

## Miscellaneous.

Correspondence of the Scientific American.

WASHINGTON CITY, May 8, 1850.

It is one of the cheering signs of the times that the South is at last waking up to a knowledge of its true interest; and the people are beginning to be conscious that the only way to bring about an equilibrium between the two great sections of the Union, is for the South to embark as extensively as possible in manufacturing enterprises and pursuits. The number of cotton manufactories is fast increasing, and in North Carolina and Georgia there are more than double the number of those in Virginia. Owing, however, to the want of practice and experience, they have at present to depend on superintendants from the North, to whom they give liberal salaries.

From an old Virginia document, it appears that the silk culture was first started in that State in 1663; and it was a penal offence if trees were not planted at the rate of ten for every hundred acres. In 1760 the London Society for the Encouragement of Arts, gave premiums for silk raised in Georgia, Pennsylvania and Connecticut. In Rhode Island silk was raised as early as 1758. It is said that the weaving of silk in America was first tried in 1833 at Marshfield, Conn.

The water is to be let into the Chesapeake and Ohio Canal in June, and in July it will be in navigable order for boats propelled by steam. Arrangements have been made for coal deposits at Alexandria, where shipments in propellers will be made North and East.

Professor Rodgers has commenced his course of geological lectures at the Smithsonian Institute. Last evening he adduced many interesting proofs that the interior of the earth consists of lava in a state of fusion. He said at the depth of two miles below the surface water will boil, and that it is calculated that at a depth of twelve miles all is liquid fire. In confirmation of this theory, he observed that from numerous experiments the heat increases in proportion to the depth.

The second part of Mr. Ewbank's Patent Office Report is highly interesting, and if the Printers to Congress shall live to print it, every farmer and mechanic in the country will be desirous of having a copy. According to the present speed in such matters, we may reasonably expect the parties to complete by the 4th of March next.

It is understood that the Hon. Zadock Pratt, of your State, is exerting himself with his usual zeal for the interests of mechanics, to have an American "World's Convention," to be held in the City of New York in 1852.—With such at the work, we may rest assured the thing will be done.

Several of Jennings' patent rifles are exhibiting in the Congressional Library. From experiments made by Col. Talbot, they have been pronounced very effective. It is much more destructive than the Prussian rifle or Colt's revolver, and much more easily handled and loaded. It will kill at 800 yards, and may kill 20 men per minute. Will not the perfection of these deadly instruments be to cause the nations to dread war?

At Foy's Hotel, in this city, is exhibiting a patent knitting machine, which in a month will furnish stockings for a regiment.

The bill recently introduced by Mr. Star-geon, in the Senate, for the establishment of an Agricultural Bureau in the Department of the Interior, has the following provisions:—A Commissioner is to be at the head of it, with the same salary as the Commissioner of Patents; his duty is to collect agricultural statistics, and to put in operation a chemical laboratory, at a cost not exceeding two thousand dollars, for the analysis of minerals and mineral waters, and such as relate to the composition of soils; the manufacture of sugar and such other manufactures as may be connected with agriculture. An annual report is to be made to Congress containing an account of the experiments.

The ship builders at Baltimore are now building a steamship for the California trade with the propeller attached. The efficiency of

this instrument appears to be acceded to by all. The objection to the Loper propeller, by the advocates of the side wheel, was, that it operated obliquely upon the water. But they did not reflect that the side wheel, as applied to ocean steamers where a greater dip is requisite than with light and unvarying draughts, it is evident that by the rolling incident to them in a heavy sea, the paddle is as oblique in its operations, and is attended with greater losses by friction and pressure than a screw propeller. Not only our own government, but the British and French, are realizing the utility of this mode of propulsion by the introduction of propeller ships into their navies. \*

## Cotton Factories.

The last number of the Mining Journal contains an able article on the "building of cotton factories at Pottsville." We know of few places where fuel could be so well supplied at a moderate price as at Pottsville, and goods could be manufactured there by steam power, cheaper than in some places with water power, but at the present moment, we do not think it would be prudent for any of the North or Middle States to erect new cotton factories. The southern States alone have any hope of success, and it is best for them also to have a little prudence in counting the cost. Our northern factories are in a very sorry condition at present,—they have too many goods on hand. They must commence to make finer goods than they have heretofore done and let the South make the coarse goods, which can be made there cheaper than at the North.

## Ship's Blacksmith.

A ship's blacksmith, says Colton, has no such word as can't in his vocabulary. He takes his order, and tries to shape his iron accordingly, though he may know it to be utterly impracticable. We had on board the Natchez an old time piece which had broken its main spring. The first lieutenant, for fun, told the blacksmith to take it to the anvil and put a new mainspring into it. Hearing the puff of the bellows and the clink of the hammer, I went forward where I found the old watch taken to pieces, and the worthy representative of Vulcan beating his full force a piece of iron. "What are you doing with this time piece?" I inquired. "Making a kinked-up sort of a thing, sir, to make it go," was the reply.

## Mammoth Steamer on the Mississippi.

The St. Louis Reville announces the appearance at the Levee of a new steamer,— "The St. Louis," just completed, and the largest on the Mississippi or its tributaries. Her length is 370 feet, beam 39 feet, depth of hold 9 feet. The cylinder of her engines are 31 inches in diameter, with 10 feet stroke. She has two smaller engines to do the work of the boat, hoisting out the freight, &c. Her wheels are 40 feet in diameter, and work 13 feet of bucket. She has 5 boilers, each 44 inches in diameter, and 32 feet in length. Her length of cabin is 260 feet, with 50 state rooms in the main cabin. Those attached to the ladies' cabin are fitted for the accommodation of small families, and can contain from 3 to 4 persons. Bathing rooms are connected with it. The cost of the St. Louis is set down at \$80,000.

## Woman.

A writer in a late Review, speaking of the Roman women, and their influence during the existence of the kingdom, says:—"From the Sabines to Theodora's conquest of Justinian, women seem to have been at the bottom of almost all the memorable events of Roman history. Lucretia, Virginia, Veturia, Fabia, the wife of Licinius, who became at her instigation the First Plebeian Consul, are illustrious examples of this: and whatever may be the changes of manner of opinions, as Hume has well remarked, all nations, with one accord, point, for the ideal of virtuous matron, to the daughter of Scipio, and the mother of Gracchi." Who, then, will doubt the influence of woman?

## Gas in Wheeling.

The City Councils of Wheeling have subscribed \$15,000 to the stock of the Wheeling Gas Company.

## Color of the Ocean.

The waters of the globe exhibits various hues, which depend upon a variety of circumstances. The ocean absorbs all the prismatic colors except that of ultramarine, which is reflected in every direction. This is its true color in general when seen apart from atmospheric influence, modified by depth; but every gleam of sunshine, passing clouds, winds, shoals, and sandbanks, affect its tints. Particular parts of the ocean show peculiar colors. The sea is white in the Gulf of Guinea, and black amid the Maldiv Islands. Various purple, red and rose-colored waters occur in the higher parts of the Mediterranean, in the vermilion sea off California, the Red Sea, and in tracts along the coasts of Chili, Brazil, and Australia.—Green water appears in the connection with the deepest blue in the Arctic ocean. The appearances are permanent, and so distinct, that ships have been partly in blue and partly in green at the same time. These tints are occasioned by differently colored animalculæ, which swarm in countless myriads in the tracts in question. The same species of animalculæ which color the Red Sea, have been found in other similiary tinted districts of the ocean. The green of the Arctic seas is produced also by minute animals, which visit in spring the coast of Holland, and have been encountered in immense shoals migrating in the Atlantic. In the Antarctic regions, Sir James Ross remarked repeatedly the change of color of the sea, from light oceanic blue to a dirty brown, caused by ferruginous animalculæ. The phosphorescence of the ocean, a magnificent and imposing spectacle, when the waves scintillate with bright green sparks, or exhibit a long line of fire flashing in a thousand directions, is mainly caused by minute organic beings, which are phosphorescent while alive; a property retained by the gelatinous particles with which certain tracts of the deep are thickly charged—their dead and dismembered relics. At the same time, a disturbed electrical condition of the atmosphere may be most favorable to the phenomenon.

## Off with the Beards.

The Emperor of Russia has taken a sudden antipathy to the patriarchal superfluities now so much in vogue, and, we are told, has issued an ukase commanding his nobility to shave off their beards immediately. There will be a revolution in Russia, in consequence—but it will be confined to the world of fashion, and mustaches will fall, instead of thrones. [We want the emperor here for a couple of months.

## New England Industry.

The Bangor Whig states that in the valley of the Blackstone river from Pawtucket to Milbury, a distance of thirty miles, there are 115 cotton and wollen factories, besides six large machine shops, two large axe factories, and three extensive scythe works, giving a total of 126 manufactories. Many of these are very extensive, the largest wollen cotton mill in the United States being among the number.

## A Telegraph to California.

Mr O'Reilly announces in the St. Louis Republican, a project of telegraph line from that city to San Francisco. He proposes that the Government shall establish a line of stockades at suitable distances along the route, which shall serve as telegraph stations, and at the same time afford protection to emigrants to California, and facilitate the transmission of the mails.

## Patent Case.

We have seen a notice in some of the Boston papers about Mr. Goodyear having suffered a nonsuit in an action which he brought forward in the U. S. Circuit Court against the Boston and Maine Railroad Co., for using India Rubber Car Springs, supplied by Fuller & Co., and made by Mr. H. H. Day, of New York.

The directors of the Connecticut River Railroad have voted to create new stock to the amount of \$300,000 or \$400,000, as they are empowered to do by acts of the Legislature, and to give this new stock a preference for ten years, to August, 1860, guarantying to its holders 4 per cent. semi-annually, from the earnings of the road.

## Works on Science and Art.

MARINE AND NAVAL ARCHITECTURE. By John W. Griffiths, Marine and Naval Architect.—Number 5 of this incomparable work contains a number of plates and the letter press is executed in the same excellent style as the previous numbers. The matter relates principally to "Water Lines," and their effect in modelling, and Mr. Griffiths analyses what is termed the "Wave Line Principle," a discovery claimed by Scott Russell. We hope that every ship carpenter will make himself thoroughly acquainted with this work.

DICTIONARY OF MECHANICS, ENGINE WORK AND ENGINEERING.—Part 9 of this work, published by Messrs. Appleton & Co., contains engravings of Dressing Mill Stones, Metal Drilling Machines, Dry Dock at Brooklyn, Dynamometers, and some good information on Electricity and the Electric Light, (not Paine's.)

We are indebted to Messrs. Birkinbine, Martin & Trotter for a useful illustrated pamphlet on the method of Warming and Ventilating part of Blockley Almshouse, Philadelphia.

Messrs. Appleton & Co. have just issued a very excellent Dictionary of Scientific Terms, by Hoblyn. This work has been very much needed in the community, and will no doubt, as it should, meet a large sale.

## The City of Glasgow.

This is the name of a new steam ship which arrived at this port on last Friday, from the City of Glasgow, Scotland, in 16 days 21 hours. This is a remarkable passage, as she had about one day's more sail than from Liverpool and is propelled by a screw. She is an iron vessel of 1600 tons burden, of a most beautiful form, embracing the hollow water line principle, so well understood on our North River boats. Her engines are 350 horse power built by those eminent engineers, Todd & McGregor, of Glasgow. This vessel shows the ability of the Clyde Engineers in constructing marine steam ships. The City of Glasgow (not the ship) is the mother of Marine Navigation, all the Cunard steamers are built there, and the fame of her engineers is world wide. It was there where Watt planned his first steam engine, and Henry Bell built his first steamboat.

## Cholera.

The Indiana State Sentinel states as a fact, that the cholera this season has attacked the cabin passengers on the rivers, and that almost without exception the deck passengers have been exempt. If there is any rule well established in regard to this mysterious disease, it is the fact of its re-visiting the scenes of its former ravages and selecting its victims from among the better classes.

## Steam between Virginia and Europe.

The people of Norfolk are discussing the feasibility, as in their minds there is no doubt of the necessity, of having a line of Atlantic steamers between that port and Liverpool.—An intelligent writer in the Richmond Whig states it is for the interest of the whole South to encourage, and advance the capital for such an enterprise.

## Malaria.

A correspondent of the American Farmer, for May, has furnished the editor with a paper on the subject, in which he details various facts, and gives the experience of the most eminent writer on Malaria, to prove that the effects of these noxious vapors may be prevented, by the planting of trees of thick foliage around the dwelling, in the direction from whence they proceed. Mr. Jas. Gregorie, a planter of upwards of seventy years, is the author of this paper.

[There can be no doubt of the truth of the above, in the main points. It is well known that the Dutch to make cinnamon high in price, cut down a great number of the trees in Ceylon, which resulted in bringing about a great deal of malaria sickness, a sickness which never left the Island in the places where the huge trees had been cut down until new shade trees had grown up in these places.

The Suffolk Cotton Mills at Lowell, Mass., are about to reduce operations to about one half of their 500 operatives. Other factories are about to do the same thing.