figures only indicate weight transferred from left to right, and it is evident that the same weights in a reversed order, are transferred from right to left, through the same diagonals. Hence, a third series of figures under the second, composed of the same figures in a reversed order, shows the weights carried by the several diagonals from right to left. The figures in the third line, show the weights acting on diagonals next on the left of respective figures. It will be seen also, that the figures under odd numbers of the upper line,

\[
\begin{array}{cccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 \\
1 & 3 & 6 & 10 & 15 & 21 & 28 \\
28 & 21 & 15 & 10 & 6 & 8 & 1 \\
q & r & o & n & m & l & k \\
\end{array}
\]

indicate weights acting by thrust, and those under even numbers, by tension. The figures 6 and 15 over o, indicate \(6w''\) acting on oe, and \(15w''\), on oe, both by thrust. Again 3 and 21 under 2, indicate \(3w''\) acting on co, and \(21w''\) upon cq, both by tension. The figure 28 at the right and left, under 1 and 7, indicate \(28w''\) acting by thrust upon aq and jk.

Now if we add all the figures in the second and third lines standing under odd numbers of the upper line, we obtain the co-efficient of \(w''\) for the aggregate maximum weights acting by thrust upon oblique members, while the sum of all the figures in like manner, under even numbers, forms the co-efficient of \(w''\) for the aggregate maximum weights acting by tension upon obliques. The former gives \(100w''=12.5w\) for compression, and the latter, \(68w''=8.5w\), for tension. Hence,