

Scientific American

NEW-YORK, MARCH 20, 1852.

The American Institute and Riddle's Fair.

In noticing the intended Exhibition, a few weeks ago, we remarked, "the American Institute may as well begin to groan;" it has begun. At the late regular monthly meeting of the Institute, the subject of Riddle's Fair was brought up and it elicited a very warm discussion. Of course the Fair was denounced, and no wonder, for shrewdly enough all the managers perceive, that with Riddle's Fair, in Reservoir Square, the walls of Castle Garden will look very bare, and the income of the Institute be very spare. The Institute is an incorporated Association, and is in debt to the handsome sum of \$15,000. Mr. Nash inquired "how was this debt to be paid off if two Fairs (Riddle's and that of the Institute) were held in one such small place?" The inquiry was an exceedingly sensible one, "how will the debt be paid?" "I ask," says Mr. Nash, if the project will not be our annihilation, for the American Institute cannot compete with a society which has a million of dollars at its back?" Col. Hoe stated that the plan of the Crystal Palace was copied from the iron houses of Mr. Bogardus; and Mr. Ebbetts said he well knew that Paxton took the plan from him. Well, it is our opinion that men of respectability should be very cautious how they speak about such things, for we are positive that none of them can adduce proof for these statements. It does not take a leaf of laurel from the brow of Mr. Bogardus, to give Joseph Paxton all the credit of designing the Crystal Palace.

The Bill to incorporate the Riddle's Fair, as an Association, passed the Senate of this State on the 10th inst.; it was opposed by the American Institute, but the opposition met with no respect whatever: its influence might have been weighed down by a feather. The Bill, we hope, will not finally pass, and yet what is to prevent it? Nothing that we know of. The American Institute deserves to be crowded to the wall, and its whole stock of mismanaging managers put up to the highest bidder, for while such an Institute might be an honor to our country—a centre of attraction to men of science, mechanics, and artists, it resembles only a dull school room. Look at the Paris Academy of Sciences; look at the Royal Society of London; look at the subjects discussed there. Does the American Institute reflect any honor on our country, as it might do with proper management like these Institutions? No, it does not. We regret this, for we wish it well—not for what it has not done, but for what it might do. We certainly want an Institution in New York like the Paris Academy of Science.

Riddle's Fair, we hear, is to be a joint-stock concern, and some of our wealthy merchants, it has been asserted, have become stockholders. It is not to be a World's Fair; it is to be a Big Show for selling the cast-off articles of the London World's Fair, at the best prices that can be got for them. Just show some men how to make money, and scruples of an honorable conscience are left to take care of themselves till the holidays are over. A pair of bellows, once belonging to Nell Gwynne, were keenly contended for by two noblemen at an auction. There is no accounting for tastes, sometimes, but we can always account for interests, and the man who would speculate in the cast-off robes of some notorious individual, either for a raree-show, or as an article of traffic, may be shrewd enough in his day and generation, but we question his sense of honor.

That the Riddle Fair will prove injurious to that of the American Institute, and a number of other local Fairs, we have not the least doubt,—but it is not yet opened, and it is our opinion that it will be a losing concern to its stockholders.

An Invention Wanted—Chance for Electric Engineers.

The Paris Moniteur offers a prize of 50,000 francs for a discovery that shall render the voltaic pile applicable, with economy, to industry, as a source of heat—to lighting, chemistry, mechanics, or medical practice. All

nations are admitted to compete during five years.

Here is an opportunity offered, and a prize to back it, for Mr. Paine only to fulfill what he has promised he could do, did do, and would do. The improvement belongs to the field of electro-chemistry, and is the only source of hope for the economic application of electro magnetism as a motive power.

Preserved Meats and Meat Biscuit.

Every commercial nation is deeply interested in the question of good preserved meats for long voyages and journeys. The old way of putting them up was by boiling the meat, placing it in tin cannisters, expelling all the air, and then hermetically sealing them. This would be a very good plan, if it was a sure and certain way of keeping meat fresh. But there are great objections to this method. One is, that the meat may not be well prepared before it is put in the cannister, consequently it will soon spoil; another is, the air may not be fully purged from the meat, and then it will also soon spoil; another is, a cannister may not be hermetically sealed, or if it is, a slight bruise, from handling it, may cause it to leak, unseen, and in that case, also, the meat will soon spoil. But the greatest objection to this plan is the facility afforded for fraudulent dealing, by those who contract to supply naval stores. Every cannister cannot be examined, because it is sealed. The late stupendous frauds practised on the British naval commissariat, whereby a million dollars worth of garbage was sold as preserved meats, should direct attention to a better plan of preserving meats, so as to insure a perfect inspection of every cannister, thereby obviating the liability of defrauding the buyer. The process of preserving meats, patented by Mr. Gail Borden, Jr., formerly of Texas, but now of this city, named the "Meat Biscuit," is destined, we believe, to be a great blessing to sailors, and all persons who undertake long voyages and journeys. The Governor of Bermuda, Hon. C. Elliot, has had some of this "Meat Biscuit" tried by Dr. Hall, Medical Superintendent of convicts in that Island, and it has been highly approved by him. Dr. Hall says "it has many advantages over preserved meats and soups; a whole cannister, either of meats or soups, requires to be used up at once after being opened, in warm climates, or it soon putrifies; it is not so with the 'Meat Biscuit.'" Dr. Hall has made many voyages to New South Wales from England, and no man in the world is a better judge than him; he also says "a cannister has been opened more than six months, and yet the article seems unaltered." He says he is using the biscuit daily, in lieu of beef-tea, for several of the sick. We would respectfully call the attention of the British Government to this fact—this irreproachable, high, and disinterested testimony to the value of the "Meat Biscuit." We do this at present, because this subject has been brought up in Parliament, recently, by one of the most astounding frauds, of garbage preserved meats, ever perpetrated on any government since the world began.

It is not very generally known that thousands of barrels of beef are packed every year, in the United States, for the Commissioners of the British Navy. They always require the best of meat; and who deserve it better, or require it more, than sailors? The United States could supply any quantity of the "meat biscuit;" it would be made of the best beef—none of the Goldner garbage—and every cannister can be inspected, so that no fraud could be perpetrated, and assuredly none would.

We would also call the attention of our own Naval Department to the "Meat Biscuit," for its real worth is not generally appreciated at home or abroad. Every pound of it contains eight pounds of good concentrated beef—muscle-producing substance; it makes excellent soup, and good fresh mince pies may be made with it every day. Dr. Lindley, F. R. S., Prof. of Botany in University College, London, in his lecture on the Alimentary Substances of the Great Exhibition, says of the "Meat Biscuit," for which a Gold Council Medal was awarded, "it is light, portable, and very nutritious. A specimen, placed in the hands of Dr. Lyon Playfair, was analyzed by

him, and found to contain 32 per cent. of flesh-forming principle. I am justified in looking upon it as one of the most important substances which this Exhibition has brought to our knowledge."

We would state here, that it takes a few trials to make the meat biscuit suitable to our common tastes, but this is owing to notions as much as any thing else. Col. Sumner, U. S. Dragoons, has used it, and nothing else, for days, in Texas, and four ounces were sufficient for his daily sustenance, keeping him healthy and strong. We hail the "Meat Biscuit" of Mr. Borden as one of the most useful discoveries of the present day, and we are confident that the Naval Departments of our own country and Britain, would find it to be one of the greatest of blessings ever conferred upon sailors, if they would only use it. Give it a fair trial, gentlemen of the Ocean Wave, and after the first voyage made with it, you will never be without it.

Views Respecting the Source of Light.

James Nasmyth, F. R. A. S., inventor of the Steam Hammer, an astronomer of no mean fame, and a man of splendid abilities, has recently published an article in the Edinburgh Philosophical Journal, explaining some of his views on the "Source of Light," which are both novel and interesting. He states that he has examined, for a number of years, the remarkable features which, from time to time, occur on the sun's surface, and whatever the nature of solar light may be, the "source of it appears to result from an action induced on the exterior surface of the solar sphere." Impressed with this view he was led to conclude that the true source of the latent element of light resided not in the sun but in space itself, and that the sun's duty is to act as an agent for the bringing forth into vivid existence its due portion of the luminous element, which, he supposes, is diffused throughout the boundless regions of space, and is perfectly inexhaustible. Reasoning upon this basis, he concludes that the element of light may not be equally diffused throughout the regions of space, and if this is so, it is easy to account for the glacial period, which as Geologists say, once existed on this earth, and which they account for, by boulders in Long Island, dritt grooves in rocks, where no icebergs are now seen, nor glaciers either. He says that there perhaps was a time when our sun in its course through the stellar universe, passed through a region of space, where the light-yielding element was deficient, and in which case his brilliancy would have suffered awhile, and an arctic climate in consequence spread from the poles towards the equator of our earth; the glacial handwriting on the walls of our mountains and ravines, he asserts, is unquestionable evidence of this. He believes that his idea of this source of light, agrees with the Mosaic account of the creation.

Substitute for Pen and Ink.

We have received from Mr. J. F. Mascher an indelible lead pencil: its marks cannot be rubbed out with india rubber after it is left on the paper for a short time; but it only makes a pale lead mark, and is nothing like the clear dark defined marks made with ink, nor the beautiful jet black of manifold writers, made with prepared paper. A pencil that will write as free as the common lead pencil, and make beautiful black and permanent impressions like the manifold writing paper, is a desideratum. He who invents such a pencil first, his fortune is safe; who will be the lucky man?

It will be seen that we are not yet at the end of invention. There are rewards offered by the French for inventions in Electricity; Mr. Ray has offered prizes for improvements connected with railroads, and there is a wide field for other improvements; and here let us say, that although some, at first sight, may deem a substitute for pen and ink a small invention, we say, it is no such a thing; it is more important than the one for which the French offer their reward. Let us take into consideration the great amount of writing that is performed every day; look at the letters, books, &c., which engage so much labor every day, in all parts of the world; think of the barrels of ink that are consumed every day, even in New York City; think of the number of times the hand of one quick pens-

man must travel from the sheet of paper to the ink-bottle, every day; and multiply the said number of times by the number of pensmen employed, and we shall find that an incalculable amount of time is lost by the mere dipping of thousands of pens, thousands of times, hourly, into dirty ink bottles.

When imagination revels for a moment on the blessings that would be conferred upon the scribbling community, by the invention of a jet-black indelible pencil, we cannot help exclaiming, "come, bright improvement, on the car of Time."

The Woodworth Patent—Petitions Against it.

No less than forty petitions, from different parts of our country, were presented against the extension of the Woodworth patent, in Congress, on Monday last week. Desperate efforts have been and are now being made to get the extension. Here is what the Washington correspondent of the New York Daily Times says about these efforts:—

"Very great exertions are now making to procure another extension of the patent for the Woodworth planing machine. In fact, the patent business never was so active in Congress as now. A powerful corps of lobby men are at work for this machine and many others, and if the assignees of the patent do not succeed in their efforts, it may be considered that the influence of the outsiders has become very insignificant. Monopolies are taxes more oppressive than any other existing under our form of government, and no monopoly ought to be allowed to exist one moment after the author of the improvement for which the patent is given has been compensated for his ingenuity, and the benefit he may have conferred upon the country."

Croton Metallic Paint.

A sample of "Mead & Fullmer's Croton Metallic Paint" has been exhibited to us, and we are convinced that it is a most excellent article, exceedingly useful, and superior to many paints for a great number of purposes. It derives its name from having been discovered in the neighborhood of Croton, N. Y., and is therefore a natural deposit; it is of a rich maroon color, and is principally composed of the peroxyde of iron, a proportion of alumina and silica, which makes it exceedingly valuable for covering all works exposed to the weather. It is excellent for painting iron railings, boilers, and all iron work exposed to moisture. We are glad to know that such a material for paint has been found so near this city. It is cheaper than white lead and many other paints in use; it works free with oil, and has a most beautiful surface. This beautiful paint is sold by Mr. Walter H. Mead, No. 19 Eighth avenue, this city.

Things to be Invented.

COAL DRILLER.—Recent discoveries prove that anthracite coal veins should be worked by perpendicular shafts when below the water level, instead of by inclined shafts, usually called "slopes." The slope is made by running down the coal vein all the way from the surface. The shaft requires to be drawn from four to six hundred feet deep, through the solid rocks that over-lie the coal, and its area is about 12 by 18 feet. To accomplish this by the usual methods, would involve an impracticable expense; and what is wanted is a steam drill to work, say twelve five-inch augers at once. A fortune will be the sure reward to him who can do this, and plenty of contracts can be had in the Schuylkill coal field immediately, the money being advanced by the colliers. Something of the kind is used at Pittsburg, to drill five-inch holes to considerable depths, for ventilating the coal mines there, but in the Schuylkill region nothing is known of the improvement.

ANTHONY.

Maryland Mechanics' Institute.

We have received a copy of the Report of the Committee of the Exhibition of the Maryland Institute, which exhibition was held in Baltimore in October, last year. The Report is an able one in every respect. It would be well if the Managers of the American Institute would take a lesson from this Report, and follow suit. The Maryland Institute is a credit to the Republic, and deserves the praise of all our people.