be made so, as the best work is obtained by permitting bridge-builders to have full latitude of design, under no other restriction than that of requirements and material. These should be made so clear that no refuge for evasion may be found under technicalities. To make a just comparison of prices, competing parties must estimate upon precisely the same basis, or endless confusion will result in any effort to make a fair canvass of tenders. It is recommended, in all cases of a bridge-letting, to call in the services of an expert—not simply a general engineer, but one familiar with the science and practice of bridge-building, for the purpose of examining the strain-sheets submitted with the tenders, and comparing them with the specifications on which bids were taken. His services should be continued throughout the building of the bridge, the work on which, however, should not be commenced before all detail drawings have been made by the contractor, and submitted to the expert for criticism and approval. If it is inconvenient to employ such an inspector through the continuance of the work, he should be called in at its completion, to make a thorough examination as to the material and execution, in accordance with the contract and specification. A suggestion was made in a report* to the American Society of Civil Engineers