

## Miscellaneous.

## Fair of the American Institute.

This is now the fourth and last week of the Fair; those who have attended it from the first, as exhibitors, must have been at an enormous expense. We have thought that if they expended but one half of the amount in judicious advertising, it would tell more advantageously. Engravings and descriptions of machinery in our columns meet the eye of all those in our country interested in such things. It would be well, also, to have stated prices, and let them be generally known. Many persons make up their minds at once either to have, or not have, machinery, when they know its price.

**BARRELL MACHINERY.**—Mr. Wm. Trapp, Jr., of Ithaca, N. Y., exhibited his patent machinery for making barrels. This machinery saws out the staves, trims their ends, joints them, cuts the chimes, makes the heads, and after the staves are put together into a barrel, it is turned on a peculiar lathe, finished and smoothed in the most perfect manner. This is excellent machinery for the rapid manufacture of barrels, and it has been greatly admired.

**NEW LOCOMOTIVE.**—Mr. H. W. Bennett, of Rutland, Vt., exhibited a model locomotive, which has its wheels so arranged with one another and combined with the truck, that it recovers its equilibrium after passing over an obstruction about half as quick again as common locomotives. It combines the tender with the engine, and carries its water under the boiler; it therefore carries only its fuel behind the furnace, and thus shortens the length of the machine, beside bringing the water weight very low down. It has oscillating cylinders, which are made with changeable bearings to prevent any uneven wear in the boxes. It is an ingenious invention.

**BOOK BACKING AND FINISHING MACHINERY.**—Mr. Charles Starr, of the American Bible Society, exhibits two fine machines—new inventions—the one for backing books and the other for finishing. These machines perform beautifully, and execute good work. Two of them will be exhibited at the World's Fair, next year, in London.

**EASTMAN'S STONE CUTTING MACHINE.**—Mr. Eastman's Stone Cutting Machine, patented last June, was in full operation; its principle is to have a great number of serrated faced rollers set on a revolving drum, the serrated rollers acting upon the stone as they revolve. We must say that we like Wilson's better, (illustrated in our last Volume); some may differ from us in this opinion.

**DICK'S IRON PLATE CUTTING SHEARS.**—This invention of Mr. Dick—anti-friction shears for boiler plate—exhibited by J. E. Holmes, No. 794 Washington street, New York, is certainly the best machine for that purpose in the world. It cuts the thickest boiler plates with as much ease and grace as a tailor cutting cabbage. This machine was illustrated in our last Volume.

**NEW SUGAR BOILER.**—Mr. Knight Reid, of New Haven, Conn., exhibits a boiler for boiling down sugar juice, by fire heat, which appears to be a very good improvement. The first boiler is set higher than the others, therefore the juice is run off to the others by gravitation. The fire is kept up in the furnace under the first, and the heat passes through metal pipes to the last—the finishing pan having a lower degree of heat than the first, to prevent the burning and consequent discoloring of the sugar. The apparatus is simple and not expensive to get up, and these are important considerations.

**FAIRBANKS' SCALES.**—We never saw such a fine display of weighing scales, of every description, as are exhibited by Messrs. Fairbanks & Co., of St. Johnsbury, Vt., and 89 Water street, this city. From the tiny scale devoted to weighing a scruple with scrupulous accuracy, to the ponderous machine for weighing, to a diamond shaving, the railroad car, all exhibit the marked skill of the most

cunning-handed artificers, and the solid thinking heads of good inventors. The accuracy of the scales made by this old established house, may be judged of by a scale for weighing 12,000 lbs., which we saw plainly affected by a few thin leaves of a pamphlet.

**MULTIPLYING MAGNETIC ENGINE.**—Messrs. Avery & Brady, of 39 Green street, N. Y., exhibited what they termed a "multiplying magnetic engine;" it is composed of four revolving poles, set in motion by four electro-magnets, which are fixed at right angles to one another and stationary on a frame, the arms of the revolving bars run inside of them.

**GOLD PENS.**—Mr. Bagley, the gold pen manufacturer, Broadway, N. Y., exhibits one of the finest cases of jewelry, in the shape of gold pens, that we ever looked upon. It was perfectly dazzling, and was an object of general admiration. The show of silver ware in the Fair, this year, never was equalled.

**QUARTERMAN & SONS' PAINTS AND DRIERS.**—A fine exhibition of chemicals for painters, is displayed by this old and respectable company, No. 114 John street, N. Y. We have tried some of their colors, and have found them every thing they were represented to be.

**GUTTA PERCHA ROPE PUMP.**—A very good force and lifting pump, manufactured by Myers & Gardner, No. 274 Fifth street, N. Y., was exhibited and justly esteemed. It is constructed on the chain and disc principle, only it has a gutta percha endless rope and india rubber bell discs. It is a good pump.

**CORN STALK CUTTER AND GRINDER.**—Mr. Jesse Urmy, of Wilmington, Delaware, exhibits a good machine for cutting corn stalks, hay or straw. The cutters are revolving enclosed in a drum, to which a band is attached around the periphery and thus motion is given to the knives. It has also serrated faces inside, which grind the material to be cut, if required, for corn stalks, this is a good combination.

Mr. Bertholf, of Sugar Loaf, Orange Co., N. Y., also exhibits his Angular Cutting Straw Cutter; the main feature of this machine is its cutting action viz., not across the stalk but in a slanting direction. This makes its action easy.

**CRACKER AND BISCUIT CUTTING MACHINE.**—Mr. Nevins, of 198 Allen street, this city, exhibits one of his small machines, with the improvement which was recently patented and which is decidedly a valuable one.

Mr. Bruce exhibits a Rotary Cracker Machine. This machine is well known we believe in the trade. Its action is uniform in cutting and feeding.

**CARVING BY MACHINERY.**—Some beautiful specimens of carving done by machinery, by Frederick White, 219 Second street, arrested our attention; they are copies from plaster medallions and are well executed. The invention must be good to do this kind of work.

**THAT OLD ARM CHAIR.**—An antic arm-chair graces the Fair, embroidered with the handiwork of Mrs. Fillmore, our worthy President's better-half. Some of our papers are boasting not a little about this, so do we—it shows Mrs. Fillmore to be a very woman—we like the idea, and must commend that couplet of poetry to our young ladies, who would think such an act beneath them,—

"When Adam delved and Eve span,  
Where was then the gentleman?"

## Proposed Improvement of Costume.

Some of the leading artists of England, as well as many amateurs and admirers of the fine arts, consider that the forthcoming exposition in Hyde Park would be a fitting opportunity of discussing the subject of costume. Artists and all persons of true taste, have long complained of the inelegance and incongruity of English and other costumes. Painters and sculptors frequently had recourse to the costume of the ancients, in order to avoid the difficulties which that of the present time throws in their way when delineating the human figure. A declaration has been drawn up, embodying the above, and many other collateral points, which has been numerous signed by some of the leading artists. They express a hope that some general European costume might be indicated by such a course.

We, however, consider these artists who express such a hope, nothing but a lot of dreamers. We wonder if they expect our engineers to wear the toga, and our hod carriers to adopt the nude style of the *athleti*. A general European costume; fudge! If the painters and sculptors of Europe cannot immortalize a man in our modern costume, then just let them do the other thing. Those men are merely copyists, who cannot strike out a new path for themselves.

## Patent Cases—Telegraph Case.

In the U. S. Circuit Court, Boston, Judge Woodbury presiding, the case, Morse Vs. House, for infringement of Morse's patent for a telegraph, was decided on the 17th inst. The judge delivered his decision against the petition of Morse to refrain House from using his telegraph, as being an infringement of Morse's patent. The judge decided that the modes of telegraphing were entirely distinct, and that there was no infringement, therefore he refused to grant an injunction. The principal points of his decision, we believe, were, 1st, that Morse's invention was only an improvement in telegraphing by electro magnetism, and the improvement consisting chiefly in tracing at the distant end of the wire, marks, made at the near end; and by tracing these marks on rolling paper, consecutively so as to be able through a meaning affixed to each mark, by a stenographic alphabet of his invention, to record information rapidly.

2d.—That Morse's patent, so limited, was original, useful, and valid.

3d.—That House's machine does not infringe on Morse's thus constructed, but, except in the use for some purposes of electro magnetism, which was not invented by either; it operates on principles, and with machinery, materially different, and uses two different powers.

B. R. Curtis, F. O. J. Smith for plaintiff; R. Choate, Geo. Gifford and C. N. Woodbury for defendants.

The counsel of Morse gave notice of an appeal to a full court.

We will publish the charge in this case next week. It is corrected for the Scientific American, and differs somewhat from the common reports. We would have published it this week had not our columns been so full before we had the pleasure of receiving it.

## McCormick's Grain Reaper.

In the U. S. Circuit Court, at Albany, N. Y., Judge Nelson presiding, October 18th—Cyrus H. McCormick vs. William H. Seymour and Dayton S. Morgan.—The plaintiff is the inventor and patentee of the Reaping Machine known as "McCormick's Reaper." The defendants reside at Brockport, this State, where they have been engaged in manufacturing reaping machines, alleged by the plaintiff to be infringements upon his letters patent. For this he claimed fifteen thousand dollars damages. It appeared, by an account which the defendants had been ordered to furnish, that they had, during the present year, made and sold about two hundred reaping machines, for more than thirty-two thousand dollars. When the case was called their counsel moved to postpone it, on the ground that they were not ready for trial. This motion was opposed by the plaintiff's counsel, who, after adverting to the importance of the questions and amount involved, urged that under no circumstances ought the cause to be postponed, unless an injunction issued, restraining the defendants from the further manufacture of the machines. A motion for an injunction had been fully argued, before Judge Nelson, in June last, and he declined answering it in July, on condition that the defendants should keep, and render, on oath, a true account of all machines made and sold by them. The defendants objected to the granting of the injunction, but the Court, on postponing the cause until the next term, ordered the defendants to pay the costs of the term; and, also, directed an injunction to issue restraining them from making any more reaping machines, such as they had been making, and known as "Seymour & Morgan's Reaping Machines." Samuel Blatchford, of Auburn, E. W. Stoughton, of New York, and Samuel Stevens, of Albany, counsel for plaintiffs. H. R. Selden, of Rochester counsel for defendants.

## Bark Mill.

Another case decided was that of Erastus Wilbur vs. Matthew Beecher for the infringement of a patent for a Bark Mill, which was decided on the 17th inst., one day before the McCormick Reaper. The verdict was in favor of the plaintiff, \$7,500 damages being awarded. Let every just patent be sustained; many have grown so skeptical about patents as to deem them of little value; the above verdict brushes away such notions.

## Oil of Poppy Seeds.

Dr. Smith, in his editorial correspondence to the Boston Medical Journal, in a recent letter written from Switzerland, speaking of the agricultural products of that and the adjoining country, says: "Immense crops are raised here of articles wholly unknown to American farmers, and perhaps the kinds best fitted to particular localities, where grain and potatoes yield poorly under the best efforts. One of these is poppies. Thousands of acres are at this moment ready for harvest—which the traveller takes for granted, as he hurries by, are to be manufactured into opium. They are not, however, intended for medicinal use at all, but for a widely different purpose. From the poppy seed a beautiful transparent oil is made, which is extensively employed in house painting. It is almost as colorless as water, and possesses so many advantages over flax-seed oil, that it may ultimately supersede that article. Where flax cannot be grown poppies often can be, even in poor sandy soil. Linseed is annually becoming dearer, and the demand for paint oil is increasing. With white lead, poppy oil leaves a beautiful surface, which does not afterwards change by the action of light into a dirty yellow. In short, this oil is destined to bring about a revolution in domestic economy. Another season some one should make a beginning at home in this important branch of industry. The oil may be used for other purposes, and even put up in the cruet for salads.

## Mining in New Brunswick.

By information received from the New Brunswick papers, and from private letters, we learn that the mineral resources of the above Province are at last beginning to be developed. During the past six months more than twenty mining leases have been granted by the Government, in the Counties of Albert and Westmoreland. Upwards of two thousand chaldron of Bitumen, or Mineral Pitch, have already been raised at Hillsborough, and will soon be ready for shipment to the United States, to be employed in the manufacture of gas. Beds of excellent coal from two to six feet in thickness, have been pierced at Meranquin, and a party of English miners are engaged to commence the working. A Mr. Steadman has also opened a vein of coal in the neighborhood of Shediac, and is now exploring an asphaltum mine near the Peticodiac River. Surveys we understand are made with great energy, and there is much competition among the purchasers of mining leases. It is stated that 100,000 tons of asphaltum might be shipped next season from one mine. At present the completion of a railway, three miles in length, is required to aid its transport to the river. The Black Lead Mine of St. John, has been well penetrated, and it is thought that the proprietors have made a profitable investment. The iron works of Carleton county, which were unfortunately consumed by fire last season, have been re-built, and have commenced the manufacture of iron from the ore of Woodstock. These facts are encouraging to the inhabitants of New Brunswick, and fully confirm the predictions formerly made by Dr. Gesner in his geological reports published about ten years since. But in an equal degree they disprove the statements of Dr. Robb, and conflict with the opinions put forth by him in Professor Johnston's recent agricultural report. The mineral resources of this fine Province are evidently under-rated. The opening of the above mines has aroused a new energy, and will no doubt contribute largely to the prosperity of that Province, where all the mines and minerals are under the control of the Legislature, and open to the competition of its inhabitants.