

imity to rivet holes and notches can be clearly observed, and by an ingenious device quantitative estimates can be made of the forces acting at all points throughout the specimens. This device consists in providing an auxiliary strip of the same material, but without holes or notches, and observing in the same apparatus the successive changes of color of the transmitted light corresponding to known changes of tension. By comparing the colors in the case of this strip with those obtained with the specimens, the numerical values of the stresses throughout the specimens can be mapped out and recorded. The applications of such an apparatus are almost limitless; it should, for example, afford a means of answering many of the vexed questions relating to masonry dams. In general, it is entirely representative of the modern tendency of research in engineering science, which consists in appealing to experiments upon models for the fundamental principles of design to be applied to large structures.

### THE BRITISH FIRE PREVENTION COMMITTEE'S PUBLICATIONS.

The British Fire Prevention Committee have decided to publish early next year an important illustrated tabular summary of the results of their official fire tests with sixty fire resisting doors. These important results cover an experimental period of 12 years and practically embrace every type of door from different varieties of ordinary wood and hardwood doors to the most modern forms of composite doors or roller shutters. The summary will be published at \$10.22 (net).

Later next year a similar summary dealing with 15 different types of fire resisting partitions will be published at \$2 52 (net).

These publications will be issued over and above the usual reports and well known "Red Books" of the committee.

It should be pointed out that new subscribers to the committee's publications enrolled at this period, i.e., November and December, 1911—whereby their subscription ranks until the end of 1912—will have the benefit of a number of valuable publications of quite exceptional importance, as well as the useful publications regularly issued by the British Fire Prevention Committee in the ordinary course, and it may thus be of advantage to public authorities, professional men and others to notify the committee of their intended subscription at this stage.

The subscription to the publications, which figures at \$10.22 per annum, allows for use of the committee's enquiry office as also of obtaining back issues of the 150 "Red Books" already issued at special figures, as far as they are still in print, as also of the summarized results of 28 fire tests with fire resisting floors, otherwise only obtainable at \$5.11 (net).

Enquiries as to publications should be addressed in writing to the Assistant Secretary of the British Fire Prevention Committee, 8 Waterloo Place, London, S. W., England.

### PERSONAL.

**Mr. C. McN. Steeves**, assistant engineer in St. John district, has been appointed engineer in charge of the new wharf on West Side, Ottawa, Ont.

**Dr. Frederick T. Dunlop** has been appointed provincial bacteriologist for the province of New Brunswick. He occupies the office of Dr. W. Warwick, who recently resigned.

**Mr. Francis W. Frost**, formerly secretary and treasurer of the Engineering News Publishing Co., of New York, U. S. A., has been elected to the office of vice-president and treasurer of Suffern & Co., 96 Wall Street, New York City.

**Mr. Frank Cooper**, for some time resident engineer of the C.P.R., at London, Ont., has been transferred to the Montreal terminals.

**Mr. E. S. Prentice** was a recent visitor to Vancouver, B.C. Mr. Prentice is a member of the Institute of Civil Engineers, of London, and late consulting engineer to the Transvaal government and the Central South African Railways. He invented a device to gauge the water capacity of hydrants while he was engaged as engineer of the old Metropolitan Board of Works and the London County Council.

**Mr. R. D. Brown**, A.M. Inst. C.E., of the City Engineer's office, Toronto, has been appointed city engineer of St. Catharines, Ont. Trained under the borough engineer of Clydebank, Scotland, he served seven years as assistant to the city engineer of Glasgow, and afterwards one year looking after the Scottish interests of the Consideré Reinforced Concrete Construction Co., Ltd., of Westminster. Mr. Brown is an associate of the Institution of Municipal and County Engineers, (London, Eng.), and a member of the Sanitary Association of Scotland.

**Mr. David M. Shaw** has left Montreal, P.Q., to assume a position in connection with a large hydro-electric development in Barcelona, Spain, which is being organized by Dr. F. S. Pearson, of New York. Mr. Shaw was born and educated in Montreal and was for many years in the employ of the Montreal Street Railway Company. He later entered the employ of the Montreal Light, Heat & Power Company in connection with their construction work at Chambly, and from there he went to Mexico in the employ of the Mexican Light & Power Company. Latterly, he has been identified with the Canadian Light & Power Company's development, being employed by one of the contractors on that work.

### CANADIAN SOCIETY OF CIVIL ENGINEERS.

The Toronto Branch of the Canadian Society of Civil Engineers held their annual meeting at the Engineers' Club, Toronto, on November 30th. Mr. John H. Jackson, Supt. of the Queen Victoria Niagara Falls Park, addressed the meeting on the Niagara Boulevard, taking up the engineering features in connection with this work. His address will be published in the columns of The Canadian Engineer.

A meeting of the Mechanical Lectures was held on Wednesday evening, December 6th, at the society's rooms, Montreal, at which Mr. Alexander Allaire, A.M. Can. Soc. C.E., Montreal, manager of the Foundation Co., of New York, read a paper on "Pneumatic Caisson Foundations for Tall Buildings."

### MEETING OF THE ENGINEERING ALUMNI OF THE UNIVERSITY OF TORONTO.

The Engineering Alumni of the University of Toronto held their annual fall meeting at the Engineers' Club, Toronto, on the evening of November 30th. Mr. W. E. Douglas, the president, was in the chair and addresses were delivered by Professor A. G. Christie, of the University of Wisconsin, and Dean Galbraith.

Prof. Christie's address dealt with engineering education at the University of Wisconsin; the text of his paper will be found in another column of The Canadian Engineer.