Historical Highlight

Multiview Drawings

Rudimentary plan views of buildings have been used since ancient times. (See Figure 1.15.) However, elevations or multiviews of buildings would take many more years before they were in common use. Albrecht Dürer (1471–1528) is known mainly for his beautiful engravings (Figure 1.17), but he demonstrated the principles of multiview drawings in a book that did not have much appeal to those who would have benefited most from his work. Toward the end of his life, he wrote a book on geometry that was mainly a summary of what was already known but did contain some interesting drawings. In this book were elementary drawings such as sections through cones and the principles of orthographic projection.

Dürer began another series of books on geometry titled The Four Books on Human Proportions, published posthumously in 1528. For this book, he made careful measurements of the proportions of human figures, then averaged them before recording his findings. The problem he faced was how to graphically represent these human proportions. Dürer chose to use orthogonal multiview drawings to represent human proportions as shown in Figure 1. His drawings bear a lot of similarity to multiview drawings used today, but it was very new at his time. Although Dürer demonstrated the usefulness of orthogonal multiview drawings, they were not widely practiced until Gaspard Monge refined this projection system in 1795.

Excerpted from *The History of Engineering Drawing*, by Jeffrey Booker, Chatto & Windus, London, England, 1963.