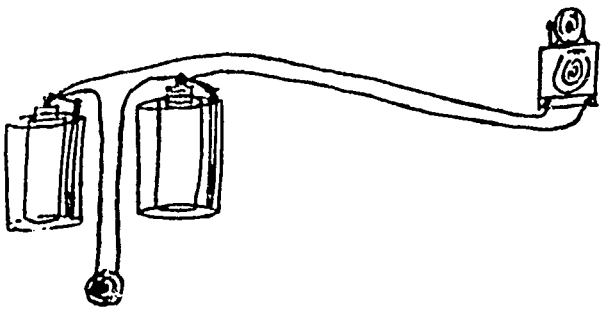
BERLIN, June 19th, 1892.

Editor ELECTRICAL NEWS

DEAR SIR, I enclose you a sketch of how a local dealer in electrical supplies was trying to get an electric bell to ring.



You will notice the zincs are "not in it" at all.

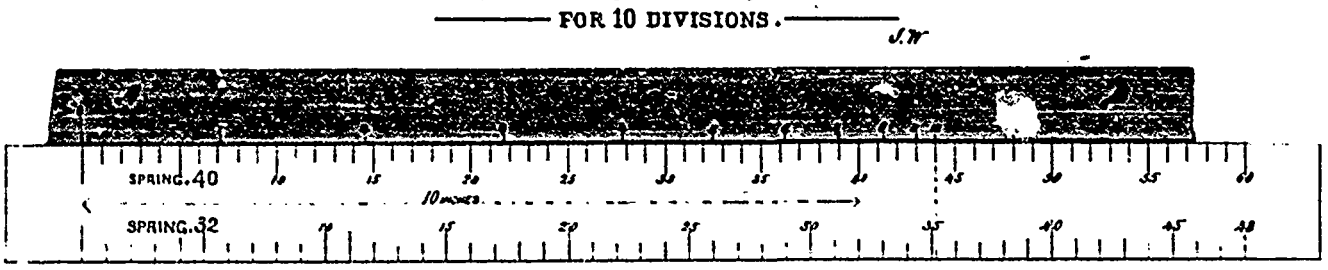
Yours truly,

H. A. ALDRICH.

MECHANICAL METHOD OF DETERMINING THEM. E. P. OF DIAGRAMS.

Editor ELECTRICAL NEWS.

SIR, During the reading of the paper on "The Measurement of Work," before the Stationary Engineers' Association of Montreal, on the evening of March 3rd, reference was made to a mechanical method of determining the M. E. P. of diagrams. After reading the paper, the author took one of the cards on the table, marked scale 40, and determined the M. E. P. by the following process, which is illustrated by the accompanying figure:



After dividing the diagram into 10 divisions, take a strip of paper, marked A. B. in the figure, and mark on the edge with a sharp pencil or the point of a knife, the mean height of each division successively. The aggregate height of the divisions is then measured with a M. E. P. scale, on which a length of 10 inches is divided into 40 equal parts, each divisional part being then 10 40ths of an inch. By this scale the distance from 0 to 10 is 44 parts, which is the M. E. P. of the diagram. If a fraction of a division had been over, it could be read to 10ths with the scale of the spring.

On the other edge is a scale for a 32 spring, on which 10 inches is divided into 32 equal parts, each part being 10/32 of an inch. It will be observed from the dotted line on the figure, that if the diagram on hand had been taken with a 32 spring, the M. E. P. would have been 35.2 lbs.

There is an accuracy and exemption from error in this method of finding the M. E. P. of a diagram, that entitles it to be better known among engineers than it appears to be. If the diagram is divided into 12 or 14 parts, then 12 or 4 inches is the unit of the scale, and it is divided into 30, 40 or 50 equal parts, corresponding to the number of the spring. The M. E. P. is read off as before.

With 10 divisions of diagram, the M. E. P. to scales of 10, 20, 40 and 80, can be read with a foot rule, but the M. E. P. scale is preferable. With a strip of good card board 18" long by 1 ½" wide, an engineer can make scales to suit the springs he has or get a draughtsman to lay them out for him, and with a dividing or gird iron parallel ruler to lay off the divisions, and a strip of paper to lay off the heights, he will work up a diagram in less time, and with less labor, than with an Amstler or a Crosby Planimeter, and I will add, with less chance of error and no use for arithmetic.

Yours truly,

J. W.

THE STRATHROY ELECTRIC STATION.

Editor ELECTRICAL NEWS.

DEAR SIR, Being in the town of Strathroy recently, I visited the Central Electric Station in that town, and for the information of your readers I submit a short description of the same. Mr. T. N. Saylor, who owns the station and plant, at once told me that I was welcome to go and come as I pleased.

The station is a white brick building 18 ft. x 75 ft. and is situate just off Front street, near the Queen's hotel. Mr. Saylor came to Strathroy a few years ago and bought the lot and built a station on it, having previously bought the contract for lighting the town from the Reliance Electric Co., who had made arrangements with the town to supply the light.

The plant consists of one 25 lt., 8 amp., 2000 c. p. Reliance dynamo; one 25 lt., 4 amp., 1000 c. p. of the same make. The 8 amp. machine is used for street lighting and some private lights, while the 4 amp. machine is used exclusively for private stores for both 1000 c. p. arcs and 50 c. p. Bernstein lamps on the same circuit. The number of lamps supplied with current at present is fourteen 2000 c. p. street arcs, fifteen 1000 c. p. private arcs, and thirty 50 c. p. Bernstein lamps, which are run every night in the year till midnight.

The motive power is supplied by a 12 x 20 Wheelock engine. Steam is generated by a 54 x 15 Inglis & Sons steel boiler, with 65 3" tubes, which is fed by a plunger pump driven off the crank shaft of engine. The feed water is raised from a well by a common well pump, operated by a crank on one side of plunger pump, and is pumped into a tank from which feed pump is supplied.

The fuel consumption for this plant is ½ cord of good wood, from 7 p.m. till midnight.

Mr. Saylor has attached to the governor of his engine, a device of his own, which he has patented, and which does away with the spring on the trip rod. The resistance to the centrifugal force of governor is obtained by a dead weight and a system of levers. Mr. Saylor informed me that he could with this device throw off the load on his engine without increasing the speed one revolution.

As I seemed rather skeptical, he said if I would come around when he shut down, he would prove to me that his device would do what he claimed. It is needless to say I was on hand at the time appointed. The engine was started up light, and I counted the revolutions per minute and found them to be 76; the load was then suddenly thrown on by closing the switches, and I counted the revolutions again and found that no change had taken place. Anyone wishing further information regarding the device can obtain it from Mr. Saylor at Strathroy.

Mr. Saylor expressed himself as being well satisfied with the Reliance system. This plant is a model of its class; everything is clean and tidy from one end to the other, and is a credit to the owner, who acts as his own engineer and electrician. Any one passing through Strathroy can make sure of a hearty welcome if they wish to visit the plant, especially if they are in the business.

Yours truly,

"TRAMP."

She wasn't on the play-ground, she wasn't on the lawn,
The little one was missing and bee-time coming on.
We hunted in the garden, we peeped about to see
If sleeping under rose-tree or lilac she might be,
But nothing came in answer to all our anxious call
Until at length we hastened within the darkening hall.
And then upon the stillness there broke a silvery tone—
The darling mite was standing before the telephone,
And softly as we listened, came stealing down the stairs:
"Hello, Central! Give me Heaven, I want to say my prayers."

—Pick-Me-Up.