THE MYSTERY OF HISTORY — DECEMBER 2, 2019

WHAT'S IT?

Fig. 1: View showing entire artifact. PHOTO: © 2019 Richard W. Black

Artifact **19-06**

Specifications:

Material: Cast iron; Weight = 2.27 kg (5 lb.);
Length = 29.2 cm (11.5 in); Circumference = 12.7 cm (5.0 in)

Clues:

The above was one of three artifacts that looked similar except for their length and the number cast into them. Another was 26.67 cm (10.5 in) long and had the number "4 1/2" on it. The third was 53.34 cm (21.0 in) long with the number "12 1/2" on it. The third (only) had a slightly larger circumference of 14.2 cm (5.59 in)

continued...

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Fig. 2: Close up view of number. PHOTO: © 2018 Richard W. Black

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

Fig. 4: View of back of same end. PHOTO: © 2018 Richard W. Black

ARTIFACT **19-06**

QUESTIONS:

– In use, how would this artifact be positioned, vertically, horizontally, other?
– What might the number stand for; why might that be important?
– Why are the depressions in fig's. 3 & 4 shaped differently?
– What might the hole itself be used for?
– The artifact appears roughly made; why might that not be important?
– BONUS Q: Can you compute the cylinder diameter from the circumferences provided?

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WHAT'S IT?

Artifact 19-06

Answer:

The Function of Window Weights and the Secret Compartment!

See if you can find a double-hung window in an older home—a double hung window actually looks like two windows with an upper and lower half called sashes. If you look carefully at the sides of each sash, you will notice that there are two different rails or jamb liners that allow the window to slide up and down. Big windows mean big weight! To offset the force needed to open or close one of the sashes, it was a common practice to fix a window weight to the top of the sash via a rope and pulley system. On either side of older window sashes, there is a secret compartment! Inside that space there would be a pulley at the top with a rope running through it. One end is tied to the top of the sash and the other end to the hole at the top of the window weight. The vertical window weight acted as a counterbalance so less force had to be applied when a person tried to open or close one of the two sashes—gravity gave you a helping hand! Each side of whole window had this "secret compartment" dedicated to one of the two sashes. It's all about using simple machines, in this case a pulley was used to make work easier. The minor differences and "unfinished" appearance of the weights is that different manufactures made variations of the weights and since they were not meant to be seen, no-one really cared what they looked like. Newer home windows use a different method.

Other names for window weights include sash weights and window counterbalances. They were made of iron and if you looked closely you would see the weight in pounds stamped on the sash weights. Why do you think the weights were different? Do you think there might be other secret compartments in your house and other buildings? If you find any, be sure to let us know! (The author has found many secret compartments in his house and barns—many of them had unique treasures inside!)

For those of you brave enough to calculate the diameter of the 5 pound (2.27 kg) weight, the cross section distance through the center of the window weight, you probably used a variation of the formula: Circumference = 2 x pi (3.14) x radius. There are several ways to compute the diameter using this formula as the foundation. If our math is correct, the diameter is 4.04 cm.

Guesses:

George W. Campbell, "Window Sash counterweight for double-hung windows. Weight of window determines size and weight of counterweight"

Tanner, "A weight for windows 'made of' bars." [The 'made of' is illegible but I'm guessing that's the intent. –Ed.]

Larry Herzog, "They are window weights used to counter balance double hung windows. Later used as boat anchors!"

Ron Wood, "Window weight used to counter balance weight of window sash. The number is the weight of the object in pounds to help match it to the window weight."

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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
Archer "Buck" Noble
Richard W. Black
Norman Frisch

Seymour Library
Mike Boedicker, Director

