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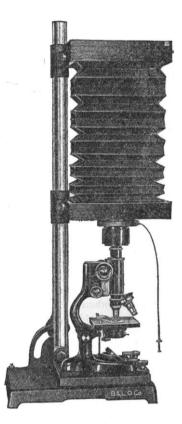
CONTRIBUTIONS OF SCIENCE TO THE LIGHTING ART¹

SCIENTIFIC work is so varied in viewpoint and objective and it is so complexly interwoven with human interpretations and technical and commonsensical applications of knowledge that it is impossible-at least in a brief paper-to establish a definite boundary between science and any of its fields of usefulness, such as a branch of engineering. Even in the scientific realm itself there is now no definite boundary between what have been termed pure science and applied science-a distinction which, in the last analysis, is now largely hypothetical. Wherever the distinction exists or is useful, perhaps the distinguishing factor is the immediate objective of the individual or of the institution which is prosecuting the work. I should define *pure science*, in the relatively rare cases where a useful purpose is served by doing so, as work done solely for the purpose of advancing knowledge. However, I have no patience with the implication of exalted purpose, as has been openly declared by some of the past members of the aristocracy of science and is still more or less delicately implied by the few remnants of that threadbare aristocracy. The old-fashioned idea of the purification of scientific work by intending and hoping and praying that it would never be put to the vulgar use of benefiting the multitude has almost completely atrophied-from lack of any use for it. Now scientific workers are rare whose viewpoint-if not their objective-is not the eventual usefulness of knowledge. Unless blinded by tradition one sees on every hand the benefits of applications of scientific knowledge. This commendable change in viewpoint and objective has also contributed toward the obliteration of the boundary line already referred to.

With gracious thanks for the knowledge inherited from pure science, the scientific worker, with increased happiness of mankind for his objective, may proudly stand alongside the so-called pure scientist. The latter follows his curiosity, overcoming obstacles or diverting his course as he wishes. The former with a definite objective before him requires not only the mental equipment of the former, but he must also be an interpreter of this knowledge into every-day usefulness and he must surmount the obstacles encoun-

¹ Abstract of an address before Section M, American Association for the Advancement of Science, Philadelphia, December 29, 1926.

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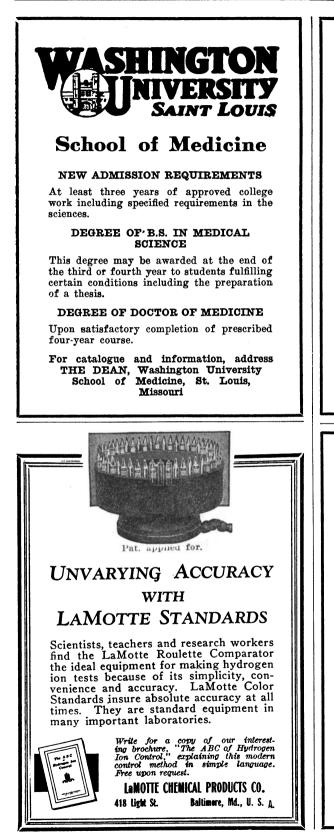
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