

THE MYSTERY OF HISTORY — OCTOBER 7, 2019

WHAT'S IT?



Fig. 1: Side view. PHOTO: © 2018 Richard W. Black

ARTIFACT 19-05

SPECIFICATIONS:

Bronze and steel. Weight = 1.62kg (3lb 9oz)

Height overall = 25.4cm (10.0in); Diameter at bottom = 13.97cm (5.5in)

CLUES:

- Label: “Otto Bernz Co. Inc.; established in 1876; always reliable; Newark, NJ
- The base, seen in Figures 1 and 2, is hollow

QUESTIONS:

- How many simple machines can you find, and name, in this object?
- What is the function of the holes in the side of the horizontal cylinder?
- What is the purpose of the hollow base?

continued

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WHAT'S IT?



Fig. 2: Top oblique view. PHOTO: © 2018 Richard W. Black



Fig. 3: Close up side view. PHOTO: © 2018 Richard W. Black

continued

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WHAT'S IT?**ARTIFACT 19-05****ANSWER:**

Thanks for participating in our “What’s It?” guessing contest! It seems this artifact was too easy to figure out; nearly everyone (of all ages) had at least a basic idea of what it was or how it was used. It is indeed a blow torch.

Let’s turn up the heat! The blowtorch is commonly used where a wide spread high temperature flame heat is required, but not so hot as to cause the surface being heated to melt, burn, or weld. Blowtorches have been around for thousands of years. The early versions were basically a candle with some type of tube attached to blow on the flame to create added heat. If you have ever seen jewelry (gold, silver) from ancient cultures, you can thank the blowtorch for allowing the metal-smiths to shape the metals to

a form they desired. Near the end of the 1700s and during the first half of the 1800s, inventors began making blowtorches similar to the one on display at Seymour. The basic components involved a reservoir for liquid fuel, a small hand pump to pressurize the fuel system, a needle valve assembly which could open or close to get the desired amount of fuel/heat, and an air control assembly which was also used to control the desired amount of heat—more oxygen, more heat.

If you go to hardware stores today the torches are different, but still use the same principles as the old candle/tube torch. See if you can identify some of the differences, e.g., what kind of fuel is used today, do today’s torches still have knobs?, etc.

GUESSES:

Nancy Breslawski “It’s an old soldering iron used to fix broken metal parts—holes mix air to keep flame from going out. Hollow barrel holds fuel. Fuel is put into handle top. Large knob adjusts flame.”

Rhett Breslawski “A water pump.” [card says for 19-04]

Doug Hickerson “Blow torch. Two valves open/close. Threads are inclined plane, two screws for adjusting holes in side for air vent for flame. Hollow base has “eye” to hook on a strap. Used for melting ice on pipes or other surface.

Irwin Cody “A blowtorch.”

Kelvin Kwiatkowski “Gas torch.”

Laila L. “Torch, to make fire and melt metal together.”

Chrissy McAuliff “Torch—like a welding torch.”

Pete Montrois “Kerosene blow torch. Top lever turns on—one in back pressurizes the system. Small valves up on top—fluid & air mixture.”

Matthew Murphy Jr. “It’s a brass blow torch used for heating objects up.”

Hailey Neumann “It’s a flame thrower, used for workmanship.”

Alan Van Eecke: “An ancient type of gas torch.”

Ron Wood “Blow torch for soldering, brazing and possibly welding metals. The holes in the cylinder draw air into the gas flame to increase the flame temperature.”

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WHAT'S IT?**BACKGROUND**

“WHAT’S IT?” has been a feature of the BCM website since its inception in 2007. In 2017 Brockport Community Museum board member Archer “Buck” Noble, a Brockport Central School District teacher (now retired) developed “The Mystery of History” school project that encouraged fourth and fifth grade students to use observational and investigative techniques to help determine the type and use of different historic artifacts.

That project was introduced to the general public during a Brockport Community Museum outreach presence at the 2017 Brockport Sidewalk Sale. That success led to this collaboration between the Brockport Community Museum, Seymour Library and Brockport Central School District.

GET INVOLVED

- **Take your best guess** regarding the current artifact.
- **Do you have an artifact** you would like to know more about? Open your query to a larger audience.
- **Have a suggestion** about how we can improve this project?

If so...

Leave your contact information in “Ye old prediction box” near the exhibit display.

CREDITS*Museum project committee*

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