

DECIPHERING SMOOTH BORE CANNON WEIGHT MARKINGS

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It was important for two reasons that a cannon be accurately weighed. The first reason was that the foundry usually got paid by the mass of metal in the gun – the weight of the gun. The second was that for correct placement, weight distribution, and overall weight on board a vessel, the correct weight had to be known in order to maintain a vessel's stability and trim. On land, the weight had to be accurate to ensure that the gun could be moved efficiently for travel, for replacement of its carriage, and for hoisting under various circumstances. Of course, not all guns have weight markings, especially as one gets into the middle of the 19th century and later. But it is likely that the archaeologist and avocational will encounter guns where the weight markings are extant. This may be with ship's guns or with guns in fortifications, many of which came originally from ships.

There are three numbers located on smooth bore guns, just usually above the button on the gun's breech. They are displayed in the three-number pattern X-X-X. The first number is the weight in hundredweight. Counter-intuitively, a hundredweight is not 100 pounds, but 112 pounds. The next number is quarter hundredweights, and the third number is individual pounds. It was critical that the weight be known to the pound. For example: 3-2-3 would equal: 3 hundredweight or 335 pounds; 2 quarter hundredweights or 56 pounds; and 3 pounds. The total weight of the gun would be 394 pounds.



Cannon at Brimstone Hill Fortress, St. Kitts (Photo by Bill Utley)

The weight of the gun above 38 28-2-18 or 4256 + 56 + 18 for a total of 4330 pounds

According to Wikipedia: "The hundredweight has had many values. In **England** in around 1300, different "hundreds" (centum in Medieval Latin) were defined. The Weights and Measures Act 1835 formally established the present imperial hundredweight of 112 lb. The United States and Canada came to use the term "hundredweight" to refer to a unit of 100 lb.

Note: Calculations of the weight of a frustrum (the general shape of a cannon tube) have been used to estimate the water weight and out of water weight of a gun, since the two measurements are the difference of the amount of water displaced by the item. This is a unique feature of weight encountered by archaeologists periodically, and especially important for the safety of archaeological divers seeking to recover a gun to a vessel.