skill of the master, or as tests of the ability of the scholar. Lucas de Burgo gives, as an example, one which in its completed form is 35 figures in length of hull, 5 figures in depth of hold, 4 more in height at stern, and 6 more midway along the deck. He says of it: "In truth it is a noble thing to see in any species and scheme of numbers, a galley perfectly exhibited, so as to be able to observe in their disposition and arrangement its stem and stern, its mast, its sail, its yards and its oars launched into the spacious ocean of Arithmetic." He exhorts the student, before entering on this last and most difficult of arithmetical labours, to invoke Apollo to inspire him with genius and resolution. Work of this kind was considered by them as a very complete gymnasium, both physical and mental for the scholar. The slow introduction of what we now call "decimal arithmetic" is one of the strangest facts in the history of arithmetic, not so much in reference to the ancient Greeks, whose system of notation hindered them, as to moderns, after the introduction of the Hindoo notation. Stifelius simplified Ptolemy's sexagesimal notation and showed that it applied to quantities *above* the unit, as well as below it, and said it was easy to see that the same reasoning applied to the denary system. Fineus, of Paris, almost had decimals, but his successors went back and not forward. Stevinus established the truth of the new application, but his method was not accepted. Napier adopted and simplified the notation, and about 1650 published "Decimal Arithmetic, teaching to perform all computations without fractions." And yet we find him after that, still, occasionally, using the older forms. We find about that time, too, curious mixtures of the Roman, the old Arabic and the decimal. Even now, the conception of the perfect unity of our system of notation is injured, in many of our books, by speaking of numbers to the left of the decimal point as *increasing*, in a tenfold ratio; and those to the right as *decreasing* in the same ratio; instead of showing that the numbers *all* increase from right to left by a common ratio; and that 1 in *any place* may be adopted as the unit of the system.

1×1, 2×2, etc., up to 12×12, properly arranged, gives our multiplication table. If this form a square, as it does generally, there are some things in it worth noticing, other than the set of products for which it is written, *e.g.*, the diagonal from the left downwards consists of the square of all numbers from 1 to 12.