The most ancient instrument used for ascertaining weight, and the one from which the others were derived, was proba­bly the common or equal-armed balance. It may have been invented much about the same period as the yoke or swing-tree employed to attach two beasts of burden to a common load. Both inventions were nearly allied in construction ; and their approximation in the nature of the object to be effected by their instrumentality, leaves little doubt that the one originated the idea of the other. In their first rude formation, they seem to have been indiscriminately used, both for weighing and equably dividing the labour of draft. Accordingly, the Greek words *ζυγὸς* and *ζυγὸν,* and their Latin derivative *jugum,* were employed to signify either the balance or yoke. In the Hebrew, the word used in the oldest books of Scripture to denote the balance, is one which is descriptive of the instrument itself, by having re­ference, through related words, to weighing and the ascer­tainment of weight ; while the word for yoke, without hav­ing descriptive reference to any instrument, signifies lite­rally *upon ;* seemingly in allusion to an already known contrivance being laid as a yoke, over or upon the necks of the two draft cattle ; a custom which still prevails in the east, as it anciently did in all countries. From the analogy furnished by the double application of the Greek and Latin terms, it may be concluded, that the beam of the balance was the instrument thus apparently refer­red to, and that it was therefore the earlier invention of the two.@@'

That the balance was the first of strictly mechanical con­trivances, is not perhaps improbable. Its great antiquity is attested by its being the only machine commemorated among the twelve signs. The name bestowed by the Greeks and Romans on this girdle of constellations was *ζωδιαχὸς,* zo­diac, a word having reference exclusively to living crea­tures. The balance being an inanimate object, seems therefore to have been long rejected by them, and its place supplied by giving to *Scorpio* a double share of the heavens ; the twelve names being then completed by ap­plying the word *Chela,* to denote that half of the sign into which the two claws of the animal extended. The intro­duction of *Libra,* or the balance, does not seem to have been fully sanctioned even in Virgil’s time ; for although elsewhere named by him, he describes its place as offering a favourable vacancy for the reception of Cæsar among the constellations ; and poetically figures the scorpion’s claws as already contracting to make room for him.@@2 The an­cient claims of the balance were however revived, and the name of *Chela* disappeared from the number of the signs. Among other nations, the balance held its place in the zo­diac from the highest antiquity. Along with the other signs, it is sculptured on the most ancient monuments of Egypt ; but that this was not their birth-place, may be in­ferred from the contrast between the figures of the signs and those native and strangely fantastical devices with which the Egyptian monuments are otherwise so profusely cover­ed. The Abbé Pluche, arguing from another circumstance, viz. the non-accordance of the seasons in Egypt with those which he considers the signs as marking, traces their in­vention to the plains of Shinar, and refers it to the near descendants of Noah.@@3 The annexed figure represents an ancient and well- formed balance from Egyptian sculpture. For the sake of distinctness, however, it is here shown as off the equilibrium. A line and plummet hang from the beam, to mark when a tongue, which points downward, reaches the vertical position.

Others, of a much ruder description, and without any con­trivance to indicate equilibrium, are given by Rosellini, from ancient Egyptian paintings.

The steelyard has generally been regarded as of greater antiquity than the common balance ; but in point of con­ception it is less simple, and likely therefore to have been of subsequent invention. The correctness of this infer­ence admits perhaps of being fully established. In Job and the Pentateuch, by much the oldest records extant, the Hebrew term employed to denote the balance is *moznaiιn,* a word of plural, or, as pointed by the Masorites, dual import. The kind of balance intended by it can be no other therefore than the common one ; the dual word *moznaim* evidently bearing reference to the two scales.@@4 That it cannot mean the steelyard, appears to be clear, because in it only one scale was required, while in every respect it is destitute of any double member from which a dual name could have arisen. This view, which appears to be deci­sive, is confirmed by the definition given of the word by Gesenius, who explains it to mean *the balance, properly a pair of scales.@@5*

The common balance being therefore the one mention­ed in Job, is ascertained to have been in use 2130 years b.c. or 218 years after the deluge.@@6 How much earlier than this it may have been used, cannot safely be con­jectured. The knowledge of it probably came down, through Noah’s family, from antediluvian times ; for with­out some means of ascertaining weight, the ordinary trans­actions of every-day traffic could not in any age have been carried on.

From the preceding observations, it appears likely that any allusion to the steelyard in the Bible should be made by a noun possessing a strictly singular tcrmination. The earliest use of such a word having reference to the subject, is in the time of Solomon, about 1014 years b. c. It oc­curs in Proverbsx xvi. 11, where the term *pheles* (explained by Gesenius, p. 643, to be *a balance, equipoise, properly a steelyard)* is followed by the word *moznaim,* already no­ticed. In the English version, this passage is translated *a just weight@@1 and balance,* &c. A more correct rendering would be, *a* *just balance and scales ;* first, because *pheles* has been preserved in the Arabic to the present day as meaning, not a weight, but a weighing instrument ; and, secondly, because the word occurs again in Scripture, viz. Isaiah, xl. 12, where its sense is fixed by the immediate

@@@1 Archdeacon Woodhouse (on the Apocalypse, 1805, p. 144), in explaining some peculiar views in regard to the translation of the Greek word *ζυγὸν,* gives priority to the yoke, rather incidentally perhaps than otherwise, since the question of date does not affect bis argument.

@@@2 Georgics, i. 32.

@@@s Pluche, Histoire du Ciel, Paris, 1739, v. i. pp. 18—30. A short memoir of this author will be found in its proper place in a former vo­lume of the present work.

@@@4 In nine passages of our version of the Bible, *mornaim* is translated in the plural *balances,* and in seven passages *balance,* Were the term *scales* employed for the plural rendering, and *pair of scales* for the singular, the English would express the original with much fidelity.

@@@5 Leo’s Gesenius, Cambridge, 1825, p. 386. The argument (in support of which Gesenius is here quoted) receives similar confirmation from the Greek, in which the singulars *ζυγὸς* and *ζυγὸν.* were generally employed to denote the yoke, and their *plurals the balance.*

@@@6 The chronology here followed is the common one, adopted and specially vindicated in this instance by Townsend (Chronological Ar­rangement of the Old Testament, 1826, v. i. p, 28). Dr Andrew, in his Scripture Chronology, 1822, p. 33, dates the time of Job 2215 years b.c. and Dr Hales, in his Analysis, vol. i. p. 185, 2337 b.c.

@@@’ Among the Hebrews, as among the Greeks, the shekel, maneh, and talent, were names of particular weights, by which their money and other precious articles were weighed. The Hebrew word for commercial or general weight was *eben,* literally *a stone,* and *ebenim,* in the plural, *stones;* probably the origin of the term stone weight.