Darstellende Geometrie. By Wolfgang
Haack. Sammlung Göschen Volume 142
and 143. Walter de Gruyter & Co.,
Berlin, 1954. Vol. I, 110 pp., 117
figures, DM 2.40; Vol. II, 129 pp.,
86 figures, DM 2.40.

In the reviewer's country before
the World War II, all the students in
sciences except those in medicine had
rather strict training on descriptive
geometry before entering universities.
After the War change was made and the
teaching hours on descriptive geometry
were drastically cut down to find the
results unsatisfactory. Now the teach-
ing hours are restored to the prewar
level. The training on descriptive
geometry is apt to be neglected in the
so-called "liberal education", but its
importance is realized by the bitter
experience.

The "Darstellende Geometrie" by
Prof. Dr. Wolfgang Haack reviewed here
will be completed by three volumes
according to the author's announce-
ment. The first and second volumes
have appeared by now. They make the
hundred and forty-second and -third
books in the "Sammlung Göschen", which
issued the similar textbooks on de-
scriptive geometry by Prof. Dr. R.
Hauszner and the present author
jointly.

One of the characteristics of this
new book by Dr. Haack is that com-
paratively little analytic geometry
is used in explanation. This is to
be justified in the reviewer's country,
because descriptive geometry is taught
before the students are trained in
analytic geometry of three dimensions.

The first volume of this book
begins with an introduction in which
the author describes the history of
descriptive geometry and emphasizes
the close relation between descriptive
geometry as a pure science and as a
practical one. The students in civil
engineering will find Chapter IV of
Vol. II to be interesting. The ex-

planations and drawings for illustration
throughout this book are clear and
concise. Exercises are not given as
themselves, but they are included in
the explanations. We hope that
Sammlung Göschen would issue an in-
dependent exercise book on descriptive
geometry. It would help students
greatly in mastering the various
devices in descriptive geometry.

The following are the titles of
contents:

Volume I.

Chapter I. The Most Important
Methods of Representation. 1.
Central projection. / 2. Parallel
projection. / 3. Orthogonal projection.
/ 4. Top and front views of simple
bodies. / 5. The applications of
various methods of representation.
Kavalier perspective. / 6. Kavalier
perspective of a cylinder. / 7.
Axonometric representation.

Chapter II. Points, Straight Lines
and Planes. 8. The four quadrants.
Median plane. / 9. Straight lines;
straight line segments. / 10. Monge's
method of rabattement. / 11. Rabatte-
ment of supporting triangle. / 12.
Representation of planes by their
traces. / 13. Straight lines and
points on a plane which is given by
its traces. / 14. Plane given by three
points on it. / 15. True shape of the
figure on a plane.

Chapter III. Construction of
intersection of planes and straight
lines.
16. The intersection of a plane and a
straight line. / 17. The intersection
of two planes. / 18. A straight line
perpendicular to a plane. / 19. The
angle between two planes. / 20. The
angle between a straight line and a
plane; the shortest distance between
two straight lines. / 21. Introduction
of auxiliary views.

Chapter IV. A Body whose boundary
surfaces are planar.

(T. Minagawa, Tokyo Institute of
Technology.)