THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
SPECIALIZATION AND RESEARCH IN THE MEDICAL SCIENCES

Modern scientists are not encouraged and are become less inclined, except in the afterglow of an active life, to indulge in metaphysics. The visualization of material phenomena, particularly when set in motion by deliberate experiment and observed in their successive stages, tends to replace speculation as to a more complete, though less verifiable series of facts. This reliance in the natural sciences on observation and experiment rather than on ratiocination is responsible for the great and rapidly increasing body of useful knowledge we possess.

Philosophical treatises by even conspicuous representatives of the natural sciences have seemed to me to differ from those of the metaphysicians in that the former apparently fail to appreciate that the metaphysical game is played subject to certain rules which have the same purpose of order as the rules in other games. Philosophy is apparently a subject like fine arts, about which many people think they have intuitional knowledge. We judge pictures as bad or good not on the basis of certain criteria that have come through the ages to be recognized as essential, but in accordance with whether we like or dislike them. In the same way we may think, because we have a certain facility in the exposition of scientific data, that we can offhand write

1 Address of the vice-president and chairman of Section K, American Association for the Advancement of Science, New York meeting, December 29, 1916.