favorable day offers itself. This was the case at the East River Bridge, where for three weeks all attempts of regulating were fruitless. As even a light breeze suffices to displace considerably a wire of such a length, and as the utmost exactness is imperative, the importance of an opportune day is evident. The wires used for guidewires were carefully selected from rings of equal weight per foot. It was necessary to examine about fifty rings in order to find three of equal weight. This shows the importance of the precaution. The regulating commenced on the New York land span and proceeded from there to middle, and, lastly, to the Brooklyn land span. Afterwards the wires were let free and found to be in perfect balance. In other less important cases, where a difference in deflection of a foot or eighteen inches is of no consequence, the calculation may be simplified by neglecting the higher powers of small fractions. Guessing, however, at the effects of stays according to existing bridges may be