

## Book Reviews

Browne's history challenges us to come up with underlying social explanations. Why the contemporary mania for naming and "stationing" new species? – so common an activity seems to defy questioning. William Kirby once said that naming was possessing, but it is surely too simplistic to see the enterprise as capitalist expropriation writ large (even knowing Wallace's need to tag and price each specimen to protect his livelihood). But these are minor cavils for what is, after all, a study which sets out to discover "topographic" patterns in history, not causal processes. Nor is it an unrewarding approach. Browne has returned the "botanical statisticians" to their rightful place, given a welcome ear to naturalists like Forbes and Watson, and shown the evolutionary importance of Darwin's uncertain arithmetic.

Adrian Desmond

DIETER OLDENBURG, *Romantische Naturphilosophie und Arzneimittellehre 1800–1840*, (Veröffentlichungen aus dem Pharmaziegeschichtlichen Seminar der Technischen Universität Braunschweig, Bd. 20), Stuttgart, Deutscher Apotheker-Verlag, 1979, 8vo, pp. 267, DM. 30.00 (paperback).

Medicine and natural science were profoundly influenced by the German Romanticism of the early part of the nineteenth century, in particular by Friedrich von Schelling (1775–1854). His *Naturphilosophie* formed the basis of the studies of chemists and pharmacologists: it emphasized the unity of the world and the regularity of its phenomena as a result of the mathematical correlations of its components. These were, first of all, spirit and nature, which were seen as opposite poles of a unified system. In the same way, everything worked within polarities such as organic and inorganic. In inorganic nature, the forces were magnetism, electricity, and chemical processes; in organic nature, reproduction, irritability, and sensibility. These categories were then subdivided in various ways. As many of the chemical elements as were then known were assigned to one or the other of the subdivisions and correlated with disease processes for a cure to be produced. For instance, J. C. Reil maintained that in the human body there was a polarity between oxygen and hydrogen, oxygen being associated with arterial blood and hydrogen with the nervous system. The oxygen was also associated with irritability and the hydrogen with sensibility. A preponderance of either principle or a dulling of both would lead to disease, which had to be countered with remedies belonging to the opposite principle; oxygen complaints were to be treated with hydrogen-like remedies and vice versa. Other systems were far more complicated permutations on the same idea. J. H. W. Grabau had a whole scale of the thirty-seven elements then known, starting with oxygen and ending with hydrogen, arranged by their supposed pharmacological effect. He also had a similar scale of organic substances. This is one of the few places where plant remedies figure in the pharmacology of the time. These systematizations, reminiscent as they are of medieval scholastic categories, proliferated until, as in the Renaissance, the pendulum swung back again, and judgements began to be arrived at empirically.

Marianne Winder  
Wellcome Institute

ALMUTH WEIDMANN, *Die Arzneiversorgung der Armen zu Beginn der Industrialisierung im Deutschen Sprachgebiet, besonders in Hamburg*, (Braunschweiger Veröffentlichungen zur Geschichte der Pharmazie und der Naturwissenschaften, Bd. 25), Stuttgart, Deutscher Apotheker-Verlag, 1982, 8vo, pp. viii, 229, DM. 30.00 (paperback).

The rich have a choice. They can ignore the poor. Two institutions do this at their peril: the Church and the State. Almuth Weidmann, in her dissertation on the medical prescriptions available to the poor in the period she calls "the beginning of industrialization in Germany", tackles a very difficult subject. Yet the extent of Germany's industrialization at the turn of the nineteenth century is still open to question, some historians preferring to call it "proto-industrialization". The discussion is important because of the underlying assumption: that industrialization created a massive upsurge in urban poor. One should recall that it was the early eighteenth century and the Prussian need for a workforce in the newly founded wool and textile businesses (Mercantilism) that helped create the workhouse. The suffering of the urban