

## Miscellaneous.

## Southern Manufactures.

The Albany (Ga.) Patriot of the 11th inst. gives the following description of the factories in the city of Columbus, in that State:—

The Coweta Falls Manufacturing Company's establishment occupies a large brick building, containing 2,500 spindles, which make from 1,400 to 1,800 lbs. of thread per day; 44 looms, making 1,800 yards of heavy osnaburghs per day; 34 cotton cards, 3 wool cards and one wool jack. They also manufacture a considerable quantity of linseys, which are more profitable than osnaburghs and yarns.—They employ from 115 to 120 boys and girls, from twelve years old upwards. Average wages—Superintendent 1,000 per annum; overseers \$30 to \$60 per month; weavers \$15; carders \$8; spinners \$7 50. Power—One of Rich's centre vent wheels, five feet diameter, capable of carrying as much more machinery. Profits on investment 10 to 15 per cent.

Near this establishment is Carter's Factory a large brick building, six stories high; cost \$10,200; privilege 6,000; calculated for 200 looms and 10,000 spindles. Estimated cost when completed \$100,000; will employ from 300 to 400 hands.

Not far from this building, is the Howard Manufacturing Company's establishment. The building is of brick, 50 by 125 feet, six stories. It contains 5,000 spindles, 103 looms—40 more to be added. Entire cost \$100,000. They manufacture 15,000 yards of cotton osnaburghs, sheeting and shirting per week, and 400 to 500 lbs. thread; employ 100 hands, from twelve years old upwards, one-third of whom are males; wages from 12 to 75 cents per day for common hands; assistants, \$1 to \$1 25; overseers, from \$2 to \$2 50; superintendent, \$900 per year. Consumption, 1,200 bales cotton.—Past profits, under some difficulties, have varied from \$34 to \$100 per day; estimated future profits, 20 per cent. on investment. There is an extensive machine shop connected with this manufactory. We examined some bales of cloth made by this establishment, and found them of a very superior quality. The hands, male and female, had a general appearance of cleanliness, health, and contentment. The proprietors of the manufactories have made arrangements for preaching, Sunday schools and a daily free school, for the operatives and their families.

We next visited Winters' Palace Mills. This is a large brick edifice, of six stories, occupied by a machine shop, four runs of mill stones—two for wheat and two for corn—with all the necessary flouring apparatus, capable of turning out from 80 to 100 bbls. of flour per day. The entire cost was stated to be some \$50,000. Ten thousand bushels of wheat had recently been purchased in Baltimore, and was being made into flour at this mill.

Near this establishment, is one which is rightly termed "Variety Works," sawing lumber, planing, making tubes, pails, bedsteads, window blinds, sash, &c., &c., all by machinery adapted to these purposes. This is doubtless one of the most profitable establishments in Columbus.

These several establishments are situated on the east bank of the river, and are propelled by water, taken from the great conduit, which has been constructed of stone, to receive and retain the water of the Chattohochee river at a sufficient elevation to afford the necessary power. The head of water thus furnished, is from 10 to 14 feet. This conduit is calculated for supplying the power for many other manufactories.

There are two iron foundries in Columbus, which turn out a large amount of castings and machinery for mills, steamboats, &c. They employ a steam engine.

The City Mills, in the upper part of Columbus, is a large wood structure, occupied by four sets of mill stones, two for flour and two for corn—and extensive flouringworks.

On the river above the city, are several establishments, which we had not the pleasure of visiting; among them the Rock Island Pa-

per Manufacturing Company. Capital employed, \$40,000, to be increased to \$45,000, to complete the machinery. They now manufacture 1,000 lbs. when the machinery is completed. Cost of rags and other materials, from 1 to 3½ cents per lb. Price of paper from 10 to 12½ cents per lb. Employ 7 girls, 2 boys, 13 men, and 1 teamster. Wages—Girls, \$8 per month; foreman, \$100; machinist, \$60; two operatives \$40 each. Main building 75 by 39 feet, three stories, besides finishing room, warehouse, &c.

In all cases where we have given the wages, the parties employed board and lodge themselves.

**MOBILE COTTON FACTORIES.**—The extensive buildings, for the future operations of this company, says the Mobile Advertiser, are located four and half miles from the city, on Bayou Durand—commonly called Dog River—nine miles from its entrance into Mobile Bay. Steamboats can land freight and receive it within fifty yards of the factory. This location was preferred to one in the city, because, being in the pine woods, all danger from epidemics to which the city is sometimes subject, was avoided—thus enabling the company to continue their business through the year; and it also removes those engaged in the factory from city influence—which is not always favorable to good order and industry. For general health, no more favorable location can be found anywhere. After all the improvements contemplated are completed, "Fulton," the name adopted, will prove one of the pleasantest villages in the State.

The factory buildings are built in the most substantial manner, of yard-burned brick, and appears to combine, in the design, everything necessary for a complete cotton-factory. The main building is 182 feet long by 54 wide—110½ feet three stories, and 71½ only two stories. There are 195 windows and 4,750 lights in the house. The roof is well covered with slate, laid on sheathing tongued and grooved, and as tight as a floor. It is fronted by a square tower four stories high, 17 by 18 feet, and 70 feet to the top of the belfry. The brick consumed amounted to 750,000. Cost of factory \$27,000. The three story building will be occupied—the first by 176 looms—the second by 40 carding machines—the third by 5,040 spindles—with such other "fixings" as may be necessary; the work, &c., &c., to be transposed from one room to the other by machinery. A large water trunk is built in the third story, with hose to carry water to all parts of the building. The water is forced into the tank by the engine. The two story building is appropriated for the engine room and machine shop on the first floor, and the second for a sizing room. The machinery of the mill, which is just being opened and put in place; looks to be of the most approved kind, and was got up by the Matteawan Company in the very best style. When ready for work, the mill will require 200 operatives—three-fourths females—and will manufacture, when in full operation, 6,000 yards of yard-wide sheeting per day.

The motive power consists of two engines of 75 horse power each, low pressure, twenty inch cylinders four feet stroke, forty revolutions per minute; four boilers, thirty-six feet long, which are located in an adjoining room to that which contains the engine. The smoke stack is eighty-two feet high, ten feet square at the base and five by six at the top, and located thirty feet from the mill. The smoke is taken from the boilers to the chimney under ground.

## Postage Reform.

Rowland Hills' important movement in England, in bringing about cheap postage, has proved a great blessing to the people, and the government revenue from post office, in that country, has increased. Our government seems to be very slow in entertaining proper views of this subject, and every attempt to get a reduction of our heavy rates, seems attended with great difficulty. Postal reform is much needed. The facilities for travelling and transporting the mails have been much improved and increased within a few years, and it is only a reasonable demand of the people that there should be a considerable reduction in postage

rates. They are much too high. The experience of the British post office furnishes us with all the results that can be required to justify a reform. The extent of our country does not change the nature of the question in the least.

Under a reduced postage tax, we should have a large revenue. Let the reform be decided upon. Barnabas Bates, the champion of cheap postage in this country, is making strong efforts, with little encouragement from our wise legislators, to produce this important and much needed reform.

**MR. EDITOR:**—If a reduction of postage is to be made upon the purchase of stamps, the minimum sale thereof should not be above the economical means or wants of the public. It would not be democratic to give the benefit of the discount to a few only, or to such as should retail them as merchandise. One advantage of their general use would be to lessen the labors of and consequently the expenses of the department. They are frequently convenient, for a deposit of a pre-paid letter, after office hours. Each postmaster might consult the convenience of his office and the wants of the community, as to the minimum amount they should be sold, at their respective offices. Pre-investment in stamps might add to the frequency of communications. The postal arrangement should be afforded as cheaply as possible to the people, and the happiest results may be expected therefrom. Friendship will be more cultivated and strengthened, contentment and happiness will be added unto and enlarged thereby. A more general knowledge of the capacities, conditions and wants of the community, will thus be constantly acquired. Out of a cultivated and friendly correspondence will spring a union of sentiments for the public weal. An increase of friendship and esteem, extensively, will add to the stability of our Union. A COUNTRY POSTMASTER.

## Log and Board Measure.

In No. 39 of the Scientific American, you give a table of board measure, which is valuable but not entirely correct. I therefore take the liberty of sending you the true mathematical rule for calculation: it is this—to double the square of half the diameter of the log (a 12 feet log) which gives the number of feet of plank which that log will make; or, which will amount to the same, multiply the diameter by the radius, will give the same result: thus, in your table, a log of 12 inches diameter gives 72 feet of plank, by the rule the half diameter is 6, the square of which is 36 inches, and doubled is 72 feet, or the diameter 12×6=72. A 12 feet log of 14 inches, by the rule, gives 98 feet—which is correct; your table gives 100 feet, which is too much. The above rule is mathematically correct, and I know it to be correct in practice, having tested it in sawing many thousand feet of plank a few years ago. M. W. B.

## Coal Trade of Ohio.

The amount of coal now annually mined on the banks of the Ohio and the tributaries cannot be less than thirty five millions of bushels, worth, at the points of consumption, not less than two and a half millions of dollars. The rate of yearly increase is probably not less than 20 and perhaps 25 per cent. At New Orleans, this rate of increase is said to be more than 33 per cent. per annum; and the yearly consumption of that city is said to have reached 3,000,000 of bushels. There are no coal mines between Cape Horn and Vancouver's Island, and the Panama and San Francisco steamers are supplied with Liverpool and Pennsylvania coal at a cost of some \$30 per ton, and by railroad or canal, the Ohio coal can be furnished at less than one-third of that price. We may look by and by for an enormous increase of this consumption. England, with not one eighth of the coal lands we have in the United States, uses twenty times the amount raised from our coal mines, but the sale by and by must be enormously increased here, and perhaps diminished there.

Twenty years ago, says the Louisville Journal, the idea of using coal as fuel on river steamboats was regarded as preposterous, and now it is a question whether this will not, in a few years be the fuel extensively used on boats between Pittsburg and New Orleans.

## New York Directory.

We are indebted to Chas. R. Rode for a copy of his new city directory, containing all the removals and changes which have taken place during the current season. We believe that no directory of this city has, of late years, been issued at so early a date as this, and the public are much indebted to the enterprising publisher for the indefatigable exertions which he has manifested in producing such a noble volume for reference. It contains eighty-four thousand four hundred and ninety-six names, being something like sixteen thousand more than were ever before furnished in a New York Directory, and is sold for the low sum of \$2, the price being 50 cents less than the one published last year. Mr. Rode has, no doubt, been compelled to struggle against the tide of adverse fortune in this undertaking, and we trust that a generous public will extend to him encouragement commensurate with the zeal and energy which has characterized his efforts. He has no doubt brought down upon himself the venom of his antagonist in the field, but since he has corrected the abuse which has grown out of the delay heretofore experienced, when the Directory has been over two months coming out, we have no doubt but that the public will encourage him to still further exertions when the year comes round, to furnish the Directory still earlier. It can be had at the office, No. 66 Cedar street, opposite the Post Office.

**DICTIONARY OF MECHANICS, ENGINE WORK, AND ENGINEERING.**—Number 12 of this work, published by D. Appleton & Co., contains further details of engines and rules for constructing. It also has some rotary engines and steamboat engines. It is a very good number.

## Remington's Bridge.

We perceive by many our Southern exchanges, that Mr. Remington is creating as much excitement by his bridge, in Alabama, as he did in London. He has erected one or two large structures which are subjects of admiration. He has erected one in Montgomery, Alabama, that was opened for travel on the 8th inst. The span is 436 feet, and the track is 10 feet wide. It is without hand rails, and is described as appearing at a distance like a slight ribbon or shaving of wood flung across a ravine—apparently too frail to bear the pressure of a bird, but proved to be capable of bearing almost any amount of weight that can be placed upon it. Hundreds of people crossed it on the day it was opened, who were completely convinced of its strength.

It is with feelings of regret that we announce the death of Mr. Wm. Burns, one of the Editors of the New York Sunday Dispatch. He died at his residence in this city on the 21st inst., after a brief illness produced by a rush of blood to the head, leaving a wife, one child, and a host of warm friends, to mourn his early departure. Mr. Burns was a young man of strong social qualities, combined with a clear and brilliant intellect, and his writings were marked with these characteristics. In this sudden death we are forcibly reminded of the fragile tenure of life, for he was but in the prime days of manhood when the hand of the destroyer fell suddenly upon him.

The article on Parker's Water Wheel, promised this week, is delayed till next week, owing to its great length.

Lead mining in the west has been almost abandoned, the miners having turned their backs in disgust on the base metal and started for the gold mines of California. The consequence is, that we are now importing a considerable quantity of lead from Europe.

Anatomical investigation has not exhibited the slightest difference of organization or construction between the vocal organs of the most harmonious and most discordant singers. All distinction appears to be based on the amount of nervous energy existing.

It is now ascertained, beyond a doubt, that alcohol, when taken freely, is directly absorbed into the blood-vessels of the stomach, without undergoing any change in that organ.