being still away on their vacation, and the second-year men either taking their customary exercise on Huntington Avenue or working for outside parties.

The electrical engineers are now receiving a course of lectures on the "Theory of Climbing Telegraph Po'es." Field practice is to commence as soon as the weather will permit.

Our mechanical students frequently have occasion to compute the amount of steam used by a steam engine from the indicator diagrams. We think the following method will be found convenient, as the only data required are a diagram and its scale:

Draw a horizontal line through the point of release, and mark the point where it cuts the compression curve, which may be prolonged beyond the limits of the diagram, if necessary, in order to get an intersection. Let

\[ l' = \text{the distance, measured on any convenient scale, from the point so found to the point of release;} \]
\[ l = \text{the length of the diagram;} \]
\[ p = \text{the mean effective pressure on the piston in pounds per square inch;} \]
\[ w = \text{the weight of a cubic foot of saturated steam at the pressure corresponding to the point of release;} \]
then the weight of dry steam per horse-power per hour accounted for by the indicator,

\[ S = \frac{13750 l' w}{l p}. \]

The above rule is accurate for any case where the steam in the cylinder is not superheated, and takes into account both the loss of steam due to clearance and the saving due to compression. The steam not accounted for by this method has either leaked through into the exhaust or has been condensed in the cylinder, and not re-evaporated before the end of the stroke. These sources of loss can seldom be detected by the indicator. The number 13,750 is obtained by combining several constants, which ordinarily appear in the calculation, into a single coefficient.

Locals.

Providence took away our beloved '86 director during vacation.

The Senior mechanicals rejoice in the prospect of ten weeks' "laboratory work"; not at the Institute though. Bless you, no! outside, of course.

The Cadets appeared in uniform last week, giving a much better appearance to the battalion. Some of them mourn some over the splendor of the officers' uniforms, gold lace, etc.; but they must remember that "all that glitters is not gold."

After this, those Civils who desire to pass with honor in hydraulics should hand in a pretty note-book. It would be well to get one with colored covers; and, if possible, the student should take a course in penmanship at some business college before taking the above-named course.

How many fellows there are who, after the semi's, have had tip-top positions offered them in business, you know, and it really wouldn't pay to come back another term. Besides, their physicians say that their health is becoming seriously impaired by too close application, etc., etc.

Various opinions of the discriminating public concerning the character of the excursionists:

At Jersey Ferry, "Glee Club?" Fulton Market, (with disgust), "Collegians!" Ditto, further on: "They've let 'em all loose, to-day." Philadelphia horse car: "Is this a college concert company?" New York exclamations: "Emigrants," "Baggage smashers," "Germany let loose," "Female seminary in disguise." (Indicating the Prof.), "All his family, I presume."

An interesting series of lectures on "Dynamo-Electric Machinery," by Prof. Sylvanus Thompson, is appearing in the Journal of the Society of Arts, beginning Dec. 29, 1882, and also in the Electrician (London), beginning Jan. 6, 1883.

In Van Nostrand's Magazine for February, 1883, is an article by Wex, on "The Regulation of Rivers and Waterways, with a View to the Prevention of Floods." Interesting for the third-year Civils.