corresponding family have in common a *finite* number ν^n of points (or $n-1$-flats). And all loci (or envelopes) of order (or class) ν having in common $C-n+1$ fixed points (or $n-1$-flats) have also in common $\nu^n - C + n - 1$ other fixed points (or $n-1$-flats).

The maximum number C of *determining* elements is unchanged by the exchange of n and ν, but such is not in general true of the minimum number of extra *determined* elements; for the only positive integral solutions of the equation, $\nu^n - C + n - 1 = n^\nu - C + \nu - 1$, are : (1) ν or $n = 1$, n or $\nu = 1, 2, 3, \cdots$; (2) ν or $n = 2$, n or $\nu = 3$. Case (2) yields interesting familiar theorems in 2- and 3-fold space. Excepting cases (1) and (2) there subsists the inequality, $\nu^n - C + n - 1 \neq n^\nu - C + \nu - 1$, where the right or the left member is the greater according as $\nu > n$ or $n > \nu$. When m is less than both n and ν, there is a corresponding inequality whose sense has the same criterion as above, though now the number of additional determined elements is infinite.

<div style="text-align: right">F. N. COLE.</div>

COLUMBIA UNIVERSITY.

THE EVANSTON MEETING OF THE CHICAGO SECTION.

THE second meeting of the Chicago Section of the American Mathematical Society was held at Northwestern University, Evanston, on Thursday and Friday, December 30 and 31, 1897, Professor E. H. Moore, Vice-President of the Society, presiding.

The following members of the Society were present : Professor Henry Benner, Dr. E. M. Blake, Professor Oskar Bolza, Mr. A. C. Burnham, Professor Ellery W. Davis, Dr. L. W. Dowling, Dr. James W. Glover, Professor Arthur S. Hathaway, Professor Thomas F. Holgate, Mr. H. G. Keppel, Professor Joseph L. Markley, Professor Heinrich Maschke, Professor Malcolm McNeil, Professor E. H. Moore, Professor H. B. Newson, Professor J. B. Shaw, Dr. H. F. Stecker, Professor C. A. Waldo, Professor Henry S. White, Professor Mary F. Winston, Professor Alexander Ziwet.

The two days' session was fully occupied in reading the following papers :