

topic of matricular algebras are limited, but also *as operators within the entire derived domain of Grassmann*. The lectures contain a very simple and elegant treatment of various questions in the theory of matrices, including Sylvester's laws of nullity and latency, the proof of the identical equation and the reduction of a dyadic to a canonical form both in the general and special cases.

It is interesting and gratifying to note that the interest aroused in the general subject of Multiple Algebra among his pupils, stimulated and directed by Professor Pierpont through his lectures on Hypercomplex Numbers, has resulted in several noteworthy publications by the late Professor Starkweather and by Dr. Hawkes, which exhibit the method and spirit of Benjamin Peirce's memoir on Linear Associative Algebras in a new and remarkably fruitful light.

PERCEY F. SMITH.

SHEFFIELD SCIENTIFIC SCHOOL,
July, 1903.

NOTES.

AT the forty-second annual convention of the National educational association, held in Boston, July 6-10, 1903, a conference on mathematics was conducted by Professor D. E. SMITH. The topic considered was the organization and the work of associations of teachers of mathematics. Over two hundred teachers of mathematics from various parts of the country were present at the conference, and the following papers were read: "On the work of the Central association of science and mathematics teachers," by Mr. C. E. COMSTOCK; "On the New England Association," by Mr. E. H. NICHOLS; "On the proposed association for the middle states and Maryland," by Dr. J. S. FRENCH; "On the investigation being made in New England as to geometry in the grammar school," by Mr. W. T. CAMPBELL; "On the report of the committee appointed by the AMERICAN MATHEMATICAL SOCIETY, on college entrance requirements," by Professor H. W. TYLER; "The relation of these associations to the AMERICAN MATHEMATICAL SOCIETY," by Professor W. F. OSGOOD. From the inquiries made at the conference it is probable that several associations will be formed during the coming year.