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Awarding Prizes for Improvements

The awarding of prizes properly for new and useful improvements by Mechanical, Agricultural, and like associations is a subject which deserves particular public attention at the present time. Prizes are offered by such institutions as inducements to excite inventors and others to study and labor, in order to accomplish superior results—to make improvements in the arts. This method of exciting the inventive genius of any people is commendable, and wherever it has been carried out in a proper spirit, has been the means of developing improvements and advancing civilization. When any association offers public prizes for the accomplishment of any specific objecst, it becomes a public contrac tor for the efforts of genius and skill, and is sacredly bound to fulfill its part of the engagement. If it fails to do this, it not only injures its own character, but retards the progress of improvement by destroying the confidence of many ingenious persons regarding the integrity of all associations of a kindred character.—It is thus that such persons may be prevented from becoming future candidates for such prizes, and the genius that would otherwise be called into exercise for victory in such contests, is left to lie dormant and unproductive.

The qualifications required of any society for awarding prizes properly, are simple and prominent. They embrace, on the part of those chosen as judges, and examining committees, a perfect *knowledge* of their duties, and unswerving honesty in fulfilling them.—With these qualifications, no society need have any fears in awarding prizes for improvements; but without them no society can do its duty wisely or well. With perfect ability to judge correctly, but lacking integrity to award justly, the least deserving candidate for a prize may receive the highest, and the most deserving candidate be denied his just claims. In this manner a great wrong may be done; and at many of our Fairs such wrongs, we believe, have been done. Again, with perfect honesty on the part of an examining committee, but without ability to judge correctly respecting the nature of the improvements submitted to their inspection, the awarding of prizes must be with them like the drawing of a lottery—a blindfold operation.

We have been led to make these remarks at present to direct public attention to the subject, by a circumstance which recently transpired in this city.

Our readers will remember that we related on page 284, how the Common Council of this city had offered three prizes of $500, $300, and $200, for the three best steam fire-engines publicly exhibited on the 6th of last month; and that the chief prize had been awarded to the most inefficient machine exhibited. This was our expressed opinion at the time. It now affords us pleasure to record the fact of that decision being reversed, and a new one made, which gives satisfaction, we understand, to all who can impartially judge of the merits of the case. An appeal was taken by those justly interested in the former decision, and it was referred to a special Board of Engineers, who, in addition to the public trial already reported, gave each engine a private trial, and were at great pains to make the examination thorough in all respects. This Committee awards the first premium to Lee & Larned's, the second to Burnham's, the third to Smith's machine.

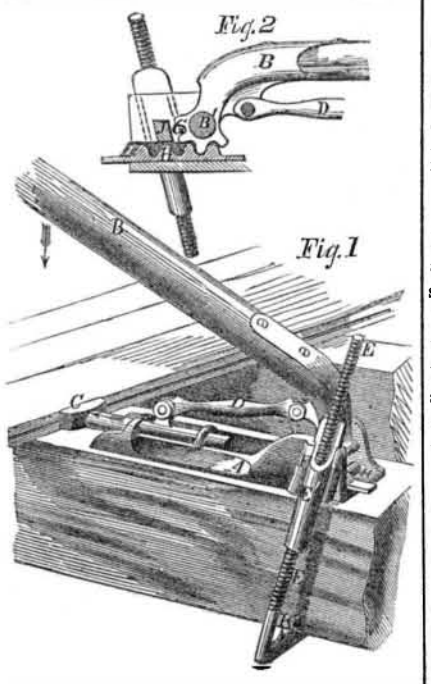
By the former decision, the machine which now receives the lowest prize was awarded the highest. The Board of the Common Council and that of the Aldermen have concurred in the decision of the new Examining Committee, and so has the public. In this case no harm finally resulted from the error first committed, because it has been rectified; but there are a great number of institutions in our country who offer and award prizes annually at their Fairs, and whose decisions, owing to the nature of their organization, once made, right or wrong, are never changed. Many complaints have at various times reached us regarding wrong and improper awarding of prizes at various Fairs, but not knowing the facts of the particular cases we could not intelligently give our opinions regarding those complaints. But at this particular period of the year, prior to the holding of the now very numerous State and County Institutions, Annual Fairs throughout our country, we call upon all such institutions to be very careful in their selection of judges and examining committees for awarding prizes. Let no persons be appointed to such offices unless they possess the qualifications we have pointed out, or hereafter some of them may be called upon—not to their credit—to reverse their decisions or suffer public disapprobation of their conduct.

Recent American Patents.

Improved Quadrant.—Ey Thomas Hedgcock of Wandsworth Road, England.—This is a very ingenious nautical instrument for accurately determining both latitude and longitude, without a chronometer and without lunar observations. An observation of the sun, only, is required. We are informed that the instrument has been practically tested, and found to be highly successful for the purposes named. If this is so, the invention is one of great importance and value. We hope to receive further confirmations of its good qualities.

Improvement in Augers.—By N. C. Sanford, of Meriden, Conn.—Consists in passing a screw down through the eye of an auger, through the wood handle, into a nut or plate. By turning the screw, the nut or plate is brought snugly up to the under side of the handle, and firmly secures it in the eye. This is a capital improvement. It enables the carpenter to use almost any sort of a stick for an auger handle, for it does not require close fitting.

Improvement in Carpenters' Clamps.—By H. W. Oliver, Whitneyville, Conn.—The implement shown in our engraving is intended to assist carpenters in clamping boards firmly together during the process of laying floors.



A is the bed plate of the instrument, having a hand lever, B, pivoted near its lower end, at B'. C is the clamp bar, connected with lever B, by means of rod, D. When lever, B, is pressed down, clamp, C, will be moved forward, in the direction of the arrow, and pressed against the edge of the board.

The implement is attached to the floor beam by means of the screw hook, E, the nut of which slides up and down between guides, F, on plate A. The lower end of lever B terminates in a segment gear, G (see fig. 2,) which works the rack, H, back and forth. One end of the rack, H, is made wedge-shaped. J is a button which attaches nut E' to A. When lever B is pressed down, the rack, H, moves in the direction of the arrow and pushes the wedge, I, under button J, whereby the latter is lifted, and with it nut E', and hook screw, E. The teeth of the latter, at K, are thus made to enter the beam and hold the implement from slipping.

When the rack, H, is moved in a contrary direction, the wedge, I, withdrawn from beneath the nut, J, and the hook screw, E, drops, carrying the teeth, K, out of the wood, so that the implement may be moved along on the beam to a new position.

When the lever, B, is bent down (as in fig. 2,) it remains self-fastened, the rod, D, being brought to a parallel line, like a toggle joint.

The facility with which this implement may be fastened and detached, its simplicity, cheapness of manufacture, and great strength, render it a most excellent assistant for carpenters. Address the inventor as above, or apply to J. A. Knight & Co., 334 Broadway, New York City, for further information.

Improved Windlass.—By James Emerson, of Worcester, Mass.—Consists of a capstan, windlass, and friction straps or brake, peculiarly arranged. The capstan turns independently of the windlass, and the movement of both is controlled by the strap. The improvement facilitates the warping of vessels to any given position when at anchor. It is also highly useful for general marine purposes. Mr. Emerson is a genius and has patented a great number of valuble improvemens in this line of invention.

Improvement in Locks.—By M. Erb & F. C. Goffin, of Newark, N. J.—Consists in placing a series of sector tumblers upon a shaft, whereby they may be operated without the use of springs, and the lock thus rendered extremely simple, far more durable, and less liable to get out of repair than the locks commonly used.

Improved Corn Planter.—By George Atkins, of Pittsburg, Pa.—This is a small implement, to be carried in the hand. The lower part is thrust into the ground wherever the seed is to be deposited. By the the act of thrusting, the seed is liberated from within, and caused to fall into the earth. The parts are very simple.

Machine for Thrashing and Cleaning Grain.—By Alfred Belchamber, of Ripley, Ohio.—The claims of the patentee will be found in the official list, in another part of this paper. The invention was fully illustrated and described in our last week's issue.

Improved Apple Parer.—Horatio Keyes, of Leominster, Mass.:—Consists in the peculiar construction of the knife head, whereby the cutter is made to conform to the inequalities of the surface of the apple, and cause the apple, however uneven or irregular in form, to be pared in an even and perfect manner.

Machine for Cutting Down Corn Stalks.—By W. S. Tilton, of Boston, Mass.—Consists of a two-wheeled vehicle, having two upright shafts, placed one on each side near the wheels. Horizontal knives are attached to the shafts, which are made to revolve by connection with the wheels of the vehicle. As the machine advances, the stalks are clipped by the knives, and fall prostrate. Farmers will be pleased with this invention.

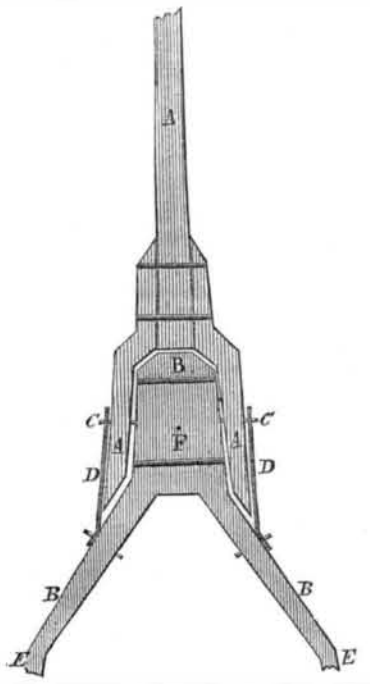
Portfolio for Binding Music Sheets, &c.—By James Shaw, of Providence, R. I.—A roller, constructed of wood, is permanently attached to the back of the portfolio on the inner side of the covers. The roller is equal in length to the covers, and has a longitudinal groove cut in it its entire length; it also has grooves cut in it circumferentially at equal distances apart. Metallic rings are fitted loosely into the grooves. The music sheets, maps, engravings, or other articles, are secured to the rings within the portfolio, by means of a needle and thread.

Improvement in Plows.—By N. S. Lockwood and J. D. Winn, of Dayton, Ohio.—Consists in a peculiar mode of attaching the post or breast to the mold board, and in the peculiar mode of attaching the share to the mold board. This invention is alleged to cheapen the cost of manufacture and increase the durability of plows to which it is applied.

Improved Harvester.—By J. C. Pluche and L. C. Pluche, of Cape Vincent, N. Y.—Consists in a pecular means employed for raising and lowering the sickle, whereby it may be made to cut the grass or grain at any desired hight from the ground; whereby, also, the sickle is allowed to conform to the inequalities of the ground. This appears to be a good invention.

Improvement in Cake Baskets.—By R. Gleason, Jr., of Dorchester, Mass.—Consists in having the lids or covers connected to the basket by swivel joint hinges, whereby the lids may be used as covers over the top of the basket, or, if not wanted, turned down underneath the basket, out of sight. This invention is designed for metallic or plated cake and fruit baskets. It is an ingenious and highly ornamental improvement.

Improvement in Wagon Tongues.—By J. T. Banghman, of Frazeysburgh, Ohio.—The object of this invention is to reduce the weight usually sustained on the necks of the animals that draw the vehicle. This is done by dividing the tongue into two parts, one of which is stationary. The whiffletrees are placed upon the stationary part, and the length and weight of the other portion or guiding tongue considerably lessened.



In our engraving, A is the movable or forward part of the tongue, and B the station ary or after part. They are united by a bolt at C. D are braces for supporting C. The after tongue, B, is connected at E with the axle of the vehicle.

The whiffletrees, or, as some call them, the double-trees, are generally attached to the movable tongue, and their weight is thus thrown upon the necks of the animals. But by the present improvement the whiffletrees are attached at F on the stationary tongue. This lessens the weight of the movable tongue, permits it to be made shorter, prevents galling of the necks of the animals, &c. The advantages of this improvement speak for themselves. Patented May 6th, 1856. Address the inventor for further information.

Recent Foreign Inventions.

Manufacture of Alum.—Peter Spence, chemist, of Manchester, England, has secured a patent for obtaining liquor or cake alum by a new process. He takes China clay, and breaks it into small pieces about the size of beans, and places them on a false bottom in a vessel lined with lead. The clay is now covered for about twenty-four hours with water impregnated with sulphurous acid gas, mixed with 1 per cent. of sulphurous acid, and slightly heated. This dissolves the iron out of the clay. The clear liquor is now run off, and the clay retained, is again covered with pure water, which, after standing six hours, is also run off. Diluted sulphuric acid is then added, heat applied, and the liquor brought up to 240° Fah., and kept at that until the sulphuric acid is saturated with alumina; this requires about forty-eight hours to accomplish. The solution is then run off in leaden coolers, where the alum concretes into cakes.

Chlorine and Peroxyd of Iron.—G. A. Thibierge, London, has patented a peculiar process for manufacturing chlorine and accessory products. In the common way of manufacturing chlorine, the peroxyd of manganese is employed, but this is dispensed with in the new process. Mr. Thibierge passes hydrochloric or muriatic acid gas over iron at a high temperature, and thus obtains protochloride of iron and hydrogen gas. He then