

There is no doubt that there are hundreds of thousands of wheels now working on railways which are exceeding out of balance; every one must have experienced the oscillation, both lateral and to-and-fro, in traveling on a railway; of course, much may be ascribed to the rails, and much to the bad working of the engine, but a great deal is caused by the wheels of the carriages; and when we consider the results before alluded to,  $2\frac{1}{2}$  lbs at a velocity of 4,000 feet or 5,000 feet per minute, what must be the effect on a carriage of  $9\frac{1}{2}$  lbs. going at a speed of 2,000 feet or 3,000 feet or (as in express trains) of 5,000 feet per minute!

It will be readily imagined that where there is a constant working of the buffers and springs, there is a constant wear and tear, and the bolts, screws, and joints must rapidly become loose, for, although constructed of enormous strength, nothing can withstand the separating force of vibration; there is also a large amount of needless wear and tear upon the rails and permanent way, as well as great injury to goods caused by the oscillation also a wasteful expenditure of power, so that altogether it is probable millions of money are by these means lost to the railway companies every year; and lastly, but a most important point, causing uneasiness, danger, accident, and sometimes loss of life to passengers. If the wheels of the engine and carriages be properly balanced, and the rails in good order, there would be very little more oscillation at forty miles per hour than there is at ten.

#### DYSPEPSIA AND CONSTIPATION.

This disease is not to be cured by medical prescriptions got from books. You must get at the cause and remove it. Of a dozen dyspeptics, scarcely two may be affected alike. In many cases, abuse of the stomach is doubtless the source of the trouble. All aperient pills increases the weakness which causes the complaint; to this rule there is no exception. All nostrums and patent medicines, of whatever pretensions, are injurious. In no case can any relief be obtained from their use.

Whoever uses tobacco or malt liquors, or other constant stimulant, or even coffee, and finds symptoms of indigestion, must first abandon these habits; and it will be ~~more~~ enough to ~~bring~~ of active remedial treatment when it is found that the disease is not then removed. Whoever has a troubled mind, or is confined to monotonous toil without exercise of labor or bodily recreation, and finds himself dyspeptic, must first seek relief by correcting these causes; for, so long as they exist, pampering the disease, medicine can be of no avail.

If there be any drain upon the vital powers in any direction, beyond healthful moderation, it must be checked before we can hope to return to the digestive organs the vigor of which they are robbed. No doctor's stuff can supply the natural forces which only the vital chemistry of the living body can create. Like intoxicating spirits, dyspeptic medicines may for the moment exhilarate a patient and make him feel great things; but, afterwards, they each make the trouble greater than before.

Beware of tea and toast, and such like diet as remedies for dyspepsia. These do but impose unreasonable tasks upon impaired digestion. What is wanted is exactly the opposite regimen, namely, food that is small in bulk and rich in substantial nutriment; something which, with the least exertion of power, the stomach can turn into rich blood to relieve the poverty of the fluids. Rare beefsteak, for instance, not fried in a pan of fat and sole-leathered, but quickly embrowned on a grid-iron, and served up with the oozing juices of red life; and if fluid accompaniment is desired, let us try port wine, weakened to suit the strength of the organs, but rather reduced in quantity than watered much.

Bran-bread is of no account in this disease. It is excellent for constipation, if used now and then, but not continuously. We must discriminate between these complaints. In constipation, often, the digestion is even super-excellent, and the torpor of the bowels, which occasions the trouble, is due to the too thorough absorption of the liquid parts of our food, leaving a residuum too dry and rigid to be freely moved forward through the curvatures of the lower bowels. The most distressing affliction grows out of the impaction of matter in the colon from this cause, giving dull pains which banish sleep and good humor. Pills are not the remedy for this distress, but tepid or cold water injections, which readily reach the colon, and, by supplying moisture,

bring away the obstruction. This treatment, though not a cure but a temporary relief, secures from distension of the bowel, which weakens its muscular power and promotes costiveness; and it also prevents it by dislodging, frequently, remnants which often lie impacted in the colon for years, causing all sorts of distressing feelings.

#### INFLUENCE OF MACHINERY.

Our valuable Scottish cotemporary, the *Practical Mechanics' Journal* recently published the following truthful remarks:—When the place of hand labor is first supplied by machinery in any branch of manufacture, the wages of those who still endeavor to obtain employment in the working of that particular branch by hand are reduced; but those who have the ability to embrace other employments, and particularly the manufacture or use of the machines which have usurped their ordinary handicraft, reap the advantage of their knowledge or genius, and, by increasing demand for the manufacture, ultimately make more wages than they would formerly have made by hand labor. When the use of machinery was in its infancy, this reduction of wages had more evil effects than it has at the present day, or will ever have again, for the spread of education and moral culture has widened and will widen the abilities of men, and teach them that certain general knowledge especially aids their advance in life. Who so capable as the transcribers whose wages were lowered by the introduction of printing, to undertake the duties of compositors and readers in a printing establishment?—fitted both by their literary attainments, and by the similarity of the employments which they would respectively have to give up to embrace. It is obvious that, with a stout heart and a clear head, all the difficulties of the new style of things would be quickly mastered, the condition of the *ci-devant* transcriber would be ameliorated, and where one copy was produced, thousands of comparatively permanent copies would be sent forth to the world, in their turn to call forth latent energy, and to disseminate knowledge. The history of power-looms and saw-mills show results equally favorable to the general adoption of machinery. All improvements, and amongst the rest the use of machinery in manufacturing processes, substitute extensive employments for circumscribed ones. Society at large participates in the additional production, and is benefited thereby. The general adoption of machinery will bear the test of profit and loss; it is also consonant with the same reasoning which sanctions divisions of labor, and its advantage, furthermore, is proved practically by an appeal to statistics.

#### SUSPENDED AND SUBTERRANEAN RAILROADS FOR CITIES.

It has been proposed, through the columns of the *Daily Times*, that a lofty iron railroad viaduct shall be constructed, to extend from the City Hall, over the tops of houses and streets, to the Central Park, and that from thence it shall connect with the several railroads that extend from New York to other cities. It is intended that locomotives shall run upon this viaduct and come into the very heart of the city, with their trains, without changing their method of draught at the outskirts from steam to horses, as is now the case. This proposition deserves public attention, because the difficulties and expense to the railroad companies, of employing combined animal and steam power, are increasing with the growth of our population. In London and some other cities, such elevated railroads are in daily use, to the great relief of the crowded streets below, and why may not the same system be adopted for New York with equal benefits. With our modern improvements in science, the mechanic arts and civil engineering, it appears to us, that such an iron railroad viaduct may be constructed without obstructing the streets during its erection, and that it would be a great advantage to the entire community.

Another system has already been proposed (through our own columns) which has the same object in view, and for which we claim equal attention with the above. It is a grand subterranean or tunnel railroad, for the relief of our streets. It may cost more in original outlay, but the difference would not be much, while for durability and a conscious feeling of greater safety, it is to be preferred. We present the two methods to the public; both

deserve attention and discussion, for the time is not far distant when one or other must be adopted and go into operation. If we had a government worth a tinker's ladle, we should hear of more inquiries into matters of practical importance for the present and future relief of our city. Property-owners along the lines of railroads are constantly quarreling against the running of steam cars, and our municipal authorities suffer this conflict of interests to wage until one or other succeeds through the power of the court. It is a pity that we have not Louis Napoleon to manage us for a while. He would not only relieve Broadway but he would also devise some plan of mutual accommodation between the railroads and the people, and stop this sort of Kilkenny-cat fighting.

#### MILKING BY MACHINERY—THE INVENTOR'S REMARKS ABOUT HIS MACHINE.

MESSEURS. EDITORS:—I was happy to learn from yours of the 25th ult. that you had succeeded in obtaining both patents on my two cow-milkers. I have fully tested the machine, used it daily for eight weeks, and can assure you that it is a practically useful implement which will come into general use. With some improvements in its construction, lately made, I can fit any cow, as to the distance the teats are apart or the different sizes, without changing the machine in the least; and three minutes is all the time needed to milk any cow in, and with less labor than otherwise occurs. The cows stand quieter, and like to be milked with the machine better than by hand.

There is satisfaction in succeeding in any undertaking; and it affords me pleasure to know that I have not only invented a good thing, but that the thing is mine for 14 years to come, and I am now fully satisfied that you have done the best for me possible. Please receive my sincere thanks for your faithfulness; and I can assure you my future patronage is yours.

Yours, truly, L. O. COLVIN.

Cincinnati, N. Y., June 4, 1860.

[We are having an illustration of Mr. Colvin's apparatus prepared (which we shall publish in a week or two), showing a dairy-maid in the act of using the implement, the cow "standing" as if she "liked to be milked," as Mr. C. states. What will not the mechanical skill of our inventors accomplish?—EBS.]

#### EGG PHILOSOPHY—GREAT BIRDS.

We have heard of "philosophy in a nut-shell" and "philosophy in an egg," and many persons may suppose that philosophy cannot be of much account when it can be cramped into such contracted receptacles. If the value of philosophy were to be estimated by the length, breadth, height and depth of modern eggs, we would certainly conclude that we lived in degenerate times, in comparison with those supposed pre-adamites who sojourned in the Connecticut valley before the Flood. Professor Hitchcock in his work on "Fossil Foot-prints," describes a biped—*Brontozoum giganteum*—which had a foot 18 inches long, and a step of not less than five feet. It was 12 feet high, and weighed from 400 to 800 pounds. The ostrich is the largest of living birds; his height is from seven to eight feet, his step is 26 inches, and he only weighs 100 pounds. The old gigantic birds had undoubtedly eggs proportioned to their size. At one time they traversed the Connecticut valley in flocks, and numerous are their tracks in the sandstone near the railroad at Northampton. Hundreds of the foot-prints, as fresh and distinct as if they had been impressed but yesterday upon the mud, are now to be seen in many sandstone slabs.

ECONOMICAL COAL BURNING.—The engine *Delaware*, on the Central Railroad of New Jersey, has run three trips, of 128 miles a trip, with 6,120 lbs. of the American Coal Company's coal. The train (mail) averaged 23 miles per hour, including stops, and consisted of three passenger cars and one baggage car. The cost of coal on the tender is \$5 per ton gross. The cost of wood averages \$5 25 per cord on the road. One and three-quarters cords of wood is required for a trip of 128 miles. The cost of altering the engine—perforated grate, enlarged smoke-arch, wire gage, straight smoke-stack and sub-treasury—was \$100. This shows a saving of above 80 per cent of coal over wood.—*American Railway Review*.