

NOTE TO PAGE TWENTY-SEVEN.

In relation to the supposed increase in the weight of the Hillsborough asphalt, in descending, I have recently proved that such is not the case. For whereas the average specific gravity previously returned by nine investigators, gives 1.099, a mass, taken by myself in the presence of several parties, from the lowest worked part of the vein in Level 8, with a view of testing that fact, showed a specific gravity of 1.091 only.

NOTE TO PAGE TWENTY-NINE.

In relation to this property of generating inflammable gas in mines of asphaltum, we might cite a case which appears to be somewhat applicable to the New Brunswick mine, but is on a much more superb scale. Travellers, fully credence, have described a remarkable mine of Asphaltum near the border of the Lake of Maracaibo, in Venezuela.

"The bituminous vapors arising from this mine are stated to be so easily inflamed that, during the night, phosphoric fires are continually seen, which in their effect resemble lightning. They go by the name of the '*Lantern of Maracaibo*,' because they serve for light-house and compass to the Spaniards and Indians, who, without the assistance of either, navigate the lake."

NOTE TO PAGE THIRTY-THREE.

The following note, received from Mr. William Rice, an experienced manufacturer of Asphaltic Paint and Varnish in Philadelphia, affords conclusive evidence of the solubility of the New Brunswick Asphaltum, and its adaptation to the purposes specified.

RICHARD C. TAYLOR, Esq.

I find that the Asphaltum is easily soluble in Coal Tar, Coal Tar Pitch, Coal Tar Naphtha, and Turpentine, at a heat of about 220 or 230 degrees of Fahrenheit. It makes a beautiful varnish, and, from all appearance, will be a substantial one. It is very much like Trinidad Asphaltum, but is much more solid, and requires a greater heat to dissolve; and in my opinion is of the same series of deposits.

It has very little earthy matter in it. I should like to contract for a quantity of it for the purpose of making it into varnish.

Wm. Rice,
Manufacturer of Marine Paint.

Philadelphia, August 5th, 1851.