tion. On the other hand the author has demanded a minimum prerequisite knowledge of analysis. This requirement is limited to elementary analytic geometry and calculus, to which may be added a few of the formulas for vector products given in the introductory chapters.

The exposition of the geometry of forces begins in Chapter 6 with a consideration of instantaneous rotations. This is followed by chapters on forces and force systems, foundations of line geometry, and equilibrium. The next six chapters are devoted to the theory of screws and are followed by two chapters on deformations, the point of view throughout this portion being purely geometric. The concepts of mechanics are taken up in the last six chapters, of which two are given to deformable bodies. The four chapters on kinetics of rigid bodies deal with the equations of motion in general, free motion under no applied forces, motion with two degrees of freedom, and with three degrees of freedom. The special case of a system of forces in a plane is excluded throughout, and in the free motion of a rigid body it is assumed that the axis of rotation does not have a fixed direction in space.

The necessary complications of notation in this subject have been reduced by the systematic use of different styles of type, thus avoiding an excessive number of accents and subscripts. For the convenience of the reader the scheme of notation is exhibited in a table at the end of the book.

There are many misprints, but fortunately most of them are self-evident and will not cause confusion.

W. R. LONGLEY.

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NOTES.

THE seventeenth summer meeting of the AMERICAN MATHEMATICAL SOCIETY will be held at Columbia University on Tuesday and Wednesday, September 6–7. Abstracts of papers intended for presentation at this meeting should be in the hands of the Secretary not later than August 20.

THE April number (volume 32, number 2) of the *American Journal of Mathematics* contains the following papers: "The reduction of families of bilinear forms," by H. E. HAWKES; "Basic systems of rational norm-curves," by J. R. CONNER; "Surfaces invariant under infinite discontinuous birational