French, on the other hand, after all their labours to re­commend a uniform system of measures, have ended in such a complication, that, for the most simple purposes of practical mechanics and civil life, it is become usual to carry in the pocket a little ruler, in the form of a triangu­lar prism, one of the sides containing the old established lines and inches of the royal foot, a second the millimetres, centimetres, and decimetres of the revolutionary school, and the third the new ultra-royal combination of the Jaco­bin measure with the royal division, the inches consisting of the 36th part of a metre, or the four millionth of a de­gree of the meridian of the earth. If such occurrences as these be calmly considered, they will make us more dis­posed to diminish than to increase the number of penal statutes intended to compel the inhabitants of the different parts of a country to study their own convenience con­jointly with that of their neighbours, and to spare them­selves the necessity of a few arithmetical operations in the course of every market-day ; and we shall feel that it is more incumbent on a wise government to endeavour to facilitate both the attainment of correct and uniform stan­dards of legal existing measures of all kinds, and the ready understanding of all the provincial and local terms applied to measures, either regular or irregular, by the multiplica­tion of glossaries and tables for the correct definition and comparison of such terms.

Measures have apparently always been derived, in the first instance, from some part of the human person. A foot, a pace, a fathom, the orgyia or stretch of the arms, a cuhit, a palm, and a finger ; these have probably all been used in the earlier states of society by each individual from the magnitude of his own person ; and afterwards a standard measure has been established by authority from the real or supposed magnitude of the person of some king or hero, in order for the attainment of more perfect uni­formity in practice ; though it is said, that in some parts of the east the Arabs still measure the cubits of their cloth by the fore arm, with the addition of the breadth of the other hand, which serves to mark the end of the measure, as the thumb which was formerly added at the end of the yard by the English clothiers. It ought not however to be forgotten, that any one of these terms possesses an advan­tage for popular use, and for the convenience of future ages and of remote countries, which would be lost by the intro­duction of any more arbitrary measurement. Thus a hand’s breadth, or a foot, is always sufficiently understood, without any definition, to enable us to form to ourselves a tolerably accurate picture of the magnitude intended to be describ­ed ; and there is scarcely an instance of the caprice of de­nomination having ever extended so far as to make the measure called a foot in any country so small as half a natural foot, or so great as two feet of an ordinary person, and cer­tainly not of its amounting to three ordinary feet ; while a metre, even to those who know that the word implies a measure, might as well have meant a mile, or an inch, or a quart, as a length somewhat greater than a yard.

The idea of accurately verifying the standard of a coun­try by any other means than that of a comparison with some actually existing original, can scarcely have occurred, except in a very advanced period in the progress of civi­lization. It was indeed enacted in the time of our Henry the Third, that an ounce should be the weight of 640 dry grains of wheat taken from the middle of the ear, that a pound should be twelve ounces, a gallon of wine eight pounds, and eight gallons of wine a bushel of London ; but this seems rather a direction for making a single standard than a mode intended for the continual verification of the standard in case of any minute uncertainty. Again, in a statute of Henry the Seventh, a gallon of corn was men­tioned as containing eight pounds of wheat : and this may perhaps serve to explain the origin of the two different

gallons. But the substitution of an original standard de­rived from an object of definite magnitude, exterior to the human person, seems to have been reserved for the days of the French revolution, though it has since been adopted in an improved form by the introduction of a foot equal to 12/33 of the pendulum vibrating seconds, as a representative

the customary foot of the kingdom of Denmark. (Quar­terly Journal of Science for 1821, *Astr. coll.* No. V.)

The Royal Society, under the presidency of Mr Folkes, made some very accurate comparisons of the English, and French, and old Roman standards, which are recorded in the Philosophical Transactions for 1736, 1742, and 1743 ; and George Graham, the eminent watchmaker, determined at the same time the length of the pendulum vibrating se­conds to be 39∙130 inches; but the standard with which he compared it requiring some reduction, it was afterwards ascertained that the length, as derived from these experi­ments, ought to have been more nearly 39∙14 inches.

A committee of the House of Commons was appointed in 1758, of which Lord Carysfort was chairman. Their Report contains some important information respecting the standards then in use. They found that the customary ale and beer gallon of the Excise was estimated at 282 cubical inches, while the legal wine gallon of the Ex­chequer was computed at only 231, though the only exist­ing standard of the wine gallon in 1688, which was kept at Guildhall, contained no more than 224 cubical inches. They suggested the adoption of this smaller gallon for the legal standard, perhaps as being more favourable to the re­venue, though the gallon of 231 inches had been previously legalized by the act of the fifth of Queen Anne ; and they employed the well-known Mr Bird to prepare two standards, which were to be exact copies of that which was made by Graham for the Royal Society in 1742, from a very care­ful comparison of the various yards and ells of Henry the Seventh and Elizabeth, which were kept in the Exchequer. One of the copies was marked “ Standard Yard, 1758,” and was presented by the committee to the House with the intention that it should be adopted as the legal stan­dard ; the other was made “ with cheeks” for common use, and proposed to be kept in the Exchequer.

A subsequent Report of a committee appointed in 1759, consists principally of proposals for some legislative regulations, tending to facilitate the equalization of weights and measures by the establishment of proper methods of checking and authorizing the standards to be employed. In 1765, two bills were brought into the House of Com­mons by Lord Carysfort, in conformity with the Reports of the committees; but, from some accidental circumstances, they were not passed into laws.

Another committee was appointed in 1790 ; but no mi­nutes of their proceedings have been recorded. In 1814 however a very important Report was presented to the House by a new committee, who had called upon Dr W. Hyde Wollaston and Professor Playfair for their opinions on the subject ; and it was principally in consequence of these examinations that the committee stated that the length of the pendulum vibrating seconds had been ascer­tained to be 39·13047 inches, and that the metre of platina measured, at the temperature of 55°, 39∙3828 English inches, representing at 32° the ten millionth part of the quadrant of the meridian. They remarked with great truth, that although in theory the original standard of weight is best derived from the measure of capacity, yet in common practice it will generally be found more convenient to re­verse this order ; and they recommended, upon the sug­gestion of Dr Wollaston, that a gallon containing ten pounds of pure water should be adopted as a substitute for the ale and corn gallons, which had become different rather from accident than from any direct legislative authority, the one containing a little more than ten pounds, the other