gated nonsense. "Get the children to see this, and when men and women they will not make such mistakes." At all events it is safe to say that they will not be held accountable for such mistakes, nor for any others. But why waste words? The professor's conclusion—this luminous principle of division—is *prima facie evidence* of the absurdity of the premises, or of the—well, the ineptitude of the logician—or of both.

(3) The *divisor cannot be greater than the dividend.* "·8 ÷ 8 means how many eights in eight-tenths: how absurd! ·8 of a pie to be divided among 8 boys—do you mean to tell me, Doubter, that you are going to find how many 8 boys in ·8 pie?" By no means, my dear professor. Some faint excuse may be found for the hasty inference that "all men are liars"; there is none for the deliberate assumption that all men are fools. The *direct* proposition is: one-tenth repeated, eight times is eight-tenths. The inverse problem is: given the product, eight-tenths, and one (eight) of the two factors, to find the other factor, one-tenth. By what operation do we find this factor if *not* by division? "We want," he says, "1/8 of ·8 pie, and the answer is given at once, ·1 pie, but this *differs very widely from division.*" How, we ask, and how widely does it differ from division?

(4) The inferences (1), (3) and (5) are given implicitly in (4): "The divisor can never be an abstract number; when a number is divided into equal parts it is not division—it is partition!" In this the disciple follows his master (see *Talks on Teaching*, pages 105, etc.), and it is to be feared that the inevitable *ditch* is the destiny of both. Never an abstract nnmber! Then *one* inverse of the problem $4 × 3 = $12 must, we suppose, be insoluble. Given the $4 and the $12, and we get the other factor, 3, by mere division. But the other inverse, given the 3 and the $12 to find the $4—*hic labor est*: this is *not* division, it is—it is "partition"—some Newtonian thing which is away beyond division but which is, we hope, within the compass of the Calculus. One-third of $12 is $4, we are told, "and the answer is given at once." Just so. But in the example divide $209671 by 539, "the answer is *not* given at once." How then is it to be found? Not by division, it seems, "because divisor and dividend must be of the same name." Not by division because the divisor is abstract and one, "cannot take (say) 539 from 209671 *dollars.*" Not by division, because "we want to find the number of units in a group." How, then, is the quotient obtained since "it is not given at once?" The ordinary mind—the mind unblessed with the gift of genius—obtains it by *exactly* the same process that is employed in dividing by $539. And in all such (possible) problems in "partition," the "answer" is universally and necessarily found by the division process. Yes, "but bless your heart, Doubter, that, nevertheless, is not a problem in division—it is something widely (in the language of the Master, *radically*) different—it is *partition.*"

II.

Let us now try to look at the problem of division from the standpoint of common sense, premising that we have already anticipated some thoughts bearing on the subject.

It is an accepted principle that *we learn with what we have learned;* the "apperception" of the *new* depends upon the *old.* Division is the inverse of multiplication; in learning division we use our knowledge of multiplication; we marshal our "apperceiving" ideas in order to attack division. We know that in multipli-