

PLATE 69. V. I. p. 565.

Fig. 1. Theoretical section, illustrating the Hydraulic conditions of strata disposed in the form of Basins. See Vol. I. p. 565, Note. (Original.)

Fig. 2. Theoretical section, shewing the effect of Faults and Dykes on water percolating inclined and permeable Strata. See Vol. I. p. 566, Note. (Original.)

Fig. 3. Double Artesian Fountain at St. Ouen, near Paris, raising water to supply a Canal basin, from two strata at different depths. The water from the lowest stratum rises to the greatest height. See V. I. p. 562. Note. (Hericart de Thury.)

and deposited in the East and West veins, and near the rocks to which they were determined by the electric currents."

In a Letter to the Author upon this subject (June 29, 1836), Mr. Fox further remarks:

"It should be observed that in proportion as the deposition of the metals proceeded, the voltaic action must necessarily have been considerably augmented, so as to render it highly probable that the metals were chiefly deposited at rather an early period in the history of the containing veins; and their intersection by other veins seems to strengthen this probability."

Mr. Fox has found by experiment that when a solution of muriate of Tin is placed in the voltaic current, a portion of the metal is determined towards the negative pole, whilst another portion in the state of an oxide passes to the positive pole. This fact appears to him to afford a striking illustration of the manner in which Tin and Copper have been separated from each other in the same vein, or in contiguous veins, whilst these metals also very commonly occur together in the same vein.