

Rotary Steam Engines.

The reasons why rotary engines have never come into general use, are, that all that have been heretofore invented have labored under one of these two difficulties:—

First—Those that have been built on the velocity principle, that is, deriving their power from the velocity or momentum of a jet of steam acting upon arms or buckets on the periphery of a wheel, have not had sufficient power to make them of practical utility.

Second—Those that have been built on the expansive power principle, deriving their power from the expansive force of steam and not its momentum alone, have never been so constructed as to run with equal ease both ways, besides being complicated, weighty and cumbersome, and consequently incurring a great deal of friction, and more expense.

From the above positions it would appear that the great desideratum is to construct an engine, not on the velocity principle, but on the expansive power principle, with a rotary movement, fixed to run with equal ease both ways and combining the other advantages of lightness, simplicity and convenience, consequently less friction, less expense, and still having the same or more power. This great end has been accomplished in the rotary engine invented by the Messrs. Schnebly. The engine we saw was at the foundry of Dunham & Browning, in North Moore street, this city. It needs a plate to be minutely described on paper. It only consists of a cast iron drum, in the beam in the top of which the steam is inducted and educted, and within which drum is a cylinder a few inches less in diameter than the drum, with two arms or pistons projecting from its periphery closing up alternately the passage between it (the cylinder,) and the drum, and on which pistons the steam alternately acts with all its force, and so fixed as to recede (and allow the steam to escape,) while passing under the head above spoken of. The shaft passes through the centre of the wheel. The head on the top of the drum, has two passages. When the engine is running one way, the steam is inducted through one passage and educted through the other, after having done its work; and on shifting the sliding valve over the two passages, the reverse motion is produced, and the induction and eduction is also reversed through the same passages.

Now it is universally known that the power of the lever (the fulcrum and resistance remaining the same,) is in proportion to its length and the power applied. This engine operates on the principle of the simple lever, and it continually uses the lever to the best advantage. The resistance and fulcrum being at one extremity and the power at the other, not acting as in the piston engine, at nearly all the angles between a straight line and a right angle, but at the same and nearly a right angle constantly, thus producing a perfectly uniform motion. It is idle to speak further of the engine; those interested should go and investigate for themselves. J. K. V. S.

[We cannot endorse all that has been said in reference to this engine in the above communication, although every sentence may be correct. But it is not for us to make dogmatical assertions relative to any invention, until by continued and fair experiment all doubts are removed. Rotary engines undoubtedly occupy less room than either the parallel or horizontal, but in claiming a thirty horse power for a cylinder of 12 horse power dimensions, as has been done for this engine, we must candidly say that we cannot see how this is possible.]—Ed.

Proverbs.

Although we cannot tell what a day may bring forth, it is always prudent to prepare for the future. As the ant prepareth herself for winter, so should man make provision for coming events and especially those events which cast their shadows before. The cholera is in Russia, and it will undoubtedly reach our shores next year, and although it is said to be less virulent and fatal than when it ravaged Europe in 1831-'32, yet we ought to be no less heedless of it on that account.—The following method of fumigation should be resorted to on the very first appearance of it, and every house in an infected district

should be fumigated three times a day.—To do this effectually, a mixture of three parts of common salt and one of black oxide of manganese, should be placed just inside the outer or street door of every dwelling house, and a little common vitriol poured upon it.—The inward current of air will convey the chlorine gas to every part of the interior, and wherever it can be smelt the effect is produced—the miasm is destroyed. If articles of clothing are infected, and the colors likely to be injured by the gas, they may be heated in an oven or on a kiln to 250 or 300 degrees (about the heat of baking bread,) when they might be handled or used with perfect impunity.

Interesting to Sculptors.

The Boston Transcript has a letter from Powers, the sculptor, giving an account of a marble quarry, just opened, about thirty miles from Leghorn. The quarry appears to have been worked in ancient times, possibly by the Etrurians, and some chisels and picks have been found there, which closely resemble those now in use. Mr. Powers says: "The sea is in sight of the quarry, at about a mile distance, and so easy and even is the ascent, that we drove over the ground at a full gallop. The road to the quarry from Leghorn is along the sea shore, and is a pleasant ride of only five or six hours. I intend to make the statue of Mr. Calhoun out of this marble, and it will be, perhaps, the first full sized statue made of it in two thousand years. I am now making a bust of Washington from this marble somewhat larger than life, by way of experiment. It is nearly blocked out, and I am satisfied already, that the effect will be all that could be wished. It is singular that the owner of the quarry is a Greek, who has found the marble supposed to be peculiar to his own country, here in Tuscany. He can afford this marble for less than one half the price of Carrara, on account of the great ease and small expense of excavating and taking it to the sea shore. The marble has a rich warm color so desirable in statues and busts, and it is most beautiful in columns, mantel pieces and the like. The grain is coarse like the Parian, but it works smoothly and takes a high polish."

The Wife.

It needs no guilt to break a husband's heart the absence of content, the mutterings of spleen, the untidy dress, and cheerless home, the forbidding scowl, and deserted hearth; these and other nameless neglects, without a crime among them, have harrowed to the quick the heart's core, of many a man, and planted there beyond the reach of any cure, the germ of the most excruciating despair.—Oh! may woman, before that sight arrives, dwell on the recollections of her youth, and cherishing the dear idea of that tuneful time, awake and keep alive the promises she then so kindly gave. And though she may be the injured, not the injuring one—the forgotten not the forgetting wife—a happy allusion to the hour of peaceful love—a kindly welcome to a comfortable home—a smile of love to banish hostile words—a kiss of peace to pardon all the past, and the hardest heart that ever locked itself within the breast of selfish man, would soften to her charms, and bid her live, as she had hoped, her years in matchless bliss loved, loving, and content—the soother of the sorrowing hour,—the source of comfort and the spring of joy.

Books.

In the best books great men talk to us, and give us their most precious thoughts. Books are true levellers. They give to all who will faithfully use them the society, and the presence of the best and greatest of our race. No matter how poor I am, no matter though the prosperous of my time, will not enter any obscure dwelling. If learned men and poets enter and take up their abode under my roof—if Milton will cross my threshold to sing to me of Paradise; and Shakspeare open to me the worlds of imagination, and the workings of the human heart; and Franklin enrich me with his practical wisdom—I shall not pine for want of intellectual companionship, and I may become a cultivated man, though excluded from what is called the best society in the place where I live.

Railways in Europe.

When Jecquar, the inventor of the wonderful loom that bears his name, was arrested and carried to Paris with his machine, Carnot, in the presence of Napoleon, roughly said to him. "Are you the man that pretends to do that impossibility—to tie a knot in a stretched line?" His compatriots of Lyons,—the impossibility being surmounted—broke his machine in 1806, and raised a statue to his memory in 1840. All those who are in advance of public opinion must bear ridicule or prosecution. In 1825 the Quarterly Review thus ridiculed the notion of certain engineers, Telford among the number, that a railway engine could go eighteen or twenty miles an hour.—"The gross exaggerations of the powers of the locomotive steam engine, or to speak English, the steam carriage, may delude for a time, but must end in the mortification of those concerned."

We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's Ricohet rockets as trust themselves to the mercy of such a machine going at such a rate."

In that year the common belief was that railways were altogether delusions and impossibilities. The Liverpool and Manchester railway was opposed in parliament with every form of invective. One member in 1825, declared his opinion "that a railway could not enter into a successful competition with a canal. Even with the locomotive engine, the rate would not be but 3 1-2 miles per hour which was slower than the canal conveyance. Another assertion which Mr. Huskisson was obliged to meet doubtfully and apologetically was "that there were two or three canals, which were sufficient for every purpose of commerce in the district through which the railroad was to pass. Let us be just to what we have been accustomed to decry as the dark ages. Let us be tolerant to those who imprisoned Gallileo, and rewarded Columbus with chains. If there be a reality in any discovery—a true thing and not a sham; if there be strength, or utility, or beauty in any work of the mind, it will live and fructify, whatever critics or orators, or even kings may do to crush it. And so with railways. On 15th September, 1830, the first passenger line, the Liverpool and Manchester Railway, was opened. The conveyance of passengers appears originally to have been an interior consideration to the conveyance of goods; and the Directors modestly anticipated that one-half of the passengers travelling by coaches between the towns might venture on the railway. In the first year after the opening there were conveyed 445,000 passengers; in the year ending 1st July, 1845, the passengers so conveyed amounted to 896,003. On the 24th April, 1847, there had been a total expended on the railways of the United Kingdom, of 78,000,000 pounds sterling; and the aggregate receipts are a total exceeding £8,000,000 per annum for the conveyance of passengers and goods—being the enormous sum of 38,800,000 per annum.

Manufactures in Russia.

A late London Letter published in the National Intelligencer, says: Mr. Cobden's late visit to the annual Russian Fair, at Nishnell Novogorod, has revealed striking facts with respect to Russian manufactures. The great variety of articles which were exposed for sale, and the admirable order which was maintained at the exchange of goods, very much exceeded his expectation. Mr. Cobden visited several of the manufacturing districts in Russia, where he was much surprised and gratified with the industry and skill of the workmen, principally native peasants. At Woohna he found silk goods manufactured in a very good style to an extent of several hundred thousand roubles annually. At Moscow several manufactures excited his astonishment and admiration. Mr. C. is said to have pronounced the calico printing mills of M. Gutschkow one of the most perfect he had ever seen in its organization. In another establishment, that of M. Procherow, the care bestowed upon the health, morals, and instruction of the children employed was very gratifying. The mills in Moscow appear to be conducted with great skill and order, and

with a very admirable combination of the various divisions of the manufactory. Cloth weaving appears to be in a very favorable, in fact, in a very advanced state in Russia, and many circumstances combine to bring this branch of industry to the highest perfection. It has long been known that the manufacturers of England had many powerful and skillful rivals on the Continent, but she has not hitherto expected to find them in Russia.

A Turkish Dean Swift.

Nasreddin, the Joe Miller of Turkish story it is recorded, once being at a mosque, was moved by the spirit of (rollery) to step into the pulpit and look down upon the spirituously an-hungered audience: "O true believers!" said he, "do you know what I am going to say to you?" "No" was the general response. "Then I will not waste my words on so stupid a rabble," said the extempore, D, D. and coming straightway down in high dudgeon went his way. On a second occasion, he renewed his experiment, and his inquiry, and the audience, moved by their previous disappointment, replied, "Yes." "O well!" said the Doctor, since you know, there's no use in my telling you, and again he made his exit. A third time he mounted the pulpit, and made his inquiry, and the audience resolved not to be baffled again, replied "Some of us know, and some don't know." "Well said he with great coolness, "let those who know, tell those who don't know."—and again girded up his loins and vanished in silence.

A New Lever.

There was a little old woman in the city of Glasgow, who much admired Dr. Chalmers, and diligently attended all his sermons, on Sunday, and week days, whether they were doctrinal or practical, theological, or astronomical. One day she came home in great perplexity. Dr. Chalmers had dwelt much upon a "moral lever," with which he wished to uplift human nature. What a "moral lever" was, the old woman could not divine. A friend took the poker, and placed it on the bar of the grate, trying to realize the idea, and make the imagery palpable. The old woman paused—amused—and at last the fire burned. She bethought of the indignity of the pulpit, the subject, the doctor, and herself, by so great a materialization of the moral lever, and bursting with indignation, she asked; "Do you mean to tell me that Dr. Chalmers would preach a hale hour about a poker?"

An Ornamental Nose.

On a fish-woman's stand in front of the market, Boston, last season, a few live lobsters were exposed for sale. A stranger unacquainted with ichthyology, came along—and turning over the dormant animals, asked the price, and at the same time raising one of them to a close proximity with his nose. "Whew!" said the fellow—"I will hev you prosecuted, mum—it smells!"—At this instant, the lobsters claw closing with a "whack" fastened it upon the gentleman's nose. The old woman placed her arms akimbo in triumph—and simply asked the gentleman, who smells now mister?"

Haunted Houses.

Mr. Hoynter states that at a parsonage in the County of Kent, England, known to him, a knocking was heard at certain times and could not be explained, and obtained for the house the reputation of being haunted, but was found to be caused by a baker at the opposite end of the village chopping wood.—The sound, it was thought, was produced by an old well opposite the parsonage. Mr. J. A. Pictious, of Liverpool, instanced a case where similar sounds heard in a house, were found to proceed from a stream, let at a very considerable distance, and not audible elsewhere.

The total liabilities of all the houses that have recently failed in England are said to be one hundred and seventeen millions and half of dollars. Of this amount at least one hundred and five millions of dollars belong to the United Kingdom.

Five years after the opening of the graveyard of Houston, Texas, it contained 5000 graves. At the same time the population of the city amounted to 5000.