FARM AND ORCHARD

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

been reported. been on the market in limited quanti- perior to grape juice. ties for several years and no loss from spoiled berries has been reported here, growers has recently been formed,

Uses and Care of the Loganberry. "I am very enthusiastic over the Oregon Agricultural College, Cor- possibilities of the loganberry juice; vallis - The more the loganberry is more enthusiastic now than I have studied the more wonderful its quali- ever been before. The results of our ties appear. Possibly its greatest experiments with four or five of the single asset is its remarkable keeping products are results that we are proud qualities. Who ever heard of a can of. Recently we made up some of this of spoiled loganberries? Of course preserved juice for drinking, carbonthe careless and unsanitary handling ated it and gave it out to a number given all fruit by some people would of our friends to sample and test. spoil anything, but if such treatment Almost invariably they told us it was has resulted in producing bad cans or the best temperance beverage they had bottles of loganberries the case has not ever tasted. It had a wonderful color, a delightful aroma and a very pleasant Dried loganberries likewise have flavor. In all these qualities it is su-

A strong association of loganberry either by the dealers or consumers. It and a serious attempt will be made to

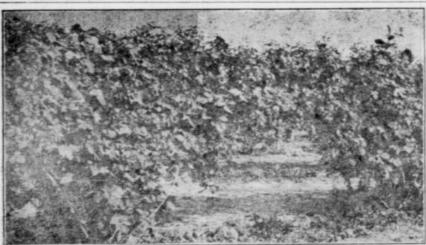


of germs of decay, but appears not to that have attended the launching of be inviting to the common by-products the other great fruit industries of the

play good keeping qualities, so that a dustry. ing tastes.

is not only very resistant to the action escape the pitfalls and hidden dangers fruits are generally expected to dis- sor Lewis for the progress of this in-

great deal is expected of the logan- The association expects to accomberry in these forms. Nor has this plish this result largely by establishing expectation ever been disappointed, so rigid standards of products which all far as reports show. Unlike the fruits growers must adhere to in order to that have to be heavily sugared and obtain the other advantages of the greatly concentrated by boiling, these association. Every box of berries, loganberry products keep with a mini- every can, every package of dried fruit mum of both. Hence the natural and and every bottle of juice that goes out distinctive loganberry flavors are pre- of the state is to be of first quality. served, offering the much-to-be-desired The fine preserving qualities makes "something" different to discriminat- this ambitious program a little easier of accomplishment with the loganberry



Training the Loganberry Vines.

Most wonderful of all this berry's than with any other berry, so that fine qualities is the self-preserving growers fully expect to see the policy quality as shown in bottled juices.

ness has been given all the foregoing farm or else made into suitable byproducts with the single exception of products. berry has very unusual preservative ies that handle the crops. tests, says:

and in it I believe that Oregon has one doubtless always will be, these areas Jack. There are reasons"-he searched of its greatest horticultural assets, are extending. Experiments are Miss Blake's countenance-"why I There are but few states that can grow being carried on in several new disgood loganberries, and the demand for tricts, some of which, it is hoped, will Turning, he stalked away into the this berry is going to be tremendous. show the necessary conditions for a The output will doubtless be increased large and profitable industry. very greatly and I firmly believe the time will come when we shall ship out of Oregon ten million dollars worth of \$4000, a sum covering debts from this fruit yearly.

"It is a splendid berry to work up into by-products by drying, canning not the result of a windfall, but repreand manufacturing into juices. These products will, I believe, be unsurpassed by any berry grown. It also serves as a basis for a long list of products, valuable in confections, ice cream and general city trade.

"We have conducted numerous experiments during the past year in be included in the curriculum. drying, canning and juice-making with this berry, and hope to be able soon to give out the information we have gathered in handling this crop.

Lucky.

There was only a thin partition between the parlor and the taproom of the suburban hostelry, so that I could not help hearing what was perhaps a latter's religious tenets. confidence about a certain Bill's terrible condition the previous day.

"Well, to cut the long story short," said the voice, which was husky, probably with emotion, "I had to set 'im number of animals it contained, but on a doorstep and leave 'im there. 'E must 'a fell asleep and 'is 'at dropped children of Israel carried this unwieldon to t' footpath, an'-would yer be- ly thing for 40 years in the wilderness lieve it?—when e woke up there was I must confess that my faith breaks hands of Carara and Cloudy, who had She broke down suddenly. 11 pence in it!"

strictly enforced. All inferior goods The severe test of commercial fit- will be kept at home and used on the

loganberry juices, and they have met Another means of managing the the test in a most satisfactory manner. rapidly growing industry is a bureau ordained, and it comes off on time. I In addition to the commercial tests, of statistics. The acreage and producthe far more critical test of the labor- tion of each year's crop will be asceratory has been applied to the products, tained as nearly as may be, and proincluding the juices, by the horticul- vision made for marketing just what tural department of the Agricultural is grown. Extensive advertising will college. These tests have established be carried on in order to widen the beyond question the fact that the market and cooperate with the agen-

qualities. Concerning these qualities While the area of growing logan-Professor Lewis, who conducted the berries on an extensive commercial scale has been somewhat limited to with equal decisiveness. "The loganberry has come to stay, certain districts of the state, and

> J. W. Cook has just paid in London which he was freed in the bankruptcy court 19 years ago. The payment was sented many years' savings.

The Italian ministry of education will spend \$15,000,0000 for new public school buildings in the next four years.

At the Minnesota school of agriculture a course of sewing for men is to

There are only 20 persons in France with a yearly income of more than \$1,000,000.

Too Much for Him.

A Methodist bishop tells of a conversation he once had with a Wyoming man touching certain difficulties of the

"Bishop," said this naive westerner, "I do not refuse to believe the story of the ark. I can accept the ark's great size, its odd shape and the vast when I am asked to believe that the down."-Harpers' Monthly.



SYNOPSIS.

Cowboys of the Flying Heart ranch are heartbroken over the loss of their much-prized phonograph by the defeat of their champion in a foot-race with the cook of

CHAPTER XV .- Continued. "Say, what is all this fuss about? I don't want to be smuggled anywhere, thank you!"

"I may not be able to square my men," Chapin reiterated. "It may have gone too far."

"Square! Square! Why should you do any squaring? I'm not going to run away." Miss Blake clasped her hands and breathed a sigh. "I've got to stay here and run a foot-race tomorrow.

"Don't be a fool, Wally!" Covington added his voice to the others. Speed whirled angrily. "I don't need your advice-convict!" The champion hobbled instantly out of range. "I know what I'm doing. I'm" going to run to-morrow, and I stand a good chance to win."

would have been said to have giggled. pproached unseen, Stover, and beind him the other men.

"Evenin'! What's all the excitement?" greeted the leader, softly. The master of the ranch stepped forward.

"See here, Bill, I'm sorry, but won't stand for this foot-race."

"Why not?" queried the foreman. "I just won't, that's all. You'll have to call it off."

"I'm sorry, too." "You refuse?" The owner spoke

ominously. "You bet he does!" Willie pushed himself forward. "This foot-race is make bold to inquire if you're talkin'

for our runner?" "Gentlemen, I can only say to you that for myself I want to run!" declared Speed.

"Then you'll run." "I refuse to allow it," Chapin declared, and instantly there was an angry murmur; but before it could take definite shape, Speed spoke up

"You can't refuse to let me run. must run-and win, And win I shall! darkness, and there followed him a ly amused at the story when he shout of approbation from the ranch-

Jack Chapin threw up his hands.

"I've done my best." "The man's mad!" cried Covington but Fresno was nearer the truth. "Nothing of the sort," he remarked,

and struck a match; "he's bluffing!" As for Helen Blake, she shook her fair head and smiled into the night. "You are all wrong," she said. "I know!"

CHAPTER XVI.

HE day of the race dawned bright and fair, without a cloud to mar its splendor. wore on, a gradual excitement became apparent among the cowboys, increasing as the hours passed, and as they prepared with joy to invade their rival's territory; nevertheless, the vigilant

watch upon their champion did not relax. It was some time after midnight

been doing night duty in accordance with Stover's orders. What with the trainer's loud complaints, the excited words of his captors, and the confusion resulting when the bunk-house emptied itself of men half clad, it had taken the ranch-owner some time to discover that Glass had been surprised in the act of escaping. It seemed that the sentries, seeing a figure skulking past the white adobe to halt. There had been a dash for liberty, then a furious struggle before the intruder's identity became clear, and but for Chapin's prompt arrival upon the scene violence would inevitably have resulted.

"I tell you, I'm walkin' in my sleep," declared Glass for the twentieth time. ."Caramba! You try for get away." stormed the Mexican. "Pig!"

"Not a bit like it! I've been a son nambulist ever since I'm a baby." "Why didn't you answer when we

called?" Cloudy demanded. "How can I talk when I'm sound asleep?"

"If you couldn't hear us call, why did you run?"

"Now have a little sense, pal. A sleep-walker don't know what he's doin'.

"Since there's no harm done, you'd better all go back to bed," Chapin advised. "Mr. Glass has the liberty of the ranch, boys, night or day, asleep or awake.

"Looks to me like he was tryin' to elope some." Stover balanced upon one bare foot, and undertook to remove a sand-burr from the other. In the darkness he seemed supernaturally tall, so that Glass hastened to strengthen his story.

"I was walkin' in my sleep as nice as you please when those rummies lep' on me. Say! You know that's dangerous; you can kill a guy wakin' him up so sudden."

"There's easier ways than that," spoke Willie from the gloom. "It's a yap trick just the same.

was in the middle of a swell dream,

"Come, come, Stover, get your boys back to bed! We'll have the whole ranch up with this noise."

Chapin himself led Glass around Mr. Fresno, if he had been a girl, the house, while that gentleman made no offer to explain the dream which "All right, Dearie! I'll bet you five had prompted him to ack his suithundred dollars—" as there emerged case before letting himself out of the up. Now I guess you four can do the from the darkness, whence they had training-quarters. Once safely back in the gymnasium, he sat up



"I Must Run-and Win. And Win Shall!"

dawn, a prey to frightful visions which the comfortable morning light did not serve to dissipate.

Wally Speed slept serenely through the whole disturbance, and was greatawoke. He was sorely tempted to Skinner, and put an end to his train-Skinner's caution, and reflected that the slightest indiscretion might precipitate a tragedy. For the first time since the beginning of the adventure he was perfectly at ease, and the phenomenon added to his trainer's dis-

may. Others beside Lawrence Glass were apprehensive. Culver Covington, for instance, was plainly upset, while Roberta Keap pleaded headache and up at the waist by a section of winhad her breakfast served in her room.

It was shortly afterward that she appeared in the gymnasium doorway, As the golden morning and cried, in an accusing voice:

"Well, Mr. Speed?" "Yes, quite well."

"You traitor!"

"You modern Borgia! Didn't you go and tell Helen everything?" "Didn't you promise to stop Culver?"

"I did. I had him thrown in jail at Omaha. What more could I do?" "You did try? Honestly?" Mrs. that Lawrence Glass had been the Keap allowed her indignation to abate cause of a wild alarm that brought slightly. "If I had known that, I the denizens of the ranch out in night | wouldn't have told Helen. I'm sorry apparel. Jack Chapin, awakened by a you didn't explain. I was angrycry for help, had found him in the furious. And I was frightened so!"

shall I do about them? I can see what they want to say, and yet I

daren't let either speak a word." "Mrs. Keap, are you sure Culver loves you?

"Horribly! And he suspects the truth. I saw him change the moment he found me here." Roberta began to weep; two limpid tears stole down her cheeks, she groped for a chair, and Wally hastened to her assistance, As he supported her, she gave way completely and bowed her head upon his shoulder.

It was in perfect keeping with the luck of things that Miss Blake should enter at the moment. She had come with Jack and his sister to inquire regarding the fitness of her champion and to nerve him for the contest, and stood aghast. Chapin stepped forward with a look of suspicion, inquir-

"What's going on here?" Miss Blake spoke brightly, tinkling

ice in her voice. "There's no necessity for an explanation is there? It seems time for

congratulations." "Oh, see here now! Mrs. Keap's really engaged to Culver, you know." "Culver!"

"Culver!" Both the young ranchman and his sister stared at the chaperon with walls of the house, had called upon it | growing horror, while she undertook to explain; but the blow had fallen so swiftly that her words were incoherent, and in the midst of them her hostess turned and fled from the

"Now don't begin to aviate until you understand the truth," Speed continued. "While she's engaged to that broken-toed serpent, she doesn't love him, do you see?" He smiled.

"I do not see!" "It was "simply a habit Mrs. Keap had got into-I should say it was an impulsive engagement that she has repented of."

"No doubt she was repenting when we interrupted you," said Miss Blake, bitterly.

Then Chapin added, helplessly: "But Culver is engaged to my sister Jean!" "Jean!" Mrs. Keap exposed her

tragic face. "Then-he deceived me! Oh-h! What wretches men are!" The widow commenced to sob. Outside came Miss Chapin's voice:

'So here you are, Mr. Covington!" And the next moment she reappeared, dragging the crippled champion behind her. Thrusting him toward Roberta, she pouted: "There, Mrs. Keap! I give him back to you."

"Perhaps you'd better go on with your explanations," Chapin suggested, coldly, to Speed. "How can I when you won't listen

to me? Hear ye! Hear ye! Culver was engaged to marry Mrs. Keap, but she discovered what a reprobate he

There was indistinguishable dissent of some sort from Mr. Covington, "-and she learned to detest him!"

Mrs. Keap likewise dissented in accents muffled.

Well, she would have learned to detest him in a short time, because she's in love with Jack Chapin; so she came to old Doctor Speed in her troubles, and he promised to fix it all rest of the explaining. If you ever get in trouble, come to the match making kid. I'll square it." They were four happy young people,

and they lost no time in escaping elsewhere. When they had gone, their benefactor said to Miss Blake: "Wouldn't you like to make that a triple wedding? We might get club rates."

For answer Miss Blake hurried to the door and was gone.

Over at the Centipede there was a great activity and yet a certain idleness also, as if it had been a holiday. The men hung about in groups listening to the peripatetic phonograph. A dozen or more outsiders had ridden over from the post-office to witness the contest. Out by the corral, which stood close to the first break of the foothills, Skinner was superintending the laying out of a course, selecting a stretch of level ground worn smooth and hard by the tread of countless hoofs.

"Makes a pretty good track, eh?" he said to Gallagher. "I wonder how fast this feller is? Ever heard?"

"They seem to think he's a whirlin' ball of fire, but that don't worry you none, does it?" Gallagher bent his lead-blue eyes upon the cook, who shrugged carelessly, and Gallagher smiled; he was forced to admit that his man did not appear to be one easmake known his agreement with ily frightened. Skinner's face was hard, his lips thin, his jaw was not er's agony of mind; but he recalled that of a weakling. He had dressed early, then wrapped a horse-blanket about his shoulders, and now, casting this aside, sprinted down the dirt track for a few yards to test the footing, while Gallagher watched him with satisfaction-a thing of steel and wire, as tough, as agile, and as spirited as a range-raised cow-pony. He was unshaven, his running-trunks were cut from a pair of overalls, held dow-cord, and his chest was scantily covered by an undershirt from which the sleeves had been pulled. But when he returned to pick up his blanyet Gallagher noted approvingly that he was not even breathing heavily. With a knowledge confined mainly to live-stock, the foreman inquired:

"How's your laigs? I like to see 'em hairy, that-a-way; it's a sign of stren'th. I bet this college boy is as pink as a maiden's palm! He don't look to me like he could run." (TO BE CONTINUED.)

Daily Thought.

Never does a man portray his own character more vividly than in his manner of portraying another.-Rich-

HEATER FOR WARMING A BED

Two to Four Candle-Power Lamp Will Give Sufficient Heat-Danger of Fire Eliminated.

As most people are aware, it is dangerous to use an incandescent lamp as a bed warmer owing to the fact that a considerable amount of heat is given off by a comparatively small bodythe lamp, writes Wilbur R. Simpson in Popular Electricity. This heat is confined and not allowed to radiate because the bedclothes pack tightly around the lamp. More than once fires have been started from this cause. But I have found that no harm is done if the lamp is inclosed in a fruit jar as



Lamp in a Glass Jar as a Bed Warmer.

shown in the sketch. I solder an ordinary lamp socket into the metal top of the jar and a two to four candlepower lamp will give sufficient heat. The size of the jar prevents packing of the covers too closely around the lamp and permits radiation of the heat fast enough to keep the temperature down to a safe point.

NOVEL USE OF ELECTRICITY

English Railroads Sort Freight by Merely Pressing Button-May Cause Wide Reform.

Hull, which has just secured its own telephone system, is to be the center of an experiment that may cause wide reform in the methods of handling freight on the English railways. The system practically means the sorting of goods in warehouse by simply pressing a button. Electrical machinery has been invented by a company with which Mr. Marconi is associated for dividing the warehouse into a series of alphabetical sections. Traveling trays under electrical control distribute the goods according to the index letter of their destination-B for Bradford, L for Liverpool, and so forth-in a manner similar to that by which letters are sorted in the post office. A French, an American and two English railway companies are now negotiating for the adoption of the system.

Test Electric Blasting.

Gold mining companies of the Rand field. South Africa, have been exerimenting with electric blasting with a view to reducing the danger of miner's phthsisis, a disease ascribed to the fine dust that results from blasting. By using electric systems the firing can be done from the surface. and the air can be cleared of the fine dust before the miners need to enter the mine.

Berlin's street railway is to be electrifled at a cost of \$6,000,000.

New York has more telephones than London, Paris and Berlin together.

est fron-ore mine in the world, which is in Lapland, is being equipped with electrical machinery. The city of Los Angeles has illum-

The richest and probably the larg-

the streets, which are turned on and off by clock-work mechanism. With a four-horsepower engine, a motor driven plow invented in Eng-

inated signs indicating the names of

land cuts a six-inch furrow at a speed in excess of three miles an hour. . . . More than 2,000,000 American farmers are now using telephones in their

homes, more than 100,000 having installed instruments within a year. Two-thirds of the telephones used in the world are in the United States, or a total of over 8,362,000. To operate them requires more than 18,000,-

000 miles of wire. An electric flat-iron invented by a Colorado man is propelled by a motor driven roller, an operator having only to guide it and control the current by

Electric mechanism similar to that of automatic telephones has been invented to enable a restaurant patron to order a meal by numbers from an indexed bill of fare.

a switch in the handle.

At the time of the last accurate report there were 375 public coast wireless stations in the world, of which the United States had 142, Great Britain 43, and Canada 33.