may be viewed as alcohol, the oxygen of which has been replaced by sulphur, as in the following formulæ :

The pyroxylic spirit of Dumas and Peligot being extremely analogous to alcohol, Dr Gregory examined whether this analogy extended to the production of a compound analogous to Mercaptan ; and, by substituting pyroxylic spirit for alcohol, he obtained this compound, which, although in most of its properties closely resembling mercaptan, is distinguished from it by a greater degree of volatility, boiling at 70° F., while mercaptan boils at 185° F. The following formulæ exhibit the composition of the pyroxylic spirit, according to Dumas and Peligot, and the probable composition of the new liquid :

The new liquid has, like mercaptan, a most insupportable alliaceous odour, and exercises an action on red oxide of mercury similar to that from which the name Mercaptan is derived.

4. On a curious Phenomenon observed in the Island of Cephalonia, and on the proximate cause of Earthquakes in the Ionian Islands. By Dr John Davy. Communicated in a letter to Professor Forbes.

Dr Davy communicates the description of certain streams of sea-water which appear to be constantly flowing into the interior of the earth, by four openings, near the town of Argostoli, in Cephalonia. These are now applied as sources of mechanical power. Dr Davy views this curious fact as probably related to the very remarkable local earthquakes which affect the Ionian Islands, and which appear to be disconnected with any volcanic appearances, or even the occurrence of trap-rocks. Dr Davy conceives that these phenomena may be attributable to the absorption of this quantity of sea-water constantly received into the land by the marly beds which occur in Cephalonia. This absorption, Dr Davy concludes from direct experiment, may produce an enlargement of the volume of the marl. This supposition is supported by the remarkable fact, that, in the Ionian Islands generally, these earthquakes occur entirely in the low and marly parts of those islands, and never in those parts connected with solid rock.