

quest; and I take this opportunity to thank those who have attempted their solution. Some of the papers sent in show much labour and intelligent thought. The first prize goes to Miss Lucy M. Edey, and the second to Miss Ida G. Morrison, both of Billerica, Que.

I am, etc.,

A. W. KNEELAND.

Montreal, Sept. 5th, 1896.

QUESTIONS.

1. Is the division of the earth into zones natural or artificial?
2. What determines the width of the zones?
3. What would be the results if the earth ceased to revolve on its axis?
4. What, if its axis were not inclined to the plane of its orbit?
5. Under like physical circumstances, why should it be hotter in the southern hemisphere during summer than in the northern during summer there?
6. Seeing that the earth is 3,000,000 of miles nearer the sun during our winter than in summer, why is winter not warmer than summer?
7. How could tropical plants and animals have once lived in the frigid zones?
8. What makes it rain?
9. Why does snow fall in crystals?
10. Why are our springs drying up?
11. What are the effects of cutting down our forests?
12. Why are river floods more frequent as the country becomes more fully settled, seeing that the rainfall becomes less?
13. Why do earthquakes and volcanoes go together?
14. What causes a constant flow of polar waters towards the equator?
15. How can it be said that every variety of climate is found in Mexico?
16. Why is it hotter at the tropics than at the equator?
17. Why does the wind blow after very hot weather?
18. Why should there be islands along the east and west coasts of Canada?
19. Why should the climate of British Columbia be warmer than that of Newfoundland?