

who takes a deeper interest in your welfare both individually as Honor men in science of University College, and collectively as members of this Association; no one who is more fully alive to the importance of such a Society as yours; and no one who is more anxious that your Association may be as productive of mutual benefit and as successful as it deserves to be, and as we all hope it will be.

In looking back over the brief past of our young Association, I rejoice to be able to congratulate you upon the success that you have had, and I am confident that your present condition is such as to warrant the brightest hopes for the future. These hopes will be most assuredly realized if each one of us does faithfully what he can to promote the general good, and the general good will be best advanced by each one doing to the best of his ability that which lies before his own hand to do.

Here, before I go any further, let me say what, to my mind, ought to be the key-note of our intercourse in these walls. Let each one of us write upon the tablets of his heart, in clear deep ineffaceable characters, the determination, that so far as in us lies, whether we do little or do much, however important or however trivial our work may be, whatever else it may be or it may not be, it shall at least be *accurate*.

I feel as if I could not lay enough emphasis on this point, for it is accurate knowledge that constitutes science, and it is accurate observation and accurate experiment that form her foundations. It is something too that lies within reach of us all. To meet with a new element may be a fortunate chance, to discover a new law may be the inspiration of genius, but to recognize the one and to demonstrate the other, observation and experiment are all in all; and observation and experiment without accuracy are worse than useless. To do accurate work needs only care and patience, and with care and patience we may each one of us become an accurate worker, and if we are accurate and conscientious workers, we may never become famous, but we cannot become despicable.

I say *conscientious* as well as accurate; and here is the second point upon which I wish to dwell, though in importance it holds the first rank. The one supreme aim which we should keep in view is always, and under all circumstances, TRUTH. All our investigations should have truth and nothing else for their object; and if through them we arrive at truth, that should be to us an all-sufficient reward. It may be that, to some of you, the statement that your investigations ought always to be directed to the object of ascertaining truth may seem an impertinent truism. Nevertheless, I can assure you that you cannot pursue the most trivial course of observation, you cannot perform the simplest experiment, without meeting with a host of temptations—and often very strong temptations—to swerve from the truth. I am not now speaking of such coarse and obvious inducements as assail the expert who is paid to find evidence for or against a certain proposition, or of the investigator who sees fame wrapped up in the establishment of a theory and ridicule in its downfall, but rather of those less glaring but more insidious temptations which surround every one of us from the very beginning. You have, for example, a substance for analysis which your preliminary examination leads you to believe is a salt of zinc. Now, in each subsequent experiment you have a strong, though it may be unconscious bias in favor of those results which would agree with this conclusion. Indolence, and a natural fear that any other results than those expected will be set down to your bungling, both lead in the same direction in contributing to this mental condition. But only just so far as you decline to permit this state of mind to influence your judgment is your work of the least value, and only when you are able to give to those experiments which turn out contrary to your expectations consideration as candid as you give to those which agree with them, will you be able to arrive at trustworthy results.

In science one ought never to try to prove anything. It is never our business to prove a thing to be true, but always to find out what is the truth about it. Now here let us note a most important difference between the Investigator and the Teacher. It is the part of the teacher to demonstrate what has already been shown to be true. It is his duty to make clear to others the results of previous investigations. It is clear that this occupation has a tendency to produce a habit of thinking diametrically opposite to that which is developed by research, and this habit of mind among teachers, using the word in its widest signification, has been a large factor in what we sometimes hear described as the "Conflict between Religion and Science." Against it there is only one safeguard—a thorough training in research as a preparation for the work of a teacher. Only after such a training is a man likely to fully appreciate that fact which is so plain and yet so hard for the mere pedagogue to accept, that truth cannot be inconsistent with itself, that no truth can clash with any other truth; and that, in the words of the great Apostle of Research, "the inquiry of truth, which is the love-making or wooing of it; the knowledge of truth, which is the presence of it; and the belief of truth, which is the enjoying of it—is the sovereign good of human nature."

Again, we cannot too assiduously cultivate the habit of suspending our judgment until we have sufficient data to form a decision. It often happens in the course of an investigation that we are unable to convince ourselves which of two contradictory propositions is true. In such a case, it becomes our imperative duty to postpone our judgment on these propositions until we obtain evidence of the truth or falsehood of one or the other. And let us note here, that in such a case as this it is not enough that the weight of evidence leans towards one side or the other; it is not enough that one is more probable or more improbable than the other. We must convince ourselves that one of these propositions is true or false; or we must refrain altogether from deciding the question, and wait for more light. Our inquiry of truth should be indeed a "wooing or love-making of it," not an appeal to brute force; we must be willing to serve seven years—or seven times seven. It is necessary that we do not decide falsely; it is not necessary that we decide at all.

And here the man of science comes into seeming collision with the man of the world. In the affairs of life there are few things more contemned than indecision of character. In many cases it is better to decide wrongly than not to decide at all. A man lost in the snow, if he would avoid the fatal torpor that threatens him, must push on even if each step takes him farther from the right way. Men of the world are quite ready to throw at men of science the epithet "unpractical." Are they right? In the first place, let us keep clear in our minds the distinction between suspension of judgment and vacillation. The two things have no necessary connection: the one relates to the judgment, the other to the will. To refer to our illustration. The benighted wayfarer may be quite unable to decide which of two ways is the right one, and yet he may pursue one of them with an iron determination in spite of the beating storm and his own weariness. In fact, in this case, and in a great many other cases in the affairs of life, the problem is something of this nature.

There are three courses open to a man, any one of which he may adopt. He is unable to decide which of the three courses is the best, but he is quite certain that either of the first two is better than the third. He therefore adopts one of the first two. This is scientific, and at the same time practical.

We sometimes hear of scientific arrogance. Now, scientific arrogance can only arise in one who neglects this principle, and forming a decision on insufficient data, looks down upon those who are still groping for light.

(To be continued next week.)

'Varsity Sport.

When the Ann Arbor students went to play Princeton, recently, at Football, they forgot to take with them a reporter, and they borrowed one from among the Princetonians. This borrowed man was a most remarkable individual, and he threw his whole soul into a lavish adulation of the Michigan team, in sending off his despatch to the *Chronicle*. "We fear," says he, "that when they come again they will walk off with the championship of the College League. They were to-day offered this membership, which will probably be accepted." The *Princetonian* says it is a breach of courtesy on the part of the *Chronicle* to take this report as an acknowledgment on the part of the New Jersey men that they fear the Michiganders. The report in question is merely that of an individual (apparently very pliable and quite innocent), and does not represent the Princeton students, which fact the *Chronicle* is alleged to have known, or ought to have known. "Meanwhile, we shall wait for a statement from the *Chronicle*, and find our foemen in the East rather than in the West."

COMMUNICATIONS.

To the Editor of the 'Varsity:

DEAR SIR,—Allow me to call attention to a contribution appearing in the 'Varsity of Nov. 13th, entitled, "Closed Debates." As the article contains charges against the General Committee of the Literary Society that are totally unfounded, we trust to the character of the 'Varsity to admit a reply. After descending on "the freedom and friskiness" that characterized the first meeting of the Debating Society this year—an open meeting—the writer mourns "the phlegmatic mildness of the Society's officers," who have not profited from the said "freedom and friskiness" by immediately ruling that in future all ordinary meetings of the Society be open meetings. The officers are graphically pictured as "shaking their heads with becoming official gravity" at hearing such a proposition, and as "standing sentry over a dead and alive constitution" that will not admit of any such mutilation. No one, Mr. Editor, is more anxious than are the several members of the General Committee for 1881-82 to hear any suggestions that may be for the good of the Literary Society, but this article, unhappily, cannot be so classed. In the first place, the Constitution reads thus: Art. 5, sec. 7, "On any