THE PUBLIC SCHOOLS.

EVIL EFFECTS OF EXCESSIVE HOME-WORK FOR JUNIOR PUPILS.

The following are extracts from a letter on "Our Educational System" from Dr. W. J. Wilson, of Richmond Hill.

"The present system has some advantages, but, like all other systems, has some serious drawbacks. . . . But while there are improved methods of teaching arithmetic in our schools, our children are forced to do a great deal of arithmetic at home, and of a character that requires the help of parents or whoever may be available for the purpose. If they had a few straight questions for home-work, which they could do without help and which would amount to just so much practice, there would be less objection, but such is not always the case, and again it is not every child who can get the necessary help for his home-work. People taught by the old methods, and rusty even in them, are not always able to enter into the newer methods of thought and show the child clearly how his question should be done. This state of affairs gives children, where help is available, a very great advantage over others who cannot get such help. There is just so much work to go over each term, and this is followed at the close of the term by a promotion examination. If, at this examination, the child comes up to a certain standard in each subject he is promoted to the next class. This promotion is looked forward to by the pupils during the whole term, and every nerve is strained that they may be able to pass. . . . . By the examination system each child is supposed to be able to put down what he knows as well as every other child, and no allowance can be made for nervousness or temporary ailments, which may not be enough to prevent the child from writing, but may make all the difference between pass and "pluck." On these examinations depends considerably more than this. The teacher is judged by his results—by the numbers he can promote each term—and, knowing this, there is the constant inducement to cram the children in every possible way. This condition of things exists from the time a child enters the lowest division of our Public School until he leaves the High School. He is forced by work both at school and at home from one class to another at a rate that cannot possibly be in the best interests of true education. A child's education should be so conducted as to bring out his reasoning powers, and fit him for any position in life in which he may be placed. A training which has for its sole object the passing of examinations is not well calculated to attain this ideal nor even, in the estimation of many educators, to give a true test of what a pupil knows. *If cramming is necessary under present conditions of life, let it be done after the body has had its full growth and development, and not at a time when it may seriously injure the child.* On account of this rapid growth and development neither mind nor body should the over-worked during the early years of life. If the growth and development are interfered with from improper food or over work, the individual is influenced by it through his whole life, and there is danger of instability of mind and conditions predisposing to either insanity or crime. The criminals of the world are on an average small men, and, while their undersize has been mostly due to over work, improper food, and poor care, the educated criminal of to-day—and it is notorious that educated criminals are becoming more numerous—may than kour cram educational system for the wadrfing of both mind and body which predi sposed to his unfortunate position. Where the mental condition from hereditary cause or otherwise is unstable, early cramming at school will certainly favor the developmen t of mental disease. This accounts forour fact that, while the general condition of the people has steadily improved and other diseases have decreased, mental diseases have been steadily on the increase. This is a question of great importance to the state, and should be carefully looked into. The time has come now when we should call a halt, and look whither we are drifting. It would pay us to make haste slowly. *Our homework would be better entirely dropped in the Public Schools;* and, instead of the harassing examinations, let a daily report be kept of each child's work, and then make the promotion when, by his whole work, he shows himself fully qualified."

The following is from the *Canadian Almanac* for 1894 portions of an article on "Insanity and Crime," by Dr. Daniel Clark, medical superintendent of the Insane Asylum, Queen street, admitted to be one of the very highest authorities on the subject of mental diseases, as follows:—

"The factors which enter into presumed causes may be very obscure, or they may only be occasions which merely make manifest the deterioration which has been latent and comes to the surface under favourable conditions. The magazine of gunpowder is harmless as granite until a spark is applied, which sets in action the explosive force; so a physical condition of bad tendency may give no sign until some excitant rouses the malign latency into activity. . . . .
Bad environments, unhealthy food and air, _olations of the general laws of health, brain tension and such like, added to a bequeathment of heredity, accomplish mental dethronement. In estimating causes two or three combined may produce one result, but which separately might be comparatively harmless. For example, heredity and worry, injury to the head and sunstroke, intemperance and want, religious or political excitement and one or more of the various diseases which impoverish the physical system, may in a cumulative way unhinge reason. It may be transmitted tendency plus any exciting cause of the multitude which exist and operate in our complex condition of society. . . . .
Of course, to the medical profession, it is of paramount importance to ascertain and consider all the factors of an untoward nature, which, singly or generically, may, and do, contribute to produce unsoundness of mind. To the teaching profession it is of no less moment to keep in view the characteristics, mental capacity, physical strength and brain-dynamics of children at a susceptible age, when over mental pressure in many children means ruin in after life. Natural exercise of the mind along normal lines leads to mental robustness, as much as muscular gymnastics promote physical strength, but overstrain in both induce loss of tone and in the end enfeeblement. It is largely among this class of children that overstudy at school makes its greatest havoc. The brain, as the organ of the mind, is overtaxed in the struggle for pre-eminence. This delicate organ is put to its highest tension and crowded to its utmost capacity in study, especially in memorizing, during its formative stage of growth. This instrument of cells and fibres is roused to its best efforts at a killing pace, to satisfy a teacher's ambition or a parent's pride, or it may be a pupil's love of praise. No one would dream of thus unduly testing the muscles or the other organs of the body during juvenile growth; yet the brain is one of the workshops in the body, subject to the same general law of recuperation, rest and decay, as are all the other laboratories in this wonderful factory of humanity. It is true that much has been done in recent years to reduce the hours and days of study among the younger children in our Province; at the same time, the number of new studies is increasing, so the gain is more apparent than real. The mere committing to memory of didactic studies is a tremendous mental strain on young children when pushed to excess. To them, much of what is required has no more definite meaning than has Sanscrit to a Zulu. If such young brains have inherent degeneracy, then undue stuffing means, in the long run, dwarfage of mind-power, not only in youth but also in adult years. When disease sets in, then is there grafted into the system one or more of a brood of nerve troubles including insanity, and generally of a hopeless kind. It needs little observation to know that as a rule the criminal classes are largely recruited from that stratum of society in which is low intelligence, and as a consequence feeble judgments to guide and control conduct."

A ratepayer laid before the trustees, as evidence that in the town of North Toronto it was necessary attention should be directed to the subject, the following example of the kind of home work given to pupils of the junior second class, composed of pupils from 8 to 11 years of age:—

1. Wisp of Hay.
2. Bob-o'-link.
3. Stole.
4. Plum-tree.
5. Bow-wow
6. Mean.
7. Vow.
8. Hairs.
9. Anyhow.
10. Cuckoo.
11. Speak.
12. Yellow-breast.
13. Treat.
14. Wool.
15. Thief.
16. Trick.
17. Feather.
18. Wove them together.
19. Scorn to intrude.
20. Brood.
21. Ch'rr-a-whirr.
22. Cruel.
23. Wonder.
24. Shame.

It was pointed out that the pupils had not been taught the meanings of the above words (which had occurred in their reading lesson), but that they were required to find them out as best they could, write them down, and to be prepared next morning not only to produce the correct meanings, but to be able correctly to spell both the meanings and the original words, under penalty of bad marks or being kept in at recess, if there were more than three mistakes. It was also shown that the pupils required to accomplish the above were also given six lengthy sums of subtraction besides. The speaker pointed out how in several instances one pupil who had wrestled with this task had been wrongly instructed at home, owing to parents who had not referred to the context giving the wrong meaning, as for instance that of the word "mean" as "stingy" when it should have been "cowardly" or "contemptible." It was shown that the result of such hap-hazard instruction could only be disastrous and disappointing, and the question was put to the trustees "Why should parents, after being taxed to build and equip moderu school buildings, and to pay the salaries of qualified teachers, be called upon to undertake the work of instruction themselves?"

U. S. Finances.

It is announced that Secretary Carlisle has accepted bids for fifty million dollars of United States gold bonds, bearing five per cent. interest, the premium on which will carry the amount to $58,000,000. This sum is required to replenish the U. S. treasury with gold, there not being enough of the precious metal to meet constant demands and avert a gold panic. It is understood that these bonds will be all taken up in the States, and that there is enough specie in the National banks to more than cover the issue. Financiers expect that this relief will tide over present difficulties till gold is gained by duties on customs when the importation of foreign goods is resumed on the revival of the "good times." The extraordinary statement was also made by Secretary Carlisle demanding $162,000,000 to pay the war pensions for the next financial year. This sum has, however, been cut down by the Advisory Committee to $150,000,000, to which has to be added back bounties $444,000, and for artificial limbs for soldiers $196,000, or a total of $150,640,000. It is an astonishing statement that there are upwards of 900,000 persons still on the pension lists. Surely the suggestion of the immense frauds on the pension bureau must be well founded! The American civil conflict terminated in 1865, nearly 29 years ago. Taking the then average age of each soldier at 25, this would make the average age of these pensioners each 54 years at the present date, but it is hardly credible that such a number can still be alive now. One satisfaction the Government has is that this prodigious drain is now at its height, and that in the natural course of human events the numbers in receipt of service pensions—naval, military, nurses, etc.—must henceforth be yearly reduced by death.

Handbills, dated London, and threatening the life of President Carnot, are in circulation in Algiers.

Old minds are like old horses; you mus exercise them if you wish to keep them in working order.

AGRICULTURAL.

Sterilizing Milk.

The sterilization of milk for children, now quite extensively practised in order to destroy the injurious germs which it may contain, can be satisfactorily accomplished with very simple apparatus. The vessel containing the milk, which may be the bottle from which it is to be used or any other suitable vessel, is placed inside of a larger vessel of metal which contains the water. If a bottle, it must be plugged with absorbent cotton, if this is at hand, or in its absence, other clean cotton will answer. A small fruit-jar, loosely covered, may be used instead of a bottle. The requirements are simply that the interior vessel shall be raised about half an inch above the bottom of the other, and that the water shall reach nearly or quite as high as the milk. The apparatus is then heated on a range or stove until the water reaches a temperature of 155 degrees Fahrenheit, when it is removed from the heat and kept tightly covered for half an hour. The milk-bottles are then taken out and kept in a cool place. The milk may be used at any time within twenty-four hours. A temperature of 150 degrees maintained for half an hour is sufficient to destroy any germs likely to be present in the milk, and it is found in practice that raising the temperature to 155 degrees and then allowing it to stand in the heated water for half an hour insures the proper temperature for the required time. The temperature should not be raised above 155 degrees, otherwise the taste and quality of the milk will be impaired.

The simplest plan is to take a tin pail and invert a perforated tin pie-plate in the bottom, or have made for it a removable false bottom, perforated with holes and having legs half an inch high, to allow circulation of the water. The milk-bottle is set on this false bottom, and sufficient water is put into the pail to reach the level of the surface of the milk in the bottle. A hole may be punched in the cover of the pail, a cork inserted, and a chemical thermometer put through the cork, so that the bulb dips into the water. The temperature can thus be watched without removing the cover. If preferred, an ordinary dairy thermometer may be used and the temperature tested from-time to time by removing the lid. This is very easily arranged, and is just as satisfactory as the patented apparatus sold for the same purpose.

Serviceable Roadside Watering-Place.

Streams from near-by elevations frequently cross or run parallel with highways, from which elevations, pipes can be laid to the side of the roadbed. This gives a head of water that will not only cause it to rise in a trough, so that a horse may be watered without unchecking—a great convenience—but will also afford such a movement of the water, if the inlet is rightly arranged, that ice will not form, at least over the entire surface, even in extremely cold weather. An excellent roadside watering trough can be made by taking a section of iron sewer or water pipe, two feet or more in diameter. This of course, will have no bottom, and one must be made in the foundation that is provided, which should be of rocks, gravel, sand and, if necessary, cement. A supply pipe and a waste pipe must enter the trough through this foundation, the supply pipe being carried up on one side of the trough nearly to the top, and its upper end bent at a right angle, so that the inflowing water may form a constantly flowing current around the circular inclosure. When this iron trough has been placed in position on the foundation prepared, the space which it incloses at its base may be cemented, after which fine, clean sand should be filled in for six or more inches. A sufficiently tight bottom may perhaps be made by tamping in a foot or more of sand. The greater the force with which water enters such a trough the stronger will be the circular current within, and the less likelinood will there be that the surface will freeze over.

Short Furrows.

The man who thinks that a fool may farm is behind the age.

Good resolutions are all forgotten when a neighbor's pigs get in and root up a piece of newly planted corn for you.

Have a small reserve garden where plants can be grown for a succession, to be transplanted when required to replace such as are out of bloom, or have been lost by accident.

Expecting a cow that stands unprotected in the cold winter blasts to give a large quantity of good and rich milk, is about as reasonable as to look for cream from an iceberg.

In making butter there is no necessity for manipulating it with your hands, as some ignorantly do. A wooden ladle is the proper utensil to use for working and handling this product.

Memory holds the melodies of the corn-stalk fiddle of childhood more sacred than the most exquisite strains of the master musician that may have for a little while charmed the matured ear.

Do not let a cow run dry progressively unless you really wish to curtail her milk yield. Feel that you can control the volume of her milk secretion by the amount and character of her daily rations.

A good, warm stable is not only an indication of a kind hearted, merciful owner but it also signifies that he is a frugal and economical man, making practical use of his knowledge that warm shelters are great feed savers.

The little wood duck is a marvelous picture of diminutive feather beauty. It possesses a plumage as gorgeous as the most perfect peacock. Its worth to the farmer is largely in its plumage, consequently few keep them on the farm.

Seeds and Seeding.

If you cannot go to the trouble and expense of hotbeds for starting some early plants for the garden, you can, at least, have a cold frame. One that is six feet square will give all the room that is needed for a private garden, and you will find it a great aid.

The success of the gardener depends largely upon the quality of his seed. Unless you have a separate plot of each item for the especial purpose of growing seed, better buy from a seed man. Using what happens to be left over from a crop for seed is not good business economy.

Select for the cold frame that spot in the garden where the sun comes earliest and stays longest. A gentle slope will be best. Have a little less depth to the frame at the lower end than at the upper, or a strip of the ground will remain cold. Put on the glass and let the ground get thoroughly warm before seeding. Have the soil rich.

A single planting of peas in the garden is only an aggravation. They are gone before you know it. Plant every week, from the time the ground is dry enough to work. For market you will find that the later plantings pay about as well as the early ones. There is a little time in mid-season when every one has peas in their own garden. Then the market is dull.

Cleaning Seed Oats.

The lands intended for oats should be selected and the seed cleaned and in readiness. Many farmers never clean seed oats. They say that oats are oats, and take their seed out of the bin, heavy and light, good and bad, all mixed together. If there is any advantage to be gained by planting good seed corn, or plump, sound wheat—and no farmer denies this—then there certainly must be in sowing the best of oats. Run the seed oats through a good fanning mill this spring and see if it does not make a marked difference in the yield and quality of the crop. All know how very flickle the early spring weather is, and that we can count on but very few days at a time in which any farm work can be done, therefore everything should be in perfect readiness to make a dash when the opportunity is presented. I have many times seen a difference in yield of twenty bushels and over per acre in two fields of oats sown two weeks apart. The first were put in at just the right time to get the benefit of a warm rain, or to mature just before a hot wind, or a shower followed by a scorching sun struck them. And where grass seed was sown with the oats I have seen a few days make the difference between a good catch and a complete failure. In nine cases out of ten the earliest spring-sown oats are the surest to yield a good crop and return most profit.

Keeping Meat Fresh in Winter.

In sections where the temperature remains below the freezing point for weeks at a time, beef and other freshly-killed meat may be kept in a fresh state for several weeks by hanging up in the loft of the wood house or other building in which no fire is kept. To make it readily available, the meat should be cut up in slices or in pieces suitable for cooking, if intended for boiling or roasting. It may then be hung up in a basket out of the reach of cats and dogs. Chickens may be thus kept, but should have the offal removed, and will prove convenient for company or those calling unexpectedly. If the pieces are rubbed with fine salt when first cut up they will keep in a better condition. The salt may be partly removed by soaking in warm water before cooking.

Damp Cellar Floors.

To rid the cellar of moisture, dig a channel about one foot wide and six inches deep through the wet portion, leading it into a drain or outlet; fill this with coarse gravel to the very top, pounding it firmly in place; this will carry off all the ground water before it reaches the surface. The drain under the wall may have become filled up and allow the water soaking into the soil outside to find its way through the wall to the cellar bottom, in which case dig a shallow channel along the wall in the bottom and fill it with gravel or finely broken stone.

Size of Dairy Cows.

In selecting a good dairy cow, there are more important items to be taken into account than that of size. This, however, is one of the controlling factors when judged from a purely commercial standpoint of profit. The practical dairyman takes little account of the beef value of an animal that has to be carried so many years. He demands his dividends once a year, and to make them as large as possible he cuts down expenses to the lowest practical point. To do this he must not carry a machine that is too large for the labor to be performed. It has been quite clearly proven that a given number of pounds of carcass divided among small animals will make greater profit for milk production than when those pounds are contained in a less number of cows. To use extreme instances, the elephant could never be made as profitable a milk producer as the goat—there is too much waste material to carry. The exact size of a cow at which the greatest profit can be produced has not been determined, but the Columbian dairy tests at Chicago indicate that it lies somewhere between six hundred and a thousand pounds.

The Spring Campaign.

All the necessary tools, harness and farm eqipment should be in perfect working order, and such repairs as might possibly be needed in the spring should be made. Time is too precious to be spent in hunting up whiffletrees, clevises, chains and buckles, or in polishing plowshares and sharpening narrow teeth when the opportunity to sow spring crops is at hand. Do not allow yourself to be caught unprepared. Every good general holds a force in reserve. After you have determined on the quantity of land you will sow to oats, spring wheat or barley, it is a good idea to decide in your mind what you will do with it in case a wet spring prevents you from sowing these grains in good season. What will it pay you to do with it? Sow it to millet, buckwheat, or sweet corn for autumn feed, or to grow some crop on it that can be turned under in the form of green manure for winter wheat?

A Blanket of Snow.

A covering of snow will prove a great protection to meadow land and to fall sown wheat and rye. It should be induced to remain as long as possible, not only on the crops named, but over strawberry plants and about the trunks of trees, currants, raspberries and shrubs. It should not be allowed to accumulate to a sufficient depth to press the canes and stalks to the ground, as they are often injured by the heavy packed drifts. Snow thrown up around the foundation walls of the dwelling house will prove a great protection to the contents of the cellar, and frequently save them from disstrous freezing. To retain snow upon fields swept by winds, brush scattered over them will produce the result. Even cornstalks scattered about will accomplish the same end.

THE WEEK'S NEWS.

CANADIAN.

There are at present six vacancies in the Canadian Senate.

Mr. J. S. Carvell, Lieutenant-Governor of Prince Edward Island, died suddenly last week. The deceased was sixty-one years of age. Already mention is made of possible successors.

Arrangements are now being made through Lord Swansea for the trial shipment of British Columbia ore to be smelted at Swansea, in Wales.

The Earl of Kintore, Governor of Western Australia, intends spending a fortnight in Canada next month prior to his sailing to the Antipodes from Vancouver, B. C.

When Dominion Parliament meets there will be four new members of the House of Commons to be introduced to Mr. Speaker.

The City Council of Kingston, Ont., was petitioned on Monday night to reduce the number of liquor licenses issued to both shops and taverns, to abolish saloons, and give only bona fide hotels licenses.

Charles Chamberlain, of Toronto, the alleged impersonator, was committed for trial by the Police Magistrate at Winnipeg on two charges, one for personation and another for perjury.

The Rev. Dr. Shaw, professor of Biblical Greek in the Wesleyan Theological College in Montreal, has been appointed acting principal of the college, to fill the temporary vacancy caused by the death of the Rev. Dr. Douglas.

Mr. A. R. Angers, Minister of Agriculture, has forwarded to the Imperial authorities a report upon the Canadian cattle trade, in which it is claimed that he has established beyond dispute that there is no pleuro-pneumonia in Canada now, nor has there been at any time since the controversy commenced.

In the case of Mr. Souvalle, editor of La Patrie, against Mr. Tardivel, editor of La Verite, tried before the Superior Court in Montreal, very interesting evidence was taken. The action was one for damages because Mr. Souvalle was called a Methodist. Decision was reserved.

BRITISH.

New Zealand is urging the Imperial Government to subsidize the Canadian-Australian steamship line.

The City of Melbourne, Australia, had 487 business failures in 1893, with total deficiencies of one million and fifty-six pounds sterling.

Mr. George A. Goodwin, a Canadian, following his profession in London, has been elected president of the Society of Engineers.

Emperor William has informed the Court of his intention to pay another visit to England next summer.

Mr. Yarrow, who is building a torpedo boat destroyer for the British Government, hopes to give her a speed of thirty knots, or thirty-four and a half statute miles, an hour.

The Bishop of Rochester will go to Florence just before Easter, and will stay there during the Queen's residence at Villa Fabbricotti, in order to officiate at the services which will be held on Good Friday and Easter Sunday for her Majesty and the Royal family.

The imports into Great Britain from Canada for January showed an increase of one hundred and three thousand pounds.

Mr Edmunds Barton, ex Attorney-General of New South Wales, is agitating for the federation of the Australian colonies. Sir Henry Wrixom says that New South Wales is the only colony keeping federation back.

UNITED STATES.

Sister Alvina, one of the nurses at the Chicago Smallpox hospital, died on Tuesday night, having contracted the disease while nursing the patients.

The Princess Colonna states that she fled from Paris to New York because she believed that her husband was plotting to kidnap one of her children.

The statistics of the New York Pasteur Institute for last year show that not a single case of hydrophobia has been observed among the eighty-five persons treated.

A snowslide crashed through the roof of the Transportation building at Jackson park, Chicago, on Tuesday. It took place at the north-west corner of the annex, where the rolling stock exhibition was located. About thirty feet of roofing was crushed in.

GENERAL.

The Duke of Saxe-Coburg Gotha intend to farm on a large scale in Germany.

The report that Emperor William and the Duke of Cumberland had agreed upon the Brunswick succession is semi-officially denied.

The Warsaw police claim to have discovered an extensive conspiracy to secure the freedom of Poland.

It is reported that Admiral de Gama, of the Brazil insurgents, who was wounded in fight at Armacao, is in a critical condition, and that his injuries may result in death.

A Relic of Barbarism.

Bull-fighting in Spain has always been more or less under the religious ban, but Pope Leo shows unusual courage in denying matadores the last rights of the Church and forbidding the attendance of the faithful. Of recent years a priest has always been in attendance in the ante-room of a bull fight ready to shrive the soul of any man unfortunate enough to find death on the horns of a bull. But earlier the rule which Leo now revives was the recognized practice in Spain. Fortunately for the Pope, public opinion in Spain has been steadily growing against this relic of barbarism, in which, it is true, there are fewer persons killed and maimed in the course of a season than in football in England, but which has its worst fault, not in its brutality, but in its cowardice. The bull is given no chance for his life, blindfolded horses are pitiably slaughtered and the men have every opportunity to escape the results of their cruelty, which would command a higher respect if it were attended by more danger. It is safe to say that until Spain outgrows the bull-fight the nation will never have reached the stature of self-government.