*Where Is Science Going?* By Max Planck. Prologue by Albert Einstein. Trans-
lation and Biographical Note by James Murphy. New York, W. W. Norton
and Co., 1932. 221 pp. Price, $2.75.

A great scientist and great man here analyzes the present state of physics
and a half century of its development with reference to its implications for the
further progress of science and for certain major interests of human welfare in
general. The prologue by Einstein, discussing the motives which impel some of
our choicer spirits to scientific research, furnishes a fitting prelude to the gen-
eral theme of the book. The introduction by Murphy will stimulate the reader's
interest in Planck both as scientist and as man. Chapter I, *Fifty years of sci-
ence*, (pp. 41–63), gives a brief non-technical but illuminating presentation of
the background of the present state of physics. The second chapter argues for
the reality of the external world and sharply opposes a bare positivistic phi-
losophy of science. This reality can never be fully attained; but "it is not the
possession of truth, but the success which attends the seeking after it, that
enriches the seeker and brings happiness to him." The third chapter is devoted
to the scientist's picture of the physical universe. The next two chapters treat
of causation and the freedom of the will. It is too much to expect any one to
deal satisfactorily with the latter problem. With respect to the former the
considered judgment of Planck is that the principle of causality should be
given such a modified formulation as to restore it to strict validity. The final
chapter deals with the passage from the relative to the absolute. The book
closes with an epilogue in the form of a Socratic dialogue by Planck, Einstein
and Murphy. Throughout this stimulating volume the treatment is as free of
technicalities as the nature of the subject admits.

R. D. CARMICHAEL

*Kurventheorie.* By Karl Menger. Herausgegeben unter Mitarbeit von Georg
Nöbeling. Berlin and Leipzig, B. G. Teubner, 1932. vi+370 pp.

In the last chapter of Pierpont's *Theory of Functions of Real Variables*, vol.
II (1912), there is a discussion of several geometric concepts, including that of
a plane curve. Various definitions which might appear reasonable at first sight
are examined and shown to be inadequate, with the net result that the question,
"What is a curve," is not answered. After the lapse of twenty years, we have a
book devoted to this question, which gives the answer and discusses extensively
the properties of curves, in a way little dreamed of in 1912.

The book under discussion is to be the second volume of a work entitled
*Mengentheoretische Geometrie.* In addition to being the first treatise on the
theory of curves and their topological properties, the book performs the further
service of gathering together in an organic whole much of the research work
on this subject done since the war—work which, from the nature of its piece-
meal appearance, must have seemed to many to be of a pointless character. To
Americans this book is of special interest, in view of the generous acknowledge-
ment of their contributions to the subject in the publishers' announcement and
in the bibliographical notes.

In the first chapter are given elementary notions from point-set theory for
later use, and brief discussions of various types of point sets, such as irreducible