

*Professor Bovey's Applied Mechanics**, suggested by the requirements of the author's classes in McGill College, deals with the application of mechanics to structures of wood and of iron. Into the discussion of Applied Mechanics, thus limited, Professor Bovey enters with such minuteness of detail as is proper for the instruction of those who, having completed good elementary courses in mathematics and mechanics, are preparing for the work of the civil engineer. In the execution of his task the author has combined, as is necessary in designing and executing the great constructions of railway engineering, careful and thorough mathematical treatment, with attention to practical details as they have been perfected by long experience. The work of the author in the selection and arrangement of his material is well done. Nor has it been a mere work of compilation. Although the reader will find much that is scattered through monographs and professional periodicals not easily accessible to students, he will find also that these materials have been worked over, adapted and supplemented with no small labour and skill by the author. Take, as an example of this, the discussion of the parabolic rib, pp. 106 to 116. As a mathematical work, it has the supreme merits of rigid exactness of thought, and compressed neatness of expression. The definitions, without affectation of formality, are brief and precisely discriminating, and the demonstrations are orderly, clear, succinct, and comprehensive. The book is profusely illustrated in a simple and effective manner. The illustrations are not borrowed, they have evidently been drawn and engraved expressly for the work. The press work is good. In a work abounding with complex mathematical formulae, it is not surprising to find a few errata, which will be discovered as the book is tested in class work, and will doubtless disappear from future editions. The work is one which should be in the hands of all persons interested in the constructive arts. Those who have not the mathematical training necessary to its comprehension, should not be entrusted with the responsibility of designing or superintending the construction of any erection more ambitious than a two-story dwelling house. We have had in this province too many illustrations of the fact that designs cribbed from European manuals, worked out by rule of thumb, or adopted without knowledge or skill, are not a sufficient furnishing for the architect or the engineer. Two ambitious roofs in this city, through mingled incompetence in design and inefficiency of execution, have proved incapable of sustaining themselves under the conditions well known to everybody to belong to our climate. Various corporation structures show remarkable ignorance of the elementary principles of the

* *Applied Mechanics*, by Henry T. Bovey, M.A., Fellow of Queen's College, Cambridge, Professor of Civil Engineering and Applied Mechanics, McGill University. Price \$2.25 (Montreal, John Lovell & Son).