

have them properly lighted and ventilated. Experiments and investigations, made during the last few years in Europe and America, have disclosed some startling facts in relation to the amount of *myopia*, or near-sightedness, to be found among the pupils in public schools. An examination made by physicians, specially skilled in treating the eye, was made in Breslau, St. Petersburg, Koningsberg and Lucerne. The eyes of over 20,000 pupils were tested, and the astounding discovery made, that, while there was scarcely any near-sightedness on the part of children during the first half year of their school life, over 60 per cent. of those in the most advanced classes had defective eyesight. This is a matter which demands the most serious attention of all who are connected with educational affairs. The chief cause of this vast amount of near-sightedness is the incorrect system of lighting school-rooms. The Austrian schools are now the best lighted in the world. In them, the light is admitted only from the LEFT side. The other three walls of the school-room are *opaque*. The worst possible light is that which comes from the *front* of the pupils. No light should be admitted to a school-room from the *right* side of the pupils. A *rear* light is not so harmful as that which comes from the *front* or *right*. A late English authority, in treating of ophthalmic diseases caused by improper light in school buildings, says: "The remedy is, to have the light sufficiently strong, and let it fall on the desk from the left hand side, and as far as possible from above." The expression "from above," just quoted, does not mean through a sky-light. The left side of the room should contain as many windows as possible, and they should extend from a line about a foot and a half above the heads of the pupils nearly to the ceiling.

Teachers are, however, frequently blameable for much of the near-sightedness of their pupils. They allow them to hold their eyes too near their slates, or copy books, or reading books while using them. Fifteen inches is recommended as the proper distance for the normal eye, from an object, in order to secure the most perfect vision. As teachers have to use their eyes a great deal at *night* in studying, and correcting exercises, etc., the following rules, prepared by Dr. D. F. Lincoln, Secretary of the Health Department of the American Social Science Association, will be worthy of their especial attention:—

RULES FOR THE CARE OF THE EYES.

"When writing, reading, drawing, sewing, etc., always take care that:

- "(a) The room is comfortably cool and the feet warm;
- "(b) There is nothing tight about the neck;
- "(c) There is plenty of light, without dazzling the eyes;
- "(d) The sun does not shine directly on the object we are at work upon;
- "(e) The light does not come from the front; it is best when it comes over the left shoulder;
- "(f) The head is not very much bent over the work;
- "(g) The page is nearly perpendicular to the line of sight—that is, that the eye is nearly opposite the middle of the page; for an object held slanting is not seen so clearly;
- "(h) That the page or other object is not less than fifteen inches from the eye.

"Near-sightedness is apt to increase rapidly when a person wears, in reading, the glasses intended to enable him to see distant objects.

"In any case, when the eyes have any defect, avoid fine needle-work, drawing of fine maps, and all such work, except for very short tasks, not exceeding half an hour each, and in the morning. Never study or write before breakfast by candlelight.

"Do not lie down when reading.

"If your eyes are aching from fire-light, from looking at the snow, from overwork, or other causes, a pair of coloured glasses may be advised, to be used for awhile. Light blue or greyish blue is the best shade; but these glasses are likely to be abused, and usually are not to be worn except under medical advice. Almost all

those persons who continue to wear coloured glasses, having perhaps first received advice to wear them from medical men, would be better without them. Travelling vendors of spectacles are not to be trusted. Their wares are apt to be recommended as ignorantly and indiscriminately as in the times of the "Vicar of Wakefield."

"If you have to hold the pages of *Harper's Magazine* nearer than fifteen inches in order to read it easily, it is probable that you are quite near-sighted. If you have to hold it two or three feet away before you see easily, you are probably far-sighted. In either case, it is very desirable to consult a physician before getting a pair of glasses, for a *mistake* may permanently injure your eyes.

"Never play tricks with the eyes, as squinting or rolling them.

"The eyes are often troublesome when the stomach is out of order.

"Avoid reading or sewing by twilight, or when debilitated by recent illness, especially fever.

"Every seamstress ought to have a cutting-out table to place her work, on such a plane, with reference to the line of vision, as to make it possible to exercise a close scrutiny without bending the head or the figure much forward.

"Usually, except for aged persons or chronic invalids, the winter temperature in work-rooms ought not to exceed sixty degrees or sixty-five degrees. To sit with impunity in a room at a lower temperature, some added clothing will be necessary. The feet of a student or seamstress should be kept comfortably warm while tasks are being done. Slippers are bad. In winter the temperature of the lower part of the room is apt to be ten degrees or fifteen degrees lower than that of the upper.

"It is indispensable, in all forms of labour requiring the exercise of vision on minute objects, that the worker should rise from his task now and then, take a few deep inspirations with closed mouth, stretch the frame out into the most erect posture, throw the arms backward and forward, and, if possible, step to a window or into the open air, if only for a moment. Two desks or tables in a room are valuable for a student—one to stand at, the other to sit at."

SUBJECTS FOR TEACHERS' INSTITUTES.

It is very desirable that the meetings of Teachers' Associations should be conducted in as practical a manner as possible. Committees cannot be too careful in the selection of subjects for illustration and discussion. Of course, each Association will have some subjects of special importance to itself, but there are many which must prove of interest to all. The following list of subjects is taken from the last report of the Superintendent of Schools for the City of Springfield, Illinois. They were taken up at the *monthly* meetings of the Teachers of that city in the year 1876. They are given as suggestions for Committees in preparing programmes for Institutes. The names of those who conducted the exercises are given, to show how very largely the ladies took part in the work. It is time that the lady teachers of Canada took a much more prominent part in such meetings. The large majority of teachers are females, and they undoubtedly possess special ability for the performance of many of the duties of their profession. If they took a larger share in the proceedings of Teachers' Institutes they would necessarily take a greater interest in their work. They would observe more, read more, and think more about their duties and the best methods of performing them.

Writing lesson at each meeting throughout the year.... Jas. O. Sampson
Address by the Chairman..... A. J. Smith
Class drill in Mental Arithmetic..... Miss E. M. Hughes
How to teach descriptive Geography..... Miss Mary Patterson
How to teach pupils to read..... Miss Augusta Trapp
The Centennial..... Miss Lillie V. Tillotson
How to make lazy boys learn..... Miss Mary J. Sell
Should all teachers do their part in the Institute?.... Miss Kate Croley
How to teach declamation..... Mr. Geo. E. Dawson
Should the time given to a written examination be fixed... Mr. A. J. Smith
Practical Arithmetic..... Mr. N. B. Hannon
Paper on Reading..... Mr. A. J. Smith
Tact in teaching..... Miss Maggie E. Muir
Class drill in English Grammar..... Mr. A. J. Smith