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[From Life Illustrated.]

What I have seen of New Agricultural Tools.

Reader: What have you seen, heard, or learned, in all your life's experience, that would be of service to mankind? Have you invented or discovered any thing new?—[Life Illustrated.

[Continued from Page 128.]

SUBSOIL PLOWS.

I have not yet done with discoveries in plows. The improvement of MAPES, as carried into effect by Nourse, Mason and Knox, upon the subsoil plow, entitles him to the rank of a discoverer—a benefactor—for he has enabled the farmer to do an important work with one yoke of oxen easier than he did before with three yoke. This plow creeps along under the hard pan below the soil, producing exactly the same effect as does the mole; lifting up and crumbling the earth above, and leaving a tunnel below for the passage of water or air. It is a great invention—it makes two blades of grass grow where but one grew before.

MICHIGAN PLOW, AND DIGGING-MACHINE.

Perhaps of all plows ever invented, that most commonly known as the "Michigan plow" is the implement that puts the land in best condition for tillage, at one operation; though not quite equal to the "digging-machine," invented by Gibbs, and perfected by Mapes, by attaching his subsoil plow to the same frame, so that upon land in good tillage, one yoke of oxen travels as fast as with a plow, loosening the earth fifteen inches deep, and mellowing a strip two feet wide, six or eight inches deep, as fine as though it had been lifted and shook up with a fork. This, then, is a new invention of an earth-worker, which, if I have not invented, I have discovered—discovered early, when in its incipient state, and with a kind, encouraging word, of more value oftentimes than money to the inventor, I bid him go on, think on, work on, hope on, trust on, and thus have I been of service to mankind.

I have not done with plows yet.

Give me a fulcrum, said the philosopher, and with my lever I will lift the earth.

Invention is the fulcrum—the plow is the lever—the earth is lifted. The sod that formed before man was, is lifted and turned over by the plow.—The land of the plain and the land of the hill are alike tilled for man's sustenance, by the aid of the plow. At first a rude instrument, in the hands of rude men—now a scientific machine. But it is not yet perfect. Every day, however, sees new improvements.

REVERSIBLE OR SIDE-HILL PLOW.

One of the latest is one long sought for—one that would enable the hill-land farmer to plow his fields right and left by reversing his plow. It was a great desideratum, upon which ingenious men have spent years of earnest study. All the contrivances for reversing the share or the mold-board have been clumsy and unsatisfactory, requiring a strong-armed plowman, and requiring hard labor. The attempts that have been made to reverse the beam have proved unsatisfactory, because it was impossible to bring the point into a right line of draught upon both sides.

I have not invented a plow to obviate this difficulty; but I have discovered that a poor, almost unknown mechanic, of Onondaga County, in this State, has made the invention, and I have benefited mankind by making it known, and bringing it to the knowledge and approval of the largest plow-making establishment in America; so that through the means of invention in one man, and the discovery and making it known of another, and the ability to manufacture of a third, an invention that in itself seems, to uninquiring and unreflecting minds, but a trifle in its way, will yet become of the greatest service to mankind. This reversible plow, so ardently desired; so long sought for; so experimented upon; so expensive to inventors and manufacturers; so inutile to those who most required it; when finally discovered, is so simple that all wonder why it never was contrived before. It had been half contrived, but unlike half a loaf, that is better than no bread, a half-formed idea was only of service to future developers.

At length the development came. The reversing beam before contrived, had been made to swing upon a stiff standard. The improvement places the turning center upon the under side, so that whichever way the forward end is set, it always sets, relatively, to the right or left handle, as though its hinder end was framed into it, when, in fact, it is held in whatever position, right or left, or central, that the plowman desires, by an easy-working latch, and always in line with the point, because the point is attached to, and swings with, the beam, and is made immensely strong by its connection with the coulter. That is the secret of the new reversible plow.

It is a little thing in itself—it will be of great service to mankind. For with it the farmer can commence upon one side of his field and turn his furrow to the right hand until he reaches the end, and there, with a touch of hand or foot, he unlooses the catch that holds the beam—the oxen turn back in the same furrow, and, in turning, turn the plow from a righthanded to a left-handed one; and so back and forth he lays his furrow-slices all one way, and leaves no deep center-ditch in the middle of his land.

PLOWS, INSTRUMENTS OF CIVILIZATION.

Once more of plows. They are great instruments of civilization, and of them I can hardly say too much. Without them, as I said before, we could not live; for the reason that we all live, in city life, excepting a few fruits of the sea, and rare city life, excepting a few fruits of the sea, and rare titbits of game from the woods, upon the fruits of the cultivated earth—the plowed lands of the country fields. What a benefactor—what a promoter of civilization is he who invents, improves, and makes plows!

GANG PLOWS.

Once more of what I have discovered new in plows. I have discovered one long desired by the farmer; particularly the farmer who thinks—has thought, that a harrow drawn over his fields, though it loosens the surface, compacts the soil below, and after all, is not the implement that he wants to cover his broadcast grain. It wants a plow that will turn a small furrow. Hence the invention of gang plows. They are all too heavy, and require too much time. To displace the harrow the cultivator was invented. Neither gang plows nor cultivator was the tool the farmer wanted.

GANG CULTIVATOR OR SEEDING PLOW.

Knox, the inventor, with Nourse the patron, determined to fill this want, and have just brought out a new tool called the "gang cultivator." I would call it the "SEEDING PLOW," it is so admirably adapted to that purpose. The same team that would draw the scratching harrow will draw the seeding plow, and, according to the plowman's desire, turn four, six, or eight little furrows, so as slightly to cover all the grain in such a manner that, when it grows, it looks as though it had been planted in drilled rows. This implement is very simple, light, and cheap. This is its description: In form it is unlike any other cultivator, except its little steel plowshare-like formed teeth. It is more like an X than a V.

Take hold of the upper end of the left-hand top of the X and set it up perpendicular, and call that the beams, to one end of which the team is attached, and to the other end the handles. Projecting down from the forward end is a sharp tooth, that serves as a guide to keep the instrument in a right line of draught. At the hind end is another guide-tooth, that serves also as a fulcrum, upon which to lift the forward end, by a twist upon the handles, when the guide-tooth catches a root or stone.

Upon the other branch of the X the little turning plowshares are fixed, so that eight five-inch furrows are turned one after another, leaving both seed and land in the best condition to grow. I have rarely discovered an implement that bid fairer to do its work rapidly and cheaply, and give greater satisfaction to the husbandman, than this new invention—this so-called "Knox's Gang Cultivator."

PORTABLE STEAM SAW-MILLS.

What else have I seen? is still a question. Happily I can still continue to answer, Much that would be of service to mankind if more seen; more known; more used by those whose business it is to produce, both for their own benefit and the benefit of those who consume. I have lately seen a late invention in the use of steam, by means of which a farmer can hitch up his oxen and drive to the woods a steam-boiler upon wheels, from which the steam is conduted in flexible tubes to a cylinder so small and light, that, with a cross-cut saw, and all its machinery attached, two men carry it here and there, planting it by the side of a standing tree that is soon felled to the earth, and then by the side of bole, that is soon cut into any desirable lengths by this steam-driven saw, that moves with almost uncountable speed across the log in any direction required, and in almost any position that could be approached by the axeman; the two sawyers, with a boy to tend the fires, doing the work that a dozen axe-men could not do.

No matter how tough, knotty, and hard the log, or how rough and unapproachable with wheels the ground; wherever the axe-man could go, this portable steam-sawer can be carried, and with the strength of half a dozen horses, do its rapid work.

OTHER PORTABLE STEAM POWERS.

I have seen, also, other steam-engines, mounted on wheels, with all their appurtenances for applying six horses' power to a threshing-machine, or grain-mill, or wood-saw, or any other farm purpose, and yet so compact and light that one pair of patient oxen could traverse the farm, or even a whole township, with this working giant. And these machines are made of all sizes, from the strength of a single man, as he would turn the grindstone, up to six, eight, or ten horses' power, and fitted to do every thing that is, could, or should be done by machinery upon a farm; and the time has already come when a farmer can no more afford to do without a farm-engine than he can without a farm-horse.

With a steam-engine he can cut his firewood, and saw his boards, and bore and mortice his fence-posts, and bore the holes in the ground where they are to stand. He can thresh his wheat and clean it of its chaff; and he can shell and grind his corn; he can cut his corn-stalks and straw for his cattle to eat; he can, if need be, pump his water with his steam-engine; and he can do that laborious work that has always been best done by the old dasher churn, and make butter by steam power. There is no end to the work that such power may not do.

STEAM-POWER FARMING.

There is no disputing the power of truth that forces itself upon my mind, that farming will be done to a great extent by steam power. The steam plow-horse is not far off. I have heard him neighing upon the other side of the steam-ferry. He will be over soon, unless he springs into life upon this side.

DWARF PEAR TREES.—We copy the remarks of the Hon. M. P. Wilder, at the United States Pomological Society's meeting last September, as reported:

'Pears upon the quince should be planted in a luxuriant deep soil, and be abundantly supplied with nutriment and good cultivation. They should always be planted deep enough to cover the place where they were grafted, so that the point of junction may be three or four inches below the surface. The pear will then frequently form roots independently of the quince, and thus combine in the tree both early fruiting from the quince and the strength and longevity from the pear stock. For instance, of trees of the same variety, standing side by side in my own ground for ten years and enjoying the same treatment, those on the quince stock have attained a larger size, and have borne, for seven years, abundant crops, while those upon the pear stock have scarcely yielded a fruit. We have, also, others on the quince, which, twenty-five years since, were obtained at the nursery of Mr. Parmentier, where now is the most populous part of the city of Brooklin, New York, and which have borne good crops for more than twenty years, and are still productive and healthy.

'That the introduction and cultivation of the pear upon the quince has been a great blessing, I entertain no doubt, especially in gardens, and in the suburbs of large towns and cities. And as to its adaptation to the orchard, I see no reason why it should not succeed well, if the soil, selection, and cultivation be appropriate. A gentleman in the eastern part of Massachusetts planted, in the years 1848 and 1849, as many dwarf pear trees as he could set on an acre of land at the distance of eight feet by twelve feet, and between these rows he planted quince bushes. In the fifth year from planting, he gathered one hundred and twenty bushels of quinces. Of the former, he sold seventy bushels at five to six dollars per bushel, and he now informs me that he has lost only three per cent. of the original trees, and that the remainder are in a healthful condition.'—[Prairie Farmer.

OVER FEEDING PLANTS.—A correspondent writes:—I have found by experience that young fruit trees and some flowering shrubs were often injured by over feeding. For many years I lost all my cherry trees. I planted them around my yards and gave them the richest soil I could gather. They grew finely; some bore good crops. In a few years they split from the branches to the roots, and in a few years more they died.

I found in journals that this splitting was supposed to be induced by the heat of the sun, for they generally occurred on the southwest side of the trunk, where the sun shone the hottest. I soon observed, however, that cherry trees never split when they grew on a poor soil; so when I discovered them to check, I at once removed all the soil for five or six feet around them, and supplied its place with loam or poor gravelly matter. Since then not one has split, and I presume they never will. When cherry trees are large and old, they may be safely manured, for then their energies are spent in bearing fruit and they grow but slowly.

Pear trees are more easily surfeited than cherry trees, but it affects them differently. When overmanured, the leaves coming out of the new wood at the ends of the twigs, instead of being one inch or more apart, came out in a cluster, and the limb ceased growing at once.

A few years ago I procured a fine young pear tree, and wishing it to grow and bear as soon as possible, I planted it in the range of the lowest point of my barn-yard, so as to receive the drainings of the manure. The new leaves all over it came out in thick bundles or whorls. I immediately removed all the earth from over the roots and filled the space with yellow loam, and turned the drain from it. In two weeks the new wood shot out and put forth its leaves, nearly two inches apart, and made a fine growth. I once manured an apple orchard of seventy trees, and every twig threw out the same whorls—wood ceased growing. The tips of all dried, and I lost one year's growth. So, I find trees, as well as men and other animals, can be overfed and surfeited. JAMES FOUNTAIN, Jefferson Valley, N. Y., January 25, 1857.—[American Agriculturist, March.

Head Quarters Nauvoo Legion,

ADJUTANT GENERAL'S OFFICE,
G. S. L. City, June 30, 1857.

GENERAL ORDERS
No. 3.

I.—The gentlemen to whom was intrusted the organization of the Lehi, Provo, Iron, Davis and Weber Military Districts will proceed to complete the same by the organization of a Regiment of Infantry in each District and the election of the proper officers as required by law, including a Major and Adjutant to each Battalion.

II.—It is recommended that Cavalry companies should be dispensed with throughout the Territory, until further orders, and that all musters and drills after 4th July next should be performed on foot.

III.—The following appointments are made in the Legion:—

1st.—In the Corps of Topographical Engineers
William Clayton as Lieutenant Colonel;
Jesse W. Fox do
Horace K. Whitney as Major;
Leo Hawkins do
John V. Long do
Wm. G. Mills as Captain;
Thomas D. Brown do
John Jaques do
James H. Martineau do
James Linforth do
John Chislett as First Lieutenant;
Orson Pratt, jr., do
Aurelius Miner as Second Lieutenant;
Charles Moeller do

2d.—In the Ordnance Department
Geo. B. Wallace as Lieutenant Colonel;
Robert L. Campbell as Captain;
Charles Colebrook do
Henry Maiben as First Lieutenant;
John M. Bollwinkel do
Edward Martin do

They will be obeyed and respected accordingly.

IV.—Col. T. W. Ellerbeck is assigned for duty in the Corps of Topographical Engineers when his duties as Chief of Ordnance will permit.

By order of
Lieut. Genl. DANIEL H. WELLS.
JAMES FERGUSON,
Adjt. Genl.

NOTICE.

The members of the Priests' Quorum in G. S. L. City will meet in the 14th Ward School house the 1st Sunday in every month at 4 o,clock, by order of the President of said Quorum.
LEWIS WIGHT,
President.
13-6m

THE DESERET NEWS.

TERMS---$6 PER ANNUM.

OFFICE-----P. O. BUILDING.

TO ADVERTISERS.—Advertisements to insure insertion in the current number must be handed in on Monday.

LIST OF AGENTS:

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A. O. Smoot	- -	Kanyon Creek Ward.
Reuben Miller	- -	Mill Creek do
Archibald Gardner	-	do
Milo Andrus	- -	Big Cottonwood Ward.
Andrew Cahoon	-	South Cottonwood "
Joseph Hammond	- -	do
Isaac Ferguson	- -	do
Silas Richards	- -	Union.
J. Guernsey Brown	-	Draper.
Samuel Bennion	- -	West Jordan.
Daniel R. Allen	- -	Jordan Mills.
McGee Harris	- - -	Fort Herriman.
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Allen Weeks	- -	Cedar Valley.
Utah County.		
D. Evans	- - -	Lehi City.
Leonard E. Harrington	-	Lake City.
T. J. McCullough	-	Lone City.
W. G. Sterrett	- -	Pleasant Grove.
D. Carter	- -	Provo.
A. Johnson	- -	Springville.
J. L. Butler	- -	Spanish Fork.
C. B. Hancock	- -	Payson.
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Peter Maughn	- -	Cache Valley.
Malad County.		
James Frodsham	- -	Fort Malad.
For California, Oregon and Washington.		
D. M. Thomas	- -	San Bernardino.
Geo. Q. Cannon	- -	San Francisco.
For Canada and the States and Territories East of the Rocky Mountains.		
H. S. Eldredge	- -	St. Louis.
Mormon Office	- -	New York City.
For the British Isles, Europe, Asia, Africa and Australia.		
Millennial Star Office	- -	Liverpool.