

NEW YORK, JANUARY 15, 1848

## Weaving.

The art of Weaving is as old as history it nelf. It is not possible to tell where it was in vented, ror at what period. In Sacred Scrip ture we have accounts of fine garments of needle work, and at the very commencement of the Jewish empire, the garments of Baby lon must have been very fine. When South America was discovered, the inhabitants wer in possession of beautiful garments of cotton cloth, shining with the most brilliant colors In North America, at least among the savage tribes of the United States and Canada, no tra ces have been found that they possessed a knowledge of the art of weaving. Among all the inhabitants of Asia, the art is known, and for all the experience and advancement in the art of weaving made by the civilized nations of Europe and our own nation, still in re gard to quality singly, the semi civilized Asi ans far surpass us. In England, cotton has has been spun so fine that it would require a thread of 490 miles in length to weigh one pound-but the Hindoo girl, by her hands hae made a thread which would require to extend 1000 miles to make a pound ; and the muslins of her manufacture, when spread on the ground and covered with dew are no longer visible. The shawls of Cashmere are unrivalled still and crapes of Canton are not yet surpassed in beauty, and some of the turbans of the Turkish and Persian chiefs are so fine that the threads cannot be seen. All the orientals manufacture by the hand, and in Europe no machinery can produce such fine webs as those which come out of the hand loom.
The finest and most beautiful shawls and scarfs sre manufactured in Parsley, Scotland. Like the inhabitants of Lyons in France, the Paisley weavers meet often in clubs and discuss the beauty or defectiveness of new pat. terns. From this custom they have been able to keep in advance of all the Eritish weavers in fine patterns.
The.first fine linen thread made in Scotland, was in Paisley, by a young girl named Christiana Shaw, who figured conspicuously in the annals of Scottish witchcraft, about the period that New England was disturbed by this mania. Spitalfields and Leeds in England, are celebrated for weaving, the former for silk, the latter for woollen goods. Lyons in France, weaves the finest silk and satin fabrics in the world; but all the fine work is done by the hand loom. America as yet, manufactures no very fine goods, especially cotton fabrics. As for linen, we know nothing aboul its manufacture, although there are thousands of Irish men and women who might, were they lrish men and women whe might, were they
encouraged, make surely as good and as fine linen here as they made at home, and which is not surpassed by that of any other nation it equalled. The art of linen weaving was introduced into Ireland and Scotland by the Huguenots, from France, and in Dunfermline, in Scotland, and near Newton Stewayt, in Ireland, is yet vet made by the desceudants of the same people, the finest and greatest variety of linen taorics. The United States have made greater advancement in the art of woulden weaving than in that of any other fabric, and from specimens which were exhibited at the Late Fair of the American Institute, we bope soon to see our manufactures rivaling in fine goods those manufactured abroad, as we now manufacture coarse goods, that are better than those of any other nation.

## Water seana.

A correspondent writes us that there is a Water Ram at Greystoke Castle and another at Giisland Wells, England, where the water is raised over two hundred feet high, and any serson can soon be furnishad with one by him this country, with tull directions for fitting this

## Aetion or Suiphur upon Iron.

But few parties will be found to dispute the fact, that the action of sulpnur upon iron is injurious to the metal. When coal contains much sulphur, or pirites, sin.ple coking will not separate the whole of it A portion of sulphur, certainly. is dissipated by the partial burning of the coal, but enough remains to have an injurious effect upon iron smelted or vorked with such coke. In the treatment of ores and fuel, for the separation of sulphur, the use of steam at a high temperature, has been proposed, by heating the steam, as air is heated for hot blast, previously to passing is through the materials. The grate to be set in mason work, so as to form a close ash pit and an arch turned over the grate from side o side, leaving the two ends open. A fanblast is recquired to blow into the ash-pit; but no blast is to be used over the fire, and a requisitesupply of water for the grate. At one end the coal is thrown in; and at the other it is withdrawn, when sufficiently ignited, and acted upon by the vapor. Below the withdrawing end, a close deep kiln ts to be built, having an opening at the bottom, with a close iron door to fil. About half way up a horizontal opening or slit-the length of one side of the kiln-is to be left for the purpose of introducingscaffolding bars; this opening to be provided with an air-tight cover. Differ ent portions of coal, after being calcined are to be drawn from the grate inta this kiln until it is tull. The scaffolding bars are then to be introduced, the door at bottom opmed, and the lower half of the cole drawn gat. The door at the buttom is then closed again, the sealfolding bars removed, that hole ciosed, the upper half of the coke dropping dowis, and the operation of calcining resumed, unti) the kiln is again filled.

## Our Advertising Page.

We request the attention of our readers to our advertising columns. There is the place for informatien regarding machinery. Those who desire to let the world know something about their machines, will recollect that the Scientific American is the best paper in the world to advertise patent machines and machinery of every description. Those who want to buy a good article of machinery, and embrace good offers, for carrying on or engaging in business, have just to consult our ad vertising page. for the right kind of information.

## Cotion trom South Arriea.

From Port Natal, South Africa, favorable accounts have been received in England, of the soil and climate of that country for the growth of good cotton. It is said that the trees of six years old are as good there as those of hree years. In this respect, if it be so, thes have an advantage over America, but we doubt if any part of the whole world will will ever be able to compete with America in the price of cotton. The enterprise, the ingenuity and energy of our people will always bear down the scale in their favor, and the excitement lately generated in the South for cotton manufacturing, will soon develope itself, we think, in monopolizing the entive cotton trade of the world.

File Manvaractory.
We have been intormed that maciinery is now in operation at Andover, Mass., fion ma nufacturing files npon a large scale.
The piece of steel to be ont is placed in socket, and then carrued under sort hatn lar to that of a not only cuts the reeth, but at the same time turns up the edger so as to make them rough, like the teeth of the best English tiles. - The apparatun is very simple, but is said to wor well

Stave Steanmors
Three large Steamers; says the N. Y.Evan gelist with engines from two hundred to three hundred horse power, have been fitted at Bahia, S. A. for the slave trade, one of them has alrerdy arrived on the WestCoast of Africa, where she exntarked 90 alaves, and escaped the brig of war Sea Lark, by steaming a ped the brig of war Sea Lark,
way from them during a calm.
Ploughs for the South and $\mathbf{W}$ fet are manu-


## Steam and water Power.

The following opinions and statistics rela tive to the cost of steam and water power oy a correspondent of the Louisville, Ky., Jour nal, should receive the careful attention o our manufacturing population, as it is one of great importance and becoming more and more so every year.
' I find from Dogget's Railroad Register that the average cost on cotton and dry goods, between Boston and sixteen of the most 1 m portant manufacturing towns that receive cotten through and send their manufactured goods for sale at that city is \$270 cents per ton. This is about the average price of such freight by steamboat, between Louisville and points 300 miles distant.
" From the annual sheet of Lowell statis tics published in January last, I make the following extracts :-
'An important undertaking, eventually to redound to the interest and wealth of the city is the building of the new canal. It is desined to give to most of the mills in the low er level a more regular supply of water, and consequently, benefit those on the upper level. It is to be of the average width of 100 feet, and a depth of 15 feet. It will require in its construction a rock excavation of 150 ,000 yards, and an earth excavation of 110,000 yards, and a mass of masonry of 50,000 yards; the whole estimated at an expense of not less than $\$ 500,000$.
'In the course of a few months will be in peration a mill built by the Hamilton company, to commence with 10,363 spindles and 200 looms; but is of sufficient capacity to contais nearly 20,000 spindles and 400 looms. The driving power for this will be a steam engine of 160 horse power, which is being put in."
"The same sheet gives a steam engine of 190 horse power as that used by the Prescott manufacturing company, which commenced operations in 1846. This company use 1200 tons of anthracite coal per annum. Here then is the second steam mill at Lowell ; the first musthave been profitable.
'SI remark in reference to this ' new canal,' that, if we add to its cost the further cost of the side canals to take the water to and from the mills, and the excavation for and building of water wheels, we have a capital sufficiently large to build on the Ohio river, and then fill with the most approved machinery, and then furnish with a fair working capital, five or six mills as large as those recently erected by Triplett \& Barret, of Bon Harbor ; Strader, Fosdick \& Harkness, of Cincinnati, and Kote. nedy, Childs \& Co., of Pittsburg, Penn., all large mills."

Vaine of Steain in manufaeturnig.
The Utica N. Y. Steam Woolen Fictory, was incorporated in February, 1846, under the General Manutacturing Law, which has long been in existense in this state. In the spring of 1847 it commenced manufacturing woolen goods, since which period it has been in regular and successful operation. The Board of Directors. on the 1Gith of December last, after a full and stationary examination of the concerns of the Company, declared a dividend of tea per cent, payable to stockholders on the frst day of February next-learimg a surplus mrotit of upsards of 25 per cent, on the capital stoch paid op, subject to their fuare action.
The wime cost of the reat esate, buidiags nachinery and fixtures of the Company, as nearly as can be ascertaired, $\$ 88,044,60$. The whole of the machuery is now in fult peration. and the cloth now manuactur

## heowards

Professor Mitchell, the distunguished astro nomer of Cincinnati who has been recently lecturing in this city at the conclusion of his course, stated that his object in lecturing was to provide for himself and famıly. He has not recesved any salary from the Institution ot Cincinnati, for six years, on account of the nabllity of its officers to aftord it

## Price of Pork.

At Cincinnati, 7000 hogs have been sold, recently at $\$ 2,50$ per bundred.-A About 25,000 have
son.

## Working Men

Dr. Channing urges upon. Working men to study politics-to look into affairs of stateand to understand every thing connected with public affairs. This is excellent advice; and it is particularly desirable in a country where working men have to participate in the election of those who are to make the laws by which the country is to be governed. "The time" (says he,) "thrownaway by the mass of the people on rumours of the day, might, if better spent, give them a good acquaintance with the constitution, laws, history, and in lerest of their country, and thus establish them on those great principles by which particular measures are to be determined. In proportion as the people thus inform themselves, they will cease to be the tools of designing politicians." The theory of our government s, that all power is derived from the people ; but practically power is conferred by the leaders of parties, who, in the distribution of offices, always take care to supply themselves first. This is the result of workingmen neglecting to investigate for themselves, and be ing content to follow the dictation of dema-gogues.-Every man shauld make himself acquainted with "the constitution, laws, histo ry, and interests of his country," and thus be enabled to exercise his own judgements on public affairs, and to act and to vote independantly. If such were the case, parties would act with more circumspection, and the country wouk be better governed.
ciun Cotton.
The officers of the Arsenai at Washington have beenengaged in experimenting with gun cotton, testing its yualities as a substitute for gunpowder. The following is the substance of the most material part of their report :In consequence of the quickness and intensity of action of gun cotton when ignited, it cannot be used with safety in our present fire arıns. By experiments, such as an accident of service, as that of inserting two charge into a musket, (which often occurs,) would cause the barrel to burst ; and, from the re peated bursting of pistols and other small arms with somall charges, there is no doubt that the barrels of our small arms would be destroyed by a few rounds even with service charges

## Novel Performance

There is exhibiting in Broadway, this city, at the present moment a number of canary birds that have been trained to draw carriages wear cocked bits and coats, fire off small can nons, dance on the tight rope, stand on thei beads, and :ervirn various other feats, that display a capacity to learn and be trained which no one could imagine the feathered race possessed. As might be expected the per formances are witriessed by hundreds of ladies and children daily.
Well, these are vain trophies of great pa fience and misspent time, and many will find a shilling to spend, in this manner but not one cent for the proor

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