equal on either side of it; and, balancing a pair of scizzors, show how the centre of weight or gravity is not at the middle of its length, that a gun or cannon is heavier at the brech than at the muzzle, and that of two men carrying a log of tapering timber, he bears the greater load who is at the bigger end of it and that to be fair, each man must take his turn at that.

The action of ordinary weighing scales is plain to any one, even to the youngest intelligence; that is when the arms are equal; and show the child, when balancing at the end of a board over a saw horse in the yard, how if his end of the bcard be twice the length the other, he can balance two of his own weight at the shorter end and thus the action of the lever scales; and how when he can weigh and knows the rule of three and is given a table of specific gravitties, (explaining that this is the weight of an of equal balk of any thing as compared with that of as much water) any one can find the volume of such an irregular or unmeasurable thing as a statue or piece of bronze or of any carved work by weighing it and then the rule of three-And how in like manner, after finding the volume or cubical contents of a piece of statuary. of such an irregular thing as a chair, an ill-shaped log of wood, a piece of stone rough from the quary, it may be measured in a box by the sand or sawdust or water it displaces and its weight got at again by specific gravity and rule of three-that in the same way, in the absence of a pair of scales or other device for weighing, the weight of a tub of butter could be got at, and that to arrive at the proportion of voids or vacua, or hollows in a load of broken stone, by far the simplest way would be to weigh an equal bulk of solid stone and then of so much of the solid bulk as would fill the same space when broken and then compare the two.

And a thousand other things which do not suggest themselves to the writer's mind just now, and which, even if they did, need not here be enlarged on, may be taught at