

AN APPRECIATIVE LETTER FROM THE FAR NORTHWEST.

GOVERNMENT TELEGRAPH SERVICE,
DEPARTMENT OF PUBLIC WORKS,
DOMINION OF CANADA,

EDMONTON, N. W. T., 19th May, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR, I have often wondered why we could not have a home journal devoted to electricity, and gladly welcome the NEWS. I hope you will soon issue it weekly, or at least semi-monthly. I enclose a year's subscription. Send me the numbers for Jan., Feb., and April; I have those for March and May.

Yours truly,

ALEX. TAYLOR.

CORRECTION.

TORONTO, June 16th, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR, Kindly make the following corrections of typographical errors in my answers in your Engineers' Competition. Question No. 2 instead of "71 saving" should read "71 saving," which makes considerable difference.

In No. 12 "highest variations of speed" should read "slightest variations of speed."

I am sorry you did not meet with more success in your effort to benefit engineers, and I should have considered more credit due the winners had there been many more competitors. May say I am quite satisfied with the decisions given by the judges.

Yours truly,

G. C. MOORING.

A CHEAP AND VALUABLE ASSISTANT.

NEW HAMBURG, June 1st, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR, Enclosed please find the sum of one dollar for ELECTRICAL NEWS to Jan. 1st, 1892. Your paper has been of good service to my electrician who has charge of my plant here, and has been useful to me on several occasions. Am sorry it could not be published every two weeks instead of once a month.

As representative of above firm, I take considerable interest in advocating the benefit derived by pursuing the columns of your journal. I think no mechanic in the country should be without it.

Wishing you unbounded success in your enterprise, I am,

Yours respectively,

CHAS. F. ERNST,

Prop. New Hamburg Electric Light Co.

ANOTHER BOILER EXPLOSION.

TORONTO, June 4th, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR, I am informed that a boiler explosion took place in Bailey's wood yard on Dufferin street, in this city, on June 1st. The damage resulting is said to be about \$1,000. Fortunately no lives were lost, but of course this fact is to be attributed to good luck, as I presume there was no person near the rotten old scrap heap at the time.

The cause of this explosion no doubt was: 1st, A rotten old boiler, which was unable to hold the pressure it was subjected to, and, 2nd, An incompetent man placed in charge.

Will the city authorities take this matter up and investigate it? Not they! But if half a dozen people had been blown into eternity, they would have been compelled to do so. In that case, ten chances to one the so-called engineer would have been among the killed, and the men who made the investigation would have laid all the blame on him (of course because he was dead). They would never lay any blame on the owner of the boiler (death trap) for buying a second-hand, corroded old tank, and then placing it under the care of an incompetent man—probably a man who had never fired a boiler in his life before.

I say that the steam user who puts into operation an unsafe boiler and places an incompetent man in charge of same, and an accident follows in which lives or property is lost, should alone be held responsible.

However, after this month all stationary engineers will be able to obtain certificates of competency, under the new Act passed at the last session of the Local Legislature, and steam users will do well to see that their engineers obtain the necessary certificate to prove that they are not ignorant of the duties of

the positions to which they aspire. And all steam users when engaging engineers will study their own interests by insisting that applicants must hold an engineer's certificate. They will, by so doing, have the satisfaction of knowing that they have a man in charge of their steam plants who is sober, steady, and has the necessary qualifications to prove himself a reliable and practical engineer.

Yours respectfully,

"SAFETY."

THE NEED OF QUALIFIED ENGINEERS.

TORONTO, June 22nd, 1891.

Editor ELECTRICAL NEWS.

DEAR SIR, I hear that Mr. Hamilton, the "steam fitter," who was appointed to the position of chief engineer in the Canada Life building, has been discharged, and it was no more than I expected. No person could expect that a man who had served his apprenticeship at steam fitting (and had worked at his trade all his life) could turn out to be a competent engineer, without the necessary study and experience which is required to make a man a good engineer.

I feel that I am safe when I say that there is not one steam fitter in every one hundred who knows anything about the proper handling of a steam boiler, to say nothing of his being able to compute the safe working pressure, or whether the boilers are of sufficient strength and stayed in accordance with the rules of the Board of Trade (English), which rules all competent engineers are familiar with.

Yet in the face of all this, the officers of a concern like the Canada Life and several others in this city, will go to work and appoint a man to take charge of a battery of boilers and engines who has no knowledge whatever of the dangerous apparatus he is supposed to be master of. At the same time, much valuable property and (what is still more valuable) many human lives are at stake.

It is high time that the authorities at our City Hall took the matter in hand, as the citizens of Toronto have a right to demand that the men who are operating as engineers in the many large buildings and under sidewalks be compelled to prove that they have at least the necessary knowledge to enable them to operate the steam plants under their charge with perfect safety. It does not follow that in order to do this a man must be an expert mathematician or chemist, but he must be a practical engineer.

It is only a week or two since a man who calls himself chief engineer in an electric light station in this city, ran a boiler night and day for over two months, so that the boiler became so foul with mud and sediment that one of the sheets was bulged and blistered. At the same time he had five other boilers lying idle, and after washing this boiler out, he ordered the fireman to fire her up again, but the fireman (more power to him), refused to do so until the sheet was repaired. Yet this man holds a position as chief engineer, although he could not pass an examination as a good fireman.

Yours, &c.,

S.

THE H. P. OF ENGINES.

Editor ELECTRICAL NEWS.

DEAR SIR,—*Mirabile dictu!* No engineer that has written on the subject at least, has been able to see the point aimed at, or properly explain it, although some come near it. All see something different in it to what they have heard or seen. I will now try to explain.

I will try, as I have hitherto done, and avoid technical terms and formulas, as only few engineers have a technical education and will better understand my meaning if put before them in plain words. I am writing to the young engineer and those who wish to learn. There is a very erroneous idea prevalent, and among scientific men too, about h. p. I am now confining this term strictly to its original meaning. Some think that it makes no difference at what rate the horse travels whether he raises 33,000 lbs. 1 ft. high, or 1 lb. 33,000 ft. That sounds very well in theory, but this is where the error creeps in. This theory would be all right if the horse's power decreased as his speed increased, but such is not the case; as his speed increases his power decreases inversely as the square of the next number, according to Leslie and other experimenters. If a horse travelling at the rate of two miles per hour can carry 100 lbs.,