

physical problems has great difficulty in turning his formulas into numbers. Accordingly the examples worked in the text include several numerical ones, and some attention is given to putting results of theory in a form convenient for calculation. The book has a utilitarian bias which should make it useful to the engineering student, as well as interesting and live to the student of pure science. This attitude is emphasized throughout and is especially noticeable in the chapter on motion in two dimensions, where practical numerical applications are made of almost every topic treated, and in the applications to problems of astronomy.

The book begins with the subject of statics and, in addition to usual topics under this head, Part I contains chapters on graphical methods, moments of inertia, potential and attraction, and an extensive chapter on elasticity including strength of materials. Part II is devoted to the dynamics of a particle and the usual special types of motion are treated in excellent style. Besides a fairly complete chapter on central forces there is one on the problem of two or more bodies. The dynamics of a rigid body forms Part III and this is concerned principally with motion parallel to a fixed plane. There is also a chapter on motion in three dimensions of a rigid body with a symmetrical axis. The last chapter is on units and dimensions. If the student is to use the idea of dimensions as a check on his equations, it seems better to place this subject in the earlier part of the book.

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THE *Annuaire* bears no signs of the struggle which is taking place in Europe. It arrived about the usual time and contains the usual information brought up to date. The astronomical part is increased by a descriptive note, with maps, of the constellations and with the names and positions of the stars which form these groups. The editors frequently find it necessary to add new information and, in order to keep the volume within reasonable limits, to omit less needed tables and articles, publishing the latter only occasionally. This year the geographical positions of the principal towns on the earth are omitted as well as the long table of magnetic elements in France.