

mechanical origin not appearing until a much later period, and becoming increasingly abundant down to the present time, when they constitute almost all the deposits that are now taking place.<sup>1</sup>

One of the most obvious questions that would arise, we might suppose, in the mind of any student of ordinary capacity to whom the theory was propounded, would be how did the deep primitive ocean disappear. Steno, Leibnitz, and other older writers had conjectured that the waters found their way into vast caverns in the earth's interior. Such a conjecture, however, was not suited to the taste of the true Wernerian, who would allow no speculation, but took his stand on a basis of ascertained fact. Well, we may be curious to know how he disposed of the difficulty. Yet we shall search in vain through Wernerian literature for any serious grappling with this obvious, and one would have thought formidable, objection to the doctrine. Werner himself appears to have inclined to the belief that the waters vanished into space. He thought it possible that "one of the celestial bodies which sometimes approach near to the earth may have been able to withdraw a portion of our atmosphere and of our ocean."<sup>2</sup> But if once the waters were abstracted, how were they to be brought back again, so as to cover all the hills on which his highest Floetz formations were deposited?

<sup>1</sup> Jameson's *Geognosy*, p. 78. Werner's followers, from the prominence they gave to the sea in their geognosy, were styled Neptunists, while those of Hutton, who dwelt on the potency of the earth's internal fire, were dubbed Plutonists or Vulcanists.

<sup>2</sup> See D'Aubuisson's *Géognosie*, i. p. 414 (1819).