densed, as the subject is a broad one, but with the help of thirty or more carefully selected slides, and a judicious assembling of the matter in hand, the hearers obtained a very comprehensive idea of bridge erection.

The introduction comprised a brief definition of terms, and the drawing of distinctions between the "pin connected," or so-called American type of bridge, and the "riveted," or European type. Mr. McKibben says, "The rapidity with which many of our long spanned railroad bridges are placed upon their masonry supports is little short of marvelous. It is due first of all to the adoption of the so-called American type of pin-connected truss. This method of connecting the various members of a truss has been the result of the inventive genius of the American bridge engineer. To be able to place a steel span upon its piers in a minimum amount of time, in order to reduce the liability of damage from floods, ice-jams, etc., and at the same time have a joint as near perfect as possible, has been the problem." Considerable stress was placed upon the fact that ease and speed in erection must be constantly borne in mind during the design.

Many examples of actual erection were presented, which included the "I" beam and plate-girder types, erected generally by means of derricks, cranes, skids, gin poles, and overhead false work, simple trusses erected by old and new types of false work, travelers, cantilevers, arches, and viaducts; the latter types requiring often unusual and specially designed means of erection, although for the most part involving no new principles.

To replace a new bridge for an old one there are many questions to be considered in connection especially with the interruption of traffic. This, of course, involves the support of the track independently, so that the construction will not interfere with the passage of trains.

The new method of erection is very interesting and a great improvement over the old.

Under the old régime the false work for "deck" and "through" spans extended above the highest part of the truss. Now the false work is below, while a traveler running upon the same raises the members to place. The transportation of a bridge or its parts to the site of erection demands the attention of the bridge company to no little extent.

The descriptions of the erection, with slides to illustrate the same, of such structures as the Forth Bridge, New York and Brooklyn Suspension, Niagara Cantilever, Philadelphia Plate Girder, Red Rock Cantilever, the St. Louis Ead's Bridge, and the Washington Arch Bridge over the Harlem River, were listened to with great interest.

The lecture was of great value to the Seniors, considering they have so nearly finished bridge design and were just ready for it; and we may say of equal value to the third-year men, in that they have grasped several introductory ideas in anticipation of their next year's work.


The Tech. Philadelphia Society held its spring meeting at Soula's Café, Fifth Street, Philadelphia, Pa., on Tuesday, April 27, 1897, with some twenty members present. E. V. Seeler, '91, was Toastmaster. Routine business was disposed of, and a "Bohemian Luncheon and Smoke Talk" followed.

Action was taken regarding the death of President Walker. Resolutions were adopted and have been received by THE TECH.

The Society is progressing, with a membership of fifty-five. The next fall meeting will be held in November.

Crum, of Iowa University, died last week. Crum's remarkable performance in the Intercollegiate Games of 1895, when he won the 100 in 10 seconds flat, and also the 220-yard dash, is still fresh in the memory of all.