plant as a machine it consists, as we have seen, of a great many little things, minute things which we cannot see except under the microscope. Having it then under the glass we examine it to see what it is like, whether there are any marks on it, whether there are any holes in it, whether it has lining and so on. These questions or the like are put. How is this matter formed? Where did it come from? It is now in the plant, it was not always there, how was it produced in the plant? Let us see! Well it was not produced there without a purpose. What is the use of it? Is it of any use to the plant? It must be of some use or it would not be there. Let us find out its use. There is a little sack or cell and this we examine and see how big it is, we tear it open and see what is in it, we look and see if it has any lining, we watch to see if it undergoes any change in the growth of the plant, and we say, well, this little cell was produced in some way. We watch it to see what it does. We find branching tubes also, filled with a particular juice. We want to know their use. A great many of those tissues, as they are called then, are contained in the plant, the whole plant is made up of these and they must be of use; what is the use of them? In fact if we knew the use of those things we would know the whole secret of plant growth, and one great benefit of such study is that it enables the cultivator to recognize as living, moving beings all the trees and plants around him. Imagine a man planting even one tree or one plant in his garden.' It becomes a matter of consequence to him, and not in a mere monetary point of view, but in many other ways. He is constantly watching that tree or plant, he sees that it is continually growing, that it is not a dead thing, like a machine which moves only when acted upon. He sees it is a living thing, that it is just as active as any of the animals on the farm, that it is in perpetual motion, that if there is a circulation of blood in our bodies going on constantly, and that there are motions in our muscles, so it is with the tree, it is continually in motion, it is never at rest, that it has, in common with ourselves, motion.

A plant, like an animal, has a sort of skeleton. All the various tissues of the plant are divided into classes. First there are these tubes, fibres, you have examples of these when the flax plant is taken and beaten up so that the bark is removed you have an example of fibrous tissues. These consist of what? Threads. They are not ordinary threads, but they have threads running through them. If you take a number of straws and put them together then you have a