from stem to stern or pole to pole may do good duty; a lamp or light: the sun—a tack stuck in the orange, a point on the earth's surface; and holding the ends of the axis in your fingers or rather between thumb and finger and inclining it to the horizon, while pointing approximately in the direction of the north star or pole of the heavens, walk around the imaginary sun, revolving the orange as you go, upon its axis, thus illustrating day and night, and the seasons and the year, showing the while how the oblique rays spreading over a larger surface temper the atmosphere, rendering it cold or cool or rather not so hot; while when they strike more perpendicularly as at the equator and the tropics, the heat is more intense. Or the double rotation may be pictured by a vehicle or bicycle around a ring, a jet d'eau or the like—the forward motion of the wheel, the yearly—that around its hub or centre, the diurnal; while the smaller or steering wheel may represent the moon, since, though it does not appear to circulate around the earth, it does so in reality by, on account of the difference in velocity of its rotation, presenting itself successively to every portion of the equally rotating Earth.

And in another most striking manner can the rotation of the earth upon itself be made visible, to wit: a rehearsal of Foucault's experiment in the Paris Pantheon but on a smaller scale—suspend an iron or other heavy ball to a swivelled hook in the ceiling over your dining room or office table. Set it oscillating in a direction parallel to one side of the room, to a joint of the floor or table and in less than an hour you will find it oscillating in a plane quite different from that in which you started it. And that the rotation of the suspending string with the house and earth, has had no effect in changing the plane of oscillation, you can see for yourself by holding out your watch at arm's length, its chain between your thumb and finger, and after starting it to oscillate, revolve the chain which will also revolve the watch but have not the least effect in altering its plane of oscillation.

Now the writer does not propose to repeat here his paper on "Technical education of the people, in untechnical language" as read by him in May 1891 before section II of the Society at Ottawa; but merely to give you an idea of how to conceive a mode of illustration of that which you desire to learn or to impart. In these electric days of vast velocities of pulsations or vibrations, by the million millions in a single second of time, of tiny and even microscopic microbes; we are at a loss to see or to believe; but when the gold beater swells out his 4" cube of the precious metal to an area of 20 ft. by 20 or 400 ft. in area, the calculation is elementary that its thickness is reduced to the four millionth of an inch or that it takes or would require 250,000 such thicknesses thereof upon the other to make an inch; and if there be 400 leaves in an inch book, you then are forced to the conclusion that, thin as is a sheet of paper, the 400th. of an inch in thickness, yet is each such leaf 600 times the thickness