

tions on coasts, as well as in the rain of towns and industrial districts. Rain taken at the Land's End in Cornwall during a strong southwest wind was found to contain 2.180 of chlorine, or 3.591 parts of common salt, in every 10,000 of rain. The mean proportion of chlorine over England is about 0.022 in every 10,000 parts of rain; at Ootacamund 0.003 to 0.004.⁴⁶

In washing the air, rain carries down also inorganic particles or motes floating there; likewise organic dust and living germs.⁴⁷ As the result of this process the soil comes to be not merely watered but fertilized by the rain. Angus Smith cites the experience of J. J. Pierre, who found by analysis that in the neighborhood of Caen, in France, a hectare of land receives annually from the atmosphere by means of rain:⁴⁸

Chloride of sodium.....	37.5	kilogrammes
“ potassium.....	8.2	“
“ magnesium	2.5	“
“ calcium.....	1.8	“
Sulphate of soda.....	8.4	kilogrammes
“ potash.....	8.0	“
“ lime.....	6.2	“
“ magnesia.....	5.9	“

⁴⁶ Angus Smith, "Air and Rain." Rivers Pollution Commission, 6th Rep. 1874, p. 425. During a westerly gale on the Atlantic coasts of Britain, when the sea is white with foam, the air, elsewhere clear, may be seen to be quite misty alongshore from the clouds of fine spray swept by the wind from the crests of the breakers. This salt-water dust is borne far inland. From the investigations carried on at the Agricultural Laboratory, Rothamsted, it appears that the average proportion of chlorine is 2.01 per million parts of rain, which in a rainfall of 31.65 inches is equal to a discharge of 24 pounds of pure sodium chloride per acre. At Cirencester, where the rainfall is 33.31 inches, the proportion of chlorine is 3.25 per million, which is equivalent to 40.3 pounds of sodium chloride per acre. R. Warington, Journ. Chem. Soc. 1887, p. 502.

⁴⁷ Among the inorganic contents of rain and snow, fine terrestrial dust and spherules of iron, probably in part of cosmic origin, have been specially noted. See authorities cited ante, p. 125; A. von Lasaulx, as cited on p. 575. The organic matter of rain is revealed by the putrid smell which long-kept rain-water gives out.

⁴⁸ Angus Smith, "Air and Rain," p. 233.