see the phenomenon exhibited. To hear a watch ticking at a distance, many fanciful arrangements were suggested. Students should be carefully warned against such answers. When a question of that sort is given, only simple experiments, such as can be easily performed in the class-room or the laboratory, should be given. They might also be told that in every possible case, clear simple diagrams should be given. It requires little skill to draw a satisfactory diagram, and it seems natural to suspect that if the candidate knows the question thoroughly he will find it easiest to illustrate with a figure.

Another serious error was the confusion of *pitch* with *intensity*. This was perhaps the most common blunder of all. As a typical bad answer look at the following: "Take a piano-string and strike it slowly and then strike it harder. We notice that when we strike it with a little force the vibrations are not so many in one second, and the pitch is lower; therefore pitch depends upon the number of vibrations in one second, the greater the number the higher the pitch." It was the same with a tuning-fork, a bell or any other instrument: strike it harder and you get a higher pitch. I cannot think that all have emphasized this distinction, or surely so many slips would not have been made.

It was also noticed that some did not know the difference between an arc and an incandescent lamp, even though they were told that the latter had a slender thread which became bright. I suppose they had never seen either, and yet this foolish error should not have been made. In some cases the telephone was described under the name of the telegraph, and many other batteries in place of Grove's. One candidate, indeed, drew a diagram of a compound microscope and called it a common telegraph circuit, though for what reason the examiners could not say. The famous *carbon button* was also frequently seen. Ever since a question was put upon this little thing, it has been found looming up in all parts of the subject —in telegraph, telephone, electric bell, and everywhere else.

The above errors relate chiefly to the Primary papers, but many similar ones occurred in the Junior Leaving examination. The matter of simple experiments was again brought to our attention. To show that a body, when projected horizontally, will reach the ground as soon as if simply dropped, the experiment of shooting a cannon-ball from a cliff, and dropping another at the same time could hardly be accepted. Yet such answers were often seen. Something practicable should always be given.

In stating the Law of Charles (or *Chas.*, as some put it), the common mistake was to omit "at 0° C." Some candidates seemed able to get the answer to the illustrative problem and yet were unable to state clearly what the law was.

It is unfortunate that the test-book does not illustrate the common electric bell; yet almost every book on electricity describes it fully, and it was surprising to see how many bungled over it.

I shall not refer at length to the Senior Leaving. Many failed to give a quantitative definition of *density*. The statement that it is "closeness with which the particles are packed" is hardly full enough for first-class certificate work. Boyle's Law and Charles's Law were often confounded, and the phrase "0° C." was also left out of the latter. It was easily discovered that many failed to see the necessity of the double time-phrase used in describing an acceleration: the first part stating the velocity acquired (or lost), the second, how long it took to secure the change; the whole expression thus indicating the