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Encouragement to New Inventions.

Among many of our monied business men, and too frequently among officers of Railroad Companies, there is a want of information in regard to many valuable improvements and inventions, which might be adopted by them to advantage, and perhaps equally as much to the advantage of others. It is a duty which Railroad Companies owe to our community to adopt such means as shall insure safety and convenience, as well as speed and profit. They should seek for those inventions which tend to avert danger and enable them to carry out their plans for the safe conducting of trains of cars to the best advantage—a neglect to do so is a crime, and should be regarded as such by the community. By many officers of railroads, a disposition to treat inventors and inventions with perfect indifference, is notorious. Presidents and Directors on some of our railroads will hardly pause to notice an improvement of any kind.

We have been told of an incident which may be properly related in this connection:—A friend called upon the President of one of the Eastern Railroads, with the model of an invention of his own, connected with one of the most important departments of railroad management. The President was absent, but the chief clerk very politely volunteered the information that, if present, he would have no time to look at models of any kind. With Yankee perseverence, however, the model was again brought, and the clerk's information proving but too true, it was taken away again. The President and his friends learning, however, that the inventor was a man of some influence, changed the usual routine of proceeding, by sending an apology for neglect, and a request that he should again submit his model for examination. This being done, all the parties who examined it were led to express their approbation of the improvement suggested. But the act speaks—it tells us that inventions or improvements, however valuable to the community, receive no notice from these officials, unless they are presented by some of the lords of the soil—some of the monied few. The poor inventor, however meritorious, however ingenious his contrivance for insuring safety or convenience to those who are travelling with such rapid speed—is repulsed without even a passing notice. When large dividends are the cherished aim of Railroad Companies, and officers are appointed whose sole object appears to be to carry out these ends, it can hardly be supposed that new suggestions or new improvements, which have safety or convenience for their object, without a special regard to profit, could meet with a very courteous reception. These are generally the men who suppose that few additional improvements in railroad engineering will ever be made; from such, inventors can expect little encouragement, and they should not look for it from that source.

The idea is prevalent in many places that inventors are but speculators, and perhaps the President above referred to has imbibed the same sentiment, if so he should be apprised that this is not the case. 'Tis true, worthless inventions sometimes fall into the hands of speculators who care little for them but to make the most from their purchase; but inventors, as a class of men, are benevolent, honest-hearted men,—men who feel grateful for a kind reception, and who appreciate a benevolent act from those who have the ability and the spirit to test their improvements, and encourage those that are worthy of encouragement. These apparent improvements may be encouraged in a variety of ways, and frequently at a very trifling expense. It is not unfrequently the case that an important improvement may be tested in a short time by the aid of an engine or car that has been laid aside for ordinary use. Railroad Companies often have the means at hand to render assistance in this manner, which might ultimately benefit themselves as well as the world at large. Experience proves that mechanical and scientific discoveries benefit all—they are a blessing to the poor as well as to the rich.

The Impertinence and Ingratitude of Scribblers.

Centrifugal Force and Horace Greeley.—Ingratitude is a vile sin, but alas, it is a very prevalent one. Our constant readers will remember that we published engravings of the static pressure—centrifugal force engine on page 339, Vol. 6, Scientific American. The description of this engine was presented in the name of Stephen Pearl Andrews, who, to his own satisfaction, proved that there was a wonderful principle in the said engine, whereby a force was obtained which came from nothing, cost nothing, and increased by the square as the velocity of the machine was doubled. A certificate from a professor of mathematics accompanied such description, as a mark of high authority we suppose, like a scarlet feather stuck in the nose of an Indian Princess. We exposed the fallacy of the whole scheme, on page 341 said volume, but philosopher Andrews, not content with our expose of the ignorance of its advocates, must needs reply to our strictures; this we allowed him to do on page 363, said volume, and only allowed ourselves one column to reply to his three. He made matters still worse, and exhibited the most profound ignorance of calculating the dynamic power of machines. Not yet content because we did not allow him more room in our columns, he went and found plenty of room in the "N.Y.Tribune," to publish all of his own remarks that had appeared in the Scientific American, and many incorrect gratuitous assertions beside. At that time for at least three months, we think, two papers in this city contained two and three columns of falsehoods and personal abuse of us every week, all of which we heeded not, as we have an abiding faith that right and honesty will always triumph at last, and iniquity meet its just reward. Two years have passed away since then; one of the said papers, although of seven years' standing, has been laid in its coffin, the other has been sold to a new proprietor and is in a very sickly condition. The "Tribune" of the 17th inst. contains an expression of gratitude from Stephen Pearl Andrews, which must be very consoling for the abuse which Mr. Greeley allowed that gentleman to shower upon us through his paper.

A discussion on *Love*, *Marriage*, and *Divorce*, was held in the "Tribune" between Henry James (an able writer,) Horace Greeley, and Stephen Pearl Andrews, and because Mr. Greeley acted towards him as we did, with respect to the use of the "Tribune's" columns, he has published the whole discussion in a pamphlet, with his own additions, and in his preface says:—

"Horace Greeley is not a philosopher—the farthest from it in the world———he has no grasp———never sees down into the centre of things———has no logical mind———Mr. Greeley is a bigot———Mr. Greeley is unfair, tricky, and mean———he is practically dishonest in an eminent degree," &c., &c.

Horace Greeley says about him:—

"Our only reply to all this is very fairly exhibited in his writings, and especially in this pamphlet. The clear-sighted reader will find him clever, acute, dialectically agile and logically sharp, and, so far as he reasons from his understanding rather than his baser appetites, well worth perusing and heeding.—This pamphlet does much credit to his intellect, but at the expense of his moral nature."

It would be out of place in us to make any comments on the qualifications of Horace Greely as an editor; they could not at least be disparaging respecting his ability, but he is evidently no judge of what constitutes *a logician*, when he considers Mr. Andrews a sharp one; his articles on the static pressure engine—that great *humbug* of which he was an advocate—ought to convince Mr. Greeley of this. The "Tribune" contained a great many articles on the new centrifugal force, by which some persons, we think, were led to take stock in the Static Pressure Association. Many of our daily papers, and we blame the "Tribune" greatly for this, flatter new projects, like the static pressure engine, the Paine Light, Hot Air Power, and other *humbugs*, by which means many of our people are thereby deceived.

The "Centrifugal Force" philosophers built one engine, which exhibited so much power, coming from nothing and costing nothing, that it has not been heard from since. Probably Mr. Greeley considers that the proprietor of such a wonderful machine must be "acute and agile."

Railroads in Cities.

In many places there seems to be a strong prejudice against having railroads pass through streets. We do not wonder why such a feeling should exist when steam power is employed to draw the cars, but we think such a prejudice is exceedingly unreasonable against having tracks laid in streets when the drawing power is the same as that which is used to draw numerous lines of omnibuses. The objections which can be urged against locomotives running in streets are many; such as the smoke of the wood employed for fuel; the blast, and the general speed at which they have been and are now run in all those cities through which railroads are laid. Locomotive power would certainly never do for New York City unless through a perfectly secluded street for that purpose, and in such a case who could or should find fault?

We have never seen a good argument advanced against railway tracks in cities, yet when the Common Council of Williamsburgh—a young city adjacent to New York—granted the privelege to a company of laying down a track in that place, they were compelled to recede from their position by a universal indignation meeting of the citizens.—It would not indeed be just to run a railroad through a street against the wish of all the owners of property in that street, but the owners of property may be wrong in their opposition, and if they are, it is the duty of those who think so to try and convince them of their error, rather than cram an improvement down their throats. Let us present a few arguments in favor of railroads in cities on which the cars are drawn by horses.

1st. Railroad cars are certainly handsomer than omnibuses, they can at least be made so, and therefore they present a better appearance in going through a street.

2nd. The track is straight, and no fears need be entertained by a pedestrian crossing the street that they will swerve from their path, like an omnibus; they go straight on and neither turn to the right hand nor to the left, so that there is no danger but in crossing the rails, whereas the danger from omnibuses is manifest over the whole breadth of the street.

3rd. Railroad cars make less noise than omnibuses, and thereby are much preferable either for streets full of shops, or those composed of private residences.

4th. One horse on a railroad can draw as much as three on the best pavements, and thus as a certain saving to any city, the rails have greatly the advantage in avoiding the expense of tear and wear of pavements, and outlay for animal feed. This saving is effected by obviating the great resistance and friction of pavements by the substitution of rails. Where this can be done and is not, a preference being in favor of clumsy omnibuses, a person is forcibly reminded of those dark times when people went to mill with a stone in one end of the bag to balance the grain in the other, to help the poor animal that carried the bag. The arguments we have presented in favor of railroads in cities as substitutes for omnibuses running over pavements, we think are incontrovertible, we know the last one is. Instead of injuring the value of property, a good city railroad running through a street should raise its value, especially if the rails are substituted for one or two lines of omnibuses.

Speed of the Norwalk Train.

In the first despatches sent to this city respecting the speed of the train which ran into the draw at Norwalk, and by which so many of our fellow beings lost their lives, it was stated that the locomotive passed over the gap, which is 60 feet wide, and struck the abutment a short distance only, below the horizontal line. Since that time the locomotive has been raised and it had never struck the abutment at all, consequently it did not leap over the gap. A question has arisen, then, as to the speed of the train, as some said it was going 40, others 25, and others only 15 miles per hour. It is difficult to tell at what rate it was going, but if it had been running at the rate of 47·15+ miles per hour it would have struck the middle abutment 16 feet below its top. Bodies fall by the attraction of gravity at the rate of 16 feet the first second, and a train running at the rate of 47·15+ miles per hour, has a velocity of 60 feet per second, which is the width of the draw. As the abutment is stated to be about 40 feet high, and as the engine did not strike it, the probability is, that the train was running at the rate of about 20 miles per hour.

Pennsylvania Polytechnic College.

A new college has been incorporated by the Legislature of Pennsylvania, whose objects meet with our hearty approbation, and we hope and trust that it may soon be firmly established. It is designed to teach mathematics and civil engineering; mechanical philosophy and the principles of machines; metallurgy, and every branch of chemistry, together with mining, engineering, mineralogy and geology. The Trustees of this Institution have not asked for State aid to establish and support it, they rely upon the generous assistance of the people of Pennsylvania in particular, and if they do not come to its aid they will be recreant to their own interests. The State of Pennsylvania is rich in mines and minerals, and a thorough knowledge of all that relates to subjects connected with engineering, minerals, and chemistry, should be taught her youth.

It is expected that the college will open in the month of September next with a full faculty; a well supplied analyical laboratory, sections and models of mines and machinery, a geological and mineralogical cabinet, field operations, and architectural and mechanical drawing, to afford ample facilities for thorough and practical instruction. Students will be enabled to pursue one or more studies for a year, term, or less period, and after examination, will be granted certificates of capacity accordingly. Candidates for Degrees will be examined on all the branches, but may pursue the studies a longer or shorter time, according to industry and ability.

Particular information about fees, &c., may be obtained by young men who would desire to attend said college, or by fathers who may desire to send their sons there, by communications addressed to John McIntyre, Esq., Walnut street, above Sixth, Philadelphia.

Commissioner of Patents.

The Hon. Chas. Mason has entered upon his duties as Commissioner of Patents, and we hope he will adopt the earliest possible measures to facilitate the examination of applications which have largely accumulated in the Office within the past year. Inventors, as a general thing, cannot afford to remain so long deprived of protection or of a decision respecting the novelty of their inventions. Theirs as well as the interests of the public, demand a larger examining force: no completed application ought to remain in the Office over two months. From what we can learn of Mr. Mason, we believe he possesses peculiar fitness for an office of such magnitude, and confidently predict for him a faithful, liberal, and comprehensive administration.

Non-Protecting Lightning Rods.

The house of Nathan Frye, at Salem, was struck by lightning on the 30th April, and much injured. What is remarkable about this case is the fact that it was supposed this house was thoroughly protected by two large rods, very properly put up and tipped with gold.—[Exchange.

[We have been informed that these large rods terminated in charcoal, and ran up part of the way, after being carried down some distance. They were, therefore, not correctly arranged. Lightning rods should always terminate in moist ground, a well, or cistern.

Jesse Hutchinson, of the Hutchinson Family of Singers, died at Cincinnati last week, at a Water Cure establishment in that city. He was on his way home from California, where he had been sick for a long time.

It is stated that a proposition for the annexation of the Sandwich Islands, is now before the administration at Washington.