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Gross Injustice in the Navy.

It is well known to most of our readers that in pursuance of an act of Congress passed at its last session, a Board of naval officers assembled at Washington, during the past summer, for the purpose of forming a *Retired List*, to be composed of those officers who, in the opinion of the Board, were incompetent for the discharge of their duties. This Board met in secret, kept no record of proceedings, called no witnesses, and heard no arguments. They commenced their session on the 20th of June, and adjourned on the 26th of July. They lost several days by absence of members, and five days on account of Sundays. Their sessions commenced at 10 o'clock A. M., and lasted until 3 P. M. The Board were required by the act of Congress to make a careful examination into the efficiency of every officer. Their whole working time was less than 140 hours, during which period they adjudicated upon the claims of 712 officers —so that the "careful examination" amounted to an average of about ten minutes for each, the result of which was to seal the fate of many a good fellow who had served his country long and faithfully.

We have thus particularly called attention to this secret "Star Chamber" tribunal, because its action has been to declare incompetent, unworthy of promotion, and an incumbrance upon the Navy, the very men who for many years past and up to the present time, have done, and are doing, so much for the interests and reputation of our country. We refer particularly to those officers who have especially distinguished themselves by their high scientific attainments, Lieut. Maury, of the National Observatory, and Lieut. Maffit, who is, probably, the most eminent hydrographer in the service, and has distinguished himself by his services in connection with the coast survey.

Notwithstanding the Executive, by its approval of the decision of the Board, has declared these officers incompetent (and incompetency, in naval language without specification, means drunkenness, mental incapacity, cowardice, &c.) and as unworthy of further promotion, it has yet ordered them both to continue their respective important and responsible duties, thus recognizing them as better fitted for their respective posts than any other officers on the list. To use the language of the Philadelphia *Inquirer*, we regard the action of the Board "as an insult upon the virtue and general intelligence of the country."

There seems to have been, on the part of the Board, a feeling which induced its members to take advantage of their irresponsible power—to strike down almost every officer who had in any way distinguished himself by his scientific attainments; and in doing this they all took very good care to look out for No. 1, as will be evident from the following statement, which any one may verify for himself by examining the naval register. Of the officers whom the Board was called to scrutinize there were 362 on the naval list ranking above the youngest lieutenant on the Board, while below on the list were 332. Every one of the 360 of the higher rank who was removed or retired, promoted or advanced one or more members of the Board, and we accordingly find that they black-balled 138, but on the lower list—the retirement of any member of which would not affect the Board—we find they only retired 46 out of 332.

Among the officers promoted by the action of this Board, in displacing men of whom the country is justly proud, we know of those who, for the past few years back, so far from rendering any service to the country, have been engaged in other pursuits, in no way allied to the Navy.

In regard to Lieut. Maury—and the case is equally true of other distinguished officers—there is but one sentiment throughout the country, and that is, that gross injustice and partiality has been displayed. His eminent services have been acknowledged by almost every Government in Europe. Prussia and Sweden have struck gold medals to his honor. The Russian Ambassador, during the last summer, has publicly thanked him by the direction of his Government. England has not been sparing of her tribute of admiration in Parliament, and has adopted his plans in her own Navy, while the great French Industrial Exhibition awards to his charts her highest premiums. His own country, on the contrary, declares him a clog and an incumbrance on its Navy, and unworthy of promotion. We trust Congress will set this matter right. Better dispense with the services of the entire Board of "ten minutes inquisitors" than of this eminent man.

We understand that it had been proposed in Philadelphia that in case Lieut. Maury retired from the Observatory, to present him with a testimonial of $50,000, as an acknowledgment of his services, and as a mark of the disapprobation of the action of the Board. We doubt not that this sum might easily be raised in our great commercial cities. Yes, twice that if necessary.

Cast Iron Shot Tower—Shot Making.

A tall cast-iron shot tower has just been erected in Center street, this city, and is the only one of the kind in the world. It is under the superintendence of J. McCullough, who for thirty years has been celebrated for the manufacture of shot. We paid it a visit a few days since, examined its construction, and witnessed the various processes connected with shot making. The designer and builder of the tower is James Bogardus, the original inventor of cast iron houses—his factory on the corner of Duane and Center sts. being the first entire cast-iron house—story upon story—ever erected. The plan of the tower is novel. Its base is 25 feet in diameter, and 18 feet deep below the surface of the ground—resting upon a hard-pan of sand. The walls of the underground foundation are of solid masonry, four and a half feet thick. The cast iron tower above is anchored to huge stones in the wall, each having two holes bored through it near the center, and eighteen inches apart. These are twenty in number, and extend eighteen feet down through the wall. A wrought-iron shaft, two inches in diameter and 18 feet long, is secured in each hole. These shafts terminate above the stone foundation in holes at the base of the lower tier of cast-iron columns, which are firmly keyed to them. There are ten cast iron columns on each tier; each of the lower columns is anchored to two of the wrought-iron shafts. The lower tier of cast-iron columns support the entire superstructure, and they are of sufficient strength to sustain a weight of 28,000 tuns. Upon the tops of the first ten of the columns there rests a cornice made in ten sections—every pair of sections meeting over the center of a column. Upon the lines of juncture stand the succeeding tier of columns, in the same line with the lower tier. All the cornice pieces are bolted together, making them—as it were—one piece, and each upper column is bolted to both the cornice sections on which it stands, and also to the column underneath. Upon the second row of columns rests another cornice, and upon it a third row, and so on to the hight required, each ascending tier of columns standing and bolted on a cornice, and supporting a cornice above. The columns are 15 feet 3 inches long each, making, with a cornice, 18 feet as the hight of each story of the tower. There are 11 stories composing the entire structure, which, with the extra top cornice, makes the whole hight of it above ground 174 feet—with the 18 feet depth of well 192 feet; this allows of a sufficient altitude for casting the largest sized shot.

For the first two stories of the tower the spaces are left open; the remaining nine are filled in with brick, four inches thick, in which are inserted five windows in each story. This brickwork is only a panneling, not intended to add to the strength of the building, but merely to shelter the workmen from the weather. The columns have flanges on them, with corresponding sections of cornice, so that each panel of brickwork is neatly and firmly inserted and cemented into the cast iron work. Each panel has therefore great strength in itself, and does not depend for security upon another part of the building.

The outside diameter of the tower is 21 feet at the ground. It tapers at the rate of six inches to the story. The outside diameter at top is 15 1-2 feet—the inside diameters are two feet less.

The total weight of the iron employed in its construction is 208,300 pounds. Its entire weight is less than the 170th part of what the first story columns can sustain. Indeed, such is their strength, that the tower might be continued with safety until, with the same taper, it would terminate in a point—over six hundred feet high. We really would like to see such a tall tower or steeple erected.

The columns and cornices—it will be noticed from the description given of their method of fastening and combination—are so united as to render the tower equal in strength to what it would be were it a single casting of metal. This is the principle on which all Mr. Bogardus' buildings are erected. Every alternate column may be broken, and the stability of the remainder not endangered.

MAKING THE SHOT—The casting of the columns for this tower was commenced on the 15th of August last, and shot was cast in it on the 22nd of last month. On entering the tower from Center street, the first thing which arrests the visitors' attention is a large circular wooden tank on the middle of the floor, filled with water, and boiling as violently as if it were heated with a steam pipe at its bottom. On a little closer inspection it will be observed that the ebullition is caused by a constant shower of shot falling into the water from an elevated story of the tower. The larger the shot to be cast, the greater is the distance required for its fall. At the top of the fall a quantity of lead is kept in a molten state in a large iron pot heated by a furnace. This is poured with a ladle into a hollow colander of sheet iron, the colander having holes in it corresponding to the size of shot to be made. The surface of the lead becomes covered with a spongy crust called cream, which is used to coat over the bottom of the colander, to prevent the lead from running through too rapidly, whereby it would form oblong spheroids, instead of round drops. The lead passes through the holes of the colander in fine threads, but forming in globules at the under surface of the colander, and dropping down in a spherical shower into the large tub of water described, cooling in its descent.—This method of making shot is said to have originated with a plumber named Watts, in Bristol, England, who, about the year 1782 dreamed he was out in a shower, and the clouds rained lead instead of water. This incited him to try a successful experiment from the tower of a church with some molten lead. This story may be true, and it may not. The process, however, requires both care and skill in the management of the colander into which the molten lead is poured.

The shot is lifted with a copper ladle from the tub into which it falls, and placed on an inclined board to drip; from this it slides into an open iron box, heated with steam, where it is dried. The color of the shot is now a dull gray, and although it might answer perfectly for use, it must be polished for market—like a piece of furniture. This is done by placing it in an angular iron barrel on a rotating shaft, with some fine plumbago. The action of the shot upon one another, in this rotating *rumble*, polishes them finely, and gives them a dark clear surface. Three of such polishing barrels are used in this tower.

The process of separating the perfect from the imperfect shot is the next in order. The shot, after coming from the polishing barrels, is placed in small quantities on very smooth inclined ways, having sides, but open at the upper and lower ends. Two of such ways are at present used in this manufactory, each requiring one attendant. When placed on these inclined ways, the perfect shot run rapidly in straight lines to the bottom into a bin, while the misshapen shot move with a zig-zag motion, or do not move at all. The attendant, who uses a brush of the width of the incline, knows about the time required for the perfect shot to run into the bin, and he then sweeps back those that are defective into a receptacle at the head of the incline. The shot which we saw separated, contained a very small amount of defective ones in proportion to the quantity separated. After the perfect shot are thus separated from the imperfect, the next process is the separating of the different sizes—they not being uniform in one casting. This is done in vibrating metal sieves, or bolts of different sizes. Two of these were in operation; they resemble a chest of drawers hung upon rockers. The sieves are set one above the other the largest size uppermost, and the shot is fed in by funnel (two on each separator) on the top. When it is poured into the funnel, the attendant rocks the sieve chest by a handle, when the largest shot are retained in the top drawer, and the smaller pass through their separate sieves or bolts into their respective drawers. From these they are taken and placed in small canvas bags, according to their number, from one, upwards, and are ready for market. These are the whole processes of shot making.

Mr. McCullough calculates that the capacity of his tower is equal to the making of five thousand tuns of shot per annum. The business of shooting shot must be great and very active in our country, as a large number of persons are now employed in this establishment, and the building is not yet quite finished. We saw more than $20,000 worth of lead in bars, on the floor, waiting to be made into leaden rain drops, to carry death to thousands of pigeons, partridges, plovers, prairie-hens, turkeys, snipe, wood-cock, duck, and other fowl. Three hands were also employed in this establishment molding bullets of different sizes —each mold piece contained 132 molds of varying size. The molten lead was poured in like tallow into common tallow molds; the molds opened horizontally, and dropped the formed bullets into receivers below: this work was carried on with great rapidity. There are now three shot towers in this city, one of brick, one of wood, (gaunt ungainly structures,) and this cast-iron one, which, from its fluted columns and beautiful cornices, is an object of ornament to the city.

GREAT FAIR OF THE AMERICAN INSTITUTE
Last Week.

The American Institute Fair for 1855 closed on the 13th inst., after one of the most successful seasons that the Institution has ever enjoyed. The exhibition has been open for a little more than a month. The number of admissions, free and paid, have been about two hundred thousand. Nothing definite has been done by the managers in reference to the lease of the Palace for next year, but it is understood that, if possible, it will be secured. If such should be the case, it is probable that great efforts will be made to render the exposition of 1856 one of greater magnitude and thoroughly national in its character. If our inventors and manufacturers would take hold with good will, they might produce an exhibition purely American in its character, that would astonish the world. We hope they will do so, and if they do, we predict that the admissions next year will reach the number of, at least, one million of people.

There is talk of the purchase of the Crystal Palace, for exhibition purposes, by the American Institute. The latter is in a very flourishing condition, and fully able to do so.

One of the stirring events at the Palace last week was the parade and drill of the New York State Militia, Col. Lyon. The troops manœuvred in the north and south naves of the Palace. Their movements were witnessed by a very large assembly of ladies and gentlemen, who crowded the galleries, and all other available points. The loading and firing by soldiers called out much applause; of course no powder was used in their rifles, but the capping and snapping was so finely done that it evinced their skill with powder and ball.

Mr. Henry Randall, inventor of a plan for an elevated city railroad, obtained permission to erect a track within the Palace, above the heads of visitors, for the purpose of showing his invention. The track sweeps the entire circumference of the building, and is in length perhaps one-third of a mile. After spending several thousand dollars, the construction was brought to a stop, and the railway remains unfinished. It is too bad. It would have formed quite a feature of the exhibition.

The gas engine, we are again sorry to report, has failed to operate successfully. Beyond an occasional start of 20 or 30 revolutions, or a run of 5 or 10 minutes, having great

difficulty to carry its own weight, it has done nothing. We sympathize with the inventor, Dr. Drake, and trust that he may hereafter have better luck. We have no faith whatever in his ability to make an economical gas engine; still, we are ready to believe when we see it actually realized. Unlike Ericsson and his hot air coadjutors, Dr. Drake has put forth no braggadocio statements in regard to his invention, but works on quietly and hopefully, and whether ultimately successful or not, deserves much credit for his untiring perseverance. Dr. Drake is confident that he can make a successful gas motor. He has been quietly working at his project for many years. He asks no favors, he expects no converts until he succeeds in practically demonstrating the correctness of his theories. His invention is certainly ingenious, and he has our best wishes for its success.

The Cloud Engine folks having taken steam from the main boiler at the Palace, and found the supply insufficient, went to work and put up a portable boiler of their own, and then used the steam from both. But somehow luck has been against them, and the engine went no better. Take the performances of the machine altogether, it has done but little better than the Gas Engine. Notices are stuck up that cloud engines will be built to order, and guaranteed to make a saving of fifty per cent. We think it doubtful whether any one has been sufficiently convinced of its advantages by the movements of the specimen at the Palace, to make extensive purchases. No test has been made of its power; it has not even been connected with the main shaft. It has run as a mere toy. Perhaps there is some explanation for the ridiculous show thus far made, with which we are not acquainted. If the owners can apologize for it, we shall be happy to acquaint our readers, for we have no wish to do any one the least injustice. We were much pleased with the first performances of the Cloud Engine; we hope yet to become acquainted with its good qualities, if it has any.

Knitting Machines.

Mr. Geo. Whipple, No. 23 William street, N. Y., exhibits some of Ellis' patent machines for knitting stockings. They are curious little automatons, and their operations attract a great deal of attention, from the fair sex particularly. The old ladies seem rather suspicious in their examination. They turn over the work, pull it, stretch it, and subject it to a variety of tests, in order to make sure that they can really believe their eyes. But all who examine seem to become satisfied that the stockings are knit firmly, the same as by hand, only better. These machines make stockings at the rate of two complete pairs per hour, taking one thousand stitches a minute. All that the operator does is to move a small treddle with the foot. Different kinds of material can be used with facility, such as woolen yarn, silk, cotton, &c. Price of machines $100; an extra charge is made for the right to use it, but just how much the attendant could not inform us.

Pipe and Tube Making Machinery.

Webster's Patent is a new invention now exhibited for the first time. The rolling is done by means of a large open cylinder, within which, and geared to the cylinder, a couple of small rollers are placed. The inventor states that 10,000 feet of tin tubing may be formed in one day by a single man. 250 feet is an ordinary day's work. This improvement is applicable to the making of locomotive tubes, stove pipes, &c. It does the work well, and is very simple in construction. Webster & Miller, exhibitors, 67 Nassau street. New York.

Mann & Weeks, of Morrisania, Westchester County, N. Y., exhibit one of Ostrander & Webster's tube machines—an excellent invention, but not very recent. It makes all kinds of pipes and tubes with great facility, is compact, simple, and cheap.

Windmills.

The only one shown in the Fair is the Self-Regulating Windmill invented by Dr. T. G. Johnson, No. 196 Bridge st., Brooklyn, N. Y., illustrated in No. 3, present Volume Sci. Am. It is a very ingenious invention, and presents a handsome appearance.

The principle upon which the regulator operates is centrifugal force of weights acting against the tension of spiral springs, the tension of the springs taking the place of the force of gravitation in ordinary regulators, such as are used on steam engines. The tension of the springs keeps the sails turned or set to receive the wind, and the centrifugal force of the weights, whenever the velocity becomes too great, turns the sails out or edgewise to the wind.

The regulator, in its construction and operation is exceedingly simple, and acts upon precisely the same principle of the one so thoroughly tested and universally used upon all kinds of machinery. This improvement is one of the latest and best of its class. Now first exhibited. Patented 1855.

Improved Vise.

No screw is employed in this vise, but the movable jaw is attached to a sliding beam which is furnished with a rack and pawl. In order to close the vise, you push the movable jaw up towards the other with the hand, and the pawl holds the same; the grip is tightened by turning the beam, the head part of which is cam-shaped for that purpose. Raise the pawl with the finger and the movable jaw opens, being self-acting; the two jaws are connected by cross levers. This vise is opened, closed, and adjusted, much quicker than the screw kind; its cost is also less. It is a good improvement. R. W. & D. Davis, inventors.—Exhibited for the first time by Wm. H. Schofield, agent, Yellow Springs, Green Co., Ohio. Price $4,50 to $17,50, according to size. Patented 1855.

Grate Bars.

The Salamander Grate Bar Co., exhibit samples of Van Syckel's patent bars for steam boiler furnaces and other fires. The improvement consists in locking the bars together by means of mortices and dowels cast on their sides, in such a way that if one bar gets heated more than another it cannot warp or spring out of place, and so burn. Bars thus made last longer than those of the ordinary construction. This improvement is in use on nearly all of our ocean steamships. Patented in Europe through the Scientific American Patent Agency. Office of the Company No. 30 Pearl street, N. Y.

Hand Corn Planter.

This implement is a little dry looking thing externally, but internally presents an exceedingly simple arrangement for forming the hole in the soil, dropping the desired number of grains of corn into the same, and then covering them up. In operating, an up-and-down movement of the tube is only necessary. The end of the tube is thrust down into the soil, and makes the hole, it also takes up dirt enough to cover the corn; by the act of raising the planter out of the soil, the corn is discharged and covered. This machine, in its construction and operation, is said by the inventors to be better than those in use from the fact of its employing a swinging or turning seed distributing plate instead of a horizontal sliding one. The covering device is also more simple, and the whole contrivance much cheaper of construction than any others in use. Coleman & Williamson, 6 Wall st., N. Y., agents. First exhibition. Patented 1855.

Barlow's Patent Circular Saw.

This improvement consists in grooving the faces of the saw teeth from their points inwardly, forming thereby acute cutting edges or double fleams at their sides. Thus constructed the teeth act upon the wood like so many gauges, cutting their way through, not tearing it, as do the common saws. The result is that the stuff comes from the saw with its surface planed off about as smooth as can be done with a smoothing plane. Saws thus made are adapted for all kinds of work, splitting, cross-cutting, &c., no change at all in the set being required. We saw it cut some veneers of hard wood thin as paper, and many other specimens, with perfect success. It is one of the best improvements in circular saws that we have ever seen. The inventor has a convenient little tool with which the grooves are cut and sharpened. Price of shop rights for the saw and the tool, $25. Patented 1855. First exhibition. A Conger, agent, 345 Broadway, N. Y.

New Mode of Hanging Mill Saws.

The improvement consists in placing behind the saw a thin plate of metal, called a guide plate, against the edge of which the saw moves up and down. This guide plate looks like a second saw, only it has no teeth. It is of the same width, thickness, and length as he saw, but remains stationary. The inventor states that his method has all the advantages of the mulley rig, besides other features which the latter does not possess. The fender posts and other appurtenances are dispensed with, and the expense of the mill cheapened by some $200 or $300. A substantial 4-horse power mill is furnished for $750; larger sizes higher cost. Charles B. Hutchinson, Inventor. Exhibited for the first time by Hutchinson & Co., Auburn, N. Y. Illustrated recently in the Scientific American. Patented 1855.

Improved Mill Stone Dress.

Mr. W. P. Coleman, of New Orleans, La., exhibits a small operating grist mill, the peculiarity of which consists in the dress of the stones. The grooves have a curve which is contrary to the direction in which the stone rotates; the inventor claims that in this manner the grain is longer detained upon the stones, and that the grinding surfaces are always kept well supplied; the result is a great increase in the quantity of grain that can be ground. The mill at the Palace certainly works well.

The awards of prizes we shall probably publish next week.

Railroad Bridges—Terrible Accident.

On the 1st inst. a large excursion train containing about 600 persons left the city of St. Louis, Mo., to celebrate the opening of the Pacific Railroad on a trip to Jefferson City. They all departed "merry as a marriage bell," but alas! the scene of joy was soon changed to one of sadness and mourning. When the train was crossing the bridge over the Gasconade river—about 35 miles from Jefferson City—its timbers gave way, crash upon crash, precipitating the engine and the cars into the river, instantly killing about 24 persons, and terribly wounding twice that number, among whom were some of the most distinguished citizens of St. Louis. The bridge was about 30 feet high, and was a substructure of scaffolding put up as a temporary affair. The timbers of it do not seem to have been tested; it was a fatal oversight. The directors of this railroad were in too great haste to have it opened, and they ought to be held responsible for their conduct. The chief engineer, T. O. Sullivan, was among the killed, and he it was who should best have known the danger. Two other bridges on this road have since been carried away with freshets, and from the accounts published of their construction, we judge that this road has been most unscientifically engineered. It is a most dangerous, cruel, and short-sighted policy to build cheap, frail, railroad bridges.

Patent Telegraph Case.

In the U. S. Circuit Court, Boston, on the 31st ult., Judge Curtis gave a decision in the case of Wm. B. Clum, vs. Chas. H. Brewer & Baldwin, F. O. J. Smith and John T. Smith, *et als.* This was a case of a bill of equity brought by the complainants, as assigness from Prof. Morse, of a right to use said Morse's telegraphic inventions on a line from Boston to Provincetown, and asking to enjoin the respondents, who were erecting and using a telegragh between the same places, under a license to use the same inventions, from F. O. J. Smith, Esq. The ground taken by the complainants was that said Smith had no interest in said inventions, and could give no licenses. After a full hearing of both parties and an investigation of Smith's title, the Court,—Justice Curtis, decided that Smith was and is the legal and equitable owner of an undivided one-fourth part of all said Morse's telegraphic inventions, and as such, entitled to grant valid licenses to defendants to use the same, and refused to enjoin the respondents.

This decision is an important one, and will be received with much interest by all who are interested in the telegraph business of the country.

A Light Metal.

Dr. Roscoe, of Heidelberg, read before the British Association a paper on the "Formation of the new metals, strontium, calcium, lithium, aluminum, &c., from the chlorides of those substances." The metal lithium, he said, was the subject of much interest, from the fact of its being lighter than water or rock oil, in which it is preserved. One great quality of aluminum was its sonorousness; exceeded in sharpness of sound, when struck by a metal instrument, the finest bell-metal.

Curious Facts about a Book.

Subscriptions are now being received in London for the two forthcoming additional volumes of Macaulay's History of England, which were announced to issue December 4th. The Liverpool *Albion*, in noticing the fact, says that the subscription will undoubtedly reach 40,000, and that the day of publication will be postponed, and that the cost to the public of these 80,000 volumes (40,000 copies,) the price of the work being £1 16s., would be £70,100; and, if placed in a line, side by side, the thickness of each being two inches, they would extend more than two miles and a half, the exact length being 13,333 feet four inches. Piled one upon another, they would tower to an altitude which would be to the highest pyramid at Gizah as "Ossa to a wart," and more than three times the hight attained by the æronaut Gainerin when he made his parachute descent. It is difficult to convey an easily realized notion of what the hight of such a pile would be, as if St. Paul's Cathedral, the Monument, Pompey's pillar, and the great Pyramid were all placed one upon another, their hight would not amount to more than a tenth of that of the books. Their weight, estimating each at two pounds, would be 71 tuns, 8 cwt., 64 lbs., about eight times that of the great bell of St. Paul's and Tom of Lincoln together, and considerably more than that of the great bell of St. Ivan's at Moscow, the largest in the world except that of the Kremlin, which has never been suspended, though many engaged in the attempted operation have been hung!"

History of Wood Paper.

Messrs. Editors—There has been much said and published during the past year on the subject of "wood paper," and I believe it has been treated by you, and in many other journals, as a novelty in the United States.

I readily admit that improvements of machinery, and a close study of chemistry, have aided in producing a better quality of wood paper, and those who have thus pursued the subject of a triumph are worthy of thanks, for every improvement which cheapens so important an article as paper confers a public benefit. In 1830, in company with Lewis Wooster, Esq., now of Wisconsin, I commenced the manufacture of wood paper, and we succeeded so far as to make a very decent printing paper, on which an edition of the Crawford *Messenger* was printed. We also made a beautiful and strong article of wrapping paper, and many tuns of book board of superior quality. We used mainly the lime and aspen woods, and by a process exceedingly simple, I was enabled to make tuns of shavings in a very few hours. We obtained a patent for our process, but Col. Magaw, the inventor of straw paper, contended that our use of alkalies was an infringement of his patent, as his specifications read, "straw, and other vegetable substances." He, therefore, threatened us with an injunction and suit, and as he was rich, and we without the staple means of contention, we concluded to seek other modes of a livelihood. I am glad other minds and hands have taken up the subject, and have no doubt that for many purposes it will afford a cheap and valuable material, whether it shall ever take a place among the finer papers or not.

Joseph. E. Holmes.

Newark, Ohio, November, 1855.

Another Medal to Prof. Morse.

The Emperor of Austria has sent a massive gold medal to Prof. Morse, as a testimony of esteem for his genius as displayed by the invention of the "electro-magnet telegraph. This is the fourth token of acknowledgment from European sovereigns accorded to and received by Prof. Morse.

Wheat Cultivation.

Prof. Mapes, in a recent address at the Indiana State Fair, stated that the wheat crops of Ohio had fallen from 35 to 15 bushels per acre This statement is denied to be true by the editor of the Ohio *Farmer*. He asserts that the average amount of wheat raised per acre in Ohio is now greater than ever it was, and he gives statistics to prove his assertion.