less than four American Engineering Societies, mostly local, and that he belongs to the junior grade of the Institution of Civil Engineers in London. This position he attained the year before last. Had he been able to show that he had held a responsible situation for five years he would have been eligible for the higher grade. As he did not obtain it, one must suppose his experience did not justify his doing so. Whether he has had any practical experience at all he does not tell us, but he does inform us that he holds two appointments at present. Taken together they explain a good deal of what follows.

He is "Consulting Engineer" to an American bridge building firm, and he is a Professor of Engineering at Tōkyō University. As to the latter position, he tells us in his preface that he has never had more than a dozen students at a time. I must be excused if I am somewhat personal, because in weighing opinions it is necessary to consider whose they are, and with what authority they are delivered. Mr. Waddell, too, in his letter invites criticism, and says there is no fear of wounding his susceptibilities because "he is not troubled with tender feelings any more than with mock modesty." I believe him, and I take him at his word.

The book consists of eleven pages of preface, followed by about thirty pages of reprints of manufacturers' price lists. The latter is useful material, but from its nature not original. Thence to the end of the first volume is technical matter involving calculations, &c., into which it is not necessary to enter. Certainly any discussion on this part would be out of place in a paper of general circulation, and merely wearisome to the public. Therefore I limit my remarks to his letter and his preface. This, I am aware, is what he objects to in "Not a Bridge Builder's" dealing with the subject. That writer noticed the preface only, to which Mr. Waddell replied that "one cannot write a review or express an opinion of any value concerning a book by reading merely the introductory chapter." That is undeniable. But, when the preface is much more important than the book, it is perfectly fair to comment on the preface, as showing the spirit in which the book is written; and for this, as much as for any other portion, an author must be held responsible.

The first volume is supplemented by a second, of tables and drawings, which again are not of general interest. Probably they owe their origin to the black-board in the class-room.

The whole work is a treatise on the American method of girder building, as compared with the English, and many differences in the methods used are pointed out. There have always been such differences, and no doubt always will be; the conditions of the two countries differ widely, and so what suits the one does not suit the other. As regards girders, the Americans have used a greater depth in proportion to length than has been taken in England, and from this change almost all the others have followed. But as I believe the Americans are now reducing depths, while the English are increasing them, the two types are becoming similar. Such matters have often been discussed by engineers of the two countries; always, till Mr. Waddell took pen in hand, in a fair and courteous manner. For really there is nothing to quarrel about in the fact that each country knows what is best for itself; on the other hand, each can learn and is