

THE MYSTERY OF HISTORY — APRIL 4, 2022

WHAT'S IT?



Fig. 1: View showing layers. PHOTO: © 2018 Richard W. Black



Fig. 2: Side view. PHOTO: © 2018 Richard W. Black

ARTIFACT 22-02

SPECIFICATIONS:

- Material: Wood, with metal hinge;
- Weight = 11.8oz (334g)
- Closed Length = 10.75" (273cm.)
- Open (tips of handles) = 27.25" (43.5cm)
- Oval Depression = Long Diameter 2" (5.1cm)
- Short Diameter = 1.75" (2.3cm)
- Depth = .56" (1.4cm)

CLUES & QUESTIONS:

Proof of Mendel's Miracles!

For this artifact let us use Detective Sherlock Holmes and his partner Dr. Watson to help us solve this mystery. Detective Holmes would look at the facts, put them all together, consider the context of his investigation, and then come up with a deduction (educated guess) or, as in this case, deductionS!

First the facts: The artifact is made from two blocks of wood. They are mirror images of each other. A wooden handle is attached to the end of each block. The center of each block sports a half

sphere (hemisphere). The blocks are connected together via a metal hinge which allows one block to fold over onto the other.

Holmes continues to examine the artifact coming up with more details as he opens and closes the object. He is especially curious about the two hemispheres cut into each block. After opening and closing the object a few times, Holmes sets it down and looks at Dr. Watson, his mystery solving partner. Holmes has a glint in his eye Dr. Watson knows what that glint means. Holmes has come to some kind of conclusion and he queries his partner, "Have you made a deduction, Holmes?"

Sherlock Holmes quips, "No... not one deduction, two. The first is elementary my dear Watson and it has to do with this artifact functioning as a simple machine to make work easier and more efficient."

"And the second deduction?" asks Dr. Watson.

"Do you remember the book I received last week? The one titled "Experiments in Plant Hybridisation", by Gregor Mendel? The answers are all in there Watson. It has to do with genetics! If you used

THE MYSTERY OF HISTORY — APRIL 4, 2022

WHAT'S IT?

Fig. 3: View of inside. PHOTO: © 2018 Richard W. Black

something akin to this artifact today, it would have been three times larger.” So our friend Sherlock Holmes has made two deductions (thoughtful guesses) about this artifact; 1. In the past this artifact was used as a simple machine to make something easier and more efficient. 2. If it were to be used in today’s world it would have to be three times larger. Your mission is to predict what the artifact was used for and explain why it would have to be three times larger to be of use today.

We’d like to thank Dr. Watson and Sherlock Holmes for taking time out to give us some clues as to what this artifact is. Happy deducing!

ANSWER:

Bigger Isn’t Better, Scurvy, & Red French Lips

The artifact displayed on the What’s It? safe may be small, but it tells a Brobdingnagian (big) story! If you are a frequent participant of the What’s It? activity, by now you know how to identify simple machines and that this artifact gives us mechanical advantage as a lever. Key features that you may have observed are the hinge connecting the two handles, the depression cut into the bottom handle (did you note the 3 holes at its bottom?), and the convex hemisphere counterpart on the top handle. If you were to put something into the cutout depression, a grape let’s say, and swung the opposite handle onto the grape and gave it a bit of a squeeze, what would be the result? Grape juices would run out of the drain holes at the bottom of the depression and, voilà, you have a refreshing

THE MYSTERY OF HISTORY — APRIL 4, 2022

WHAT'S IT?

drink! So the artifact is a squeezer of some sort, but what may it have squished?

Here are some interesting tidbits of info that emerged after a bit of detective work; on close examination the depression is not perfectly round—it's oblate, these devices were a common kitchen tool used during the 1700's, the wood material used is probably elm (predating Dutch elm Disease in the U.S.), AND—the grandest curiosity—what got squished were lemons!

Lemons, you say?!? It isn't even big enough for something the size of a golf ball! Here is where we put on our higher level thinking skills cap. If it was used to squeeze lemons, the fruit had to be quite small compared to today's lemons. The artifact is able to hold a lemon approximately half the size of today's lemons. One might extrapolate and conclude that over time fruits and vegetables have become larger, which, of course, they have. How, why, and is bigger better?

The how and why questions are fairly easy to answer. Plant breeders have created bigger, more resistant to disease, and better looking fruits and vegetables for the supermarkets. But, do big-

ger fruits and vegetables provide a proportional increase in nutritional value? The answer is a definitive NO. Matt Peskett authored a paper which critiques data about the nutritional value of fruits and vegetables in the past compared with today's bigger fruits and vegetables. As it turns out, bigger size does not mean bigger nutritional value because of a phenomenon known as genetic dilution. If you're interested in pursuing this topic, please goggle Mr. Peskett's web article, "It seems modern fruits and vegetables are bigger, but no more nutritious".

Other interesting trivia about the pucker producing lemon: British ships carried lemons to stave off scurvy—a disease caused by a vitamin C deficiency, lemon juice was used as invisible ink—its' acids damaged the fibers of paper and when held up to heat they would brown up faster than the rest of the paper, lemon "trees" are actually evergreen shrubs that can produce up to 600 pounds of lemons a year, and, during the Renaissance, French ladies would use the pucker power of lemons to redden their lips!

—Stay curious!

GUESSES:

Seymour Library In-person Responses

Brandon Braen, "Lemon squeezer or orange juice extractor."

Susan Campbell, "Oil can to lubricate moving parts."

Camron Male, "A nut cracker."

Jennifer McBride, "A garlic press to press and mince herbs."

Yushua Nieves, "A garlic press used to crush garlic and other aromatics to be used in soups, stews, etc."

Ron Wood, "A garlic press, used for crushing garlic for cooking."

Eileen, "A school or business ink well? "...on another card: "Lemon squeezer? Garlic squeezer?"

THE MYSTERY OF HISTORY — APRIL 4, 2022

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

Archer “Buck” Noble

Norman Frisch

Garrett Roe

Seymour Library

Jennifer Caccavale, Director