THE SECOND LAW OF THERMO-DYNAMICS.

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Professor De Volson Wood has, in the May number of this Journal, attempted to show the geometric and mechanical impossibility of the process I have suggested for interfering with the ordinary exchanges of radiant heat between bodies. His mistake is in substituting a mill of his own invention for mine, and different from mine, and then showing that his mill will not work, as it certainly will not. In constructing his mill he has evidently placed his reflectors c , at right angles to the path of the ray. But I have made no such assumption in regard to the proposed position of my reflectors, for I say on the first page of my original article: "Let the surface of c which faces b be perfectly reflecting, and let the parts between its apertures be either concave or a series of inclined planes so directed that each of the projectiles will pass back through one of the apertures in b ." Is it denied that they can be so directed? They certainly can be so directed, even though "the apertures are so placed that a , c , b , are upon one (and the same) straight line," as I have stated them to be, instead of being upon different lines, as Professor Wood has placed them.

That this inclined position of the reflectors is contemplated all through my paper is seen also from a sentence on the page next to the last, where I say that the "vanes (of the screen c) may be so inclined as to return radiations coming from B partly to apertures in front of those from which they emanated and partly to those behind." In fact, the very proof on which Professor Wood relies to show that his mill will not work, demonstrates beyond doubt that my mill will work, for the part of his mill which stops radiations from A is just where I have an aperture to allow them to pass.

Change of Volume in Galvanizing.—E. Bouty has found by recent observations that the variations of volume in galvanic deposits, which exercise a pressure upon the moulds, and the Peltier phenomenon at the surfaces of contact, are mutually connected. He finds a certain intensity of current, which he calls the neutral point of temperature. In all higher intensities the electrode heats, and in lower intensities it cools, during the process of deposition.—*Comptes Rendus*.