

blue. But these springs cannot be brought into use, on account of their being covered by the waters of the river in the spring and autumn.

THE CALEDONIA SPRINGS.

The mineral springs known under the name of Caledonia are three in number. The first, near the Hotel, is a gas spring: its specific gravity is 1.0038. The second is saline: its specific gravity is 1.0087. The third is sulphureous: its specific gravity is 1.0062. The temperature of all three is 44° , and they are situated in a ravine at a few paces distance from each other. The first disengages a great quantity of carbonated-hydrogen gas mixed with carbonic acid and oxide of carbon. The second disengages the same gases, but in a very small quantity. The third hydro-sulphuric acid also in a small quantity. These gases are disengaged in much greater quantity before a storm; they diminish with the heat, and are in still less quantity in very hot weather. I think this is owing to the atmospheric pressure which may condense the gas by its action on the surface of the water, while another cause may exist with relation to the springs which disengage hydro-sulphuric acid. It may be supposed that it arises from the sulphuret of iron or pyrites with which the country abounds, and which is found in the different beds of earth, being dissolved in much greater quantity by the water in the seasons in which they are most abundant, and in which the decomposition of the sulphuret is more facilitated than at a period when the spring is fed from one part of the bed only.

An analysis of the Caledonia waters had already been made by Mr. Chilton of New York. I am sorry to remark that they do not agree with his analysis, not as regards the quantity of matter, but principally as regards their composition and the existence of substances in them. According to him, these waters contain sulphate of lime, iron, and potassium. I have not even been able to detect any traces of these substances; consequently I think that Mr. Chilton has taken carbonate for sulphate, and has found the iron and potassium in the ashes which may have been blown by the wind into the springs, or in the bottles which contained the water, if they had not been well cleansed.

As magnesian, iodurated, and sulphureous springs, they are very useful, and on account of the temperature which is always regular, are excellent for rheumatism and gastric diseases; they are besides useful for diseases in the nature of *goitres*, for which