

evidently wrong. "Oh," my friend would say, "that is what Professor got, it must be right." He had more confidence in his eye and ear and power of writing correctly than he had in his own thinking powers. We should be so practised in thinking out everything for ourselves that we would far rather trust our reasoning than our sight or hearing.

One good example of original thinking is in the solution of "deductions" in Euclid. How easy it is to follow the propositions in the book? How difficult to work out the most simple deduction for ourselves until we have had practice! The Society makes us think for ourselves. We discuss subjects upon which we have neither books nor lectures. We *have* to think for ourselves.

I think I am taking up rather too much time on this "thinking," but I have so felt the necessity of it myself that I feel as if I could not impress it upon you too strongly. I would like to skip the next point for the present and take the fifth and third together.

Originality of thought and observation. They work together; the more we observe the more do we think upon what we observe, and the more we think about these things the more we observe, and the more closely. It soon becomes natural for us to ask "why" or "how" about everything we see. One would be inclined to think that we would be interrupted continually by these questions, but the question comes up and is answered almost unconsciously if at all simple, and we have added something to our experience almost without knowing it. There seems to be an undercurrent of thought which goes on unconsciously, and which seems to work with memory. We ought to cultivate to the utmost of our ability this power of observation. It ought to be as necessary to us as being able to read. An aid to our observing is a subject for us to think and observe upon.

Now, the Society has its discussions. What better inducement could you wish for? The subject for discussion is always announced at least a week beforehand and sometimes a month or more. Besides the discussions the members are at liberty to ask questions, and the more questions asked the better. It makes the others think.

Now, gentlemen, rake up questions; don't be afraid of their being too simple, but ask questions on everything that comes under your notice that has anything whatever to do with engineering.

Now, to come back to number four. It widens our minds. How important to the engineer, more than anyone else, is the wideness of his mind! I think that you will all admit that studying with the object of standing well in the examinations tends to narrow minded-