mented force, they urge their way downward. Soon they are joined by other streamlets, and thus the united waters form a rivulet, which goes wandering about the country, seeking the thirsty and weary brute, and dispensing its blessings to all that choose to partake. On this traffic no excise-tax has been imposed. The rivers are still free to perambulate the country, and furnish entertainment and comfort for man and beast.

Suppose, for a moment, the surface of the drift had been left an unbroken plain. The native cisterns might still have been inclosed, but no leakages could occur; neither spring nor rivulet could originate under such circumstances. A stream originating in another region might flow through this, but even such a stream would diminish instead of augmenting its volume. The greedy sands would consume it. Like the rivers of Nevada, its beginning would be more imposing than its end.

But suppose, farther, that in a country of such unbroken surface, the argillaceous particles had not been separated in beds of clay. Suppose the entire mass of drift materials a promiscuous mixture of coarser and finer constituents. What would become of the water precipitated from the clouds? It must descend to the rocky foundations of the land. Man, who would seek a well, must dig to the bottom of the formation. This might be one, two, or five hundred feet. Such a condition of things would be rather inconvenient. And yet the existing condition results from an incident in geological history which, at first view, seems only destructive and retrogressive.

Nor is this all. Vegetation has greater need than man that a large body of water should be held within a limited distance of the surface. Were rains always frequent, this necessity might not exist; but large portions of the earth's surface are subject to droughts of greater or less severity.