

bored a hole through this black slate, and the gas soon collected in sufficient quantity to explode, when ignited.

There is a ridge of sand at Fredonia, as at many other places, between Cleveland and the outlet of the Niagara from Lake Erie, but I tried in vain to identify the ridges with those seen by me at Rockport, and could not discover that their heights, as estimated by residents, agreed at different places. Some of them, indeed, according to Mr. Whittlesey, the engineer, decline in altitude as they are traced eastward.

We next reached Buffalo, and found so many new buildings erected since the preceding autumn, and new shops opened, that we were amazed at the progress of things, at a time when all are complaining of the unprecedented state of depression under which the commerce and industry of the country are suffering.

At the Falls of Niagara, where we next spent a week, residing in a hotel on the Canada side, I resumed my geological explorations of last summer. Every part of the scenery, from Grand Island above the Falls to the Ferry at Queenstown, seven miles below, deserves to be studied at leisure.

We visited the "burning spring" at the edge of the river above the rapids, where carburetted hydrogen, or, in the modern chemical phraseology, a light hydro-carbon, similar to that before mentioned at Fredonia, rises from beneath the water out of the limestone rock. The bituminous matter supplying this gas is probably of animal origin, as this limestone is full of marine mollusca, crustacea, and corals, with-