inform Mr. Waddell that the drawings for the bridges which I refer to were not merely "passed" by my father, but actually made under his own eye, and in accordance with his own personal instructions. He alone is responsible for their design, though it is probable that in designing them he endeavoured to assimilate them, so far as he thought desirable, to the type which had already been introduced into the country before his connection with the lines. But of this I cannot now speak positively.

Mr. Waddell also says, "I doubt that the consideration of wind pressure ever entered the calculations of stresses in the existing Japan bridges." I can set his doubt at rest at once with regard to the 100 ft. span bridges, which he accuses of showing such "glaring defects of design," by assuring him that this point received most careful attention from my father. I was at the time in his office, and well remember the wind calculations being gone into minutely.

Now, notwithstanding Mr. Waddell's disclaimer, it must be obvious to every candid observer, that he has, as Mr. Pownall has hinted, been singularly ready to volunteer his criticisms—how much more to publish his denunciations and disparagements—on the existing railway bridges in Japan. Had he been requested by the Japanese Government to report upon them, there might have been some excuse for him, though many right-minded engineers would have hesitated before consenting to do even this; but, that he should impose upon himself this task unbidden, and carry it out in the spirit in which he has done so, seems to argue unusual confidence in his own attainments.

Goethe says:—"The man who loudly denounces, I always suspect," and certainly, in the present case, Mr. Waddell has given good grounds for a suspicion that he has an ulterior object in view in thus rushing into print.

He objects to this being made a personal matter. But I should like to ask him how he can deny that it is purely such. When one engineer criticises and passes a condemnation judgment on the work of another, the first question an outsider asks is; "Who is this who undertakes the office of censor? What is his position as an engineer as compared with that of the man whose work he pulls to pieces? Is he a competent authority to deal with such a matter?" Until these questions are answered, it is impossible to know what weight to give to his opinions and criticisms; and it is in order to enable your readers to answer these questions, that I take upon me the uncongenial task of comparing Mr. Waddell with Dr. Pole, in order that the public out here (were this to occur in England, it would be treated with the silent contempt which it deserves), and especially those Japanese who are likely to be misled by Mr. Waddell's statements, may be able to judge which of the two is the better able to design railway bridges and whose opinion on the subject is likely to be the more correct.

Now, on looking at the title-page of Mr. Waddell's book, the first idea that would suggest itself to the mind of an engineer of any standing or experience would be that he had before him the work of a tyro. It is to be supposed that here, if anywhere, the author gives us all the information regarding himself of which he is proud. There are some six lines or so of "titles," only two of which, however, are worth anything at all, and one, at least, of which a respectable engineer would hesitate to print after his