

classes of persons who suffer most from the effects of mental overstrain. The case book of the physician shows that it is the speculator, the betting man, the railway manager, the great merchant, the superintendent of large manufacturing or commercial works, who most frequently exhibits the symptoms of cerebral exhaustion. Mental cares accompanied with suppressed emotion, occupations liable to great vicissitudes of fortune, and those which involve the bearing on the mind of a multiplicity of intricate details, eventually break down the lives of the strongest. In estimating what may be called the staying powers of different minds under hard work, it is always necessary to take early training into account. A young man cast suddenly into a position involving great care and responsibility, will break down in circumstances in which, had he been gradually habituated to the position, he would have performed its duties without difficulty. It is probably for this reason that the professional classes generally suffer less from the effects of overstrain than others. They have a long course of preliminary training, and their work comes on them by degrees; therefore, when it does come in excessive quantity, it finds them prepared for it. Those, on the other hand, who suddenly vault into a position requiring severe mental toil, generally die before their time.—*Chambers' Journal.*

A First Step to Ruin.—It may to some seem trifling to say that the first cigar a young man takes within his lips often proves his first step into a career of vice. I grieve and tremble over every youth whom I see contracting this habit; it often leads to other and worse things.—*John Angel James.*

Normal Schools in the United States.—*Appleton's Journal* furnishes the following statement respecting normal schools in the United States: "Every State of the Union has normal schools except Texas and Nevada. Massachusetts has one normal school for every 208,193 of her population; Illinois ranks next, having one normal school for every 254,941; Ohio has one for 296,140; and New York has the greatest number of normal schools, yet only one for every 398,432 of her population. The whole number of normal institutions in the United States is 114, of which 51 are State schools, 16 city schools, 27 connected with colleges and universities, and the remainder supported in various ways. There are 10,922 pupils in these schools and 445 teachers. Nearly one-tenth of all the normal pupils in the country belong to the Female Normal College of New York City. During the three years that the college has been in existence not a single student has been expelled, not one suspended, and not more than half a dozen cases for discipline have been reported to the president, and these were but for trivial offences."

School House Ventilation.—In my estimation, no ventilation is good which requires the opening of doors and windows at any time. Window ventilation is often used in warm weather, but I consider it undesirable, because it admits insects, dust, and hot air; i. e. air hotter than might be secured by properly arranged air-ducts, which may be so contrived as to introduce comparatively cool air. But window ventilation certainly should never be used in cold weather, while the scholars are not taking active exercise. It is never necessary in good ventilation. Ventilation should, as far as possible, be automatic, and should be beyond the control of every one except the person who has it in charge. This self-acting ventilation may best be secured by combining the ventilating system with the warming apparatus, so that the active condition of the warming apparatus shall necessitate an active ventilation; because we are much more sensitive to a change of temperature than we are to the stupefying influence of foul air.—*R. C. Kedzie., M., D., in Sanitarian.*

Meteorology.

—OBSERVATIONS taken at Halifax, N. S., during the month of December, 1873; Lat. 44° 39' North; Long. 63° 36' West; height above the Sea 125 feet, by Sergt. John Thurling, A. H. Corps.

Barometer, highest reading on the 2nd.....	30.586 inches
" lowest " 28th.....	28.950
" range of pressure.....	1.636
" mean for month (reduced to 32°).....	29.873
Thermometer, highest in shade on the 4th.....	54.0 degrees
" lowest " " 16th.....	—
" range in month.....	56.0
" mean of all highest.....	34.2
" mean of all lowest.....	15.7
" mean daily range.....	18.5
" mean for month.....	24.9
" highest readings in sun's rays.....	89.0
" lowest reading on the grass.....	-2.0

Hygrometer, mean of dry bulb.....	27.0 degrees
" mean of wet bulb.....	25.7
" mean dew point.....	19.8
" elastic force of vapour.....	.107
" weight of vapour in a cubic foot of air.....	1.3 grains
" weight required to saturate do.....	0.4
" the figure of humidity (Sat: 100).....	72
" average weight of a cubic foot of air.....	569.3 grains
Wind, mean direction of North.....	6.00 days
" " East.....	2.75
" " South.....	6.75
" " West.....	13.00
" " Calm.....	2.50
" daily force of 0-12.....	2.7
" daily horizontal movement.....	302.0 miles
Cloud, mean amount of 0-10.....	6.4
Ozone, mean amount of 0-10.....	2.4
Rain, No. of days it fell.....	4.
Snow, number of days it fell.....	14.
Amount collected on ground (rain & snow).....	5.9 inches
Fog, No. of days.....	4.

—OBSERVATIONS taken at Halifax, Nova Scotia, during the month of January, 1874; Lat: 44° 39' North; Long. 63° 36' West; height above the Sea, 125 feet, by Serg't John Thurling, A. H. Corps.

Barometer, highest reading on the 6th.....	30.620 inches.
" lowest " " 16th.....	29.292 "
" range of pressure.....	1.328
" mean for month (reduced to 32°).....	29.945
Thermometer, highest reading on the 8th.....	52.3 degrees.
" lowest " " 27th.....	-15.7
" range in month.....	68.0
" mean of all highest.....	36.0
" mean of all lowest.....	17.2
" mean daily range.....	18.8
" mean for month.....	26.6
" highest reading in sun's rays.....	92.8
" lowest reading on the grass.....	-17.0
Hygrometer, mean of dry bulb.....	28.1
" mean of wet bulb.....	27.1
" mean dew point.....	23.0
" elastic force of vapour.....	.123
" vapour in a cubic foot of air.....	1.5 grains.
" vapour required to saturate do.....	0.3
" the figure of humidity (Sat. 100).....	80
" average weight of a cubic foot of air.....	569.5 grains.
Wind, mean direction of, North.....	5.50 days.
" " East.....	5.00
" " South.....	8.00
" " West.....	10.00
" " Calm.....	2.50
" daily force.....	2.6
" daily horizontal movement.....	306.2 miles.
Cloud, mean amount of (0-10).....	7.8
Ozone, mean amount of (0-10).....	2.3
Rain, number of days it fell.....	9
Snow.....	11
Amount collected on ground.....	6.94 inches.
Fog, number of days.....	8

THE JOURNAL OF EDUCATION.

(FOR THE PROVINCE OF QUEBEC.)

The Journal of Education,—published under the direction of the Hon. the Minister of Public Instruction, and Edited by H. H. MILES, Esq., LL. D., D. C. L., and P. DELANEY, Esq., of that Department,—offers an advantageous medium for advertising on matters appertaining exclusively to Education or the Arts and Sciences.

TERMS :—Subscription per annum \$1.00; Public School Teachers *half price*; School-Boards &c., *free*.

Advertising.—One insertion, 8 lines or less \$1.00, over 8 lines, 10 cents per line; Standing advertisements at reduced charges, according to circumstances, but not less than \$10 per annum.

Public School Teachers advertising for situations, *free*. School-Boards &c., *free*.

All communications relating to the *Journal* to be addressed to the Editors.

Printed By Léger Brousseau, 9, Buadé Street, Quebec.