

By the adoption of the Canadian shilling as the fifth part of a dollar, we have virtually recognised the decimal system for our currency; in estimating, also, the ton at 2000 lbs., and the cwt. at 100 lbs., we have made a further advance in the right direction. And it is clear, that if the British bill becomes law, we must either adopt the standards which form the basis of their system of weights and measures, or improve upon it in such a way as to avoid many of the objections to which it is liable. In new scientific works, claiming to come up to the standard of modern requirements, the French weights and measures are generally adopted; and we do not see any valid reason why a modification of that admirable system should not find favour with our legislators.

In order that our readers may form some conception of the difficulty of this question in England, we introduce the following notice of British weights and measures from the report of the Select Committee of the House of Commons.

"Omitting many specific anomalies, we have no less than ten different systems of weights and measures, most of them established by law:—1. Grain, computed decimally, used for scientific purposes; 2. Troy weight, under 5 Geo. 4, c. 74, and 18 & 19 Vict., c. 72; 3. Troy ounce, with decimal multiples and divisions, called bullion weights, under 16 & 17 Vict., c. 29; 4. Bankers' weights, to weigh 10, 20, 30, 50, 100, and 200 sovereigns; 5. Apothecaries' weight; 6. Diamond weights and pearl weights, including carats; 7. Avoirdupois weight, under 5 Geo. 4, c. 74, and 18 & 19 Vict., c. 72; 8. Weights for hay and straw; 9. Wool weight, using as factors, 2, 3, 7, 13, and their multiples; 10. Coal weights, decimal under 1 & 2 Will. 4, c. 76, and 8 & 9 Vict., c. 101, Nos. 1, 5, 2, 1, '05, '025. We have also, in occasional scientific use, the weights of the metric system. For measures of length, we have the ordinary inch, foot, and yard. We have, in cloth measure, yards, nails and ells. There are four different sorts of ells. For nautical purposes, we have fathoms, knots, leagues, and geographical miles differing from the common mile. The fathom of a man-of-war is 6 feet; of a merchant vessel, 5½ feet; of a fishing-smack, 5 feet. We have also the Scotch and Irish mile, and the Scotch and Irish acre. There are several sorts of acres in the United Kingdom, and there are a great variety of roods. We have, in almost every trade, measures of length especially used in those trades; for the measurement of horses we have the hand; shoemakers use sizes; and we are compelled to adopt gauges where the French use the *millimètre*. These gauges are entirely arbitrary. The custom of the trade is the only thing which would decide the question, in case of dispute. For measures of capacity, we have twenty different bushels; we can scarcely tell what the hogshhead means; for ale, it is 54 gallons; for wine, 63. Pipes of wine vary in many ways; each sort of wine seems to claim the privilege of a different sort of pipe. For measures of weight, we have about ten different stones: a stone of wool at Darlington is 18 lb; a

stone of flax at Downpatrick is 24 lb.; a stone of flax at Belfast is only 16½ lb.; but it is also at Belfast 24½ lb., having in one place two values. The hundredweight may mean 100 lb., 112 lb., or 120 lb. If you buy an ounce or pound of anything, you must inquire if it belongs to Dutch, Troy, or avoirdupois weight." The *Chemical News* says:—

"The intrinsic excellence of the system of weights and measures established in France is almost universally recognised, and its superiority to the system, or rather the confusion of systems prevailing in this country, has long been felt. In scientific pursuits the French decimal system has been very largely adopted, with convenience in some respects, but with disadvantages resulting from the absence of any relation between it and the legitimate weights and measures used in commercial transactions.

"The Parliamentary Committee that have lately been inquiring into this subject have come to the conclusion that there would be a great advantage in the general adoption of a system of weights and measures which should be uniform, in itself, and with the system now established in France. The bill now before Parliament proposes therefore to substitute the French decimal weights and measures for those hitherto used in this country. This proposal certainly combines very great difficulties with, perhaps, equally great advantages, and it will doubtless be the subject of considerable difference of opinion. The inconveniences resulting from its adoption cannot but be very great, though they may be only temporary, and the great point to be determined is, whether the advantages ultimately resulting from the adoption of a system of weights and measures uniform with that of other countries, would be so considerable in themselves, and so much more important than the inconveniences of the change, as to justify its adoption.

"In France the introduction of the metrical system was effected at a period peculiarly favourable for a change of the kind, but still its practical recognition was a work of considerable time and difficulty. It may even be said to be scarcely complete at the present. The introduction of the metrical system, as the legitimate one, in this country, would probably be far from being generally followed by its actual adoption, just in the same way that the present legitimate weights and measures are not universally used. Local custom is so much more influential than sound principle, that even now transactions are carried on in many parts with weights and measures that are not the legitimate ones, and it is equally probable that if the metrical system were legitimately established, the actual use of the weights and measures now familiarly known, would be discontinued but very gradually. It would almost seem as if such a progressive change were contemplated by the framers of the bill as inevitable, since it provides that "For the more convenient subdivision of weights and measures, it shall be lawful to use the double and the half of all the said units, and their principal decimal divisions and multiples, as well as any other subordinate divisions which the Committee of the Privy Council for Trade may deem expedient." Thus it is proposed that the new pound should not be identical with the kilogramme, which is equal to 2·2046 pounds avoirdupois, but that it