THE NATIONAL ELECTRIC LIGHT ASSOCIATION OF THE UNITED STATES.

PROGRAMME OF THE MONTREAL MEETING, SEPTEMBER, 1891.

Session to open at 10 a.m., and adjourn at 2 p.m.

SEPTEMBER 7TH.—3 p.m.—Convention called to order; addresses of welcome and reception; response; address of president; report of secretary; report of treasurer; reading invitations received; adjournment to meet in evening at Exhibition Rink at 8 o'clock p.m. 8 p.m.—Formal opening of the exhibition.

SEPTEMBER 8TH.—Reports of Committees on Relations of Manufacturing and Central Station Companies, etc.; Reports of Committees on Data; Reports of Committees on World's Fair; Reports of Committees on Legislation; Reports of Committees on Underground; Reports of Committees on Safe Wiring.

SEPTEMBER 9TH.—Discussion of T. C. Smith's Paper; Paper W. C. Warner, "Various Forms of Carbon for Use in Arc Lamps"; Paper—Capt. Eugene Griffin, "Three Years Development of Electric Railways"; Paper—H. Ward Leonard, "A Central Station Combining the Advantages of both Continuous and Alternating Systems."

SEPTEMBER 10TH.—Paper—J. I. Ayer, "Some Details of the Care and Management of an Arc Lighting Station, as Practised in the Municipality of St. Louis"; Paper—C. J. Field; Paper—George A. Redman, "Central Station by Water Power"; Paper—J. J. Burleigh, "Uniformity of Method in Keeping Central Station Accounts."

Executive Session to follow immediately to elect members of Executive Committee, and to name place of next meeting.

Entertainments to be arranged for each day and announced by bulletin.

The following is the the programme arranged for the entertainment of the National Electric Light Association of the United States, by the Citizens' Executive Committee, Montreal:

MONDAY, SEPT. 7th.—Opening proceedings of the Convention in the Windsor Hotel, addresses of welcome by His Worship the Mayor, and other distinguished members of the Reception Committee. 3 p. m.—Formal opening of the Exhibition.

TUESDAY, SEPT. 8th.—2.30 p. m.—Fire Department Display on Champs de Mars. 4 to 7 p. m.—Garden Party. 8 to 11.30 p.m.—Conversazione at Redpath Museum, Molson Hall, McCill University.

WEDNESDAY, SEPT. 9th.—3 p.m.—Drive through the city and around the mountain. 4 to 7 p.m.—Garden Party.

THURSDAY, SEPT. 10th.—2.30 p.m.—Through the kindness of the Harbor Commissioners, trip by boat down the St. Lawrence and the Lachine Rapids, stopping on the way at Caughnawaga. 8 p.m.—Banquet at the Windsor Hotel.

FRIDAY, SEPT. 11th.—3 p. m. — Lacrosse match, Garden Party. In the evening Promenade Concert at Sohmer Park, through the courtesy of Messrs. Lavange and Lajole.

SATURDAY, SEPT. 12.—3 p.m.—Yachting excursions for ladies, on the St. Lawrence and Richelieu rivers. 7. p.m.—Excursion to Quebec at reduced rates.

It is expected that His Excellency the Governor-General will be present during the Convention.

A REPLY TO "R."

TORONTO, Aug. 17, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR,—Allow me to say in answer to a letter signed "R" in last month's NEWS, that, judging him by his letter, he does indeed (as you say) show a little of that intolerance which he so unsparingly condemns in others.

As regards the explosion on Dufferin street, I can only say that if the particulars of the case were as "R" reports them, no blame could possibly be attached to the engineer in charge, and the letter which I wrote to your paper would in that case be doing him an injustice, and as I never (to my knowledge) saw the man in my life and have no idea who he is, I would be the last man to do him an injury intentionally.

On the other hand, the information I received on the subject and the source of same (in the absence of further proof of "R's" statement), I consider equally reliable. "R" should not talk of "venting spleen," &c., as it is very easy to see after reading his letter in the NEWS that he is venting his spleen against, and showing his hatred for, the C.A.S.E. I may say that I am a member of the Association, and am proud of it, too; for it has done me more good than any other organization I ever became a member of, and if "R" is an engineer (but I feel sure he is'nt), I can assure him it will do him all the good imaginable to become a member of the "ring," as he calls it.

It would not be a hard matter to take the wind out of "R's" sails on one or two points in his letter, but I do not consider it is worth while, as it might only give him a chance to again open his tirade of jealousy and slander against an organization that is honestly striving to do a good work in raising by all legitimate means the status of the stationary engineers of Canada, and which has up to the present time met with a fair measure of success in its undertaking.

We invite our employers, the steam users, to unite with us and even attend our meetings, feeling satisfied to leave the verdict in their hands as to whether or not the objects of the Association are such as should command the respect and esteem of our fellow citizens. We have no fear of the result.

The latter part of "R's" letter I will leave to the tender mercy of "S" (whoever he may be), although I see that "R" gives in his wisdom one writer the credit for both letters. In this guess he is far astray.

Apologizing for taking up so much of your space, and wishing the NEWS the success it so well deserves, I remain,

Yours, &c.,

SAFETY.

SAFETY VALVES, THEIR HISTORY, ETC.

611 & 612 Electrical Exchange.

NEW YORK, 12th August, 1891.

Editor ELECTRICAL NEWS.

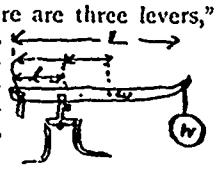
It is with some hesitation that criticism is offered upon Mr. Le Van's articles upon safety valves, begun in your paper vol. 1, No. 7, p. 88, issue of July, '91. The following points are noted that no beginner may be accidentally led astray:

Throughout the article appears the term "static momentums" where it is usual to use the term "static or statical moment," (see Weisbach "Theoretical Mechanics," p. 195)—the word momentums or quantity of motion belonging to that part of mechanics treated under the head of dynamics rather than under statics when the lever is rightly put.

Instead of saying: "The resistance at *f* is called the fulcrum," would it not be more accurate to say that the fulcrum is the point of application of a third force about which two other forces or sets of forces are being balanced, the axis or point about which rotation or equilibrium is established being defined as the fulcrum (Weisbach, p. 255, or D. K. Clark's "Manual of Rules, &c.," 5th edition, 1890, p. 296; "Kinematics and Dynamics"—J. G. Macgregor, 1887, p. 406, &c.

Going into it a bit deeper, the fulcrum is really the "permanent centre" of the lever, ("Mechanics of Machinery," A. B. W. Kennedy, 1886, p. 47.)

On p. 106 it is correctly stated that "there are three levers," but it is incorrect to say that the weights act only at two different points. The general equation (1) W.L+w x=A.p.l. is incomplete. The "moments" (not momentums) of the form forces involved are as follows: The weight of v+3=2



Forces.	Their Lever Arms.	Their Moments.
A.p.	l	Ap. l
W	L	W.L
w	x	w. x
Z	l	Z.l

making the general equation :—

Apl=W L+w x+z l

The weight of the valve and stem act with the arm l, not with the arm x, and ∴ it is incorrect to add the weights v, s and w, and take their sum as a force acting with the arm w. This mistake may be due to an article in *Power-Steam*, vol. X, No. 5, p. 6, May, 1890, where the error likewise occurs.

Yours truly,

J. STANFORD BROWN,

Consulting Engineer.

Visitors to the convention who may be passing through Toronto should, if possible, stop off long enough to take a look at the city and visit the electric lighting station on the water front. The works of the Toronto Electric Light Company are always open to the public and they will be especially so to the members of the convention. This station occupies a somewhat unique position inasmuch as all their plant is manufactured on the premises. They have a well-equipped machine shop, including winders and braiders for covering all the wire used for line work and dynamos. There is no secretiveness about the policy of the management, and many devices originating here have been adopted by other electric light companies througout the country, notably an automatic cut-out for use on lamp poles to prevent open circuits through breaking of leading wires. They are nothing if not original, and visitors could no doubt be able to pick up pointers that might be of great use to them in the business. There are lightning arresters on each line which are contained in a separate building, so avoiding any chance of fire in the main building through an accidental short circuit in the arrester; and they have a very complete apparatus in connection with the fire alarm service of the city, enabling their patrolman with horse and wagon to start out within ten seconds of the striking of the alarm in case his services should be needed to look after the safety of any of the lines. We are assured that visitors to the works of the company will be made most welcome.