

work as to obtain uniform conditions running through the determinations for a large number of teeth. The weights must be taken, always under like conditions, particularly of humidity and temperature of atmosphere; for they will vary with varying conditions in greater degree than the intrinsic variations in the density or relative weights of different teeth. Take, for instance, a tooth fresh from the mouth, wash it in distilled water, dry it in a napkin, and place it at once on scales of the required delicacy, and, in an atmosphere of ordinary humidity, it will lose weight so rapidly by the evaporation of water that it will be impracticable to balance the scales. This is true when the scales are enclosed in a glass case, and the weights worked by levers from the outside. The drier the atmosphere, the more rapid will be the loss of weight. Without control of this condition there can be no accuracy in results. This is corrected, in a fair degree, by converting the scale case into a moist chamber by an arrangement for packing its walls with wet blotting paper. Again, take a tooth that has been dried, or has been allowed to dry, in the open air, but is reasonably fresh, and make an attempt on different days to determine its weight, and it will be found that it will vary from one to four or five milligrams on different days. Now, if a hygrometer record is kept in connection with the weights on different days, it will be found that the differences in weight correspond with the differences in the humidity of the atmosphere. In a word, dentine, especially when reasonably fresh, has quite wonderful hygroscopic properties, absorbing water from the atmosphere in humid weather, and giving it out again in dry weather."

To quote again from page 357, as a further example of exactness: "It next becomes necessary to choose a specific part of the dentine, and confine the work to that particular part of each tooth. Why a particular part? This question was answered by the determination of the density of the different parts of the dentine of a large number of teeth. This revealed the fact that the dentine of the crown of a tooth is generally heavier in proportion to its bulk, is more dense, than the dentine of the root."

Of the many available and valuable examples in this article but one more will be given. On page 359 Dr. Black continues: "The teeth are allowed to stand in distilled water for twenty-four hours; no longer, for putrefaction is liable to begin. Then the tooth is cleaned and the section cut; the condition of the pulp is determined when cleaning the pulp chamber, and it is recorded as living or dead. The section is placed again in its tube in distilled water, and a number of these are placed in a steam sterilizer and brought to the temperature of live steam and so held for ten minutes. This is to drive all air out of the dentinal tubules and to prevent decomposition; also to expel all air from the water and to put it in the