
**FIGURE 1.4** ***Valeriana officinalis*** **of Fabio Columna's (aka Fabio Colonna; 1567–1650)** ***Phytobasanos*** **(Plant Touchstone, 1592). Columna, who learned botany while looking for a cure for his epilepsy, learned of the valerian of Dioscorides, was grateful for the efficacy of the herbs of the day, and appalled at the inexactness of the botanical descriptions of early herbals. He set out to bring more botanical precision to medical works. This was the first herbal that used copper etchings rather than the earlier wood blocks.**

The nineteenth century was a period of prolific medical writing resulting in the publication of several hundred texts on materia medica and medical botany describing thousands of medicines used worldwide. The early formal materia medicas of leading pharmacognosists such as Pereira in 1846 and Flückiger and Tschirch in 1887 provided information regarding plant origin, harvest, chemistry, and the processing and morphological characteristics of the specific plant part to be used as a medicine. Authored works of Pomet (France; 1694), Green (England; 1820), and Coxe (United States; 1818) discussed the importance of the quality assessment of materials to be used as medicines.

Requirements for quality assessment of medicinal plants were similarly codified in national pharmacopoeias (e.g., London pharmacopoeia, 1618; Paris pharmacopoeia, 1639; Edinburgh pharmacopoeia, 1699; U.S. pharmacopeia, 1820). Pharmacopoeias evolved from simple recipe books to works providing detailed descriptions of the macroanatomy of medicinal plant parts. After the application of the microscope to plant morphology, microscopic descriptions were also included and became integral to the identity tests provided by pharmacopoeias. Both macroscopic and microscopic descriptions persist in pharmacopoeias today and are accompanied by qualitative and/or quantitative chemical analyses.