in which Q represents the length of the quadrant required, A that of the polar axis, π the circumference of a circle whose diameter is 1, and *m*, *one fourth part* of the fraction expressing the ellipticity, or in this case $\frac{1}{1184}$.

Executing the calculation the result is...32,813,000 feet.
Substract 10,000,000 metres = 32,808,992

Remain, excess..... 4,008

for the excess of the true quadrant over that assumed as the basis of the metrical system, that is to say, one 8194 aliquot part of the whole, or one 208th of an inch on the whole metre, which is therefore the quantity by which the French standard is actually too short.

(28.) It must not be denied that this is a very wonderful approximation, and in the highest degree creditable to the science, skill, and devotion of the French astronomers and geometricians who carried on their operations under every difficulty, and at the hazard of their lives in the midst of the greatest political convulsion of modern times. And adopted as it is over a large portion of Europe; were the question an open one what standard a new nation, unprovided with one, unfettered by usages of any sort, and in the absence of any knowledge of the existence of the British yard, should select; there could be no hesitation as to its adoption (with that very slight correction above pointed out—which would in no

the circumscribed circle internally. The circumference of this small circle is the difference between those of the ellipse and of the larger or circumscribing circle.