

latter covered nothing that was not fully provided for in the former ; and that the only changes required in the work already done, were the raising of the grade an average of one foot, over the comparatively small amount of earth-works in progress ; together with the tearing down and rebuilding of the Jacques Cartier Pier ; all of which, according to the construction placed upon the original contract by Mr. Walter Shanly and Mr. Sandford Fleming, as well as by myself, could have been accomplished " for less than twenty thousand dollars." (See "*Report of the Chief Engineer upon the situation*," dated March 4, 1875.)

Thus it will be seen that the former outcry against narrow earth-works, defective culverts, excessive waterways, worthless sand and cement, &c., &c., &c., having failed to accomplish the purpose for which it was originally intended, was no longer persisted in ; and, also, that the very large mountain, after several months of the most excruciating labor, had succeeded in bringing forth a very small mouse.

The efforts of Mr. Light, in the direction of an elevated standard for first-class Government Railways, together with subsequent experiences, have, however, produced several very important, if not clearly beneficial results in Engineering Science, which should not be lost to the world, or to the profession ; among which I would call particular attention to the following, which may very properly be designated as :

MODERN ENGINEERING MAXIMS.

1st. A Civil Engineer, whose skill and experience have elevated him to the exalted position of Government Engi-