Miscellaneous.

Correspondence of the Scientific American.

WASHINGTON CITY, Dec. 26, 1850.

At the Patent Office a considerable number of workmen are employed in working the marble blocks to be in readiness for spring. This beautiful material will outlast any other in the City. It is expected that Congress will make an early aperopriation for the completion of the building. The interior of the department is daily thronged with visitors at the rate of four hundred per day. Messrs. Varden and Campbell are making great improvements in the gallery by a re-arrangement of the splendid pictures. Within the past two weeks $60 has been contributed, through the box in the gallery to the Washington monument.

The Baltimoreans are rejoicing over the invention by a mechanic of that city, of a fan which is kept in motion by clock-work running ten hours. When stationed on the top of the bedstead, it will keep the sleeper cool and comfortable during sultry nights. It will be a decided luxury. A person named Parker is here endeavoring to procure a patent for a *Water Guage*, but I understand that a Caveat for a similar invention was filed about a year since by an English inventor.

The Virginia and Tennessee Railroad Co. are about to build a Rolling Mill for the manufacture of their own iron; they think that a saving of about $300,000 per annum will be effected by it. A pair of Georgia Burr Mill Stones have recently been received at a mill in Norfolk, Va., from Savannah. They have excited considerable attention; formerly such kind of stones were all imported from France, but Mr. Hoyt, of Savannah, made the discovery of the Georgia Burr bed, which promises to supersede the foreign. The stones are fitted for a 4½ feet circle, weigh about 1600 pounds each, and are of a superior quali y.

The fire-proof calico, prepared with the phosphate of magnesia, is now finding an extensive sale in this section. It is an admirable thing for children. The war steamer Saranac is expected to receive steaming orders in a few days. There is a great want of engineers in this branch of the service, owing to the fact that so many of them resign for private vessels. A couple of very elegant cars have just been completed for the Washington and Baltimore Railroad. They are 34½ feet long, and will hold 52 passengers each. They are furnished with mahogany spring seats, covered with plush velvet. One of these cars rests upon 16 eliptic springs, on Perkins' plan. The other is upon the same number of gum elastic springs of Fuller's patent. Both have the side swing motion of Davenport and Bridges' plan, which resembles the gentle rocking of a cradle. On the whole these cars are said to excel anything of the kind in this part of the country. The account in your last number of a negro whose skin was changed to white by the bite of a rattle-snake, is an interesting fact, and a celebrated scientific gentleman here intends to allude to it in his forthcoming lecture, on "The various Colors of the Human Race." The petition referred to the Patent Committee of the House for renewing the Patent of Moore & Haskell on a Harvesting Machine, has been reported on favorably.

The lectures of Professor Alexander, at the Smithsonian Institute, were well attended. It is a pity the architect made the room so small. It does not accommodate one half of the people who desire to attend. *

[The machine to which our correspondent refers, invented by a Baltimore mechanic, for sleeping softly, is a good thing, but the Baltimore inventor has been anticipated: old Commodore Barron took out a patent for the same kind of invention in 1831, we think. A model of such a machine was in our office for months in the beginning of last year, and the inventor of it had used it in the tropics a number of years.

We are happy to hear from our correspondent about the introduction of the Georgia Burrs into Virginia. We have had some specimens of the stone for a long time, in our possession, and we noticed it in our last Volume. —[ED.

Patent Office Report.

The New York Tribune has published about one half of the unprinted Report of Mr. Ewbank. It is a very long document, but a very able one. We hereby publish some extracts from it, to show its power:

ERRORS ENTERTAINED OF INVENTORS.

It is a prevalent opinion that both ordinary and extraordinary inventions cost their authors little labor and thought to develope; nothing is more erroneous. It is an essential element of man's being, and of the constitution of things under which he exists, that all truths, mechanical or philosophical, can only be realized by strenuous and continued effort. Our perceptive faculties are too obtuse, and happily for us it is so, to apprehend them at a glance. In that case, they would be held too cheap to be looked for, and deemed worthless when seen. If inventions required no exertion to discover, where would be their value? If virtue cost nothing, it would cease to be virtue. No fact is clearer than that man's destinies are in his own hands, and that he alone can exalt and debase them. To rouse him to be faithful to himself is Nature's ceaseless care. With powers dormant in him and equal to every exigence, she leaves him to exert them or not. She does naught for him that he can do for himself, and has taken care that he shall know nothing, have nothing that he does not strive for. Then how common is it to hear ingenious men disparaged by ascribing their best things to lucky or random suggestions—whereas chance inventions, if such things ever were, are much rarer than supposed. Though appearing fortuitous, they may be traced to previous reasonings or reflections:—sprouting seeds whose transient plantings had been little noticed and forgotten. They had never sprung up had they not fallen on soils prepared by previous culture to receive them. Sparks set not sand on fire, nor do fruitful ideas germinate in barren minds. Flashes of thought, like those of the electric fluid, may dart suddenly and unexpectly,—but they are not less the regular effects of inducing causes. Inspiration descends not in its highest or its lowest forms but on those who seek to be inspired.

It is not given to man to perfect aught without toil and seldom without long continued toil. The smith forges not a plowshare with a blow, nor any new device, however simple, matured save by re-percussions of thought. *Nul bien sans peine*—a universal truth.

The power inventors wield is not less manifest in the changes they have wrought in the habits, customs and occupations of females, than it is obvious in the pursuites of the other sex, in the outdoor world. They have not only broken up the honored arrangements of the kitchen, wash-house and dairy, but have invaded the parlor and even boudoir. A century ago the rock and spindle were common;—in Europe are women who still twist thread with their fingers. Fifty years since the wheel had a place in every dwelling, and carding no less than spinning, was a domestic duty. With thrifty housewives the shuttle, too, was not a stranger, within twenty years knitting was indispensable; not a few of our farmers still wear home-made hose. Then straw plaiting, tambour working, lace making, plain and fancy embroidery, with other delicate operations of the needle, were and are still taught as necessary accomplishments such they will hardly be held much longer, since these and various other performinces are new done by automatic fingers with a precision, regularity, dispatch, delicacy of touch and finish that no human organs can rival.

Most, if not all, the Fine Arts have been subdued by mechanism. The lathe is still to be met with in its primitive forms, in the potters wheel, the spring-pole, and in the modern Egyptians arteloior—(seated on the ground, this artist empolys one hand to revolve the object to be formed, holds the cutting tool in the other, and presses it on the rest with his toes.) The lathe, so long confined to shape articles whose sections were circles, now produces oval, elliptical, epicycloidal and eccentric work; copies, medallions, and even busts in equal enlarged or reduced proportions—performing the work of the engraver, die-sinker and statuary or sculptor.

The richest figured tapestry and damask in relief are now produced by magic mechanism. Looms rival the palette and burin; beside gorgeously colored carpets they weave landscapes equal to oil paintings and portraits after the finest line engravings. Then, from the increase in number of sewing machines, the time would seem not distant when the needle itself and thimble will be exhibited in museums with distaffs, spinning-wheels, knitting wires, tambor frames, hand-looms, lace-making bobbins, spillons, and other antiquarian curiosities, as evidences of imperfect civilization. In chromolithography, automaton artists rival the finest touches of old masters, and shortly will multiply by millions their most esteemed productions.

Passengers' Baggage and Railroad Regulations.

A radical reform is demanded by the public, from the majority of our railroads, in receiving and delivering the baggage of passengers.—Every railroad should have outside porters to receive and take charge of passengers' baggage as soon as it is landed on the sidewalk, and they should direct the passengers where to get their tickets, and to the right cars. They might have hats with some mark on them, or some other insignia, to point them out. There should also be temporary sign boards hung up on the side of the cars in the depot, such as—"These cars take passengers for New Haven, and also the Housatonic route, and start at 8 A. M." This sign could be removed when the cars start. Some of our railroads appear to blunder into success against the worst possible regulations. At the depot in Canal street, New York, the owner of baggage is required to deposite it on board the baggage car, or upon the top of a table near it, before the porters of the company take any cognizance of it. Now this is always exceedingly inconvenient and often almost impossible. When ladies are travelling alone, their baggage is set upon the sidewalk by the hackman, who considers his task ended; and it then becomes a serious difficulty to get it placed in the baggage car. She must then search for the ticket window, about the size of a decent bat's wing, and known only by a crowd around it, barring access to a lady until the very last moment, when the cars are to start. This should not be—there should be two windows, always one for the ladies. In some depots, at the end of the journey, the delivery of baggage is managed in a very miserable manner. The baggage cars from Philadelphia are opened on the ferry boat—and every passenger is expected to come forward and claim his baggage when the number is called. This, with hundreds crowding around and pushing in every direction, is almost impossible, especially for the "women folks." At Greenbush, opposite Albany, at Albany, Utica, and other places, the baggage is thrown upon a platform, and each one is required, in a dense crowd of hundreds, to come forward and claim his own. On the road from Baltimore to Philadelphia a man is allowed by the company to go through the cars and ask permission to take charge of baggage belonging to passengers on reaching the city. He receives their checks, takes the street and number at which each trunk is to be delivered, and gives in return a card certifying his security for the baggage to the amount of $100. This ends the traveller's care as to his baggage. When the train reaches Philadelphia, he goes to his hotel or his house, and in half an hour his baggage is deposited at his door, for which he pays twenty-five cents. Those who do not choose to avail themselves of the offer, can of course take charge of the baggage themselves, and then the annoyance and trouble are voluntarily assumed. Some other railroads have the same regulations, and every one should adopt it, along with those we have suggested. The extra expense would be, we are persuaded, a saving in the long run. There are many ladies who would think nothing of taking a journey alone, if our railroads were better managed at the different stations, but with the present regulations they are wise to stay at home.

Mechanics in Congress.

It is said that nearly one-half of the members of the present Congress were once journeymen mechanics. If so, (says the Washingtan correspondent of the Charleston News,) this is an interesting fact, and shows what perseverance can accomplish. These men have become great, not so much from the facilities for a common knowledge, which our systems of education afford, as from a self-reliance which a sense of independence confers. It has been truly said that the moment you make a man politically equal with his fellow, you give him a consciousness that he is so in all respects.

Serious Accident in a Rolling Mill.

A letter dated Danville, January 8th, says that in the rolling mill there, the large fly-wheel, weighing from twenty-five to thirty tons, burst asunder, and scattered the roof and machinery at a fearful rate. Pieces weighing 3, 4, and even 6 tons, were hurled through the rof, crushing everything before them. One man only was slightly injured. The damage cannot be less than $10,000—it may reach $30,000. It is believed to have been done by some villain, who threw a piece of iron between the cogs of the main wheels. This unfortunate affair throws hundreds of laborers out of emment.

Discovery in Tanning.

We are informed by a correspondent from New Oxford, Pa., that Mr. Wm. H. Rosensteel, of that place, has discovered a new and valued improvement in the mode of Tanning Leather, which has been tried for nine months, and which, it is said, will save "one-fourth of the bark and make the stock weigh at least three lbs. more per hide, tanning in one-third of the usual time, and making a better looking article." These are very important improvements, especially as only one-fourth of the customary number of vats are employed, consequently no less than one half of the usual labor is saved. We are not able to describe the process, but our correspondent is one on whom we place every confidence in what he asserts.

Great Launch.

More than twenty-five thousand persons congregated at the Dry Dock, last Monday morning, to see the novel spectacle of the launch of three steamers, one of them with her engines ready to work, and one the gigantic ocean steamship Arctic. Every roof, window, balcony, fence, pile of timber, pier, carriage, adjacent ship, or floating craft that could afford a point of view, was crowded with eager spectators. There can hardly be a doubt that more people were collected on this occasion than any one purpose has drawn together for years. The steamer New World was launched with all he machinery aboard and the steam up. The Arctic is 3,500 tons burden, and is one of Mr. Collins' line. The launch was splendid.

An Equestrian Feat.

The Swansea, (Eng.) Herald publishes the following item of sporting intelligence: "Last week, a hare, pursued by some greyhounds, after several turns, and being hardly pressed, jumped on the back of a young horse, where she fixed herself astride. The affrighted animal not being accustomed so such a rider, bounded off at full speed, kicking and plunging, accompanied by the dogs. This continued from four to five minutes, when, choosing a favorable situation, puss hopped off, and very gallantly made her escape."

Utica Water Works.

Utica has just completed her water works, which give them a copious supply of pure water at the cost of only $75,000. It has a great head, and the hydrants carry water 30 feet above the spires of their churches. Its benefits in cases of fire will more than pay the whole cost of the works.

Six large American eagles alighted upon the ice, in Sandusky Bay, a few days since, where they remained for some time, probably waiting for their skates.

The city track of the Harlem Railroad will soon be laid with heavy rail.

Colt, the inventor of the famous pistol, has been presented to the Sultan of Turkey.