very speedily followed both in America and Russia, so soon as the reason of the thing and the trifling amount of the change came to be understood. And even without legislation the relation between the proposed new or *geometrical* measure and the imperial ones is so simple and striking—fixing itself so easily in the memory, and the conversion from one to the other so ready, that, *were there no other reason*, it might almost be questioned whether it would be worth while to make the change.

(31.) But there is another reason, and I think a decisive one. Hitherto I have said nothing about our weights and measures of capacity. Now, as they stand at present nothing can be more clumsy and awkward than the numerical connexion between these and our unit of length. A grain is defined as the weight of distilled water, so that 252.724 of such grains at the freezing temperature, or 252.46 at that of 62° Fahr. which is the standard temperature of our imperial yard, shall fill a cubic inch. Of such grains, so defined, the pound contains 7000, the ounce  $437\frac{1}{2}$ , and the gallon of water at 62°, 70,000. According to this system, the cubic foot of water at our standard temperature weighs 997'145 oz., falling short of 1000 oz. by very nearly 3 oz. However tempting this approximation might appear, still, in the absence of any more cogent reason, the commissioners who recommended our system of weights and measures legalized in 1824 forbore to recommend such a change in the ounce (about 13 grain) as would have brought it about; though the rule that a cubic foot of water weighs 1000 ounces is still handed down as a rough and ready