

ing for the supposed change of temperature ; but much more from the difficulty of understanding how this change of temperature operates. According to the usual opinion, the precipitation of water from the atmosphere, is the effect of the mingling together of currents of warm and of cold air, which are supposed to operate on each other in the following manner :

From the law of the tension of vapour, already described, it follows, that when two currents of air having different temperatures, but both alike saturated with vapour, are mixed together ; though the resulting temperature of the mixture will be the mean of the two, the resulting tension of the vapour will not be likewise the mean. The resulting tension of the vapour will always *exceed* the tension belonging to the resulting mean temperature ; consequently, there will be an excess of vapour, which will be precipitated in the form of water. Thus let us suppose two currents of air, both saturated with vapour, the one having a temperature of 40° , and the other a temperature of 60° ; and that these two currents of air are mingled together ;

	Inches of Mercury.
The tension or elastic force of vapour at 40° is equal to	·263
“ “ “ “ “ of vapour at 60° is	·524
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	·787
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Mean Tension	·398