FARM AND ORCHARD

Notes and Instructions from Agricultural Colleges and Experiment Stations of Oregon and Washington, Specially Suitable to Pacific Coast Conditions

Growing More Potatoes

enlarging the yield on the high cost of increased. living has been shown by Professor In this larger output of the potato, their crop annually as food for swine. reducing the weed pests. About 19,000,000 head of swine are And best of all, Oregon is favorably annually fattened on potatoes in Ger- located both as to domestic and foremany, but other food, especially corn, ign markets, so that when transporta-

It is also pointed out that as populato Reduce Living Cost tion increases in the United States and as farmers learn to rely less on nat-Oregon Agricultural College, Cor- ural resources and more on intelligent vallis-Aside from the many other ad- manaement of them, both production, vantages of growing larger crops of through larger acreage and better potatoes in Oregon, the effect of thus yield, and consumption, will be greatly

Scudder, agronomist at the Agricul- Oregon is most favored with opportuntural college, to be promising. It is ities for making the increase. The pointed out that the per capita con- potato grows with a yield considerably sumption of potatoes in the United higher than the average of the United States is but 2.6 bushels annually, States, and the quality is also above while in Germany it is 7.3 per capita. the average. The crop is badly need-In addition to this large use of pota- ed s a money crop, and also for the toes ias human food in Germany, the sake of its effects through rotation of Germans produce forty per cent of crops in maintaining soil fertility and



Potato Farm On Stump Land in Columbia County, Oregon.

is a cheaper food for hogs in this tion has been a little further develcountry.

The possible value of a larger po- lack for a market. tato production in lowering the high cost of living is further shown in the Directions for Control of classified reports of the greatest potato eaters of Germany. While the richand well-to-do classes in that tatoes are considered a satisfactory Since the disease is caused by a micro-

oped the Oregon farmer should never

Dreaded Hog Cholera

Oregon Agricultural College, Corcountry eat but 3.6 bushels per capita vallis-The most dreaded hog disease annually, the great laboring classes in the world, hog cholera, has already consume 12.3 bushels, the peasant gained a slight foothold in the Northclasses 8.8, and the very poorest west, and can be kept from becoming classes as high as 17 bushesl per cap- an expensive scourge only by the ita annually. It is thus seen that po- greatest care in preventing its spread.

> WORLD'S YEARLY CROP, IMPORTANT FOOD PLANTS (Average for 5 Years, 1906-1910.)

Crop Tons Potatoes 156,000,000 113,000,000 107.000.000 Oats Rice Rye Barley 33,000,000

and economical food among the very scopic germ that is readily scattered classes of people where such food is in many ways, every owner of hogs most needed.

whence it was introduced into Europe. lege:

high yield and excellent food value, fering from cholera. combined with palatability, to grow 2-By carriers; that is, by hogs known that the tuber became so pop- pings. ular in Ireland that many persons have 3-By humans that have come into kali, then these bacteria will be of is a native of Ireland. But it is in ises. Germany that the science of potato 4-By dogs, coyotes, buzzards or the bacteria will not remedy these production has reached a very high de- other carrion feeders that have eaten troubles. gree of perfection.

hardly larger than some of fout states, in which have been put hogs that were it annually grows 8 million acres of infected with cholera. potatoes. This vast country of ours grows about 31 million acres. The to- infected hog lot or pasture. tal potato crop of Germany is more 7-By slop, swill or garbage that than 1 billions of bushels annually, contains uncooked bacon rinds or ham he total crop in our country is slightly bones of hogs that were affected with more than a third of a billion bushels cholera when slaughtered. annually. That is, Germany, with its small area of land, produces more than four times as many potatoes as we

and consumption may have some bear- mended by the United States departing on our "high cost of living." Al- ment of agriculture is exactly in line though consumption has already over- with my experience, said Professor A. taken production in the United States, L. Peck, landscape garden specialist yet consumption should be increased. at the Oregon Agricultural College. Note that in 1909 we imported 8,000,- "Salt is the safest, least expensive 000 bushels of potatoes. Notwith- and most effective of the chemicals I standing the fact that we consumed have tried, and inflicts less damage on the home production and the heavy im- the lawn. I get best results by cutportation, yet undoubtedly a greatly ting off the dandelion stock about two increased consumption of this health- inches below the surface with a table ful food would do even more to reduce knife, and putting a teaspoonful of the cost of living."

A Crabpecked Husband.

The little, mild, bald man had setshoulder, and grabbed his ear to steady are too darned satisfied." they heard was:

been at the office all the evening.". Chicago News.

should guard against the invasion of And yet, America is the home of the cholera germs by each and all of the ing detrimental influence that may be potato, which was first made available following methods, as outlined by Dr. to civilization by Pizarro, in Peru, B. T. Simms, veterinarian of the Col-

The Europeans took advantage of its | 1-By direct contact with hogs suf-

enormous quantities for food and man- that have recovered from the disease enable the legume to make a good ufacturing purposes. It is well to but still pass germs with their drop-

come to believe that the Irish potato contact with infected hogs or prem- little use. Again, if poor seed is used,

carcasses of hogs that died of cholera. While the country of Germany is 5-By stock yards, stock cars, etc.,

6-By infected water-as from an

Eradicating Dandelions.

"The use of common salt for the "These facts regarding production eradication of dandelions, as recomsalt directly on the cut end of the root.

The Sin of Satisfaction.

A dairyman from the Middle West tled down in the train to read, and, made so great a success of his creamfeeling drowsy after a trying day at ery in a North Carolina town that obbusiness, fell asleep. On the hat rack servers asked him why the local farmabove was a ferocious crab in a buck- ers did not take advantage of the same et, and, reaching to edge of the rack, opportunities. His pointed answer best obtainable pure-bred registered it fell, alighting on the little man's was: "Because you Southern farmers "Darn" itself. All of the passengers waited goes here, bucause it is needed. It exexpectantly for developments, but all presses the condemnatory attitude toward listless content, which is only lazi-"Let go, Sarah! I tell you I've ness. Satisfied indolents are doomed, unlicensed or not registered in a stud and even congress can not save them, book try as it will .- Wall Street Journal.

SWEET CORN AND SNAP BEANS

Main Points in Growing Good Crop Is Making Soll Rich by Liberal Applications of Manure.

(By J. L. LEONARD.)



Excellent Specimens of Sweet Corn.

a longer season than if only one variety had been planted at this planting. Then a part of the ground was re-

served for later planting, so that we had plenty of sweet corn and snap beans for home use from an early season until frost. Besides this there was considerable corn dried for winter use and from \$10 to \$12 worth of sweet corn and beans sold off of the half-acre plot.

About one dollar's worth of small ears was fed to the stock and plenty of seed saved for next year's planting.

beans was worth not less than \$25.

The main points in growing a good shallow cultivation.

each hill.

Some Farmers Have Wrong Idea as to Use of Materials for Legumes -Bacteria Gather Nitrogen.

By J. F. NICHOLSON, Idaho Expert ment Station.)

ceived by the Idaho experiment station would indicate that some farmers have a wrong idea as to the use in increasing the stand or in correctoperating in the soil. Their sole duty whose roots they grow.

If the soil is deficient in nitrogenous fertilizers, therefore, they will growth and yield. If the soil, on the other hand, is sour, or contains alor too much or too little seed is sown

is frequently deficient in these bacteria and they should be applied artificially.

Protect the Trees.

the rabbits are very liable to turn to be'd rather run on, and now he calls a diet of orchard tree bark, and in a young trees by all means with wrapkill, trap or poison the rabbits.

Better Breeding.

Commence grading up the farm horse stock by mating carefully selected, sound, suitable mares with sound, prepotent, muscular, pure-bred registered stallions.

Continue year after year to use the stallions of the character and breed first chosen and never out-cross to

any other breed. sound, unsuitable, partially impotent,

We know of no other crops that pay better for labor bestowed than a good large plat of sweet corn and snap beans. Last year we planted nearly one-half acre to sweet corn and

The earliest planting was made as soon as the ground was warm enough to insure growth. An extra early variety of sweet corn was planted on a part of the first planting, then a medium early variety was planted the



same day. This gave roasting-ears for

The stover and bean vines were worth from fifty cents to one dollar for stock feed. Considering everything, the half acre planted to corn and

crop of sweet corn are: Making the that Sheffleld Handicap six years soil rich by liberal applications of ago." manure or commercial fertilizer, a well prepared soil and good, frequent steadily, "but assuming that my name

one or two beans should be planted in come in; be good."

INOCULATING ALFALFA SEED

The correspondence recently reof inoculation material for alfalfa and other legumes. These bacteria applied to the seed have no power to assist in the germination of the seed, is in gathering nitrogen from the air and turning it over to the plants on

These bacteria need not be used if the legumes already growing in any particular soil show the nodules on the roots. This can be determined by careful examination of the roots for the nodules on the same. New ground

In sections where rabbits abound it is never advisable to leave the young orchard without protection against these animals. In a single night they are capable of doing more damage than the cost of protecting the entire orchard would have amounted to in a year. As soon as the supply of green vegetation is destroyed by frost, then stoutly. "I only asked him which side very short time they can girdle a little tree beyond repair. Protect the pers, paint, or by fencing and then

Do not use any stallion that is un-



SYNOPSIS.

Cowboys of the Flying Heart ranch are earlbroken over the loss of their much-dized phonograph by the defeat of their hampion in a foot-race with the cook of prized phonograph by the defeat of their shampion in a foot-race with the cook of the Centipede ranch. A house party is an at the Flying Heart. J. Wallingford Speed, cheer leader at Yale, and Culver Tovington, inter-collegiate champion runder, are expected. Helen Blake, Speed's inveetheart, suggests to Jean Chapin, sister of the owner of the ranch, that she nduce Covington, her lover, to win back the phonograph. Helen declares that if Covington won't run, Speed will. The Sowboys are hilarious over the prospect. Speed and his valet, Larry Glass, trainer at Yale, arrive. Helen Blake asks Speed, who has posed to her as an athlete, to cace against the Centipede man. The Sowboys join in the appeal to Wally, and fearing that Helen will find him out, he sonsents. He insist, however, that he shall be entered as an unknown, figuring that Covington will arrive in time to take his place. Fresno, glee club singer from Stanford university and in love with Helen, tries to discredit Speed with the hadies and the cowboys. Speed and Glass put in the time they are supposed to be training playing cards in a secluded spot. The cowboys tell Glass it is up to him to see that Speed wins the race. Willie, the summan, declares the trainer will go back has packed in ice, if Speed fails. A telegram comes from Covington saying he is in jail at Omaha for ten days. Glass in a panic forces Speed to begin training in earnest. The cowboys force Speed to eat in the training quarters and prepare him a diet of very rare meat. Miss Blake

the training quarters and prepare him diet of very rare meat. Miss Blake sixes a cake for Speed and is offended hen Larry refuses to allow him to eat. Covington arrives on crutches. He yas he broke his toe in Omaha. Mrs. eap, engaged to Covington and in love ith Jack Chapin, exposes Speed to elen, because Speed had failed to presid Covington from joining the party, beed decides to cripple himself, but dinner, the Centipede runner, appears the a proposition to throw the race, lass attempts to escape at night, but is ptured. Fresno gives Gallagher, the nitpede foreman, \$500 to bet against, beed for him. Helen Blake hears of it id bets \$500 on Speed. him up," and some one said: "Are we ready?"

CHAPTER XVII .- Continued.

"I haven't got you. My name is Skinner." "Nix on that monaker," Glass smiled, indulgently. "I had a man in

"You're in bad," asserted the cook

is Long-The corn should not be planted too "I didn't say your name was 'Long." thick but good seed should be used I called you 'Whiz.' Glass chuckled in order to get a uniform stand. Then at the point as he scored it. "Now

Skinner darted a look toward Galagher and the Centipede men gathered about the shrilling phonograph, stopped and tied his shoes, and breathed softly:

"Spiel!" "This little feller I'm trainin'-does

ne win?" aer inquired:

"Did the man you trained for the

Sheffield Handicap win?" "Never mind that. Does this frameap go through?" It happened that Speed, drawn irresistibly, had come forward to hang upon every word, and now chose this moment to inter-

rupt. "It's all right, Mr. Skinner-" But Skinner leaped to his feet,

"Don't try anything like that!" he ried in a terrible voice that brought Jabby Gallagher striding toward

"What's goin' on here? Are they ryin' to fix you, Skinner?" "Not a bit like it," Glass protested



Little Feller I'm Trainin'-Does He Win?"

'or police protection."

"Don't try it again, that's all!" the ook warned, sullenly.

"I reckon I'll take a hand in this!" Jallagher was in a fine rage, and would have fallen upon the offender and not Stover stepped in his path. "I reckon you don't!" he said easily.

The two glared at each other, and were standing thus when Speed and sis trainer moved gently off. They nade their way to the house in comparative silence. "I-I made a misake," said Wally. "You've been jobbed like you was a

paby," said Glass. "There ain't but one thing to do now. Go into the house and change your clothes, and when you get ready to run, get ready o run for your life-and mine." Over on the race-course Gallagher

vas inquiring:

"Who's goin' to send these y'ere

athaletes away?"

"I am!" announced Willie without hesitation. "Bein' perhaps the handlest man present with a weepon, I'm goin' to start this journey." looked his foes squarely in the eyes. "Has anybody got objections to me?" The silence was flattering, and more loudly now, so that Skinner might hear, he added: "If your man tries to beat the gun, I'll have him wingin' his way to lands celestial before be makes his second jump."

Gallagher acknowledged the fairness of this proposition. "This race is goin' to be squar'," said he. "We're from his blanket, and stamped his ready when y'all are."

his clothes and into his silken running-suit. He was numb and cold from his shoulders and thrust it to-His hands performed their duties to ward his trainer, who shock his head. be sure, but his brain was idle. All he knew was that he had been betrayed and all was lost. He heard Glass panting instructions into his ear, but they made no impression upon him. In a dull trance he followed his trainer back to the track, his eyes staring, his bones like water. Not un til he heard the welcoming shout of the Flying Heart henchmen did he realize that the worst was yet to come. He heard Larry still coaching earnestly: "If you can't bite him, trip

Glass held out his hand. "Good-by, Mr. Speed."

Chapin came forward and spoke with artificial heartiness, "Good-luck. Wally; beat him at the start," and Covington followed. "Remember," he cautioned, sadly,

what I told you about the start-it's your only chance." "Why don't you fellows think about the finish of this race?" faltered the

runner. Then, in a voice broken with excitement, Helen Blake spoke, holding out her hand for a good-by clasp. "Dear Mr. Speed," she said, "will you try to remember this?-remember to run before he does, and don't let him catch up to you. If you do that, I just

know you'll win." This magnificent display of confidence nerved the athlete, and he smiled at her. He wished to speak,

but dared not trust himself, Gallagher was calling; so he went "Without an upward glance, Skin- to the starting-point, whence he surveyed the course. There it lay, no more than a lane leading down between ranks of brown-faced men whose eyes were turned upon him. On the top rail of the corral perched Willie, revolver in hand. The babble of voices ceased, the strident laughter stilled, Speed heard the nervous rustle of feminine skirts. Skinner was standing like a statue, his toe to the

mark, his eyes averted. "You'll start here and run a hundred yards out yonder to the tape,' Gallagher announced.

"I refuse!" said Speed firmly. For one breathless instant there was a hush of amazement, then a cry of rage. Still Bill Stover hurled the nearest man out of his patch, and strode forward, his lean face ablaze. He wheeled and flung up his hand as if to check some hidden movement of Willie's.

"No voylence yet, Will! What d'you

mean, Mr. Speed?" Speed uttered what he knew was his final joke on earth. "I mean that I refuse to run straightaway. I'm an all-around athlete, and I must run all around something."

Amid shouts of confusion, those who had taken position along the course came crowding back to the startingpoint. Willie wrapped his legs about the top rail of the fence and drew a second revolver, while the two foremen bellowed indistinguishable threats at each other. Chapin lost no time in withdrawing his guests out of the turmoil, but Helen kept her place, her face chalky but her eyes very bright.

"What are you tryin' to hand us?" roared Gallagher. Still Bill was quick to take a cue. Don't get hectic!" said he. "There's

nothin' in the articles about runnin' straight. Let 'em run around the cor-

But at this suggestion every voice seemed to break simultaneously. "Humpy Joe ran straightaway," declared Gallagher.

"Yes, an' he kept at it," piped Willie. "I favor the idea of them runners comin' back where they start from." "Listen, all of you," Speed an-nounced. "I am going to run around and around and around this corral.

If Mr. Skinner chooses to accompany

me, he may trail along; otherwise I

shall run alone." "Never heerd of such a thing!" Gallagher was dancing in his excitement, but Skinner calmed him by announcing, curtly:

"I'll beat him any way he wants to

"You couldn't beat a rug," retorted | most."

Wally, and Glass suddenly smote his palms together, crying, blankly:

"I forgot the rug!" "We don't want no arg'ment afterwards. Does the Centipede accept its fate?" Still Bill glared at the faces

ringed about him. "We do if Skinner says so." "Twice around the corral," agreed

stand? If he falls, I keep going." Instantly there ensued a scramble for grand-stand seats; the cowboys swarmed like insects upon the stout fence of the corral.

Skinner. "But no accidents, under-

"Then you'll start and finish here. Once y'all pass we'll stretch a string to yonder post, and the first man to bust

it wins. Who's got a string?" "Mr. Gallagher, won't you use my sash?" Helen quickly unfastened the long blue bow of ribbon from her cotton gown, and Gallagher thanked her, adding:

"Moreover, the winner gets it!" For the first time, then, Skinner ad-

dressed Miss Blake. "Hadn't you better make that the oser, miss? The winner gets the coin," and the assent came in a flashing smile from the sky-blue yes.

"Then the loser gets the ribbon!" Gallagher announced loudly, and made one end fast to the corral. "Which I call han'some treatment for Mr. Speed, an' only wish we might retain it at the Centipede as a remembrance. Are the runners ready?"

Those near the starting-point gave room. Skinner stepped quickly out spikes into the soil; he raised and low-J. Wallingford Speed stepped out of ered himself on his toes to try his muscles. Speed drew his bath-robe "Give it to Covington, Bo: I won't

> be here when you come back." "Get en your marks!" The starter gave his order.



"I'm Goin' to Shoot Twice This

Time!" brought his weight forward upon his hands. He whispered something to Skinner. That gentleman straightened up, whereupon Willie cried for a second time:

"On your marks!" and again Skinner crouched.

"Get set!" The crowd filled its lungs and waited. Helen Blake buried her nails in her rosy cold palms. Chapin and his friends were swayed by their heartbeats, while even Fresno was balanced upon his toes, his plump face eager. The click of Willie's gun sound-

ed sharp as he cocked it. Into the ear close by his cheek Speed again whispered an agonized-'Don't forget to fall down!"

This time the cook of the Centipede leaped backward with an angry snarl, while the crowd took breath. "Make him quit talking to me!"

cried Skinner.

Gallagher uttered an imprecation and strode forward, only to have his way once more barred by Still Bill Stover. "He can talk if he wants to." "There is nothing," Speed pointed out with dignity, "in the articles to

forbid talking. If I wished to, I could sing. Yes, or whistle, if I felt like "On your marks!" came the rasping voice of Willie as Wally murmured to

Skinner: "Remember, I trust you." Skinner ground his teeth; the tendons n his calves stood out rigidly.

"Get set!" Once more the silence of death wrapped the beholders, and Willie raised his arm.

Speed cast one lingering farewell glance to the skies, and said, devout-"What a beautiful, beautiful

Now the starter was shaking in an ague of fury. "Listen, you!" he chattered, shrilly.

'I'm goin' to shoot twice this timeonce in the air, and the next time at the nearest foot-runner. Now, get set!" and the speaker pulled the trigger, whereupon Speed leaped as if the bullet had been aimed at him. (TO BE CONTINUED.)

Gen. Booth's Story of His Career.

General Booth thus epitomized his career: "When I started my work I gave up the friendship of the people of the better class. I gave up the hope of wealth and I abandoned ambition. Now I have found all that I gave up. Had I wished it I could be wealthy. My publications have brought me thousands of pounds, but every cent of it has gone back as it came, for the betterment of the conditions of humanity, for making people happy. Similarly, I have the best friends in all classes, and, so far as ambition is concerned, if I am not the best known man in the world, I am prayed for the