

Scientific American

NEW-YORK, AUGUST 21, 1852.

Mechanics Fairs.—New York Crystal Palace.

Fairs, for the display of works of art and the products of industry, are of very ancient origin, and have been the means of doing much good in every country in which they have been established and encouraged. Our country, although young, has been greatly benefited by such exhibitions; they should be sustained with the heart's best enthusiasm of the nation. The objects of such exhibitions are to excite a spirit of laudible emulation, and to present objects of comparison for improvement. The man who exhibits a machine at a Fair, does so because he believes he has produced something which he is proud of displaying, and respecting which he has a consciousness that it possesses peculiar merit. Machines and implements of different kinds arranged together, enable those who are interested to make comparisons of their qualities, to detect defects, and thereby suggest improvements. That spirit, so pre-eminent in our people—the desire to excel—is thereby stimulated, and many men, observers at past Fairs, will be exhibitors at future ones; this is the way to improve and progress. Almost every (if not all) State in our Union has its State Agricultural Society, and the utmost latitude is allowed at the Fairs, for the display of useful machinery; this is right—we are glad that such a spirit is abroad in our land; it has done much for the advancement of Agricultural and Mechanical Art, and it will do much more.

The Annual Exhibition of the State Agricultural Society of New York, takes place at Utica on the 7th of next month (September). The Annual Fair of the State Agricultural Society of Pennsylvania takes place at Lancaster on the 21st of October next. The Fair of the Maryland Institute will take place in Baltimore on the 4th of the same month; and the 25th Annual Fair of the American Institute will be held at Castle Garden, this city, at the same time. We have noticed a few of these Fairs, because inquiries have been made of us respecting them. We hope they will all be well attended and well managed. We have a foreboding that this will be the last Fair of the American Institute, at least for a few years to come; we hope not, but we cannot get rid of this feeling at present. There can be no doubt, now, of the certainty of a World's Fair to be held in this city next year; the gentlemen who are at the head of it have surmounted every obstacle, and it is stated that it will be opened on the 1st of next May (1853), and perhaps continue for four years.

Hitherto we have spoken against this Fair, and called it Riddle's Fair; we now understand that the influence which was exerted at the World's Fair, in London, and of which some of our exhibitors, spoke to us about with unpleasant feelings, and which was deprecated, as being connected with the origin and management of the World's Fair, in New York, is no longer an obstacle. We looked upon this Fair as not National, and when it was asserted, that we were to have a Crystal Palace designed in England, which was to be a mere model form of the London one, we could not speak of the scheme, but as it deserved. But the building to be erected will be American in design and construction, and so far recommends itself to our favor. We always stated we believed it would be a benefit to this city, and so it will, and we hope and believe it will be of immense benefit to our whole country. Measures have been matured, and some discordant elements removed, to make it honorable to all engaged, and profitable to exhibitors and visitors. France, England, Austria, Russia, Prussia, Belgium, Spain, Turkey, and the Isles of the sea, will contribute to the New York Crystal Palace. We may expect to see the greatest Fair ever held in our country, in this city, next year.

Our First City Railroad.

The Sixth Avenue Railroad is now completed, as far as fiftieth street, and the cars began running on Wednesday last week. Twenty cars have been placed on it, to follow one another every five minutes. The Common Council, after this road was nearly finished, by

a shameful piece of trickery, endeavored to stop it. If the effort had been successful, in all likelihood the tax payers would have been made to bear the whole expenses of the company to the song of half a million of dollars. This is essentially our first City Railroad, designed to supplant the omnibus system. It is to be hoped that it will be managed with discretion, spirit, and a sacred regard for the good of the people.

The Yacht Race.—England Learning.

The Regatta of the Royal Victoria Yacht Club, came off in England on the 23rd of last month. In the contest, the yacht America, which took the prize last year, under the able management of the Commodore of the New York Yacht Club, came in third, two other yachts being before her. This has been made the subject of some rejoicing on the other side of the water, and it has been said boastfully "the American crack clipper has been compelled to take the third place assigned to her, and the honors of the club have been nobly regained." This, we say, is not so; the America, in that race, proved herself, as she did before, to be far superior to any yacht in the Royal Club. In the race, by a mistake, she was sailed for some time on a wrong tack, and thus lost considerable time, but even after this, when the other yachts had obtained this advantage, she passed them all, and would have come in first had the breeze not fallen away almost to a calm. The fact admitted in all the accounts of this race, of the America overhauling and passing all the yachts in the squadron, when the breeze was stiff, is proof positive of her superior qualities. The America, by the regulations of the club, was only allowed to carry but one small top sail, while the winning yacht carried large balloon topsails. The name of the winning yacht is "The Arrow," she is an old stager, but during the last winter she was lengthened, and so far as it, could be done, was remodelled after the America. This fact is the most honorable of all to American skill, for it proves incontestibly that the advantage and superiority of the America is owing to the higher scientific attainments of the Americans in ship-building. The sails of the English yachts were cut in the American fashion, and every thing that possibly could be done, in copying after our celebrated yacht, is an evidence that Uncle John is not too old nor too stubborn to learn from his young relative.

Lord De Blaquiere, the owner of the America, has written a letter to the London Times, in which he speaks, with enthusiasm respecting her qualities. He has sailed 7,978 miles with her since last November, and when under the most trying circumstances of wind and weather, behaved well. She has astonished many practical seamen in the Malta squadron, and has been distinguished by an almost total absence of repairs owing to the economy of her rig. He believes that her well-judged symmetrical lines, and her simple rig are the causes of her unmatched success, and he hopes that his countrymen will profit by her example.

The Flax Cotton.

This substance, about which so much has been said, and said favorably too, appears to be a failure; at least this is the view we take of the subject.

A parliamentary paper, recently printed in England, contains a further report from Sir Robert Kane, the Director of the Museum of Irish Industry, on M. Claussen's invention for the production of flax cotton. Some surprise has been expressed, that, if M. Claussen's improvement contained anything real, that the facts have not been communicated to the public. The result of the experiments in Ireland do not, however, appear to sustain the expectation that a substitute for cotton has been found in Claussen's method of working flax. The agents acting for M. Claussen found it impossible to produce satisfactory results in those works which they had themselves selected, and where they had been working previously. This was attributed to defective machinery. Sir Robert Kane, in his report, says that several interesting facts have been already ascertained as to the real nature of the material produced, and as to the true action of the material used. He expresses himself

satisfied that M. Claussen's process does not at all produce a material approaching in structure or organic quality to cotton. The views of the bursting up of the fibres put forward by some of the persons, who have come forward to explain the process in public, do not appear to be well founded. The flax fibres are, in M. Claussen's process, excessively finely divided and separated from each other, but each remains still a thorough and complete flax fibre, and quite unlike cotton; and the same amount of division, and the same fineness and pliability of fibre, may be given, and often is given, to flax, by simple dressing, especially if the flax has been over-rotted. This point, as to structural character, is fundamental to the value and quality of the flax-cotton, and further experiments are to be made. It is asserted since this report that the various minor difficulties which have impeded the practical application of the discovery have been fully surmounted, and that the use of the article has been carried on with great profit for some time past by a body of individuals in Belgium.

We, however, accept the statements about its success with great caution; we are positive that many falsehoods have been told about the cheapness of this production. A patent has been secured for the United States, and a company has been formed for carrying out its objects, but the company, so far as we learn, have done nothing to merit much attention in the way of successfully competing with cotton. We were informed some time ago, that a factory to carry out Claussen's patent had been started at Fall River; but its products are very dilatory in coming to market. On page 125, Vol. 6, Sci. Am., we stated that the nature of what was called flax-cotton was "entirely different from cotton," and the testimony of Sir Robert Kane corroborates our statement. It seems then, that the flax-cotton, so far, has failed to realize the expectations of many, and at the same time, has not turned out according to the representations of those particularly interested in making good their own assertions about the superiority and advantages of the discovery.

Telegraph Batteries.

A few weeks ago we published a few statements respecting an invention made by Geo. Little, in Electric Telegraphs, and the "New York Courier and Enquirer" copied them. Some person connected and acquainted with telegraphs, has endeavored to correct some things in the short article, but it is very evident that he is a careless reader. It was thus stated in the article referred to—"Mr. Little calculated to save \$200,000 to the Telegraph Companies; he does not use platinum, mercury, nitric acid, nor sulphuric." Out of this the corrector goes on to prove that this cannot be, as the batteries for all the telegraphs in our country involve only an expense of about \$12,000 per annum. This may be true; we know that Mr. Jones puts down the expense for batteries at a far lower figure—only \$6,100—but the article referred to did not state that the whole saving was to be effected in the battery—it only states he does not use certain materials, and no more. He also asserts that Mr. Little "has discovered nothing new, that the idea of substituting the magnetic electric machine for the galvanic battery, is not a new one. In 1845, Prof. Morse made the experiment on the magnetic principle on the line between Baltimore and Washington, using a magnetic electric machine belonging to Dr. Page, of the Patent Office." He also states that Mr. Davis, of Boston, and Mr. Baily, of Detroit, made successful experiments with a like machine. We would state that like experiments were made twenty years before Prof. Morse attempted it; but how does this man know what machine Mr. Little uses? It was stated in our article that he recorded messages exactly like the chemical records of Bain; Prof. Morse never did that, and if Davis and Baily have done so, let them produce the documents.

Boiler Explosions in France.

In twenty-two years there have been only eighteen accidents in France by the explosion of boilers. In that country no locomotive, nor any steam boiler, can be used without having been first submitted to the examination and test of one of the government engineers

appointed for that purpose. This plan we hope to see adopted at no distant day in our own country. Out of 10,000 boilers in use, in one year, there were only two accidents took place. It is creditable to France that she carries out the laws she has enacted.

What has been Done and what has to be Done.

There is something almost ludicrous in seeing men in this enlightened day, pulling and puffing at some severe physical toil, when the same thing can be done by a machine whose iron arms never grow weary, and whose sturdy limbs never need repose. Brick-making was one of the most slavish occupations in the world, and a few years ago all the work was done by hand, but man has been driven—in many instances against his own will—from this brutish toil, and the machine now performs that labor, leaving man to follow a nobler destiny. It is needless for us to speak of a thousand blessed substitutions of machine for manual labor, such as the grist mill for the quern; the threshing mill for the flail; the spinning wheel for the spinning frame; the hand loom for the power loom, &c., our object principally, in the few words we have to say, is to direct the attention of mechanics and inventors to the duty of observing and marking such and such severe and toilsome occupations for which machine-labor might be substituted. A company has just been formed in this city, for the purpose of sawing fire-wood by machinery into proper lengths for stoves, and selling it in that state to purchasers. Now, although wood has been sawn by machinery into proper lengths for stoves in many places, still, until now, no such wood could be purchased in this city; the wood used was all sawn by men employed for that purpose with hand saws. It may be said "the men who made it their business to saw loads of wood from door to door, were not very highly paid for their severe toil, and they will thus be thrown out of earning their daily bread, therefore such machine-labor should be discountenanced." Were the premises correct, the conclusion would meet with our assent, but machine-labor, in the aggregate, has not yet created a surplus fund of idlers; men, when thrown out of one occupation, soon fall into others, and in the majority of past instances, the changes have been beneficial. The question might be asked, why was there not such a sensible wooden company organized in this city before? we really wonder why so many of our men of capital were so long wooden headed on the subject.

In this city, where there are so many new brick buildings in the course of erection all the time, it is certainly a subject of wonder to see all the mortar and brick carried up high ladders by men, having little angular wooden boxes called "hods" on their shoulders. The labor is most oppressive and severe; in our opinion, it could well be superseded by machinery, so as to save running up and down the ladders, at least; this surely could be done by block and tackle. We might present some other objects for the consideration of our readers, but as we have so many sermons to deliver in one year, we have said enough upon this text at present.

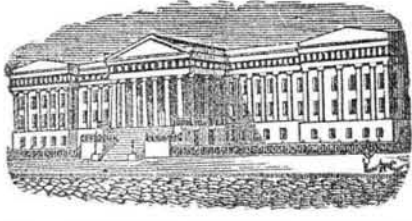
Extension of a Patent.

On the petition of Elisha K. Root, of Hartford Conn., praying for the extension of a patent granted to him the 10th day of December, 1838, for an improvement in punching or forming the eyes of axes, hatchets, &c., for seven years from the expiration of said patent, which takes place on the tenth day of December, 1852.

It is ordered that the said petition be heard at the Patent Office on Monday the 1st of November, 1852, at 12 o'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to be granted.

Persons opposing the extension are required to file in the Patent Office their objections, specifically set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing, must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

THOS. EW BANK, Com. of Patents.
Washington, August 12, 1852.



Reported Officially for the Scientific American

LIST OF PATENT CLAIMS

Issued from the United States Patent Office
FOR THE WEEK ENDING AUGUST 10, 1852.

PROCESSES FOR MAKING ILLUMINATING GAS—By H. W. Adams, of New York City: I claim the process of manufacturing illuminating gas, substantially as set forth, the process of feeding into heated retorts charged with bituminous coal, either oil, coal tar, resin, or asphaltum, or any other bituminous or carbonaceous substances, separately or mixed, and reduced to a fluid state, and decomposing the same in the same retort, and by the use of the same heat in conjunction with the distillation of the coal, in the manner and for the purposes substantially as described.

DOUBLE GRATES—By J. S. Brown, of Washington, D. C.: I claim the arrangement of the forked rods, or their equivalents, in combination with the inclined track and roller, for the purpose of causing the gate always to swing in the direction from the rider, substantially as set forth.

I also claim the combination of the latch, catch, and pin, or their equivalents, substantially in the manner and for the purpose set forth.

CASTING TYPE—By Wm. P. Barr (assignor to Geo. Bruce) of New York City: I claim the employment, in type casting machines, of an adjustable valve, substantially in the manner described.

CIDER MILLS—By Jarvis Case, of Selma, O.: I claim the employment of the revolving crushing cylinder or roller, with grooves cut in its periphery, the movable feedingslats or radial cogs, the eccentric rings or plates, and the scrapers, the whole being constructed, arranged and operating in the manner substantially for the purpose set forth.

MACHINES FOR DRILLING STONES—By Henry W. Catlin (administrator of the Estate of Alex. Catlin, dec'd.) of Burlington, Vt.: In behalf of the within named Alex. Catlin, I claim the revolving arms or wheels, having a cavity near its centre, to receive the core of the stone, in combination with the revolving cutters, in the manner and for the purpose described.

METHOD OF SECURING MOVABLE POINTS OF RAILROAD FROGS—By Marshal Curtis & Edgar St. John, of Binghamton, N. Y.: We claim the combination of the peculiarly formed shaft of the frog point, and its corresponding channel and socket, said point secured to its seat by spike and bolts or their equivalents, substantially as described.

TANNING—A. K. Eaton, of Rochester, N. Y.: I claim the combination of sulphate of potash, with the tanning liquor, substantially in the manner and for the purposes set forth.

GRAIN AND GRASS HARVESTERS—By Daniel Fitzgerald & J. H. Smith, of New York City: We claim, first, the construction of the floor in the centre, upon which a man may stand to gather the grain.

Second, the construction of the rim, to which the knives are attached, for the purpose of giving the butts of the grain a bed to stand upon, while being carried through the channel to the centre.

Third, the constructing a spiral channel within the guards, for the purpose of gathering the grain within the central space.

CARRIAGES—By Jonathan Fox, of Manchester, N. J.: I claim, first, making the hubs of wheels of two discs of wood, with angular scores cut in them to which the spokes are fitted, so that as the discs are drawn together, they bend the sides as well as the edges of the spokes, said discs of wood being fitted to and confined between two plates of metal, substantially as described.

Second, the sliding perch, in combination with the levers, ratchet wheel, and pawls, or such analogous devices equivalent to these, as will raise the hind end of the body of the carriage, and load when the hind axle stops, while the fore one moves forward; the weight of the hind end of the body and load adding, as it descends, in propelling the hind axle forward, the body being made to slide upon the roller of the forward axle, as described or otherwise.

Third, the sliding perch, in combination with the levers, or such analogous devices equivalent thereto, as will raise the load or a part of it, when the team or moving power starts, so as to partially relieve the team and carriage from the sudden jerk and shock to which it is subject, when the connection is firm and unyielding.

MANUFACTURE OF GLASS LENSES—By J. A. Gilliland, of New York City: I claim the manufacture of droptic lenses of glass in steps or rings by pressure in metallic moulds, as specified.

METHOD OF CONVERTING RECIPROCATING INTO ROTARY MOTION—By Chas. Howard, of Alton, Ill.: I claim an apparatus, substantially as described, for converting a reciprocating motion into a rotary one, or converting a rotary into a reciprocating motion, consisting of the wheel, levers (four) and connecting rods (two), or their equivalents, for the purpose specified.

MODE OF DRYING SIZED PAPER—By Jos. Kingsland, Jr., of Saugerties, N. Y., and Norman White, of New York City: We claim the process of drying sized paper, by passing it between a series of trunks, perforated on two sides, and so arranged that the hot air passing through these perforations, will come in contact with both sides of the paper, and then escape, and not run or be confined with the sheets.

REDUCING GOLD MINERAL—By Wm. Longmaid, of Beaumont Square, England. Patented in England Jan. 29, 1832: I do not claim the use of lime, when forming fluxes; but I claim the use of iron, substantially as described, to extract portions of gold, when the same are not readily precipitated by their density.

LOOMS FOR WEAVING PILE FABRICS—By Samuel Richardson, of Claremont, N. H.: I claim the spring flaps, or their equivalents, which open and close the pickers upon the wires, and support the wires after they are drawn from the loops, and carried to a proper position to be inserted between the sheds of warp and guiding them into the same, substantially as described.

RAILROAD CAR BRAKES—By John Schoenherr, of Reading, Pa.: I claim the method of arranging and operating the parts which render the brakes inoperative, at the pleasure of the engineer or other hand, viz., hanging the drops from arms on arbors, with arms projecting in a contrary direction to the arms, I, and connected by links midway to a lever, the end of which is the fulcrum; the power being applied to the other end, through the eye by means of the rope which passes through loops along the entire train to the rear end of which it is made fast, the same devices being repeated and capable of instantaneous action on each car, the arrangement thus having nothing in itself antagonistic to the end in view, the rope being always slack, and by its own weight and motion, when the train is under way, keeping the drops up and out of the way of the brakes, so that the brakes are always operative unless the engineer, by winding up the rope, throws down the drops, and renders the brakes inoperative for the time being; the whole being substantially as described, by no means intending to claim, however, the interruption of the operation of the brakes, actuated by the crowding of the cars upon the locomotive, by the interposition of drops, when these are interposed by mechanism, the weight and motion of which, when the train is under way, is antagonistic to the counterbalance intended to keep the drops up and out of the way of the brakes.

HATS—By Benj. Sherwood, of the County of New York, N. Y.: I claim, first, the attaching to a hat a ring, or part or parts of a ring, inside, to fit upon the head, and leave a space around it, for the purpose of producing ventilation, in the manner substantially as described.

Second, I claim constructing a band for the purpose of fitting easily to the head, of thin metal, made flexible, by cutting out part of the substance, in the manner substantially as described.

THREADING WOOD SCREWS—By Cullen Whipple, of Providence, R. I.: I claim, first, an annular concave burr cutter for threading screws, having a helical or conical serrated thread, substantially as described.

Second, the combination of the moving rests on opposite sides of a revolving screw cutter, with the mechanism described, or the equivalent thereof, for operating the same in such a manner as to move them simultaneously towards and from the cutter, to press the blanks against the latter, to be threaded, and so that the pressure of one blank in one direction, may be counteracted by the pressure of another blank in the opposite direction, as set forth.

Third, the combination of the vibrating rests with the vibrating rotating turn screws substantially as described, so that the blank may be rotated steadily, and with regularity, while the rest is carrying it towards the cutter, to sink a screw thread on it.

MILL DRESS—By J. W. Kane, of New Carlisle, O.: I do not claim a circular mill stone dress, in which the furrows are arcs of circles swept from a single centre; but I do claim the particular mill dress represented, constructed and arranged as described, or in any manner substantially the same.

COMPOSITIONS FOR PRESERVING BUTTER—By L. De Coru, of Cincinnati, Ohio: I claim the preservation of fresh butter, for any length of time, as described, using for that purpose the aforesaid chemical compound, or its equivalent, substantially in the manner and for the purpose set forth.

DESIGNS.

GRATE FRAME AND FENDER—By James L. Jackson, of New York City: two designs.

GRATE FRAME, SUMMER PIECE, AND FENDER—By James L. Jackson, of New York City.

COOKING STOVE—By Fredk. Schultz, of the District of Northern Liberties, Pa. (assignor to Wm. P. Cress, of Philadelphia, Pa.)

STOVE—By Jacob Beesley & Edward Delany, (assignor to Wm. P. Cresson), of Philadelphia, Pa.

COOKING STOVE—By Jacob Beesley, (assignor to Richard Peterson), of Philadelphia, Pa.

Woodworth Patent.

[Continued from page 374.]

The abstracts which the committee have caused to be made from the records of the Patent Office, imperfect as they are, throw much light upon the subject, and tend to show a sufficient reason for withholding from the committee an account of the receipts under the patent. The connection which they show between the administrator and Mr. Wilson from the beginning, in matters relating to the patent has been so intimate and continuous as to make it equally improper and impracticable to separate them in the investigation.—The agency of Mr. Wilson seems to have been the most active and efficient, except when new grants were to be procured, and these appear to have been uniformly obtained by their joint co-operation, though always in the name of the administrator. The abstracts of the Patent Office, with the aid of the data furnished by the papers before the committee show additional receipts from assignments and licenses to the amount of \$1,531,486, thus making an aggregate approaching two millions of dollars.

That even this large sum is only a fractional part of the amount of receipts is apparent, not only from the records themselves, but from other surrounding circumstances. It is well known that very few of the grants prior to 1836 have been restored since the destruction of the records by the fire which consumed the Patent Office. Many assignments of rights under the Woodworth patent were never recorded, though their existence is proved by recitals in subsequently recorded grants. A very large proportion of the grants which are entered upon the records recite only the nominal consideration of one dollar instead of stating the actual consideration. More than forty of the grants embraced in the abstract are of this description though conveying valuable rights, some of them for

entire States. Many, and indeed most of the conveyances by the administrator to Wilson, state no other sum than one dollar as the consideration of the sale. Such is the grant to Wilson for the State of New Jersey on the 9th of August, 1843. Such is the grant for the State of Maryland on the same day. Such is the grant to Wilson of the District of Columbia and the States of Virginia and Tennessee on the 14th of September, 1843. Such is the deed of January 11, 1844, conveying the whole of the States of Michigan, Georgia, and Arkansas, and large tracts of territory in fourteen other States. Such is the conveyance of the whole State of Vermont, except a single county, on the 10th of March, 1845.

The sole consideration for the sale to Wilson of the re-issued patent in the 9th of July, 1845, so far as the record shows, was the sum of one dollar. And even where the record states a sum which would seem to be the actual instead of the nominal consideration, the committee find upon investigation that the amount is understated in various instances. It is of course incredible that sales so important as those above enumerated, where the pecuniary consideration expressed was the sum of one dollar, were made for that amount in fact. In the case of the deed of January 11, 1844, the administrator admits in the memorial of 1845, that the actual consideration received was \$39,290. The records equally fail to show the true consideration of the sale to Wilson of the second extension. The deed of March 14, 1845, executed by William W. Woodworth himself, purports to convey the second extension, except the city of New York, in consideration of \$1,000. This the administrator now admits was not the true consideration. (See memorial of 1850, page 6.) That deed, however, if the relation of the parties was merely that of buyer and seller, of course terminated the interest of the administrator. Yet, on the 28th of May, 1845, a conveyance of the same right from William W. Woodworth, administrator, by James G. Wilson as his attorney, was executed to Henry R. Wilson in consideration of \$50,000; and he, on the same day, as the records indicate, reconveyed to James G. Wilson for \$46,000. But it seems that the fact was established before the Senate committee of the last Congress, that the actual consideration of the sale from Woodworth to Wilson was \$100,000. (Congressional Globe of 1849-50, page 461.) Many deeds were executed both before and after the last extension, by James G. Wilson as the attorney of the administrator, and it is evident that neither of them regarded it as desirable that the conveyances should disclose, when recorded, the full amount received from time to time for rights under the Woodworth patent. But another reason exists why the records of the Patent Office show only a very inconsiderable share of the proceeds accruing from the invention. A very large proportion of the rights under the first and second extension were held under licenses from Woodworth and Wilson. These licenses were not by law required to be recorded, and few of them therefore found their way to the Patent Office. It has been a favorite method with the proprietors of the patent to insure a rich, certain, and continued revenue, by exacting a fixed proportion of the gross earnings of the machines in regular periodical payments.

If the receipts from the invention had been only between one and two millions of dollars, as disclosed by the imperfect records of the Patent Office, an application for further bounty would be sufficiently extraordinary. But in the facts furnished to the committee in the printed statement and argument submitted on the part of the memorialist, in connection with those established by the other evidence, data are furnished which show that the sums named bear a very small proportion to the actual revenues of the patent.

It is stated in one of the documents submitted on the part of the applicant, that one thousand Woodworth machines were in operation in this country in 1850. The administrator proved, on his application for the extension of 1842, by the affidavit of Mr. Gibson, one of the principal grantees, that he had run five of the machines for ten years, and that "the said machines will and actually do dress flooring

boards to the number of one thousand a day, each machine," being an average upon each of ten thousand feet per day. In the printed statement or argument submitted to the committee on the part of Mr. Woodworth, it is stated that "one machine will plane ten thousand feet per day." In the same statement it is admitted that the public pay an average of five dollars per thousand feet for the lumber dressed in the Woodworth machines. The licenses recorded in the Patent Office show that one-fourth of the gross earnings is usually paid by the licensee to the owner of the patent; and in no instance have the committee been able to find that the average tribute exacted is less than one dollar per thousand feet for dressing ordinary lumber.

Taking these data, furnished by the memorialist himself, the gross earnings of each machine for a single day in dressing one thousand plank, or ten thousand feet, amount to fifty dollars. Of this, the clear tribute to the owner of the patent is one dollar per one thousand feet, or ten dollars upon each day's work of one machine; making, for one thousand machines, a clear tribute of ten thousand dollars for each working day, or three millions of dollars per annum, over and above the profits and tribute to the subordinate grantees and licensees. These are the results which follow from the facts furnished by the administrator. The committee are not able to vouch for the accuracy of those facts, and cannot therefore say how nearly the results approximate to the truth. They find one dollar per thousand to be far below the maximum of tribute; five dollars per thousand far below the maximum of price; and ten thousand feet per day far below the actual amount which these machines will dress, as claimed in the business advertisements of those who run them.

[To be Continued.]

Bugs in Peas.

A correspondent of the Germantown Telegraph in writing to that paper on the subject of bugs in peas, says he prevents them as follows:—

When my seed peas are ripe, I pick out the best, and put them into dry glass pint or quart bottles, filling each bottle as full as possible to allow them to be corked up. Then I place the bottle or bottles in a pan of cold water, and set the pan over the fire to get hot gradually. I let the bottle remain there till the water is too hot to bear the finger in it, then take it out, and cork it up directly, and seal the cork with rosin or anything to exclude the air perfectly. This gives the egg in the pea such a dose that it ceases to live, and does not all injure the pea, as I should fear scalding would. It has answered with me for many years past, and will answer for those who will follow my directions.

Almost every pea will grow, after being taken out of the bottle and sown in the spring; and from my experience I should say that about half the peas wherein the bug remains till spring, will not grow so as to do any good. I had full proof of this several years back. That year I picked out all the sound peas and sowed them only. The chickens got among them and scratched them up in places. Having no more sound peas, I sowed the bug eaten ones, but with poor success; for only one here and there grew. This satisfied me as how far the pea bug injured the seed-pea, and led me to adopt the bottling system, which has perfectly succeeded with me. The sooner they are bottled after being dry and ripe, the better.

Australian Gold

A specimen of Australian gold has been received at the mint in Philadelphia. By an assay of a portion of it, it was found that the proportion of pure metal is 966 thousandths fine; which is equivalent to \$20 per ounce, or thereabouts. Assays that have been made in England have given the result of 938 thousandths fine. Upon these facts it is presumed that Australian gold is better than California; containing less silver by 6 or 7 per cent. on the average.

While hauling up the wire cable of the electric telegraph between England and Ireland, a long and strong pull brought up an old anchor.