

speak of (realized) culture as "a provisional completeness of human nature."

It may, perhaps, be objected by some that the definition of culture here given is calculated to lend aid and comfort to that spirit of dilettanteism which has proved itself so serious an impediment in the past to the progress of true knowledge. Under the pretext, it will be said, of aiming at some kind of completeness of intellectual outfit, many will be found contenting themselves with mere surface knowledge, and shirking all the hard work inseparable from a proper grounding in any one branch of study. To this we can only reply that the requirements of our definition would not really be met by such a course as this, and that nothing would be easier than to expose the charlatan who not only knew nothing well but had no proper measure of his own ignorance. A large part of culture, as we here understand it, consists in having some due appreciation of the extent and importance of those fields of knowledge which we have not been able to make our own. We recognize the man of culture not less by his diffidence in regard to those things he has not mastered, and upon which he does not venture even to have an opinion, than by the confidence and precision with which he moves in subjects that he has more or less made his own. Show us the man who, on the strength of a little general reading, will express opinions right and left, or who argues deductively, with reckless confidence, from a few general principles settled in his own mind, and we shall show you one who has never risen to the conception of culture which we are here endeavouring to set forth. "The fear of the Lord," says an admirable proverb, "is the beginning of wisdom;" and the first lesson in culture

is the correction of that error to which, as Bacon has pointed out, all untutored minds are prone, of supposing in nature a greater simplicity than really exists.

Now, the contribution which science brings to culture is this:

1. It imparts actual knowledge of the condition and constitution of the external world.

2. It trains the observing and reasoning faculties.

3. It imparts a knowledge of its own methods, and by so doing gives the mind a new consciousness of its powers; for the methods of science are simply the labour-saving methods of the mind itself.

We see, therefore, its relation to culture. That wholeness of the mind of which we have spoken is manifestly incompatible with gross ignorance and error in regard to the source whence all sense-impressions flow. It is not culture to be floundering amid hopelessly erroneous hypotheses, nor to see things only with the untrained eye of sense instead of with the inward eye of instructed reason. Culture—intellectual wholeness—requires that we should see the world as those see it who have studied its phenomena and laws; not that we should know all that each specialist knows—a manifest impossibility—but that we should in a general way know what report has been brought from each great field of inquiry. So, in the days of Columbus, culture did not require that each man should visit the new continent for himself; but culture did require that each should know that a new continent had been discovered, and what its general features were, so far as it had been explored. The man of culture to-day should be able to speak of the world as it is now known to be, not as it was supposed to be fifty, or a hundred, or two hundred years ago.

Secondly, science trains the observ-