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CATALOGUE
OF
GARDEN, FLOWER, FIELD AND GRASS SEEDS, &C.



ALSO,

A DESCRIPTIVE CATALOGUE

OF

AGRICULTURAL AND HORTICULTURAL TOOLS AND IMPLEMENTS; HOT AIR, VENTILATING FURNACES; RANGES; COOKING, PARLOR, AND OFFICE WOOD AND COAL STOVES,

MANUFACTURED AND FOR SALE WHOLESALE AND RETAIL BY

DAVID PROUTY & CO.,

AT THEIR

FURNACE, STOVE, FARM IMPLEMENT AND SEED WAREHOUSE,

Nos. 19, 20, and 22 North Market, and 19 Clinton Streets,

BOSTON,

1851.



ANDOVER: JOHN D. FLAGG,
STEREOTYPES AND PRINTER.

ADVERTISEMENT.

THE Proprietors, in offering their Catalogue for 1850 to the notice of their friends, take the opportunity to tender their best thanks for the patronage they have experienced, while conducting their very extensive concerns for so many years, and express the hope, that their favors will still be continued, to mutual satisfaction. It has ever been their endeavor, and it will continue to be made their chief aim, to introduce to the notice of their customers, whatever of improvement may be discovered, in the construction of the various articles offered to their choice, and in particular, in the various Implements connected with Agriculture, as well as in the selection of the choicest seeds, both for Farm and Garden purposes; and by exercising their usual care and circumspection, they trust they may rely upon their friends for that preference which they have so long enjoyed, and which they gratefully acknowledge.

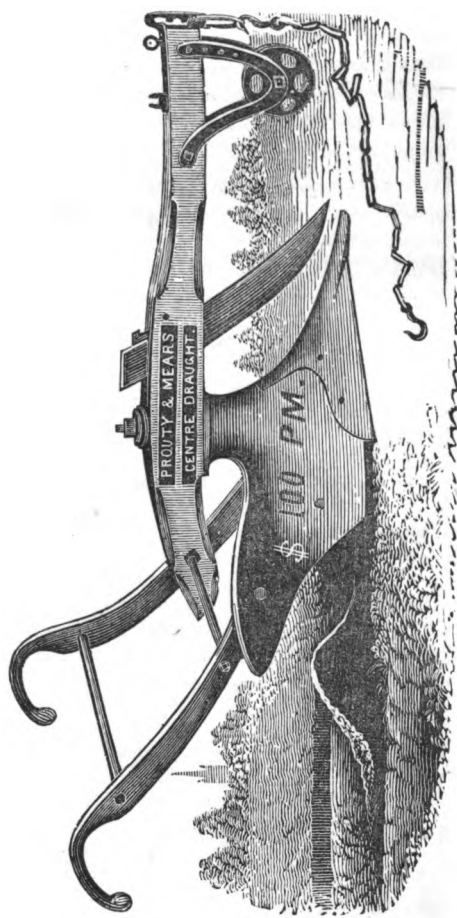
Great and manifest have been the improvements made in the construction of Agricultural Implements within the last few years, and particularly in that of the Plough in other hands, while their Patent Centre-draught Plough, of which they keep many sizes and patterns on hand, neither requires nor admits of alteration or improvement. As it was at first constructed in principle, so it remains, unapproached and unapproachable; the only addition being, the increase of various sizes and patterns, to fit them for every possible purpose. In the language of the Northampton Report on the trial of Ploughs last year: "Of easy draught, it turns the sward most perfectly, and in a clear, free soil, preserves its furrow without a holder; and if the ground is in the best condition for ploughing, nearly prepares it for seeding, by its peculiar shape and turn of share and mould-board, which pulverize and disarrange the particles of the furrow-slice, and consequently aid fermentation and decomposition, and the elaboration of food for plants, from the organic matter of the soil; all at much less expense, than the same point is obtained by the harrow; and in perfection,

perhaps fully equal to that 'spade husbandry,' which has been termed 'the perfection of good culture.' To follow this plough is to like it."

In connection with these ploughs, they are prepared to supply to order, everything in the Agricultural department of their establishment; as they continue to manufacture the best and latest improved machines, tools, etc., a portion of which only, can be enumerated in this Catalogue. Their field, garden and flower seed business has been placed on an enlarged footing, and is under the superintendence of an experienced Seedsman; arrangements having been made with the most responsible Gardeners, to raise seeds exclusively for their establishment. By these united means, they are enabled to offer to general notice, the choicest and most extensive assortment of Implements, tools, seeds, etc., together with standard works on the subjects of Agriculture, Horticulture, and rural affairs, on terms the most liberal.

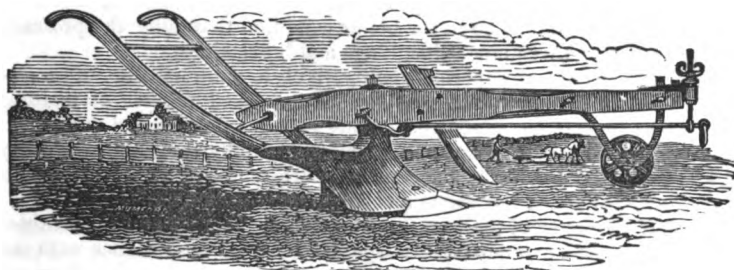
DAVID PROUTY & Co.





The celebrated Centre-Draught Plough.

PROUTY & MEARS' PATENT CENTRE-DRAUGHT PLOUGH



This Plough, the invention of Prouty & Mears, themselves experienced ploughmen, is deservedly most popular among farmers. The admirable principle of *Centre-Draught*—the result of careful experiment suggested by extensive and scientific investigation—renders it the most valuable implement for every kind of service to which it can be applied. By receiving the resistance of the furrow-slice equally on both sides, the line of draught being in the centre, the plough lands properly, and is drawn straight forward, with a regular and steady motion, and naturally keeps its true position. It is managed with such ease and comfort to man and team, that one man and a yoke of oxen are quite equal to the task of breaking up new land in a common soil—a saving of labor which will soon amount to the *first cost* of the plough. A distinguished farmer, Mr. Phinney, of Lexington, does not hesitate publicly to state, “that on conferring with some of his neighbors relative to the work of Prouty & Mears’ Plough, it is believed that in ploughing a field of ten acres, the amount of labor saved added to the amount gained in consequence of improved tilth, when compared with the work of any other plough, is fully equal to the price of it.”

Gov. Hill, of Concord, N. H., in a letter to us says: “The Sward Plough you sent me last year, the largest of the two, I have used in breaking up a piece of sward land, and it worked there as no other plough ever performed on my land. It turned every inch in the best manner, and I calculate that in the work of four days, it will save its price in lessening the necessary strength of the team. The same plough we have been using for the last ten days, in ploughing up rough land, full of roots and stumps, cleared from the forest two years ago. Here also it ploughed the surface nearer to perfection than I have ever known any other plough. I feared the breaking of it, or that it would give way, but it stands the rock bravely.”

The patentees have added to their already very extended list, several patterns, combining new and important improvements, adapting them to

every quality of soil and the various systems of culture; especially to an approximation to the *spade labor system*, which is admitted to be the *perfection of good husbandry*—and why? For the reason that at one operation it perfectly turns the mass, of whatever depth; covering all vegetable and other matter lying on the surface, leaving the furrow-slice in a fine, lively, friable state, crushing its hard lumps and disarranging its particles, thereby elaborating its food for plants. Hence, as but one ploughing is requisite, the proper moment may be taken for its performance, when the seed bed will be found to be in far better condition than after the protracted labor of two or three cross-ploughings and harrowings.

Their castings are of superior quality, both in workmanship and material. By using *pure iron*, the result of an improved process of melting, they offer castings of *less weight*, possessing *superior strength and durability*; thus, with chilled points, wings and landsides, and by the superior quality and finish of the wood-work, their ploughs are rendered in every respect the very articles which the wants and interests of the farmer demand.

The high character of the Centre-Draught Plough, abundantly sustained by a continued and extended patronage, is in perfect accordance with the decision of the able and impartial committee of the Massachusetts Agricultural Society, in awarding to the inventors the sum of \$100, the *highest premium ever given in this country for doing the best work with the least draught*, in a trial open to the whole Union, running its natural course, inclining to keep its true position without any effort of the ploughman, and turning a furrow one foot wide and six inches deep, *with a draught of only 294 pounds*, in compact and well swarded land, being much the easiest in draught of any plough of which we have any report.

Besides the great State premium of Massachusetts, the Centre-Draught has taken the high premiums in New York, Pennsylvania, Delaware and Maryland. Last fall, at four trials, where the Plough was the particular object of experiment, it took the highest premiums in four different States. At the County Ploughing Matches, their performance was the admiration of our best farmers, and premiums too numerous to mention, were awarded for the excellent work done by them; but the trial in Northampton, in the fall of 1845, is worthy of notice, where, "in accordance with a regulation of the Society adopted to prevent favoritism, or any suspicion of it, in the adjudging of premiums, the Committee were not present during the ploughing, and consequently could not know at the time of deciding, by whom any of the lands were ploughed." There were at this trial seventeen Worcester ploughs, and only five of Prouty & Mears', and yet to *all these five premiums were unanimously awarded*, and these of the *highest class*, though only eight were offered.

The *self-sharpening* principle, by which the point of the share, (so liable to wear upon the under side,) is readily turned over, thus causing the wear to facilitate its entrance into the ground. This process may be repeated so long as stock remains, when the other end of the point may be brought forward to undergo similar alternations. The wing of the share also is invertible, and with similar success. One peculiarity in this plough should not pass unnoticed, which is, the effectual manner in which it pulverizes the slice in its passage over and from the mould-board, completely disturbing the arrangement of its particles, leaving it perfectly accessible to sun,

air, and moisture, and is, in connection with the subsoil plough, the most perfect approximation to spade labor yet exhibited. The expense of running this plough is probably less than any other now before the public.

This plough when at work must not be set upright on its landside, but be permitted to take a bias or leaning towards the furrow, as when standing on a floor or level ground, by which the soil will be broken up and turned completely over, with the precision of the spade. Should the point work loose, unscrew the share bolt and insert a small piece of paper under the neck of the point, or the landside of the socket, and screw up tight.

The coulter must be set in exact line with the landside of the plough, from the point upwards, and on no account are its services ever to be dispensed with. If the plough goes too much on the point, shorten the traces or chain. By raising or lowering the wheel—care being taken that no more pressure be put upon it than just sufficient to keep it on the ground—any depth, from 3 to 10 inches, may be carried with the greatest regularity, without regard to the inequality of the surface of the land, or the extra aid of the ploughman. More or less land, to the greatest exactitude, can be given or taken by changing the direction of the clevis to the right or left. To constitute it a three horse-abreast plough, hook the rod into the notch on the landside of the beam, and bring it to the extent of the clevis on the same side. For two or three horse tandem, place it on the furrow side; and for two horses, mules, or oxen abreast, hook the rod into the centre notch, bring it to the centre of the clevis, and regulate the going of the plough by giving more or less land, in the customary way.

The following Premiums are a few of the many that have been awarded the Centre-Draught Plough:

At Bridgewater, Mass.

First Premium—Prouty & Mears' Plough.

Exhibition at Concord, Mass.

First Premium—Double team, Prouty & Mears' Plough.

Second Premium—Double team, Prouty & Mears' Plough, (held by a boy 14 years of age).

Third Premium—Double teams, Prouty & Mears' Plough.

Second Premium—Single team, Prouty & Mears' Plough.

Third Premium—Single team, Prouty & Mears' Plough.

Exhibition at Taunton, Mass.

Six Premiums to Prouty & Mears' Ploughs.

Philadelphia Agricultural Society's Ploughing Match.

First Premium, \$10.—For the Best Plough, Prouty & Mears' Centre-Draught, No. 5½.

Newcastle County Agricultural Society's Ploughing Match.

First Premium, \$10.—Best Edge Furrowing, Prouty & Mears' Centre-Draught Plough, No. 5½.

First Premium, \$10.—Best Flat Furrowing, Prouty & Mears' Centre-Draught Plough, No. 23.

Premium, \$10, and Farmers' Cabinet for one year.—Best Ploughing, Prouty & Mears' Centre-Draught Plough, No. 5½.

Baltimore Agricultural Society, Md.

First Premium, a Silver Goblet, value \$10, Prouty & Mears' Centre-Draught Plough, No. 5½.

Prince George's Agricultural Society, Md.

First Premium, a Silver Ice Spoon, value \$6, Prouty & Mears' Centre-Draught Plough, N. 5½.

Mechanics' Charitable Association, Boston, a First Premium.

Portland, Me., a Diploma.

Massachusetts Agricultural Society's Committee on Inventions, Premium of \$20.

Boston, Medal and Diploma for Centre-Draught Plough.

American Institute, New York, a Gold Medal for Centre-Draught Plough,

Massachusetts Agricultural Society. Worcester, a Premium of \$100 for the best Plough.

His Imperial Majesty, the Emperor of all the Russias, First Premium, a Massive Gold Medal, value \$300, Prouty and Mears' Centre-Draught Plough.

Maryland State Agricultural Society,

Awarded their first Premium of \$20 to Prouty & Mears' No. 5½ Plough.

The Agricultural Society at Mount Holly, N. J.,

Awarded their first Premium to Centre-Draught Plough, No. 5½.

Hundreds of Premiums might be named, but the above are deemed sufficient, as every Plough sold at our establishment will be warranted to give satisfaction in its operation.

Trial of the Boston Centre-Draught Plough in Albany.

REPORT OF THE COMMITTEE.—We, whose names are underwritten, were solicited to examine the Centre-Draught Plough, and witness its performance, at the farm of T. Hillhouse, Esq. The performance of this duty was far from being courted by any of us; but having been selected for that purpose, it would have been uncourteous to have declined; and having performed the duty, it is incumbent on us to report the result of our examination. We have no desire, we must state in the outset, unduly to magnify the Centre-Draught Plough, nor to praise unduly its performance. Neither can we be prevailed upon (even if desired so to do) to undervalue all or any of the various new and improved ploughs now before the agricultural community, which are brought in competition with it. But we nevertheless report truly and fairly the facts in the case.

The committee are almost strangers to each other — inhabitants of different parts of the State — chiefly, if not entirely, practical men, and accustomed to use (and perhaps prejudiced in favor of) other ploughs. Yet, with entire unanimity, we concur in the opinion, that *the Centre-Draught Plough is not surpassed by any plough with which any of us are acquainted.* The work performed by it is equal in excellence to anything we have ever seen, and performed with as little labor and fatigue by both ploughman and team, as it could, in our opinion, possibly be done. Perhaps nothing more than the above need be said, as it comprises, in general terms, all that we can say, or that it can be desirable to say. However, we will add:

The plough can be adjusted with the greatest nicety, both as respects the depth of the furrow and the width of the furrow slice, with perfect facility and ease.

We are quite sure that it runs very light, and is of course easy to the team. But we did not make any trial with the dynamometer, and therefore are unable to make any comparative statement between the draught of this plough and others. All we pretend to offer upon this point is the result of our observations upon the apparent effort and fatigue of the team — a conclusion which can be relied on to some extent, although we admit far from being conclusive. We however would remark, by way of fortify-

ing our opinion, that at the celebrated trial of ploughs, made at Worcester a year or two since, this plough bore off the premium of \$100, after a severe competition with some of the most celebrated ploughs. So far as the ploughman is concerned, we can with certainty assert, that severe labor and strenuous effort on his part, is entirely done away. Even skill is comparatively useless in working with this plough.

This may seem a strong position to take, but in confirmation of it we must state, that we saw furrow after furrow ploughed with great nicety, the hand of the ploughmen having been laid to the plough only to enter it at the commencement of the furrow. As to the style of the work performed, we can say, that some of the ploughs lap the furrow slice, (and they are those which we prefer,) and to which our report mainly refers.

The workmanship of this plough is *excellent*; and we beg specially to commend the casting of the share from a composition which is *much harder than ordinary cast iron*, thus insuring a greater degree of durability to the plough share. If to this be added that the share is also constructed upon the self-sharpening principle, it can easily be conceived that the purchasers are insured against the too frequent recurrence of the vexation that results from the rapid and often *unexpected* wear of the share.

In conclusion, we would remark, that this plough has obtained celebrity, and has received and is daily receiving the cordial approbation of men whose opinions have far greater weight than ours. We believe that it has lost none of its celebrity by the trial which we witnessed, for out of the numerous company present there was not one who did not seem to be both surprised and delighted with the performance of the plough.

J. B. NOTT, Albany County.

JOHN MCVEAN, Monroe County.

T. HILLHOUSE, “

C. HANNAN, Genessee County.

The Prouty & Mears' Centre-Draught Plough in Ohio.

MESSRS. PROUTY & CO.—I did not receive the plough you sent me, until the last week in November. Happening then to go to town with my wagon on a market day, I found it at the warehouse of Mr. Kirk, to whose care it had been forwarded by Mr. Smith, of Cincinnati, where it had arrived a day or two before, attracting very great attention from numerous farmers who had examined it, and by whom it had been much admired. When I had got it to my wagon and into the street, I soon had a crowd around it from three to four deep, and as many as could stand upon it, being literally blocked up, for a considerable time, by farmers who were desirous of seeing “The Boston Centre-Draught Prouty & Mears' Plough,” two seeming to come for one that left; but night coming on, I was obliged to leave.

The land being in tolerable order, on the Monday following, many of the neighbors collected to see the plough tried. We took it into the field together with one that drew a premium at our Fair, made by Mr. Peacock, of Cincinnati, who had left it with me for the purpose, and which, when tried by the Dynamometer, was the lightest running plough at the Fair, turning as neat a furrow as any, but not so wide, on which account it took the second premium only, although many considered it entitled to the first. The trial commenced by backing up three rounds, about fifty rods in length,

with the Peacock plough; land, a stiff clover sod three years old, interspersed with patches of very tough blue grass; the soil varying from very stiff clay to black loam: the surface rolling, and often very sideling. The rounds being long and soil stiff, we were not surprised to find the horses sweat considerably. We then hitched to the Prouty Centre-Draught, and backed five rounds to these three, when it was observed by all present, that by the time the team had gone a single round they began to cool, and before the five rounds were finished they had become perfectly cool, evidently walking off with great ease to themselves, although carrying a furrow an inch deeper and two inches wider than that taken by the Peacock plough.

We next backed up three rounds in another place, with the Centre-Draught, and then turned four rounds with the Peacock Plough, when, as soon as we started, the horses began to labor, and by the time the rounds were finished, they were in a sweat again. And although we had no Dynamometer to ascertain the precise difference between the draught of the two ploughs, it was very evident to all, that it was greatly in favor of the Boston Centre-Draught. Mr. Peacock has the reputation of being one of the best plough-makers in the State, and his plough was considered a first-rate article; yet when we came to compare the work performed, the difference between them was greater than in their draught, the Peacock plough edging the furrows, laying them uneven and considerably broken, leaving the clover tops visible through nearly all the work, while the Prouty Plough inverted the sod so completely, that you could not have told, and would have had to guess what crop had grown there, unless the clover roots had led you into the secret; the soil at the same time being left quite mellow, and in fine order for harrowing.

I have ploughed five acres of similar land since, and like my plough better and better. The work, examined by many first-rate farmers, has been pronounced by all, superior to everything they had before seen. I have also tried it in stubble-land, and find it to work admirably. I measured thirty-one furrows in the sod ground, and found them to average thirteen inches wide, with a uniform depth of seven inches. The wheel works to perfection, and is convenient on many more accounts, than regulating the depth of the furrows. I forgot to say, on the day of trial, and after following a couple of furrows with the Centre-Draught, it was proposed to let the plough go alone. No sooner said than done, and to our amazement it ran a round of one hundred rods without putting a hand to it, further than steadying it on land that was a good deal sideling; turning a much neater furrow by itself than with an indifferent ploughman. Indeed, it was agreed by all, that upon level land without obstruction, it would run all day, by only just turning it in and out at the ends.

An iron merchant of this town has engaged to bring on a number of ploughs from your establishment in Boston, in the spring, as a great many farmers are anxious to obtain them; I hope we shall be furnished in time for spring cultivation. The blacksmiths do not encourage them, as they will lose their work of sharpening and new laying the shares, as in other ploughs, but when they become known, farmers will, I am confident, send one hundred miles to obtain them, rather than purchase those now in use about us. The entire satisfaction which my plough has given me, and the universal admiration she has excited, have induced me, as in duty bound,

to give you the above information ; and in conclusion, I wish you to consider me your much obliged friend,

STEPHEN WIDNEY.

Piqua, Ohio, Jan. 28, 1845.

Chester and Delaware County Agricultural Society, Pa.

We, the undersigned, two of the Committee appointed by the Chester County Agricultural Society on Crops, do report, that we have this day viewed the corn-field of Paschall Morris, Allerton Farm, near Westchester ; that we have calculated the field to contain over ten acres, and that the average yield on the whole field, is *one hundred and one bushels and three pecks of shelled corn to the acre*. A portion of this field yielded seven half bushels of ears to the shock, which will give *over one hundred and ten bushels of shelled corn to the acre*. The Committee will further take occasion to observe, that the whole field was remarkably clean and free from weeds, and the soil appeared to be in a mellow and friable condition.

11th Month 3d, 1845.

Signed, { JOHN WORTH, JR.,
JAMES PAINTER.

Much of the merit of this crop, its freedom from weeds and continued growth and vigor from the start, are attributable to the deep ploughing and use of the Prouty Plough. This plough, by its peculiar mode of operation, breaking the texture of the sod, at the same time that it lifts it up and throws it over, pulverizes and crumbles to a certain extent the furrow slice ; and by opening it into seams or cracks, admits a passage for the sun and air to the particles of soil, meliorating them, and preparing for the reception of the crop ; and when the harrow is afterwards used, the whole is reduced to a finely pulverized state, highly favorable to the action of the atmosphere and the absorption of its gases, and affording no harbor for weeds, in the shape of impenetrable clods of earth, not uncommon, after the use of many other ploughs. This field, when the *ploughing* was finished, owing to the open and pulverized appearance of the sod, and the interstices between the furrows being all filled up, allowing no grass or weeds to be seen, resembled one already *harrowed*, and continued mellow through the season.

PASCHALL MORRIS.

The Centre-Draught Plough in North Carolina.

MESSRS. D. PROUTY & Co.—I will thank you to choose for me, from the excellent assortment of Implements in your store, three of your Centre-Draught, Self-sharpening Ploughs, No. 5½. Your Ploughs are very preferable and superior in all respects to the hundred, or, perhaps, endless varieties that are manufactured in the Union, and I congratulate you upon having brought so important an implement to a degree of perfection that leaves the husbandman nothing further to wish for, or desire. But I do not consider my recommendation necessary ; your Ploughs require no other test than a *fair trial*.—I am, respectfully,

FREDERICK RUTLEDGE.

Murraysville, Buncombe Co., N. C., Nov. 16, 1845.

The Centre-Draught Plough during the Philadelphia Exhibition.

MESSRS. D. PROUTY AND Co.—The value of the Centre-Draught Plough has been fully tested during the three days of the Philadelphia Agricultural Exhibition, in my field near the Lamb Tavern, where three acres of the stoutest Corn-stalks, on the roughest surface—the plough going across the ridges—and with weeds four feet in height on the head lands, have been so completely buried by a furrow fifteen inches wide and eight inches deep, as to leave scarcely a vestige behind; pulverizing the soil from the bottom to the top of the furrow, quite equal to the labor of the spade, a perfect and level seed bed for Potatoes in the Spring. The plough following a pair of horses much of the time without a holder, and performing, with the greatest ease, what I consider impossible for any other plough to accomplish.

Since then, I have turned up with the same plough, one half of a field for wheat, the other half having been ploughed with the common plough of the country and sown a month ago, and the difference in the appearance of the land is remarkable: that, after the common plough, requiring so much harrowing after the wheat was sown, as to become hard and flat, while with the Prouty Plough, a single turn of the harrow left the land light and in small well-broken particles, a fit seed bed for the wheat, which appeared above ground in a few days, as evenly planted as onions in a garden, with no fear of the surface becoming hard and washing during winter.

Mantua Farm, Pa., Nov. 14, 1845.

SAMUEL ROGERS.

REPORT

Of the Committee on the Trial of Ploughs, which took place at the meeting of the Agricultural Society at Northampton, Mass., on Thursday, the 18th of October last.

GENTLEMEN:—Your Executive Committee, to whom was referred the subject of awarding premiums on Ploughs, have attended to that duty, and ask leave to submit the following Report:

The plough lies at the foundation of agricultural progress, and any improvement in its construction or use diminishes the cost of production, and so far beneficial to all who eat bread.

Good crops depend upon good ploughing, as good ploughing depends upon good ploughs.

The object of ploughing is to fit or prepare the ground for seeding or planting, and the plough that does the most towards accomplishing this preparation at the same expense, is the best plough.

With a view to the trial of ploughs, the committee had provided a Dynamometer of the most improved construction, with a stationary power for moving the plough, and other apparatus for obtaining the weight of the furrow turned, which altogether was deemed capable of giving with nice precision the amount of work performed by each plough, and the amount of team-labor expended in performing it; facts which would at once show the comparative economy of using the different ploughs submitted to the test, and assist the committee in coming to a correct decision on the premises.

Of the different sizes of "centre-draft" ploughs put into their hands for

trial, by Messrs. Prouty & Mears, the committee, in discharge of their duty to the Society, recommended, as a plough for all work, the No. 5½ S. S. as the best plough within their knowledge. Of easy draft, it turns the sward most perfectly and in a clear, free soil preserves its furrow without a holder; and if the ground is in the best condition for ploughing, nearly prepares it for seeding by its peculiar shape and turn of share and mould-board, which pulverize and disarrange the particles of the furrow slice, and consequently aid fermentation and decomposition, and the elaboration of food for plants from the organic matter in the soil; all at much less expense than the same point is obtained by the harrow, and in perfection, perhaps fully equal to that "spade husbandry," which has been termed "the perfection of good culture."

In stubble land the work of this plough was found to be very good, and with the aid of a light chain, made fast one end near the plough clevis, and the other to the right hand whiffletree, with sufficient slack chain to sweep the ground, say, one foot in advance of the plough, the stubble was entirely covered in, and the work pronounced to be of the most perfect and satisfactory description.

This plough is a self-sharpener, and of full medium size, suitable for a single team, and, in the opinion of the committee, should be owned by every farmer who keeps but one plough, until it is superseded by a better one. Its self-sharpening point and share add very much to its value, by saving perhaps one-half of the expenses of repairing necessary to a common plough point, and this, together with the additional tilth of pulverization given under favorable circumstances over the smooth, hard, flat furrow plough, superseding or greatly reducing the immediate use of the harrow, may be safely said to amount to an ultimate saving of more than the whole first cost of the plough. To follow this plough, is to like it.

Plough No. 25 is a trifle smaller than No. 5½, and in comparison with the weight of sod turned, is rather of the lightest draft of either plough brought forward at the trial. It holds easy, turns a smooth flat furrow, and may safely be recommended to those who prefer that kind of work without regard to pulverization, as the best sod plough for a single team.

Plough No. 72 excited the admiration of the committee, by its easy holding, comparative light draft, and good work, and obtained their recommendation as the best sod plough for deep ploughing, or heavy work, requiring a double team.

A true "centre-draft" plough is so constructed that the central point of its line of draft, will balance on the central point of the line of resistance, and maintain its given depth and width of furrow in a free and clear soil, without assistance.

If otherwise constructed, the line of draft is more or less oblique to the line of resistance, and requires the labor of a ploughman to counteract the oblique tendency, and consequently increase the labor of the team in proportion to the waywardness of the plough, and the counteracting struggles of the ploughman.

This was so manifest during the examination and trial, that some of the committee were led to believe that the vaunted office of the "wrestling ploughman," was nothing more or less than a necessity growing out of the imperfect construction of the plough; or, in other words, the plough holder was needed mainly to conceal the ignorance or mistakes of the plough-maker.

A plough which unaided will keep its depth and width of furrow the most even and perfect in a clear soil, will require the less aid in a rough soil, and its easy draft and easy holding, is scarcely less important in the latter than in the former.

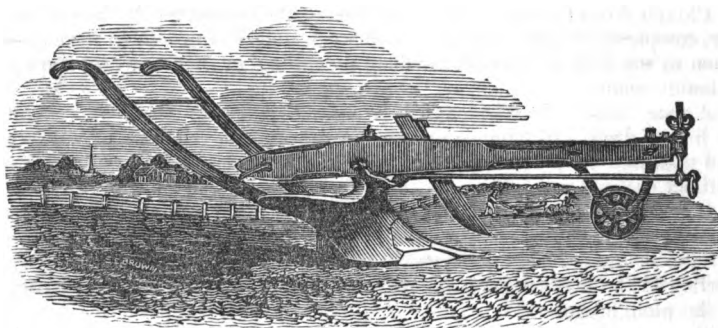
A plough should not depend for its reputation upon the skill of the ploughman, as is many times the case; but it should exhibit the intelligent skill of the manufacturer, if possible, to the extent of dispensing entirely with the aid of the ploughman in giving a *specimen* of good ploughing; and there is much reason to hope, that through the action of your society in this matter such implements will be produced that our farmers will soon discard, as worse than useless, every plough that requires the labor of man to keep it from running out or turning over in a clear soil. In behalf of the Committee.

WILLIAM CLARK, *Chairman*.

Northampton, Nov. 1849.

It should ever be borne in mind, and must never be forgotten, that the Centre-Draught Ploughs perform their operations on perfectly distinct and different principles from those of all others whatsoever. While one is careful to assure us, that his plough throws its furrow to an angle of 45° , and another boasts that the plough of his fabrication is calculated to turn a furrow so flat, that the slice will, in no case, yield to the pressure of the foot; and a third has discovered, that the perfection of ploughing consists in edging the furrow-slice, so that the grass along the interstice shall be covered by the action of the harrow on the over edge, thus disposed; the Centre-Draught Plough undermines the land, and carries up and over the pulverized furrow-slice, burying all vegetable substances, of never so strong a growth, just where it would be placed by the most careful spademan, namely, *in the bottom of the furrow*.

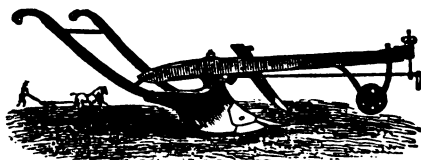
PROUTY & MEARS' PLOUGH No. 6 $\frac{1}{2}$.



This is a three or four-horse plough, of great strength and capacity. Self-sharpening, with reversing double point and share, turning a furrow to the depth of a foot, by sixteen inches wide, and burying the heavier growth of vegetable matter at the bottom of the furrow, without choking,

—this plough is equal to the culture of the strongest soil, at the least expense of labor and cost of fittings; 100 acres of land having been turned with a single set of irons, at the charge of less than a cent per acre for repairs.

No. 5½. This Plough is self-sharpening, and calculated for two or three cattle, carrying a furrow 7 inches in depth and a foot or 13 inches in width. It must not be held on its bar-share while at work, but be permitted to lean towards the furrow, when the surface vegetable matter will be completely turned over and buried. Admirable for breaking up old sward-land, which has been thrown out of cultivation; for by it, the soil will be so pulverized as to afford the finest tillage for corn, the rows at six or seven feet distance; after which, the land may be returned, inexhausted and improved, to the grass culture. The use of the wheel is strongly recommended, although the Plough is perfect as a swing plough without it: in this case, place the back bands forward; press upon the handles to go deeper, and lift up, to go shallower. The coulter must never be removed, but kept in a direct line with the breast of the Plough. The point and share may be repeatedly turned, when they will be found equal to the task of ploughing from 80 to 100 acres of land each set.



No. 30. This Plough is calculated for a pair of horses in working broken land. While at work, it must be permitted to lean towards the furrow, and if used with a wheel, the back bands must be placed forward. It will be found capable of turning a furrow four or five inches deep and nine or ten inches wide in a free soil, to the greatest perfection; pulverizing the land like a garden, and burying all surface vegetable matter in the bottom of the furrows. The irons are self-sharpening, and may be repeatedly turned, when they will be found equal to the task of ploughing from forty to fifty acres of land each set.



No. 2¼. A small one or two horse or mule plough, on the self-sharpening principle, with reversing point and share; capable of turning a furrow nine inches wide and five inches deep, in light sod ground.

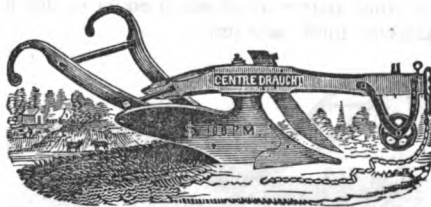


No. 1. A single horse, self-sharpening plough, with reversing point and share, for cultivating between rows of corn, etc.

Nos. 54 and 55. Full-sized left-hand ploughs, for two or three horses, with double reversing points and shares; equal to a furrow fifteen or sixteen inches in width by nine inches deep, and performing, with the greatest ease to man and team, on old or new land, and warranted to give satisfaction in all.

The left-hand plough is used, principally, by the German and Dutch farmers, in various parts of the country, and works equally as well as the right-hand plough. It can be used with two or three horses abreast, or tandem.

These ploughs are generally fitted with wheels, but they may be obtained without this appendage, which, however, is beginning to be properly appreciated in hard and strong soils, and under difficult circumstances; as, by placing a pressure on it by means of the arc-screw at the head of the beam of the plough, a lad of fifteen is equal to a labor which would otherwise require the strength and judgment of the best man on the farm—a most important consideration, at busy seasons, or in the absence of a competent ploughman.



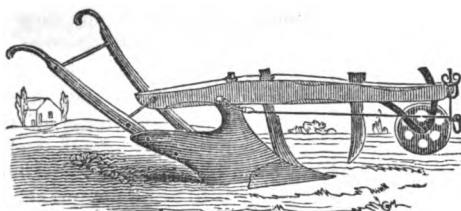
Nos. 22, 23, 25, and 26, are the Sward or Grass Ploughs, of a series of the Centre-Draught (Nos. 20 and 21 being the light one-horse and Seed Plough of this variety); which were intended to carry out and demonstrate that well-known principle, "That spade labor is the perfection of husbandry." The peculiar structure of the mould-board, or ground-wrest, being such, that, while the furrow slice is detached from the land in the best form (the rhomboid), it is carried over its winding surface with a moderate exertion of power, on the part of the team only; having the arrangement of its particles disturbed, their cohesion destroyed, and the mass, in a light and friable condition, inverted and laid off by the side of the last furrow, completely covering all loose and vegetable matter which had before been found on the surface, thereby bringing about the desired result in a most satisfactory manner.

Nos. 21 and 20. These ploughs are adapted to the labor of one horse, carrying furrows four or five inches in depth, and from 8 to 9 inches wide. While at work, they must not be held on the bar-share, but be permitted to lean towards the furrow, by which the soil is pulverized and the vegetable surface-matter completely buried. They are not calculated for turning down trash, but for second stirring or sod ploughing, working between rows of Corn, etc. they are perfect in all respects.

Nos. 19 and 0. Cotton Ploughs for single teams, of superlative make

and finish. They are admirably adapted to the eradication of weeds and pulverization of the soil. For working the land between the rows of corn, they will be found the cheapest ploughs in the market.

PROUTY & MEARS' IMPROVED MEADOW PLOUGH,
Nos. 25, Eagle C. L.

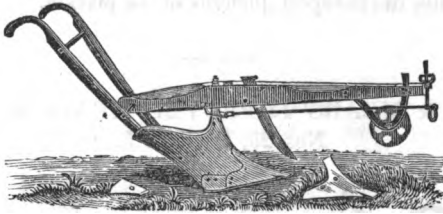


These are strong four cattle Ploughs, with the addition of a wrought iron lock coulter. To these ploughs there is affixed, when required, a steel-edged share or point, cutting very wide, and a reverse, or drag cutter, for the purpose of cutting and completely turning over the surface of wet meadows, where drained by ditching. A crane clevis is attached to the end of the beam, which enables the team to travel on the unbroken ground, and thereby keep clear of the miry furrow, which would otherwise be very fatiguing, if not wholly impracticable, thus making it comparatively easy work for the team, and obviating the great objection to breaking up wet meadows or swampy lands. When the steel-edged share is removed, and a strong cast iron one replaced, and the forward or drag cutter removed, the plough is adapted to rugged upland and hills, it being the strongest cast iron plough ever made for such purposes, thus rendering it fit both for upland and meadow ploughing.

It may be well to explain the terms used here, as *Lock Coulter* and *Cutter*, which are too often used as synonymous. The *Cutter* is of wrought iron, edged with steel. It passes through the beam, and is confined by a key or wedge, or is sometimes clasped on the side of the beam by a strong band of iron passing round the whole beam and cutter, and reaches down nearly to the point of the share. It can be raised or lowered at pleasure, or taken out entirely.

The *Lock Coulter*, is also made of wrought iron and edged with steel. It passes up through the beam, and is fastened by a screw nut, and also connects with the share, by locking quite through the share and mould-board, where it joins them. This mode of fastening gives a plough much greater strength, and makes it much more suitable to be used among rocks and newly cleared land, and among roots, etc., as the coulter cannot be turned one side, or forced out of its place.

THE GORDON PLOUGH,



For extra deep ploughing. These are a new series of ploughs which we have recently got up at the suggestion of the late Alexander Gordon, Esq., of New Orleans, for the more perfect cultivation of the Sugar Cane. They are calculated to carry furrows one foot in depth, and from twelve to eighteen inches in width, with a team of from four to six horses, mules or oxen, and ploughing to such a depth, as to bring the unexhausted soil to the surface, burying effectually all surface vegetable matter in the bottom of the furrow, thus making it one of the most important implements in the sugar culture.

In this Improved Plough, we have an additional cutting-edge or share, on the mould-board, by means of which the furrow-slice is cut gradually, as it rises on the mould-board, the full width of the furrow. The work is more perfectly done, and with greater ease to the team. Many soils are turned with ease, in which the common plough will not do good work. It can also be used in the common way, by substituting the filling-in-piece for the extra cutting edge.

No. 33 is intended for two or three yoke of oxen, and is for very deep ploughing; turning a furrow from twelve to fourteen inches deep, and from fifteen to eighteen wide.

No. 72 is intended for four cattle, and turns a furrow ten to eleven inches deep and fourteen wide.

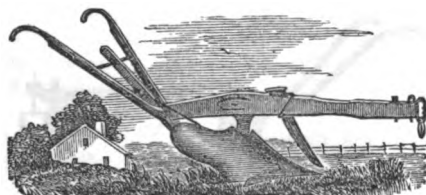
No. 71 is a three or four cattle plough, turning a furrow eight inches deep and twelve wide.

No. 31. This Plough is intended for one yoke of oxen, or two horses, and turns a furrow six inches deep and twelve wide.

ROAD PLOUGH.

No. 8. This Plough is particularly designed for turning New Lands, making Railroads, Canals, Turnpikes, etc. and is capable of sustaining a team of from six to twelve cattle. This is undoubtedly the strongest cast iron plough in use; and for durability and perfection of its work, is unequalled.

PROUTY AND MEARS' IMPROVED SIDE HILL PLOUGH.



Of these Ploughs we make four sizes. They are so constructed that the mould-board is easily and instantly changed from one side of the beam and wood work of the plough to the other, which is done simply by unhooking the hind end of the mould-board and letting it fall over on the ground, and bringing it under and up on the opposite side, which is all done by the ploughman at the handles. It is as easy as any other plough to manage and change. By this plough the operator is enabled to do the work horizontally upon side hills—going each way and turning all the furrows equally well down the hill. This mode of ploughing prevents all washing of the land or soil by heavy rains, to which all side hills are subject when ploughed as level land. This same plough is extensively used for horizontal ploughing. The mould-boards have been so improved and lengthened during the last two years, that level land is ploughed equally as well as with the common plough; this leaves no dead or finishing furrow, nor does it make banks or ridges by turning furrows towards and on each other. They are also very useful in turning furrows from walls and fences, and particularly in road-making. They save much time of the team by turning short about, instead of crossing wide ends of lands in the fields, as is done with common ploughs.

No. 0. *Side Hill*.—A light one horse or mule plough, designed to work amongst small trees, etc. in nurseries.

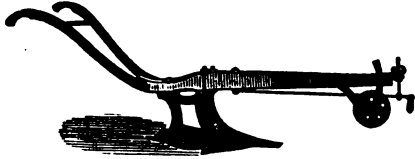
No. 1. *Side Hill*.—A light two cattle greensward or stubble plough.

No. 2. *Side Hill*.—A three cattle greensward plough, and is sometimes used with three or four cattle, according to the nature of the soil.

No. 3. *Side Hill*.—A large four or six cattle plough, made very strong, and is suitable for heavy, rugged farm work.

With wheel and cutter the medium sizes are highly approved for turning over mowing land for the purpose of re-seeding in the autumn, as with the cutter, they lay the furrow-slice *flat* and with great uniformity, avoiding the *centre* and bank furrows and leaving the land the same general level as before ploughing.

PROUTY & MEARS' PREMIUM SUB-SOIL PLOUGH.



This implement is light in its structure, simple in construction, easy in draught and management, adapted to a common team, on common farms, working alone in the under-draining or water-furrowing of fields of recent sown grain, and is of great value. For loosening ground in road-making, it has not its equal. Following the common plough, it works to admiration, stirring the sub-soil completely, without mixing it with the incumbent strata, and leaving it in the best possible condition to be acted upon by the atmosphere, to facilitate the descent of water by filtration, and to afford an unfailing supply of moisture to the roots that pervade the entire mass by evaporation. Simplicity, strength and economy are here most happily combined.

A correspondent of the Farmers' Cabinet, after witnessing the operation of the *Centre-Draught and Sub-Soil Plough* on the farm of Mr. Reybold, makes the following remarks :

“ So soon as this plough (the centre-draught) had passed, throwing over a furrow to the depth of the surface staple only, the sub-soil plough, invented by Messrs. Prouty & Mears, followed in the bottom of the furrow, performing its operation to “ a charm.” It was drawn by a pair of small horses, and seemed to follow with an ease that astonished us all, pulverizing the sub-soil to the depth of a foot if put to it, and leaving it in such a state, that the lad who guided it, preferred walking on the land side of the furrow, rather than to drag his feet ankle deep in the loosened earth ; in every respect, this implement is *perfect*, and will be the means of augmenting the crops to a profitable extent ; opening the sub-soil to a depth sufficient to carry off a superabundance of moisture in a rainy season, and admitting a full evaporation from below in a time of drought—circumstances essentially favorable to the growth of corn, which every one knows is accelerated by heat, when accompanied by a proper degree of moisture. I therefore consider the sub-soil plough the perfection of improved cultivation ; but to be able properly to appreciate its services, it is necessary to witness its operations ; and although not so easily worked in some soils as in others, it will be found of the greatest service in all, giving the means of gradually deepening the surface soil, permitting the washings of the manure to descend into the pulverized sub-soil, where it will be retained, instead of being permitted to pass off as heretofore, by the impenetrable hardpan, whenever the earth is glutted with rain ; and hence it is, that the soil might be deepened every time it is turned ; the operation of sub-soiling, however, not being necessary, perhaps, oftener than once in three or four years. To witness the sub-soil plough passing up and down the furrows to

the depth of about a foot, by the strength of a pair of small active horses, walking about four miles an hour, with the ease, comparatively, that a man might cut cheese with a knife, was to me a treat that I would not have lost for any sum that could be offered; it has opened the sub-soil of my own mind, and I calculate the augmentation of its future crops will be pretty considerable. The lad who guided the sub-soil plough, and who was competent to the task, was not, comparatively speaking, much higher than the handles; another boy about the same height took his place in his absence, and by these two lads the ploughs upon the farm of Mr. Reybold are worked, in a manner that would do credit to many full-grown men; they are fine lads, and well deserve this notice."

No. 0, *Sub-Soil*—Is a one horse plough; at the South it is used with two mules. Its sub-soil furrow is from six to eight inches deep below the surface furrow.

No. C, *Sub-Soil*—For ordinary farm work. Its size is medium, but it is of sufficient strength to stand the draught of two or three horses. It will run to the depth of twelve inches.

No. B, *Sub-Soil*—Is suitable for four cattle, and will pulverize the soil to the depth of fourteen inches below the surface furrow.

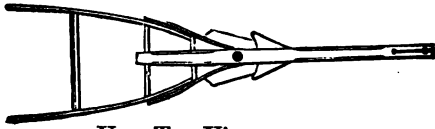
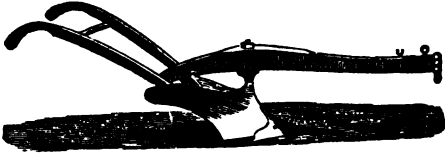
No. A, *Sub-Soil*.—This is a very large and strong plough, and will pulverize to the depth of eighteen inches. These have been found very serviceable in the construction of Roads, &c., in loosening the soil preparatory to digging. It is suitable for a team of from six to ten cattle. The draught rod should always be used with these ploughs, as it serves to take the strain off the beam, and causes it to run far more steady than without it.

THE PARING PLOUGH.

This is used in preparing turf for burning, by paring it from the surface of the land where it grows. It has a thin flat share of wrought iron or steel, with a lock-coulter forward, and two stout coulters on the wings; thus cutting the furrows into two strips, as it moves along. The turf thus pared off is cut into pieces with sharp spades, by hands following the plough, and when these strips are dried in the stocks where they are thrown together, they are burned, and the ashes are thrown broad cast over the land. Light sandy soils should not be burned.

PROUTY AND MEARS' DOUBLE MOULD-BOARD, OR RIDGING PLOUGH.

Side View.

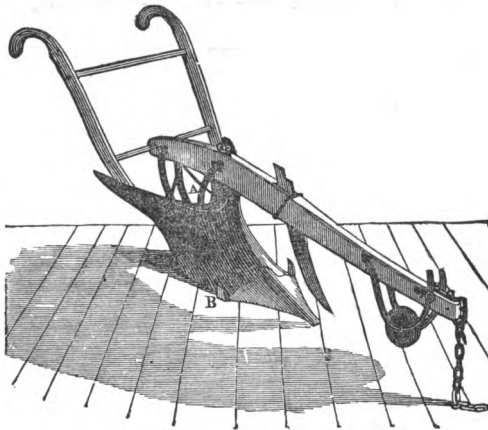


U Top View.

No. 1 is used for ridging out land, and serves a very good purpose for ploughing among corn, potatoes, &c., while it throws the dirt both ways. It serves the purpose of double ploughing, and is much better where the rows are near together, and saves half the labor. — Other uses to which it may be applied, on a farm, will readily suggest themselves.

Nos. 2 and 3 are the same as the above in form and construction, but of larger sizes, and have points of greater width for digging potatoes. They are used in planting corn, ridging out land for root crops, and digging shallow ditches. They are also much used in the cultivation of the Sugar Cane at the South and in the West Indies.

PROUTY & MEARS' NEW IMPROVED MIDLAND PLOUGH.



This is a double mould-board plough of the largest size; calculated for the gathering and distributing of ridges, in the cultivation of root crops and harvesting of potatoes, &c., but especially designed for the forming of

back-furrow ridges on grass, or sward-land, where manure has been spread upon the surface — which is done by throwing two furrows nearly together, and enclosing the manure and vegetable matter in such manner as to form a seed bed most desirable, for corn or other crops to grow thereon — a practice which is being successfully introduced into some sections of the country.

This plough is furnished with a wheel at the fore end of the beam ; it has also a larger wheel under the after end of the beam, as seen at A, which serves as a land side, on which it is supported while in action, and by means of which it is with ease carried round the ends of the land, and from place to place — the coulter, suspended from the beam, dividing the furrow-slice from the surface downwards, into two parts. The cutters seen at B B, near the tip of each wing of the share, and extending upwards some three inches, separate the divided and ascending furrow-slices from the solid land on either side, and enable the plough, by the peculiar form of its mould-board, to place the furrow-slice thereon, with ease and regularity. The width of work carried, may be varied or adjusted by the cutters, from 18 to 24 inches, viz. : — two furrows may be laid off, from 9 to 12 inches each, and from 5 to 7 in depth.

CONNECTICUT RIVER VALLEY, OR OLD LAND PLOUGH.

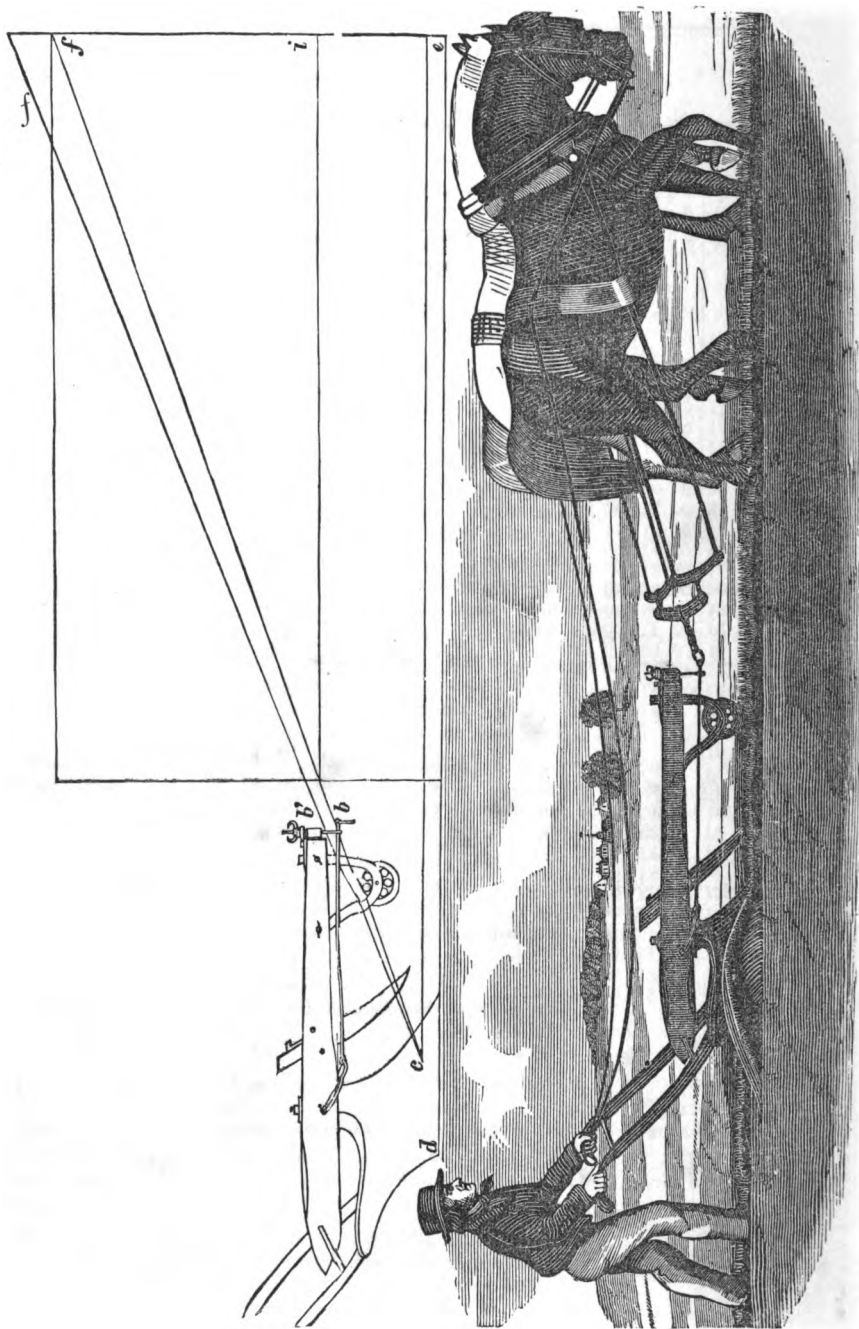
No. C. R. V. This Plough is of a new and improved pattern, designed for the ploughing of old land, stubble, &c. It is of such peculiar form as to avoid all clogging on the mould-board, at the same time completely turning the furrow, burying all vegetable matter that may have been on the surface, and leaving the soil in a light and perfectly pulverized state. The standard of this plough is made of such a height as to entirely prevent its choking up by the gathering of weeds, grass, &c., and allowing of its running at a greater depth than can be done with any other plough. In the cultivation of Broom-corn, on intervals, this plough is found to be invaluable.

DESCRIPTIVE CATALOGUE
OF
PROUTY & MEARS' PATENT CENTRE-DRAFT PLOUGHS.

DESCRIPTION.	SIZES.	Plain.	With cutter	With cutter and wheel, or draft rod.	With cutter wheel and draft rod.
Small Cotton	No. 0	\$3 25			
Common "	"	3 50			
Small Horse	" 19	4 00			
Medium "	" 20	4 50			
Large "	" 21	6 50	7 50		
Stubble	" E	7 00	8 00	9 50	
2 Horse	" 22	7 50	8 50	10 00	11 50
2 " New, Old Land,	" C. R. V.	8 00	9 00	10 50	12 00
2 Cattle, Sward	" 23	8 00	9 00	10 50	12 00
2 or 3 "	" 25	8 00	9 00	10 50	12 00
3 " "	" Eagle C	8 50	9 50	11 00	12 50
4 or 5 " "	" 26	10 00	11 00	12 50	14 00
2 or 3 " "	" 25 Lock Coulter		10 00	11 50	13 00
3 or 4 " "	" Eagle C, Lock Coulter		10 50	12 00	13 50
3 or 4 " Extra deep	" 72 " "		13 00	14 50	16 00
4 or 5 " "	" 33 " "		14 00	15 50	17 00
Heaviest Road	" 8 " "		16 00	18 00	20 00
3 Cattle, Sward	" 31 Patent Cutting Edge	8 00	9 00	10 50	12 00
3 " Extra deep	" 71 " " "	9 00	10 00	11 50	13 00
4 " " "	" 72 " " "	11 00	12 00	13 50	15 00
5 " " "	" 33 " " "	12 00	13 00	14 50	16 00
Meadow	" 25 Steel Share				14 00
"	" Ea. C. L, Steel Share				15 00
"	" 72 Cutting Edge				17 00
"	" 33 " "				18 00
1 Horse	" 1 Imp'd Self-Sharpening,	5 00			
Large Horse	" 24 " " "	6 50	7 50	8 50	9 50
2 Horse	" 30 " " "	7 50	8 50	9 50	10 50
3 Cattle, Sward	" 54 " " "	9 00	10 00	11 50	13 00
3 " Extra deep	" 50 " " "	10 00	11 00	12 50	14 00
4 " " "	" 64 " " "	10 00	11 00	12 50	14 00
3 " Left Hand	" 54 " " "	9 00	10 00	11 50	13 00
4 " " "	" 55 " " "	10 00	11 00	12 50	14 00
1 Horse	" 0 Side Hill	5 00			
2 "	" 1 " "	9 00	10 00	11 50	
3 Cattle Sward	" 2 " "	10 00	11 00	12 50	
Heavy Sward	" 3 " "	11 00	12 00	13 50	
Ridging light Horse	" 1 Double Mould	3 50			
" Common "	" 1 1/2 " "	5 00			
" heavy "	" 2 " "	7 00			
" 2 "	" 3 " "	8 00			
" 4 Cattle	Midland	13 50	14 50	16 00	
			D. Rod	& wheel	
1 Horse	No. 0 Sub-Soil	6 00	7 00	8 00	
2 Cattle	" C "	7 00	8 00	9 50	
2 " Left Hand	" G 2 "	7 50	8 50	10 00	
3 or 4 Cattle	" B "	9 00	10 00	11 50	
Heavy Road	" A "	11 00	12 00	13 50	

The prices in the above table are those at which they are retailed at our ware rooms. To dealers we make a liberal discount. Repairing pieces furnished at all times, and on moderate terms, when required.





Directions for using Prouty & Mears' Centre-Draft Plough.

From the complicated structure of the plough, and the manner in which circumstances oblige us to apply the draft to the implement, some misconceptions have arisen as to the true operation of the draft, and the proper manner of its application. Too little is understood of the true principle of draft, to enable the ploughman to attach his team and arrange the clevis so that the plough will do its work properly, and with the least force or power. To render this subject more intelligible, the following remarks are made in connection with the plate annexed.

Let b represent the forward end of the beam, and c the centre of resistance on the plough, which may be assumed at about 2 inches above the plane of the base of the plough, $d e$, though it is liable to constant changes from the depth of the furrows, and constant inequalities in the soil.

We will consider the particular form of those parts through which the propelling power is brought to bear upon the plough. It is evident that the propelling force acts in a direct line from the hook or ring at the shoulder of the animal, to the centre of resistance, and were it not for considerations of convenience, a straight bar or beam lying in the direction $c b$, and attached firmly to the body at c , would answer all the purposes of draft perhaps better than the present beam. But the draft not being the end in view, but merely the means by which the end is accomplished, the former is made to subserve the latter; and as the beam, if placed in the direct line c to b , would obstruct the proper working of the plough, we are constrained to resort to an indirect action to arrive at the desired effect. This indirect action is accomplished through the medium of an angular frame-work, consisting of the beam and the body of the plough, so strongly connected together as to form an unyielding structure. The effect of the motive force applied to the frame-work at the point b , and in the line of b to f , produces the same results as if $c b$ were firmly connected with a bar in the position of the line c to b , or as if that bar alone were employed.

The average length of the trace chains being about 10 feet, including all that intervenes between the clevis of the plough at b , and the horse's shoulders, let that distance be set off in the direction b to f ; and the average height at the horse's shoulders where the chains are attached, being about 4 feet 2 inches, let the point f be fixed at that height above the base-line $d e$. Draw the line from f to c , which is the direction of the line of draft acting upon the assumed centre of resistance, c ; and if the plough is in proper trim it will coincide also with the ring of the clevis; $e c f$ being the angle of draft, and equal to 20° . It will be readily perceived, that with the same length of hames, the angle $e c f$ is invariable; and if the plough has a tendency to rise at the heel, or run on the point, under this arrangement, it indicates that the ring at b is too *high* in the clevis. Lowering the ring a trifle, will bring the plough to work evenly upon the base of the landside, or work flat.

If the plough has a tendency to rise at the point of the share, the ring b is too *low*, and must be moved by raising it a little in the clevis. If a pair of taller horses be harnessed to the plough, the draft chains, depth of furrow, and soil (and, by consequence, the point of resistance c .) remaining the

same, we should have the point f raised, suppose to f' ; by drawing the line f' to c , we have $e c f'$ as the angle of draft, which will now be 22° , and the ring will be found to be below the line of draft $f' c$; and if the draft chains were applied at b , in the direction $f' b$, the plough would have a tendency to rise at the point of the share, by the action of that law of forces which obliges the line of draft to coincide with the line which passes through or to the centre of resistance; hence the ring b would be found to rise to b' , which would raise the point of the share out of its proper direction. To rectify this, the ring must be raised in the clevis by a space equalling that between b and b' , causing it to coincide with the true line of draft, which would again bring the plough to work evenly on the base of the landside, and run flat.

These principles are substantially such as are adopted by the most experienced and practical ploughmen, and, if properly applied, will not only do the best work, but accomplish it with the greatest ease to themselves and their team. If the power is not rightly applied, good work cannot easily be done; for if the plough inclines in or out of the ground too much, or takes too wide or too narrow a furrow slice, the ploughman must exert force to direct it properly, in addition to that required to overcome the obstacles and inequalities in the soil, but if the power be rightly applied, the plough will move so accurately as not only to perform good work with more ease to both ploughman and team, but, in soils free from obstruction, even without the guidance of the ploughman.

To effect a proper horizontal movement, the clevis at b or draft-rod, must be adjusted and confined at that point, moving it to the right or left, if necessary. This will cause the plough to take its proper width of furrow slice, which, in sod, should be wider or narrower according to the depth or thickness of the furrow slice required; for as the thickness is increased so also should the width, in order to turn it easily and perfectly over, particularly when the furrow slices are required to be laid over level and side by side. The proportion in ordinary sod should be 6 by 12 inches, or 7 by 14 inches. In determining the width of furrow slice, some regard must be had to the strength of the particular sod to be turned; for the plough will turn over a wider slice in a strong or stiff sod, than when running in one more easily broken, or it will cripple and double when raised to a perpendicular position, thus only doing the work called "cut and cover."

Uses of the Cutter and Wheel.

The Cutter.—Simple as it appears to be, this is a very important appendage to the plough, as it cuts the furrow slice from the main land with great ease and precision, requiring much less power of team than when the slice is broken or torn off (which is always done when a cutter is not used,) and the precision adds much to the quality and beauty of the work, leaving the slice true and straight upon the edge. Much depends upon the cutter being properly formed, and so set as to cut the furrow slice in the shape best adapted to turn and lie as required. The cutter can be raised or lowered at

pleasure, to cut shallower or deeper, or it can be detached entirely, which always should be done in ploughing rocky, or very rough or rooty land. The cutter is very useful in cutting up the crab, and other tough grasses, thus enabling the ploughman to cover them up completely with the furrow.

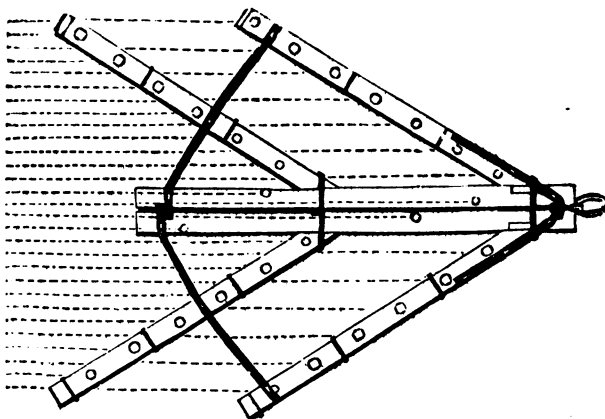
In order to turn the furrow slice completely over, and do what is termed flat-work, or planing, the cutter should pass down from the centre of the beam, about three inches forward and above the point of the plough, *standing out* in a line with the face of the landside; so that by placing a straight edge along the face of the landside, and forward past the cutter, it shall touch the point of the cutter. This position causes it to cut slightly under the improved land and leave the furrow slice bevelling upon the edges, and when turned over, the upper corner will have receded a little from the sod land, and thus admits the succeeding slice to drop in *flat* by its side.

To lay the furrow slices inclining, and lap them one upon the other, the cutter should pass down perpendicularly from the landside of the beam in such a way as to cut the edges of the slice at right angles with the sides. Whether the cutter be attached at the side or through the beam, it can be bent so as to stand in either position.

The Wheel.—Many advantages are realized in the use of the wheel on the plough, particularly in turning sod. It serves as a gauge to regulate the depth, and can be raised or lowered as required. It admits of the plough being drawn by a proper length of chain in any soil; and, with the aid of the wheel, the plough moves steadily and accurately along, being less affected by any irregular movement of the team; thus performing the work more uniformly, and with greater ease both for ploughman and team, and the plough is thereby drawn at a convenient distance from the team.

The cutter, draft-rod and wheel are applicable, and are attached, when desired, to all sizes of ploughs, excepting the very small. One or all may be used on the same plough.

THE GEDDES HARROW.



The Geddes Harrow, so called from the inventor, GEORGE GEDDES, of Tyler, Onondaga Co., N. Y., is considered by those who have used both, to be superior to the square harrow, inasmuch as it draws from a centre, without an uneasy and struggling motion, and is of course easier for the team. The accompanying cut is so simple and distinct, it needs no description in this place. Being hung by hinges, it is easily lifted when in motion, to let off collections of weeds, roots or other obstructions. It can be doubled back, and is of very convenient form to be carried in a wagon about the farm. Some have teeth put in as in common harrows, simply by being driven in from the upper side; others have the teeth so made as to be let through the timber from the under side, with a washer below, and a nut and screw on the top; this avoids the losing of teeth, by preventing them from dropping out, as in the common harrows.

There are several sizes containing more or less teeth as required, and at prices varying from \$8 to \$20.

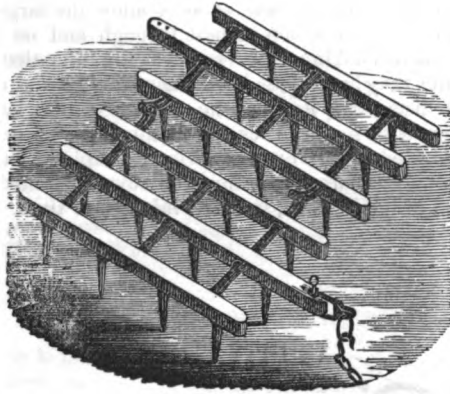
The work performed by this harrow is better, with one operation, than can be done with the common or A Harrow by going twice over the ground.

SCOTCH OR SQUARE HARROW.

This is one of the most effectual harrows in use for smooth lands. They can be used single, or two abreast, as occasion may require. Prices from \$6 to \$14.

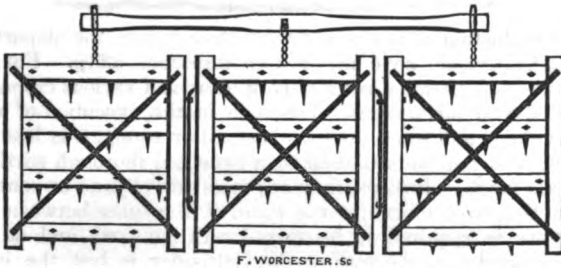
Sufficient attention is not generally paid to harrowing, it being the next most important operation after ploughing. The land should be harrowed from four to six inches deep, so as to leave the ground in a fine pulverized condition, and, if practicable, should also be rolled afterwards, when sown with grain or grass.

SQUARE HARROW.



The above plate represents a square jointed or folding Harrow, suitable for rough or heavy work, of which we make various sizes.

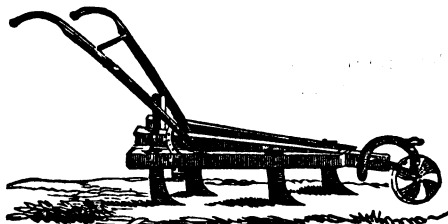
PEDDERS' COMPOUND CENTRE-DRAUGHT HARROWS.



These Harrows are strong, light, convenient, and well adapted to the purpose of levelling the surface and covering grain or small seeds; when, if the ploughing has been carefully performed, and the land in good order, a single turn of them will often be found to have effected the business in less than one half the time and labor requisite to execute it by any other means now in use; leaving the soil broken and finely pulverized, with the neatness and precision of the spade and rake. They are worked in sets of three, hinged together, and drawn by a swingle and cross trees, by two horses, mules, or yoke of oxen abreast. Each harrow being three feet square, the space covered by them is nine feet wide. The teeth, 17 in each, and placed in cross rails four in number, so that the harrows follow in

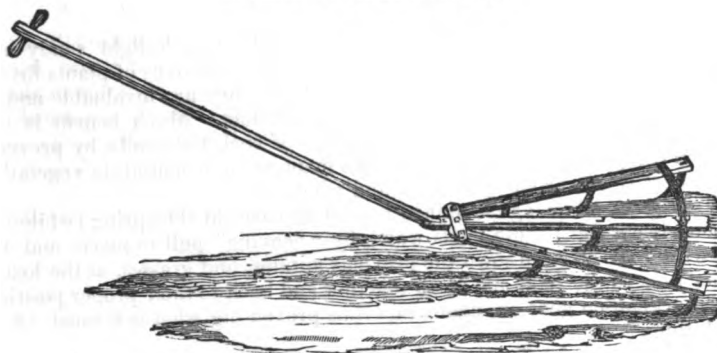
straight lines, and not diagonally, as is customary. They are therefore better, and complete their work in a much shorter space of time. No two teeth follow in the same track, and although placed nine inches apart, or distant from each other in the rails, so as to allow the large clods, that are not broken by the first concussion, to pass through and on towards the remaining teeth, without choking the harrow, yet the interstices, when marked on the ground after they have passed, will measure two and a quarter inches only, at regular distances; leaving the surface of the land as smoothly *raked* as a garden, a fit seed-bed for the smallest grain, seeds and grasses. They can be separated simply by unscrewing a couple of nuts, so that three single harrows, a pair of harrows, or three harrows combined, can be formed from the same set of implements, in a few minutes of time.

CULTIVATORS.



In the introduction of labor-saving machinery into the department of Agriculture, Cultivators have acquired an important office. For thorough stirring of the earth between rows of corn, cane and various crops, the Cultivator has several advantages. Despatch in the execution of work is a special advantage, and when the crop is small or young, it is less likely to be choked with dirt, or buried, than by a close and thorough stirring of the earth with a Plough. Besides, they are made to expand or contract from two to five feet, to conform to the width of the space between the rows. When manure is required to be mixed with the earth, and, at the same time to be retained near the surface, the Cultivator is just the implement required; it covers grain sown broad-cast at a uniform depth, much better than the harrow or plough, as the plough covers it too deep. Prices from \$3,50 to \$8.

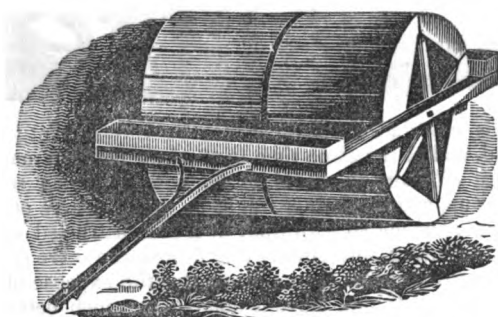
HAND CULTIVATOR.



This Cultivator is made entirely of iron, except the handle, and expands from ten to eighteen inches. It is a very useful implement in garden culture, and is often used in fields, among rows of carrots, beets, &c. It cuts up, and leaves the weeds exposed, and stirs the earth very thoroughly.

The operator, with his hands behind him, clenches the cross-handle and walks easily forward between the rows, and performs the work better and faster than several men with hoes, leaving the ground well pulverized, and the weeds destroyed. This being so expeditiously done, it can often be used with advantage. Price \$2,50.

FIELD ROLLER.



This is an important implement, and is fast coming into general use. It crushes all sods and lumps that remain on the top of the ground after the harrow has passed, and forces small stones down even with the surface,

and thus renders the field smooth for the cradle, scythe and rake; presses the earth close about the seed, and secures a more sure and quick germination.

Its greatest benefits are realized when used on such light sandy and porous soils as are not sufficiently compact to hold the roots of plants firmly and retain a suitable moisture; on such lands they are invaluable and in all cases their use has greatly increased the product. Much benefit is undoubtedly found by compressing the surface of such light soils, by preventing the escape of those gases from the manure so essential to vegetation and so easily extracted by the sun and winds.

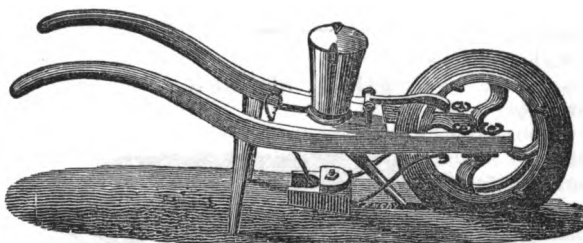
Very great advantage is gained by rolling early in the spring (while the ground is yet soft,) those lands which by "heaving" pull to pieces and displace the roots of grain sown the previous autumn, and grasses, as the heavy roller presses the roots and earth together and back to their proper position, when vegetation goes on again, and thus preventing what is termed "winter-killing."

Rollers are variously made of wood, stone, and iron. Those of iron are most desirable, being more easily made than of stone, and not subject to decay like wood.

Also, smaller sizes for garden purposes, of stone or iron.

Prices from \$20 to \$75.

IMPROVED SEED SOWER.

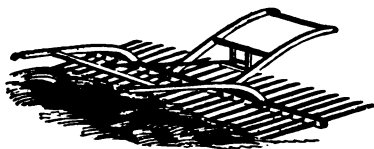


In using this machine, the farmer may be certain that his seed is put into the ground, and at the same time in the best possible manner. There has been a great difficulty in machines for sowing garden seeds; they are very apt to clog up, and the farmer might go over an acre of land and not sow a single seed; but not so with this; it is so constructed that it cannot possibly clog. In using this sower, the farmer can save one half of his seed, and do the work at less than one quarter the expense of the common way of sowing his seeds, and have it done in a much better manner; it opens the furrows, drops the seed, covers it over, and rolls them down. It will sow almost any kind of Garden Seeds; say ruta бага, mangel wurtzel, turnips, carrots, beets, parsnips, onions, &c. It is highly recommended by a great number of persons who have used it the present season. Price \$7.

IMPROVED CORN PLANTER.

This Planter is on the same principle as the Seed Sower, but is intended for corn, beans, peas, &c. It can be adjusted so as to drop any number of kernels required in each hill, and, at the same time, placing the hills at any distance from each other; or they may be equally well planted in drills. Price, \$10.

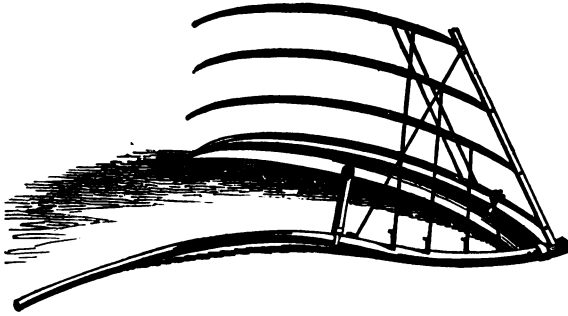
REVOLVING HORSE RAKE.



This implement, so well known in many parts of the country, and in use for so many years, holds nearly the same relation to the common hand rake in saving labor as the plough and cultivator bear to the hand hoe. Still a large portion of our farmers have not availed themselves of its advantages. The amount of work it will perform with a single horse and driver may be easily estimated by any one, when it is stated that a strip of hay on the ground, ten feet wide, may be raked up into winrows as fast as the horse can walk; that is, if the horse travels three miles an hour, more than three acres will be raked up in that time, or at the rate of twenty-four acres per day.

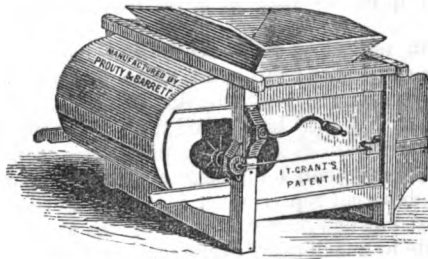
The only labor in unloading each rake full of hay, is a slight lifting of the handles, which causes the teeth and handles to make a semi-revolution, and drop the hay without the least stopping or delay. The rapidity with which a large field of hay may be secured from a threatening storm is one of its greatest advantages. When in operation the teeth lie flat on the ground, and not as represented in many agricultural papers, running on their points. The above cut represents a Premium Revolving Horse Rake. It is one of the best finished pieces of work of the kind ever made in the country, being made by machinery, every joint and every tooth, head and all, are true to each other. As they are made of the best of second growth Massachusetts white oak and white ash, they have no equal in strength, finish, or durability. Price from \$5 to \$7.

GRAIN CRADLES.



These are of the latest and most approved patterns in use. The fingers are adjusted by screws in the most simple manner, setting them in or out as occasion may require. The scythes on these cradles are very light, and warranted equal to any in the country. Price from \$3 to \$4.

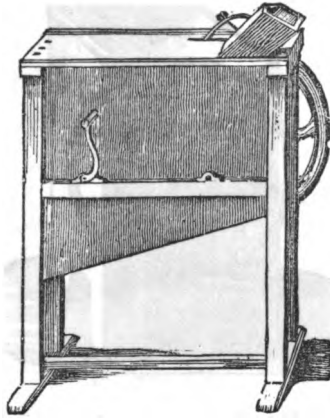
PATENT PREMIUM FAN.



These mills will chaff and screen one bushel of wheat per minute, and take out all the chaff, cockle, and smut at the same time; being the only mill that cleans wheat perfectly at one operation. (With other mills it requires two operations to perform the same labor.) They will also clean all other kinds of grain and seed by once running through. Coffee and Rice may be cleaned in them in the best manner. They are made of the best materials and finished in a superior style; a boy can turn them with perfect ease. We have five sizes, viz. No. 1, 2, 3, 4, and 5. Price varying from \$10 to \$30.

IMPROVED SEED SOWER.

PROUTY & MEARS' IMPROVED CORN SHELLER.

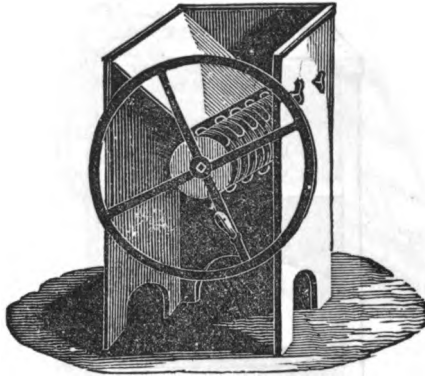


The accompanying cut is a good view of the single hopper and single balance wheel machine. This is believed to be one of the most efficient and durable shellers ever used as a hand sheller, having been in use for the last ten years or more, and having had some slight improvement it still stands at the head of the list of shellers for ease of operation, amount of work and durability. With two men, two hundred bushels of ears are easily shelled per day, or with two hoppers and large balance wheels, double that amount can be done with three men. It is equally well adapted for the large ears at the south and west as for the small ears at the north. Some have a balance wheel on each side; this balances the machine a little better, and the wear of the shafts is more equal and durable. It is about one and a half by two and a half feet on the floor, and three and a half feet high; with the single hopper it weighs about 100 pounds, with double hopper and balance wheel, it weighs about 150 pounds. Price from \$6 to \$10.

BRIGG'S PATENT CORN SHELLER.

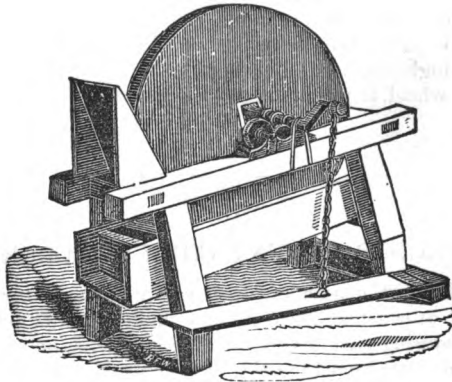
This is a small, light, convenient, and easily-worked corn sheller. It is entirely different in construction from any sheller ever before offered to the public. The operating part of the machine is of iron, and is so constructed as to separate the corn from the cob. For a small and cheap machine, we know nothing better. Price \$3.

VEGETABLE CUTTER.



This is an improved Vegetable Cutter, for cutting large or small roots. The great objection to all other machines is, their cutting the roots into slices, which makes it almost impossible for the cattle to get hold of them; this machine, with a little alteration, cuts them into large or small pieces, of such shape as is most convenient for the cattle to eat. It will cut with ease from one to two bushels of roots per minute. Price from \$10 to \$14.

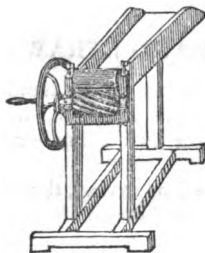
GRINDSTONE.



This cut represents a stone full hung for grinding. This has a crank for a foot treadle, and is on antifriction rollers. This method lessens very much the friction, and is more durable than when the shaft is allowed to

run on the wood of the frame, besides it is much more economical, one man being always able to sharpen any farm tool alone. A good assortment of cranks, shafts, rollers and sett plates constantly on hand; also a choice lot of the most approved stones, for farming purposes, at prices varying according to size and quality.

HOVEY'S PATENT SPIRAL STRAW CUTTER.



These machines excel all others for cutting hay, straw, or corn-stalks. They have great advantage over all other Cylinder Cutters, in the ease and facility with which the knives can be adjusted. Any one knife may be taken off and ground without removing the whole number; and should any one knife become narrow by grinding, the edge can be set out by set screws, so as to come in equal contact with the hide roller, without the necessity of grinding all the other knives down to the same width. The wings to which the knives are fastened are of vast importance, as they serve to strengthen and support the knives, and prevent them from bending while cutting corn-stalks or other coarse fodder.

They are made of different sizes, with 6, 8, 10, and 12 knives. Price from \$7 to \$30.

There is a great saving in the cutting of corn-stalks, hay, and straw, in two ways. The animals do not waste it by drawing it out of the mangers, and trampling it under their feet, and time and labor are saved them in masticating. They obtain their supply of food readily, and then lie down to digest it, and rest. Fermentation also develops the nutritive matter, and requires less work for the stomach, and this, by saving muscular exertion, leaves more strength with the animal to be expended on ordinary work. The same principle holds with milch cows, sheep, &c. If the food be given to them in a form more readily adapted to assimilation in the animal system, the greater the product of milk, wool, flesh, &c., they can yield from the same quantity. Cutting, bruising, grinding, fermenting, and cooking the food, all tend much to fit it for easy and rapid digestion, and whenever it can be thus prepared, without too much expenditure of labor, it should be done. By adopting a mixed food, much of the coarser products can be worked up, which are now suffered to be added to the manure heap. Indeed, scarcely any of the vegetable productions of the farm need be suffered to run to waste, or added to the manure heap, till they have

first contributed all the nutriment they contain to the support of animal life.

By chopping these up fine, and properly cooking and seasoning them, they will be eaten with peculiar relish, easily digested, and go twice as far as in the ordinary method of feeding.

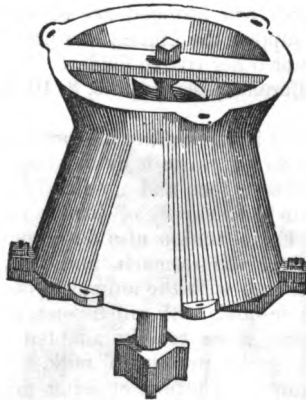
Both hay and straw should be slightly wet, and seasoned with a little meal and salt, for several hours before it is fed to the stock.

COMMON HAND STRAW CUTTER.

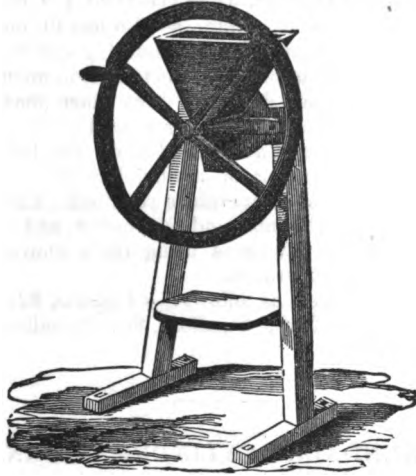
With these the straw is moved up by hand, and the knife is used by hand-lever. It is a very simple machine, and is easily kept in order; though when more than one or two animals are fed, larger machines will be preferable.

The great advantages, as well as saving, that are secured by these Straw Cutters, is sufficient to commend them to use on every farm and plantation; add to this the fact, that their use can occupy a season of the year, when the time could not be devoted to other pursuits with the same profit. Price \$5.

BARK-MILL, AND CORN AND COB CRUSHER.



The Bark-Mill is much used for the purpose of cracking or crushing the corn and cob together, preparatory to grinding between mill stones. These are made of various sizes.

HAND GRAIN-MILL.

This mill is used for grinding grain, coffee, and spices, as desired. It is usually operated by hand, though it can be constructed to run by other power. It grinds from one to two bushels per hour. When the plates or grinding surfaces are worn out, they can be replaced at a small expense. Price \$7.

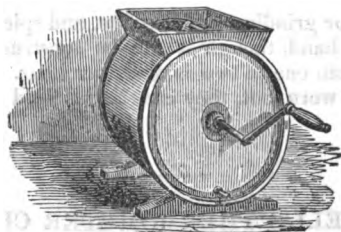
CROWELL'S THERMOMETER CHURN.

We would recommend the use of this thermometer churn, with a full

conviction of its great superiority to all others — those on the atmospheric principle especially. Butter made by the use of this churn will be yellower than that produced by any other, while *that* from the churning by atmospheric churns, will be uniformly whiter, as also less in quantity; the boast, "that the butter-milk remaining after the churning will be found of superior quality," being made at the expense of the butter, in quantity and quality. If the cream is not the proper degree of heat when placed in the churn, which may be known by the thermometer placed at the end — say 62 degrees, (if too warm, it will stand above, and if too cold, below,) apply cold or hot water, as may be, by means of a tunnel to the chamber below the churn, which will produce the temperature required. Cream of the proper temperature, will produce the most and best butter, and requires less time in the churning. Only a few times using these churns is necessary to ascertain the best mode of operation.

The price of these churns is as follows: — 4 quarts, \$2; 2 gallons, \$4,50; 3 gallons, \$5; 4 gallons, \$5,50; 6 gallons, \$6; 10 gallons, \$6,50; 20 gallons, \$8.

KENDALL'S CYLINDER CHURN.



Too much has not been said in favor of this simple and labor-saving churn. The sale of them for the last few years has been unprecedented by any other churn, and so general satisfaction have they given, that not one in a thousand has been returned, although all are warranted satisfactory. It is a simple cylinder, with a kind of large hopper upon the top, with a cover or lid to fit. It has an iron shaft, polished and closely fitted in metal boxes at each end, and on this shaft are suspended two floats or frames at right angles with each other, thus forming four floats, and by turning the shaft by means of the crank, the floats being confined to it, are turned at the same time, breaking the cream four times at each revolution of the shaft or crank. These floats are removed or taken out of the churn in a moment, by unscrewing and drawing out the crank first — thus making it very convenient to remove the butter after churning and cleaning the churn.

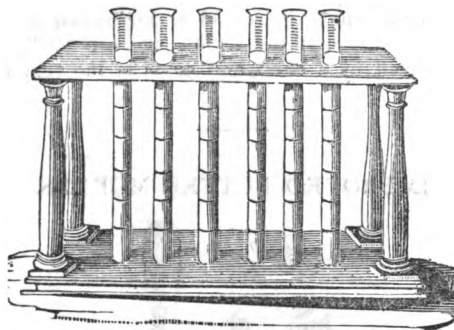
The churn may be filled more or less to suit those using it, but generally about two-thirds full is the best plan. In churning care should be taken not to turn too fast, as it only delays the coming of the butter, and is harder for the person using it. In case this is filled more than half full, the milk

should be drawn off at the bottom so as to bring the whole below the shaft before it is withdrawn to take out the butter. The sizes are as follows:— No. 1, for 1 to 2 cows; No. 2, for 3 to 5 cows; No. 3, for 5 to 8 cows; No. 4, for 8 to 15 cows; No. 5, for 15 to 25 cows. Prices from \$1,75 to \$4,50.

In using they are placed upon a bench, table or platform. Being compact in shape, they are cheaply, easily and safely transported to any part of this or other countries.

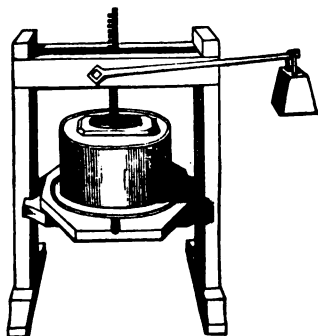
GAULT'S CHURNS, various sizes.
DASH " " "

LACTOMETER.



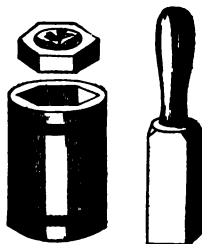
This is the only proper instrument or gauge for testing the qualities of milk drawn from different cows correctly. It consists of several glass tubes placed in a frame or stand perpendicularly. The upper parts of these tubes are divided and subdivided by marks cut in the glass, and all are thus graduated exactly like the others. They are filled with milk from different cows, and to the same height, then after remaining a proper time the quantity of cream in each is distinctly seen at a glance through the glass, and the exact difference determined by the described marks. The milk can also be tested by its color and consistency, after the cream has arisen, by holding the whole up towards a strong light. No dairyman should be without this valuable instrument in selecting, purchasing and selling his dairy cows.

IMPROVED CHEESE PRESS.



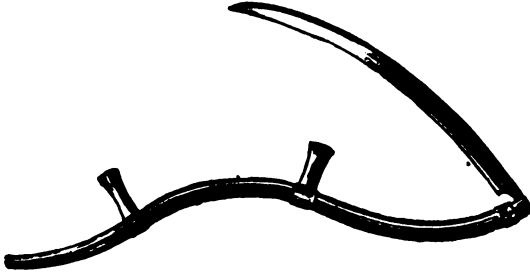
The above cheese press is one of the most simple as well as powerful presses now in use. By applying the weight upon the end of the lever, the amount of pressure can be increased or diminished at pleasure, in the ratio of 1 to 24. They occupy but little space, are not liable to get out of order, can be managed by a child, and come at the very low price of \$3.

IMPROVED BUTTER MOULDS.



This is a very simple contrivance for forming butter into lumps made for market. The butter is pressed into the mould until it is completely filled, then, by turning it bottom upwards, and lifting the mould from the lump, keeping the pestle firm upon the movable bottom, you have a beautiful six-square pound, or two pound lump (according to the size of the mould), with a neat and pretty stamp upon its top. So exact are they made, that when perfectly filled, the lump will be found to weigh more uniformly its designed weight, than when put up and weighed in the ordinary way. No dairy should be without one or more of these useful articles. Price from 75 cts. to \$1.50.

PATENT SCREW NIB SCYTHE SNATH.



These are found to be the most approved, and best calculated to work free and easy. The regular turn at the heel, and the strong and substantial iron rings which secure the scythe and nibs, are considered great improvements in these snaths. We keep constantly a great variety of snaths, of various qualities, and from different makers, with or without scythes, and some very extra strong, with two heel rings, designed for bush scythes.

SCYTHES.

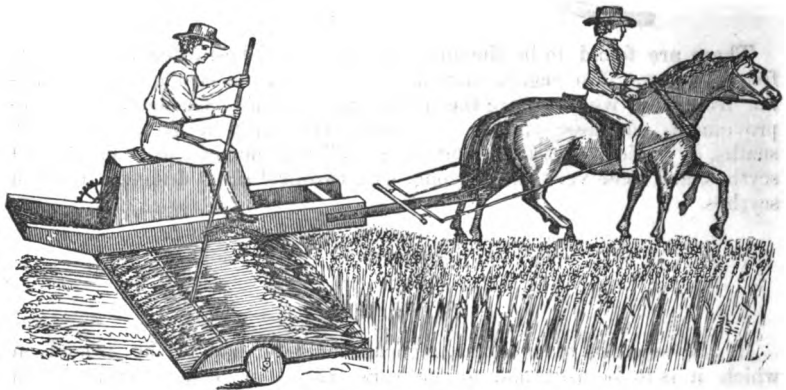
In the selection of a scythe, regard should be had to the ground on which it is to be used, and to the work that is to be done with it. On smooth meadow lands and bottoms or surfaces, free from stones, a long narrow scythe, a little turned at the point, is best. The strokes being all with a regular curve, a wide swarth can be carried, and the cutting of the grass be close and even, securing all the thick undergrowth which such lands produce. The harder the temper of the scythe, provided it does not crumble, the longer it will hold an edge. On sandy soil or lands sometimes overflowed on the margin of streams and rivers, the grit that works up among the grass, presently destroys the edge on a soft tempered scythe. The liabilities of a scythe to become battered on stony land, requires that its temper should be such as will afford it tenacity. A hard brittle edge would require too much time to grind out its batters, which it would likely receive by use on stony uplands. For rough surfaced uplands, a shorter scythe is to be preferred, that it may be adapted to inequalities, and be carried more readily through the grass, by the sideways stroke, often found necessary to pick out the grass among rocks and stumps. A wide scythe lifts the edge higher from the ground and land, and is preferred by some for rough upland mowing.

Mowing is a laborious work, and without the best of tools is exceedingly liable to injure the constitution. Farmers practise a bad economy when they put boys to mowing with old, poor or dull scythes, pleading as an

excuse, the small amount of work which they accomplish. If boys must be put to this employment, they should have the best of tools, light, and in the best order. Hernia has often been produced in boys by mowing with dull scythes, or before they had come to proper strength.

We recommend the scythes from the Manufactory of Messrs. N. & A. N. Darling (for whom we are agents) as being of superior *quality* and finish, and retaining their temper even when nearly worn out. They are made after the pattern of the most celebrated English scythes.

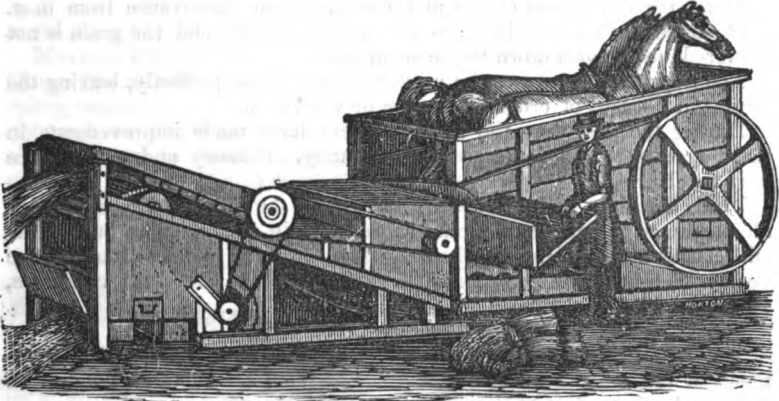
IMPROVED REAPING MACHINE.



The practicability of reaping wheat, oats, &c., by means of a machine propelled by horses or mules, is no longer problematical; the work performed being far better than can be done by cradle, scythe, or sickle, at the rate of twenty acres per day, requiring the aid of four mules or horses, and eight binders to follow, and cutting a breadth of six feet, and 200 yards in length, in the space of one minute of time. The crop may be cut at any desirable height; and, in a growth too heavy for the cradle, will be found not to leave a single ear standing, gathering the whole so clean as not to require the use of the rake on a field of a hundred acres. It will also cut green oats, damp grain, or clover and herds grass, as well as can possibly be desired; while its power, simplicity of construction, and durability, will save its owner the original cost the first year, on a farm of 300 acres.

Prices, \$110; and \$100 for a smaller size, capable of cutting from fifteen to twenty acres in a day.

PATENT IMPROVED RAILWAY CHAIN HORSE POWER
AND OVERSHOT THRASHER, WITH SEPARATOR.



These machines were invented and first used in New York in 1839, and patented in 1841. The first of the kind made, some of which have been in constant use, are still good. Over two thousand of them have been made and sold by the inventors, or under their immediate superintendence, and wherever introduced they have proved to be admirably adapted to the wants of the farming community; a fact evinced by the steadily increasing demand for them, which in New York, and the adjacent Eastern and Western States, and in a few counties in New Jersey and Pennsylvania, required over 400 machines to supply them in 1848.

These machines have taken premiums at the New York and Ohio State fairs, and at numerous county fairs in different States, and in Canada, never having been exhibited without receiving a premium.

The accompanying cut gives a side view of a one horse machine at work. It is so compact and convenient in its arrangement a small sized barn floor will set the whole, and leave room for working, and, with from two to four hands, it thrashes from 50 to 100 bushels of wheat or rye, or twice the quantity of oats, barley, or buckwheat per day. As the one horse power thrasher requires but few hands, little space, and is very efficient, it is the kind best suited to the wants of a single farmer, and most sold in this section; but for the large farms of the South and West, as also for the largest in this vicinity, the two horse or *double* power is sometimes preferred, as it will thrash twice the quantity of the one horse if properly attended.

The horse power is strong and durable, and runs light. With a slight elevation the horse's weight drives the thrasher with force and speed. It is not only adapted to thrashing, but to driving all machines farmers use — feed-cutters, clover-hullers, corn-shellers, grindstone, churn, &c., and also

used by mechanics for driving circular and upright saws, lathes, boring machines, &c.

The Overshot Thrasher, which does its work over instead of under the cylinder has several advantages over the ordinary thrashers in use. The apron or feeding-table is level and of proper height to allow the feeder to stand erect and feed evenly and easily, without annoyance from dust. Sticks or stones are not liable to get in the thrasher, and the grain is not scattered, but thrown down to the separator.

The Separator separates the grain from the straw perfectly, leaving the former in the best of order for the fan or wind-mill.

During the past year, the manufacturers have made improvements in these machines that increase their capacity, efficiency and convenience very much.

These machines will be sent to any part of the State or Union, and are all warranted to perform, not only as set forth in this circular, but to the entire satisfaction of the purchaser. Also warranted to keep in order one year. Weight of one horse machine, complete, about 1200 lbs.; two horse, 1600 lbs.

The following testimonials are submitted in confirmation of the statements of the manufacturers. Hundreds of the same tenor can be given. All but the first relate to the one-horse machines.

The following extract from a letter of my foreman in Virginia, soon after he commenced using the machine, is all I have had directly from him:

‘I like the machine much better than I expected to — it is the best one I ever run. With two mules we thrashed 500 bushels of oats in one-and-a-half days. The fan attached works well, but will not clean oats as fast as we can thrash them.’ He has been thrashing wheat since, and I understand it works well.

Yours, respectfully,

C. GILLINGHAM.

MESSRS. PROUTY & Co.—You ask me how I like the machines you sold me last fall, and what I knew of your kind of machines before.

In the fall of '44, I got a horse power Thrasher, Feed Cutter and Clover Huller at your shop and used them constantly from July to April, for 4 years, after which I sold them to my brother for \$128, or only \$11 less than I gave for them.

I used the machine enough to have done the thrashing and feed cutting for a hundred acre farm for fifty years. There are a good many of your machines in my neighborhood now, and as long as you make them well, none others will be bought.

My new one works as well or better than the first one. About 1,000 to 1,200 sheaves is a day's work.

Yours, truly,

ENOS GARMIN.

MESSRS. PROUTY & Co.—The Rail-way Horse Power I purchased of you, I find from experience, is easier upon the horses, more convenient and durable than the Sweep-Power, and I think only needs to be known to become generally adopted.

Signed,

WILLIAM C. GENT.

MESSRS. PROUTY, & Co.—I am perfectly satisfied with your Horse Power and Thrashing machine. With one small sized horse I thrashed sixty-eight bushels of oats in ninety minutes, and without hurrying at all. It is a safe and easy plan for a horse to work, and I consider it the best arrangement for thrashing that we have ever had in Maryland.

Yours,
SAMUEL SUTTON.

MESSRS. PROUTY & Co.—Gentlemen: The prejudices against your Horse Power, which had become prevalent in my neighborhood, are subsiding rapidly; men that declared positively that a horse of theirs should not work on it for the whole machine, have acknowledged to me, after seeing it operate several times, that they consider it the best power they ever saw.

Yours respectfully,
GEO. W. DUDDERAR.

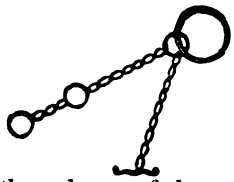
Cash Price of Whitman's Horse Power and Thrasher.

Wrought Iron Rail-way Horse Power, for two horses,	. . .	\$100 00
“ “ “ “ one “	. . .	75 00
Best Improved Thrasher for large Horse Power,	. . .	50 00
“ “ “ small “	. . .	40 00
Thrasher that is suitable for either sized power,	. . .	45 00
Additional price with straw carrier,	. . .	15 00
Patent Thrasher, which cleans at the same operation,	. . .	100 00
Driving Bands for large Power,	. . .	8 00
“ “ small “	. . .	6 00
New kind of wrench,	. . .	2 50

Price of Wheeler's Horse Power and Thrasher.

Price of Single Horse Power, latest improved,	. . .	\$80 00
“ “ “ Separator,	. . .	10 00
“ “ “ Thrashing Machine,	. . .	25 00
Two bands, with an assortment of extras, wrenches, &c., complete,	. . .	5 00
		<hr/>
		\$120 00
The Double Power, &c., complete, is \$25 more, or . . .	. . .	\$145 00

CATTLE TIE OR CHAIN.



This is the most convenient and secure mode of fastening cattle in use, and at the same time the most comfortable. The large ring being confined by a round post attached to the manger, and so loose as to slip up and down as the animals move their heads in feeding, or in getting up or lying down. The ends are thrown round the neck, and the T end put through one of the small rings at the other end of the chain, according to the size of the animal's neck, and thus the animal is safely confined. Such

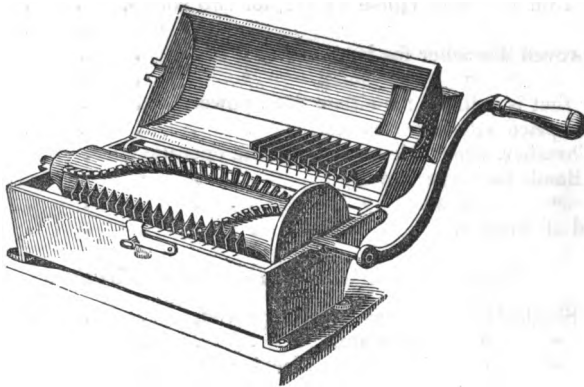
a chain will last an age, and at the same time costs less than the ordinary stancheon, and very little more than the wooden bow which is extensively used in many places.



CAST IRON HORSE POSTS.

This is a very neat and ornamental post, designed to be set in front of dwellings, &c., to fasten horses to. Being made of cast iron they are very durable, and add much to the appearance of country residences. Price from \$4.50 to \$6.

NEW SAUSAGE OR MINCING MACHINE.



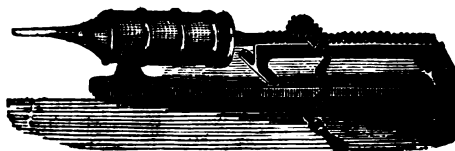
This machine, by the power of one man, is capable of cutting readily from 80 to 100 pounds of meat per hour—the person turning the crank feeding the machine, thus leaving the mass cut sufficiently fine and uniform.

It is constructed of blocks of wood about 5 inches thick, 9 inches wide, and 15 inches long, connected together by hinges and hasps. The two faces of the blocks are so carved or bored out as to form a hollow cylinder or barrel extending through the length of the blocks, excepting enough at each end to form a head or cap. In this cavity is suspended a wooden cone on an iron shaft, running lengthwise, and one end of the shaft extending through and connecting with a crank outside. In this cone are placed three rows of wood or iron pegs, so arranged spirally as to form a kind of screw, running lengthwise—the pegs being smaller, shorter, and closer together as they approach the large end of the cone—making the mean diameter of the pegs the same at each end of the cone, and just filling the space or cavity. Each block has a set of triangular knives fixed stationary, and so as to allow the pegs to pass between them.

The process is simply putting in the meat at the small end of the cone, through the kind of hopper or tunnel, and by turning the crank the meat is passed around, through and between the knives, and forward to the large end of the cone by the combined action of the pegs and knives, and finally discharged through an aperture in the bottom, at the large end of the cone, or opposite the hopper end — the fineness being gauged by the size of this discharging aperture.

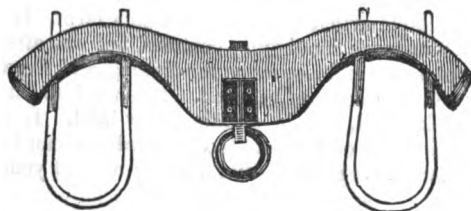
The machine is warranted to cut fit for use, from 80 to a 150 lbs. per hour, according to the power applied — one man being sufficient to turn it constantly. Several hundred have been sold during the past two years, and given entire satisfaction.

MEARS' IMPROVED SAUSAGE MACHINE.



It is about twenty years since a premium was awarded to this article at Brighton, Mass., by the Committee on Useful Inventions of the State Agricultural Society, since which time it has found its way into most pork manufacturing establishments, and into many families in this and the neighboring states. The reception they have met from the public, has induced the original constructor now to offer the machine so improved in form and material, that for efficiency and neatness, it must commend itself to the notice of the operator. One man will do more in preparing and filling sausages with this machine, than ten men can in the old manner of working them.

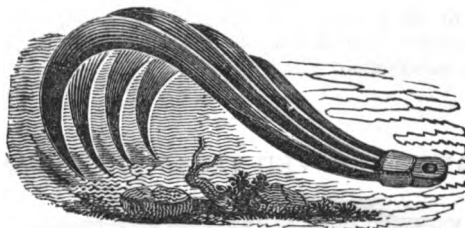
OX-YOKES AND BOWS.



A good yoke is of great importance in securing the greatest amount of labor with the utmost ease to the cattle. Such as are poorly made, or constructed on bad principles, are almost worthless; as they greatly diminish

the labor, and often seriously injure the oxen. We have several kinds and sizes of yokes suited to the various wants of the farming community.

ROOT AND BUSH PULLER.



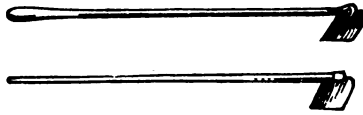
This implement is very effective in tearing out stools or clumps of small bushes, which grow in wet, boggy land. It is made of inch by inch and a half bar iron, with two, three, or four prongs, weighing from twenty to forty pounds. The ground is first, (if the roots are large and thick,) loosened around the bushes, when the claw or pull is fastened to one side, and a pair of oxen attached by means of a chain to the implement. At the word given, the bushes are torn out by the roots. One man, with a smart and well broken pair of oxen, will thus do the work of ten men. Price from \$2 to \$5.

PRONG OR POTATOE HOE.



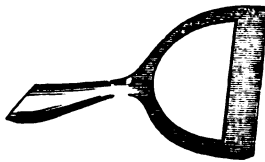
This is a new article, and much approved; it is found to be one of the most useful though simple articles that are used on a farm. It was invented and used in the first instance for digging potatoes, but was afterwards found to be as useful for planting and hoeing as for digging, and likewise for every other purpose for which a hoe can be used. It is used to the most advantage in stony or rocky land, and in planting new land. It is likewise a good garden hoe, being one of the best tools a gardener can have in use, in working between rows of vegetables, and digging around young trees.

FIELD HOES.



Among the assortment is a great variety of hoes of all kinds, as field, garden, carrot, &c., &c., with and without handles. The best are cast steel, with shank and hoe forged solid, or from one piece. They possess great strength, and are light and durable.

DUTCH SCUFFLE HOE.



This is a tool for weeding carrots, turnips, &c. They have two edges and a long handle. The operator stands between the rows and works the hoe back and forth, cutting each way, and walks backward in the row; thus, by not trampling on the weeds after they are cut, but exposing them to the sun, they are soon killed. They are of different sizes, from 6 to 12 inches in width, the common size for use being from six to eight inches.

TRANSPLANTING TROWELS.

These are intended for preparing the ground to receive small plants, and for taking them up and removing them to the desired place, and transplanting them without disturbing their roots or checking their growth. Sizes from five to ten inches in length. They are made of the best of cast steel, and may be ground as sharp as desired.

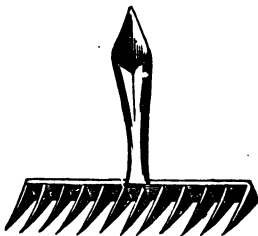
LADIES' WEEDERS.

These are simply another form of the trowel, except that they are a plain piece of steel, instead of being bent up at the edges. They are made light and delicate, and are used for weeding gardens, and working in and about flowers, both in the garden and in pots — a durable article from four to six inches in length.

GARDEN FORK.

A light, strong, and useful tool in the garden among plants and flowers, and in flower pots, etc., — made of steel and very neatly finished.

GARDEN RAKES.



A very great variety, with iron, wood, and steel heads and iron and steel teeth, from six to twenty inches wide, and any desired number of teeth. Also, some with teeth upon one side, and a scuffle or hoe upon the other, answering a double purpose of hoe and rake.

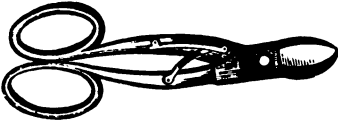
CAST IRON OX SHOVELS OR DIRT SCRAPERS.

Of these there are several kinds in use, but the best kind now made are those with cast iron bottoms, sides and edges, with wood back and handles, and wrought iron handles. They are found to be far superior to anything else for the purpose of road making, levelling hills, filling hollows, digging wide deep ditches and cellars, and are a convenient article on every farm.

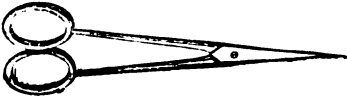
GRASS OR EDGING KNIFE.



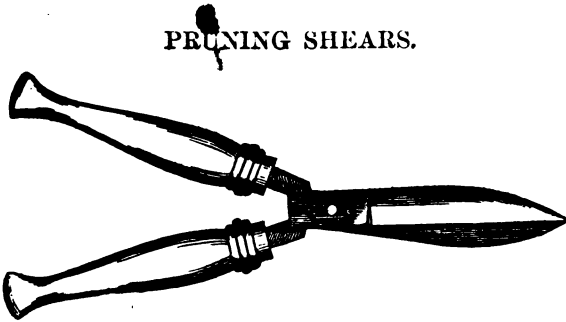
This is fitted to a straight handle, and used for paring the edges of grass, bordering walks, &c., and also for cutting outlines for sods for turving, which are afterwards easily raised with spade or shovel. They are found to be among the number of those handy and useful tools, which every gardener should have.

IMPROVED SEED SOWER.
VINE SCISSORS.

These are useful for removing superfluous leaves, twigs, &c., thinning out grapes when they have grown too thick on the bunch, etc.

FLOWER SCISSORS.

Combining scissors and tweezers or pincers. They are useful in gathering flowers or fruits from thorny stems, as they hold whatever is cut off by the pincers.

PRUNING SHEARS.

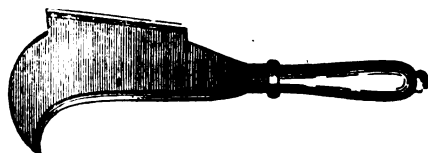
Of these there are a great variety of patterns: some with long wooden handles, for cutting thick branches from trees, shrubbery, hedges, &c.; others, with bow handles, like scissors, for cutting smaller twigs, flowers, &c., and are very handy for ladies' use. Others are attached to a long pole, and operate by means of a lever, moved by a cord and pulley. Its use is, to enable a person standing on the ground to prune trees, some of the branches of which could not be easily pruned by any other process. Garden shears are used for cutting grass on the lawns, or bankings. Others are made with a notch, for trimming hedges or shrubbery; by which means the operator may cut a good sized branch.

GARDEN SYRINGES.

Of various sizes. For watering the leaves and branches of trees, shrubs, and greenhouse plants, or for destroying noxious insects by using various

liquids, are found very useful, and are extensively used in flower gardens and nurseries.

BILL HOOK.



Very useful for various purposes, as pruning trees, &c. It is made of cast steel, with two cutting edges—strong and easily used with one hand. This is also frequently used to trim thorn hedges with.

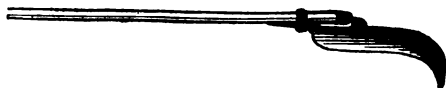
CULTIVATOR

TREE SCRAPER.

A very convenient form for scraping and smoothing the bark of trees. It is simply a triangular plate of cast steel, each edge being about four inches long, and attached to a short iron socket, through the centre with a nut and screw.

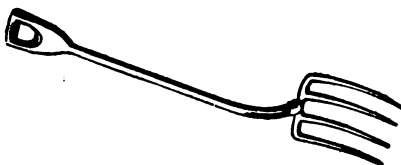
This article is indispensable in keeping trees in good order; should be used every season, in removing the dry and hard bark from trees, to insure a quick and vigorous growth, and keep them in full bearing.

BRUSH AND BRAMBLE HOOK.



These are of various forms—the cut, however, represents the most approved and in most extensive use; they are used with a handle about three and a half feet long; are very useful for trimming hedges, cutting brush, brambles, &c.

HAY AND MANURE FORKS.



No one implement has undergone so thorough an investigation and improvement, as the Hay and Manure Fork. Since the first introduction or use of these articles, great improvement has been made in the form of them, and the quality of the steel from which they are made. Among the most approved manure forks in use, are those of Morse, Pope & King, made for our establishment of cast steel, manufactured from one piece, in which no welding is necessary. These forks have been in common use for twelve years; they are so well tempered as to have that degree of elasticity that they discharge the manure with the greatest ease; they are in no way liable to clog or foul, and are very strong and durable.

FIELD ROLLER.

SHOVELS AND SPADES.



These are made of various sizes from the best of cast steel, and from the establishment of O. Ames & Sons, which is sufficient warrant of their superior quality and finish.

BUDDING KNIFE.

The edge of the blade is rounded at the point, and will shut up as a pocket knife. At the other end is fixed permanently a thin flat, ivory lifter, with which the bark is loosened and raised, after being cut to receive the bud.

For the best modes of grafting, budding, pruning and culture of fruit trees, and further descriptions and uses of many other useful implements, J. J. Thomas's Fruit Culturist is referred to, as one of the cheapest and most practical works on the cultivation of fruit trees ever published.

PRUNING KNIFE.

A good article, very large and strong, and found almost indispensable in the cultivation of young fruit trees.

FRUIT PICKER.

This is a kind of tin cup, with fingers upon one edge — the bottom of the cup is open work, to enable the operator better to use it by seeing through. The whole is set upon the end of a light pole — the operator reaches it to the fruit so as to bring the stem between the points or fingers, when it is readily secured by a slight twisting of the instrument.

PRUNING SAW AND CHISEL.

This is a very useful implement for both the nursery and orchard. The saw is about twelve inches long, and is attached to the socket for the chisel blade at one end and a screw socket on the handle and at the other end. The chisel blade is of the best cast steel, and three inches wide and four inches long, and both edges are made sharp for cutting either way. It is usually made fast to a long handle, and being light and strong, it is well adapted for the purpose it is intended.

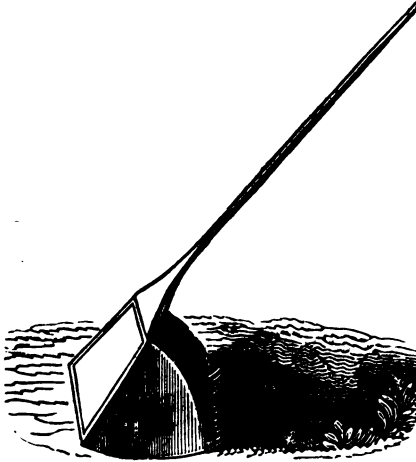
HAY KNIVES

Are for the purpose of cutting hay in the mow, and are a desirable article for that purpose, and almost indispensable where hay is stacked in the yard, or the farmer would wish to spend his hay to the best possible advantage.

DITCHING KNIVES AND SPADES.

These knives are calculated for cutting ditches, trimming low swamp land, and are found very useful for the purpose.

CRANBERRY RAKES.



An excellent article for gathering cranberries, and saves the labor of many persons. After raking, the berries are spread until the chaff is dry, and winnowed as grain. One man can gather as many cranberries in one hour as six men could by picking by hand. They are made with iron and steel teeth, and of various sizes and forms, at from \$1 to \$5 each.

BARN AND CARRIAGE-HOUSE DOOR ROLLERS.

They are of various sizes and prices, and are very much superior to hinges, for large doors; as they are much more easily moved, and never liable to be damaged by winds. They are, also, much cheaper.

BRANDS, OR STAMPS,

Of all descriptions, for marking and branding the farmer's tools. Every farmer who is in the habit of lending and accommodating his

neighbors and friends, as all farmers are and must be, should have every tool marked with his name. This prevents the loss of any tools, and inquiry and trouble among neighbors.

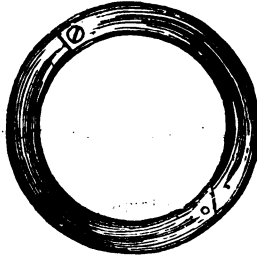
CURRY COMBS AND CATTLE CARDS.

Patent and common curry combs, and cards with brass teeth. No stock farm should ever be without a good supply of these articles, and constant use should be made of them.

HORTICULTURAL TOOL CHEST.

Every lady or gentleman who is fond of gardening, should have a tool chest. It contains a complete set of garden tools — all fitted to one handle, and so constructed that all the tools may be packed in the chest and locked up, and carried from one part of the garden to the other.

BULL RINGS.

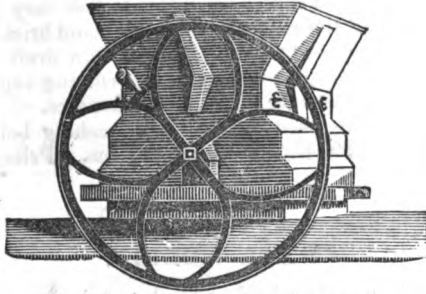


Every bull should have a ring in his nose, after one year old; after which, the most fractious animal is easily managed. It is easily done, by punching the cartilage between the nostrils, and then inserting the ring, and screwing it together.

GRAIN CRADLES.

OX BALLS.

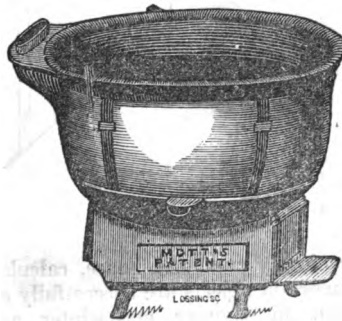
These are of brass or composition. They are screwed on the ends of the horns, and thus prevent cattle from injuring each other by hooking. They are also very ornamental.

PROUTY & MEARS' IMPROVED CORN SHELLER.
IMPROVED SUGAR MILL.

These are not strictly agricultural implements, yet it has been our custom to manufacture and keep them in connection with agricultural tools. They are used by grocers and country traders in grinding and preparing sugars for use, when taken from their original packages. The dampness of the sides and bottom being equalized, and the whole mass rendered of a uniform fineness. With one of these machines a man can grind with ease a box of four hundred pounds of sugar in twenty minutes, leaving the grain of the sugar in the most perfect order for retailing. Price from \$7 to \$12.

STORE TRUCKS.

A very handy machine for moving boxes, bales, casks, &c., for Stores, Warehouses, Railroad Depots. There are various sizes.

MOTT'S AGRICULTURAL FURNACE.


The cut represents the most approved portable furnace for agricultural

purposes now before the public. It is formed of cast iron, and is of itself both stove and boiler. The fire passes completely round the kettle or boiler, the space being some two to three inches between the outside or stove and the boiler. This causes the water to boil very quickly, and with very little fuel, saves all the expense of masonry and brickwork, as a funnel or stove pipe is all that is necessary to give it a draft for all purposes. They are admirably adapted to boiling and steaming vegetables and food for stock, and are convenient for many other purposes.

The smaller sizes are used for ordinary washing boilers. There are eight sizes: 10, 15, 22, 30, 45, 60, 80, 120 gallons. Prices from \$8 to \$60.

WELL WHEELS.

This is a cast iron pulley wheel or block to raise water from wells, and is admirably adapted for raising and lowering light weights about stores, and store-houses, as it works with much ease and expedition.

TITCOMB'S IMPROVED PATENT BEE-HIVE.

Patented 10th April, 1849.

FIG. 1.

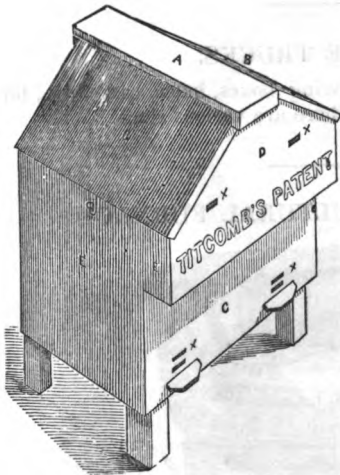


FIG. 2.

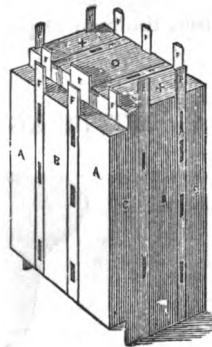


Fig. 1st, Is an ingeniously arranged house, calculated to contain two hives, by which two important objects are successfully accomplished, namely: thorough ventilation in summer and winter, and the keeping an uniform temperature at all seasons of the year, a want of these requisites

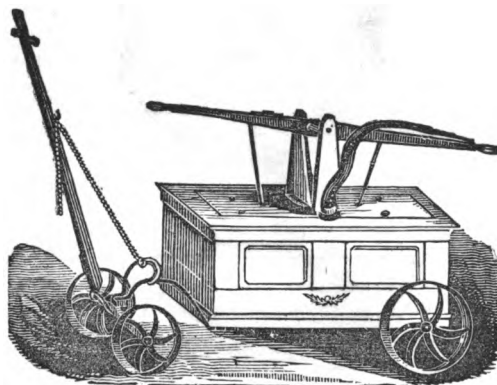
having been the cause of much destruction in other hives; but which in these, a very little care will suffice to prevent. As a stock hive, it will be found not to have its equal; swarms might be expected to issue from it early, and the importance of early swarms is well understood by every experienced Bee-keeper. The mode of guarding against the inroads of the Bee-moth will be found effectual; and the facilities afforded for cleansing the hives and replacing the old brood-combs by new ones, complete. Robbery by other hives has been also prevented by a peculiar arrangement, and the whole structure is built upon philosophical and scientific principles, adapted to the instinctive habits and wants of the Honey Bee.

Fig. 1. C, D. The front; D, a projecting portion of front. E, E, one end of the house, B A B—the roof. B B, the sleeping portion of the roof, with lids attached to the top, which is a horizontal board, lying under A, which is a cover or cap to prevent the entering of rain. * * * Apertures, into hollow rods or tubes, that conduct to and from the main or centre hives. The length of the house is 30 1-2 inches inside measure, width 22 1-2 inches to the projection, 13 inches above the floor, where the width is increased to 2 1-2 inches, by said projection.

Fig. 2. A, B, A, C, D, E, represent one of the principal or centre hives detached from the house, and a more complete insight into this hive might be had, by a perusal of a pamphlet published by the Inventor, containing a brief history of the Honey Bee, which accompanies each hive. Price \$12.

We have a variety of other patterns for Bee Hives, at prices varying from \$2 to \$8.

GARDEN ENGINES.



Of various patterns, varying in price from \$12 to \$60.

CAST STEEL AND COMMON AXES.

This article among our farmers is one of the most useful implements ever invented. Nason's and White's cast steel axes are considered the best, and most approved in form and shape, and are warranted in every respect to be of the best quality. They are finished in the most perfect manner, and ground to a fine smooth cutting edge.

Hatchets, cleavers and many other tools, made by different workmen, and finished in the same manner.

POST HOLE AUGER.

This is a steel auger designed for cutting out post holes in soft clayey land or land free from stone. With one of these tools a man can bore a hole 10 inches in diameter 3 feet deep in five minutes. These are made of 8, 9 and 10 inches in diameter at prices from \$3 to \$5 each.

MOTT'S CAST IRON VASES,



For halls, conservatories, fountains, public grounds, &c. We copy from the N. Y. Cultivator the following description:

The cast iron vases, exhibited by Mr. J. L. Mott, at the fairs of the State

Agricultural Society and American Institute, and to which honorary premiums were awarded at both places, are in pattern equal to the finest Italian models; in durability, far their superior; the cheap rate at which they can be furnished, is another and not a small, recommendation, of the invention of Mr. M. Prices from \$5 to \$15.

CAST IRON REVOLVING CHAIRS.



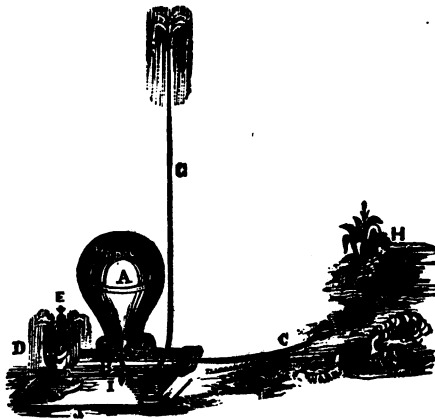
For halls, porches, &c.; also for green houses, gardens, and public grounds; the seat of the chair is made to accommodate the anatomical form of the user, and is as easy as a cushion. They have recently been introduced into many of our public schools, and given universal satisfaction; as, by their rotary motion, they make a seat of a peculiarly easy description for the sitter, even if the school hours are prolonged beyond the usual number. They are perfectly simple, and neat in construction, and come at a low rate in quantities. Price \$5.

RECEIPT FOR MAKING GRAFTING WAX.

Many mixtures have been proposed for this use, and each in turn has been laid aside for cause. What is called by sculptors "modelling wax" is the best, as it is entirely proof against water, and its contraction by cold, or softening by heat, is not sufficient either to cause it to run or crack; it may

be pressed into any form, without breaking up granular or mealy. Melt bees wax, and while melted, stir in about one quarter the weight of balsam of fir, (Canada balsam). If poured while hot on thin tissue paper, laid on a smooth surface, it may be cut in strips, and so used conveniently. If in sticks or balls, the warmth of the hand, and slight working will render it soft, so as to be pressed over the incision, and around the scion. If a small quantity of vermilion is added, it will be a beautiful red color, and insects will not travel over it to attack the scion.

IMPROVED HYDRAULIC RAM.



The annexed cut represents the Improved Hydraulic Ram.

H, spring or brook. C, driver or supply pipe, from spring to ram. G, pipe conveying water to house or other point required for use. B, D, A, E, I, the ram. J, the plank or other foundation to which the machine is secured. This is a perfectly simple and effective machine for forcing a portion of a brook or spring to any required distance or elevation, where a proportionate fall can be applied.

The various uses of the ram are at once obvious, viz: for the purposes of irrigating lands, and supplying dwellings, gardens, farms, factories, villages, engines, railroad stations, &c., with running water.

The simplicity of the operation of this machine, together with its effectiveness and very apparent durability, render it decidedly the most important and valuable apparatus yet developed in hydraulics, for forcing a portion of a running stream of water to any distance and elevation proportioned to the fall obtained.

It is perfectly applicable where no more than 18 inches fall can be obtained, yet the greater the fall applied, the higher may the water be conveyed, the quantity raised varying in proportion to the height with a given fall. It will raise say one-eleventh of the water ten times the height

of the fall to which it is applied. Thus, if applied under a fall of five feet, with a supply of eleven gallons per minute, it will force up and discharge, at an elevation of fifty feet from machine, one gallon per minute; and under the same head or fall it will of course raise and discharge a larger quantity of water in proportion as the height to which it is conveyed is diminished, and so a less quantity a greater height.

The ram is constructed with an adjuster, which renders it decidedly superior to anything of the kind yet invented, as by this improvement the same machine may be conveniently varied in capacity, and at once adapted to various sized streams.

They are composed of metal, and are a very neat, compact and portable article; the ordinary size, weighing but about 35 lbs. and occupying only about a cubic foot of space. Prices from \$8 to \$50.

SUNDRY ARTICLES NOT DESCRIBED.

Pick Axes	Bench Hooks
Mattocks	Scythe Rifles
Stone Picks	Scythe Stones
Potato Diggers, 4 and 6 tines	Hay Rakes
Manure Drags	Eyed Hoes
Grafting Chisels	Handle Hoes
Grafting Saws	Grafting Wax
Grass Hooks	Budding Ties
Sickles	Wrenches
Iron Crow Bars	Paint Mills
Steel " "	Vices
Garden " "	Rein Snaps
Garden Reels and Lines	Ox Bow Pins
Shovel, Hoe, and Fork Handles	Sheep Shears
Axe Handles	Cheese Hoops
Floor Scrapers	Wheel Barrows
Flails	Canal " "
Tar Hoes	Watering Pots
Floral " "	Riddles
" Rakes	Horse Rake Teeth
Horse Brushes	Milk Pails
Caterpillar " "	Milk Pans
Draft and Logging Chains	Ox Muzzles
Trace Chains	Apple Parers
Halter " "	Tobacco Cutters
Fence " "	Hook and Ring Hames
Whiffle Trees, Double and Single	Hammers
Butter Moulds	Grindstone Hangings.
" Stamps	Corn Knives

REMARKS ON SOILS.

Stiff clay should always be kept in grass, for, owing to their adhesiveness, it is difficult to cultivate them, they will not pay for doing so at the present prices of produce and labor; besides, if properly taken care of and occasionally manured, their average yield of grass is a good one, and it does not run out as in most other soils. Loamy and sandy soils should be kept in a rotation of crops: and the lighter the soil the harder it may be worked in this way, provided it be well manured after each crop is taken from it, as it exhausts itself more rapidly than a loam, and above all a clayey soil. The latter is cold, inert and sluggish, and like an unwieldy animal, cannot be roused beyond a certain production.

We are great advocates for stirring the ground deep. This is best done with the sub-soil plough, which loosens the substratum without turning it up to the surface. Sub-soils are rarely as rich as surface soils; they should therefore be brought up and mixed with the surface soil no faster than they can be enriched and made equal to them. A rich surface soil may be turned up to any depth. For example, in alluvial bottoms, when a depth of six inches of soil has been cultivated till it has become somewhat exhausted, by turning up an additional inch or more it gives fresh rich earth to the cultivated surface, and is equivalent to a good manuring. Trench or deep ploughing, under such circumstances, is very beneficial.

THE GARDEN.

In garden culture greater pains should be taken than in field culture, because the products there are required to be of superior quality, and it is desired to make the most of the land, to say nothing about the eye being gratified with its tidy appearance. It should be sheltered from cold winds; have a southern or eastern aspect if possible, and a warm dry soil for all early vegetables. Later products may be put on a colder soil. The deeper the ground is stirred and enriched, the better. One foot is the least depth that a good gardener will be satisfied with, and if he can turn up and enrich the soil to the depth of eighteen inches or two feet, so much the better. Indeed, with asparagus and some other products, the latter depth is absolutely necessary to produce a good crop.

GRASSES.

Blue or June grass makes the best lawns; growing fine and thick, the turf is firm and elastic under the feet, coupled with a velvety smoothness and softness which no other grass in the United States can produce. It should be sown at the rate of 5 to 10 lbs. per acre in the autumn or winter at the South, and early in the spring at the North. Top dress with plenty of lime, plaster and ashes.

RED CLOVER.—This is one of the most important crops in the United States. It grows readily on almost any soil, from Maine to Texas, and under proper treatment almost anywhere yields profitable returns. By large numbers of farmers, it is used extensively as a fertilizer in their rotation for wheat, and for this purpose nothing is better adapted. It also affords one of the most profitable crops of hay. It does well, sown with orchard grass, as the two ripen about the same time. All soils are suited to it, if dry and fertile. It should be cut when the bulk of the blossoms are turning brown, and after lying in swarth until wilted, turned over without spreading, raked and cocked the same day, and when sufficiently cured in the cock, put in store, with the addition of a few quarts of salt to every load. From 8 to 16 lbs. of good seed is required for an acre, more being necessary on stiff or old soils than on new and lighter ones.

WHITE CLOVER.—This is a valuable herbage for pastures, but does not grow to a sufficient size for profitable hay, except for sheep stock. Sow from 4 to 8 lbs. per acre.

LUZERNE.—This is cultivated to considerable extent in the neighborhood of cities. It requires a very deep, rich loam, as it sends down its long tap roots to a depth of 2 to 5 feet. It must be kept clear of weeds the first year, after which it completely covers the ground. It may be cut several times in the course of the season, and yields a large quantity of fodder, somewhat inferior in its nutritive qualities to the red clover. Plaster, or bones in considerable quantities, ground and scattered broadcast, and other manures, are essential to its continued productiveness on the same land. It requires 10 to 15 lbs. of seed to the acre, broadcast; or in drills at the rate of 15 lbs.

ORCHARD GRASS.—It comes forward earlier than any other grass in the spring, and produces most abundant crops in quick succession, yielding several large cuttings of excellent hay in one season, and furnishing a great quantity of nutritive pasturage. It requires a dry and good soil, and should be cut before it ripens, or closely fed to secure its full value. Sow at the rate of one and a half to two bushels per acre, for if the seed is not sown thick it will come up in tufts. It is more important that this grass covers the land well than any other that we know of.

RED TOP.—It is a valuable grass for very moist soils, yielding a large return of good hay. It is cultivated similarly to the Timothy or Herd's Grass. It makes a thicker and superior pasture to Timothy, and forms a pretty good turf for a lawn. Sow from 16 to 24 quarts of seed per acre.

TIMOTHY, HERD'S GRASS, FOXTAIL, MEADOW CAT'S TAIL.—By all these names this grass is known. It is the king of grasses for hay in the northern parts of the United States and the Canadas. Good clays or loamy lands are best suited for it.

GRAIN.

BARLEY.—Grows well on a light, rich soil, but is probably more tenacious of a fertile clay. Sow from 2 to 3 bushels to the acre.

BUCKWHEAT.—This crop is generally cultivated on light land. It is sown either broadcast or in drills, at the rate of 1 bushel per acre in the former, and 2 or 3 pecks, if in the latter case.

MILLET.—This requires a dry, light soil; but a heavy crop can only be realized on a rich one. It may be sown in drills or broadcast. It will produce from 1½ to 4 tons fodder per acre, equal in value to grass, and from 20 to 60 bushels of grain, equal to corn for many kinds of feeding. Sow from 16 to 24 quarts per acre. When the ground is in proper condition, and the season favorable, the former quantity in drills, and 16 quarts broadcast will insure a full crop.

OATS.—These do best on a very strong soil, and clayey loams are well adapted to them. The imperial and the Bedford oats are considered the best. Sow from 3 to 4 bushels per acre.

RYE.—This grain is never advantageously raised unless upon dry, light soils. Sow from 5 to 6 pecks per acre.

WHEAT.—Before sowing, the wheat should be thoroughly cleansed, and every particle of foreign seed removed. Then wash it three successive times in the strongest brine, mix with a coating of slacked lime, and spread out to dry. If spread out in the sun it will dry in two or three hours, if in the shade it requires longer. This preparation secures the crop against smut, and promotes the growth. The quantity of seed found most judicious as a general rule for sowing, is 5 to 6 pecks per acre; on the heaviest clay soil two bushels per acre is none too much, the same causes requiring variation as in barley and other grain. Some kinds of seed, tiller better than others, which of course should vary the quantity sown. The best kind of wheat is the improved White Flint.

INDIAN CORN.—The soil must be light, dry, and rich, to produce a good crop. It is always best to soak the seed before planting, in a strong solution of saltpetre. This gives an early, vigorous growth.

FERTILIZERS.

We shall merely treat of such fertilizers as are usually kept on sale.

ASHES.—These may be used leached or unleached, with good effect at all seasons, and all kinds of soils, though they best suit lands of a light sandy or gravelly nature.

BONE DUST.—This substance also may be applied precisely like ashes, except not in so large quantities. Its effect on Indian corn is not so good as ashes. It best suits grass, wheat and turnips.

Sawings of bone are fifty per cent. more powerful.

CHARCOAL DUST.—This also may be applied like ashes, and in any quantity, from ten to two hundred bushels per acre.

GUANO.—*Caution in application.*—Be very careful to place the guano so that it will not touch the embryo, or young roots, or stalks of corn,

potatoes, cabbages, tobacco, sugar cane, cotton, or any plant that has but one stem from its root; for it is of such a burning nature, that if a portion no larger than a small pea comes in contact with the plant, before being watered or rained on, or undergoing partial decomposition, it instantly kills it. With grass and small grains this caution is not important, as other shoots from the roots will immediately supply the place of those killed.

Preparation.— Before using guano, pass it through a fine sieve, and all lumps remaining, break up, and these pass through the sieve. Now take at least four times its bulk of sand, or dry sandy, or light loamy soil, and pass this through a coarser sieve, if you have one, and mix it in layers with the guano. Let this compost lie a few days—several weeks would be better—then toss it over and beat up well together, and it will be fit for use.

Quantity applied per Acre.— This depends upon the kind of soil and its condition, and the kind of crop to be grown. From two hundred and fifty to four hundred lbs. of guano per acre is the safest quantity to apply. It acts quickest in a light sandy soil or loam, and is excellent to start crops on cold moist land. It hastens the ripening of crops on all kinds of soil.

Guano should be spread broadcast upon grass-lands, early in the spring, and directly after mowing. On grain, early in the spring, or in the autumn directly after being sown. When applied to corn, either pure or in compost, a table spoonful or so may be put into each hill, and a little dirt thrown over, and then drop the seed, or it may be hoed in round the corn, the first time hoeing. Apply it in the same way to peas, beans, potatoes, and other root crops, melons, &c.

Lime.— This may be applied at any season, at the rate of twenty to two hundred bushels per acre; but we would prefer moderate doses of not over fifty bushels, and put it on the oftener. Like charcoal, it does best kept near the surface, and in other respects may be applied like it.

Plaster of Paris.— Sow this broadcast upon grass or grain, early in the spring, at the rate of two or three bushels per acre. It requires to be sown early, so as to have the benefit of moisture, and to ensure its decomposition. It best suits clover, and is very good for potatoes and turnips.

Poudrette.— This is an excellent manure to start corn and other products, and give them a quick growth, but its effects are not lasting.

FRUIT TREES.

For the directions on transplanting and pruning, below, we are chiefly indebted to catalogues of experienced nurserymen, from which we have copied with slight alterations.

Transplanting.— It is frequently the case that a tree which has received all the care and attention which can be bestowed upon it by the most experienced nurserymen, is transplanted to a soil of very inferior character, and being thus stunted in its growth is the frequent cause of dissatisfaction to the purchaser. The planter should therefore bear in mind that, with

the exception of very fertile alluvial bottoms, like those of the Mississippi, &c., it is difficult for the soil in which a tree is planted, to be too rich, and that the rapidity of its growth, and its subsequent productiveness, are very much influenced by the proportion of fertilizing matter contained in the soil.

Before planting an orchard, the ground should be thoroughly *sub-soiled* or *trench ploughed*, to the depth of eighteen inches or two feet.— This is always done in Europe, but scarce ever thought of in the United States; and yet we consider it the first and most important operation in the preparation of ground for an orchard, unless it be so rocky as to render this impossible.

After the trees are set out, the ground should be well cultivated, and if a poor soil, as highly manured as the means of the cultivator will admit. It is impossible for a tree to flourish, as it should, when the roots are surrounded and covered with a thick sod. When the tree is isolated as in a garden or lawn, a rich compost of earth and manure should be dug in around it, care being taken that no pure manure be allowed to come immediately in contact with the roots. The ground about these also, for the space of two or three feet, should be kept mellow until the tree is of large size; and it would also be well to dig in a portion of manure about the roots every spring.

SOILS PROPER FOR DIFFERENT KINDS OF FRUIT.

The Apple.— This will succeed on almost any soil not too wet; a rich gravelly loam will, however, ensure the finest trees and fruit. Before planting, the ground should be well cultivated and mellowed, with corn or potatoes, and enriched, if necessary, with a good quantity of manure. After the trees are planted, the orchard should be kept in cultivation for some years, and even after the trees become large and are in full bearing condition, the ground should not be kept in grass more than three or four years successively.

The Cherry.— This does best in a dry, rich soil, but bears abundantly even in stiff clays when well drained.

The Pear.— This succeeds best on a rich, clayey loam, with a gravelly subsoil, but will grow and bear fruit on even a poor soil, provided it is not too wet. A heavy clay soil should always be avoided, unless well drained, as this is known to be very retentive of moisture, and is frequently so highly saturated as greatly to injure, if not to kill the tree.

The Plum.— A clayey soil well drained, or rich loam, best suits the plum.

The Peach.— A sandy or light gravelly soil, not over rich, is decidedly the best for the peach, though it flourishes very well in a warm climate in rolling, clayey soils, where no surface water could remain to their injury.

Pruning and Training.— All trees require more or less pruning. With young trees the knife is required to form a symmetrical head, to induce luxuriance of growth, and to cause early fruit bearing. Bearing trees in orchards also require frequent pruning, to relieve the tree of all branches

which are weak, and crowd upon others, or uselessly consume the nourishment afforded by the root. It is also frequently required to check too great luxuriance of growth, which often induces disease and seriously affects the longevity of the tree. Care and judgment, however, are necessary, and there may be often danger of too much pruning. When a tree is healthy, produces well, not too much crowded in its branches, and free from suckers on its boughs, it will in general require very little pruning. No suckers should be allowed to grow from the root, as they divert a material portion of the sap from the branches. There is much question respecting the proper season for pruning, but experience is very decided that the early part of summer is the best; the sap being then in full operation, the wounded part quickly heals over, while in winter the branch to which the knife has been applied will be frequently found dead several inches below the wound.

AGENCY.

Acting as Agents for Nurseries in this vicinity, we can at any time furnish Fruit or Ornamental Trees of every variety and description.

ORDERS.

It is very desirable that all orders should be sent very early in the season, that we may have as much notice as possible, and send the trees to their destination at an early period after the opening of the season of transplanting. For want of care on this head, many orders arrive when it is no longer safe to take up trees, and are necessarily left over until the next season. We would urge upon the attention of Southern and Western purchasers, the great importance of sending their orders as early as August or September. In the spring, vegetation is often far advanced at the South and West, before the frost will allow the trees to be taken up at the East; and if sent at that season, they frequently vegetate on the passage, and cause great loss to the purchaser. In the fall no difficulty of this kind will occur and trees are annually sent to the far Western States at that season with entire success. The utmost care is taken to label distinctly, according to the invoice sent, every variety of tree or plant ordered; they are packed in matted bundles or boxes, according to the distance and probable exposure, for which a reasonable charge will be made.

WHEN TO PLANT GARDEN SEEDS.

Artichoke.— Sow the seeds last of March in seed beds, and transplant into a light rich soil; slightly protect in winter. In the following spring

separate the offsets, and plant three or four in hills two feet distance; in rows four feet apart.

After separating the seed crown called the bristles or chokes, the flower heads are boiled or pickled. Boil them near two hours, or until tender, in water with a little salt. Sometimes they are fried and used as regouts or when very young as salad.

Asparagus.— Sow in April, in drills about one inch deep, and in rows about eighteen inches apart. The soil should be light, deep, and well manured. Transplant with care, when one, two or three years old, into deep manured trenches, which must be filled up as the plants grow. Two or three inches of horse manure should be laid on the bed every fall, and carefully forked in, in the spring. Some allow the plants to remain as sown, and put layers of manure on, every year.

Beans.— *English Dwarf Beans* should be planted very early, as soon as the ground is workable; if delayed till late, the crop is generally overtaken by the scorching heat, and is fast destroyed. A good stiff loam is the best adapted to their growth. When about two inches high, hoe them, and draw the earth around their stems two or three times during their growth. When the pods begin to grow, break off the top of the stems; this will cause them to swell and fill up, and prevent their running all to flowers; gather them when about half their full size; boil them in plenty of water, with a little salt, and serve up as other beans.

Kidney Dwarfs should be planted as soon as the danger of frost is over, in light rich soil, three or four in a hill, or in drills two or three feet apart. Let them be carefully hoed, drawing the earth around the stems very little each time. Other kinds may be planted from last of March at intervals until August.

Pole Beans.— Pole beans are generally planted in hills about two feet apart, putting four or five beans in a hill, and leaving a space in the centre for the pole; they should not be planted till all danger from frost is past, and the Lima and Sieva not until the last of April, as they will not grow until the weather and ground are warm. The best quality is the Lima, but it is late; the Sieva or Carolina is much like it, and earlier. The London Horticultural is a greater bearer, early and good. Lima beans may be forwarded in pots, and transplanted with perfect success. This variety, and the Sieva, may be preserved for winter use, by picking the green pods when they are well filled, and placing them in kegs or jars, with a layer of pods and salt alternately, and filling up with water enough to cover them; when wanted for use, shell and soak them in fresh water ten or twelve hours, boil them about twice the usual length of time, and it is difficult to distinguish them from beans fresh gathered.

Beets.— Sow from first of April to middle of June, in deep rich sandy loam. Thin the young plants to the distance of six or eight inches, and fill up the vacant places with those taken out. The early turnip-rooted are the earliest, and are of fine quality. When young the leaves make excellent greens. The long blood beet is the best for table and winter use. The French sugar beet and mangel wurtzel are most valuable for cattle, and are

much cultivated. Thirty to forty tons are raised on an acre, for which it takes about four pounds of seed.

Borecole or Kale. — Sow in April or May, and manage as cabbages. In winter transplant into trenches, and cover with straw. The crown or centre, improved by frost, is delicate and sweet when boiled.

Brussels Sprouts. — Sow the seeds early in May, and transplant about the first of July. The general treatment should be about the same as that of broccoli and cabbage. The plants when protected in winter, send out young sprouts in the spring, which make excellent greens. There is no finer spring vegetable.

Broccoli. — Sow in hot beds in March, or for general sowing in the open ground, in April or May, in good rich and light soil. Thin out the plants, to prevent their being drawn up weakly. Those that do not produce heads in October and November, should be taken up and placed in the cellar, and covered up to the leaves with earth.

Cabbage. — Cabbage seed for a very early crop, should be sowed in a hot bed in March, give plenty of air, and thin out the plants, that they may grow strong.

When the plants are four to five inches high, they should be transplanted, if the weather is mild, into the open ground, in rows, two feet apart, and about fifteen inches apart in the row; make the ground rich and light, and set them firmly; as they grow, give frequent hoeings, and keep clear of weeds; those who have no hot beds, should sow in the open ground early in May, which will be soon enough for a general crop.

The late varieties need not be sown until the middle of May; sow in drills or broadcast, in beds properly prepared, and thin out as soon as they are one inch high; transplant them in June, in rows, two feet apart. Those who wish to preserve their cabbages through the winter, should take them up in dry weather, and plant them down to the leaves, and close together in a dry sheltered spot. The whole must be covered securely with straw and boards, to keep off rain.

Red cabbage makes an excellent pickle. Cut it fine and sprinkle it with salt. Let it be forty-eight hours, then drain off the water and put it in a jar. Put vinegar with ginger or other spices on the fire, and as soon as it boils, pour it over the cabbage. When cold cover tight and put in a cool place.

Cardoon. — The stems of the leaves, after being blanched like celery, are the parts made use of for salads, soups, &c. They are in perfection in autumn and winter. The seed must be sown in April or May, in a bed of rich earth, and transplanted in June in rows, at four feet distance from each other; they should be earthed up in the same manner as celery, taking care to keep the leaves close together, by tying round each a piece of bass matting. On approach of winter take them up, and bury them in a cellar, like celery, for winter use.

Carrot. — Sow for early crop about the first of April, and for main crop towards the middle of May, in rich loamy soil, manured the previous year,

in drills about one inch deep, and two inches apart. The plant should be thinned out to the distance of three or four inches.

The early horn is best for very early use; but for the principal crop, the long orange and large white are best. They are considered very valuable for horses and cattle. From eight hundred to a thousand bushels may be raised on an acre. About two pounds of seed should be used to the acre. If the weather is dry, it is best to soak the seed before sowing, and mix it with dry plaster or ashes.

Cauliflower.— For an early crop, sow in September, and preserve them from all frost in sash or otherwise, and keep them in a healthy state; and the following spring transplant into rich loamy soil. Hoe and water them well. As the flower heads appear, break the larger leaves down over them, or tie them gently upon the heads, to close and blanch them. For a late crop, sow the latter part of April, and manage as broccoli. This vegetable is considered very superior. Cut the heads while firm, and before the flower begins to spread; thin off the leaves and stalk, and let it lay a short time in salt and water. Then put it in boiling water, with a handful of salt, and skim the water well. Take it out as soon as a fork will enter the stem easily. It is then eaten with melted butter, or the gravy from meat.

Celery.— Sow in February and March in hot beds. Set out the young plants in beds during April, about four inches apart, where they may remain a few weeks, when they should be carefully removed, with the balls of earth attached to the roots, to the trenches. Let the trenches be dug a foot or more deep, and put in six inches of well rotted manure; then fill the trench nearly to the top with the soil that was thrown out, and with a fork mix it well with the manure; a moist situation is the best. The plants should be set about six inches apart in the row, and as they proceed in growth, earth them up once a week, a little at each time, carefully observing not to cover the heart of the plant. For winter use, sow the seed in April, or early in May, in a bed of fine rich soil made smooth and even; sow tolerably thick, and beat the surface of the bed firmly with the spade; then cover with fine earth sifted on, about a quarter of an inch deep; if dry weather ensues, give a good watering, and the seed will come up well.

Chervil.— Sow in rows ten or twelve inches apart, and cultivate the same as parsley. It is recommended as a fine salad, and possesses an aromatic flavor; it is also used in soups, &c.

Coleworts.— A species of cabbage, and cultivated in the same manner. They are used as greens like cabbage sprouts, which they so much resemble that they are seldom cultivated.

Cucumber.— For an early crop, sow as soon as the weather becomes warm, in hills about four feet apart. Put a large shovel full of well rotted manure in each hill. Sow liberally, as the yellow bug will require a part, and it is best to have surplus of plants. The early frame and green cluster are best for early use. Sow for pickling from the middle of June to the middle of July. The long prickly and small green are the best for pickles.

Curled Cress, or Peppergrass.— Sow the seed thick in drills from April

to September. They must be cut while young and tender. They are considered excellent when eaten with lettuce.

Corn Salad, or Feticus. — This is also cultivated as a salad, for winter and spring use. Sow the seeds in clean rich ground, in August and September, and cover in winter with straw.

Egg Plant. — The seeds should be sown in hot bed in March, and transplanted into the open ground in May, as soon as the ground becomes warm. The purple variety is best for eating. It should be sliced and fried with ham; or it may be parboiled, drained, and fried in batter of flour and eggs, or in fresh butter with finely grated bread, previously seasoned with spice and herbs.

The white variety is used for ornament. It makes a beautiful appearance when the plants are filled with fruit, which generally grow about the size of a large egg.

Endive. — Sow in rich soil, at intervals from April to July, in drills fifteen inches apart, and the plants eight inches apart in the rows. Hoe them frequently. Tie up the leaves when fully grown, to blanch the heads. They are used as a salad. The green curled are the best.

Indian Corn. — Plant about the last of April in good soil. For very early use, plant the early white Jefferson. The Tuscarora comes in next, and is a very good variety; it remains a long time in the milky state. But for table use, to be eaten in the green state, no variety will compare with the sweet or sugar corn. Corn needs frequent and deep hoeing, drawing up the earth a little each time.

Kale. — Plant in hills two feet apart. It is forced into growth in the spring, blanched and used as asparagus.

Leeks. — Sow in April, on a well prepared piece of ground, and transplant in June into rows fifteen inches apart, and four or six inches from each other in the rows. Hoe up the earth about the stems as they continue to grow, so as to blanch them and make them tender. Cutting off the tops of the leaves three or four different times in the course of the season, is beneficial, as it makes them throw out new heart leaves. The London and Scotch are the two best varieties. The soil should be rich but not fresh manured.

Lettuce. — Sow in February and March in hot beds, or in the open ground in April, in good rich mellow ground. When the plants have five or six leaves, transplant them into rows a foot apart each way. Hoe frequently, and in dry weather, water plentifully. The finest of salads with vinegar and sugar.

Melon. — Plant in hills of light soil, the latter end of April.

Muskmelon. — Plant in hills four to six feet apart. Prepare the hills by putting in a shovel full of well rotted manure at the bottom. Plant a dozen seeds in the hill, to allow for the depredations of the bugs. But eventually let but two or three good plants remain. The green flushed varieties are

superior to the yellow. They should be planted a good distance from squashes, pumpkins, &c., as they are liable to mix.

Mustard. — The white or English mustard is cultivated as a salad. The leaves are used like cress, when very young. Sow in drills, at different times from April to June.

Nasturtium. — This is deserving of cultivation on account of its beautiful orange colored flowers, and its excellence in salads. The grain, berries or seeds of this plant, which it produces abundantly, make an excellent pickle; in the opinion of many, preferable to capers. It is sown in drills in April, nearly an inch deep. When about six inches high, it should have sticks placed to climb upon; or they may be planted by the side of fences, palings, &c.

Okra. — Sow in April on good rich ground, and in rows two feet apart. Thin out the plants to the distance of eight or ten inches apart from each other. Hoe them frequently, and draw the earth up round the stems, as they advance in growth, to five or six inches. The green pods are used in soups, &c., and the ripe seeds are sometimes burnt and used as a substitute for coffee.

Onion. — The onion is one of the best products of the garden. The soil best adapted to their growth should be light, and well enriched with very old stable manure or compost. Dig the beds carefully with the spade, and make the surface fine and even with a good iron rake. The seed should be sown as soon as the ground can be got into good condition. Make the drills one foot apart, and cover the seeds about an inch; finish by pressing the earth well upon the seed, with a board laid lengthwise on the row and walking across it. Thin out the plants to an inch or two apart, and keep them clear from weeds. The white onion is the best for early use, or for pickling; the yellow or silver skin for a main crop; and the large red will keep the longest.

For very early use in spring, the white is generally sown in August, and the beds covered with straw or litter in winter.

The potato onion is preferred by some persons; it grows large, and the flavor is very mild. They should be planted as soon as the frost is out of the ground, and in rows a foot apart. The onions should be barely covered; as they grow, draw the earth up over them with the hoe; they will be ripe enough to dig the latter part of August.

Parsley. — Sow from March to August, in drills one inch deep, and eight to twelve inches apart. It is used in soups, stews, and gravies for meats.

Parsnip. — Sow thick, early in April, in rows twelve inches apart, and one inch deep, in a right deep soil, well manured the previous fall, or with fine dung early in March. When the plants are two or three inches high, thin them out the distance of two inches. Parsnips will endure the hardest frost, and may safely be left in the ground through the winter. They should however be dug early the following spring, before they begin to grow.

Pumpkins. — This is a valuable field crop for fall and early winter feeding, for cattle, sheep and swine. It is usually planted among corn and

potatoes, which is a good practice. But it may be advantageously grown by itself on a rich, dry, well pulverized soil, planting in hills, at a distance of six or seven feet apart each way. The cultivator can do all the work for them. The large yellow pumpkin is the best.

Plant in May, in hills about five or six feet apart, in rich, well manured, loamy soil. Put six or seven seeds in each hill, leaving but three or four, the most thrifty ones, to grow.

Peas.—Plant the early varieties as soon as the ground can be prepared in spring. The others in succession from April to June. Plant in double or single rows, in drills about three feet apart, and three inches deep. To have a succession, and to prolong the season of them, several kinds should be sown. Hill's extra early and cedo nulli are the two earliest kinds, and should be planted first. The early Washington, early Warwick, dwarf marrowfat, and dwarf blue Imperial, may be planted at the same time, and will come into bearing in succession.

Pepper.—Plant in hot beds in March, and transplant into the open ground the latter part of May, in rows about twenty inches apart, and eight inches apart in the row. Repeated hoeings promote their growth. They are excellent for pickles.

Radish.—Sow at intervals from March to August, in light sandy soil. Radishes are not likely to grow well in land which has been long cultivated, as they are apt to be hard and wormy, which is owing to their slow growth. They succeed best in new land, which is free from insects. The scarlet short top and long salmon are the best kind for early planting. When the weather becomes hot, the turnip-rooted sorts succeed best.

Rhubarb.—Sow the seeds early in the spring, or in September, in a rich deep soil and warm situation. If sown in beds, they may be transplanted the next season into rows, at the distance of three or four feet apart in the rows. The stalks are used very early in spring for pies, puddings, &c. Cut up the stalks, sprinkle them with sugar, and manage as with apple or other pies.

Salsify, or Vegetable Oyster.—Sow early in March, the same as parsnips. The roots are taken up in the fall and preserved in sand, or remain in the ground and are dug up in the spring. The roots are boiled like parsnips, or cut up in thin slices and boiled in water, mashed, thickened with flour, and fried with salt pork or butter. Some persons after scraping the roots, steep them in vinegar, to extract a bitter taste, and then boil or stew them.

Scorzonera.—Sow in April or May, and manage generally like salsify, which it greatly resembles in its quality and use.

Spinach.—Sow the round leaved or summer variety early in April for summer use, and the winter or prickly in August and September for winter and spring use. When cold weather sets in, it should be covered with straw, to protect it from the sun, and prevent freezing and thawing. It is excellent for greens.

Squash.—Plant in April in hills about six feet apart, and the soil well enriched with a good quantity of rotten manure or compost to each hill.

Sow a sufficiency of seed to allow for loss by insects. Three or four plants are enough to leave finally for each hill. The early scollop or bush squash is an excellent variety for summer use. Canada and winter crookneck, and autumnal marrow, are considered the best for winter use. The marrow must be planted at a distance from every other variety, as they are very liable to mix.

Sea Kale.— But little cultivated, though a most excellent vegetable. It is a perennial plant, and the young shoots which rise in the spring are the parts eaten. These are generally blanched by covering them with a large garden pot or box, or making a hill of earth over the crowns of the roots; when cooked, it is served up like asparagus. The cultivation is simple. Select a good piece of ground, and let it be dug very deep, say eighteen inches. Sow in April. The plants may be raised from the seeds, or from offsets from the roots. The rows should be two feet apart, and the plants about a foot apart in the rows. If seeds are sown, it will be best to drop five or six into each place, to guard against accidents. The seeds vegetate very slow, and if dry weather occurs, water the beds frequently. In November cover the beds with a good thick coat of strawy manure, to protect the crowns of the roots from injury by frost.

Tomato.— Sow in hot beds in March, or in the open ground in April. Transplant to about three feet apart. Place sticks or trellises for them to run upon, or set them near a fence and tie them up to it. They are a very wholesome vegetable, and properly cooked, are considered a great luxury. They should be peeled and cut in pieces, then stewed over a slow fire for about half an hour, with pepper and salt.

Turnip.— Turnips may be sown at all seasons, from April to August, although those will be the best which are sown very early in spring; and those which are sown early in August, for a fall or winter crop. The best kinds for early use, are the early white Dutch, and early garden stone; and the white flat, yellow stone, and yellow Aberdeen, are excellent sorts for winter use. The value of ruta бага, for feeding cattle, &c. in winter, is too well known to need urging here. One thousand bushels can be grown with good management, on an acre, and it is considered an extremely profitable crop for farmers. The seed should be sown from the first to the middle of June, as they require longer time to grow than other turnips.— Sow in drills on land ploughed deep and harrowed; thin them to the distance of twelve inches from each other, and give them one or two good hoeings afterwards. One pound of seed will sow an acre.

Sweet Herbs.— The seeds of marjoram and thyme are very small, and unless carefully sown, they will frequently fail to come up well. The soil should be made fine and raked level. Sow in very shallow drills, twelve inches apart; lightly cover with fine earth, and press it down well on the seed. Throw over the bed a bass mat, or a little straw; just enough to cover the surface, and prevent the sun from drying up the soil. As soon as the plants are perceived, remove the mats or straw; and if the weather is dry, water frequently. Lavender, basil, and the other varieties of sweet herbs, may be sown in beds by themselves, and should be frequently hoed, and

kept clear of weeds. Those which are biennials or perennials, can be protected through the winter by covering with strawy manure or litter.

Potatoes.—This root is the product of almost every soil, although a dry, rich one is best suited to them. A sod turned over in the preceding autumn, so as to become well rotted in the spring after the grass has well started, is perhaps the best suited to give a fair yield, and at the same time a fine, healthy, well matured return. They may be planted in hills or drills, according to the judgment of the cultivator. Whole potatoes of a medium size are better for planting than small, or large cut ones. They should be well hilled up in hoeing. The hills may be about three or three and a half feet apart; or if in drills, they may be three and a half feet asunder, and the potatoes placed about ten inches apart. There are a variety of choice potatoes which are at times popular in different parts of the country, and which from the introduction of new and favorite varieties, or the older ones becoming poor bearers, or from other causes, fall into disuse. Among the best of the present time may be mentioned the kidney, the pink eye, the carter, the mercer, early hill, early frame, Chenango, &c. It requires from twelve to twenty bushels of seed, for planting, per acre.

FRUIT AND ORNAMENTAL TREES, EVERGREENS, SHRUBS, PLANTS, &c. &c.,



Of the most approved varieties, will be furnished at short notice, and packed in mats when required, so they can be transported to any part of the United States.

DAVID PROUTY & CO.'S

CATALOGUE

OF

VEGETABLE, AGRICULTURAL, AND FLORICULTURAL

SEEDS;

CONTAINING ALL THE BEST VARIETIES, AND
INCLUDING MANY

NEW AND IMPROVED KINDS;

ALSO,

**A LIST OF PLANTS; TUBEROUS FLOWER ROOTS; GARDENING,
AGRICULTURAL AND BOTANICAL BOOKS, ETC.**

ASSORTMENT OF SEEDS FOR FAMILY GARDENS.

For the convenience of purchasers who wish to stock a family garden with vegetables, but who are unacquainted with the various sorts, and proper proportion of each for that purpose, we would recommend the following varieties. Each kind is labelled with directions for their culture.

1 pint Early Peas 1 " Dwarf Blue Imperial do 1 " Late Marrowfat do 1 " Early Marrow Dwarf String Beans ½ " Pole Beans 1 ounce Long Blood Beet (true) ½ " Early Turnip-rooted Beet ½ " Early York Cabbage ½ " Savoy Cabbage ½ " Red Dutch Cabbage, (for pickling) ½ " Early Cauliflower ½ " Early Horn Carrot 1 " Long Orange Carrot ½ " White Solid Celery ½ " Curled Cress, or Peppergrass ½ " Early Frame Cucumber ½ " Long Green Prickly do ½ " Large Head Lettuce	½ ounce Large Dutch Parsnip ½ " Early Curled Silesia Lettuce ½ " Pine Apple Melon (fine) ½ " Large Watermelon ½ " Large Red Onion ½ " Large White Portugal Onion ½ " Double Curled Parsley ½ " Flat Squash Pepper 1 " Early Scarlet Short Top Radish ½ " White Turnip Radish ½ " Early Squash ½ " Canada Crookneck Squash ½ " Autumnal Marrow Squash ½ " Early White Dutch Turnip ½ " Yellow Stone Turnip ½ " White Flat Turnip Sweet Marjoram — Sage — Summer Savory.
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PRICE, 3 DOLLARS PER BOX.

ADVERTISEMENT.

The following Catalogue contains all the most approved and useful varieties of Vegetable, Agricultural, and Floricultural Seeds.

In the selection of our Seeds, great care is taken to have only those which can be relied upon, and raised by experienced growers; and those kinds which cannot be raised in this country without much difficulty and uncertainty, we import, from the most reliable sources in Europe.

The selection of good seeds is a subject of great importance to the cultivator, for on this the success of his crop depends. It is far better to purchase seeds (when such can be had) that can be depended upon, than to use those about which there is the least doubt of their genuineness. A few dollars should not be put in comparison with the risk that is run, by using those of doubtful character; for if such are sown and prove of an inferior sort, it is too late, when discovered, to remedy the evil. The germinating power may be known before the crop is sown; but their character as regards pureness, cannot be ascertained.

All kinds of Fruit and Ornamental Trees, Shrubs, Grape Vines, Honey Suckles, Roses, Green-House Plants, &c., furnished to order, from any of the nurseries in the vicinity of Boston.

CATALOGUE OF SEEDS, ETC.

VEGETABLE SEEDS.

GREEN GLOBE ARTICHOKE.

Sow early in the spring.

GIANT ASPARAGUS.

Sow in Autumn or early in the Spring.

ENGLISH BEANS — DWARF.

Early Mazagan

Broad Windsor

Plant early in Spring.

KIDNEY DWARF, OR BUSH BEANS.

Early Yellow Six Weeks

Early Red Eye China

Early Marrow

Early Black Eye

Early Red Cranberry

Early Speckled Russian

Early White Kidney

Early Large White Egg

Early Caseknife

Early Half Moon

Sow from April to June.

POLE OR RUNNING BEANS.

Large White Lima

Small White or Saba

Canada or Speckle Saba

London Horticultural

Red Cranberry

White Cranberry

Yellow Cranberry

White Dutch Caseknife

Scarlet Runners

White Dutch Runners

Sow in April and May.

BRUSSELS SPROUTS.

Sow in May, and set out in July.

BEEF.

Early Turnip-rooted		New Bassano
Long Blood Red	|	Mangel Wurtzel
White Sugar	|	Yellow Globe

Sow from middle of April to June.

BORECOLE, OR KALE.

Green Curled Scotch		Purple Curled
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Sow in May.

BROCCOLI.

Early White		Purple Cape
Early Purple		White Cape

Sow from 10th to 20th of May, and transplant early in June.

CAULIFLOWER.

Large Early		Large Late
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Sow about the 20th of May for late, in Sept. for early.

CABBAGE.

Early York		Turnip-rooted above ground
Early Low Dutch	|	Turnip-rooted below ground
Early Vanack	|	Large Late Drumhead
Early Sugarloaf	|	Green Globe Savoy
Early Hope	|	Late Sugarloaf
Early Battersea	|	Yellow Savoy
Early Ox heart	|	Red Dutch, (for Pickling)
Early Drumhead	|	Large Burgen

Sow for early Cabbages about the middle of Sept., and cover in winter with straw, — or in hot beds, in February, — for late, sow about the middle of May.

CELERY.

Seymour's Superb White		Bailey's White Giant
Red Solid	|	Bailey's Red Giant
White Solid	|	Celeriac
Lion's Paw	|	

Sow in hot beds in March or May, in the open ground, in deep, rich, moist land.

CARROT.

Long Orange		Large White
Early Scarlet Horn	|	Large Yellow
Altringham	|	

Sow from April to June.

CUCUMBER.

Early Frame
Early Cluster
White Spine

Long Prickly
Long Green Turkey
Small Gherkin, for Pickles

Plant about the first of May.

CHERVIL.

Sow from April to August.

CORN SALAD.

Sow in August and September.

CURLLED CRESS, OR PEPPERGRASS.

Broad Leaved

Water

Sow from April to July.

ENDIVE.

Green Curled

White

Sow first of July.

EGG PLANT.

Purple, best for culinary purposes

White, ornamental

Plant in hot-beds in March and April.

INDIAN CORN.

Early White Jefferson
Early Tuscarora
Early Sweet or Sugar
Early Yellow Canada

Craft's improved Canada
Large Yellow Dutton
Calico Speckled
Rice Corn, for popping

LEEK.

Large London

Scotch Flag

Sow in April.

LETTUCE.

Early Curled or Silesia
Royal Cape
Green Coss

Large Green head
Tennisball
White Coss

Sow in hot-beds in March, also at intervals through the season.

MARTYNIA.

Plant in May.

MELONS.

Green Citron (green flesh)	Mountain Spout, water
Pine Apple (green flesh)	New Imperial, water
Nutmeg (green flesh)	Long Island, water
Large Yellow Canteleup	Large Round, water
Christiana (yellow flesh)	Apple Seeded, water
Black Spanish, water	

Plant in May.

MUSTARD.

White or English

Brown

NASTURTIUM.

Sow in May or June.

ONION.

White Portugal	Tree or Top
Silver skin or Yellow	Potatoe Onion
Large Red	

Sow in March and April.

OKRA.

Sow in May.

PARSNIPS.

White Dutch	New Sugar
Guernsey	Hollow Crowned

PEAS.

Hill's Extra Early	British Queen
Early Prince Albert	New Milford Marrow
Early Cedo Nulli	Dwarf Marrowfat
Early Warwick	Dwarf Blue Imperial
Early Washington	Knight's Dwarf Marrow
Early Dwarf	Knight's Tall Marrow
Bishop's Early Dwarf	Spanish Dwarf
Blue Prussian	Dwarf Sugar

Sow as early as possible, and at intervals till the end of May.

PEPPER.

Tomato Shaped, or Squash	Long, or Cayenne
Bell	Sweet Spanish

Sow in March, in hot-beds.

PUMPKINS.

Fine Yellow Family	Mammoth
Plant in May.	

PARSLEY.

Double or Curled	Plain or Single
Sow early in Spring.	

RADISH.

Early Scarlet Short Top	Scarlet Turnip-rooted
Early Frame	White Turnip-rooted
Long Salmon	Black Spanish
Sow in March and April, in hot-beds, and at intervals through the season.	

RHUBARB.

Wilmot's Early Scarlet	Victoria
Tobolsk	Mammoth
Sow in November or early in Spring. Plants furnished.	

SPINACH.

Round Leaved, or Summer	New Zealand
Prickly, or Full	New Flanders
Sow from April to September.	

SEA KALE.

Sow early in Spring.

SALSIFY, OR VEGETABLE OYSTER.

Sow in April or May.

SQUASH.

Early Bush or Scallop	Winter Crookneck
Early Apple	Canada Crookneck
Summer Crookneck	Autumnal Marrow
Plant in May.	

SCORZONERA.

Sow early in Spring.

SKIRRET.

Sow early in Spring.

TOMATO.

Large Red	Small Red
Large Yellow	Small Yellow
Pear Shaped	Cherry
Sow in March and April.	

TURNIP.

Early White Dutch
 Early Snowball
 Early Garden Stone
 White Flat, or Globe
 Yellow Stone
 Yellow Maltese
 Yellow Aberdeen

Long Yellow French
 Long White French
 English Norfolk Turnip
 Yellow Swe. or Ruta Baga
 Purple Top or Ruta Baga
 Skirving's Improved Ruta
 Baga

Sow for early use in April — for Fall or Winter use, sow about the first of August.

SWEET HERBS, &c.

Balm
 Sweet Basil
 Borage
 Fennel
 Hyssop
 Saffron
 Lavender

Sweet Marjoram
 Rosemary
 Sage
 Summer Savory
 Thyme
 Caraway

FARMING OR AGRICULTURAL SEEDS.

BARLEY.

BEETS.

White Silesian, or Sugar
 Yellow Globe

Mangel Wurtzel

BROOM CORN.

BUCKWHEAT.

CABBAGE.

Drumhead

Sugarloaf

Savoy

CARROT.

Altringham

Large White

Long Orange

CORN.

Craft's Improved Canada
 Large Dutton

Large Brown
 Large Parker

GRASS SEEDS.

Timothy or Herds Grass	English Rye Grass
Red Top Northern	Italian Rye Grass
Red Top Southern	Sweet Vernal
Rhode Island Bent	Northern Red Clover
Fine Top	Southern Red Clover
Fowl Meadow Grass	White Dutch Honeysuckle
Blue Joint Grass	French or Lucerne Clover
Orchard Grass	

MILLET.

MUSTARD.

English White	Common Brown
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BEDFORD OATS.

Kentucky	Extra heavy
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PEAS.

Large Marrowfat	Field
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POTATOES.

Early Hill	Carter
Chenango	St. Helena

EYE.

Spring	Winter
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TURNIP.

Yellow Swede or Ruta Baga	English Norfolk Turnip
Purple Top or Ruta Baga	Yellow Aberdeen
Skirving's Improved Ruta Baga	White Flat or Globe

WHEAT.

Italian Spring	Black Sea
White Flint	Etrurian

BIRD SEED.

Canary	Rape
Hemp	Millet
Rough, or Unhulled Rice	Maw

 MISCELLANEOUS SEEDS.

Buckthorn	Horse Chestnut
Three Thorned Acacia	Acorns
Yellow Locust	Arbor Vitæ
Tobacco	Althea
Elm	Hemlock
Mulberry	Pine
Mountain Ash	Silver Fir

Seeds of many varieties of American Forest Trees, can be furnished, if orders are forwarded during the Summer months.

 GENERAL REMARKS ON SEEDS.

Good seeds, true to their marks, perfect in their production, and possessing vitality, are not only of the highest importance to the cultivator, but the dealer is also interested in having those of the first quality, as on this his reputation and success depend. Yet, the dealer and the seed-grower are often blamed when not in fault; for good seeds will often fail from unfavorable circumstances. They may fail from the ground being too cold and wet, or from its being too hot and dry. Lying in a dry soil, exposed to a scorching sun, their vitality is soon destroyed. Many hard seeds, — as carrot, parsnip, &c., — should have the soil rolled or pressed upon them, otherwise they are liable to fail.

Sometimes the tender plants start well; and, in the course of one or two days, and before the owner gets a view of them, they are all eaten by insects, and the seedsman is blamed. Again, insects devour them before they come out of the ground. Seeds may be buried too deep to vegetate; and shallow planting, on a dry soil, in hot weather, is very liable to failure. Powerful manures — such as hen or pigeon dung, guano, chemical manures, and those under powerful fermentation — may destroy seeds with which they come in contact. Seeds often fail from poverty in the soil. When there are so many causes of failure, it is not remarkable that failures occasionally take place; and the cultivator should investigate these subjects thoroughly, and not blame the seedsman without reflection and candor.

FLOWER SEEDS.



THE following beautiful lines on the "Use of Flowers," by MARY HOWITT, form a very appropriate introduction to the Flower-Seed Department.

GOD might have bade the earth bring forth
 Enough for great and small,
 The oak tree and the cedar tree,
 Without a flower at all.

He might have made enough, enough
 For every want of ours,
 For luxury, medicine, and toil,
 And yet have made no flowers.

The ore within the mountain-mine
 Requireth none to grow,
 Nor doth it need the lotus-flower
 To make the river flow.

The clouds might give abundant rain,
 The nightly dews might fall,
 And herb that keepeth life in man,
 Might yet have drunk them all.

Then wherefore, wherefore, were they made,
 All dyed with rainbow light,
 All fashioned with supremest grace,
 Up springing day and night;

Spangling in valleys green and low,
 And on the mountains high,
 And in the silent wilderness,
 Where no man passes by?

Our outward life requires them not;
 Then, wherefore had they birth?
 To minister delight to man,—
 To beautify the earth,—

To comfort man,— to wisper hope
 Whene'er his faith is dim;
 For whoso careth for the flowers,
 Will care much more for him!

EXPLANATIONS.

The number under which each species or variety of seeds is sold—the Scientific Name—the Common Name—the Period of Duration of the Plant—Color of the Flowers—Height of the Plant—Period of Blooming—and price per packet, are all given in the seven columns of the Catalogue, as follows:—

1st Column.—Number under which each variety is sold—and under which orders are executed; the detail of the name being unnecessary.

2nd Column.—Scientific or common name of the plants, agreeably to the remarks at the head of each alphabetic list.

3rd Column.—The same.

4th Column.—Hardiness and duration of each plant, viz.:—h, *hardy*; hh, *half hardy*; t, *tender*; F, *frame*; G, *green house*; a, *annual*; (1 year); b, *biennial*; (lasts 2 years); p, *perennial*, (lasts many years.) They are thus applied in the Catalogue:—ha, *hardy annual*; ta, *tender annual*; hb, *hardy biennial*; hhb, *half hardy biennial*; hp, *hardy perennial*; hhp, *half hardy perennial*, &c.

5th Column.—Color of the flower. The abbreviations are as follows:—var, *various*; sc, *scarlet*; cr, *crimson*; pur, *purple*; str, *striped*; yel, *yellow*; va, *variagated*; or, *orange*; b & w, *blue and white*, &c. &c.

6th Column.—Usual height in feet the plants generally attain under good cultivation.

7th Column.—Usual months of flowering.

A star, *, added to the letters of the fourth column, denotes that the biennial and perennial plants flower the first year as well as the second.

A double star, **, following the scientific name, signifies that the plants are climbing, and suitable for an arbor, or trellis work.

Dots, . ., in the fourth column, indicates a repetition.

TIME OF SOWING.—Hardy annuals from April to June, and many of the kinds in the autumn. Half hardy annuals in May or earlier, in a *green-house* or a *hot-bed*. Tender annuals in a *hot-bed*, and transplanted to the border in June. Biennials and perennials from April to July.

ASSORTMENTS OF SPLENDID FLOWER SEEDS.

8 varieties of superb Double German Asters,	\$0 50
8 varieties of superb Double Balsams,	50
4 varieties of do. do. do.	25
4 varieties of splendid Dwarf Rocket Larkspurs,	25
4 varieties of fine Candytuft,	25
4 varieties of fine Zinnias,	25
20 varieties of Flower Seeds, assorted kinds,	1 00
50 varieties of do. do. do. do.	2 00

FLOWER SEEDS.

The following plants, being known by their common or English names, they are thus arranged in alphabetical order, and the scientific name given in the third column. A collection may be ordered, by merely giving the numbers, and date of the catalogue.

No.	Common Name.	Scientific Name.	Duration.	Color.	Height ft.	Period.
1.	Aster, Chinese mixed	<i>Aster sinenses</i> , var	hha	var.	2	Aug. Oct.
2.	quilled, German do.	— 8 sp. and var	..	..	2	.. ..
3.	— dark blue	— <i>atrocaeruleus</i>	..	d. blue	2	.. ..
4.	— light blue	— <i>late caeruleus</i>	..	p. blue	2	.. ..
5.	— red	— <i>atrorubens</i>	..	red	2	.. ..
6.	— rose	— <i>roseus</i>	..	rose	2	.. ..
7.	— white	— <i>albus</i>	..	white	2	.. ..
8.	— Turkey	— <i>turcius</i>	..	crimson	2	.. ..
9.	— variegated	— <i>variegatus</i>	..	va.	2	.. ..
10.	— new, pyramidal	— <i>pyramidalis</i>	..	var.	2	.. ..
11.	— early dwarf	— <i>nanus</i>	..	..	1	July, Sept.
12.	— Animated Oats	<i>Avena sensitiva</i>	..	white	$\frac{1}{2}$	.. ..
13.	Auricula, finest mixed	<i>Primula auricula</i>	hhp	var.	2	May, June.
14.	Balsam, fine mixed	<i>Balsamina hortens</i>	ta	..	2	July, Sept.
15.	extra double, do.	— var	..	..	2	.. ..
16.	— double rose	— <i>rosea</i>	..	rose	2	.. ..
17.	— — scarlet	— <i>coccinea</i>	..	sc.	2	.. ..
18.	— — white	— <i>alba</i>	..	white	2	.. ..
19.	— — purple	— <i>purpureus</i>	..	pur.	2	.. ..
20.	— — striped	— <i>striata</i>	..	str.	2	.. ..
21.	— — mottled	— <i>punctata</i> var.	..	var.	2	.. ..
22.	— — crimson spot	— <i>punctata</i> var.	..	cr. & w.	2	.. ..
23.	— — scarlet spot'd	— <i>punctata</i> var.	..	sc. & w.	2	.. ..
24.	— — purple do	— <i>punctata</i> var.	..	pur. & w.	2	.. ..
25.	— — crimson [press	— <i>phoenicea</i>	..	cr.	2	.. ..
26.	Belvidere, or Sum. cy.	<i>Chenopodium scopana</i>	ha	yel.	2	Aug. Sept.
27.	Cape Marigold	<i>Calendula pulvialis</i>	..	w. & p.	2	July, Sept.
28.	Candytuft, white	<i>Iberis amara</i>	..	white	1	June, Aug.
29.	purple	<i>umbellaea</i>	..	pur.	1	.. ..
30.	crimson	— <i>phoenicea</i>	..	cr.	1	.. ..
31.	new blush	<i>carnea nova</i>	..	rose.	1	.. ..
32.	new rocket	<i>coronaria</i>	..	white	1	.. ..
33.	fragrant	<i>odorata</i>	..	..	1	.. ..
34.	Coreopsis, golden	<i>Calliopsis tinctoria</i>	..	y. & pur.	2	June, Sept.
35.	Drummond's	<i>Drummondii</i>	..	yel.	2	.. ..
36.	dark red	<i>atrosanguinea</i>	..	yel. & cr.	2	.. ..
37.	Carnation, mixed	<i>Dianthus caryophyllo-</i>	hp	var.	2	June, Aug.
38.	— fine double	— var. [ides	..	..	2	.. ..
39.	— finest German	— var.	..	..	2	.. ..
40.	Picotee	— var.	..	..	2	.. ..
41.	— finest German	— var.	..	..	2	.. ..
42.	Catchfly, Lobels	<i>Silene armeria</i>	ha	red	1	.. ..

No.	Common Name.	Scientific Name.	Dura- tion.	Color.	Height	Period.
43.	Catchfly, large clustered	Silene compacta	fr	rose	1½	June, Aug.
44.	white	alba	..	white	1	.. ..
45.	Canterbury Bell, blue	Campanula medium	hb	blue	2	June, Sept.
46.	white	— alba	..	white	2	.. ..
47.	Coxcomb, crimson	Celosia cristata	ta	cr.	1½	July, Sept.
48.	yellow	— lutea	..	yel.	1½	.. ..
49.	Brighton Prize	— var.	..	cr.	1½	.. ..
50.	bordered	— var.	..	var.	1½	.. ..
51.	Columbine, mixed	Aquilegia vulgaris	hp	..	2	May, July.
52.	Siberian	Siberica	..	blue	1	.. ..
53.	Crysanthemum, yellow	Chrysanthemum coro-	ha	yel.	2½	July, Aug.
54.	white	— alba [narium]	..	white	2½	.. ..
55.	tricolored	carinatum	..	3. col.	1	.. ..
56.	new golden	luteum	..	yel.	1	.. ..
57.	Chinese primrose	Primula prænitens	hbp*	pur.	½	July, Dec.
58.	white	— alba	..	white	½	.. ..
59.	Cypress vine**	Ipomœa Quamochit	ta	cr.	cl.	July, Sept.
60.	Convolvulus, dwarf	Convolvulus minor	ha	bl. & wh.	1½	July, Aug.
61.	new dark extra	atropurpureus	..	dark pur.	1½	.. ..
62.	— white	albus	..	white	1½	.. ..
63.	Cacalia, scarlet	Cacalia coccinea	..	sc.	1	.. ..
64.	new yellow	— lutea	..	yel.	1	.. ..
65.	Dahlia, finest mixed	Dahlia, var.	tp*	var.	5	.. ..
66.	Egg plant, purple	Solanum melongena	ta	pur.	2	July, Oct.
67.	white	— var.	..	white	2	July, Sept.
68.	Eternal flower, golden	Elichrysum bracteatum	hha	pur.	2	.. ..
69.	new white	— album [um]	..	white	5	.. ..
70.	— purple	Xeranthemum annu-	..	pur.	1	.. ..
71.	— white	— album	..	white	1	.. ..
72.	Eschscholtzia, mixed	Crpseis, var.	ha	or.	1	.. ..
73.	Forget-me-not	Myosotis arvensis	..	blue	½	June, Sept.
74.	Flos Adonis	Adonis autumnalis	..	sc.	1	July, Aug.
75.	Fraxinella, purple	Dictamnus fraxinella	hp	red.	2	.. ..
76.	white	— alba	..	white	2	June, Aug.
77.	Foxglove, purple	Digitalis purpurea	..	pur.	2½	.. ..
78.	white	— alba	..	white	2½	July, Sept.
79.	new spotted	— punctata	..	pur. & w.	3	.. ..
80.	yellow	— lutea	..	yel.	3	.. ..
81.	Globe Amaranthus	Gomphrena globosa	ta	cr.	2	.. ..
82.	white	— alba	..	white	2	.. ..
83.	variegated	— variegata	..	var.	2	.. ..
84.	Gourd, bottle**	Cucurbita lagenaria	..	white	10	.. ..
85.	striped pear**	ovifera var.	..	yel.	10	.. ..
86.	orange**	aurantia	..	..	10	.. ..
87.	two colored	bicolor	..	2 col.	10	.. ..
88.	Geranium (<i>Pelargoni-</i> <i>um</i>), extra	Pelargonium sp. & var.	gp	var.	2	April, June,
89.	scarlet	sp.	..	sc.	2	.. ..
90.	Hawkweed, golden	Crepis barbata	ha	yel.	1	July, Aug.
91.	purple	— rubra	..	pur.	1	.. ..
92.	silvery	— argentea	..	white	1	.. ..
93.	Heartsease, (<i>Pansy</i>)	Viola tricolor, var.	hp	var.	¾	May, June
94.	fine mixed	— grandiflora	hb*	..	¾	May, Sept.
95.	extra, from very fine named flowers	var.	..	..	¾	.. ..
96.	Hibiscus, African	Hibiscus, Africanus	ha	yel. & br.	2	July, Sept.
97.	fine yellow	manihot	G.	yel.	3	.. ..
98.	Horn Poppy, mixed	Glaucina phœnicea	ha	var.	2	Aug, Sept.
99.	Honesty or Satin flower	Lunaria biennis	hb	blue	1½	July, Aug.

Common Name.	Scientific Name.	Dura- tion.	Color.	Height ft.	Period.
No.					
100. Hollyhocks, mixed	<i>Althæa rosea</i>	hp	var.	5	June, Sept.
101. black	— <i>nigra</i>	..	black	5	.. ..
102. yellow	— <i>lutea</i>	..	yel.	5	.. ..
103. rose	— <i>rosea</i>	..	rose	5	.. ..
104. white	— <i>alba</i>	..	white	5	.. ..
105. crimson	— <i>phœnicea</i>	..	cr.	5	.. ..
106. mottled	— var.	..	mot.	5	.. ..
107. Ice plant	<i>Mesembryanthemum</i> [<i>crystallinum</i>]	ta	white	$\frac{1}{2}$	.. ..
108. Indian shot	<i>Canna indica</i>	..	sc.	3	July, Aug.
109. Jacobea, mixed	<i>Senecio elegans</i>	ha	var.	1	July, Sept.
110. double purple	<i>purpurea plenna</i>	..	purp.	1	.. ..
111. — crimson	<i>kermesina plenna</i>	..	cr.	1	.. ..
112. — white	<i>alba plenna</i>	..	white	1	.. ..
113. Larkspur, dwarf rocket.	<i>Delphinium ajacis</i>	..	var.	$1\frac{1}{2}$	June, Sept.
114. double blue, [mixed	— <i>cæruleum</i>	..	blue	$1\frac{1}{2}$	.. ..
115. — porcelain	— var.	..	p. blue	$1\frac{1}{2}$	.. ..
116. — white	— <i>album</i>	..	white	$1\frac{1}{2}$	.. ..
117. — rose	— <i>rosea</i>	..	rose	$1\frac{1}{2}$	.. ..
118. branching, mixed	<i>consolida</i> , var.	..	var.	$2\frac{1}{2}$	July, Aug.
119. — blue	— <i>cæruleum</i>	..	blue	$2\frac{1}{2}$	.. ..
120. — rose	— <i>roseum</i>	..	rose	$2\frac{1}{2}$	.. ..
121. — white	— <i>album</i>	..	white	$2\frac{1}{2}$	June, Aug.
122. Bee	<i>elatum</i>	hp	blue	4	.. ..
123. Chinese	<i>chinensis</i>	..	..	3	.. ..
124. large flowered	<i>grandiflora</i>	..	..	3	.. ..
125. Lavatee, red	<i>Lavatera trimestris</i>	ha	rose	2	July, Sept.
126. white	— <i>alba</i>	..	white	2	.. ..
127. Love-lies-bleeding	<i>Amaranthus caudatus</i>	..	red	2	.. ..
128. Lupins, mixed	<i>Lupinus</i> , sp. & var.	..	var.	2	.. ..
129. large blue	<i>hirsutus</i>	..	blue	2	.. ..
130. — rose	— <i>pilosus</i>	..	rose	2	.. ..
131. yellow	<i>luteus</i>	..	yel.	2	.. ..
132. white	<i>albus</i>	..	white	2	.. ..
133. Marigold, Fr'h mixed	<i>Tagetes patula</i> , pl. var.	hha	yel. & br.	2	.. ..
134. superb striped French	<i>striata superba</i>	..	..	2	.. ..
135. African, lemon	<i>erecta citrina</i>	..	lem.	2	.. ..
136. — orange	<i>aurantiaca</i>	..	or.	2	.. ..
137. — mixed	— pl. var.	..	var.	2	.. ..
138. Marvel of Peru, mixed	<i>Mirabilis dichotoma</i>	ha	..	3	July, Oct.
139. Mignonette	<i>Reseda odorata</i>	..	white	1	June, Sept.
140. Morning Glory, mix'd	<i>Convolvulus major</i> **	..	var.	cl.	July, Oct.
141. Nasturtium, tall**	<i>Tropæolum</i>	..	yel.	6	June, Sept.
142. dark crimson**	— <i>atrosanguineum</i>	..	cr.	6	July, Sept.
143. spotted	— <i>Shillingii</i>	..	spot.	6	.. ..
144. Peas, sweet, mixed**	<i>Lathyrus odoratus</i> , var.	..	var.	5	.. ..
145. — striped**	— <i>striatus</i>	..	str.	5	Aug. Sept.
146. — painted lady	— <i>pictus</i>	..	var.	5	.. ..
147. — white**	— <i>albus</i>	..	white	5	.. ..
148. — black**	— <i>nigrus</i>	..	black	5	.. ..
149. — scarlet**	— <i>coccineus</i>	..	sc.	5	.. ..
150. — purple**	— <i>purpureus</i>	..	purp.	5	.. ..
151. — Tangier**	<i>tingitanus</i>	..	sc.	5	.. ..
152. Everlasting, red**	<i>latifolius</i>	hp	pink	5	June Sept.
153. — white	— <i>albus</i>	:	white	5	.. ..
154. Persicaria	<i>Polygonum orientale</i>	ha	red	6	.. ..
155. Polyanthus, fine mixed	<i>Primula elatior</i> , var.	hp	var.	1	July, Sept.
156. Pink, clove, mixed	<i>Dianthus moschatus</i>	..	..	$1\frac{1}{2}$	June, July
157. Chinese, annual	<i>annuus</i>	ha	..	1	July, Aug.

Common Name.	Scientific Name.	Duration.	Color.	Height	Period.
No.				ft.	
158. Pink, Chinese, imperial	<i>Dianthus Chinensis</i>	ha	var.	1	July, Aug.
159. pheasant-eyed	<i>floribundus</i>	hp	..	1	.. ..
160. Poppy, mixed	<i>Papaver somniferum</i> ,	ha	..	2	July, Sept.
161. — superb fringed	— <i>fimbriata</i>	..	..	2	.. ..
162. — African	— <i>Rheas</i> , pl. var.	..	..	2	.. ..
163. — picotee	— <i>pictus</i>	..	..	2	.. ..
164. Phlox, peren. mixed	<i>Phlox</i> , sp. & var.	hp	..	3	.. ..
165. Drummond's annual	<i>Drummondii</i>	ha	..	1	July, Oct.
166. Prince's feather	<i>Amaranthus hypocon-</i> <i>driacus</i>	..	cr.	2½	July, Sept.
167. Petunia, white	<i>Petunia nyctaginiflora</i>	..	white	2	July, Oct.
168. purple	— <i>phœnicea</i>	..	violet	2	.. ..
169. finest mixed	— var.	..	var.	2	.. ..
170. Rocket, sweet	<i>Hesperis matronalis</i>	hp	purp.	2	July, Sept.
171. Rose campion	<i>Agrostemma githiago</i>	..	..	2	June, Sept.
172. Scabiosa, dwarf, mixed	<i>atropurpurea nana</i>	ha	var.	1	July, Sept.
173. fine tall, mixed	— <i>grandiflora</i>	hhp*	..	2	July, Nov.
174. Sensitive plant	<i>Mimosa sensitiva</i>	ta	pink	1	July, Sept.
175. Snapdragon, fine mixed	<i>Antirrhinum majus</i>	hp*	var.	1½	.. ..
176. carnation	— <i>caryophylloides</i>	..	str.	1½	.. ..
177. painted	— <i>pictum</i>	..	var.	1½	.. ..
178. scarlet	— <i>coccineum</i>	..	sc.	1½	.. ..
179. splendid new, 20 var.	var.	..	var.	1½	.. ..
180. Stock, 10 weeks, mix'd	<i>Mathiola annua</i> , var.	hha	..	1½	June, Sept.
181. scarlet	— <i>coccinea</i>	..	sc.	1½	.. ..
182. white	— <i>alba</i>	..	white	1½	.. ..
183. purple	— <i>purpurea</i>	..	purp.	1½	.. ..
184. wallflower leaved	— var.	..	v.r.	1½	.. ..
185. new intermediate	— <i>intermedia</i>	..	cr.	1½	.. ..
186. Victoria.	— var.	..	..	1½	.. ..
187. new white pyramid'l	— <i>pyramidalis</i>	..	white	1½	.. ..
188. Stock, German, mix'd	<i>annua densiflora</i>	..	var.	1	.. ..
189. — carmine	— <i>miniata</i>	..	..	1	.. ..
190. — new yellow	— <i>lutea</i>	..	yel.	1	.. ..
191. — crimson	— <i>kermesina</i>	..	cr.	1	.. ..
192. — rose	— <i>rosea</i>	..	rose	1	.. ..
193. — violet	— <i>violacea</i>	..	vio.	1	.. ..
194. — white	<i>Mathiola annua alba</i>	..	white	1	.. ..
195. — peach blossom	— <i>persicæfolia</i>	..	peach	1	.. ..
196. — blue	—	..	blue	1	.. ..
197. Stock, Queen, scarlet	<i>incana</i>	hhb	sc.	2	May, Sept.
198. — purple	— <i>purpurea</i>	..	purp.	2	.. ..
199. — white	— <i>alba</i>	..	white	2	.. ..
200. Stock brompton, scar.	<i>simplicifolium</i>	..	sc.	2	.. ..
201. — purple	— <i>purpurea</i>	..	purp.	2	.. ..
202. — white	— <i>alba</i>	..	white	2	.. ..
203. — imperial, 2 colors	— <i>imperialis</i>	hhp	2. col.	2	.. ..
204. Sunflower	<i>Helianthus annuus</i>	ha	yel.	6	Aug. Sept.
205. — splendid double	— <i>indicus</i>	..	..	3	.. ..
206. Sweet Alyssum	<i>Alyssum maritimum</i>	..	white	1	June, Sept.
207. Sweet Sultan, mixed	<i>Centaurea</i> , var.	hha	var.	1	July, Sept.
208. purple	— <i>moschata</i>	..	purp.	1½	.. ..
209. white	— <i>alba</i>	..	white	1½	.. ..
210. yellow	— <i>suaveolens</i>	..	yel.	1½	.. ..
211. blush	— <i>crocydium</i>	..	flesh.	1½	.. ..
212. Sweet William, mix'd	<i>Dianthus barbatus</i>	hp	var.	1	June, Augt.
213. double flowered	— <i>pleno</i> [lum	..	..	1	.. ..
214. Venus's Looking Glass	<i>Prismatocarpus specu-</i>	ha	blue	1	June, Sept.
215. Virginia stock, red	<i>Molcomia maritima</i>	..	red	1	July, Sept.

Common Name.	Scientific Name.	Dura- tion.	Color.	Height ft.	Period.
No. 216. Virginia stock, white	Malcolmia alba	ha	white	1	July, Sept.
217. Wallflower, bloody	Cherianthus cheiri	hbp	br.	1½	May, Aug.
218. yellow	— flava	..	yel.	1½	.. ..
219. purple	-- purpurea	..	pur.	2	.. ..
220. double German	flore pleno, pl. var.	..	var.	2	.. ..
221. mixed	—	..	..	2	.. ..

The following seeds, with very few exceptions, have no popular or English name; and in consequence, the scientific names are arranged in alphabetical order. The names in the second column, by which they are often called, are mostly literal translations of the specific name: Example — *Clarkia elegans*, "elegant" *Clarkia*, &c. A dash, —, indicates a variety; parentheses, (), that the word is not literally translated, or is super-added.

Scientific Name.	Common Name.	Dura- tion.	Color.	Height ft.	Period.
No. 222. <i>Ageratum Mexicanum</i>	Mexican	ha	blue	1½	July, Aug.
223. odoratum	fragrant	..	..	1½	.. ..
224. <i>Alonsoa grandiflora</i>	great-flowered	gp*	sc.	1½	June, Sept.
225. <i>Amaranthus tricolor</i>	three colored	ta	3. col.	1	July, Sept.
226. <i>Alyssum saxatile</i>	golden	hp *	yel.	1	May, July.
227. <i>Amethysea cærulea</i>	blue	ha	blue	2	Aug. Oct.
228. <i>Agrostis pulchella</i>	pretty	..	green	1	.. ..
229. Argemone, var.	(finest mixed)	..	var.	3	July, Sept.
230. <i>Aquilegia formosa</i>	beautiful	hp	r. & or.	1½	June, Aug.
231. glandulosa	gandular	..	w. & c.	1½	.. ..
232. Skinneri	Skinner's	..	blue	1½	.. ..
233. <i>Anagallis Indica</i>	Indian	ha	..	1	July, Aug.
234. var.	(finest mixed)	..	var.	1	.. ..
235. <i>Bartonia aurea</i>	golden	..	yel.	1½	July, Sept.
236. <i>Brachycome iberidifolia</i>	Swan River daisy	hha	blue	1	.. ..
237. <i>Browallia elata</i>	winged	ta	..	1	.. ..
238. <i>Baptisia cærulea</i>	blue	hp	..	1	.. ..
239. <i>Campanula pyramidalis</i>	pyramidal bell-flower	hbp	..	4	June, Sept.
240. — alba	white	..	white	4	.. ..
241. Loreii	Lore's	ha	blue	1	.. ..
242. — — —	(peren. sorts mixed)	hp	var.	2	.. ..
243. <i>Centaurea Americana</i>	American	ha	red.	3	Aug. Sept.
244. — cyanus	(beautiful mixed)	..	var.	2	.. ..
245. <i>Cladanthus Arabicus</i>	Arabian	..	yel.	1	July, Aug.
246. <i>Clarkia elegans</i>	elegant	..	lil.	1½	July, Sept.
247. — rosea	new rose	..	rose	1½	.. ..
248. pulchella	pretty	..	lil.	1	.. ..
249. — alba	white	..	white	1	.. ..
250. — grandiflora	large-flowered	..	red.	1½	.. ..
251. — — —	(mixed)	..	var.	1½	.. ..
252. <i>Calampelis scabra</i> **	climbing	hbp*	or.	10	.. ..
253. <i>Cleome grandiflora</i>	great-flowered	ha	rose	4	.. ..
254. <i>Calceolaria</i> , pl. var.	(splendid mixed)	G.	var.	1½	May, Sept.
255. <i>Clintonia elegans</i>	elegant	ha	bl. & wh.	½	July, Sept.
256. pulchella	pretty	..	..	½	.. ..
257. <i>Cobæa scandens</i> **	Mexican	gp*	purp.	10	Aug. Sept.
258. <i>Coelinsia bicolor</i>	two-colored	ha	wh. & p.	2	July, Aug.
259. — heterophylla	various leaved	..	wh. & c.	2	.. ..
260. <i>Calandrinia grandiflora</i>	large-flowered	..	p. & red	1½	July Sept.
261. discolor	two-colored	..	rose	1½	.. ..
262. speciosa	showy	..	purp.	½	Aug. Sept.

Scientific Name.	Common Name.	Duration.	Color.	Height	Period.
No				ft.	
263. <i>Cassia Marylandica</i>	Maryland	hp	yel.	4	June, Sept.
264. <i>Commelina caelestis</i>	sky blue	ta	blue	1½	July, Aug.
265. <i>Chelone barbata</i>	bearded	hhp*	sc.	2	Aug. Sept.
266. <i>Chryseis crocea</i>	(<i>Eschscholtzia</i> .)	ha	or.	1	June, Oct.
267. <i>Californica</i>	Californian	..	yel.	1	.. ..
268. <i>compacta</i>	compact	..	..	1	.. ..
269. <i>Cineraria, pl. var.</i>	(splendid mixed)	G.	var.	2	Feb. May.
270. <i>Cosmanthus fimbriat's</i>	fringed	hha	yel.	1½	Aug. Sept.
271. <i>Cistus, pl. sp.</i>	(fine mixed)	p	var.	2	July, Oct.
272. <i>Cytisus, pl. sp.</i>	(mixed)	..	..	2	June, Aug.
273. <i>Didiscus cæruleus</i>	blue	hha	blue	2	.. ..
274. <i>Delphinium splendens</i>	splendid	hhp*	..	4	.. ..
275. <i>Dianthus giganteus</i>	gigantic	hb*	red	4	July, Sept.
276. <i>Hispanicus</i>	Spanish	hhp*	..	1	.. ..
277. <i>plumarius</i>	feathered	hp	var.	1½	.. ..
278. <i>moschatus, fl. pl.</i>	musk, double flowered	..	wh. & p.	1	.. ..
279. <i>Erysimum Peroffskya-</i>	Peroffsky's	ha	yel.	2	.. ..
280. <i>Eutocaviscida</i> [num	viscid	..	blue	1½	.. ..
281. <i>Eucharidium concin-</i>	neat	..	cr.	1	Aug. Sept.
282. <i>grandiflorum</i> [num	large-flowered	..	purp.	1	.. ..
283. <i>Fuchsia hybrida</i>	(extra fine mixed)	G.	var.	2	June, Oct.
284. <i>Gaillardia, pl. sp.</i>	(fine mixed)	hp	var.	2	Aug. Oct.
285. <i>picta Drummondii</i>	painted	hhp*	y. & s.	2	.. ..
286. <i>Richardsonii</i>	Richardson's	hhp*	yel.	2	July, Sept.
287. <i>Gilia capitata</i>	bunch-flowered	ha	blue	2	.. ..
288. <i>tricolor</i>	three-colored	..	3. col.	1	.. ..
289. <i>Godetio (Enothera)</i>	(finest mixed)	..	var.	1	Aug. Oct.
290. <i>bifrons</i>	two-fronted	..	p. & c.	1	July, Sept.
291. <i>Lindleyana</i>	Lindley's	..	wh. & r.	1	.. ..
292. <i>rosea alba</i>	rose and white	..	white	1	.. ..
293. <i>rosea</i>	rose-colored	..	rose	1	.. ..
294. <i>Geum coccineum</i>	scarlet	hhp*	sc.	2	.. ..
295. <i>Helenium Douglassii</i>	Douglas's	ha	yel.	1	July, Aug.
296. <i>Heliophylla Araboides</i>	Arabis-like	..	blue	1	.. ..
297. <i>Humea elegans</i>	elegant	hb*	red.	5	July, Oct.
298. <i>Ipomæa coccinea**</i>	scarlet Morning-glory	ha	sc.	10	.. ..
299. <i>Ipomopsis picta</i>	painted	hhb*	..	2	July, Sept.
300. <i>Lasthenia Californica</i>	Californian	ha	yel.	1	July, Aug.
301. <i>Leptosiphon androsa-</i>	long-tubed	..	lil.	1	.. ..
302. <i>densiflorus</i> [ceus	dense-flowered	..	var.	1	.. ..
303. <i>Limanthes Douglassii</i>	Douglas's	..	yel.	1	.. ..
304. <i>grandiflora</i>	large-flowered	..	w. & y.	1	Aug. Sept.
305. <i>Lisianthus Russellianus</i>	Duke of Bedford's	G.	purp.	2	.. ..
306. <i>Lobelia gracilis</i>	graceful	ha	blue	½	July, Oct.
307. <i>cardinalis</i>	Cardinal flower	hb	sc.	½	June, Aug.
308. <i>ignea</i>	flame-colored	hhp	..	3	Aug. Sept.
309. <i>ramosa</i>	branching	ha	blue	1½	.. ..
310. <i>Lophospermum scan-</i>	climbing	..	rose	cl.	July, Oct.
311. <i>Hendersonii**</i> [dens	Henderson's	..	spot.	cl.	.. ..
312. <i>Lotus jacobæus</i>	dark-flowered	ta	black	1½	.. ..
313. <i>Lupinus nanus</i>	dwarf	ha	p. & bl.	1	.. ..
314. <i>Cruickshankii</i>	Cruickshank's	..	var.	2	.. ..
315. <i>Hartwegii</i>	Hartweg's	..	b. & w.	1½	.. ..
316. <i>pulchellus</i>	pretty	..	blue	1	Aug. Sept.
317. <i>polyphyllus</i>	many-leaved	hp	..	2	June, Aug.
318. <i>— alba</i>	white	..	white	3	.. ..
319. <i>Lychnis chalconica</i>	scarlet	..	sc.	2	.. ..
320. <i>flos Jovis</i>	flower of Jove	..	cr.	2	Aug. Sept.
321. <i>fulgens</i>	glowing	hhp*	sc.	1	.. ..
322. <i>rosea nova</i>	new rose	hp	rose	2	July, Aug.

No.	Scientific Name.	Common Name.	Duration.	Color.	Height ft.	Period.
323.	<i>Leycesteria formosa</i>	beautiful	hp	w. & p.	6	Aug. Sept.
324.	<i>Linaria speciosa</i>	showy	ha	var.	1	" "
325.	<i>Lopezia coronata</i>	crowned	..	..	..	June, Aug.
326.	<i>racemosa</i>	pendulous	..	..	..	" "
327.	<i>Madia elegans</i>	elegant	..	yel.	2	July, Sept.
328.	<i>Malope grandiflora</i>	large-flowered	..	cr.	2	" "
329.	<i>— alba</i>	white	..	white	2	" "
330.	<i>Malva zebrina</i>	striped	..	str.	2	" "
331.	<i>Morenii</i>	Morenii's	hp*	red	2	Aug. Sept.
332.	<i>moschata</i>	musk	..	white	2	" "
333.	<i>Martynia frag.</i> [na**]	fragrant	ta	var.	2	July, Sept.
334.	<i>Maurandia Barclaya-</i>	Barclay's	hha	purp.	10	July, Oct.
335.	<i>semperflorens</i> **	ever-flowering	..	rose	8	" "
336.	<i>antirrhiniiflora</i>	Snapdragon, flowered	..	b. & wh.	cl.	Aug. Sept.
337.	<i>Mesembryanthemum</i>	(fine yellow)	..	yel.	½	" "
338.	<i>tricolor</i> [glabrum]	three-colored	..	red	½	" "
339.	<i>Mimulus cardinalis</i>	scarlet	hhp*	sc.	2	July, Aug.
340.	<i>moschatus</i>	musk (plant)	..	yel.	½	June, Sept.
341.	<i>— — —</i>	(extra fine mixed)	..	var.	1	" "
342.	<i>Nemophila atomaria</i>	white-spotted	hha	w. spot.	1	July, Oct.
343.	<i>discoidalis</i>	white-bordered	..	b. & w.	1	" "
344.	<i>insignis</i>	beautiful blue	..	blue	1	" "
345.	<i>— grandiflora</i>	large-flowered	..	..	1	" "
346.	<i>striata</i>	striped	..	str.	1	" "
347.	<i>aurita</i>	ear (leaved)	..	purp.	2	" "
348.	<i>Nigella damascena</i>	Love-in-a-mist	ha	blue	1	Aug. Sept.
349.	<i>Hispanica</i>	Spanish	..	..	¾	" "
350.	<i>Nolana atriplicifolia</i>	atriplex-leaved	..	..	1	July, Oct.
351.	<i>grandiflora</i> [des]	large-flowered	..	..	1	" "
352.	<i>Oxyura chrysanthemoides</i>	Chrysanthemum-like	..	yel.	1	May, June.
353.	<i>Papaver orientale</i>	Oriental poppy	hp	sc.	2	" "
354.	<i>pulcherrimum</i>	beautiful	hp*	..	2	Aug. Sept.
355.	<i>Pentstemon Chandleri</i>	Chandler's	hpp*	va.	2	" "
356.	<i>gentianoides</i>	gentian-like	..	red	2	" "
357.	<i>— coccinium</i>	scarlet	..	sc.	2	" "
358.	<i>speciosum</i>	showy	..	rose	2	" "
359.	<i>— — —</i>	(fine mixed)	..	var.	2	" "
360.	<i>Phlox Drummondii</i>	Drummond's, 20 var.	ha	..	2	" "
361.	<i>pl. sp. perennans</i>	(perennial mixed)	hp	..	3	June, Oct.
362.	<i>Portulaca splendens</i>	splendid	hha	cr. & wh.	½	July, Oct.
363.	<i>Thellusonii</i>	Thelluson's	..	sc.	½	" "
364.	<i>Potentilla formosa</i>	handsome	hp*	rose	1½	June, Aug.
365.	<i>atrosanguinea</i>	dark red	..	cr.	1½	" "
366.	<i>Primula cortusoides</i>	Cortusia-like	G.	purp.	1	June, Aug.
367.	<i>Rhodanthe Manglessii</i>	Mr. Mangles's	hha	rose	1	July, Sept.
368.	<i>Rudbeckia lasiniata</i>	yellow	hp	yel.	2	Aug. Sept.
369.	<i>Rhexia Virginica</i>	Virginian	ha	cr.	1	Sept. Oct.
370.	<i>Salpiglossis, pl. var.</i>	finest mixed	hha	var.	1	July, Sept.
371.	<i>Salvia bicolor</i>	two colored	hp	b. & wh.	1	July, Aug.
372.	<i>patens</i>	splendid blue	hhp*	sky bl.	2	Aug. Oct.
373.	<i>Rhodenwaldii</i>	(new crimson)	..	cr.	2	" "
374.	<i>Schizanthus pinnatus</i>	pinnate-leaved	ha	l. p. y.	1½	July, Sept.
375.	<i>— humilis</i>	dwarf	..	l. r. y.	1	" "
376.	<i>— porrigens</i>	spreading	..	l. p. y.	1½	" "
377.	<i>— Priestii</i>	Priest's	..	white	1½	" "
378.	<i>— pulchellus</i>	pretty	..	wh. & pur.	1	" "
379.	<i>— venustus</i>	beautiful	..	dark	1	" "
380.	<i>retusus</i>	blunt-leaved	..	cr. & yel.	1	" "
381.	<i>Sophora Japonica</i>	Japan	hp	purp.	2	June, Sept.
382.	<i>Stevia serrata</i>	(sweet scented)	ha	white	1½	July, Sept.

No.	Scientific Name.	Common Name.	Dura- tion.	Color.	Height	Period.
					ft.	
383.	<i>Sphaenogyne speciosa</i>	showy	hh	yel.	1½	Aug. Sept.
384.	<i>Thunbergia alata</i> **	winged	ta	buff	6	July, Oct.
385.	— <i>alba</i> *	white	..	wh. & b.	6	.. ..
386.	— <i>aurentiaca</i> **	orange	..	or & b.	6	.. ..
387.	— <i>Fryeri</i> **	Mr. Fryer's	..	yel.	6	.. ..
388.	— — — — — um*	(fine mixed)	..	var.	6	.. ..
389.	<i>Tropaeolum peregrin-</i>	Canary-bird flower	..	yel.	10	July, Sept.
390.	<i>Verbena Aublita</i>	Mr. Aublet's	..	lil.	1	July, Oct.
391.	<i>venosa</i>	veined	hhp*	blue	1	.. ..
392.	pl. var.	(splendid mixed, 25 var.)	..	var.	1	June, Nov.
393.	<i>Viscaria coeli rosa</i>	Rose of Heaven	ha	rose	1	Aug. Sept.
394.	<i>oculata</i>	(dark) eyed	1
395.	<i>Vinca rosea et alba</i>	rose and white	a	r. & wh.	1	July, Oct.

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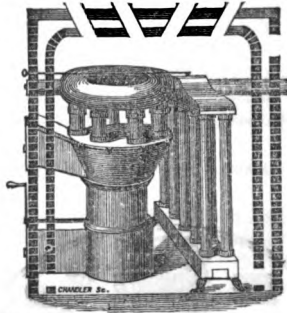
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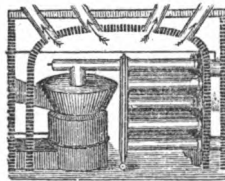


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This furnace is made entirely of cast iron of unusual thickness, which renders it one of the most *durable* furnaces in use.

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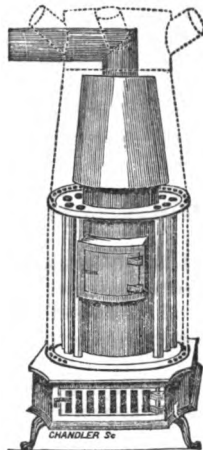
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They are simple and compact in construction, and may be placed in a dining room, entry, or cellar, as occasion requires, occupying but little more room than an ordinary stove.

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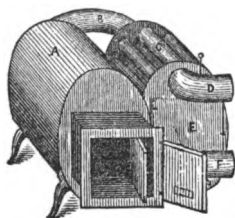
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 Edwin Lemist, Roxbury.
 W. S. Damrell, Boston.
 Boynton & Woodford, Boston.
 W. D. Ticknor & Co.
 Market Bank, Boston.
 Congregational Church, Reading.
 do. do. Sharon.
 do. do. West Newton.
 J. P. Townsend, Boston.
 Isaac H. Cary, do.
 John Gilbert, Jr., do.
 Rev. J. H. Allen.
 Thomas K. Davis, Boston.
 C. C. Dean, do.
 George P. Reed, do.
 Revere House, do.
 Joseph Seal, Wilmington, Del.
 St. Martin's Church, Mercus Hook, Pa.
 Charles M. Tyson, 113 S. 8th St.
 H. McCall, Trenton, N. J., (2)
 J. P. Stockton, Princeton, N. J., (2)
 W. & J. T. Chambers, Kennet Sq., Chester
 County, Pa.
 Unitarian Church, Sharon.
 do. do. Somerville.

Charles Thompson, Charlestown.
 Amos Frothingham, do.
 Tappan, Whittemore & Mason, Boston.
 Thomas Nickerson, South Boston.
 Frederick Nickerson, do.
 George Gerrish, Chelsea.
 Joseph Dunklee, Brighton.
 J. H. Lord, Newton.
 E. Wing, do.
 Cole & Loch, Newton Corner.
 C. S. Savage, West Newton.
 Clinton Clark, Brookline.
 William Bird, do.
 J. Hamblin, Roxbury.
 E. H. R. Ruggles, Dorchester.
 George Haynes, do.
 William A. Harris, do.
 William Hovey, Jr., Cambridge.
 John Benson, do.
 William Snow, do.
 C. D. Invilliers, Germantown, Pa.
 E. Harris, Moorstown, N. J.
 J. B. Dayton, Camden, N. J.
 Baptist Church, do.
 American Art Union, Chesnut St., Pa., (2)
 John Hagey, Market above 9th.
 Chas. J. Dupont, Brandywine, Del.
 Luther Hoadley, Eutaw, Ala.
 Samuel C. Hills, New York.
 Rev. J. Turnbull Backus, Schenectady,
 N. Y.

PROUTY & MEARS' IMPROVED FURNACE.

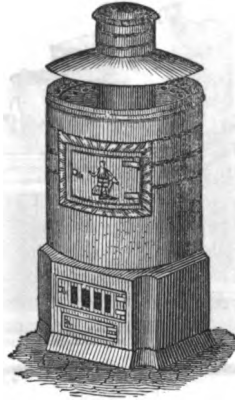


The above cut represents one of Prouty & Mears' Improved Furnaces for burning wood, for the purpose of warming dwellings, school-houses,

churches, or other public buildings. Being but *three* feet high, it is particularly adapted to low cellars, at the same time admitting of greater elevation to the hot pipes, after leaving the brick chamber, than can be obtained by any other furnace in use.

Letter A represents the fire chamber, which receives wood of three feet in length, and of great size, at the same time presenting a larger extent of radiating surface for the transmission of its heat. C is a series of pipes through which the fire and smoke are made to pass, and amongst which the fresh air rises on its passage to the conductors; the temperature of the pipes regularly increasing upwards, as the air approaches the conductors into the rooms above. B, a funnel for conducting the smoke and fire from A to C. D is a discharge-flue, by which the smoke can escape by a direct passage from A, through B, and three upper pipes in C, immediately into the chimney, and thus facilitate the process of kindling, or to enliven the fire when low. F is another discharge-flue, placed at the lower end of the radiating pipes, and through which the smoke must pass into the chimney, when the damper in D is closed. E is a large door opening upon the ends of the pipes, by which access can be had at all times, for cleaning or other purposes.

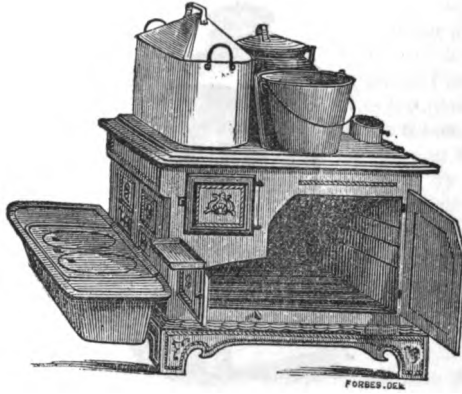
The fire-chamber is furnished with double doors one foot apart, which shut nearly air-tight; and being furnished with draft-registers, the fire can be regulated in the most perfect manner, rendering it perfectly safe at all times. In order to heat a building, the furnace should be set in the cellar, or basement-room, surrounded with a double brick wall, each four inches thick and four inches apart, arching it over the top, leaving a door opposite E, of sufficient size to take out the furnace, should occasion require; the door being made of two thicknesses of tin or sheet-iron, three inches apart. At the bottom of the chamber build a false floor, of brick, on which place the furnace, with openings for the passage of the fresh air immediately under the fire chamber A, and radiating pipes C, and otherwise distributing it about, so as to bring it in contact with the heated parts of the furnace, which, becoming heated, rapidly passes off through the tin conductors, into the several apartments intended to be heated. The fresh air is brought through a wood conductor, from without, and discharged into the space between the two walls, thence through the opening under the furnace in the false floor into the furnace-chamber, thus *heating and ventilating* the building at the same time, in the most satisfactory manner. Price \$50.

PROUTY & MEARS' IMPROVED VENTILATING SCHOOL STOVE.

This stove was made with the design of obviating the many objections which have been raised to the manner of heating school-rooms by other stoves, not combining ventilation with the heating arrangements. By this stove, a current of fresh and pure air is introduced from without, which is passed through the stove, heated, and thrown into the room, without coming in contact with any red hot iron, whereby the oxygen is taken up, and the air rendered poisonous; but a mild, pleasant, and healthy heat is diffused into the most remote portions of the room. These stoves have been put in various school-houses, banks, offices, &c., in this city and vicinity, where they can be seen in operation, and we feel no hesitation in warranting them to give entire satisfaction. They are also well adapted for churches, where there are no cellars in which to place a furnace, or for any large building.

The simplicity of their construction, and the satisfactory manner in which they have operated, give us great confidence in presenting them to the public, and we would call the attention of school committees and others in want of such articles to call and examine them at our ware-rooms. Price from \$30 to \$65.

THE "NEW ENGLAND" AIR-TIGHT COAL COOKING STOVE.



This is the best stove in use, particularly for coal. It has been three years in the market, and grows more and more popular.

The castings are heavy and no labor is spared to make it the most perfect stove to be found.

The flues are large which insures a strong draft.

The oven doors are lined with tin plate, and the bottom oven-plate is grooved which adds much to the strength; also to the amount of fire surface; these two points make the oven a much better baker.

The fire box is so constructed that the ashes clean themselves from the grate, which is very important when coal is used, as without this arrangement the grate would immediately become clogged and burn out; also the draft would be impeded.

There is a fine broiling hearth and gridiron attached to this stove, which are indispensable. We have improved this stove during the past winter, both in its arrangements and external appearance.

No. 2, 6 in. and Ware,	. . . . .	\$
3, 7 " do.	. . . . .
4, 8 " do.	. . . . .
5, 9 " do.	. . . . .

"GREAT WESTERN" AIR TIGHT COOKING STOVE.

No. 6, 10 in. and ware,	. . . . .	\$
7, 11, " "	. . . . .

These large stoves are the most perfect articles of the kind, that have ever been made for hotels, boarding houses, vessels, &c.

They are made in the same thorough manner as the "New England and Western," and are warranted in every particular.

The No. 6 has four boiler holes in the top, and No. 7 has six. They both have extra large broiling hearths and gridirons.

These stoves are very heavy and are made to do good service.

COOKING RANGES

Of the latest and most approved patterns in use.

J. MEARS' IMPROVED DOMESTIC COOKING STOVES.

Three sizes for Coal or Wood.

This stove has been before the public for many years, and has never failed to give the most unbounded satisfaction.

COAL PYRAMID STOVE.



Many sizes of this stove, calculated for the heating of offices, counting rooms, halls, entries, &c.; a very neat, tasty, and powerful stove, and very durable. Prices from \$10 to \$30.

THE "IRON MONARCH" AIR TIGHT COOKING STOVE.

For Wood.



No. 3,	7 in. and ware,	.	.	.	.	.	.	.	.	.	\$
4,	8 " "	.	.	.	.	.	.	.	.	.
5,	9 " "	.	.	.	.	.	.	.	.	.
6,	10 " "	.	.	.	.	.	.	.	.	.

This is an improved "Premium" stove and is one of the most simple and convenient of the air tight.

It is well fitted and cemented; the top and covers are ground; the fire box is large and a good summer arrangement is made in the hearth. This stove has a large oven which bakes in the most perfect manner.

The fire plate and bottom oven plate are so well supported by the shape of the bottom, that they can never sag.

"PREMIUM" COOKING STOVE.

No. 1,	6 in. and ware,	.	.	.	.	.	.	.	.	.	\$
2,	7 " "	.	.	.	.	.	.	.	.	.
3,	8 " "	.	.	.	.	.	.	.	.	.
4,	9 " "	.	.	.	.	.	.	.	.	.
5,	10 " "	.	.	.	.	.	.	.	.	.

These stoves are light, and are fitted with great care. The tops, covers, edges, &c., are all ground perfectly smooth, which adds much to its appearance.

THE IMPROVED "WESTERN" AIR TIGHT COOKING STOVE.

For Wood.

No. 2,	6 in. and ware	.	.	.	.	.	.	.	.	\$
3,	7 " "	.	.	.	.	.	.	.	.
4,	8 " "	.	.	.	.	.	.	.	.
5,	9 " "	.	.	.	.	.	.	.	.
6,	10 " "	.	.	.	.	.	.	.	.

This stove is made and put together in the same perfect manner as the "New England." The oven doors are lined with tin; the bottom oven plate is grooved, which adds much to its strength and also to the amount of fire surface.

The flues are large, which insures a good draft.

The fuel burns on a solid hearth, which for wood is preferable to a grate.

A large and convenient broiling hearth and gridiron are attached, which are very useful.

We have improved this stove in several particulars during the past winter, and also given it a new dress.

THE IMPROVED "CALIFORNIA" AIR TIGHT COOKING STOVE.

For Wood.

No. 2,	6 in. and ware,	.	.	.	.	.	.	.	.	\$
3,	7 " "	.	.	.	.	.	.	.	.
4,	8 " "	.	.	.	.	.	.	.	.
5,	9 " "	.	.	.	.	.	.	.	.
6,	9 " "	.	.	.	.	.	.	.	.

This stove is made from the same patterns as the "Western." The bottom oven plate is flat and the oven doors are not lined with tin. This is as well made as any stove in market.

A large broiling hearth and gridiron are also attached which are very convenient.

We do not put quite as much labor on this stove as on the "Western," and can therefore sell it a little cheaper.

THE "IRVING" COTTAGE PARLOR STOVE.



No. 1, 21 1-2 in. long, \$
 2, 24 1-2 " "

This stove is made of cast and sheet iron, and is very pretty and convenient for wood.

It is an entirely new pattern, and for a parlor wood stove is not surpassed for elegance or convenience.

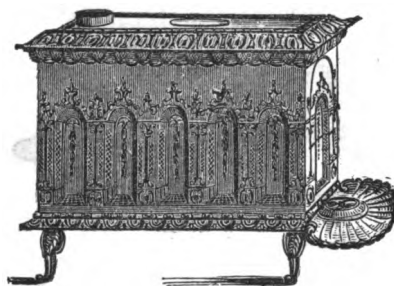
MADEIRA COAL STOVE.



This stove has recently been improved so as to burn coal, in parlors, chambers, or offices, without any of the disagreeable and unhealthy effects

generally attending coal stoves, by the exposed surface of red hot iron coming in contact with the air of the room. The cylinder in which the coal is consumed is detached from the main body of the stove, thus keeping the stove looking bright and clean without becoming oxygenated, at the same time it is forcing a continual current of heated air into the room, of a mild and healthy nature. The simplicity of their construction, and the satisfactory manner in which they have operated wherever they have been set up, fully warrants the presentation of them to the public.

AIR TIGHT SIX PLATE STOVE.



No. 1, 15 in. long,	.	.	.	.	.	.	.	\$
2, 18 " "	.	.	.	.	.	.	.
3, 21 " "	.	.	.	.	.	.	.
4, 24 " "	.	.	.	.	.	.	.
5, 27 " "	.	.	.	.	.	.	.
6, 31 " "	.	.	.	.	.	.	.
7, 37 " "	.	.	.	.	.	.	.

These stoves are fitted and cemented with care, and are as well made as the parlor.

The pattern is new and beautiful.

CYLINDER STOVES

Of various sizes and patterns, for coal, well calculated for shops, store rooms, cabins, &c.

AIR-TIGHT PARLOR STOVE.



No. 1, 15 In. long,	. . . . .	\$
2, 18 " do.	. . . . .
3, 21 " do.	. . . . .
4, 24 " do.	. . . . .

The above are new patterns and well fitted and cemented.
 They take long wood, have large doors, and are well fitted and cemented.
 The price of these stoves is low, and they are worthy of your attention.

IMPROVED PATENT CABOOSE.

This is a new and superior article designed exclusively for vessels, and are made of extra thickness, with brass latches and ketches, which will not become useless by rust, and are furnished with complete sets of copper and tin fixtures as required. There are five sizes.

No. 1, with copper trimmings . . .	\$25,	with tin trimmings,	. . .	\$20
2, " " "	30,	" " "		25
3, " " "	45,	" " "		38
4, " " "	65,	" " "		55
5, " " "	125,	" " "		

No. 4 and 5 have two ovens, one each side of the fire.

PROUTY AND MEARS' IMPROVED VENTILATOR AND
SMOKE BLOWER.



The above figure represents a new pattern of ventilator, just introduced by us, for the purpose of increasing the draft of smoky chimneys, ventilating steamboats, cabins, railroad cars, public and private buildings, ships, hospitals, stables, mines, &c., &c. For ventilating stables, there has probably nothing ever been introduced to public notice, that performs its duty so thoroughly as this simple arrangement, whereby all the noxious and poisonous gases arising are allowed to escape, and a current of pure air made to circulate throughout the building. It also allows the escape of steam, &c., arising from new hay when placed in the barn; thus in a great degree, avoiding the liability of being struck by lightning as is often the case in the Summer, the heated state of the close steam or air, being a great attractor of that dangerous fluid. They are made of galvanized iron, or wood, of various sizes, as occasion may require, and at prices varying from \$4 to \$50.

Constantly on hand an extensive assortment of Pyramid, Cylinder, Box, Office, Parlor, and Cooking Stoves of various patterns.

Russia and English Sheet-Iron Funnel, Tin and Sheet-Iron Ware, Oven Ash and Boiler Doors, Warfle Irons, Cauldrons, Furnace Register of all varieties, Funnel Stoppers, Coal Hods, Coal Sifter, &c., &c.



RECORD OF TREATMENT, EXTRACTION ETC.

Shelfmark: 7074148

S&P Ref No. DE0056/10

Microfilm No.

Date	Particulars	
15.3.2000	pH Before or Existing	pH After
	4.7	7.4
	Deacidification Mag-bi-carb Gelatine Size	
	Adhesives Animal Glue Wheat Starch Paste	
	Lined Laminated 3 lvs 8.5gsm tissue 5.8gsm Kozo repair	
	Chemicals / Solvents	
	Cover Treatment	
	Other Remarks	

DERRY: NOTTINGHAM
2000

