



NEW YORK, OCTOBER 28, 1848.

**Honor to whom Honor is Due.**

It is a lamentable fact that many men who are esteemed for honor, honesty, probity and worth in private life, seem to have no qualms of conscience in appropriating to themselves the scientific discoveries or inventions of others. This is particularly true in reference to the handiwork and productions of our mechanics and artisans. It pained us not a little to behold at this year's Fair of the American Institute (as it has before,) the studied trumpeting of Agent's *ware*, without a single reference to the actual producer. In the displays of mechanical and artistic skill that are yearly exhibited in Paris, the articles entered must have the name of the mechanic or mechanics and artisans who labored on the same, labelled or engraved on them, so that the public may not bow to a proxy genius. We wish this custom to be universally adopted in our own country, because it is so democratic and republican in nature and justness. We might here point distinctly to articles exhibited at the Fair, and say to the Managers and respectable gentlemen, as the prophet said to David, "thou art the man."

There is no class so guilty of the evil that we speak of, as our manufacturers. Now, it would be even something to their interest to send with their goods the name of the girl that wove such a piece of cloth—and the person who had charge of the same. This would be no more than an act of justice, and would (we are perfectly confident,) be not unprofitable to the manufacturer.

Our Fairs are for the ostensible object of encouraging American genius, skill and industry. It is surely a poor plan of carrying out these objects, by exhibiting, in too many cases, splendid tokens of artistic skill to dazzle the eyes of onlookers, for the mere purpose of letting people know where these things are sold, not made. An humble mechanic or artisan, has frequently to chew the cud of chagrin in seeing some agent receive a medal or diploma for a piece of workmanship which, the person who received the reward, could no more perform than the man in the moon.

We hope that these few hints will not fall like good seed among thorns and briars, but upon good soil and bring forth good fruit.

It is a great source of honest pride, to behold the handiwork of our mechanics and artists made the theme of just praise, but we take more pleasure in witnessing the admiration transferred from the work of art, to the artist; but oftentimes we are deprived of this pleasure, because honor is not awarded to whom it is due.

**Evening Free Schools.**

Evening Free Schools are now opened in various parts of our city for the instruction of our young men and women. We hope that they will take advantage of this blessing, for a blessing it really is, and that they will appreciate the benefits of a good education. There are many very eminent men who have received all their education after the toils of the day were over. There is certainly a great pleasure arising from having mastered some difficult problem before retiring to sleep, in comparison with beholding the performance of Forest or a Macready. Our young Mechanics should not neglect availing themselves of the additional privileges provided by the Education Board of this city.

**Honor to Mechanical Ingenuity.**

In Paris there is a Central Jury appointed by government to examine articles of mechanical ingenuity, decide upon their merits and grant proper rewards, and the Legion of Honor is often granted. We have often thought that an *Order of Merit* should be established among our Mechanics and Farmers. L. L. D., D. D. &c., with the Hon. this and that, belong to everybody but our working people.

**Prevention of Explosions in Steam Engines.**

Mr. John Wilder of this city, in a letter to the Tribune, says that it is impossible for the force of elastic steam to produce the breaking of engines and rending of boilers that so frequently occur: they are the work of the explosive principle, when disengaged from its combination with steam. Similar in its effect to lightning and identical with electricity in its distinctive properties; its velocities are in effect unlimited; it is devoid of weight, and not subject to the laws of gravitation, which are inherent in all matter that has weight, and it is hence evident that it may be conveyed away by similar conductors.

It is absolutely certain that the explosive principle is disengaged from steam as it is let into the cavity of the nozzle, or valve-chamber, on the opening of the steam-valve: the pressure that kept them combined is then in great part taken off, until the cavity is filled with steam. There is no proper escape of the explosive element from the nozzle, which is heated, and in effect insulated, and the accumulation is highly dangerous; but it may be safely carried off by proper conductors, those most convenient are small, copper tubes.

One end of a tube at proper length is to be terminated in the best manner for the diffusion of the electric fluid—the other end to enter the cavity of the nozzle, and have over its orifice a slight valve, kept by a spring a little open, to allow the explosive element to pass off by the tubular conductor, the valve to close by the force of steam as the cavity becomes filled therewith. The conductors of a condensing engine should be carried high enough above the water in which they terminate to preserve the vacuum.

The security from explosions and breaking

of engines must be complete, the cost and trouble only nominal.

**Words of Wondrous Length and Thundering Sound.**

The Philadelphia Ledger opens its batteries upon the name of the New York *Pomological Society*, and enquires "what *ology* is this?" The only answer we can give is, nonsensology. Our scientific system makers, are sadly debasing our mother tongue, by adding to it strange and uncouth foreign terms,—which have neither sweetness of sound nor sense of application to compare with our simple and energetic Anglo Saxon. "The Association of Fruit Growers" would not only be a name more easily understood, but more beautiful than "Pomological Society." The English language by the combination of words is capable of indefinite expansion, and in spite of many lamentations made by dull professors about the barrenness of our language, we find no literature that thrills deeper on the heart than some of the old ballads in which are not to be found a word exceeding three syllables in length. Shakspeare and Burns, show what can be done with their native tongue and those who complain of it are like miserable mechanics who complain of their tools, to hide their incapacity to use them.

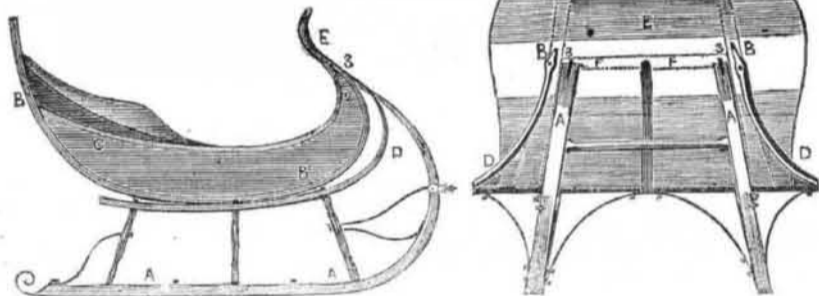
**Mammoth Pump.**

The St. Louis Republican of the 5th instant says that "Capt. P. Bennett will, to-day at 3 o'clock, P. M., put in operation, on board the steamer Cumberland Valley, foot of Florida street, Walsh's mills, his new invented patent pump, constructed on scientific principles, without valve or piston, calculated for freeing sunken boats from water—throwing the unheard of quantity of one thousand barrels per minute."

**IMPROVED SLEIGH.**

FIG. 1.

FIG. 2.



These sleighs are the invention of Mr. Moses Miller of Fort Ann, Washington Co. N. Y. and secured to him by letters patent. The improvement consists in the manner of constructing sleighs; by means of which improvement the dash board may be made of any desired width, so as to form wings on each side thereof, out of the same piece which constitutes the dash board itself, thereby affording more effectual protection from annoyance, by the throwing of snow; whilst also the structure of the forepart of the vehicle is rendered more permanent than heretofore, and will more rapidly admit of repair.

In the accompanying drawing, fig. 1, is a side elevation, and fig. 2, a view of the front of the sleigh. A A, are the runners, B B and C C the timbers that are called the raves; B B being the lower, and C C the upper raves, which with the necessary cross pieces constitute the main frame of the sleigh body. D D are fenders which are curved round so as to bring their outer ends opposite to the main raves B B, as shown at 3 in fig. 2, to which raves they are fastened by a screw bolt, or some analogous means. The main raves B B, are turned up in the form seen in the front at B fig. 2, but this curve may of course be varied at pleasure. The fore part of the raves are connected firmly together by means of a cross piece, the place of which is shown by the dotted lines at F F, fig. 2.

In the constructing of sleighs as heretofore made, the dash board constituting the fore part of the body of the vehicle, has been placed on the inside of the raves, and it has therefore been limited in its width to that of the frame work of the sleigh, which width is designated by the dotted lines B B, fig. 2, this being the place of the raves. Under this arrangement, the dash board is planted on the

raves at their outer sides, and it may, therefore, be extended out in width so as to form wings, in one solid piece with the said board. The board so attached is shown at E E,—where the part of E E constitutes wings, which may be extended out to any desired width without any additional cost, and in a manner much more permanent and convenient than such parts could be made of, added to sleighs on the old plan.

The runners, A A, are curved upwards, and backwards, so as to bring their fore ends in contact with the dash board at a point immediately opposite to the cross piece F, to which they are confined by the use of suitable screw bolts. The dash board is affixed to the raves by means of wood screws, and the whole arrangement of the front, therefore, is such that runners, fenders and dash boards may readily be removed for the purpose of repair.

The dash board being made all in one piece is a very important improvement over the old way, and they can be made much cheaper and certainly more easily repaired. The main raves are formed in a proper press, and the panels of the sides of the sleigh are secured by grooves and tennon to the raves, and a series of small bolts or bands passing through the raves inside joining the panel and raves, dispensing with the more expensive stays, and making a far stronger sleigh at the same time. These improvements will no doubt be universally adopted by our sleigh makers. Two of these sleighs may be seen at Mr. Brewster's Carriage Repository, No. 396 Broadway, this city, and we have examined them personally, and are convinced that they embrace new and valuable improvements, being neater, lighter and stronger than those made in the old way.

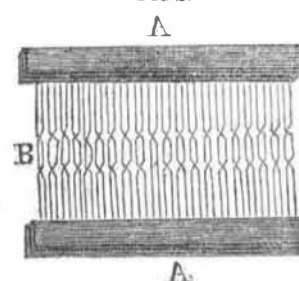
**Vogel and Thomas's Harness.**

FIG. 1.



Fig. 1, exhibits the eye of the heddle and shews that it is braided forming not two but one cord at the base and top of the eye, and certainly superior to the old heddle. One advantage of it, is that the varnish will saturate the cord more thoroughly than if the eye was made of knots, making them far more durable as has been proven with a harness that has been severely tested for more than one year. Another advantage is, that it forms a far smoother eye as will be observed in

FIG. 2.



A A are the two slips that confine the heddles and B are the heddles. Now it will easily be perceived that for fine work a vast improvement is embraced in the form and make of a harness made of these heddles, while for all other kinds of weaving, the advantages are indisputable. Both the machine and the work it produces have peculiar claims upon the manufacturing interests of our country, and both are patented. The proprietors have wisely concluded to sell rights of States, in such a manner, that the person or persons who secure single rights, will have a respectable field for operations and be well remunerated in their enterprise. The Institute awarded a gold medal for this invention and it certainly was not too high a prize.

**Emigration and Trade Societies.**

The Sun says that one of its correspondents—a hard-working mechanic—endowed by nature rather than by study with strong perceptive faculties and good reasoning powers, wishes to impress upon the different trades societies of the city, the importance of action being taken by those who are able, for the assistance of those who are not, during the severe winter months in prospect and for all future time. No means are better calculated to effect this desirable object than a good emigration system, such as he suggests. Let our labourers and mechanics form Emigration Societies and thus assist those of their numbers who are disposed but unable to seek employment in the vast fields and new cities of the boundless West. Thus they would do a double good. In relieving those, they relieve themselves of their competition and advance so much nearer to constant employment and good prices.

**California Gold.**

Edward N. Kent, chemist, of this city, in a letter to the Sun says that he has analysed some of the California gold ore and finds it composed of arsenite of copper, containing a little Nickel and Zinc, and mixed with Iron Pyrites, some of which is in well defined crystals, and without a single particle of gold.

This is cooling news to the bullionists, but they must just smelt their disappointment instead of their gold—in the crucible of resignation, and after this stick the old proverb on the tips of their noses "It is not all gold that glitters."

**THE SCIENTIFIC AMERICAN.**

Persons wishing to subscribe for this paper have only to enclose the amount in a letter directed (post paid) to

MUNN & COMPANY, Publishers of the Scientific American, New York City.

TERMS.—\$2 a year; ONE DOLLAR IN ADVANCE—the remainder in 6 months

Postmasters are respectfully requested to receive subscriptions for this Paper, to whom a discount of 25 per cent will be allowed.

Any person sending us 4 subscribers for 6 months, shall receive a copy of the paper for the same length of time