

the sea-shore; this figure is intended to illustrate two causes of the production of Springs by *descent* of water from porous strata at higher levels; the first, producing discharges in vallies of Denudation, along the line of junction of porous with impermeable strata; the other, by the interruption offered to descent of water by Faults that intersect the strata.

The Hills A, C, are supposed to be formed of a permeable stratum  $a, a', a''$ , resting on an impermeable bed of Clay  $b, b', b''$ . Between these two Hills is a Valley of Denudation, B. Towards the head of this Valley the junction of the permeable stratum  $a, a'$ , with the Clay bed  $b, b'$ , produces a spring at the point S.; here the intersection of these strata by the denudation of the valley affords a perennial issue to the Rain water, which falls upon the adjacent upland plain, and percolating downwards to the bottom of the porous stratum  $a, a'$ , accumulates therein until it is discharged by numerous springs, in positions similar to S, near the head and along the sides of the vallies which intersect the junction of the stratum  $a, a'$ , with the stratum  $b, b'$ . See V. I. p. 559.\*

The Hill C, represents the case of a spring produced by a Fault, H. The Rain that falls upon this Hill between H, and D, descends through the porous stratum  $a''$ , to the subjacent bed of Clay  $b''$ .

\* The term *Combe*, so common in the names of upland Villages, is usually applied to that unwatered portion of a valley, which forms its continuation beyond, and above the most elevated spring that issues into it; at this point, or spring head, the valley ends, and the *Combe* begins. The conveniences of water and shelter which these spring-heads afford, have usually fixed the site of the highest villages that are planted around the margin of elevated plains.