

which the oldest Arab had never witnessed. Here we see rain returning to the desert on restoring the trees.

In Spanish America, lakes have had their area diminished and their shores dried, from the general removal of the trees by the Spaniards; but now that cultivation has been resumed by the enterprising Americans, these lakes are being again filled up with water, and the shores are once more plentifully supplied with rain. Extensive drainage, although beneficial to the rapid growth of plants, and to the profit of the agriculturist, may also tend to diminish the rain-fall by robbing the springs of their supply, and by conducting the surface water more rapidly to the rivers and to the ocean.

Those lands near the sea, over which the wind transports the aqueous vapor there acquired, are, as a general rule, the most plentifully watered, while those distant from this source receive less in amount; these facts are fully borne out by actual observations. And may not the diminished rain-fall in England be attributed in a great measure to the extensive surface draining by drain-tiles and other methods which are resorted to to promote the rapid growth and excessive yield of grain and some of the other agricultural products?

It will be seen that rain increases with the temperature, from the fact that hot air holds more water suspended than cold. The humidity of the atmosphere attains its maximum at the sea-shore, and there tends to produce the greatest amount of precipitation. These causes are always present, but in a modified degree, and frequent, though small, showers are the necessary consequence; heavy and violent rain storms are of rare occurrence there. In proportion as the mercurial column in the barometer falls, there is more chance of rain being formed, inversely in countries with a high barometric pressure, such as on the 30th degree of latitude, where there is very little rain. Such regions have a tendency to become deserts. Variations of temperature and irregularities of climate increase the showers of rain, and the formation of the soil plays also an important part in the production of rain, for ascending concave surfaces of soil receive a maximum, more especially when exposed to rainy winds; and more rain falls in *wooded* than in *bare* districts.

It rarely or never rains on the coast of Peru, in the great Valley of the River Columbia, in that of the Colorado in North America, the Sahara in Africa, and the Desert of Gobi in Asia, while in Patagonia and Chiloe it rains almost every day.

Days of rain are more numerous in high than in low latitudes. In the region Calmus it rains during a part of every day, the fall amounting to 225 inches in the year.

The heaviest fall of rain on our globe takes place on the Khasia Hills, to the north-west of Calcutta, and amounts to 600 inches annually. The greatest amount that has fallen in the vicinity of Montreal in one hour, was 1.110 inches.

These observations extend over a period of upwards of twenty years. Below is a table, showing the annual mean amount of rain-fall at some