THE FAIRY-LAND OF SCIENCE.

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rain. Pause for a moment and think. You have surely heard of gravitation, by which the sun holds the earth and the planets, and, keeps them moving round him in regular order? Well, it is this same gravitation which is at work also whenever a shower of rain falls to the earth. Who can say that he is not a great invisible giant, always silently and invisibly toiling in great things and small whether we wake or sleep?

Now the shower is over, the sun comes out, and the ground is soon as dry as though no rain had fallen. Tell me; what has become of the rain-drops? Part no doubt have sunk into the ground, and as for the rest, why you will say the sun has dried them up. Yes, but how? The sun is more than ninety-one millions of miles away; how has he touched the rain-drops? Have you ever heard that invisible waves are travelling every second over the space between the sun and us? We shall see in the next lecture how these waves are the sun's messengers to the earth, and how they tear asunder the rain drops on the ground, scattering them in tiny particles too small for us to see, and bearing them away to the clouds. Here are more invisible fairies working every moment around you, and you cannot even look out of the window without seeing the work they are doing.

If, however, the day is cold and frosty, the water does not fall in a shower of rain; it comes down in the shape of noiseless snow. Go out after such a snowshower, on a calm day, and look at some of the flakes which have fallen; you will see, if you choose good specimens, that they are not mere masses of frozen

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