

# WILLAMETTE FARMER.

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### THE CASH SYSTEM.

The farmers of Oregon, of this coast, and elsewhere, are all alive to the advantages and importance of dealing strictly for cash, and we have a few brief remarks to make on that subject.

We have tried the credit system, and are tired of it. A portion of our subscribers pay up punctually, but the most do not. We lose interest money, and meet with some losses, and the subscription list does not average over \$2.50 for each subscriber, per annum, and this leads us to making the following change in terms:

Hereafter all renewals and subscriptions, where the cash shall accompany the order, can be paid at \$2.50 per annum. All Subscriptions that are allowed to run thirty days over time will be invariably \$3.00 per annum. This offer is made to induce prepayment of subscriptions, and will be applied only to those who pay strictly in advance.

All those who are receiving this paper are invited to remit the balance that will be due us on the 1st of January, and add \$2.50 to pay for the year 1876. That will commence the year punctually, and place them on the prepaid cash basis.

A look at your tax will show you how much you will be indebted to us January 1st at the rate of 25 cts a month.

Remittances can be made by registered letter, currency can be sent by mail at its current value, or money can be paid to our local agents.

[For the Willamette Farmer.]

OUR HILLS, &c.

BY A. F. DAVIDSON.

[Concluded.]

I have been asked, "How were our hills formed along the base of the Cascades and in the valley?" This is a profound question. I will, however, answer it as best I can. I might not show my answer by saying, as David Crockett did, "God Almighty made them." Inasmuch as we know absolutely nothing of the First Cause, we propose to answer this question by looking at secondary causes.

The sun is the cause of all the phenomena we see around us. Heat, light, electricity, magnetism, &c., are only various modes of motion; and force is at the bottom of all motion; and force is derivative, flowing from the sun. These, then, are means used to ends. Causes produce effects, primarily; effects become causes, secondarily. As a consequence, then, results point to causes; our hills are results; therefore, our hills point to causes.

Now we come to the work. What are, or were, the causes which produced our hills? They were produced, mostly, by glacial action during several ice-ages; some of our smaller hills were produced by glacio-aqueous action during several drift-ages or periods.

By the aid of astronomy, geology, and physical science, both terrestrial and celestial, we may be able to unravel the mystery.

There have been several ice-ages, as the geographical strata and chorographical features of our earth clearly show. When the Cascades were first thrown up, the sea rolled over the now Willamette, and the Coast chain of mountains was then submerged. Thousands of years afterwards the Coast chain emerged from the sea, and the Willamette was a vast bay.

When, in accordance with astronomical laws, our earth's orbit slowly alters its form; now nearly a circle, and then more eccentric; it is during the period at which the earth's orbit has least eccentricity, the temperate and intemperate climates, which repeat their cycle in 21,000 years, are severally less temperate and intemperate than when, some 1,000,000 or 2,000,000 years later, the earth's orbit has reached its extreme eccentricity.—Each hemisphere, then, during this period, must pass 10,500 years, alternately, in extreme heat or extreme cold. If, then, our hemisphere passed through an ice-age of 19,500 years, the glaciers on the Coast chain must have been from 3,000 to 20,000 feet deep, and some less on the Coast chain. The mountains were then much higher than they are now, and the masses which ground them down will never be seen.

Ice-ages, the accumulation of snow, condensed by its own weight, must have formed immense masses all along these then towering mountains of ice, forming glacial fields portentous and awful, and descending by force of gravity to the bay below—the Willamette valley—crushing, and bearing along with them masses of trap and basalt, with other debris, torn from the mountain sides, and pouring these down on the already deep-frozen basin below—now in piles, now in chains, now in ridges. This abstracting, grinding, and depositing process must have gone on for from 5,000 to 7,000 years in one epoch or ice-age. And how many of these has our earth passed through? Ask the sun, and he will not tell you. We trace three, however, in the deposits forming our foothills along the Cascades, and Coast chain, and two more in the deposits, buttes, and hills in the valley.

These glacial fields, in their irresistible downward pressure, ground down the tops of the mountains, wore vast grooves through them, and deposited, with the ice, at their feet, the now foot-hills, buttes, and smaller elevations through the valley.

No wonder our hills are rich—rich in debris of ice ground rocks and soils—rich, deep down, in the debris of by-gone ages—ages of convulsion and war; ages of intense cold, of snows, and storms. Here were means to ends; causes and effects, and—the results are what? Hills of ground up inorganic and organic matter, forming the deepest and richest soil on earth. Though many of our hills are from 500 to 1,000 feet high, yet they are splendid soil from top to bottom. Wells dug in them fifty or sixty feet show little difference in the composition of the soil, though there are frequently found strata of older materials. This shows, in part, that there were several eras of deposits, or that the ice-laden streams shifted in their course, as we do doubt the case.

In process of time, the ice-age passed away, and was succeeded by a genial age, to which the flora and fauna came forth rejoicing in the dawn of a new morning. Owing to the altered position of our earth, old Sol poured forth his irradiating beams of light, life, and beauty over the late scene of desolation. The ice melted away in the lowlands, gradually the heat crept up the towering heights, and the sun no longer rises on vast ice bound and snow-covered mountains and hills. The valleys and hills are encumbered with a carpet of green, and the mountains studded with immense forests, dark, and darkly beautiful, as the warm breezes play among the leaves and sing through the branches. Where the vast masses of ice wore down grooves, gorges, cañons, now laugh the little rills, now leaps the babbling brook, now roars the tumbling torrent, and deep down plunge the headlong waters, dashing on to the valley below. There it is.

Here, then, we see the action of some of these great causes which operate throughout the vast domain of matter.

### Letter From North Yamhill.

NORTH YAMHILL, Jan. 5, 1876.  
EDITOR FARMER. I have for a long time failed to fulfil my promise to you, viz, to furnish you with an occasional item from this place, for some cause my business continually pushes me, so that often I scarcely find time for reading the papers, much less for writing, this want of time is perhaps more owing to mismanagement on my part than to my being really so very industrious. Farmers in this part have been somewhat disappointed—in that—owing to the very early and long continued rains, they have been able to do but very little fall seeding, aside from the sowing of summer fallow. However as most farmers here summer-fallow more or less of their land, there is quite a large extent of fall wheat, all looking very promising, and as the time of year is almost past when we expect hard freezing if at all, and this being the only destroyer that we have as yet had occasion to fear, you may expect quite sure that we will report next harvest a fine yield of winter wheat. Nearly all the remaining wild land that is clear of timber is being broken up, and large preparation being made for an extensive spring crop.

The grange at this place is in a prosperous condition. The officers elected for the ensuing year were installed on New Year's day. A general turn-out of the members was had. A fine dinner was set by the sisters which was partaken of freely by all present. Worthy Master R. R. Loughlin, who has been Master of our grange for two years, and since its organization, on retiring from the chair was presented by the mem-

bers of the grange with a nice can as a token of their appreciation of his zealous and untiring labors as their Master for so long a time. H. F. Bedwell the newly installed Master has been a very useful member of the grange since its organization, and I have no doubt will acquit himself equally well with his predecessor.

The heavy rain last week brought the Yamhill up to a booming stage, much higher than has been known for many years, we have as yet heard of but little damage being done. Bridges on sloughs are in many places badly wrecked, and in some cases washed entirely away.

A full school is in progress at North Yamhill Academy with Mr. H. C. Liecer as teacher. Mr. Liecer was formerly a teacher at Forest Grove, and has acquired a good reputation here as well as there.

A debating club has been organized at this place which appears to command considerable interest. H. C. Liecer, Teacher, and Hon. Lee Loughlin, are among the most able participants. D. C. S.

### Statement of Flax raised by Messrs. Parrish & Miller, Jefferson, Marion Co.

There were eighty acres sown, with two bushels of seed per acre, making 160 bushels in all. This seed cost \$5 in Jefferson, and was the imported Dutch seed. The flax yielded ten bushels of seed per acre, which will all grow, and not take more than one and a half bushels per acre to make it as thick as that which they sowed. Not more than three-fourths of the seed sown came up, being, it is thought, damaged by the long sea voyage. The entire crop of seed is saved for sowing, and that which they do not sow themselves they will sell for \$1 per bushel or 7 cents per pound. Samples of the lint have been sent to the manufacturing firms of Smith, of Mechanicsville; Lape & Co., of Hart's Falls; Thompson & Gafney, of Valley Falls; and H. M. Crane, of Schenecady; all of the State of New York; also, to H. G. Akin, of Johnsonville, N. Y., an experienced man in growing and dressing flax, he having been in the business for over thirty years. Mr. Akin went to these manufacturers, and they all pronounced it worth twenty cents per pound, when North River flax was worth only sixteen cents, and of a better quality than any North River flax they ever saw, and equally as good if not better than the Dutch. The last named manufacturer, Mr. Crane, is expected here in a short time, to locate in Salem or Portland, to manufacture shoe thread and all kinds of twine. Mr. Crane is an experienced manufacturer, and will make flax worth as much here as in New York city, if he locates here.

The cost of cutting this flax was as follows:  
Chinaman, 219½ days.....\$219 50  
White labor, 233 days..... 278 50  
\$498 00

Cost of pulling per acre, \$6 16  
Cost of whipping the seed off, rotting, spreading, taking up, bunding, drawing to barns, cleaning, and drawing seed to warehouse about two miles.....\$250 00  
Chinaman, 250 days.....\$250 00  
White labor, 180 days..... 223 50  
\$473 50

Cost per acre, \$5 917½.

There were 25,000 bundles of the flax, yielding, as far as dressed, one and a half pounds per bundle, equal to 37,000 pounds of lint, which is a yield of 462½ pounds per acre. The lint is worth twenty cents in New York city, and fifteen cents in Portland, gold.

Value of lint per acre.....\$69 37½  
Seed, at \$4 per bu., 10 bus. per acre..... 40 00  
Total value per acre..... \$109 37½  
Cost of seed, 2 bu. per acre @ \$5..... \$10 00  
Total cost of labor..... \$12 08½  
Total cost per acre..... 22 08½

Net profit per acre..... \$87 29½  
Farmers will perceive that this statement does not include the cost of putting in the land and of breaking and sowing the flax. A future statement will be made to cover these things.

Messrs. Parrish & Miller have their mill in operation, which is located 1½ miles from Jefferson, near Mr. Miller's residence. Any farmers wishing to sow flax can call on Messrs. Parrish & Miller and get all the information they desire.

Having superintended the work on the above flax, I will vouch for the correctness of this report. EDWARD AKIN.

SUCCESS WELL.—A great many subscribers are accepting our proposition to pay up to Jan. 1st, and renew for 1876 at \$2.50 in advance. It is gratifying too, that we receive many new subscriptions at the reduced price for advance payment. Cash in hand pays us better, and also pays our subscribers much better.

### Death of David Weston, A Pioneer of 1842.

BUTTEVILLE, JAN. 1st, 1876.  
EDITOR FARMER: A special meeting of Butteville Grange, D. C. 21st, the following proceedings were had:

J. W. Grim, Master, announced the death of Bro. David Weston, which occurred at his farm residence near this place on Sunday, the 19th inst. After a few appropriate remarks by the Master, a committee was appointed to present resolutions at the next meeting expressive of the feelings of the members on receiving the sad intelligence of Bro. Weston's death. Then proceeded in a body to attend the funeral service, which was conducted in accordance with the rites of the Order.

Whereas, we have learned with deep regret that Bro. David Weston departed this life Dec. 19th, 1875; therefore, Resolved, That in the death of Bro. David Weston, Butteville Grange has lost a worthy member, and Oregon an early pioneer and useful citizen. That, in obedience to this dispensation of Providence we humbly bow in sorrow, and express our sympathy with the bereaved family and friends of the deceased.

Thus, The Oregonian and WILLAMETTE FARMER be respectfully requested by the Secretary of this Grange to publish a copy of these resolutions.

W. H. REES,  
F. X. MARTINEAU,  
J. S. VAUGHN,  
Committee.

The old Pioneers, one by one are, fast going. The first generation will soon have passed by. Whilst a few yet remain, with sad hearts overflowing,  
Let us pay a last tribute to each as they die.

David Weston was born in the State of Indiana, July 4th, 1820; from thence he removed with his parents to the Territory of Arkansas in 1833, just prior to the admission of that territory into the Union, where he continued to reside until 1841, when, in company with the late T. D. Keizer and family, he started for Oregon. They passed the following winter in Missouri. But as the time approached when they were about to cut loose from their old base of supplies and launch out upon what at that time seemed to be an almost boundless waste, Mr. Keizer decided to defer making the journey until the following spring. But young Weston, fully intent upon accomplishing the hazardous enterprise in which he had embarked, at once entered into an arrangement with Mr. Yardean Bennett and family, by which he was to become their camp boarder during their journeyings across the wide expanse of ocean-like plains.

The indefatigable labors of Oregon's first, best friend, Hall J. Kelly, had now through the skillful culture received at the hands of Col. Benton and Dr. Linn but just begun to yield its long looked for fruits. The little party of men, women, and children, with whom David Weston, early in May, 1842, crossed the western border of civilization, are justly recognized as the first emigrants proper who had left their eastern homes with the avowed intention of establishing themselves permanently as husbandmen upon Oregon virgin soil. Among those who engaged in this early enterprise may be mentioned our fellow citizens, F. X. Martineau, S. W. Moss, and A. L. Lovejoy, names familiar in Oregon thirty-three years ago.

David Weston, prior to leaving Arkansas, had acquired some knowledge of blacksmithing, and soon after reaching the Willamette valley he entered the smith shop of T. J. Hubbard, a skillful mechanic who had come to the Territory under the auspices of Capt. Wyeth, and is now living in Unatilla county, having nearly reached his three-score years and ten.

Notwithstanding Mr. Weston had never received any advantages from school, nature had endowed him with a genius which soon enabled him to reach the front rank of Oregon's most skillful artificers. He selected a land claim next below the lamented Dr. Newell's on the Willamette river, upon which his family now resides. When, in 1847, the Provisional Government of Oregon called for volunteers to march into the country of the hostile Cayuse Indians, he promptly offered his service, fully equipped for the conflict, served as a Lieutenant in that memorable campaign, in Oregon's first regiment of mounted volunteers, remaining at his post of duty until the last company (Capt. Martin's) was withdrawn from the field.

David Weston, under all the changing vicissitudes of life, was a true friend, a kind and hospitable man. There were present at his funeral Old Pioneers from Clackamas, Yamhill, Polk, and Marion counties, to pay the last tribute of respect to his remains, a few of whom, with feelings of unalloyed sorrow, wept over his tomb. W. H. R.

### MAGAZINES.

Scribner's Monthly, for January, is at hand and is an appropriate commencement of the great Centennial year, opening as it does with a beautifully illustrated description of "New York in the Revolution." There is also the first installment of a series of revolutionary letters that are certain to be interesting. This magazine contains a rich and varied assortment of literary treasures and we cannot see that any intelligent family can make better use of a few dollars, (\$1 currency is the price) than to subscribe for a work that will come monthly and serve as a means of culture and refinement, for Scribner's Monthly is devoted to literary and social cultivation and progress. A few dollars well applied in the purchase of good reading matter we consider as much a necessity for every pleasant home as that wheat sowed to raise bread. The food for the body is consumed each day to keep the physical man alive, but the food for the mind becomes part and portion of an ever growing intelligence that can never die. Many a mind remains dwarfed and narrow sighted when if well fed it could grow to grand size and be honored and respected. The magazine literature of our day possesses great value, for with the higher reading is mingled much to educate and instruct.

St. Nicholas, Scribner's monthly magazine, for the young people, is also at hand, and is crowded full of charming stories, poems, and adventures, all of which are illustrated with beautiful engravings. One by one the different magazines published for the young folks have been absorbed by the St. Nicholas, until at last it has no competitor of any note, and indeed we cannot see how any competitor can arise when it possesses so many attractions. The present number is calculated for the holidays and is particularly interesting.

### Mixed Farming Necessary.

EDITOR FARMER: I notice a most excellent article in the FARMER Dec. 17th, under the head of "Mixed or Special Farming," but there is one idea in favor of mixed farming that is impressed upon my mind that was not spoken of, and that is, that every year some one or more of the articles that can be produced by a system of mixed farming bears a high price, so that the fore-hand farmer who follows the mixed plan can always have something in market that pays him well for his production. And when we come to consider that we sow and we plant almost entirely in the dark as regards to our knowledge of what the future market will be, it seems to me to be something that farmers will risk their all on any one special article, when if that article that he has produced goes down, down he goes without any power to help himself. Yes, Mr. Editor, mixed farming for one month, out of debt for another, and success will follow.

L. B. JUDSON.

SALEM, JAN. 31, 1876.

A friend writing from Yocedillo, Douglas county, says: "We are having the heaviest rains of the season. The streams are all bank full and many of them are overflowing. The weather is very warm, and there has been no frost yet, not even enough to nip the tomato or melon vines. Stock looks well, and if no severe weather comes in the next two weeks, we are all right for the winter. Grass is growing, and gardening will soon begin if the rain stops."

FROM COOS COUNTY.—Mr. Stephen Baker, secretary of North Coquille Grange, No. 173, at Dora, Coos county, writes us: "Our grange is getting along finely, building a new hall 20 x 30, two stories high, the lower for a school house and the upper for the meetings of the grange." Dec. 24th strawberries and myrtle trees were in bloom there, something never known before in that region.

"Happy Hal" touches a theme that should commend itself to every home where the FARMER reaches, and other communications from the same pen are on hand that will be found of practical as well as poetical interest, for "Happy Hal" is one of the best poets we have to hear from because speaking in prose.