and tobacco smoke; . . . he walked for half a day without rest even when an old man; . . . on Sundays he usually conducted botanical excursions which any one might join on payment of two or three groschen. . . . "On these occasions", an old pupil says, "he explained equally well the inscription on a tombstone, the construction of a windmill, the course of the stars, or the structure of a plant . . . the commonest plant became new by what he had to say about it; a hair, a spot, gave him opportunity for questions, ideas, investigations."

The life-work of Sprengel was expressed in his now famous book *The Secret of Nature discovered in the Structure and Fertilization of Flowers* (1793), which gives a detailed account of his observations on the flowers around Berlin. He showed that most of the flowers have nectar, and he interpreted the colour as an advertisement of this, suited to catch the insect-eye. By the insects' visits pollination is secured, which is important, since self-pollination is often impossible—for various reasons, but especially because of a want of time-keeping (dichogamy) between the stamens and pistil of a given flower. But there is no detail of the flower without its meaning: variously coloured spots serve as honey-guides or pathfinders to the exploring insects, hairs protect the nectar from rain and yet offer no obstacle to desirable visitors, other arrangements secure that the insects are dusted with pollen; such was the tenor of this pioneer's interpretation, all in a manner with which Darwin and his successors have made us familiar. If Sprengel had only discovered the *utility* of cross-fertilization, which Darwin proved experimentally, his work could hardly have been overlooked as it was.

The Secret of Nature seems to have fallen quite flat, probably because little interest was at that time taken in such inquiries, partly perhaps for extrinsic reasons, such as the unpopularity and unconventionality of the author. At all events, for nearly seventy years after its publication this bionomical classic was unjustly forgotten. In 1841 it came into Darwin's hands, and