

## MISCELLANEOUS.

## Prof. Porter and Aerial Navigation.

With an Atlas strength of mind Prof. Porter has labored for the past seven years to bring into practical operation a perfect system of aerial navigation. Many pilgrimages has he made, and many difficulties has he met and vanquished in pursuit of this grand object.—Although often discouraged he would never give it up so, but on he went with eye unquenched by the sunshine of prosperity, or dimmed by the clouds of adversity, towards the grand object of his desires. His ambition to soar has been like that of the eagle, proud bird of the sky. He labored some years in New York City, in order to bring his wonderful balloon, named the Revoloidal Spindle into public notice, and along with Mr. Robjohn, astonished our citizens in the Tabernacle one evening in 1849, by making a model of it sail through that building as graceful as a whale. One of these aerial machines was to start from New York for California in April 1849, but somehow or other, instead of getting up it always got down, and Prof. P., disgusted, we suppose, at the ingratitude or blindness of the New Yorkers, to the merits of his machine, pulled up stakes here, and pitched his tent in the metropolis—Washington. Since he has made that city his place of abode, we understand he has devoted himself to his great work—aerial navigation—with a constancy of purpose, and a zeal which should arrest the attention of all high-flyers. We now learn by the Washington papers that Prof. P. has again given ocular demonstration of the practicability of aerial navigation, by the exhibition of an operating aeroport, 23 feet long, and furnished with a steam engine and a pair of propelling wheels, whereby the apparatus is propelled rapidly through the air in any required direction. The exhibition is favorably spoken of as being highly exciting and gratifying to those who witnessed it.

Last year he commenced the construction of an aeroport or flying-ship, 160 feet in length, and nearly completed it before the approach of winter compelled him to suspend operations. When this is finished he intends to construct another of much larger dimensions, and capable of carrying passengers at a speed of 100 miles per hour, the practicability of which he apparently demonstrates as clear as mud in his lectures, and in a small pamphlet, in which the principles and construction of the machine, and the mode of managing the same, are described; and he moreover contends and demonstrates that this mode of traveling will be much more safe than by railroads or steam vessels. This large aeroport is estimated to cost \$15,000, and is to be owned in shares of \$5 each. About six hundred of these shares (amounting to \$3,000) it is said, have been taken and the money paid in, and in order to secure the shareholders from any liabilities of assessments, or any responsibilities, Mr. Porter gives for each \$5 a regular title deed, which entitles the holder thereof to draw a proportionate share of the profits that may accrue from said aeroport, payable quarterly.

Thus the security of stockholders, namely a certificate of \$5 for each share is certainly an excellent plan of securing the issuers of stock against loss, but it does not clearly appear to us how it secures the purchasers of it. Nevertheless, the project is so grand and vast, it is enough to make mount Vesuvius burst out in fiery laughter. As of yore, Prof. P. has not yet given up the idea of traveling to California at the rate of 100 miles per hour, scaring the grizzly bear, and starting the deer on the Rocky Mountains. It is his intention when he builds his large aeroport, to run to California from Baltimore in 30 hours, and make two trips per week, carrying 200 passengers each trip. Won't there be great times then. When this wonderful aeroport of the professor is completed, light and intelligence will be diffused among the darkened nations; cannons will be sold for old iron, steamships for coal scuttles, and railway cars for cow pens.

There are 6,691 miles of railway in England, from which £44,8 of receipts per mile have been obtained during the last quarter.

## Accident to the North Star.

About 10 A. M., last Thursday morning, Commodore Vanderbilt's steam yacht, North Star, left the pier foot of Grand street, East River, on her pleasure trip for Europe, but as she cast off her cables, the tide, which was running out very rapidly, swung the ship out of her course, so that her stern struck with some force upon the pier below, at the foot of Jackson street. In clearing the pier she was again thrown out of her course by the tide, and in a moment after, struck upon the reef of rocks lying about 100 feet from the pier, where she lay until the high water floated her off. The steamboat Huguenot came alongside immediately, and took off all the guests without the occurrence of any further accident.

It was stated that the main cause of the accident, was the stupidity of the man at the helm, who, on the order being given by Commodore Vanderbilt to put the helm a port in order to carry the ship into the stream, turned it in a contrary direction, thus allowing the tide to carry the vessel aground, but this was not true—the pilot could not avoid the danger. In striking she keeled over on one side, and for a moment there appeared danger of her capsizing.

It is one of the most disgraceful things in connection with our harbor, that such rocks are suffered to exist in it.

On the next day she was put on the Dry Dock at the Navy Yard, and was found to be little injured. In four hours the copper was replaced, and she went to sea in the evening. Success to the North Star.

## New Method of Grafting Grape Vines.

The following is from the "Ohio Cultivator":—

"Saw off the vine an inch or so below the surface of the ground. Then with a gimlet or small auger, just the size of the graft, bore one or more holes perpendicularly or parallel with the grain, about two inches deep, in the top of the root sawn off, and into these insert the scions the full depth of the holes. Let the scions be of the last years growth, well ripened and about six inches in length, with a bud or eye at the top; they should be cut from the vine during the winter or early in the spring, before the sap gets in motion, and the operation should be performed before it is expected the sap will start, although it will usually succeed afterward if the top of the stock is well waxed. After inserting the scions, cover the wounds firmly with moist clay, up to the eye of the scions, and place a board so as to protect it from washing by rain till the leaves appear. This method is surer than cleft grafting.

## A Curious Relic.

Dr. Crone, of Yorkville, S. C., has recently procured for Dr. John McLean, of Lincoln Co., N. C., a specimen of feathers and a winding sheet taken from the body of a corpse, supposed to be that of an Indian girl, found in a sulphur cave in Middle Tennessee, many years ago. It was found in a cane coffin, with the legs cut off at the knees and placed on the breast. The body is in a perfect state of preservation; the flesh very tough and free from taste or smell, and perfectly hard; the feathers were used as an outside covering; the bark canvas was the second, and enveloped the deer-skins which covered the body.

## Progress of the Cholera.

In the last sitting of the Academy of Medicine, in Paris, Professor Jules Cloquet communicated a letter which he had received, from Teheran, from his nephew, who is physician to the Shah of Persia, in which he gives some interesting details on the subject of the cholera. He says:—"We are threatened with cholera this spring, and I am obliged to do the honors of the country to this disagreeable visitor. The malady in this instance follows a progress quite unusual. It broke out at Bussorah in 1851; it has already come up the course of the Tigris as far as Bagdad; from Bagdad, in crossing the Kurdistan, it directed its course towards the province of Azerbaïdian. After having ravaged that country, particularly Tauris, the capital of it, it proceeds to the south and south-east, following the borders of the Caspian Sea, and

it is stated that it has made its appearance at Cashin, which is only 22 leagues from Teheran. According to this itinerary, it is not probable that on this occasion it will direct its course towards Europe, and there is every reason to believe that, after having levied its quota on Persia, the malady will proceed to India, its native country, which it ought never to have quitted."

## Railroad Engines.

Zerah Colburn makes the following extraordinary statement in an article in the "Railway Times":—

"The average annual deterioration of American engines is from eight to twelve per cent. upon their first cost, while five cents per mile are required for repairs, so that generally our engines destroy themselves at the rate of \$10 value per day when in full use. This can be easily established by proofs."

Engines cost from \$3,500 to \$8,000. Taking the average cost at \$5,000, and calculating that the engine is used 300 days in the year, the wear would amount to \$3,000 per year. The Erie Railroad have 142 engines, and at this estimate their annual cost must be \$426,000 allowing that they are all in use.

## The Crystal Palace.

We believe there may be found in this city a few individuals of ultra sanguine temperament, who expect that the Crystal Palace will be opened by about the celebration of the National Anniversary. We visited the skeleton of that building yesterday, and really if it comported with our strict views of high moral principle to risk a bet, we would venture one dollar to fifty that it will not be ready to receive the public before the first of August; and we have our own reasons for believing that the happy day will be still further postponed to the first of September. The delay, we suppose, is unavoidable, so we must possess our souls in patience.—[New York Daily Times.

## Cure for Toothache.

We know nothing of the safety or efficacy of the following recipe for toothache, which we find imputed to a practitioner, in an eastern paper:—"Gum copal, when dissolved in chloroform, forms an excellent compound for stuffing the holes of decayed teeth. I have used it frequently, and the benefits my patients have derived from it have been truly astonishing. The application is simple and easy. I clean out the hole, and I moisten a little piece of cotton with the solution; I introduce this into the decayed part, and in every instance the relief has been almost instantaneous; the chloroform removes the pain, and the gum copal resists the action of the saliva; and as the application is so agreeable, those who labor under this dreadful malady would do well to make a trial of it."

## A Month of Calamity.

This has been a month of calamity.—Within three or four weeks there have been recorded in the pages of the public press the destruction of the steamship Independence in the Pacific, the Ocean Wave on the Lakes, and the Jenny Lind in California; the awful railroad calamities at Chicago and Norwalk; and now there is added the loss of the ship William and Mary at sea. By these six disasters not less than five hundred souls have been hurried into eternity; and in addition to these there have been minor accidents on railroads and steamboats, falling of buildings, &c., which would materially swell the fearful aggregate.

## Ship Race for Ten Thousand Dollars.

The owners of the ship "Sovereign of the Seas," of New York, having bantered the world for a race, W. H. Webb replies that he accepts the challenge, and is ready to bet the sum of ten thousand dollars on the ship "Young America" (the last of his construction), commanded by Captain Babcock—the trial to be made on the terms proposed, viz., from New York to San Francisco, both vessels loaded, and to sail together or within thirty days of each other.

The opening of the railroad from Savannah to Columbus, which unites the Savannah and Chattahoochee Rivers, was celebrated on Friday, May 20th.

## Improved Lithographic Press.

An improved press for lithographic printing has been invented by H. C. Spaulding, of Hartford, Ct. The object accomplished by the improvement consists in giving a uniform and forcible impression to all parts of the stone with the expenditure of but a very small amount of power. The arrangement of Mr. Spaulding for effecting this object is this:—a wood or metallic air-tight chamber or tub, containing water or other fluid, with its bottom or one side composed of india rubber or some other water-proof elastic or pliable material, is used to give the impression; said chamber being furnished with a tube and plunger, and the pliable bottom or side of the chamber serving as the tympan. By applying pressure to the plunger, an equal amount of pressure is transmitted by the water or fluid to every part of the tympan, and by using a small plunger an immense pressure may be obtained with a small expenditure of power. Measures have been taken to secure a patent.

## Loom for Weaving Plain and Figured Fabrics.

A great variety of improvements for looms have been illustrated and described in the Scientific American, and new devices are coming under our notice almost daily. Several very important improvements have lately been invented by James Greenhalgh, Jr., of Waterford, Mass.; the improvements relate to several parts of the loom, and are too extensive to describe without the aid of engravings. The parts upon which the improvements are made are those which relate to the harness motion and the method of hanging the heddles; there are also several improvements in the method of constructing and operating the jacks, by which the amount of labor is lessened, and the work performed more perfectly than by those ordinarily in use. The inventor has taken measures to secure a patent.

## New Drill and Countersinker.

Warren Lyon, of New York City, has taken measures to secure a patent for an improvement in hand drills; they are very simple in construction, cheap, and perfectly adjustable. The nature of this invention consists in having a conical or other shaped weight upon the arbor of the drill, for the purpose of giving the requisite pressure, and having a system of levers and a counterpoise connected to the upper part of the arbor, for the purpose of elevating and depressing it, and at the same time of adjusting the pressure given to the drill by the weight. The upper end of the arbor turns within the end of one of these levers, and to the other end is attached a second lever, which has an adjustable counterpoise connected to it by a stirrup, and a ratchet rod attached to it extending down by the side of a hook, by which the drill may be raised and kept in any desired position while not in operation. The support for the metal to be drilled may be of the form of those in common use.

## New Steam Boiler.

J. S. Underhill, of the city of New York, has taken measures to secure a patent for an improvement in boilers for steam engines. The object of this invention is for the purpose of obtaining a more complete heating surface by a peculiar arrangement of tubes and water spaces, and also for the purpose of providing means whereby the soot and ashes may be removed with more facility and ease than has heretofore been done. Mr. U. places a portion of the tubes vertically and others laterally within the boilers—his boilers having vertical sides and ends with an arched top, and is really a good arrangement.

There seems to be little room left for improvement in steam boilers, no one, however, can tell what may yet be done,—an age of improvement this, certainly.

## Daguerreotype Hat Crowns.

These specimens of art are daily finding some new position in which to exhibit their beauty and perfection. They are now placed in the tops or crowns of hats, and kept in that position by a very simple contrivance for the purpose. The daguerreotype tops will not be more expensive than the French paintings which are at present employed. This arrangement is the invention of Thomas Rafferty and Henry G. Leask, of New York City, who have taken measures to secure a patent for the improvement.