vines. Then there are smaller wineries springing up all over the county, beside those at Anaheim. Will it not be time enough to erect more wineries, that is establishments that can make 500,000 to 1,000,000 gallons, after the vines planted last year and to be planted this year are in bearing? It is not good policy to spend too much money on reduction mills until you have plenty of ore on the dump and more in sight.

Pertilizing Olive Yards

The indifference in many parts of southern Europe to care for the precious olive tree, which in spite of the neglect on the part of man in positions favorable to its prosperity can do its work, aided by nature only, has become in many a district so great that the habitual abandonment of pruning and stirring up the ground, often for a number of years, has led people to assume that justice is being done to their inheritance. Not long ago, a paper in the south of the State, writing up the tree now at last getting into favor with Californians, nearly expressed the needlessness of cultivation. No person who can inquire into and judge of the nature of any tree and deduce therefrom that of the olive tree. can easily be taken in by such heresy May the idea that a tree like the olive tree can take care of itself never gain credence in this State. If you look for returns which can be justly expected from the olive tree, do your duty toward it first, and it will not disappoint you. No true friend of the olive who has investigated and observed the habits and wants of the tree, has ever been led to advise indifference, but declared, with reason, what you give to the tree, it will requite with large interest.

It seems to the point to quote an authority on olive culture, Professor Caruso, oI the Pisa University, on that subject. That gentleman has laid down rules on the question of fertilizing the olive tree, which we will give in their entirety.

1 To maintain constancy in the bear-

ing power and general prosperity of the In very fertree, manuring is a necessity. In very fer-tile soils it may be left without that supply for some years, but to delay it indefinite would impair and gradually diminish its fruitfulness, years of full fructification would fail, and your clive plantation be-

2. To fertilize well, render to the soil the refuse from the manufacture of the oil and the wood cut in trimming the tree

3. Proportions and compositions of the ashes vary, and for this reason it is not exactly clear which kind of manure is necessary in different soils.

4. The most certain way to apply fertilizers is to know the average loss each year of fruiting of the tree, in Iruit, leaves and wood, and restore to the soil the principles of fertilizing essences contained in those three parts of the tree.

The total weight of the leaves that annually fall naturally from the tree, rotting at its base, may be at an average 11 pounds 12% ounces, and 2,142 pounds per acre. This weight in relation to the fruit is as 71 to 100, and not, as stated by Gas-This weight in relation to the fruit

parin, as 50 to 100.

6. The growth of leaves prevented by 6. The grown of leaves prevented by pruning, if that labor is practiced with prudence and at regular periods, represents annually about I pound 14% ounces, or 236 pounds per acre. This part of foliage, not returning to the soil, is about 5 per cent, or I-18 of the total restored to the plant. pruning, if

7. The wood lost by the tree in a year by meteorological accidents and by pruning may be calculated to amount to 7½ pounds, or, per scre, 1,377 pounds, and not to a minimum of 11 pounds per plant, as calculated by Mr. Andoynaud.

ood and leaves separated in pruning are in proportion of weight as 87

tree to produce them as follows: Nitrogen, tree to produce them as follows: Milogen, per tree, 2 47-100 ounces; per acre, 25 pounds, 15 ounces. Potash, per tree, 12, ounces; per acre, 17 pounds, 5 ounces. Phosphoric acid, per tree, 5-9 of au ounce;

per acre, 5 pounds, 6 ounces.

10. The amount of fertilizers necessary for that consumption would be 39 pounds 9 3-5 ounces for each olive tree of regular size and regularly trimmed, or per acre, 1,602 pounds.

The whole of which for consumption to each plant each year has to be restituted, of fertilizing principles of the plant itself, viz, residues of the oil press, washings of the same, and leaves and wood,

ould be 56 pounds.

12. Uaeful for adding to manure and macerating with the same for olive trees are seaweeds (algae), reeds, corn leaves, straw of cereals, branches of the grape vine and herbs. Poor in mineral elements are canes from marshy soil, but still useful for olive manure. Ashes and rotten olive paste may also serve to add to manure in state of fermentation. A layer of about a foot high of manure with a thin cap of lime or gypsum on the top on level soil, impermeable and slightly slanting, so as to allow rain water to pass through the heap, is advisable. The liquid may be used to moisten the mass in maceration, in order to effect uniformity of decomposition.

The season for manuring the olive tree depends upon the climate, site and the season of gathering the crop. south manuring is convenient late in the fall or in winter, while in the clive grove situated at the extreme north of the region it proves best to manure at the end of winter, in February or March, when the danger of the intensest cold is passed.

Old olive trees in decay should be manured constantly by devising a small excavation around the trunk about one foot deep, into which the manure is placed and buried, opening the ditch some weeks before feeding the tree with the manure, in order to let the soil be sersted in which the roots live.

15. It is advisable in parts where ma-nure is scarce to alternate manuring by nure is scarce to alternate manufing by cultivating leguminona plants of easy growth and developing rapidly at the expense of the atmosphere, and plowing in. Where manure can be used every second year half of the ground should be second year han of the ground should be thus employed alternately. If every three years, the following year the leguminous plauts should be planted, and the third year a simple plowing of the olive grove take place. Where only every fourth year manuring can be done, the easiest way is to divide the aurface of the ground in four portions and successively manure the first, plow the second, plant vegetables in the third, and cultivate the fourth. F. P.

RAIN IN THE SOUTHERN COUNTIES.

SAN FRANCISCO, Dec. 27, 1883.

EDITOR MERCHANT:-The rains appear to be capricions this year--first falling in the south, then in the north, and giving the eenter a cold shoulder. It may be interesting for some of your readers to know that in the coast valleys of San Diego county there have fallen nearly five inches already In those valleys eight inches always insures abundant crops; so you may well believe that the people are happy. Here are specimen paragraphs from a friend, whose letters have come this week:

San Diego, December 21st. * * * "Just had another beautiful rain; up to this writing we have .77 inch covered over a period of two days, every drop of it go-ing into the ground. It is not clear yet, and we may get more to-night. Back in and we may get more to-night. Back in the valleys I think they have had fully an inch. I was at the Cajon Wednesday and Thursday, It is looking fine and green. You can whoop it up this year, and you friends will not be disappointed when they see it.'

"San Diego, December 22d. " " "We have had one of the beat rains ever known here—for it eame slow and has all gone into the ground. Report says there have been two inches at the Cajon; I put it parts of the former and 22 of the latter.

9. The annual loss of the tree in the have been two inches at the Cajon; weight of the three said products would at 1.75. Country is green and nice.

Another correspondent writes that San Diego is full of straugers, and that an air of prosperity is psrvading all.

I desire to inform those who are looking towards our Cajon valley that I shall go south some time next week, and that I hope the public will take an early opportunity to judge for themselves of what I havesaid of the choice valleys of San Diego county. The trouble in the past has been that only the present sections with small critical in the choice will be proposed to the sections with small critical transfer of the section with the section of the the poorest sections, with small executions of the county have been examined by visit ors, and with little exception offered to set-tlers in small subdivisions. The real agritlers in small subdivisions. cultural progress of the county has been due mainly to the experiments of settlers on scraps of public lands, not included in the main valleys covered by Spanish grants. On the Cajon, which was partially cut up, the experiments of Mr. Clark proved the success of raisin culture:

Major Clare proved citrus culture; Capt. Sherman proved wine making opportunities, Mr. Georga A. Cowles proved the apple, pear, etc., and the practicability of alfalfa pear, etc., and the without irrigation in the bottom lands Others near San Diego have proved that the true home of the lemon is there, and that the guava is a profitable plant to cultivate. The olive has long been known to be a success. These are the incentives for more cantious men to plant largely, and it is to be done from this time forth. the last year of cheap land in San Diego county. Yours sincerely, Chas. A. Wetmore.

CHAS. A. WETMORE.
P. S.—Here is a letter I have just received from Professor Pohndorff:

St. Helena, Dec. 21, 1883. CHAS. A. WETMORE, Esq. San Francisco, Cala.

My Dear Friend: I have examined with particular interest the sample of 1883 Zinfandel wine, from the Cajon estate. As I saw the wine at your office a week ago, when I expressed my most favorable impressions, and have heard that Mr. Haraszthy had been equally agreeably impressed with the wine, I now examined it with more critical care, submitting it to the test of comparison with very good Napa '83 Zinfandels. It stood that test. The Cajon Zinfandel

has even the advantage of a superior astringency, well harmonized with other taste elements. For the age, or the youth, rather of the Cajon sample it has developed well; its color is unobjectionable, as dense as the regular run of well-made Sonoma Zinfandels; its alc. strength 1 cent, fully covered; its acids, which I have no time to test now, apparently in a very good proportion, its body very good and certainly not excessive for a good table beverage. As to its etherous and aromatic ele-ments, the grape flavor, characteristic of the Zinfandel, is well defined, even if in that respect it has to concede the precedence to first-class Napa Zinfandel wines.

Different from the general tone of the wines from southern counties, it has nothing of heaviness and the too full-bodied taste that would call for dilution. I drank of the Cajon sample at my meal, and was perfectly satisfied with its deglutition undiluted, a shape in which I seldom drink my potation of red wine at the dinner table, excep if I have a light wine that will satisfy my thirst in its pure state, some wine that should consider too good to be diluted.

A parcel of wine of the shape of the sample from the Cajon will not be given a back place by any dealer, nor be graded lower than a really good Zinfandel of regular, not exactly exceptionally high classifi-

Who would hesitate to grow that wine, if

its vine is a good bearer at the Cajon?

I received the raisins. They are a testimony to the great possibilities of the Cajon On Monday I shall be in the city, and

hope to see you. Received circulars Yours, very truly F. Pohnnorff,

The demand for grape vines and cuttings grown in Fresno vineyards is growing to immense proportions. The Eggers Vine-yard has received an order for 250,000 cutyard has received an order for 250,000 cul-tlings of one variety from a San Joaquin county land owner, who proposes to start a vineyard.—Fresno Republican.

The olive crop of France and Italy is re-ported to turn out short by sixty per cent of an ordinary crop.

SEASON OF 1884!

VINES and VINE CUTTINGS

I take pleasure in informing my patrons that I shall be able to furnish, if called for soon, limited quantities of

GENUINE CUTTINGS

Of the following rare varieties: FOLLE BLANCHE, COLOMBAR (Sanviguon vert) MATARO, CARIGNAN, GRENACHE, PETIT PINOT (Crabb's Black Burgundy) CHAUCHE NOIR, TROUSSEAU, MEU-NIER (same as the ac-called Franc-Pinot of Mr. Scheffler-misuamed), CHARBONO, FOLLE NOIRE, MALBECK (same as Lefranc's so-called Cabernet-Malbeck) MOSELLE RIESLING, WEST'S WHITE PROLIFIC, MUSCAT of FRONTIGNAN, SEEDLESS SULTANA, etc.

The prices of the foregoing are capricious and some of the varieties, particulary MATARO, MALBECK, CARIGNAN, MEUNIER and WEST'S WHITE PRO-LIFIC, are nearly all engaged at the present time.

Price lists will be forwarded to those inopiring, as circumstances vary them.

Also, All the Well Known Varieties uch as ZINFANDEL, RIESLING, CHAS-SELAS, CHAUCHE GRIS, BERGER, MUSCATS (Gordo Blanco and Alexandria) FLAME TOKAY, etc., etc.

ROOTED VINES.

Particular care will be taken in respect to rooted vines to guard against infection by diseases. I can furnish rooted ZIN-FANDEL, MALVOISIE, VERDAL. FEHER ZAGAS, CHARBONO, etc; at varying prices, according to the demands of different producers,

Also a few thousand CALIFORNICA SEEDLINGS; RIPARIA SEEDLINGS all engaged.

RIPARIA CUTTINGS.

Having made necessary arrangements, I am prepared until January 15th to offer fresh RIPARIA CUTTINGS from the forests of Nebraska-car load already arrived in better condition than ever before received in this State, as follows:

36 INCH CUTTINGS at \$10.00 per M. 42 4 \$12.00

Ten per cent off for cash within 10 days after receipt and acceptance of ordera.

For those who desire shorter lengths I will furnish

10 to 15 inch cuttings at \$3.50 per M. 15 to 18 " " \$5.00 " " 18 to 20 " " \$6.00 " "

But I advise purchasers to take the long cuttings and prepare them to suit themselves. This is the cheapest offering of

Riparia cuttings ever made in California. All of these Riparia stocks not aold before January 15th will be sold at public auction to the highest bidder.

SEED.

I have fresh Riparia seed (from Nebras ka) to offer at

\$2.50 per lb. for less than 5 lbs. \$2.00 " " " 5 lbs. and more.

Also, Fresh Californica Seed at \$1.50 per lb. for less than 5 lbs. \$1.00 " " " 5 lbs. and more.

CIRCULARS will soon be ready to explain the importance of certain of the rarest varieties and will be furnished on demand.

Address

CHAS. A. WETMORE, No. 321 Moutgomery St., or No. 111 Leidesdorff St., San Francisco, Cal.

P. O. Address No. 111 Leidesdorff St. S. F.