NOTES ON THE ARCHITECTURE, NESTING-HABITS, AND LIFE-HISTORIES OF AUSTRALIAN ARANEIDÆ, BASED ON SPECIMENS IN THE AUSTRALIAN MUSEUM.

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PART II.—THE CRIBELLATÆ.

Simon, in his work, "Histoire Naturelle des Araignées" (second edition), divides Spiders into two sub-orders, namely, Aranea theraphosæ and Aranea veræ. Of these, the former was dealt with in my last paper. The latter, which now claims our attention, is again divided into two sections—Cribellátæ and Ecribellátæ; these terms signifying that those of the first section have what is known technically as a cribellum et calamistrum, whilst those constituting the second section are not so provided.

All the Spiders of the sub-order under consideration may be distinguished from the Territellaræ by their falces, which, instead of being strongly prorected, as in the Aranea theraphosæ, are directed vertically or obliquely from their base; moreover, their fangs strike sideways, the falces moving in a horizontal or oblique direction, whilst those of the Trap-door Spiders are directed downwards, and move vertically parallel to one another.

The Aranea veræ cribellátæ are divided into eight families, namely: Hypochilidæ, Uloboridæ, Psechridæ, Zoropidæ, Dictynidæ, Eeobiidæ, Eresidæ, and Filistatidæ; and of these the second, fifth, and eighth are represented in Australia.

The cribellum is an additional silk-spinning organ, and is situated between and at the base of the first pair of spinners; it consists of a slightly elevated, transverse plate, divided above into two parts, but united at the base throughout their entire length. These parts consist of a single joint each, the spicules of which are truncated, compressed, and concave. The surfaces of these joints are minutely and numerously punctured, and emit a quantity of fine, flocculent silk, which is used in the construction of webs.