

THE National Lumber and Building Material Association will hold an exhibit at the Chicago Casino, Peck Court and Wabash avenue, the week of February 10 to 17, 1908. Everett W. Hogle, secretary of the Illinois Masons' Supply Association, is in general charge of the arrangements for the exhibit and convention, which will be important.

FEBRUARY 4 and 5, 1908, have been set as the days for the next annual convention of the builders' supply men in Chicago. Headquarters will be at the Auditorium hotel, and in all probability a banquet will be given at the close of the convention. Frank Wright, of the firm of Meacham & Wright, is the Chicago member of the executive committee. Membership in the organization has been growing steadily.

A SPECIAL committee appointed by the National Lumber Manufacturers' Association to look after obtaining \$150,000 to endow a professorship of lumbering in the Yale Forest School have reported that the subscriptions amount to \$67,500, which is \$17,500 more than was reported at the meeting of the association at Norfolk last spring. Fifty thousand dollars of this endowment in bonds has already been turned over to Yale University, the income of which will be used for instruction in applied forestry and lumbering.

THE fourth annual convention of the Iowa Association of Cement Users will be held in Des Moines, Ia., February 19, 20, and 21, 1908. Headquarters will be at the Savery hotel and application for space, which will be allotted by the square foot, should be made to J. R. Hubbart, manager of the hotel. George H. Carlon, Oskaloosa, Ia., is president; George H. Ross, Grinnell, Ia., treasurer, and Ira A. Williams, Ames, Ia., secretary. All of these gentlemen will be glad to answer inquiries in regard to the convention and the exhibit.

A 150-ton crane of unusual construction has been installed at Birkenhead, opposite Liverpool, England, for the handling of great weights into vessels alongside the wharf. It consists of a special 3-footed supporting framework, which rises about 60 feet above the dock level and is enlarged at the top to carry a revolving derrick structure with an overhanging jib. The latter is pivoted on a step bearing within the lower part of the supporting frame, and bears at the top against a pressure ring that withstands the thrust of the overhang. The jib has an extreme overhang of 38 feet 8 inches, and at the end carries an auxiliary hoisting gear of 50 tons capacity. The main gear, of 150 tons capacity, has a radius of action of 28 feet. A peculiar feature of the derrick is the use of continuous current power for the operation of the hoisting motors.

THE next convention of the National Association of Cement Users will be held in the concert hall of the Tech Theatre building, Buffalo, N. Y., on January 21 to 24. The exhibition will be open from Monday noon, Jan. 20, to Saturday midnight, Jan. 25.

The program includes papers on "Cement Sidewalks" by C. W. Boynton, Chicago, Ill.; "Elementary Mechanics of Reinforced Concrete," by Prof. W. K. Hatt, Purdue University, Lafayette, Ind.; "Factory-Built Concrete," by W. H. Mason, Stewartsville, N. J.; "Concrete as a Plastic Material for the Expression of Architectural Ideas," by Irving K. Pond, architect, Chicago, Ill.; "Artistic Effects in Reinforced Concrete," by Ross F. Tucker, New York City; "Exposed Selected Aggregates in Monolithic Concrete Construction," by Albert Moyer, New York City; "Progress in Manufacture and Use of Cement

Building Blocks," by A. N. Pierson, East Orange, N. J.; "Practical Methods Involved in the Erection of a Reinforced Concrete Building," by H. H. Fox, New York City; "The Unit vs. the Loose Bar System of Reinforced Concrete Construction," by Emile G. Perrot, architect, Philadelphia, Pa. There are a number of other subjects on the preliminary program for which speakers have not yet been obtained, and each of the committees is given a time to make a report. An hour is given each morning to a meeting of those interested in the fields covered by these committees.

The list of exhibitors already procured for the show is large and promises to be larger than it was at Chicago last year.

The attendance will be drawn largely from a new field. The first three conventions drew from the same states, Indiana, Illinois and Wisconsin, most largely, with many of the same faces each year. But few of these will appear at Buffalo on account of the expense of the trip and possibly in a few cases because the Chicago show took the place for them that the association has heretofore.

It is likely, however, that it will be attended largely by Canadians, in so far, as this is the first convention of the association held within reasonable distance of the Canadian boundary.

## Bascule Lift Bridges

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elevation of the base of rail above water, about 10 feet, the bridge is designed as a through truss cantilever. It crosses the channel at the acute angle of 36 deg. 30 min., which necessitates a span of 275 feet, centre to centre of bearings, in order to give a clear channel of 120 feet. The loading is 10,000 pounds per lineal foot of bridge, with a concentrated load of 50,000 pounds at any point of each track. The bridge is operated by electricity, and the machinery and equipment is so arranged that it may be operated by one man from the operator's house on one side of the channel. The sub-structure rests upon piles driven to rock and cut off five feet below the bottom of the channel. This system of piling is shown to good advantage in figs. 13, 14 and 15.

## Additions to Chateau Frontenac

(For illustrations see page 44.)

ON page 44 will be found illustrations showing the Chateau Frontenac, Quebec City, as it will appear well known hostelry, one of the finest on the American when the additions to cost \$1,500,000, proposed by the owner, the Canadian Pacific Railway, are completed. This continent, is picturesquely situated at the foot of the elevation upon which is located the historic citadel, overlooking the St. Lawrence river. It is one of the best examples in Canada of the French Chateau type of architecture and it may be seen in the illustration that Mr. Painter, the architect, has quite successfully carried out the original style in his design for the new additions. The present building will be a very small part of the completed structure, as proposed, although the designer has worked out the problem of planning the additions so as to make the existing building become a very part of the finished structure, in a most commendable manner. The hotel now contains 260 rooms, but when the enlargement has been completed it will contain 640 rooms, which will make it by far the largest hotel in Canada. It is noteworthy that the contract for the first section to be added provides for reinforced concrete construction and was awarded to the Provincial Construction Co., of Toronto. The Kahn system of reinforcement is specified. In view of the fact that the present building is of skeleton steel construction this appears to be a victory for reinforced concrete.