Collecting Bridges

This month the creation of the web site “Digital Bridges” at Lehigh University is being noticed and celebrated. And rightly so, because this web site is a model for the presentation of extensive book material in a way that functions simply for those using it.

Two groups of users are envisioned: those studying the history of bridge construction, of course, but also engineers throughout the country who are engaged in restoring old bridges. There is already evidence that the second group is beginning to discover this resource. I suggest you take a look and see for yourself at http://bridges.lib.lehigh.edu.

Every project, however, has a background, and that background is the development of a significant collection of material about the construction of bridges, a collection based on material acquired by the University in the 19th century, as well as an intensive program of acquisitions in the last 10 or 12 years.

The real credit for the development of this collection belongs to Professor of Art and Architecture Tom F. Peters, who, upon his arrival at Lehigh in the late 1980s, took the trouble to point out that the library has some really important early technology books, particularly regarding bridges, in its collections.

Given what was already here, it seemed clear that in developing this area of the collection Lehigh offered the opportunity of creating a research collection of international significance. Clearly, that goal has been attained, and the collection will gain valuable publicity through “Digital Bridges.”

But why bridges, as opposed to some other area of technology?

The answer lies in the social as well as technical significance of bridges. These structures represent barriers overcome, the joining of peoples and the facilitating of commerce. In short, they are highly visible edifices which symbolize the advance of civilization like no other type of structure.

Bridges also offer special challenges to engineers. Unlike buildings, they are constructed at a 90-degree angle to the force of gravity, and call constantly for the utmost of the engineer's skill in resisting this force, the force of wind, as well as the constantly-increasing force of the loads applied to them.
Although “Digital Bridges” concentrates on American bridges, collecting encompasses significant bridges from both Europe and America, and indeed around the world.

Nonetheless, this discussion will limit itself to the American holdings represented in the digital project, and what more significant icon could one imagine than the Brooklyn Bridge, opened in .... and described in the rare publicity pamphlet illustrated on the front.

The image in the upper left is a detail from John Roebling’s *Long and Short Span Railway Bridges*, one of the most important bridge works published in the United States, and written by America’s most important 19th century bridge engineer.

Two other images suggest the breadth and depth of not only the collection, but also what’s available on the website. The right-hand, middle illustration comes from Wadell’s , a mature text on bridge construction. The image lower right represents the more mundane task of constructing the thousands of small bridges necessary to complete the country’s transportation system.

*Special Collections materials are available for research and consultation without restriction. For further information contact Philip A. Metzger, Curator of Special Collections, or Ilhan Citak, Special Collections Assistant. Reading room hours are Monday through Friday, 1 p.m. to 5 p.m. or by appointment. Telephone: (610) 758-4506; fax (610) 758-6091; e-mail: inspc@lehigh.edu.*