

tam illustri imperii nostri regno munere ac officio regio fungens, non tam mihi. illa bonæ voluntatis et fidelitatis pignora, quam Reginæ, cujus regnum, ut ita dicam exhibuisse ac sustinuisse traditum, accipiam expressa ac provocata.

Quæ cum ita sint, amici, omnia quæ bona, omnia quæ culta, omnia quæ honesta, invenite, corripite, hac adolescentiæ hora occupate; hinc vera virtute, vera scientia, vera fortitudine induti, non solum vobismet ipsis sed patriæ tam vestræ quam meæ præsidium et decus floreatis.

At the conclusion of the reading of the address there was loud applause.

His Excellency also offered the following remarks in English:—Although, my young friends, I am very grateful for the kind reception you have given to the very imperfect expression of my thanks, which I have endeavoured to convey to you in that language in which you yourselves have addressed me, in words which I may hope are not likely to be subjected to that severe criticism which they would be quite unable to sustain, I feel that the expression of my thanks would be incomplete unless I took this opportunity for asking that to-morrow may be given to the scholars of this institution as a holiday. (Cheers.) I have also the pleasure of stating that it is my intention, so long as I am fortunate to occupy the honorable position of Governor-General of Canada, to offer to the students of this school a silver medal, to be given, subject to such conditions as, after consultation with your superiors, may be determined upon. (Cheers.)

Mr. Ritchie, another of the students, then presented His Excellency with a bouquet of beautiful flowers from the Students of the 5th and 6th forms.

Hearty cheers were then given for the Queen, the Governor General and Countess Dufferin, and the Masters of the School, and the proceedings then closed.—*Gazette*.

### Mars and the Earth Compared.

The first view of Mars shows an analogy with our own planet, in the distribution of climates into frigid, temperate, and torrid zones. The study of its topography will, on the other hand, show a very characteristic dissimilarity between the configuration of Mars and that of the earth. On our planet the seas have greater extent than the continents. Three-fourths of the surface of our globe is covered with water. The *terra firma* is divided chiefly into three great islands or continents, one extending from east to west, and constituting Europe and Asia; the second, situated to the South of Europe, in shape like a V with rounded angles, is Africa; the third is on the opposite side of the earth, and lies north and south, forming two V's, one above the other. If to these we add the minor continent of Australia, lying to the south of Asia, we have a general idea of the configuration of our globe.

It is different with the surface of Mars, where there is more land than sea, and where the continents, instead of being islands emerging from the liquid element, seem rather to make the oceans mere inland seas—genuine mediterraneans. In Mars there is neither an Atlantic nor a Pacific, and the journey round it might be made dryshod. Its seas are mediterraneans, with gulfs of various shapes, extending hither and thither in great numbers into the *terra firma*, after the manner of our Red Sea.

The second character, which also would make Mars recognizable at a distance, is that the seas lie in the

southern hemisphere mostly, occupying but little space in the Northern, and that these northern and southern seas are joined together by a thread of water. On the entire surface of Mars there are three such threads of water extending from the south to the north, but, as they are so far apart, it is but rarely straits which connect them constitute a very distinctive character of Mars, and they are generally perceived whenever the telescope is directed upon that planet.

In order successfully to observe Mars, two conditions are requisite: First, the earth's atmosphere must be clear at the point of observation; and, secondly, the atmosphere of Mars must be also free from clouds—for that planet, like the earth itself, is surrounded by an aerial atmosphere which from time to time is obscured by clouds just like our own. These clouds, as they spread themselves out over the continents and seas, form a white veil which either entirely or partially conceals from us the face of the planet. Hence the observation of Mars is not so easy a matter as it might at first appear. Then, too, the purest and most transparent terrestrial atmosphere is commonly traversed by rivers of air, some cold, which flow in different directions above our heads, so that it is almost impossible to sketch a planet like Mars, the image seen in the telescope being ever undulating, tremulous, and indistinct. I believe that, if we were to reckon up all the hours during which a perfect observation could be had of Mars, albeit his period of opposition occurs every two years, and although telescopes were invented more than two and a half centuries ago, the sum would not amount to more than one week of constant observation.—G. FLAMMARION, in *Popular Science Monthly* for December.

### Fur-bearing Animals—The Alaska Seal.

The skins used for fancy furs and robes are mostly obtained from the carnivorous or flesh-eating animals; as the sable, marten, mink, ermine, seal, otter, bear, etc.: some are obtained from the rodents or gnawers; as the beaver, coypou, or nutria, muskrat, rabbit, etc.: and a few are obtained from the ruminants, or those that chew the cud; as the bison, that supplies our buffalo-robes; and the paseng or wild-goat of Persia and the Caucasus, and the Assyrian or Siberian sheep, from whose young kids and lambs we obtain the much-used Astrakhan.

By far the most valuable fur that passes under the name of seal is that of the sea otter, or Alaska seal, which, while it has the habits of the seal, forms a connecting link between it and the otter. A large portion of this fur is obtained from two islands, St. Paul and St. George, in latitude about 56½° north, in the Sea of Behring or Kamtchatka, about 250 miles northwest of the peninsula of Alaska. These islands were sold by Russia to the United States as a part of the Alaska territory. When, in 1869, General George H. Thomas was sent by our government to examine and report upon the country, he estimated the fur-bearing seals, or sea-otters, seen each summer on these islands, at from 5,000,000 to 15,000,000, lying in the rookeries, and covering hundreds of acres. For the last fifty or sixty years, the Russian Government had limited the number of skins to be taken yearly to some 80,000 or less. As General Thomas recommended that the hunting and killing of these animals should be regulated by law, Congress, in 1870, adopted substantially the Russian system; and in a few weeks the Alaska Company, of which Hon. Henry P. Haven, of New London, Connecticut, is a prominent owner and influential officer, leased from the United States the islands of St. Paul and St. George. The company contracted to pay