

as mercilessly as physicists are, and have a right to test reasoning, even where they cannot for themselves verify facts. When I stand here before lawyers, and before learned ministers, and before scholars better informed than I have had opportunity to be on these great themes, I feel, that, although not men of science, you have the right to test the reasoning of science. I am bringing to you here only what are conceded to be facts; and you are competent to test the logic of the facts. It is the right of every mind to look into the logic of whatever touches immortality, the soul, and all that is highest in human endeavor.

It is beyond contradiction that we know that these little points of structureless matter spin the threads, and weave the warp and woof, of organisms. But the bioplasts are of apparently just the same matter in the eagle and in the lion. You look into the centre of the egg of the eagle, and you will see a little mass of colorless, viscid substance, wholly structureless, so far as the highest power of the microscope can reveal its nature. But, when the egg begins to quicken, there is a different segmentation for each of the four great classes of animal forms. All eggs of the class of vertebrates, for instance, begin their development in the same way, and run on in the same way for a while; but your radiates begin another way, and your articulates another. Examined by all the physical tests known to science, bioplasm is the same, however, in your radiate, and articulate, and vertebrate.