

cal into philosophical thought;¹ so much so that this closing chapter on the development of mathematical thought forms a fitting link with the next great department of our subject—the Philosophy of the Century.

6.
Origin of
mathe-
matics.

We are told that mathematics among the Greeks had its origin in the Geometry invented by the ancient Egyptians for practical surveying purposes. The first mathematical problems arose in the practice of mensuration. Modern mathematical thought received in an analogous manner its greatest stimulus through the Uranometry of Kepler, Newton, and Laplace: through the mechanics and the survey of the heavens new methods for solving astronomical problems were invented in the seventeenth and eighteenth centuries, and the nineteenth century can be said to have attempted to perform towards this new body of doctrine the same task that Euclid, three hundred years before the Christian era, performed towards the then existing mathematics. As Proclus tells us, “putting together the elements, arranging much from Eudoxus, furnishing much from Theætetus, he, moreover, subjected to rigorous proofs what had been negligently demonstrated by his predecessors.”² What one man, so far as we know, did for the Grecian science, a number of great thinkers in

¹ Thus, for instance, the recent investigations and theories of the “manifold,” as they have been set forth by Prof. Georg Cantor of Halle, constitute, as it were, a new chapter in mathematical science, whereas they were formerly a subject merely of philosophical interest. See a remark to this effect by B. Kerry at the end of his very interesting article on

Cantor's doctrine in the 9th vol. of Avenarius's ‘Zeitschrift für wissenschaftliche Philosophie’ (1885), p. 231, where he refers to Kant's comparison of philosophy to a Hecuba “tot generis natisque potens.”

² Quoted by Cantor, vol. i. p. 247. See also Hankel, *loc. cit.*, p. 381 *sqq.*