find all measures of capacity of the smallest size up to the largest, from a gill to a quarter, bearing proportions one to the other, which are divisible by 8, and the whole of them are multiples in capacity of a measure given by four times 8 corns of wheat. It is evident, therefore, that the measures in common use here and in the United Kingdom are not so fanciful or arbitrary as some imagine. Turning to our more familiar weights we find the number eight also quite prominent. The pound avoirdupois is twice 8, or 16 ounces. The pound troy weight is 12 ounces, that is, 8 and 1-2 8. This was fixed by William the Conqueror, the title "troy" being taken from Troyes, where it was in use. The troy pound was declared to be 7,560 grains of meal, which is 8 multiplied by 945. The ton is 2,000 pounds, which also is a multiple of 8, as is also the ton of 2,240 pounds.

Turning to measures of length, we find the English mile to be 1,760 yards, which is divisible by eight. The inch is said to have been fixed in length by a certain number of barley-corns, and the yard is 36 inches, which is a multiple of half eight. In 1825, the length of a standard yard was fixed by Parliament on a scientific basis, a perpetual datum being established by length of a pendulum vibrating seconds. There are now five standard brass yard measures, one in the House of Commons, one each in the Mint, the Royal Observatory and Royal Society. The standard measures of length, therefore, which we use are as scientific as those of the metric system.

England certainly needs the abolition of some local measures which cause great confusion. At Bedford, wheat is sold by a measure of 5 Imperial bushels in Cornwall the standard measure is 16 gallons in Middlesex 8 1-2 gallons; and Suffolk, and other counties, have local measures, in all of which it is evident that 8, or some proportion thereof, is the standard. It is remarkable, and very suggestive, that for so many centuries measures of weight and capacity have been adopted without any sign of the decimal system coming into use.

The inference seems a fair one that there is some principle of utility in measures of capacity and weight which contain 8 parts, or are divisible by 8, or are fractions of 8, which measures are more convenient than those based upon the number 10, or its multiples, or fractions This superior utility arises, we submit, from the much greater number into which a measure based on the sum of 8 parts can be divided without involving a fraction. Now the simplest division of anything is by halves, and eight when halved gives 4, and 4 halved gives 2, whereas 10 when halved gives 5, and a further halving involves a fraction. Eight may be divided by 2 and 4, and by three-fourths without a fraction, which is a manifest advantage in dividing goods rapidly so as to avoid fractional parts. Take, for instance, a piece of cloth 48 yards long, it is divisible into these whole numbers, 24, 16, 12, 8, 6, 4, 2, whereas a length of 50 yards, a decimal length, is only divisible into whole numbers, 25, 10, 5, 2. Clearly the measure built up out of 8 units has a great advantage over one based on 10 units. It will also be noted that, each one of the first series of 7 figures can be halved, and such 7 will yield a whole number, whereas out of the latter series of 4 figures only two can be halved without involving a fraction, viz., 10 and 2. As dealers in all manner of goods avoid fractional quantities as far as possible, they naturally cling to those weights and measures which are most easily divided into halves, quarters, eights, and which yield a whole number after division. A familiar illustration is a common one in Canada. When an article is 25 cents a yard, we have to pay 13 cents for half a yard, and so on. Thus, daily buyers pay 1-2 cent more for goods, owing to there being no currency of the value of 1-2 a quarter, or one-eighth of a dollar. Sir Fred. Bramwell, one of the most eminent engineers of the age, affirmed in a letter to the "Times" condemning the proposed change to the metric system, pointed out that in France it had been found necessary to adopt a supplementary system of measures of capacity which were more conformable to the English plan by facilitating divisions by halves, quarters, and eighths; which, he affirms, are more natural and more generally convenient than divisions by tenths, and fractions of ten. On the other hand it must be allowed that the tables of weights and measures in use on the old land and in Canada are far more elaborate and complicated than is desirable. They involve a great waste of time in schools, and many of the transactions of trade are also wasteful of time, as calculations of mixed quantities are tedious, though long use renders even illiterate persons remarkably expert in this work, and daily familiarity with the system develops a capacity for mental arithmetic which would surprise those who only know tables of weights and measures by seeing them in a book. A look at the following table of the metric measures does not seem to convey the idea of their being free from complication:—

SYNOPSIS OF THE METRIC SYSTEM.

RELATIVE VALUES.	LENGTH.	SURFACE.	CAPACITY.	SOLIDITY.	WEIGHT.
1,000,000	....	....	1 Cubic metre. of pure water.	.....	Tonne=
....	....	......		....	1,000 Kilos.
100,000	....	....	....	....	Quintal=
....	....	....	....	....	100 Kilos.
10,000	Myria-metre.	....	....	....	Myria-gramme
....	....	....	....	....	=10 Kilos.
1,000	Kilo-metre.	....	Kilo-litre.	....	Kilo-gramme.
100	Hecto "	Hectare.	Hecto "	....	Hecto "
10	Deka "	....	Deka "	Deka-stere	Deka "
UNIT.	METRE.	ARC.	LITRE.	STERE.	GRAMME.
0.1	Deci-metre.	Deci-arc.	Deci litre.	Deci-stere.	Deci-gramme.
0.01	Centi "	Centi "	Centi "	....	Centi "
0.001	Milli "	....	....	....	Milli "

This looks as intricate as the English tables, but,