Correspondence.

Hot-Beds and their Management. SALEM, Or., March 13, 1884. Editor Willamette Farmer Mr. R. S. Cook, of McMinnville, has requested me to write an article and publish it in your paper, telling how to make and manage a hot-bed. Also how to prevent the ravages of the turnip tlea. The gardener must have hot beds to I believe the turnips attract more insects considered a stock region and for unes grow early vegetables and to start his than any other vegetable we grow in are rapidly being amassed in this line, cabbage and tomato plants and what-If one has much hot-bed room it is lime I am not bothered but very little enterprises of ordinary agricultural life the valleys for cultivation. They say better to use fire heat instead of manure with insects destroying my small plants. prosper equally well. What fruit that the farms present a sorry look; poor heat. I will first describe the making of the manure hot-bed: The usual size the seed, cultivate the soil, watch the equal to the best. As a poultry country is 3x6 feet; this determines the size of plant grow and do all we can and still it the hot-bed; six feet from front to back. and three times as many feet long aone has sashes to use. It may be made entirely on top of the ground or a hole may be dug six feet wide and the length of the hot-bed, from one to two feet deep. Fill this hole with fresh clean horse manuro, treading it down firmly, if it is early in the season, the manure should be two feet or more deep so it will retain the heat longer; if late in the season, then it may be no more than one foot deep. Early in the season is say, February 1, and late say middle of March. The soil on top of the manure should be from six to eight inches deep and very rich garden soil, or it may be clean river sand. Sand works very nicely and does not pack or form into lumps. Around the hot-bed is a frame of boards made tight. It should extend above the top surface of the bed when completed, six inches in front side and eighteen inches on the back side. The bed should always extend east and west, the sashes sloping to the south. As

soon as the manure is put in and the soil put on top, cover with the sashes, In two or three days the heat will raise. At first it will come up too high for planting anything in, but wait until it commences to go down, and when the thermometer indicates about 90 deg. and not allowed to get too dry nor be gotten up and successfully carried kept wet. It must be constantly watched through by Misses Mary Bat and Nora and on all warm sunshiny days the sashes must be raised or taken off, not in every respect. Mr. and Mrs. Geer enallowing the temperature in the day tertained the guests in a hospitably and mountains: time to get above 75 deg., and at night pleasing manner. it should go below 40 to 50 deg. If the sashes are closed an hour of sun will burn the plants up. On a cold night the plants will get chilled unless the hot-bed is covered with mats, carpetor anything that will protect it. A great danger in managing a hot-bed is that the plants will damp or rot off, just at the surface of the ground-the great and sudden changes in the temperature causes this. The best way to stop it is as soon as the small plants get their first pair of true leaves one fourth inch wide take them up and prick them out giving them room to grow and form good stalky Heating a hot-bod with fire heat is far more satisfactory than the above. Make either a lean-to on the south side of a

building, wall or tight fence, or a seperate house with roof going both ways, having the building run north and south and the roof slanting east and west, making it high enough so one can work inside of it standing erect. Heat it with a brick flue running underneath the hot-beds. The heat then is under the control of the workman, and the body of air inside of it being so much larger the temperature can be managed much easier. It takes experience to manage a hot-bed successully. One may read all there is to be read in books and papers, then fail until he get experend papers, then fail until he get experience. Peter Henderson's "Gardening is considered. One of these is Goose the Yakima canyon, many tunnels and Lake valley, and as many of our best ten degree curves, while the Natchez dening are the best books I know of on citizens are from the Willamette, we are citizens are from the Willamette, we are citizens are from the will among the same from rock work and easy of grade.

slacked lime and ashes. Any garden leys open to homestead and pre-emption soil should have heavy applications of entry. There is scarcely any choice beashes; leached or unleached. Also of tween one claim and another. The lime. I put on of ashes at the rate of water is near the surface and aithough 12 or 14 wagon loads to the acre and re- rain seldom falls during the summer peat the application again in two or three months yet it is found preferable not to years. Not many insects will live and irrigate field crops. The averages are thrive where there is plenty of lime and for wheat, are twenty bushels per acre; farms are worth \$125 per acre, and they ashes along the row, or sprinkle it along barley, thirty bushels; oats, forty bushels. the rows as soon as the seed is sown; These figures are often doubled and the rows as soon as the seer is soon, as the seer is soon, then if the insects appear put on more, even trebbled. This has hitherto been but from Helena west, they found then if the insects appear put on more considered a stock region and for unes nothing but mountains. Arriving in the garden. My plan is to not grow any for it is naturally adapted to the raising turnips at all, then by using ashes and of all kinds of stock. Yet the varied Let us never forget that we may plant has come into bearing proves itself · God who gives the increase.

DEXTER FIELD.

Macleay Items.

MACLEAY, March 22, 1884.

Littor Willamette Farmer: Macleay is one of the foremost towns eading merchant. He came here last buying their butter or doing without. fall and has made a wide circle of friends and is prospering.

Our school is prospering finely with Miss Bailey, from Polk county, as the teacher. We wish her success.

There was an entertainment at Mr. Levi Browers' to-day. A carpet sewing, which our Macleay belle's all took part in, and it was also Mr. B.'s birthday. If its getting fashionable to sew carpet rags on birthdays, I will inform the young of the skill and labor of the old States ladies that I am going to have one every day of the week until ours are all sewed.

Mr. L. Brower as leader. Many who thought that there was not a musical tone in their soul, have concluded that he is the right man in the right place.

At Mr. T. T. Geer's a few nights ago we had a nice birthday party in honor of Mr. G.'s 33d anniversary. It was a complete surprise as he was at his desk writing when we rushed in upon him. He looked as though he thought the Modocs had broken out again. It was Williams, and was a pronounced success

There was also a pleasant party at the residence of Mr. Al. Herren. There were present many young people from the neighborhood as well as from Salem. It was well mannaged and Mrs. Herren was highly complimented on her fine upper, having everything heart could

The Waldo Hills wolf club is doing a good work, having killed three wolves in two weeks. Messrs. Patten and Grifith being the lucky ones.

Uncle Johnny Kayes is very poorly at present. He is one of Oregon's pioneers and one of our most persevering and enterprising citizens.

The loss of Edmonson's Wide Awake is deeply felt by the entire community Stampede pass has the advantage of the and we all sympathize with him in his Natchez. Col. Smith states, however, misfortune. But as he is a thorough stockman we feel that he will soon have the vacancy filled. W. A. T.

Letter from Southeastarn Oregon LAKEVIEW, Or., March 10, 1884. Editor Willamette Parmer

I am much surprised at the number of letters received from Oregon asking of the ways and means of Southern Oregon, and although Gen. Sherman on the sion of his last visit told us that "the Willamette valley was Oregon," yet we are happy to say that there are a few we are happy to say that there are a few \$3,000,000. The Stampede pass requires garden patches left after the Willamette 25 miles of the heaviest rock work along ready to invite others from the same The best way to manage the insect region. There are many thousands of Send \$2 for the Farmer for one year, greater inducement than any other profitable.

has come into bearing proves itself equal to the best. As a poultry country we can searcely see how it could be better. The turkey so troublesome to nourish grows here without the loss of one from the brood. We have a superior dairy region, yet our market for these the same thing in Washington Territory.

products is high, for the people are so One farmer there told them he lost all that these products seem trifling. So one pair of mules, the county. Mr. W. P. Hermen is car you will find here the largest farmers

The greatest aggravation to the farin the spring is considered another harvester of the great crop-and so it is.

It is but natural, therefore, that home improvements should be neglected. We need more agriculturalists. Our land only awaits the plow and seed. A trifle expended here will make any man rich. in this country. Come and see.

S. S. CALDWELL, Sect'y, S.-E. Or. Im. Society.

Linn County Council.

ALBANY, Or., March 24, 1884. Editor Willamette Farmer:

The Linn County Council will meet on the 29 instead of the last Saturday A. S. POWELL. in the month.

A Comparison of Passes.

come News has been gather authorative figures about the Stampede They had left altoghther too good a ject to the proposition of using so much and Natchez passes over the Cascade

From the crossing of the Columbia river to the nearest tide water the route through the Stampede pass is 20 miles and 300 feet longer than that by way of the Natchez pass, and the estimate of the cost of the mountain work is for the former \$1,600,000 greater than that invested in the latter. The length of the tunnel required is 16,800 by the Stampede pass, or 7,700 feet longer than that by the Natchez pass. The grade is 86 feet per mile for ten miles by the Stampede pass.

From the Columbia crossing to tide water by the Natchez pass the route is 20 miles and 800 feet neaver than by the Stampede pass. Tunnel 9,100 feet in length, or 7,700 feet shorter than by the Stampede pass. Cost of construction, \$1,600,000 less. The grade is 116 feet per mile for ten miles by the Natchez

In the single matter of grade the that the grade on the Natchez may be reduced to 100 feet per mile, which would leave the Stampede an advantage of but 14 fest in grade for 10 miles, while in every point to be considered the Natchez has overwhelming advantage. Even with 18 bridges on the Natchez river, which will be required to reduce the grade to 100 feet, the cost will be 30

The estimate of \$1,600,000 does not represent the actual difference in cost between the two routes. It refers only to the mountain work, and when the approaches are considered the total in favor of the Natchez swells to fully

Two young farmers residing eight miles north of this plant, decided last fall soon after the appaint of the Northern Pacific Ila look at Oregon, Washington Territory, and California, with a view of locating themselves in one of these places if they should be pleased. Their Wisconsin thought it might be desirable to get cheaper lands. They thought well of the Yellowstone Valley, in Montana Oregon, they were quite surprised to find but small acros of tillable land. Three ranges of mountains traverse the State from north to south-leaving only the principal crop, and is now very cheap. No corn; hogs are fattened on wheat soaked in barrels. They found busy making money by other methods his stock last winter by starvation, except

mers here is to see so much government grass going to waste annually, and every additional hoof that can be started out. They found it a dirty, muddy, undrained city. One small flouring mill, no clevators, and no demand for labor. The wheat is sacked, taken to the railroad stations or river landings, and

hence to the ocean vessels.

The railroad trains were loaded with people going West, many were mechanics and young men seeking employment, but none was to be had in any of the towns they visited. Hundreds go there, using up all their means by the time of heir arrival, and then have to shift as we have a singing school here, with to say of the ways and means to wealth tain; in fact, every second man was either a land agent or wanted to sell his farm. It began to rain the next day after their arrival in Portland (about Thanks-giving), thereby making the streets nearly impassable and everything un-

> They say the buildings, roofs and all, are covered with moss, and the climate is very damp through the winter. They heard more coughing in Oregon and which enable fruits grown in warm cli Washington Territory, than in all their mates to be safely irresported to long lives before. They got their information distances? When fruit is wrapped it is from farmers mostly, going out among partly protected from cold, and the dif-them. You may well believe, therefore, that the much bragged up Oregon and cool place should therefore be selected Washington Territory didn't sunt them. country to like either of those places, care with finit, but if the good quality

> They then went to California, with and somethess result in an increased which they were much pleased. They price no objection should be made. found it, however, gotten up on too big a scale for ordinary farms. The country lies in great tracts of sandy soil, requiring irrigation. None but men of large means can successfully go into wheat farming in California (Southern California is not expense attending irrigation.
>
> They therfore returned home well

satisfied with their Wisconsin farms.
They did a wise thing in going to look before deciding to sell, and considered their \$500 well spent. They found men from Illinois and other Western States who had sold their farms, had gone to these countries, relying upon the big stories they had heard, and who found themsives "badly left." A. E. H. thomslyes "badly left."
MILWAUKEE, Wis.

We find the above in a Western intention could get so many lies into the same space. Thousands of immithe same space. Thousands of immi-grants are arriving here who are finding prefer it. - Coquille Herald. homes and are content. Those who have been here a few years are all satisfied. Portland is a beautiful city and per cent, less than if the road were to be hay has never sold there for \$40 a ton in built through the other route. it is worth about \$20. Of course there

called the "turnip flea" is by using air neres of land in this and adjoining valcontemporary who gave the above to the public will publish our brief reply.

Fruit Notes

A Baltimore firm has introduced the Japanese persimmon into this country, and planted 1,000,000 trees. The fruit is said to be delicious, and the general opinion is that it will be well received when offered for sale.

From all quarters the Wilson strawperry has been attacked, but the source of wariare may generally be traced to those who are engaged in endeavoring to sup reede it with something of their Newer varieties are given all the benefits of mulch manure and cultivation in order to make them attractive. If treated as the Wilson has been they would soon pass away. Having stood in high favor for more than ten years, it still remains the champion berry for shipping and producing under adverse

It has been long a disputed question whether plants derived nitrogen from the air or not. The verdict has been in favor of the non-appropriation of that element from the atmosphere, despite Bonssingault's claim to the contrary. M. Ville, in order to test the matter, caleined a portion of the earth, to expel all tory impressed them favorable as a nitrogen, and then grew a good crop of grazing country. They were also very dover in the same with a fertilizer contuct disappointed with Portland.

They found it a distribute the same with a fertilizer containing no nitrogen, the water used betaining no nitrogen, the water used being distilled. This demonstrates that clover appropriates nitrogen from the air, and, consequently, when grown and plowed under adds nitrogen to the soil. Wheat derives no nitrogen from the atmosphere, and when experiments were made with that plant the nitrogen was

not increased One of the chief causes of decay, when apples or other fruit is stored, is close contact. Should an imperfect apple become diseased, the disease assumes a contagions form, and spreads from one apple to the other until all are destroyed. This is more particularly noticed with peaches and plums, and it reminds us that more care should be exercised in preserving truits over winter. Lemons and oranges come to us from foreign, countries wrapped in paper and packed only in small lots. It has been demonstrated that apples, when placed on a shelf, each being separated from the other, keep well; and why cannot a lesson be taken from the foreign methods, which enable fruits grown in warm ch

Farm and Garden. Myrtie Timber.

There is no place of which we have any knowledge where myrtle grows to here meant, as they only visited the that degree of perfectness that it does in center of this State), owing to the great Coss county. The wood, if as fully known as black walnut, would become more valuable than that highly prized unishing wood; and when we take into consideration the fact that the timber grows large and actually incumbers the ground, we can justly claim much wealth in this respect. When we take into consideration that walnut is being shipped from Europe to the United States, we should be careful how we destroy our myrtle. Canes made of the black mytle are the finest we have ever seen, without exception, and can readily be sold for three or four dollars here. Some that we receive in exchange and do doubtedly bring a large price in some not see how anybody with honest city where men of money appreciate the intention could get so many lies into beautiful. For furniture it has no equal for beauty of finish or durability, and

Native Tobacco.

Last fall several farmers who have tried on a small scale the practicability twenty years, if it ever has. At present of tobacco raising in this vicinity brought samples of the product for exhibition on are land agents; also some wish to sell the walls of the land office. A few days their improved farms to be able to take ago Mr. Myers, a gentl-man who has up new land. As to "coughing," the spent the greater part of his life as a tobacco raiser in Kentucky, called in to country is very healthy. . Take the above examine these samples. After making through and it is a mess of slanderous a careful inspection he expressed surprise lies from beginning to end, done, no at finding an article of such excellent doubt, for the purpose of preventing important on The extent of grable land the business of raising and manufacture. migration. The extent of grable land ing tobacco in this vicinity would be open to settlement is as large and offers found not only practicable but highly