

## MISCELLANEOUS.

## The Fair of the American Institute.

After having opened on the first inst., the whole of the departments may now be said to be in full operation. It seems that a full week is generally required to set all the wheels in operation. There are not, by a great deal, so many articles exhibited this year, and as we said last week, "the arrangement is better on this very account. Much trash has been refused, and there is room to walk about, less confusion, and consequently one article does not seem to be contending for the honor of covering up its fellow.

In the machinery room there are fewer machines, and not many actually new things, while a few old stagers are still to be seen on the shelves—such as an angular paddle wheel, which has flourished at every Fair within our recollection, and which is as worthless for practical purposes as a slap-jack would be.

The machinery is driven by one of Mr. Burden's beautiful engines, but there is less tax upon its powers this year than there was last.

**COTTON SPINNING MACHINES.**—There are two spinning frames exhibited, one is Dodge's Cop Spinner, which has been on exhibition before, but is now neater in construction, and considerably improved. The other is the Spinning Frame of Mr. Wanton Rouse, of Taunton, Mass., a very excellent machine. Mr. Rouse obtained a patent for a good improvement on this machine last year, and since then he has made one or two others. It does its work well, and is, in every respect, a beautiful machine; it was constructed by Mr. Robert Dean, of Taunton, aforesaid. One peculiar feature of this machine, and for which we had the pleasure of procuring a patent, consists in an auxiliary guide rail, which so guides the thread that it has the same amount of draught at every point in building the cope; this enables it to make a most beautiful, firm, and even cope. Another recent improvement, is a peculiar cone cam to guide the rail. This cam has a rotary and a longitudinal movement to guide the rail in the most proper manner to lay on the thread as the cope increases in thickness. It is a valuable improvement.

**TURNING LATHES.**—Messrs. Scranton & Parshley, machinists, New Haven, Conn., exhibit quite a number of turning lathes and other tools. The price is affixed to each lathe, so he that runneth may read. We like this plan, for it at once presents to the eye the saleable value of the machine, and people can judge by the eye whether they are worth their price or not. We would like it if the price, was put on all machines.

**INVENTIONS ILLUSTRATED IN THE SCI. AM.**—In order to show that the inventions we publish are of such a nature as not to be afraid of light and public examination, and are really meritorious, we would state that a number of very prominent machines exhibited have been illustrated and described in our columns. An excellent Rotary Pump, the invention of Mr. Carey, was illustrated on page 345, Vol. 3. The very excellent machine of Messrs. Adams & Son, of Amherst, Mass., for making Felloes, was illustrated on page 169, Vol. 4. Mr. R. Cook's Blowing Engine, on pages 185 and 188 Vol. 5. The patent invention of Mr. Post, for Opening and Closing Window Shutters and Doors, and illustrated two weeks ago, on page 19, is also exhibited and meets with much attention. The Portable Furnaces, Blow Pipes, and Jeweller's Table of Messrs. Barron, illustrated on page 28, Vol. 5, are also there; so is Porter's Forge Tuyere, illustrated on page 405, Vol. 6, also displayed.

We may yet be able to dig out more inventions which have heretofore been illustrated and described by us. We have not had time to explore the whole ground, consequently we have not yet seen all. In the meantime let us say, these inventions are certainly much more conspicuous on account of being published; this is easily accounted for, thousands having descriptions of them, because we have now the largest circulation of any mechanical paper in the world, and those who are interested in new improvements look to our columns as the first source where such improvements are likely to be found. In alluding to the said machines, as published by us, we at once refer to the source where good descriptions of them

can be found; we therefore do not say anything about their nature at present.

**IRON SHEARS AND PUNCHING MACHINES.**—J. T. Perkins, of Hudson, N. Y., exhibits good iron shears and a punching machine. Mr. Perkins makes excellent tools and has a good reputation. These tools are of good workmanship and of the common form.

**SELF-STRIPPING CARDING MACHINE.**—J. P. Stillman & Co., of Westerley, R. I., exhibits a Self-stripping Carding Machine; this has long been a desideratum among cotton manufacturers; the machine works cleverly, and is a piece of the greatest curiosity at the Fair. By looking at it, nothing seems to be doing at all, when, all at once, up flies a flap of the cylinder cover and forward comes a flap, stripped clean as the leaf of a book. The only objection we have to it is the force used, and flapping noise made when the card is cleared. This may be remedied by some device, such as a buffer of india rubber or a covered spring.

**STEAM GAUGES.**—Mr. P. Stillman exhibits, as usual, an unrivalled case of beautiful instruments connected with steam engines and boilers. His Steam Vacuum and Water Gauge is a fine instrument, and for workmanship, they look like the handiwork of a master chronometer maker. Lowe's Pressure Gauge, of which Mr. Pirsson, No. 5 Wall street, is agent, is a very excellent and beautiful instrument.

**MANGLES.**—Of these useful domestic machines, a number are exhibited. The Spring Mangle, illustrated in Vol. 4, Sci. Am., is there as large as life, claimed to be a "patent," but we don't know where to find the record of it in the books of the Patent Office. It is a good mangle, though, and is manufactured by Duncan & West, No. 51 Beekman street, this city, also by Smith, Torrey & Co., No. 50 Maiden Lane. It would be well for every family to have one of these machines, at least, if the family consists of more than three or four persons.

**THE FINE ARTS.**—The very first thing that strikes an observer, when he enters the portico, is a fine bronze casting of a huge mastiff, with an apparent mixed of the noble Spanish hound; it is the work of Mr. Hoppin, of the firm of Bogardus & Hoppin, of this city. We wish this work of art had been sent to the London Exhibition, it would have done us much credit as a people as it does Mr. Hoppin personally. It is by far the finest work of the kind we have ever seen.

**DAGUERREOTYPES.**—The Daguerreotypes of Messrs. M. A. & S. Root, in this city, are the finest exhibited. They are rich and full in tone, and have none of that dead and flat appearance which, in general, characterize and are found fault with in daguerreotypes. We advise those who visit the gallery to give their pictures particular attention: they will find them full of self-commendation—requiring only to be seen to be admired. There are some oil paintings exhibited, but alas for the genius displayed. But we must be charitable, and will say this much in extenuation of doubtful merit, "the field was too great, not for the paint but the powers."

**NEW JERSEY ZINC.**—There is a very interesting display of New Jersey Zinc Ores, the pure zinc made from it, and various oxides of zinc, now used for paints. We are glad to know that the zinc paints are so beautiful and enduring. Lead paints, which are very destructive to health, should not be countenanced where the zinc can be used. Zinc paints are healthy and free from all injurious qualities. With a public spirit well worthy of commendation and being publicly noticed, this company has offered prizes for the best pieces of painting, to be brought in and exhibited as zinc painting. For a long time the zinc ore of New Jersey lay valueless to our country: no plan was known whereby it could be resolved economically from the ore. Eminent American and European chemists were consulted, but they knew nothing about it. Experiment and sagacity have at last triumphed, but not until a very short time ago, when, by a new discovery—a mechanical application—it is now made cheaply and well. The invention is an exhausting draught, whereby the zinc vapor is drawn from furnaces and condensed in large bags, the air passing through the bag, which retains the metallic vapor. It is a most beautiful and ingenious application of art. The

agents of this Company are S. T. Jones & Co., No. 53, Beaver street, this city.

**MODEL OF MOUNT VERNON.**—One feature of great interest at the Fair is a miniature model of Mount Vernon, the place wherethe great Washington lived, and where his ashes now repose. It is the work of Mr. Yates, and is the subject of great attraction.

We shall continue our observations next week.

## The Exhibition of the Franklin Institute.

This old and respectable institute holds its next fair in the halls of the Philadelphia Museum, and opens on the 21st inst. The rooms were to be opened this week on Friday, for the reception of goods, and no goods can be entered for competition or premium after the 20th, though they may be deposited for exhibition. After the 25th no deposits will be received, except by special action of the Committee. It will close on the 1st of November. The judges are persons practically acquainted with the several branches of manufactures on which they shall be appointed. Awards will not be confined to specimens prepared expressly for exhibition, but regard will be had to the prices and quality of the articles, compared with the same description of foreign goods, and with specimens presented at former exhibitions; and no premium shall be awarded for an article that has received one at any former exhibition of the Institute. Three grades of premiums will be awarded, styled a first, second, and third premium, consisting of a silver medal, a bronze medal, and a certificate. All articles deposited must be accompanied by an invoice, stating the name and residence of the maker and depositor.

## Beards.

Mr. Andrew Jackson Davis, the celebrated Seer, comes out in the Hartford Times in favor of men wearing their beards. He says the hairs of the beard are terminations or continuations of nerves; those of the hard coating and membrane of the eye are connected with the beard on the upper lip, and when that is shaved off the nerves are exposed to injury; some diseases of the eye he attributes to shaving. In women, these nerves instead of terminating in the upper lip are buried in the cheeks, and have much to do in controlling the phenomena of blushing. Bronchitis and maladies of the lungs are produced by shaving off the beard on the chin. Mr. Davis also argues that mustachios are no obstacle in the way of eating, or any other function in which the lips are employed: an argument indeed which we cannot admit. The most uncomfortable thing to decent eating, appears to be mustachio, but every man to his taste; we suppose that Davis has had a revelation on the subject, having seen inhabitants of his other world with beards, but that is very easily accounted for, no razors being made there.

## Copper in Wisconsin.

Copper has been discovered near the village of Bad Axe. Mr. Smith, a merchant of that village, was one day out with his gun for a few hours' sport. He had wounded a deer, and was following it up by the marks of blood on the grass, when he stumbled upon a sharp point of some substance sticking up above the surface of the ground. A moment's examination convinced him that he had found a piece of native copper. He dislodged the mass from its bed, and taking it home, he found it to weigh some 50 pounds. Encouraged by this discovery on his own land, he has been engaged in sinking a shaft on the spot. He has already taken out some 60,000 pounds of ore, mixed with native mineral, valued at \$60 per thousand, and by "drifting ahead" in the crevices between the rocks, has found the vein to be of great value. Report assigns it a thickness of seven feet, and a depth as yet unexplored.

## Culture of the Olive.

R. Chisholm, Esq., of Beaufort, S. C., is cultivating the olive tree from plants procured in the neighborhood of Florence, in Italy. The olive tree will grow throughout the cotton-growing region. The plant is of slow growth and very hardy. We are glad to know that there is a prospect of cultivating the olive in our country, for assuredly the oils sold here for "pure olive," are fraudulently mixed with lard oil. It is a fine oil for table use, and is

most extensively used in France, Switzerland, Germany, Britain, and Turkey, in preparing cotton for the beautiful Turkey red dye. None of this color is dyed in America; By having pure, cheap olive oils, we will have better soaps, &c.

## Poetry and the Fire Annihilator.

Mr. G. H. Cutter, the author of "The Song of Steam," and some other thrilling pieces of poetry, has added another leaf to his laurel by writing "The Song of the Fire Annihilator," which appeared in the "New York Daily Times," of Wednesday last week. The poetry would have produced a very powerful effect upon our mind, and would have lighted up a flame of enthusiasm equal to that produced by the "Song of Steam," and we should have defied all the fire annihilators in the world to have quenched it, if the author had only lighted his poetical torch at the vestal fire of truth; but in this case he unhappily has made a very wrong choice of a subject. Let us quote the last two verses for the sake of illustration:—

The hand of Science, that called me forth  
My sceptre shall now obey;  
From the curse of this ruin I'll shield the earth,  
Till the planets themselves decay;—  
Till the solemn end of that final day,  
When the stars from heaven shall fall,  
And I myself shall be swept away,  
In the fire that consumeth all.

Then bear me forth to each distant land,  
And the scenes that ye so deplore—  
The midnight blaze—the incendiary's brand—  
Shall ravage the world no more.  
When your burning palaces light the skies,  
Like a signal of doom and death,  
The flame that your utmost strength defies,  
I'll quench with a single breath."

Mr. Cutter has formed the idea that no more Moscows, nor burning ships, nor palaces, will take place; but if a person goes down to the Fair at Castle Garden, and examines one of the Fire Annihilators, with the price (\$20) on it, he will be constrained to take a hearty laugh at the idea of a fire being quenched by a single breath of such a miserable substitute for the Fire Engine.

## Healey's National Picture.

We examined a few days since, at the National Academy of Design, Healey's recently finished historical painting of Daniel Webster in the United States Senate Chamber, represented as he appeared in 1830, when he replied to the speech of Robert Y. Haynes, the then Senator from South Carolina. The United States Senate Chamber is in the form of a segment of a circle. The presiding officer's chair is in the centre of the straight line, or chord of the arc; so that, to include a view of the Vice President (John C. Calhoun) in his place, only a section of the chamber can be given upon a plain surface. Mr. Webster is to the right of the central aisle, and is, of course, the figure of the painting, to which all the others are accessories. It embraces over one hundred portraits of distinguished characters, several of whom were recognized by us as excellent likenesses. Mr. Healey has devoted several years to this work, and we regard it as reflecting the highest credit upon his skill. It stands in a magnificent frame, of large size, and is embellished with unique designs. Every lover of art will be amply rewarded for the time spent in viewing this great work.

## Porter's Tuyere Iron.

We would call the attention of our readers to the advertisement of Mr. Porter, in another column of this paper. Mr. Porter has shown us certificates, commendatory of his invention, from some of the most extensive iron makers in this city, and from what knowledge we have of his invention, we can confidently recommend his Tuyere to any parties who have occasion to use such an article.

## Stove Polish.

We have again been favored with a specimen of Stove Polish from the establishment of Messrs. Quarterman & Son, 114 John street, and as is the case with every thing which emanates from their works, it is an article unsurpassed by any polish or blacking we have ever used. See advertising columns.

Rice has been cultivated more than 150 years in South Carolina. It was planted there in the year 1693, and has been grown every year since that time.