

( 1904 )

the *White Conduit*, situate on the West of *Islington*, with much the like success as the former. Upon shaking the Bell before any Air was intruded, it was but just audible at 30 yards distance. Upon the Injection of one Atmosphere (begging leave as before to call it so) it became then as audible at 60 yards, as it was before at 30. A second being intruded, the Bell upon shaking might then be heard at 90 yards distance. But after that, tho near 100 strokes of the forces were repeated, yet could it hardly be heard 20 yards farther. Which I attribute in a great measure to the Reasons before given. The Morning was very Misty, which caus'd a great Dew upon the Grass. Little or no Wind stirring. And the silence requisite in making such an Experiment nicely, at last began to be interrupted by the sounds of the five a Clock Bells, and other Noises which joyn'd in Chorus with them from the City, contributing in some measure to the unsuccessfulness of the latter part of the Experiment: Which still I hope to prosecute farther, not despairing of finding such a Gage as will show the Certainty of the Quantities injected, without any danger or hazard in the Attempt.

VIII. *An Experiment made at a Meeting of the Royal Society, touching the Diminution of Sound in Air rarefy'd. By Mr Fr. Hauksbee.*

A Bell being included under a Receiver, which being shaken to make the Clapper strike, it was very observable that the Interposition of the Glass betwixt the Bell and the Ear, was a great obstruction to its Sound, notwithstanding it was audible at some good distance from it: But gradually withdrawing the Air, and making several Stops to shake the Bell at different Degrees of Rarefaction, the Diminution of the Sound at every Stop was very distinguishable. Till at last, when the Receiver was well exhausted of Air, the remains of Sound was then so little, that the best Ears could but just distinguish it: It appearing to them like a small shrill Sound as at a great remoteness. Upon suffering the Air to re enter ( which was not done all at once, but by turns ) 'twas easie to perceive the increase of Sound at the different times the Bell was made to ring: The Recipient being again repleat with Air, the Sound then seem'd something more clear and audible than it did upon its first inclusion.

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L O N D O N,

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