

## CORRESPONDENCE.

*Editor "Acadian Scientist":*

If your botanical readers, who are commencing practical botany would send me as many of the weeds and plants growing in their vicinity, *with their common names as used in their locality*, I would not only be very much obliged, but would gladly return them the botanical names and render such other assistance as I might be able. My object is to find out to what extent the same popular names are applied to the same plants in different sections of the country. If your readers take an interest in the work, I shall be happy to give them the results of my observations, when completed, in the SCIENTIST.

All parcels addressed to "Pictou Academy, Nova Scotia," shall receive immediate attention. Marked "*botanical specimens*," they pass through the Canadian and American mails at the rate of only one cent for every quarter of a pound.

A. H. McKAY.

A correspondent from New Brunswick asks an explanation of a selected paragraph which appeared on page 5 of the July No. of the SCIENTIST, in which it is stated that a man weighing 150 lbs. on the earth would weigh 45,000 lbs. on Jupiter. In reply, the Astronomical Director would say that he is ignorant of the source of this selection and further that he cannot defend the statement. The law of attraction is this—"The attraction of a sphere upon a point at its surface is directly as the mass and inversely as the square of its radius; that is if you double the mass of a sphere while the diameter remains the same you double the weight of a body on the surface; if you double the diameter while the mass

remains the same the weight of a body at the surface is reduced to one-fourth.

Now the mass of Jupiter is 213 times that of the earth but its diameter is 11 times as great; therefore the relative attractions at the surfaces of these two planets would be as 213 is to 11<sup>2</sup> or 121, and 1 lb. on the earth would weigh  $\frac{213}{121}$  lbs. on Jupiter, or nearly 2 lbs., if the two planets were at rest. But Jupiter rotates in about 10 hours and its circumference is 11 times that of the earth so that a point on Jupiter's Equator is rotated 25 times as fast as a point on the earth and would consequently have a correspondingly greater centrifugal force or tendency to overcome the force holding it to the surface. I have no doubt therefore that the common assertion that gravity on the larger planets is vastly in excess of the same force on the earth is entirely incorrect. The difference in centrifugal force should overcome the slight difference in attraction and render the weight of our assumed man about the same on either planet. If I am wrong in this, I am open to correction for I know that a very different statement is often made.

A. E. C.

## LITERARY NOTICES.

The current number of the Princeton Review is at hand, and proves to be of more than usual interest. The leading article is one by President Porter of Yale College, entitled "A College Fetich" and which reviews the utterances of Mr. Chas. Francis Adams, Jr., before the Harvard Alumni. Mr. Adams, it will be remembered, referred to the study of the classics as the fetich worshipped in colleges, and claimed that small benefit was derived by himself and classmates from such study, and that French and German would have been of greater service to them in practical life. President Porter holds that a thorough knowledge of the classics not only makes simple the study of modern languages, but that such knowledge cannot