Dear Colonel Robinson,

In reply to the letter I had the honor to receive of date the 14th Instant. I have the honor to inform you for the information of His Excellency, Marshal 1st. Du Pare Bruneau, that when I inspected the Splinter of the Frigate, I did not clop or designate any Piece of Ordnance, until it was examined most scrupulously both as to its efficiency, but also as to its real or existing Caliber. My first object was to ascertain what the Gun actually had become, without a reference to what it had originally been. This was effected by introducing circles of dimensions corresponding with the different Calibers into the bore - so soon as this measurement & examination afforded me a knowledge of its real Caliber, I clophed it as such.

My next operation was, to cause all the Balls of that immediate Caliber and those nearest to it, to be selected & placed together. Then had a gage made of the size of the bore, allowing 1⁄20 part of the Caliber as Windage (which is the usual proportion in The British Service) and also had a gage made somewhat smaller - such Shot as passed through the former, and would just pass the latter, were deemed appropriate; and clophed accordingly.

His Excellency will be pleased to observe, that when a Gun was restocked to be of a certain Caliber, the Shot of that nominal dimension, was not clophed as eligible for it, until they had passed both the proper, and appropriate Gages.

Many of the Guns, as you justly observe, have augmented their Caliber, from age and long service, whilst the Shot, from the same cause, has diminished in weight & dimension, so that because to these being thus rendered a Gun nominally a 24, & a Shot clophed as such, being brought together would have been very ill proportioned - They are now, in form, what may be termed a Piece of Ordnance of Shot of so very slow and irregular a nature, as cannot be properly clophed.

Can be

Yours truly,

[Signature]
His Excellency will not, on reflection, be surprised, observing in any observations that the 24, 25, and 26th are susceptible of receiving Balls of one of the former Calibers, when he is pleased to consider how trifling an addition of diameter is produced by the augmentation of one 1st of inch, around in large a surface, and indeed in many instances a 23 and a 24 pound Ball, did not differ in real weight more than 30 Drachms. More that weight, and perceived, except in a cotton Caliber, were clasped at such; all the somewhat different in accuracy, whilst others that came nearest to an inferior Caliber were also designated as such, all the somewhat above their proper weight—

Attention was also paid in the classification, to those Shot which had lost their spherical shape, and assumed an irregular one.

Some of the Shot are rather smaller than they ought to be, relative to their respective Pieces, and consequently admitting a greater degree of Winding than is deemed advantageous. I have suggested to the Commanding officer of Artillery, the propriety of adopting a method which is used in similar situations by the French with effect. That of giving each Shot, a Coat of Pitch, which not only tends to preserve them and prevent the surface from crackling, but also adds, in a small degree to their diameter, and consequently by decreasing the Windage, to their precision when Projected.

I trust His Excellency will be satisfied as to the manner I carried on the Service, which was altogether performed under my immediate inspection, and only hope to be entitled with the execution of more active, and more important objects, wherein I might be able to prove myself worthy of the Confidence His Excellency may be pleased to place in me.

I have the Honor to be

Your Most faithful & obedient Servant,

Allen Ludlow, Major
Portuguese Artillery