makes the difference between poverty and sufficiency, for be it known the employer soon discovers the superior qualities of the man who employs his brains as well as his hands in the performance of his duties, and advancement and higher pay are sure to follow sooner or later.

In the whole course of practice in the building arts there is no tool the artisan possesses that lends itself so readily to the quick solution of the many difficult problems of laying out work as the steel square. Therefore, it is essential the workman should have a thorough practical knowledge of its capabilities and applications, and it is to aid him in acquiring that knowledge that this work is prepared. It will be my endeavor throughout to place everything presented in as simple and plain a manner as possible, and avoid mystifying the workman with a redundance of formulae and figures, giving graphic explanations where possible, and cutting out surplus figures where such can be done without vitally affecting the sense of the subject under discussion.

As a matter of course I have drawn from many recent writers on the steel square, both as regards illustrations and descriptions, and in a number of instances it may be necessary for