435 PEPYS TO NEWTON 12/21/1693

December 21. 1693

Sr

If to what you have done, & which I can in no wise sufficiently acknowledge Your favour in, it could be excusable to come once more to You upon ye same Errand; it should be to ask You whether B's Disadvantage (in his Contest with A) bee any thing different under his Obligation to fling 2 Sixes at one throw with 12 Dyes, from what it would bee, were hee to doe it at twice with 6 Dyes at a time out of one Box, or at once out of 2 Boxes with that Number in each; I being yet (I must owne) unable to satisfie my selfe touching ye difference, i:e:, how it ariseth, though at ye same time You have putt mee beyond all doubt of A's having ye advantage in ye main of B. Nor must I conceal my being at ye same loss how to comprehend, even when flinging 12 Dyes at one throw out of a Single Box (the said dyes being tinged, halfe Green, half blew) my being less provided for turning up a Six with either of these different colour'd Parcels while flung together out of ye same Box, then were ye Six blew to bee thrown out of one Box, & the 6 Green from another; in which latter Case, I presume each of them severally would bee equally entituled to ye producing of a Six with A's Six white Ones, & by consequence of 2 when flung together. I am conscious enough that this is but fumbling, & that it ariseth only from my not knowing how to make ye full use of your Table of Progressions: but pray bee favourable to my unreadiness in keeping pace with you therein, & give mee one line of further helpe. I am most thankfully,

Dear sir,

Your obliged & most humble & faithfull Servant S. PEPYS

from H. W. Turnbull, ed., *The Correspondence of Isaac Newton*, Vol. III (Cambridge University Press, 1961)