

the average fall of rain in the country which it traverses does not, I believe, exceed 24 inches in a year. A far greater body of water comes down the Tees, Swale, Ure, Wharfe, Aire, Calder or Dun, though they drain smaller areas, because the annual fall of rain in the districts through which they flow is double that which feeds the Derwent. The average annual fall on the whole area of Yorkshire may be estimated at about 30 inches; on the east coast under 20, and on the extreme west under 50.

The great body of water which flows through Humber to the sea, has risen in vapour from the ocean and the land, ascended to high regions of the atmosphere, collected into clouds, and descended in snow-flakes, hail-stones, or rain-drops. There is perhaps no more instructive history than that of a drop of rain. The elements of its composition are diffused through the atmosphere, but so sparingly that they constitute less than one hundredth part of its bulk. Rain falls in Yorkshire to the average depth of about 30 inches in a year; and in some parts of Cumberland the annual fall of rain has been measured by Mr. Miller to four times this amount; yet at any one moment, upon the average, the atmosphere probably contains of vapour only so much as would yield over all the globe a depth of three inches of water. And this quantity may be always nearly the same, though almost every particle of it may be, or rather must be, many times raised in evaporation, and thrown down in snow or rain in the course of a single year. The drop, gathered by accretion of minute particles, may be snow, ice, or water, according to the circumstances of the place and time; it may be collected from elements which have floated from another quarter of the globe, or have been exhaled from the surface immediately below. On the ground, the drop is divided between two rivals—the earth and the air. The portion which enters the earth is again demanded by two claimants;—vegetation, acting by the roots of plants, carries upward much moisture to the air, and the porous subsoil and rock conduct the residue to the hidden reservoirs of springs. After seasons when rains are scanty, this residue is