

### Important to Parents and Teachers.

We respectfully but very earnestly call the attention of our readers to the statements below. It will be seen that it is proved by a very extensive collection of facts that children learn more when they study three hours a day than they do when they study six. We have long been convinced of this from our own experience and observation, and we believe that no more momentous truth can be disseminated among the community.

When a child comes in fresh from his play, with the blood bounding through his veins, his brain is full of life and vigor, his ideas are all clear, and he can learn more in fifteen minutes than he can in two hours after his brain is fatigued and his whole system has become languid by confinement at his desk.

From pretty extensive inquiry we are satisfied that the present murderous system of long confinement in school is continued by a want of frankness between parents and teachers. Nearly all the parents are opposed to the practice, but it is kept up by the teachers under the mistaken idea that they will give dissatisfaction by reducing the hours of their own labor.

Not only should the gross amount of study be greatly diminished, but recesses should be more frequent. Thirty minutes is quite long enough for any young child to study, and one hour for a child of any age. The human brain is not like a steam engine that the longer you run it, the more work you get out of it. What the brain can do depends wholly upon its condition. Any person can accomplish more mental labor in one hour when the brain is in a healthy and active state, than he can perform in a month when the brain is tired and exhausted.

Among the Parliamentary papers recently issued in England, are two small volumes containing some information collected by Mr. Edwin Chadwick during the recent education inquiry. Mr. Chadwick shows in these papers that the present practice of long hours of teaching is a wide cause of enervation and predisposition to disease, and induces also habits of listlessness and dawdling. The half-time system is found to give nearly, if not quite, as good education as the whole time; and common sense tells us that a boy who has acquired the same amount of knowledge in half the time of another boy must have obtained a proportionately superior habit of mental activity. It is this alertness, combined with the bodily aptitudes created by drill, that gives the comparatively stunted boys of the town a preference over the strong robust lads from the coast. Good schoolmasters say that about three hours a day are as long as a bright, voluntary attention on the part of children can be secured, and that in that period they may really be taught as much as they can receive; all beyond the profitable limit is waste. Hence it is urged that part of the present long school hours be devoted to gymnastic exercises or drill, as part of the system of education, or that the half-time system be more adopted. It is a frequent complaint by runaway apprentices and vagrant children that the work to which they were first put was really very painful to them; but children, while at school, might be gradually introduced and accustomed to labor and exertion. Early physical training would remove or diminish congenital defects or bodily weakness. It is estimated that an addition of at least a fifth might be made to the efficiency and value of a boy as a laborer in after life—an addition equivalent, in the mass, to the produce of the labor of one-fifth more of population, without the expense of additional food, clothes or shelter, to maintain them. Drill is very strongly recommended by many eminent men, who give their testimony in these papers. It improves the health, the carriage, the manners, even the character; sharpens the attention, gives habits of obedience, promptness, regularity and self-restraint. Sir F. B. Head writes:—"No animal, whether on four legs or two, can be of any use in the workshop of man until he has been sufficiently divested of that portion of his natural inheritance called a 'will of his own.' What's the use of a cow if she won't allow either man or maid to milk her?—what's the use of a horse if he won't put his head into a collar or suffer a saddle on his back? A system of military drill in our schools would prove so beneficial that, if once adopted, an undrilled young man, like a raw, unbroken horse, would be considered unserviceable." "I should consider a youth of double value," says Mr. Whitworth, "who has had

the training of the nature of a drill; he attends to commands; he keeps everything he has to do with in a high state of cleanliness; defects are corrected, and special qualifications brought out." "We find the drilled men very superior," says Mr. Fairbairn. "They are constantly in readiness for the protection of the country," writes Lieutenant General Shaw Kennedy. "I would not," said an eminent manufacturer, "take less than £7,000 for my whole set of workmen in exchange for the uneducated, ill-trained and ill-conditioned workmen of the manufacturer opposite. The steadiness of the educated men induces steadiness of work, and comparative certainty in the quality and quantity of the produce." "Why do you bespeak children from the infant school in preference to others?" an operative was asked: "Because they require less beating, and they are sooner taught," was the expressive answer. It is maintained in the papers that much more might be made of the existing means of education by a system of union and consolidation and gradation of schools, and a division of educational labor; and with improvements of this nature, and contemplating the striking results of education in the district half-time industrial schools for paupers—schools which are emancipating children from hereditary pauperism and crime by methods of training which might be so much more widely adopted—"men like us, past the middle period of life," writes Mr. Chadwick, "might expect to see in a few years a change in the whole moral and intellectual condition of the population, as great as any change produced by improvements in physical science and art in our time."

### The Shoe Market.

The *Shoe and Leather Reporter* states that the Boston shoe market has assumed a very lively appearance, which contrasts very pleasantly with the despondency which prevailed for previous months. It says:—

The principal call is and has been for oak or hemlock brogans for the army, the demand for goods for ladies' wear or light shoes for the other sex being very limited. There is some call for boots and heavy goods for the California market; the ship *Electric Spark*, which recently cleared for San Francisco, took out 1,243 cases.

The stock of prime goods is very small, and there seems little danger of many shoes being left over to next season, as scarcely anything is being made up except on orders. Sales are also made very generally on a cash basis.

THE ELECTRIC TELEGRAPH.—We have before us a recently published work, entitled "The Triumphs of Invention and Discoveries," from the press of Thomas Nelson & Son, London. We have examined it with some care, and although a superficial and comparatively unimportant work, yet it has all the profound conceit that generally exists amongst British writers. In the article on the Electric Telegraph, the entire credit of this great invention is placidly bestowed upon the British, Morse's name nowhere appearing in the work. The author, in the face of all the facts to the contrary, does not scruple coolly to rob our countryman of all credit in the production of this great work.

SCIENTIFIC COMPLIMENT.—At a meeting of the Academy of Sciences of the French Imperial Institute, last month, our distinguished countryman, Professor Alexander Dallas Bache, Superintendent of the American Coast Survey, was elected a Foreign Corresponding Member of the Academy.

THE first railroad in Oregon has just been built on what is called the "the transit across the cascades." The road is of substantial construction, is three and three-quarters of a mile long, and most of it is on tressel-work of a dizzy height.

A BATTERY of Whitworth's rifled cannon, presented by the loyal American citizens in England to our government, was forwarded from this city to Washington on the 17th ult. They were fitted with carriages, caissons, wagons and forge of the United States pattern.

A new steel-pen factory has been established in Camden, N. J., by R. Esterbrook & Co., who, having secured the services of some of the best pen makers of the old world, and one of the firm having twenty years' experience in the business, expect to manufacture an improved and superior article. It is supposed that Birmingham will be obliged to yield the 'champion quill' to Jersey.

### Hardening the Surfaces of Rails and Railway Wheels.

A patent has lately been taken out by Mr. Wm. Longmaid, of Ireland, for hardening the surfaces of rails and tyres of wheels, after they are formed in the usual manner, by subjecting them to a peculiar process. The rails and tyres are packed in a suitable iron chamber with peat or wood sawdust, previously saturated with sulphuric acid, covering the surface to be hardened. The chamber is then closed so as to exclude the air, and with its contents is raised to a red heat by a fire, and maintained at this temperature for thirty-six or forty hours. The bars and tyres are then withdrawn from the chamber and tempered by any of the well-known processes, and they are fit for use.

CHARRING RAILWAY TIMBER.—The same inventor chars the surfaces of railway timbers, by saturating them first with dilute sulphuric acid, then heating them in an oven raised to a temperature of 250° Fah. The strength of acid preferred is about 3° Twaddles' hydrometer. Railway timbers when charred on the surface endure much longer than if exposed with their natural surfaces. This is certainly a peculiar way of charring the surface of wood at such a low temperature. We should have judged that the sulphuric acid would have injured the timber, but Mr. Longmaid says it does not.

### NEW YORK MARKETS.

COAL.—Anthracite is selling at the yards from \$4 50 to \$5 per 2,000 lbs (short ton).

COFFEE.—There is an active demand for Rio coffee, and a buoyant feeling in the market. The duty on coffee is 4c. per lb. when shipped in American vessels from the place where it is grown; all other vessels except the Dutch, 10 per cent *ad valorem* in addition. The prices of coffee range from 14c. for St. Domingo, the lowest, to 20c. per lb. for Java, the highest.

COPPER.—American ingot copper ranges from 19½c. to 20. per lb.—rather low. The sales are small.

COTTON.—The market is inactive, and prices may be considered nominal. The reported sales are 1,000 for the week ending September 19th. We quote:—

	Upland.	Florida.	Mobile.	N. Orleans & Texas.
Ordinary, per lb.....	18	18	18	18
Good ordinary.....	19½	19½	19½	19½
Middling.....	21½	21½	21½	22
Good middling.....	22	22½	22½	23
Middling fair.....	—	—	—	—
Fair.....	—	—	—	—

The arrivals have been—  
From Providence, bales..... 405  
Total import since September 1st..... 1,647

The export from the 1st to the 17th was 6 bales; same period of 1860 4,548 bales. The export of cotton from New York has therefore ceased.

FLOUR.—The demand for State and Western flour has been active during the past week, and prices have advanced from 15c. to 30c. per bbl. The prices range from \$4 80 to \$6 25 per bbl. The export from New York from the 1st to the 17th of September was 88,481 bbls.

GRAIN.—The wheat market has been greatly inspired by the news from Europe relative to a partial failure of crops in France, Germany and Great Britain. From English papers we learn that the quality of the wheat is good, but the quantity to the acre is small; there will therefore be a large European demand for American grain this fall and winter. The sales during the four days of the past week were fickle, and amounted to 670,000 bushels. The receipts were light, and holders not inclined to sell, expecting higher rates soon. The prices range from \$1 16 to \$1 40 per bushel.

HIDES.—The prices of hides regulate the price of leather, which is one of our important and staple articles. The demand for hides is active, and prices have materially advanced. The total imports since the 1st of September are 455,400, against 235,100 for the same period in 1860. With such a large import and great activity in the market, the tanning business promises to be better than it has been for three years past.

INDIGO.—There is a great demand for the finer qualities of this dye drug. The best Bengal in chest is \$1 85 per lb.; Manilla, from 60c. to 90c.

IRON.—Foreign pig is firm, with small sales. American pig is in better demand, with a slightly upward tendency in prices, ranging from \$15 50 to \$17 50 per ton. Such prices are still held as being too low to be remunerative, and holders are not willing to sell.

LEAD.—Pig continues in good request at full prices. The American stock is small. Bar is quoted at 6½c. per lb.; Pipe at 6½c.

LUMBER.—There is a very limited demand for lumber, owing to the prostration of the housebuilding business. White pine, Albanyboards (tongued and grooved), \$20 to \$22 per M. feet; Spruce boards, from \$13 to \$15 per M. feet.

PROVISIONS.—Mess beef, country, from \$5 to \$5 50 per bbl.; Extra beef, \$12 to \$18; Western pork, \$10 to \$15 50; Prime mess, \$17 to \$18.

STEEL.—English, from 14c. to 16c. per lb.; German, 7c. to 10c.

American spring steel, 5c. to 5½c.

SUGAR.—Duty on all raw, 2c. per lb.; slightly improved beyond the raw, 2½c.; refined, 4c. Ranges from 4c. to 10½c. per lb. The prices have advanced, as there is a diminished stock on hand.

TALLOW.—This article is scarce, and there is a considerable demand for it for export; price, 8½c. per lb., cash.

TEA.—The duty on tea is 15c. per lb. The quantity of tea in the market is said to be small. The prices range over an extensive variety, from common Singapore, at 18c. per lb., to the finest Fychou, at 75c. per lb.

TIN.—The best Banca ranges from 27c. to 28c. per lb. Tin plate is in good demand, and brings prices ranging from \$5 75 to \$8 25 per box.

TOBACCO.—The duty on leaf is 25 and on other unmanufactured 30 per cent *ad valorem*. Ohio seed leaf ranges from 5c. to 17c. per lb.; Havana fillers and wrappers, from 25c. to \$1; Connecticut fillers and wrappers, from 5c. to 20c.

WOOL.—American Saxony fleeces, from 35c. to 38c. per lb.; Merino, 30c. to 35c.; Foreign, from 8c. to 27c. There is a great demand for coarse wool which has advanced in price.