



NEW YORK, OCTOBER 21, 1848.

The Great Fair.

There is an additional temporary building fitted up this year for the operations of machinery, consequently the machinery is better displayed this than during any previous Fair. The room, however, is too small, it is perfectly jammed. Were the whole Hall a machine room it could be filled up easily. From what we have seen of this Fair, we are convinced that an exhibition Hall for machinery—a Museum—might profitably, both for owners of machines and the Institute, or some other Association, be kept open throughout the whole year in this great city. Then would come here the inventor with his new machine, and here would resort the manufacturer to behold the latest improvements. In a great measure, this has almost become a fixed habit at any rate, but what we want is a focus—a continual centre of exhibition.

Any Association that would manage an affair of this kind well, would do the country some service. The Institute, we have been informed, is going to do the genteel thing this year, in the distribution of prizes and all things connected with the Fair. This is necessary, for there is not quite such a variety of articles exhibited this year as there were in 1847. Eighteen out of the twenty-five of last year's managers are also managers this year.

The collecting and exhibiting the fruits of American industry by Fairs, is both wise and laudable. Such exhibitions lead to emulation, improvement and advancement in the useful arts—upon which depend the prosperity of our country.

Associations of Capital and Labor.

We are right glad to see practical men uniting their capital and labor together in mutual associations. No other way appears to be so reasonable as this for the elevation of our mechanical classes. The general way in which manufacturing operations are conducted is for one, or a few men of great wealth, to unite together (often without the knowledge to construct a single article of manufacture) and hire practical men at so much per day or week, the capitalists reaping the greatest share of the benefits. We do not mean to say a word against men of capital doing this—every man has a right in this country to invest his money when, and how he pleases—capital has its rights. But why should not workmen enjoy both the fruits of their toil and the benefits of capital also. We have known a number of such associations that were perfectly successful, and they all might be, if care was taken that kindred spirits alone formed the association. When capital and labor are united, a direct advantage over mere capital is apparent, and this is right. It is too bad, to behold mechanics—industrious and sober men who have served a good apprenticeship—condemned for the want of a little capital to labor hard as journeymen when their heads are covered with the frosts of many winters. The only way for mechanics to rise above this evil is to associate their capital and labor together. The amount each may possess may be small, but ten with \$300 each make a joint capital of \$3000, and every day's labor is so much capital added to the stock.

To be successful, the company must be composed of sensible, honest and industrious men—each looking to his neighbor's rights as well as his own. We believe that no country on the face of the globe offers so many advantages to our mechanical and operative classes, as the United States of America. Our political organization in reference to social elevation, is only of a negative nature—it is to prevent evils and is the very best for that purpose, but the happiness, comfort and advancement in civilization of our people, rests on the foundation of moral worth and intelligence.

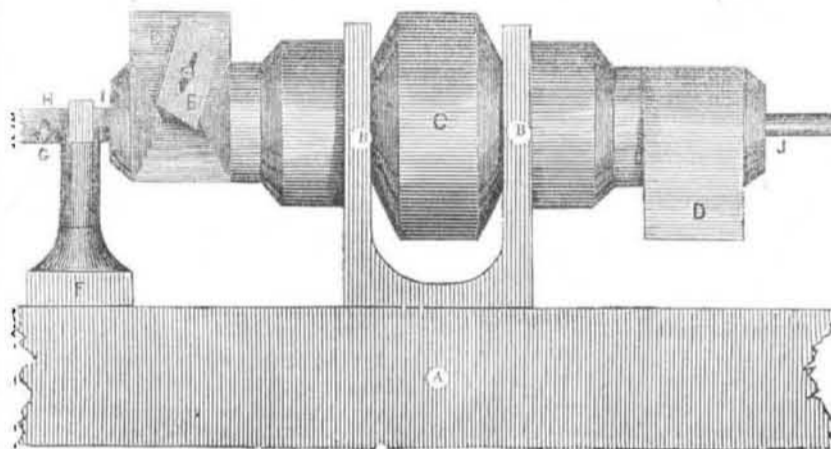
It is therefore our opinion, that to elevate our mechanical classes, there is not an absolute necessity of exploring a new territory and removing to new fields. The materials for elevation are at command and the tools are in our mechanics hands, while the field of operation is at their own doors, and we are glad to know that many of our mechanics have sense enough to perceive this.

We have been led to make these remarks, by having been informed, that a number of our practical pianoforte makers—men whom we know to be of sterling stuff, have associated their capital and labor together and formed the North American Piano Forte Manufacturing Company. The manufactory is at No. 88 Walker st. near Broadway, and from the qualifications of the members of the company the best and most improved piano fortes will be made by them. This is to be expected for every one has an interest in the business and no doubt (it is reasonable to expect it) their work and fame will soon be wide spread. Our wealthy classes, yea all our people wish success to such enterprises—it is part of the American character, to rejoice in the prosperity of industrious and enterprising men.

Liberia Coffee.

Coffee from the Colony of Liberia has been received in Boston, and proves, on trial, to have a very fine flavor. Some good judges have pronounced it equal, if not superior, to the finest Mocha. It is a very highly flavored, and a smaller quantity is required to make a beverage of good strength than is necessary with coffee of some other kinds. The specimen imported came from the farm of the Rev. M. More, in Bassa country. The coffee plantations in that country are beginning to afford a surplus for exportation. The Hon. S. A. Benson, of Bassa Cove, sent over by the Liberia Packet, a few weeks since, about fourteen hundred weight. If it finds favor in our market the cultivation will rapidly increase. The taste for good coffee seems now pretty firmly established, and every body, who has not forgotten it, laughs at Madame Sevigne's old prophecy that the taste for coffee and the poet Racine would pass away together. Deeply as the French poet is revered by his countrymen, even they love coffee perhaps as strongly, and in countries Racine never thought of, a good cup of Mocha Liberia is a highly prized luxury.

PICKET MACHINE.



This is one of those labor saving contrivances which from its simplicity costs but little, though the advantages derived from its use are certainly great. How much is added to the beauty and cheerful aspect of a country house, by the erection around the premises of neatly turned picket fences, those of our readers who reside in the country will at once appreciate. But in most villages there are few who thus adorn their dwellings, on account of the expense, as by the old way each particular picket must be turned out in a lathe by hand, an operation which consumes much time and labor. To remedy this and to bring within the reach of every person one of the best means of beautifying their homes is the design of the Picket Machine, of which the above cut is a representation.

The machine is chiefly composed of one iron casting of the above form, having a round passage extending through its whole length; cutters are attached at each end. A is a stout frame upon which the whole is placed. B B, are supports upon which in brass Journals the machine revolves. C is the pulley by which motion is communicated. The sticks of which the pickets are formed do not revolve, but are held in one position by means of a square notch near H in the bearer F, but the machine on which the cutters are fastened, revolves with great rapidity. E shows one of the cutters,

fastened by a screw upon the projection D. A cutter is fastened in the same manner at each end of the machine, though only one is seen in the engraving, as the other end shows the back of the projection D. The ends it will be perceived are of peculiar formation having apertures just at the edge of the cutters in order to allow them to meet the wood as it passes through. The rough stick being introduced at I comes in contact with the cutter E and passing through to the other end meets another cutter which gives it the finishing touch, and the picket comes out at J beautifully and evenly turned.

The great utility and cheapness of these machines must be apparent to every one. In country saw mills, grist mills, turning shops or wherever a little power is convenient they can be used to great advantage. Two boys with one of them can turn out two or three hundred pickets per hour.

We have now on hand one of these machines fitted to turn two different sizes of pickets, which we will dispose of to the first customer for \$35. At one half the common prices for pickets the machine will pay for itself in one day. We can send it with perfect safety to any part of the United States. Any person wishing it will please remit the amount by mail and the machine shall be promptly forwarded.

Changes produced by Railroads.

The full influence which the passenger and traffic railway is to exert on the relations of society is far from being developed, but it is already great. Its agency is already felt in every department of public and private business. Its speed and punctuality are changing the habits of domestic life, the arrangements of commerce both in detail and in the gross, and even the civil and military organization of states.

“Whoever has stood on an eminence that commands an extensive view of any of our main trunk lines, with its subsidiary branches, in the vicinity of some great centre of industry, must have been struck with its power of annihilating distance. At brief stated intervals the graceful white steam cloud, waving on the wind like some chival-

rous banner, marks the progress of the train along the central line, while similar streamers, converging to it on every side, mark the approach of its tributary tenders. It is this organized system of intercourse that enables men in every department of commerce and public service to command for themselves and families the healthiness and amenity of a rural life while engaged in those pursuits which can only be successfully followed amid the close, dim, and jostling thoroughfares of a city. Even the poor labourer participates in the benefits conferred by this new agent of inter-communication by the extension of the sphere within which he can make his toil available.”

Whoever has occasion to frequent the resorts of business must have noted the insensible change which the railways are producing

in its arrangements. To take the first illustration which presents itself, we may refer to our country merchants who used to lay in goods at considerable intervals, and on a comparatively large scale. Now scarcely any of them keep large stocks on hand; by the aid of the railway they receive supplies they immediately want at intervals throughout the year. They are thus less subject to speculative uncertainties of price, less exposed to loss by injuries of accident to their stock, and more able to conduct their business on a safe ready-money system. The change is great from the method of some ten years back. In every department of commerce changes more or less akin to this can be traced to the agency of the railroad.

Ballooning.

Of the practicability of this air flying, N. P. Rogers wrote in this wise:—

“This aërostation can never, probably, come to anything useful. We can't navigate, for the purpose of commerce, travel, or discovery, the ‘brave o'erhanging firmament,’ or explore, in the gas distended craft, the great orb of day, the waning moon, or those islands of light that spring at night from the boundless Pacific ‘hung on high.’ No rudder can be invented that shall steer the light airship thro' the billowy clouds. The compass will not traverse, to point to the celestial pole, and no anchor can fix its crooked fluke in the bottom of the Aeronaut's ocean.”

This view of ballooning has been truly verified in the case of Dr. Morrill, who last week made a journey from Niblo's Garden in this city and came near losing his life by dropping into the Atlantic instead of terra firma.

Female Medical Instruction.

We see by a paragraph in the Boston Mail, that a course of medical instruction for females is about to commence in that city. This is said to be the first time, in our country, that systematic instruction has been provided for females in this rich branch of practice. It is stated that there is in all directions, an urgent demand for qualified Midwives. In a number of places, money has been raised and committees appointed to select suitable females to receive instruction in this course.—Quite a number of pupils are already engaged.

We would be more obliged to our worthy contemporary, the Farmer and Mechanic, if it would give us credit for our original articles, instead of giving it to imaginary papers, as it did with the “Improvement in Printing Yaras.” There is nothing more disrespectful to a co-laborer in the same field, than an act of this kind—rather give no credit at all. It is like borrowing a tea kettle from Mrs. Jones and taking it home to Mrs. James, with many obligations for her favors. We are not indebted to our friend for such favors, but others are at our expense, as the last week's Farmer and Mechanic can abundantly testify.

Suspension in the Coal Trade.

In consequence of the reduced consumption of coal this year, from the general suspension of iron foundries in Pennsylvania and other states, the Lehigh Coal and Navigation Company find themselves unable to dispose of their stock, except at prices which will not pay expenses. They have accordingly suspended their shipments from Mauch Chunk. Much distress among the operatives in the mining regions will necessarily follow this suspension.

A splendid steamer, called the Hiram Powers, in honor of Ohio's celebrated artist, has been built at Cincinnati.

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