entirely new to us in reasoning and thinking. This shows the necessity of knowing how to think.

Another thing—clearness of thought. How often when we have read a thing, that is, followed out somebody else's thoughts and reasoning, we think it is quite easy and plain, but when we come to write it out or explain it to someone else it is not quite so easy and so plain. We leave out steps, we get " muddled " ; due, gentlemen, to a lack of clearness, to a bad way of thinking. There is nothing so conducive to clear thinking as writing or explaining to others. This the Society gives ample room for practice in.

Again, gentlemen, we don't all look at things in the same light. We look at this in widely different ways. What is the result? When the ways are made known we see that it is possible to see things differently and to attack them from different sides to those we have been accustomed to, and consequently our minds gradually begin to look at things not only as they used to but as some others do. Thus, there is less chance of mistake; in fact our minds become broadened. If there is one mistake that we ought to fight against with all our might it is *narrow mindedness*, and the tendency to run in fixed grooves. This can be greatly overcome by the exchange of ideas, and the open discussion of various subjects.

Again, gentlemen, we are too fond of doing nothing but reading books and following lectures. That is, we only follow other people's ideas and reasoning—very good as far as it goes—but in this way we practise our own thinking powers very little indeed. There is no originality, and when we are left to ourselves we are at a standstill. We can follow a game of tennis, and see how every stroke and rally and everything is done, in fact, know all about it, but when we come to take the racquet ourselves, where are we? Here, again, the Society helps us greatly. It give us opportunities for original thought. So much for the improvement of our thinking powers.

Now, there is another thing which the engineer requires very much, that is, the power of observation. The observing of facts and methods, and the remembering of them, and the power to reason about them, and to base deductions on them, and to draw logical conclusions from them. This is most necessary. To be able to reason and think we must have a foundation of facts to go upon. These the Society can give us. In the Society all may get the benefit of the reading of one. Thus, you see what a large amount of knowledge we can get together; also, by means of our magazines. Books concerning the practice of engineering in this age of rapid advance-