

a subaqueous deposit of the Lias formation, never yet explored by geologist, because never yet laid bare by the ebb ; though every heavier storm from the sea tells of its existence, by tossing ashore fragments of its dark bituminous shale. I soon ascertained that the shale is so largely charged with inflammable matter as to burn with a strong flame, as if steeped in tar or oil, and that I could repeat with it the common experiment of producing gas by means of a tobacco-pipe luted with clay. And, having read in Shakspeare of a fuel termed "sea coal," and unaware at the time that the poet merely meant coal brought to London by sea, I inferred that the inflammable shale cast up from the depths of the Frith by the waves could not be other than the veritable "sea-coal" which figured in the reminiscences of Dame Quickly ; and so, assisted by Finlay, who shared in the interest which I felt in the substance, as at once classical and an original discovery, I used to collect it in large quantities, and convert it into smoky and troubled fires, that ever filled our cavern with a horrible stench, and scented all the shores. Though unaware of the fact at the time, it owed its inflammability, not to vegetable, but to animal substance ; the tar which used to boil in it to the heat, like resin in a faggot of moss-fir, was as strange a mixture as ever yet bubbled in witches' cauldron,—blood of pterodactyle and grease of ichthyosaur,—eye of belemnite and hood of nautilus ; and we learned to delight in its very smell, all oppressive as that was, as something wild, strange, and inexplicable. Once or twice I seemed on the eve of a discovery ; in splitting the masses, I occasionally saw what appeared to be fragments of shells embedded in its substance ; and at least once I laid open a mysterious-looking scroll or volute, existing on the dark surface as a cream-colored film ; but though these organisms aised a temporary wonder, it was not until a later period that I learned to comprehend their true import, as the half-effaced but still decipherable characters of á marvellous record of the gray, dream-encircled past.

With the docile Finley as my companion, and left to work out my own will unchallenged, I was rarely or never mischie-