

is also found. Much of the trap here is amygdaloid of every variety and texture. In some the cavities are lined with beautiful crystals of heulandite, white and red. In another variety they are filled with Thomsonite, a finely radiated mineral of the zeolite group, while small crystals of diabantine, of the chlorite group, are found encrusting the cavities of another variety. Laumontite is abundant, but owing to the fashion which this mineral was of crumbling when exposed to the air and free from moisture, it is not always easy to get good cabinet specimens. So abundant is it in some places that, owing to its crumbling, the cliff is there made more susceptible to the action of the waves and cavern of considerable dimensions are formed. Apophyllite in square prisms and of a varying green color is also found here, sometimes associated with the preceding. Ulexite, a beautiful mineral composed of satin-like fibres, and quite fragile, was also found in small quantity, as also several others, which, for the sake of the general reader, we will not describe.

Very interesting also were our visits to "The Rock" and to other parts of the beach at low water, on which occasions shells, crabs, star-fishes and other marine animals, together with a variety of sea weeds, would be stowed promiscuously into the collecting basket to be assorted and cared for at leisure. But space forbids a description of our work in this line. Suffice it to say that every minute of those two weeks was thoroughly enjoyed. Even a rainy day was considered no disadvantage. There were animals to be dissected, there were objects to be mounted for the microscope, there were uncertain minerals to be tested, and the accumulating material to be packed for transportation.

We wish that every reader of the SCIENTIST who is at all interested in the study of Nature, could visit Black Rock as we did; and not Black Rock alone but other points of interest near, such as Cape d'Or just across the Bay, Isle Haut, standing grim and solitary farther out, Cape Split to the eastward, standing out like a gigantic break-water to enclose Scotts Bay, a little farther on, Cape Blomidon of poetic fame, and many other localities of equal interest. We have a country of whose mineral wealth in respect both of those that are ornamental and useful we should feel proud. Some of the minerals that we have mentioned, together with others not enumerated, are not to be surpassed by those of any other country, while Nova Scotia's mines of gold and iron and coal rank among the best. What could be more fitting than that every young man and young woman, boy and girl, in Nova Scotia should gain a practical acquaintance with those minerals for which our country is so justly celebrated?

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FOR THE SCIENTIST.

CHEMISTRY.

II.

The chemist considers all matter, whether solid, liquid or gaseous as made up of minute particles, which, being arranged in close approximation, go to make up larger bodies. These particles are of themselves too small to be observed. These very minute portions of matter are called by the chemist *molecules*, that is the smallest particle of matter which can exist in a free state, or it is the ultimate limit of divisibility by mechanical means. Thus, one of the smallest particles into which we can conceive a drop of water to be divided would be termed a molecule of water.

Generally speaking these molecules are acted upon by two opposing forces