EUNOTIA (Plate IV. figs. 16, 17.).—The carapace is siliceous, and either simple or bivalve; flat below, and convex, and often richly dentated above. An empty carapace is shown fig. 16; and a group of living *Eunotiæ* attached to a stem of conferva fig. 17. Several fossil species have been discovered at Santa Fiora.

That the general reader, whose attention is for the first time directed to these inquiries, may be in some measure prepared for the vast accumulation of fossil animalcules which are found in some formations, I subjoin the observation of Dr. Bailey on one species, an elegant fragile animalcule, which hangs in clusters together, appearing like spiral chains, and is about $\frac{1}{20}$ of a line in diameter.

"This fresh-water infusoria (*Meridion vernale*) is seen in immense quantities in the mountain brooks around West Point, the bottoms of which are literally covered in the first warm days of spring with a ferruginous-coloured mucous matter, about a quarter of an inch thick, which, on examination by the microscope, proves to be filled with millions and millions of these exquisitely beautiful siliceous bodies. Every submerged stone, twig, and spear of grass, is enveloped by them; and the waving plume-like appearance of a filamentous body covered in this manner, is often extremely elegant. Alcohol completely dissolves the endochrome (soft

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