road Sandringham in Melbourne. When I went there, Jack Ryding (the master mind of Robilt) looked at me with a big smile and said "you are Greek aren't you?" I replied "yes sir" He took the initiative to drive to my house on a Sunday afternoon, set up the machine and showed me how to cut my first Brilliant Cut on a piece of quartz. Apparently he told me that he had visited Greece for holidays, and saying how the Greek people where very kind to him, so I guess that left a mark on him. He was a very sweet and gentle man. God bless him. "

Historical Notes

Robilt started off in 1946 making toy model trains and Jack Ryding a watch maker from England was the founder of Rytime supplying Robilt with gears. In 1950, the two companies joined together called Rytime Robilt still continuing on making model trains and other various toys. In 1960, the company stopped the toy production and finally making lapidary equipment.

Sapphire 76



Country of Origin **United States**

Date Made

1976

Date Acquired

July 27, 2023

Acquisition Notes | Purchased from Roger Derry

Notes

From a jewelry store owner family near Detroit. Originally purchased in the 1970s and given to Roger in mid 2023 and then passed on to me.



A photo of the machine from the instruction manual

Facetron



Country of Origin | United States

Date Made

1980s

Date Acquired

December 1, 2022

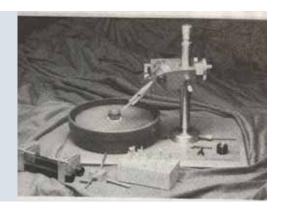
Acquisition Notes | Purchased from Diane Cook

Notes

Notes in video, from Ventura California

Historical Notes

This one seems to be a first-generation Facetron.



A 1989 ad from Lapidary Journal

Facette Safari



Country of Origin

Date Made 1980s?

Date Acquired | February 2, 2022

Acquisition Notes | Purchased From Jordan Wilkins

Notes

I acquired this in Sacramento, Ca. The previous owner was Jay Conner. Includes base plate, mast, spindle, and table adapter. It was originally set in a bench but it was too big to take.

Historical Notes

The Safari was Facette's portable model of the Gem Master, made for cutting in an RV. Seems to be very rare as I have only ever seen 2 other models.



A 1979 ad from Lapidary Journal

American Facetor



Country of Origin | United States 1990s Date Made

July 1, 2022 Date Acquired

Acquisition Notes | Purchased from Brett Leighton

Notes

Previous owner acquired in May of 2022 from Robert Alexander Boudin, from Topsham Maine. He died in 2011 and was the original owner.

Historical Notes

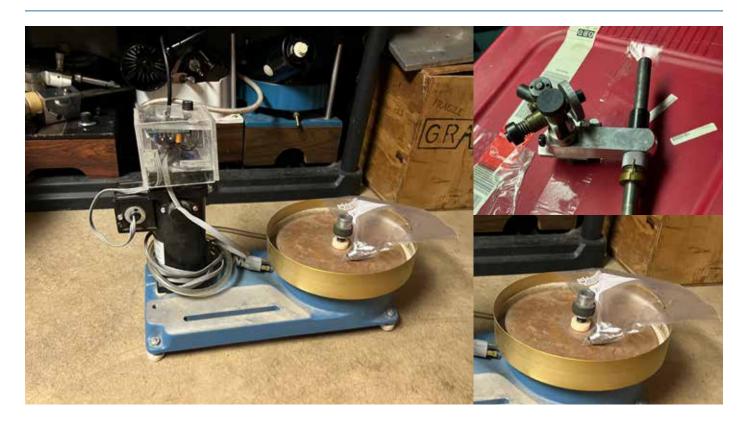
The prototype and original documentation about the company is at a museum in New Mexico.

The American Standard Corporation facetor program was initiated by Alois Tlush, Vice President of Quality Engineering and

a faceter in his own right. Al discovered Earl Montgomery, who was developing a new facetor, and was so intrigued with this machine and its potential to simplify the art of faceting, that he suggested that Earl associate himself with American Standard, Frank Tlush, Vice President of American Standard, gave the go-ahead to explore this idea. Charles Tlush, Product Development Engineer, was put in charge of developing initial production prototypes. Charley is of the "old school" who believe that any job worth doing is worth doing right...



Lee OK Machine



Country of Origin **United States**

Date Made 1980s?

Date Acquired January 24, 2023

Acquisition Notes | Purchased from Nick at Cutting Edge

Notes

Acquired in Phoenix. Previous owner was in Sun City, Az.

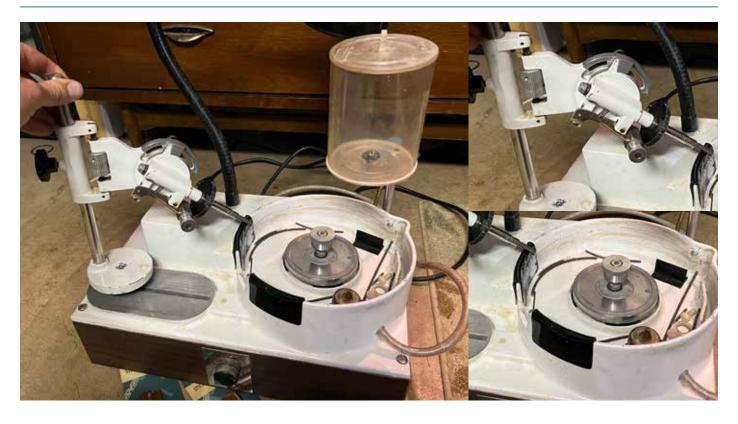
Historical Notes

This is the second generation of Lee machines. They switched from the removable hanger to a mast style and called it the OK machine..



A 1984 Ad for the Lee OK machine

Graves Mark IV



Country of Origin United States

Date Made 1990s?

Date Acquired | December 19, 2022

Acquisition Notes | Purchased from Diane Cook

Notes

Possibly belonged to Ray Forester from the Natural History Museum. His daughter passed it to Diane who passed it to me. Acquired in Ventura, California.

Historical Notes

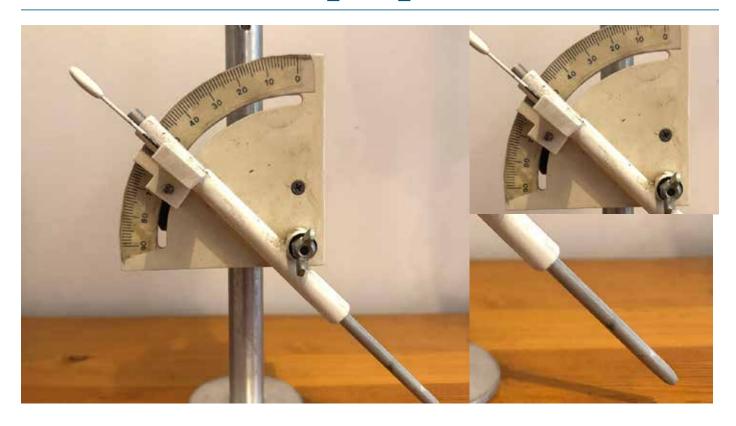
It seems the White version of the Mark IV was introduced in the 1990s.



N 1992 Au 101 a Write Graves Wark

IV from Lapidary Journal

Profacee V Laptop Facetor



Country of Origin
Date Made
Date Acquired
Acquisition Notes
United States
1990s
July 9, 2023
Purchased from Hawa Rowat

Notes

Hawa's father, Said Rowat, owned these in the early 1990s, using them in his shop Hersch Jacobson in Marlybone High Street, London. Acquired in Ipswich, England.

Historical Notes

Made by Gerald Wykoff and details and pics can be found in Glenn Klein's Evolution of Faceting Machines book



Photo of the machine from Glenn Kleins' book

Graves Mark 2 Mast



Country of Origin	England
Date Made	1990s
Date Acquired	July 9, 2023
	Purchased from Hawa Rowat

Notes

Hawa's father, Said Rowat, owned these in the early 1990s, using them in his shop Hersch Jacobson in Marlybone High Street, London. Acquired in Ipswich, England.

MDR (90's Model)



Country of Origin
Date Made 1990s?
Date Acquired February 3, 2022
Acquisition Notes Donated By Mike Jones

Notes

The previous owner was Janice Fingato and she donated it to the Tucson lapidary club. Mike acquired it from the club and then I acquired it from him in Tucson.

Polymetric 88 Scintillator



Country of Origin United States

Date Made 1996

Date Acquired April 1, 2016

Acquisition Notes Purchased from Dennis Bodily

Notes

Serial number indicated 1996 manufacturing date. This was purchased from a Polymetric representative, used. He drove it all the way from Southern Utah to San Francisco to avoid damaging it in shipping. The water tank was replaced with a modern on in 2017. The digital readout was replaced by Polymetric in February 2020. The original sale included rough gems, dops, and an OMF concave machine which was later sold.

Historical Notes

This is an early Scintillator model, from before they changed the water tank and control box.



Early Scintillator Photo

Hamag XV Nova



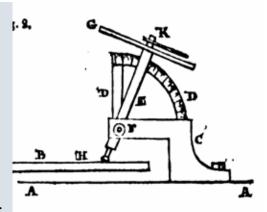
Country of Origin	
Date Made	2000s
Date Acquired	October 1, 2019
Acquisition Notes	Purchased from David Harucksteiner

Notes

This was purchased from a gemcutter in Austria who bought it in Germany and used it until he replaced it with a newer machine.

Historical Notes

This is a modern style German head that seems to have taken inspiration from the British quadrant designs of the late 19th century. The design was printed in an 1849 newspaper and this XV Nova visually looks to be an exact duplicate of that old design.



British "Quadrant" Design as printed in The Saturday Magazine.
December 12 1840

Vesta VFM2



Country of Origin Vietnam

Date Made 2020

Date Acquired September 1, 2020

Acquisition Notes Donated by Vesta Group

Notes

This is the second version of the Vesta Faceting Machine. Version 2 fixed problems with the first version.

Historical Notes

The company started producing faceting machines in 2017. They seem to be the first Vietnamese faceting machine to manufacture mast-style machines. Since their debut in 2017, at least two other Vietnamese manufacturers started producing similar machines.



First generation Vesta Machine, March 2017

Moore Design Radiant





No Image Available



Country of Origin	United States
Date Made	2020s
Date Acquired	March 4, 2024
Acquisition Notes	Purchased from Tom Reeves

Notes

Traded for a stone to cut. Moore Design Radiant machines made by Tom Moore in Bakersville.

Historical Notes

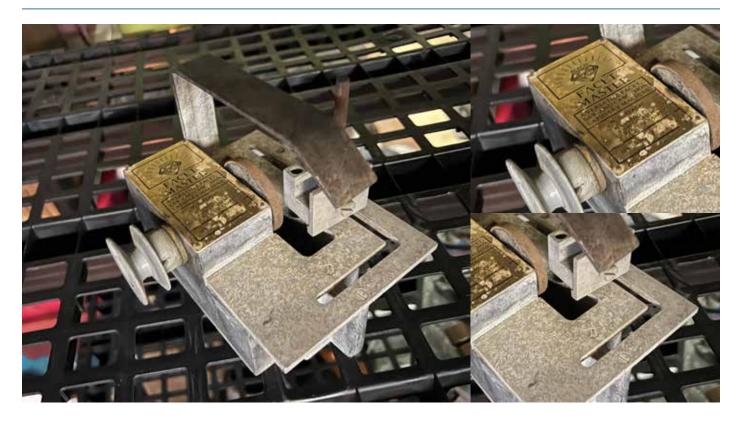
Selling as "MDR" even though theres no connection in the name with the historic MDR manufacturer



Misc Machines

4 machines

ML Beach Facet Master



Country of Origin
Date Made 1960/70s?
Date Acquired January 7, 2023
Acquisition Notes Purchased from Ebay: Auctionhunter_805

Notes

Believe I got it at a sale in Oak view, Ca.

Historical Notes

Most of the information I can find from ML Beach is from the 1970s.

Sandstone Grinding Wheel



Country of Origin	Bulgaria
Date Made	18xx
Date Acquired	January 13, 2021
Acquisition Notes	Purchased from Ebay: antiquedaeho0

Notes

Historical Notes

In medieval and Renaissance times, sandstone wheels were a common way to shape gemstones

Hanaporuwa



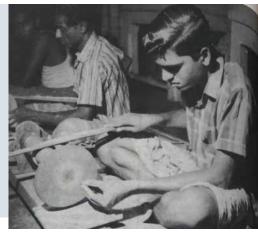
Country of Origin Sri Lanka
Date Made 1970s?
Date Acquired June 4, 2024
Acquisition Notes Purchased via Maxime Ruelle

Notes

Purchased from an antique dealer in the Fort in Galle.

Historical Notes

This is one of the oldest types of faceting machines in the world and the oldest one that's still in use. You can still find old cutters in Ratnapura using this machine.



1979 photo of a cutter in Sri Lanka using a Hanaporuwa

British Arms



Country of Origin	United Kingdom
Date Made	
Date Acquired	June 29, 2024
Acquisition Notes	Donated by Ivan Andrasi

Notes

"It was used for cutting for big stones, my friend from Poland repair it and made it work again so I will ask him how its working. But my opinion is that it is from quadrant"



Photo of the masts within the original machine



Accessories Reference Stones Polishing Compounds and other Misc.

15 pieces

Box Of Antique Wooden Dops



Country of Origin
Date Made 1800s?
Date Acquired May 5, 2023
Acquisition Notes Traded with Valerie Duraffourg

Notes

Originally acquired from a lapidary family in La Pesse around 1988

Dopping Lamp with Warming Plate



Country of Origin	France
Date Made	1820s
Date Acquired	May 5, 2023
Acquisition Notes	Traded with Valerie Duraffourg

Notes

Originally acquired from a lapidary family in La Pesse around 1988

Historical Notes

These are the type of lamps we see being used while cutting stones in the Jura in the late 1800s and early 1900s. This one is made for gemcutting because of the plate on top that holds the stone over the flame to warm it without getting it too hot

Vintage Gem Boxes



Country of Origin	France
Date Made	
Date Acquired	May 6, 2023
	Purchased from Saint Claude Antique Shop

Notes

All from end of the 19th century

Lot of Jurassian Glass Preforms



Country of Origin France 1890s? Date Made

Date Acquired November 1, 2024

Acquisition Notes | Purchased from Lons Le Saunier Antique Shop

Notes

Many parcels of glass preforms wrapped in old invoices from 1881, etc.

Two Pink Shell Cameos



Country of Origin
Date Made
Date Acquired
Date Acquired
Acquisition Notes
Purchased from Saint Claude Antique Shop, France

Notes

Cut in villages around Jura- early 20th century

Three French Handcranked Laps



Country of Origin	France
Date Made	1920s?
Date Acquired	May 15, 2024
Acquisition Notes	Purchased from Jura Antique Shop

Notes

Three Jura Laps and crank wheel that belonged to a factory in Gex. The guy had a full bench from the Gex factory but didn't want to sell because it was a family heirloom

Large Oil Lamp



France
1930s?
June 2, 2024
Purchased from Lyon Brocante, France

Notes

Historical Notes

These are the type of lamps are often see sitting on or near cutting stones in old photos of cutting from the French Jura in the late 1800s and early 1900s.

2 Small "Pigeon" Oil Lamps



Country of Origin France
Date Made 1930s?
Date Acquired May 1, 2024
Acquisition Notes Purchased from Leboncoin

Notes

Historical Notes

These are the type of lamps we see being used while cutting stones in the Jura in the late 1800s and early 1900s.

Industrial Gas Dopping Lamp



Country of Origin France
Date Made 1930s?
Date Acquired 2024

Acquisition Notes | Purchased from Leboncoin

Notes

Likely used in a French gemcutting factory

Vintage Gem Gauge



Country of Origin	Germany
Date Made	1940s?
Date Acquired	February 20, 2020
Acquisition Notes	Donated by Ed Perry

Notes

I was told: "Stephen Kotlowski and I were friends and lived fairly close. He gave it to me before he passed away. He got it from a jewelry store back in NJ. I think. That's about all I know. I never expected him to go so soon so I never asked."

Bruce Bar Abrasives



Country of Origin United States

Date Made 1950s

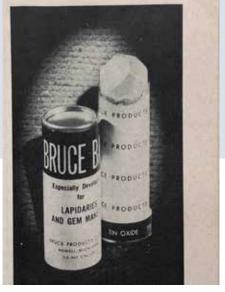
Date Acquired June 2020

Acquisition Notes Unknown

Notes

Historical Notes

This is an American product from the 1950s and 1960s.



Advertisement photo for Bruce Bar from Gems and Minerals, March 1966

Synthetic Sapphire (Cutting Sample)



Country of Origin	France
Date Made	Mid 1900s?
Date Acquired	May 6, 2023
Acquisition Notes	Purchased from Saint Claude Antique Shop

Notes

White Quartz (Cutting Style Sample)



Country of Origin	France
Date Made	Mid 1900s?
Date Acquired	May 6, 2023
Acquisition Notes	Purchased from Saint Claude Antique Shop

Notes

Vintage Polish Powder Jars





No Image Available



Country of Origin	United States
Date Made	1940s/50s
Date Acquired	January 20, 2023
Acquisition Notes	Donated by Meg Berry

Notes

From Meg Barry's own vintage stock. Includes Bruce Bar and others

Dixon Polishing Powders Jars



Country of Origin

Date Made

Date Acquired

Acquisition Notes

Duited States

1940s/50s

January 31, 2023

Dwight Schannep

Notes

Purchased from American Antique Mall in Tucson. The previous owner told me they originally came from an estate sale in Tucson. 2 jars.

Traditional Polishing Abrasives



Country of Origin	England / Sri Lanka
Date Made	2010s
Date Acquired	2018
Acquisition Notes	Chas Matthews Ltd / Jayamini

Notes

The tripoli/rotten stone was donated by the cutters of the Chas Matthews studio in London. The traditional Sri Lanka wadi powder ball was donated by the Jayamini family in Ratnapura, Sri Lanka.

Historical Notes

Before diamond powder was common and cheap, many other types of polishing abrasives were used to polished colored stones. "Rotten Stone" also known as Tripoli was often mentioned in 19th century British texts. In Sri Lanka, Wadi was used. Wadi was made from the ashes of midribs from kitul palm fronds, plus the ashes of burned rice husks. The ashes were cooked together in equal parts along with a trace of lime (CaCO3) to make fist-sized balls. The balls were burned for a few hours using rice shells, and then the ashy remains were partially dissolved in water. Several rounds were required to get the mixture down to the finest particles, which would then be used for polishing.



Traditional gem faceter using Wadi polishing abrasive

