



The Fair of the American Institute.
No. 3.

The Twenty-first Annual Fair of the American Institute closed on Friday evening of last week. The closing address was delivered by Gen. Talmage, the same gentleman who delivered the closing address last year, and who was blamed by one of our Boston correspondents, for praising English for American cutlery—State Prison labor for that of the honest products of our embrowned mechanics, but as the Institute was incorporated by our Legislature to “cherish labor and promote domestic economy”, it was in perfect accordance with the conduct of their Charter givers, for the Institute to encourage convict as well as virtuous free labor.

The Address was an illogical, incongruous mass displaying no small amount of ignorance. He stated that our agricultural population “paid our taxes and fought our battles” and that all the boon Agriculture had been able to obtain was the publication a few years past, of a report from the Patent Office embracing a few matters of agriculture. He did not allude to the decided neglect of our mechanics, exhibited by government and the Institute—Our agriculturists should get at least 75 per cent of government favor, because they average this amount in proportion to the number of our inhabitants,—this would be right. Our mechanical classes should at least get 25 per cent of government encouragement, but have they got this amount of favor, this amount of just protection? Not they. The State of New York has a Geological and Agricultural Department at Albany, supported at no small expence—and there is not a single spindle, loom, model, or mandril to be seen in the whole establishment. The *Life*—of the American Institute, is the exhibition of works of mechanical and artistical invention and skill,—take from the Fair the works of our mechanics and artists, and it would be a miserable display of crazy brick bats, rotten bags of hops, and stewed apples in a milk pan, and although we have an excellent State Agricultural Society, and it would be the province of the Institute to encourage mechanical skill, it has studiously raised up the perpendicular of a Minor State Agricultural Association, and has endeavoured to buy and possess a Model Farm to spend the money that should be devoted to the encouragement of the Mechanic Arts.

Gen. Talmage forgot too, that the expensive reports by appointed committees by government to investigate into the sugar manufacture, and to make geological surveys, were more than mere Patent Office Reports. He also forgot or was ignorant of the fact, that the Patent Office was supported by mechanical inventions, and that the agricultural reports should not be made by that Department—that all such reports, were trespassing upon the nature of that Institution.

It is well known that the income of the Patent Office, last year, exceeded the outlay by \$21,232 84. \$465, was paid for agricultural statistics. The whole sum received by the Patent Office was \$63,111 19, all for inventions, yet how have our mechanical classes been treated, in comparison with our agricultural classes, by the Patent Office? why so far from Gen. Talmage being correct, the agricultural reports of the Patent Office, have been most voluminous and valuable, while the invention reports, have been but very shabby affairs—a few pages only devoted to our mechanics and inventors. We say, that the Patent Office should attend only to the duties of Inventors and inventions instead of devoting volumes to matter as valuable to those who pay the Patent Office revenue, as windlestraws and winter greens. A great number of our inventors are perfectly enraged at the manner in which they have been treated, and no wonder. There is certainly a reform needed both in the arranging and printing of the Patent Office Reports. We know not where the fault

lies, but there is a grievous fault somewhere.

These remarks have been elicited, by the address of Mr. Talmage—we want not only protection and encouragement to one class—but justice done to a certain class—a neglected but most valuable class—the very soul of our nation’s greatness, as we can satisfactorily prove to any man.

CLASP COUPLING JOINTS.

The first premium for Mechanical Inventions was awarded for West and Thompson’s Clasp Coupling Joint. Those who would desire to know more about this invention, will find it fully described and illustrated page 129 Vol. 3, Scientific American. We were the first to introduce this invention into public notice—since that period it has been patented both at home and abroad. We saw another coupling joint at the Fair to couple pipes without any bolts whatever, but it was very complicated and will never come into general use.

BLIND HINGES.

Quite a number of Blind fasteners &c., were displayed, among which we noticed particularly that of Mr. Talbot, manufactured at Taunton, Mass. This is a revolving Blind Hinge and it operates the Blind from the inside of the house without raising the sash, and answering all the purposes of a window lock at the same time.

DOOR SPRINGS.

The Door Spring of Mr. Thomas Peck, Syracuse, was the most simple exhibited at the Fair, and a great number of orders were given by persons who saw it. The Patent was issued last week.

DODGE’S BALANCE PUMP.

This pump, an engraving of which appeared in No. 2 of our present volume engaged no small share of attention. Owing to our readers having all a taste for Science and Art, great numbers of them visited the Fair, and Mr. Dodge’s Pump was recognised and very highly praised.

It is not possible, as we have mentioned before, that one title of the articles, exhibited can be described, and we must now take a brief review of some articles not mentioned before.

Mr. Hyde of Troy N. Y., exhibited a new Truck, the principal object of which was for the turning of rapid curves. The plan of the truck is entirely new and relates to the side bearings, from the main central cross beam to the axles. This part is made of two continuous iron curved springs—double like a ribbon, forming a series of arches—and thus combining the best form for strength as well as the best mode of allowing the car to recurve on the one side and extend its curve on the other. We will be able to present an engraving and a fuller description of this valuable improvement to our railroad interests, in two weeks.

Woodworth’s Planing Machine was exhibited by Messrs. Frink and Prentiss of Jersey City, also Mr. Carter’s Model of Blanchard’s Machine for turning irregular forms. These two machines were objects of very special attention, every mechanic seemed to know them and exhibited an interest, which we gleaned by their conversation—was raised by reading about them in the Scientific American. No machines have caused so many law suits in America or the wide world, as these two,—this speaks volumes for their value and importance.

Mr. Joseph Dixon, of Jersey City—a very ingenious and scientific gentleman, exhibited specimens of pure iron, and improved steel, also some of his superior crucibles. Mr. Dixon is well known for many valuable inventions, such as the duplication of engraved cylinders, improvements in the manufacture of iron and steel, and the best black lead crucibles in the country. Philadelphia and Baltimore were well represented. We noticed particularly a very neat and useful invention from Philadelphia. It was a Music Frame which turned the leaves of the music book while the operator was playing on the piano. The foot operates a stirrup, which moved a vibrating arm that regularly turned round catching a small rod between the leaves, bending it over and opening up a new page.

A portable saw mill from Baltimore, was a very ingenious and valuable machine, and

was universally esteemed as such. The Furniture department was well stored, and Jewellery and glass of every description made no small show.

Woolen Cloths exhibited some improvement—but in the Cotton line, the Jeans of York Mills, Oneida Co. N. Y. and the Gingham of Ida Mills, Troy, were this, as they were last Fair, by far the best—nothing like them.

Not being able to spare more room at this time, we will publish the prize medallist next week.

New Invention.

Our exchanges say that an invention for cutting stone is in operation in New Haven, which dresses down stone at the rate of a square foot in from one to two minutes, and with two attendants only, and a limited amount of steam power, doing the labor of more than a hundred men. There is said to be no mistake in the thing; and if so, it promises to make stone supersede brick, and revolutionize entirely our present mode of building. As we are not acquainted with its particular construction we cannot tell whether or not it differs from other Steam Stone Cutting machines.

Tanner’s Sumach.

The Venetian sumach, (*Rhus coriaria*) so much used in tanneries, is imported in large quantities from Sicily, and from the South of France, and sells at \$45 to \$50 per ton. It is very distinct from all the American species in its growth and general appearance, with the exception of the *Rhus copallinum*, and it is superior to them all for manufacturing purposes.

The best mode of forming plantations would be from seeds, which may be imported from Naples, or the south of France. It is of easy culture, and propagates rather freely from suckers. The *Rhus coriaria*, being a native of the South of Europe, it will not flourish to the northward of New York. On the light soils of New Jersey, which are there so prevalent, it would, no doubt grow well; but it would, probably, produce more shoots in the lower sections of the Southern States, where the climate is more congenial and mild.

Basements Unhealthy, Why.

They are naturally dark and not ventilated every day, as they should be; and the air is much worse near the floor, which renders such places generally unfit for small children to stay in. Parents and nurses should be very particular to remove the air by allowing the doors and windows to be frequently opened, to let in fresh air. O how much comfort and enjoyment, as well as prevention of ill health may be secured by a little care and attention to these matters!

Hydrophobia.

A cure for hydrophobia has been tried with complete success by Dr. Haller, of York, Pa., in consultation with Drs. McIlvain and Fisher. The patient, a lad twelve years of age, was bitten by a mad dog in April. Symptoms of hydrophobia appeared on the 2d of October, instant. The doctors ordered him to take two grains of acetate of lead and two grains Dover’s powder every four hours—to drink freely of diluted acetic acid, and have his spine freely rubbed with equal parts of Grayville’s lotion and olive oil. Under this treatment, (although but little was hoped) he commenced in 10 hours to show symptoms of amendment and has been gradually improving. He took eighty grains of each article without producing any other sensible effect upon his system than tranquilizing the spasms and producing sound sleep.

Something Startling.

A German gentleman advertises that he has at last solved the problem which the greatest chemists have hitherto thought impossible, viz: by discovering an ingredient by means of which the azote of the atmosphere can be totally destroyed, and thus producing a perfect vacuum—a new, cheap, and valuable motive power being obtained. We are sceptical on this point and believe the inventor to be an enthusiast or worse.

Telescopes four and one half inches long when closed, of power sufficient to show Saturn’s ring and some of the double stars, are now sold in London, with stand, case, &c. for fifteen dollars.

Cause of an Explosion.

A number of practical and scientific engineers having examined the cause of the explosion of the Concordia which recently happened on the Mississippi made the following report:

“That from the appearance of the boilers, there was at the time of the explosion a deficiency of water, though from evidence advanced it appears that the second engineer left watch some half an hour previous to the accident, and left with an adequate supply of water in the boilers. That it may be probable the flues in the larboard boiler were bare of water, in consequence of the boat having been listed to starboard considerably, when leaving Plaquemine, and when righted up, the water came in contact with the flue intensely heated by being left bare.

Prussic Acid.

Dr. Nesbitt, of the University of Glasgow was recently found dead in his room with a vial of prussic acid and one of ammonia beside him. A post mortem examination showed that he had taken some of the acid, probably as a narcotic, but finding that he had taken too much, it is supposed he had used the ammonia to counteract its effect.

New South Wales.

A manufactory of japanned leather is being most successfully prosecuted in Sydney. The article has not only superseded, to a great extent, that which was once imported largely from England for coach builders and others, but it is thought there will be eventually a considerable export of the Sydney manufacture.

The new Satellite of Saturn, discovered by Professor Bond of Cambridge Observatory, in the United States, was discovered by Mr. Lassell of Starfield, on the 18th of September. The honor of the first discovery of course belongs to Professor Bond and his country. Mr. Lassell’s telescope is one of the most powerful in Europe. Professor Bond writes to the Boston Traveller under date of 11th instant, that he has followed the new satellite through an entire revolution, and finds that a periodic time of twenty-one days approximately satisfies the observed positions.

On the coast of Africa, a British man-of-war chased a slave steamer, which, after leading her sixty miles from the coast, suddenly returned leaving the vessel of war to beat back, and in the meantime the steamer took on board her cargo of fifteen hundred slaves and was off.

A society was established in London recently, to be called the “Irish Amelioration Society,” to employ the peasantry in the preparation of peat fuel and charcoal; and by removing the peat, to effect the full reclamation of the bog lands.

Dr. Chalfice a writer on cholera considers that the Asiatic form of this disease is propagated by a minute insect which traverses districts like the blight with us.

If you multiply any given number by itself, say 8:—thus say 8X8=64; then take one from the multiplier and add it to the multiplied the product will always fall short by one of the former product. Thus:—from 8—7, one added to 8—9; 7—9—63.

The Montrose Review mentions the death of John Smith a labourer, who was wrapped in wet sheets, by George Steel, a hydropathic practitioner to cure him of rheumatic fever, and died within an hour. The doctor is to be tried for manslaughter.

The St. Louis Courier says that a company of stockholders residing in Kentucky, Indiana, Arkansas, Louisiana and Mississippi have organized themselves for the purpose of manufacturing cotton at Cannelton, about 120 miles below Louisville.

A rock of salt three hundred miles west of Fort Gibson Arkansas, furnishes salt equal to the whitest and finest table salt. It is obtained by the simple process of scraping the rock.

A diamond has been found in Borneo weighing 104 carats. It is said to be of the purest water, very regularly crystallised and will probably lose but little in polishing.