

DRILL CULTURE AND HORSE-HOEING.

Drill culture and horse-hoeing of small grain are based on the following theories—

1. Rain, and more so irrigation, is the negative cause of contracting the soil, except that rich in humus.

2. Contraction makes the surface a more powerful conductor of heat in day time, and cold at night; the sudden transition from either is detrimental to vegetation.

3. The contracted surface draws out the moisture, and favors evaporation more than a loose surface would, and necessitates oftener repeated irrigation; which again causes more work, more watering, and more contraction.

4. The contraction of the soil jeopardizes the tender roots.

5. Contraction excludes, more or less, the aerating connection with the roots.

6. The surface, between the plants, sowed in drills, can be hoed, and thereby the before-mentioned calamity is materially lessened.

Between the drills is room for the water furrows; these can be hoed after each irrigation, until prevented by the height of the grain. No broadcast sowing machine will lay the seed exactly to the depth wanted; but the seed drill machine will do it.

Experience goes to show that, in drill culture of small grain, about 50 per cent. of seed grain can be saved, and from 30 to 100 per cent. gained in the yield.

When even the empirical farmer notices the comparatively stagnant condition of his grain, on account of the hard, baked surface, he has an intuitive impression that the surface should have been loosened before it got so dry and hard. But, as he can not do it in his broadcast grain field, he resorts to watering again; this gives relief for a few days, and then the evil repeats itself with interest; the result is a poor crop.

Agricultural science has not as yet, attributed any great importance to the properties of humus, but practice does. Why? Because its effect is more mechanical than chemical. This makes itself more manifest in connection with irrigation. Our bench land is rich in grain producing minerals, and poor in organic matter. Here lies the difficulty in producing a crop, corresponding to the real (chemical) capacity of the soil. It should be an object in farming to enrich the soil with organic matter; this should not be burned, to clear the barnyards, or imaginarily enhance the value of the bottom lands; but it should either be mixed with stable manure, piled up to rot, or, if suitable, be brought on the land as it is. Farmers should stable feed their horses, work oxen and milch cows, kepton lucern in the summer, and thereby increase this manure pile, besides gaining many other advantages of advanced farming.

The chemical properties of the manure, at least by covering the same by layers of straw or other substances, should be preserved. But until our farmers are rich enough in humus, drill culture, and horse hoeing is the lever for that purpose. Of course it will revolutionize our present system of agriculture, if system it can be called; which, with few honorable exceptions, with a view to reciprocity, is absolutely suicidal.

The president of this stake, Jos. A. Young, furnished the United Order here, this Spring, with a seed drill, which sows six drills and makes a water furrow between each two drills at the time. We have used it this Spring with satisfaction.

It is indeed a labor-saving machine, and, at the same time, it lays the grain at the depth wanted, and makes the waterfurrows the depth and width exactly as wanted; besides the distances between the hills even; it does this work four times as cheap as was done by the single plow and hand sowing. It will sow, water furrow or hoe an acre per hour. Our aim is, to make a seed drill capacitated to finish two acres per hour, with a four-horse draft for sowing and water-furrowing; the same implement only needing two horses for hoeing. This has the advantage of the above machine, in that it saves one day's work for a man on each sixteen or twenty acres, and when hoeing it saves a span of horses besides.

The United Order is, in farming, the condition wherein labor-saving machinery is urgently calling into

requisition the most rational application of economy, and we have leading men who are taking energetic strides in that direction, and who have already advanced unquestionable proofs, by the blessing of God, of how to make the United Order a success. C. A. M.

By Telegraph.

BELFAST, 6.—The American team arrived in this city this evening; their reception surpassed that given when they entered Dublin. Mayor Lindsay and the corporation of the city were at the station to receive them as they stepped from the train, and escorted them to carriages, when a procession was formed and the guests made a triumphal entry into the city. They passed through streets festooned with banners, and packed on each side by crowds, apparently comprising the entire population. The cheering was unceasing from the moment they left the station until they reached the Imperial Hotel, and there the enthusiasm of the populace was so great and the calls for the Captain of the team were so urgent that the Mayor introduced Col. Gildersleeve, who was received with round after round of applause. Col. Gildersleeve thanked the citizens for their cordial reception, and the Mayor introduced Major Leech, who was received with great applause. He said that the highest honor that could be paid to him and the Irish team was in the cordial welcome which the people of Belfast had given their conquerors. The visitors then entered the Hotel and dined with the Mayor and members of the city government. Later in the evening they attended a fete given in their honor at the Botanic Gardens. On their way to the place of festivity they found the streets crowded with people whose enthusiasm was irrepressible. The gardens presented a gala appearance. Fifteen thousand persons were present, and repeated cheers were given for the Americans. Before leaving Dublin Gildersleeve and the other members of the team visited and took leave of the Lord Mayor and prominent citizens. A large assemblage witnessed their departure from Dublin. Letters were received by Gildersleeve to-day, proposing that, at Wimbledon, the Americans shall shoot against a picked team of English, Irish and Scotch.

PARIS, 7.—Garnier de Cassagnac has published a letter, in which he threatens to kick Gambetta. The father of Don Carlos has been released on his promise to quit French territory.

VIENNA, 7.—The remains of the Emperor Ferdinand were deposited in the Church of the Capuchins, in the same vault with those of Maximilian, Emperor of Mexico.

Sherman's Opinion of Grant.

"Gen. Grant," said Sherman, "is as good an example of the American-born, American-bred standard man as this country can show. He has the wonderful gift of reticence, and he had it during the war as much as since. He is generally just to his fellow officers. On the battle field he displays common sense in every extremity. He went into the war with a devil of a bad staff, but he stuck to the men around him because they had been his friends in the days of his poverty. After a while he changed that staff, and there was a great improvement. Rawlins was a smart fellow, but awfully rough. Now, sir, it has been printed all over this country that Gen. Grant was drunk at the battle of Shiloh. I saw him at half past ten and at half past four that day, and he was cool as a cucumber and straight as a string. I don't believe that Grant was ever drunk when there was any fighting to be done. He has a rather sensitive temperament, and when battles are off and there is an interval he may require some stimulation. But the tale that he was drunk on the main day of the battle of Shiloh is a libel. I believe it could be proved that he could get nothing to be drunk on, and I know from contact that he was sober."—*St. Louis Times*.

As Mr. Owens, of Albany, handed the judge \$5 for mauling a book-agent, he remarked that he hadn't had as much fun for the money since Barnum was around.

Sicily is opposed to martial law for the suppression of her numerous brigands. The authorities think otherwise.

NOTICE.

To William Higgins:

YOU ARE HEREBY NOTIFIED THAT I have expended for you the sum of Twenty (\$20) Dollars for labor performed on the Shoo Fly Lode (East), in Ophir Mining District, Tooele County, Utah Territory, being the amount to be expended by you on your proportion of said lode, and unless the same shall be paid by you within one hundred and eighty days after the date of the first newspaper publication of this notice, to wit, January 20th, 1875, your interest in said lode or mine will be forfeited to, and become the property of, myself, by operation of law.

SELAH CHAMBERLAIN.

Salt Lake City, January 18, 1875. w51

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EXECUTORS' NOTICE.

NOTICE IS HEREBY GIVEN TO THE creditors and all persons having claims against the estate of Rasmus H. Hougaard, deceased, to present the same for settlement within three months from date. Also all persons knowing themselves indebted to said estate to come forward and satisfy the same forthwith at the residence of John H. Hougaard, in Manti City, Sanpete County, Utah Territory.

JOHN H. HOUGAARD,
PETER H. HOUGAARD,
Executors of the Estate of Rasmus H. Hougaard, deceased.
Manti City, Sanpete Co., Utah Terr.,
June 3rd, 1875. w20

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