

becomes a receiver of the electricity which is generated during mastication, and mingling of the positive and negative elements of food. Electricity is thus generated, as it would be in mixing elements in the laboratory. Without a metal in the mouth the electricity is what might be called organic, not polarized. It is the agent which adds delicacy to taste, also that which prompts natural selection of food to be eaten in pairs, as sweet and sour, in lemonade, acid and alkali, soda water, charged waters, roasted or broiled meats, roasted coffee, peanuts, etc., are negatives to saliva, and cause a natural current of animal electricity. This prepared food is taken into the stomach and the mysterious process of digestion completed, neutralization of the elements, the waste product is cast off, the electric vital energy is stored up in the muscles for work. Excuse this digression from the oral cavity. The truth of this will some day revolutionize physiology and establish digestion upon an electrical basis.

Now we are ready to advance another declaration. That metal in the mouth converts organized electricity into physical electricity. The effect is this, when such an unnatural current is discharged at a given point tissue or dentine is injured. Aluminum is almost free from potential, thermal changes and electricity passes readily through the plate without injury, so with gold when it rests upon membrane. This will be taken up again.

The next trial plate was of cast aluminum for experimental purposes. In order to cast aluminum it is slightly alloyed, and my first experience in wearing the plate was interesting and amusing. The plate was a full upper, except the second molar on each side. To increase the bite, and to prevent the molars from elongating a cap of the metal covered the coronal surface. The case articulated with a bridge on each side below. The plate was inserted in the afternoon, nothing remarkable was noticed except the metallic taste thought to be due to finish, etc. In the evening I went upon the street, and to my surprise all the street lights in sight flashed, and were unsteady. As all were affected alike I concluded the cause was at the Central Station. It was not many minutes before I could produce the flickering at will by closing my teeth. On opening the jaws enough to give space the lights were steady. By involuntary action the electric shock affected the optic nerve and produced the effect. The gold became charged, and on contact discharged and gave a shock. Burring out the metal and filling in with vulcanite corrected the trouble. But the cast metal was discarded for a rolled and swaged plate, which, to me or for me, is the most comfortable plate I have worn, and, in fact, it has very few objections.

To be fair with the cast metal I will say for a single plate, where there would be no gold opposite, I presume the alloy would not