

## NEW YORK, JULY 14, 1849.

## Machinery and its Economy.

There are some very honest and sincermen who believe that machinery has been injurious to the working classes, and that restraints should be put upon its use, giving as a reason that " it tends to destroy many occupations." Those men have never examined deeply into the principles involved in such a question-the advantages derived from machinery, and the benefit it has conferred upon all classes. There is no middle position between the advocate of machinery and him who opposes it. The latter must stand upon the ground that man is more benefitted without, than with machinery, and he must fall back upon the resources which nature has provided for him, viz. his hands, his feet and his teeth, to supply his daily wants. In infancy, man is perhaps the most helpless of all God's creatures, but in manhood his seat of intellect rising like a lofty dome which tops a graceful building, crowns him " Lord of Creation."-It is the glorious prerogative of man above all God's earthly creatures, to possess a progressive soul. Created in the image of his Maker, it is an evidence of his divine descent that there are no limits to the expansive grasp of his gigantic intellect. This may not be noticed in individuals, but it is apparent in our race. Compare the progressive grandeur of mind displayed in the rude sled of our Anglo Saxon forefathers with the wonderful locomotive of the nineteenth century, and we will be able to form some idea of developement of mind, as displayed in the invention of machinery. Or if we take the rude canoe of our forefathers that is sometimes dug up from the sands of the Thames and the Clyde, and compare it with the steamship of the nineteenth century, we will be able to form some idea of the blessings conferred upon all mankind by improvements in machinery .Gilbert Burns, the brother of the poet, declared that "the man who invented the threshing machine was a public benefactor," as it relieved one class of men from an occupation of the deepest drudgery ; and we have often wished to see some machine invented, that would at once destroy the slavish occupation of brick making. Our wishes are realized, and although the slaves of brick making have seen their " occupation gone," we have not heard of one suffering for lack of bread, and they never will on that account. A knife, an axe, a spade, a hook, a spear, are all machines. The very savage cannot do without them. Wherever the mechanic arts are found in their rudest state, there man is found as rude. Mehemet Ali of Egypt, once tried what he could accomplish without machinery, by driving 30,000 Arabs to open up one of the old aqueducts of the Nile. No spade, no hoe, no scoop was provided for them. They had to scoop up the mud with their hands, and the result was, that more than ten thousand fell victims to this barbarous spirit of oriental enterprise, and all for the want of machinery.

It is veryeasy to discomfit any person in argument who takes the opposition ground against machinery, but then there is another class who would use some machinery (they must do it) while they would proscribe other kinds. But what machine shall we proscribe? Will it be a sewing machine, or some new washing machine? We might as well proscribe an organ, or a piano, for they are machines, and although they may be old, it makes no matter for that, if they take away the occupation of some vocalists. An old evil should be dispatched with as little mercy as a new one. But the truth is, every improvement in machinery, is a general benefit.-Some individuals may suffer from the introduction of a new machine, but the greater number are benefitted, and we go for "the greatest good to the greatest number."

The strongest argument against the introduction of new machines and improved machinery, is the impoverished condition of operatives in the British manufacturing districts. The decline of manufactures in Ireland is her inability to cope with the coal manufacturing districts of England,-the want of the main manufacturing stimulant. In England her manufacturing machinery may besaid to have passed the limits of supply. This is the cause of her evils, for it is well known that for 30 years, her manufacturing population increased at the rate of 30 per cent, while her agricultural population increased at the rate of only 1 per cent. This was an unnatural drain and she now suffers the consequences. The wars on the Continent of Europe, made her a hotbed of manufactures, and when they ceased to stimulate, it is no wonder that the forced plants suffered. No such evils need be feared on our wide continent. The land is not here absorbed exclusively by beef-eating barons, to the exclusion of oatmeal-eating peasants. No, no, every improvement in American machinery, confers a benefit upon all, whether that improvement be made upon a steam engine, a spinning jenny, or a spinning wheel. It is in view of these considerations, that we look upon America in the future, as the grand centre of civilization, because here we have room for man's developement in mechanical invention. There is one thing however to be observed in connexion with this, viz. the moral, as well as the mental developement. The two must go hand in hand. Unless they do so, we have no hope. But with a moral and mental developement which looks to the general good, every improvement in machinery can, as it should, be made a blessing to the high and low-the dweller in the lordly mansion and the dweller in the humble cottage.

## Filtering Water.

As this is the season of the year when many impurities are mingled with the water with which we are supplied for domestic use, it is Our work requires the best steel that can be prodent and wise, so far as we are able, to remove those impurities. There are two kinds of impurities in water. First, those which are combined with water chemically. Second, those which combine with water mechanically.

The first cannot be removed by filtering, the second can. In no case, are we supplied from natural resources with pure water .--Pure water, that is water composed of its simple elements, exggen and hydrogen, is not a palatable or healthy beverage. We are therefore wisely provided by providence, with water after it has chemically combined with several substances which are beneficial to the system, such as carbonic acid, and some of the salts of lime. These cannot and they should not be seperated by the common filter. But the mechanical impurities may and should be seperated.

To do this for the most common purposes the filters that are sold in our Plumbing Establishments are excellent. But any person whatever can filter water, by pouring it into a sheet of flannel through some powdered charcoal. The water can be filtered without the charcoal by passing it through several thicknesses of flannel, or felt, but we like the charcoal, and if it was mixed with burned bone dust, it would be all the better. No person would believe, how pure the water comes trickling through the charcoal, but charcoal is one of the best filtering substances known. Any person with common ingenuity can construct a vessel to filter upon this principle .-For certain reasons we would use two ply of flannel with a wad of cotton wool between. It would be well to let the water fall through a space open to the air, before it is received into the receiving vessel. The reason for this is, that in passing through the charcoal and cloth, the water is deprived of some of its atmospheric air and it should be allowed to absorb some air afterwards before it is used.-No person should use pails that are painted with white lead. We are glad to see unpainted water pails coming into more general use The man who first discovered the Gold in Colifornia, was J. W. Marshall, of New Jersey, who built Captain Suter's saw mill.

# Scientific American.

#### Adirondac American Cast Steel.

The high character this important article of home manufacture is obtaining, induces us to refer to it again; and we trust as it is so excellent in quality, that all who feel an interest in home products will give this steel its merited support. The quality we are informed is warranted good, and is adapted to all purposes of the best Cast Steel of any other make, whilst the price is as low as the imported. The following amongst many recommendations have been handed us.

## EXTRACTS.

Novelty Works, May 2, 1849. "A cutter made of it was used in one of our largest Lathes in very heavy wrought iron turning and was found to be, to use the phrase of the very competent and experienced Lathe man, "prime tip top." We shall feel a strong preference for the American manufacture.

# UNITED STATES NAVY YARD,

STILLMAN, ALLEN & Co."

## BROOKLYN, June 13, 1849.

" This is to certify that I have tested the Adirondac Cast Steel, and found it to be of very superior quality, and prefer it to any I have used heretofore.

## DANIEL LADD, Master Smith."

ALLAIRE WORKS, N. Y. June 13, 1849. " Having used the Adirondac American Cast Steel in our Works we find it a very superior article. Our foreman reports that in his trials of this steel ' it stands severe work, and that he prefers it to the best imported."

R. R. MCLLVAINE, Manager of the Allaire Works, 466 Cherry st. New York."

BEALS & FRASER'S GRANITE YARD, N. Y. "The Adirondac American Steel is being used in our Yard on the hardest Granites, and stands fully equal if not superior to any cast steel we have used. It has been tried in Drills, Points, Hand and Stone Hammers, and we prefer it to the best imported Steel. obtained. BEALS & FRASER.

SAM'L. M. JONES, Foreman.

SAM'L. YATES, Blacksmith. Our space will not admit of selecting further from the recommendations.

By a Card accompanying the above, we see that the American Steel Co.'s Warehouse is with QUINCY & DELAPIERE, 81 John st. N. Y., where orders may be addressed.

## Reception of Father Mathew.

The welcome extended to this noble man and reformer on the 2d inst., was a tribute to moral worth, and shows that the sentiments of philanthropy and benevolence are warmly cherished by our people. We trust that his mission to this country may prove eminently successful in elevating down trodden and degraded man to the position assigned him by nature to occupy. His labors in Ireland, exhibit in a striking degree the power of kindness and sympathy over the unfortunate, and we hope that wherever he may go, the same generous feeling will be manifested, which will encourage him to enter the great field of reform with zeal and efficiency.

#### American Queensware.

The Pittsburg Gazette notices the extensive manufactories of Queensware which are carried on at East Liverpool, about fifty miles below that city. Eight potteries are employed in making ware from the clay which is obtained in the vicinity. The Gazette says the are from these potte es is equally

Interesting to Navigators. An official report from Mr. Bache, the superintendent of the U.S. Coast Survey, gives the information that Lieut. Commanding Chas. H. Davis has determined the position of Cashe's ledge off the Coast of New England. This ledge, termed "dangerous" in the " American Coast Pilot," was sought for last season by Passed Midshipmen Ammen, under the immediate direction of Lieutenant Commanding Davis, but efforts were not crowned with success. The determination by Lieut. Com. Davis places Ammen's rock of Cashe's ledge in latitude 42 56 N., longitude 68 511 W.-This differs nearly 12 minutes in latitude, and 12 in longitude, from the last previous determination. Lieut. Davis says-

The latitude of the rock, by the meridian ob-- 42º 56' N. servation of the sun is

The longitude, the mean of both days, is - - - - 68 51 ± W.

The least water on this rock is twenty-six (26) feet; a less depth has been reported by fisherman, but they sound with their fishing lines, not accurately marked, and having on them a lead of three and a half pounds only ; not heavy enough to press down, or pass through the thick kelp that covers the rock. The extent of rock having tenor less fathoms on it, is about half a mile in a N. W. by W. and a S. E. by E. direction, and very narrow. It is surrounded by a deep water at a short distance, particularly on the south and east side, where the depth increases suddenly to sixty fathoms.

#### Food in Cholera Times.

Dr. Mitchell, professor of Theory and Practice in the Medical College of Philadelphia, in a late lecture on the subject gives the following as the Safe and Unsafe food during the prevalence of this disease :

SAFE-Beef steak, beef tongue, dried beef, mutton, chickens, ham, mackerel, smoked herrings, rice, roasted good potatoes, toasted bread, crackers, mustard, horse radish, salt, pepper, vinegar, black tea, Java coffee, iced water, iced lemonade, iced claret, soda water, ice cream.

UNSAFE-Fresh pork, veal, fresh fish, oysters, greens generally, unripe fruits, fresh warm bread, sour bread, molasses and water, common alcoholic drinks

The Doctor recommendations are strictly correct and are just as applicable to every day life-healthy and unhealthy seasons.

#### Newspapers in Europe.

The London Times, a daily paper, costs \$45 per year. The same rate is charged for the Morning Chronicle, Daily News, Globe, Herald and Post. The London Evening Mail is published three times a week at \$25 a year. The London semi-weeklies, \$16,50 per annum, and weeklies, \$12, and \$9. The French daily papers, the large ones, are about the same as the London prints; those about the size of our penny papers cost\$20 and\$25 per annum. The German dailies cost \$22 to \$36 per annum.

[The above we copy from an exchange, in connexion with it we must say that there are some weekly publications in London, which are far cheaper than we can put them up here, such as the London Journal, and the" Family Herald;" they only cost one halfpenny per number and there is a great amount of illustrated reading in them.

## Model Making.

This peculiar branch of business in which little has been heretofore done has latterly assumed a stand with other kinds of business and is quite extensively carried on in this City. Among the many establishments which

besides being a great deal cheaper, than the English article manufactured from the same kind of clay.

This branch of our manufactures has sprung up within the past few years, and has already driven the English yellow ware from our market. It is sold in vast quantities in New York, Philadelphia and the other Eastern cities, as well as in Pittsburg, Cincinnati, Louisville, St. Louis, New Orleans, and the rest of the Western towns. The beds of coaland clay found in the vicinity of East Liverpool are inexhaustible, and we learn that several manufacturers, in addition to the yellow ware,

purpose of making white queensware.

attend to this branch of business we know of none of them that can get up a neater model for a small price than Mr. Peckover, whose

advertisement appears in another column.

Courts of Conciliation are much needed among us. There are evils and abuses in our present system of courts that need remedving. People bow to them at present submissively, because they are the fruits of long custom; but they are not the less bitter fruits for that.

#### Flour in Bags.

Tne Albany Argus states that the sale of flour in bags is becoming quite a trade between design importing clay from Missouri, for the the New York Millers and the East. The bags are of sufficient size to hold a barrel.