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Reaping Machine Trials.

It is our opinion that there is not a better mode of testing the principles of construction, and the quality of workmanship embraced in Harvesting Machines, than fair honest public matches, where prizes are offered for the best. But here lies the difficulty, viz., carrying out the intent of such trials fairly, and deciding justly on the merits and defects of each machine. In a recent number we published the report of the committee relating to the trial of mowing machines at Bedford, Westchester county; and if we are to credit the information we have received, (and it appears to be beyond a dispute correct,) that report of the trial was not only exceedingly defective, but incorrect. We find an article in the *Batavia (N. Y.) Advocate* relating to this trial, by a farmer who was an eye witness, who states that every machine on the ground, excepting Ketchum's, did clog repeatedly, while the report does not mention this, but classes it with three others, as being, like them, "least likely to clog." He also states that he was surprised that the committee gave the preference to Allen and Russell's machines for working on rough uncleared bottom, when it was notorious that Ketchum's machine operated better than the others.

At the end of the report of the committee, we stated that it was very unsatisfactory. It was too general, vague, and indiscriminating, and we, for this reason, judged it was the product of an incapable committee. It states that "on account of the finger caps reaching back to the finger board on Ketchum's, Manny's and Hallenbeck's mowers, these are the least likely to clog." It also states that "the machines having an iron cutter bar, cut the grass smoothest;" but with respect to the particular description of the machines, and wherein they differ from one another, it is decidedly defective. What does the report mean by the cap fingers not extending back to the finger boards? To us it appears to be Hussey's fingers; and if so, this should have been stated in the report. "Honor to whom honor is due." The machine of Mr. Hallenbeck, of Albany, got considerable praise, but did it get all it deserved? Hallenbeck first introduced the iron finger bar, and the open fingers. These things should have been stated in the report. Correct reports of such trials would be of great use to our farmers, but we must say that little reliance can be placed in any report of the kind we have yet seen. On this account, however, we will not say a word against such trials, for the ardor of the makers of such machines to come off successful in such contests, spurs them up to construct them in the most superior manner, and thus they have been led to introduce many improvements, both in the workmanship and in the arrangement of their several parts. We object in such trials to one man having more than one machine on trial, unless all have an equal number; for if one has two or three machines, and another only one—as was the case at the Bedford trial—it is natural to suppose that he who has only one will be more cautious in operating it, for fear of a mishap, than him who can remedy a breakdown to one of his machines by bringing in another to supply its place.

It gives us no small amount of pleasure to perceive the great improvement which has recently been made in such machines. Six years since, we repeatedly pointed to the huge and clumsy reapers and mowers then in use, few of which are now to be seen. Neat iron work has taken the place of large and unsightly wooden beams and bars, and we have now mowing machines of much easier draught, and altogether superior in every respect. We do not suppose, for a moment that we are at the end of improvements in such machines yet. Perfection is difficult of attainment, but without striving it never can be reached. There is still room

both for the exercise of inventive genius and mechanical skill in the construction of mowing and reaping machines.

Testimonial to the late Commissioner of Patents.

Since the announcement of the resignation of the Hon. Charles Mason, Commissioner of Patents, we have received letters from many parts of the country containing expressions of regret at his retirement from office, but coupled with words of eulogium touching his official conduct, and sentiments of esteem towards him as a man. No individual ever occupied the post with such entire satisfaction to inventors and the people at large, or vacated it amid such a general shower of complimentary remonstrances because he would no longer serve.

It has been suggested by one of our correspondents that the inventors of the country, and others, should unite in presenting to Judge Mason some sort of a testimonial, in token, not only of their appreciation of the important services he has rendered, but also as an acknowledgment of the debt of gratitude they owe him for those services. This proposal meets our unqualified approbation, and we shall gladly do all that we can to promote its accomplishment. We believe there are hundreds who will take personal pleasure in contributing for so worthy a purpose, and we presume that the mere announcement of the opportunity, will be all that is necessary to ensure a very substantial and gratifying result.

It has appeared to us that no place could be selected more convenient for the deposit of contributions than Washington; and that no person more willing or better qualified to receive the funds, purchase, inscribe, and present the testimonial, could be chosen than S. T. Shugert, Esq., Acting-Commissioner of Patents.

We therefore take the liberty, without having had consultation with him, to propose and request that all persons who desire to contribute to the "Mason Testimonial," shall enclose by mail, or otherwise, the amount of their subscriptions, and address the same to "S. T. Shugert, Acting-Commissioner of Patents, Washington, D. C." We further propose that the opportunity of subscribing to this fund shall be continued from the present time until the first of October next, and that the treasurer shall then expend the moneys he may have received, in the purchase of a service of plate—or whatever article may, in his judgment, be deemed more appropriate—the same to be suitably inscribed, and presented by him, on behalf of the contributors, to the Hon. Charles Mason.

In order to avoid inconvenience as far as possible, we shall request from Mr. Shugert, for publication in our paper, a list of the names of all contributors as fast as received. This publication, we presume, will be a sufficient acknowledgement of the safe receipt of the money, while it will also serve to show the progress and amount of the contribution.

We would remind our readers that it will require but a mere trifle from each of them to make up a handsome amount of money for the proposed object. We therefore hope that none will be backward about contributing because their amounts are small; "every little" will certainly help.

Death of an Inventor.

We are sorry to be compelled to chronicle the decease of John Gorrie, M. D., at Apalachicola, Fla., June 29th. Dr. Gorrie was an inventor of considerable note, his last and greatest work being the production of a steam ice making machine. A year or two previous to his decease, Dr. Gorrie had associated himself with a gentleman of fortune in this city, and they jointly undertook the construction of one of the machines on a large scale. Just as the apparatus was completed, Dr. Gorrie's partner died, and the mechanism fell into other hands, and was sold at auction. We saw it not long since at a foundry in this city. It consisted of a series of air pumps ingeniously arranged to condense air and reduce the temperature of the water, by passing it in showers through the condensers during the process of conden-

ation. The motive power was an engine of some 30-horse power; and the estimated quantity of ice which the machine was capable of producing was two tons per diem. The principles upon which this invention operated were described by us a long time since.

Mowing Machines—Disputed Points.

NEW JERSEY MATCH—A trial of mowing machines took place under the superintendence of the New Jersey State Agricultural Society, on the 9th inst., between Newark and Elizabethtown, on the farm of O. Meeker. Seven machines took part in the contest, namely: Allen's, Deitz's, and Dunham's, Whitenach's, Manny's, Ketchum's, and Forbush's. The trial is stated to have been very satisfactory, but we have not yet received the official report of the Committee. A great number of spectators were on the ground to witness it. The *Tribune* says respecting it:—"This trial indicates a very evident progress of improvement in New Jersey. We doubt whether ten persons would have come to see such an exhibition ten years ago, and if they had seen the machines at work, they would have been very slow to profit by the improvement, as in fact the whole country has been; for mowing and reaping machines are no new things, as all well know who remember how perseveringly Obed Hussey, of Baltimore, the original inventor and builder in America, has struggled along in poverty, till he has so far perfected his machines that others have come forward when his patent expired and made some trifling addition, and with the public mind ready to adopt such great labor-saving implements on the farm, they have reaped the harvest from the fields which Mr. Hussey had sown nearly twenty years ago."

This is a left handed compliment to little New Jersey. In some things it may be behind other States, but in some things we venture to assert that it is much in advance of others—such as in the manufacture of jewelry, watch cases, &c., patent leather, &c., as carried on at Newark. Then there is a Paterson, distinguished for its locomotive and cotton machinery. New Jersey has a high reputation for some kinds of manufactures, and the *Tribune* makes a great mistake when it stigmatizes its people for backwardness in reaping machine inventions, and gives all the credit to Obed Hussey, of Baltimore, for being the original and first inventor of them. New Jersey was the first State which distinguished itself for reaping machine improvements; the first American reaping machine patent having been taken out in 1803, by R. French and J. T. Hawkins, two of her citizens, and the machine of Wm. Manning, of Plainfield, N. J., patented in 1831, with the exception of the top guards for the cutters, was the same as the most approved of the present day—it was the parent of all the successful American mowing machines. "Honor to whom honor is due."

HAS McCORMICK INVENTED ANYTHING?—This is a question forced upon us by a letter from Messrs. Seymour and Morgan, of Brockport, N. Y. In it, it is stated that he is not the inventor of the zig zag side edged cutter, that "he claims the straight edged sickle teeth reversed every 1½ inches, in order to cut both ways. And we again repeat that Moore & Haskell first invented the straight sickle above described (some ten years before the date of McCormick's patent,) afterwards the zig zag sickle."

ROCHESTER TRIAL OF REAPERS—The account which we published in No. 44, taken (as stated) from the *Rochester American*, respecting the trial of reapers, is stated to have been very incorrect in a card published by Howard & Co., of Buffalo, in the *Rural New Yorker*. The report of the Committee on the trial has been published. The first premium was awarded to Ketchum's, the second to Manny's with Wood's improvements, and the third to Wheeler's. The report of the Committee is totally worthless so far as it relates to the construction of the machines. It states that "they had no time to examine minutely their mechanical construction."

What a confession for a committee appoint-

ed to decide on the merits of these machines.

Exhibition of the Maryland Mechanical Institute.

The eighth annual exhibition of the Maryland Institute for the promotion of the mechanic arts, will be held in the city of Baltimore on the 2nd of October next. The mechanics, artists, and manufacturers of the different States are invited to become exhibitors. The prizes are as follows:—One hundred dollars will be given for the best specimen of machinery; seventy-five for the best article the production of a mechanic or manufacturer, not included in the machine department; fifty for the best work of art; and twenty-five for the best specimen of ladies' needle, crochet, or knit work. These are extra prizes to the usual gold and silver medals. The Baltimore exhibitions have always been highly distinguished for display, spirit, and good management. We hope this one will be well attended as it deserves to be.

The Maryland Institute is the most complete and imposing in our country. It possesses a splendid and large building, has a School of Design, one of Applied Chemistry, and a regular winter course of lectures.

Big Spring Fair.

The second annual fair of the Big Spring Literary Institute, will be held at Newville, Cumberland Co., Pa., on the 7th of August (next month.) This Institute has for its object the encouragement of agricultural, mechanical, and the other useful arts. The exhibition will be held in the hall of the Institute at Newville.

Information respecting the exhibition of articles may be obtained by letter addressed to the President, John Diller, or Cor. Secy., W. R. Linn.

Beautiful Lithographic Work.

We have had the pleasure of examining some beautiful colored lithographic plates (representing varieties of fungi,) produced in Vienna, the place where the art was discovered, and which has been presented to the American Institute by Chas. F. Losey Esq., Austrian Consul in this city. These works of lithographic art afford abundant evidence of the great taste and skill of the Austrian artists, and that the mother city of this invention still maintains her superiority.

We are also indebted to Mr. Losey for a copy of the Transactions of the Austrian Association of Engineers at Vienna. This work is published twice a month, and shows us that in some things the Austrian engineers are ahead of ours, for the American Association of Engineers which was formed in this State a few years ago, has now no existence, and only published two short papers of its transactions.

How to Increase the Speed of Steam Vessels.

What is to prevent the paddles being affixed to chain cables passed over two wheels, one at each end of the boat? This would be equal, in fact, for practical purposes, to a paddle wheel of any desired diameter—one to which the motive power might be applied from two or more shafts, accomplishing a greater number of revolutions, and hence increasing the speed to almost any desired extent.—[Phila. Ledger.

Our cotemporary will find such a method of propelling vessels illustrated in our history, on page 152, vol. 5, SCIENTIFIC AMERICAN, invented by a distinguished Philadelphian, the partner of John Fitch. It is not a good plan, however, because it involves such an amount of loss by friction,

The Water of Albany.

We learn by the Albany *Knickerbocker*, that the water of Albany, at the present time, is in the same state that the Boston water was last year—it has got the fishy taste. The *Knickerbocker* calls for chemical analysis to unravel the mystery. That has been done with respect to the Boston water already, and accounts of the same will be found by our cotemporary in back numbers of the present Vol. SCIENTIFIC AMERICAN.