

Oregon Agricultural  
Experiment Station

---

Bulletin No. 29. February, 1894.

---

HORTICULTURE.

---

Notes on Vegetables, Fruits, Pruning, etc.

GEORGE COOTE, Horticulturist.

---

The Bulletins of this Station are sent free to all residents  
of Oregon who request them.



AGRICULTURAL COLLEGE PRINTING OFFICE.

H. R. CLARK, Manager,

CORVALLIS, OREGON:

1894.

## BOARD OF REGENTS.

---

GOV. SYLVESTER PENNOYER, <i>President</i> .....	Portland.
J. M. APPLEWHITE, <i>Treasurer</i> .....	Corvallis.
WALLIS NASH, <i>Secretary</i> .....	Corvallis.
G. W. McBRIDE, <i>Sec'y of State</i> , .....	Salem.
E. B. McELROY, <i>Supt. Public Instruction</i> .....	Salem.
R. P. BOISE, <i>Master State Grange</i> .....	Salem.
T. W. DAVENPORT,.....	Silverton.
JOHN EMMETT,.....	Umpqua Ferry.
W. A. SAMPLE,.....	Pendleton.
W. P. KEADY,.....	Portland.
J. K. WEATHERFORD,.....	Albany.
J. T. APPERSON, .....	Oregon City.
BARNARD DALY,.....	Lakeview.

## OFFICERS OF THE STATION.

---

JOHN M. BLOSS, A. M.,.....	President and Director.
H. T. FRENCH, M. S., .....	Agriculturist.
GEO. COOTE, .....	Horticulturist.
F. L. WASHBURN, A. B.,.....	Entomologist.
MOSES CRAIG, M. S., .....	Botanist.
JOHN FULTON, B. Sc., .....	Chemist.

## Notes on Vegetables, Fruits, Pruning, etc.

### CABBAGE.

Experiments with different varieties of cabbage, have been made each season during the last three years.

The purpose, the first and second years, was to determine what varieties would best withstand the winters of the Willamette Valley; a report of this was made in Bulletin No. 15. The last season 1892-93 it was thought advisable to further test several early varieties, to prove which were best suited for extra early use, as it was believed that this would be of value to the farmers and gardeners.

Fall planting of cabbage is of great importance in this climate for the reason that it greatly hastens the maturity the following spring, thus enabling the gardener to compete with cabbage shipped from California. In previous trials the seed was sown Sept. 25. Last year, as an experiment, the seed was sown a month earlier, Aug. 25. The experiment proved a success in this, that the first heads matured 28 days earlier than that from seed sown on the 25th of Sept. in previous year, and yet the last season was at least a month later than the previous year. This would indicate a gain of more than a month in ordinary years.

But I would not recommend that seed should be sown earlier than Aug. 25th, because the plants show a greater tendency to run to seed in the early spring instead of making heads.

The engraving on the following page shows the Cabbage garden, photographed March 28th 1893.



## SOWING THE SEED.

The manner of sowing the seed differed but little from that recommended in Bulletin No. 15. The soil for the seed bed was made of rather light, moderately rich and well pulverized soil. After the bed had been prepared for sowing a rod was laid crosswise and then pressed down, being drawn backward and forward, so as to form a shallow groove. These grooves were made about 6 inches apart. In these grooves the seed was sown, and covered thinly with fine soil, then finished by beating the surface or the soil gently with the back of a spade.

## VARIETIES.

The following is a list of varieties grown: Newark Early Flat Dutch, Henderson's Early Summer, Early Etampes, Early Summer (Dep't of Agriculture) Early Winningstadt, Early Jersey Wakefield, and Early Summer Succession. All varieties were planted on the 9th of Oct., 1892. Very bright sun-shine followed for two weeks, which caused the plants to flag, but as soon as rain began all plants revived, and commenced to grow rapidly. By the middle of November all varieties were looking well. Those making the best growth, through December and January, were Early Etampes, and Newark Early Flat Dutch.

Early Winningstadt produced rather long stems. Those making dwarf growth, were Henderson's Early Summer, Early Jersey Wakefield, and Early Summer.

The last week in December and first week in January, these plants were covered with 10 in. of snow, after the snow melted away they looked quite healthy. On the last week of January and the first week in February, the plants were again covered with 14 in. of snow for eleven days, at the end of this time, when the snow disappeared, the plants still retained a very healthy appearance. Through March and April, they made but slow growth; but in the early part of May, they began to grow rapidly.

The following tabulated statement will prove of interest.

Name of Variety.	Per cent of plant going to seed.	Date of marketable maturity.
Early Summer.....	.00	July 2d
“ Succession.....	.00	July 8th
„ Jersey Wakefield.....	.02	June 4th
„ Winningstadt.....	.02	June 18th
„ Summer Dept. of Agr'l.....	.10	June 30th
Extra Early Etampes.....	.00	May 27th
Henderson's Early Summer.....	.14	June 28th
Newark Flat Dutch.....	.09	June 23th

## CABBAGE. (SPRING SOWN.)

The following varieties, were grown from seed sent to the station, by different seedsmen for the purpose of testing them, the seed being sown in spring, in open ground.

*World Beater*—Burpee & Co.,—This is an excellent variety, producing good sized heads, averaging 10 in. in diameter; extra solid; and even in size.

*Safe Crop*—Burpee & Co.,—A variety resembling (“World Beater”) to a great extent, producing good heads 10 in. in diameter.

*Early Summer*—Dep't of Agriculture.—Large heads, somewhat flat; 14 in. in diameter; solid; a good keeping variety.

*Mammoth Rock Red*—Possen & Co.,—Heads large and solid; used only for pickling purposes; quality, good.

*Late Flat Dutch*—Possen & Son.—Short stem, large heads: mature quick, and is of good quality.

*Savoy*—Possen & Co.,—This is strictly an early winter variety, as light frost improves its quality, for cooking purposes, making it more tender. It will stand more frost, than any other variety.

*Burpee's Safe Crop*.—Burpee.—Heads averaging 10½ in. in diameter; stem short; of very compact growth; heads firm, even and flat. Averages well with any of the other varieties, also has some advantages which others have not; having but few outside leaves, and stand a long time before bursting.

#### CULTIVATION OF CELERY.

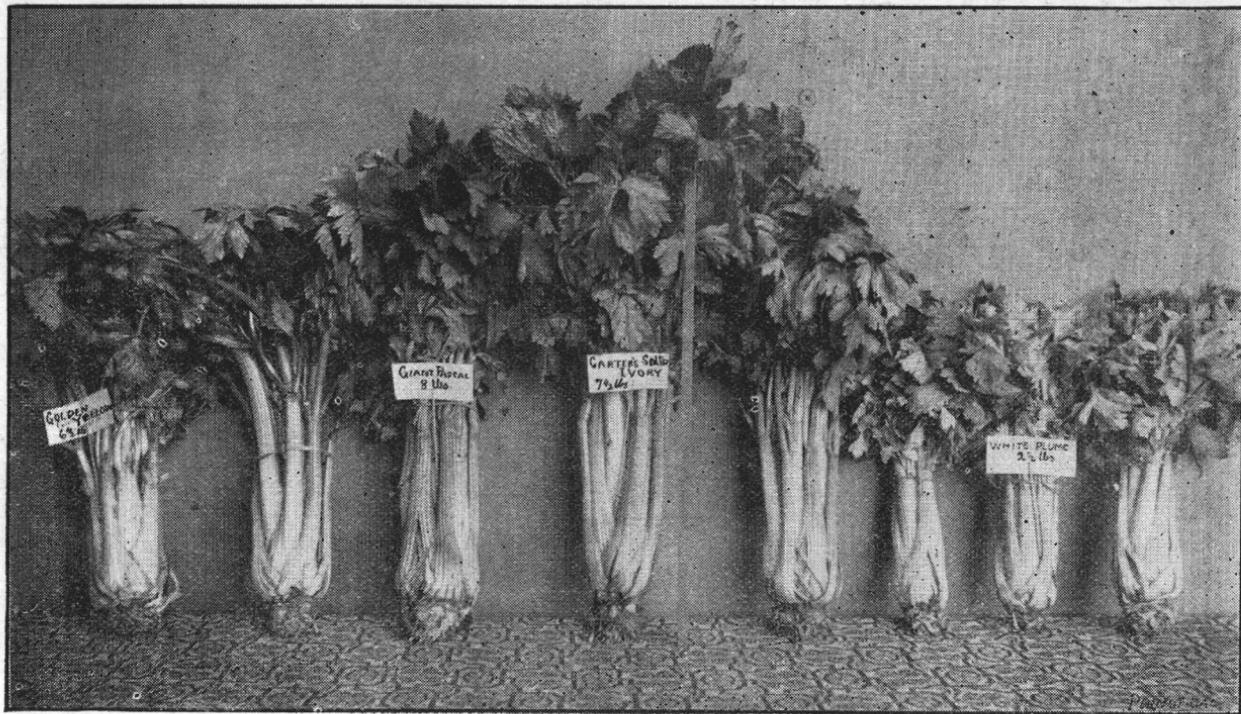
The seed was sown on March 28th in pans, and placed in the forcing house. As soon as the young plants had made three leaves, they were pricked out into flats or boxes which were 3 in. deep and 12 in. wide. The plants were still kept in the house for four weeks. After this time they were placed in a cool frame to harden for two weeks. A bed was then especially prepared, in the following manner: a compost was made of rotten manure, and leaf mold, and about a fourth of rich loam, well pulverized and mixed together before being used. This compost was placed on very firm ground, to the depth of six inches and well trodden down, and afterwards well watered. As soon as the water had soaked away, so that the compost was not too wet for working, the plants were transferred. The plants were placed 4 in. apart, in rows 6 in. apart. Care was taken to keep the roots moist while out of the earth, and the long tap roots were shortened. The plants were given a liberal supply of water at all times. As soon as they had grown sufficiently to plant in their permanent position, the ground, which had previously been spaded 15 in. deep was put in readiness. This was done in order that the soil, should be well loosened, so that the water applied to the plants, should be permitted to drain through the soil more freely, thus preventing it from becoming stagnant and injuring the plants.

#### MODE OF PLANTING THE DIFFERENT ROWS.

Row No. 1 and 2—This was done by first digging out trenches or ditches 10 in. deep, then placing in it 3 in. of well rotted stable manure, mixed with hard wood ashes, 1 part ashes, to 5 parts of manure. This was put into the bottom of the ditch. This compost in the ditch was then spaded to the depth of 5 inches, thus mixing the 8 in. of compost with 2 in. of soil. This being completed, the plants were set out 12 in. apart, in a single row. The ditches were 4 feet apart, thus affording plenty of room, for earthing up. Each row contained 50 plants.

Row No. 3— was given a top dressing of loam, ashes and manure, in equal parts, without any apparent results.

Row No. 4— The trench was dug out 13 in. deep, and 6 in. of fresh cow manure, well spaded into the soil, at the bottom of trench. Much



better heads were obtained by this treatment, the plants made a much more rapid growth, and were of better quality.

During the dry season, plenty of water was given, never permitting the plants to become dry. Under this treatment, a good growth was kept up during the season.

*Golden Yellow*.---This variety was the first to mature, is good in quality, a few plants rotted during the season, is valuable for early use as it bleaches very quickly after banking up.

*White Plume*.---Heads small, requires but little banking up. Matured a few days later than Golden Yellow, the quality is not so good as some others. Its whiteness makes it easy of culture and it is becoming quite popular for early use.

*Solid Ivory*.---This is an excellent variety. Stands winter well without rotting, has a good nutty flavor, is free from stringiness. Heads quite large, valuable for late use.

*Grant Pascal*.---Resembles the solid Ivory in flavor and texture; head does not grow so large as the former, but make a very solid compact growth, as the season advances becomes quite pithy.

The accompanying cut on page 55 represent each variety.

#### TOMATOES.

The testing of different varieties of tomato was not carried on very extensively. Tests were made of varieties, sent to the station, by the following named seedsmen: J. M. Thorburn & Co; W. Atlee Burpee & Co; D. M. Ferry, and Posson & Son, agents Portland. As many of the varieties received, have been previously tested, it is not necessary to make further report of them. No variety has done so well, this season, as in seasons previous, owing to the late spring which caused the plants to make very slow growth. The last two weeks in May, they made very rapid growth but were soon overtaken by dry weather, by which they were again much retarded so that the fruit, on most of the varieties, was late in setting. The early fall weather, was very cool, with heavy frosts, consequently the plants were cut off before the fruit had fully matured.

Varieties which proved themselves this season, to be of value, were Atlantic Prize, Thorburn's Terra Cotta, Lemon Blush, and Matchless, which fruited in the following order.

*Atlantic Prize* (D. M. Ferry) Fruit above the average size; productive; first fruit matured on Aug. 21st; marketable maturity on the 30th; very valuable for early use.

Thorburn's *Terra Cotta*; fruit large, slightly angular or ribbed, and of good quality; a second early. The plant making a sturdy growth.

*Lemon Blush*.---This is quite a good variety of the yellow-type; but not so productive as Terra Cotta, it is a second early, and a valuable addition to the list.

While others rotted very badly, no sign of rot was traced, on either of the three varieties mentioned. Tucker's Favorite. (Burpee & Co.) fruit large, failed to mature.

*Early Michigan* thirty days later than Atlantic Prize Dwarf Champion, a second early, fruit medium in size, quite smooth; solid and productive.

## MISCELLANEOUS VEGETABLES.

*Fordhook Squash*.—This is a new variety, introduced by W. Atlee Burpee & Co. It has all the points claimed for it by this firm. It is a good winter variety; good keeper, has thin skin; very thick meated; very sweet; matures early and is one of the best for table use in winter.

*Burpee's Columbia Beet*.—An extra colored beet of good size and quality; even in growth, producing but few side roots; color, a deep blood red throughout.

*Burpee's Improved Beet*.—A variety producing but small top; matures early, and of good quality.

*Burpees Iceland Lettuce*.—Producing solid heads, 8 in. diameter, very crisp and sweet; is a valuable variety for main crop as it does not run to seed readily; it is in season for a long time.

VARIETIES OF KALE, OR BORECOLE (*Brassica oleracea Fimbricata*)

Kale produces large loose leaves and is of the cabbage family. It is very valuable for winter use, after cold weather has destroyed the cabbage crop, the Kale being hardier, produces an abundance of green vegetable all through the winter and spring. It fills up a gap that no other vegetable does by producing in late winter and through the spring.

Green vegetables of any description are always eagerly sought for in late winter and early spring. The action of frost, improves the flavor, but dry freezing winds will destroy the plants much more than frosts. Some varieties stand the freezing and thawing better than others. Like all varieties of similar description they require rich land. The soil should be spaded or plowed deep, and well manured.

## CULTIVATION.

The seeds should be sown in nursery beds, early in April, and the plants set out not later than the middle of June, and treated in every respect, the same as cabbage. When taking the greens for use, the tops of the plant only should be taken, at about the third or fourth leaf on the stem. In about three weeks after the tops have been removed, the young shoots on the main stem will be fit for use. Below will be found a description of varieties, as grown on our trial grounds, this season.

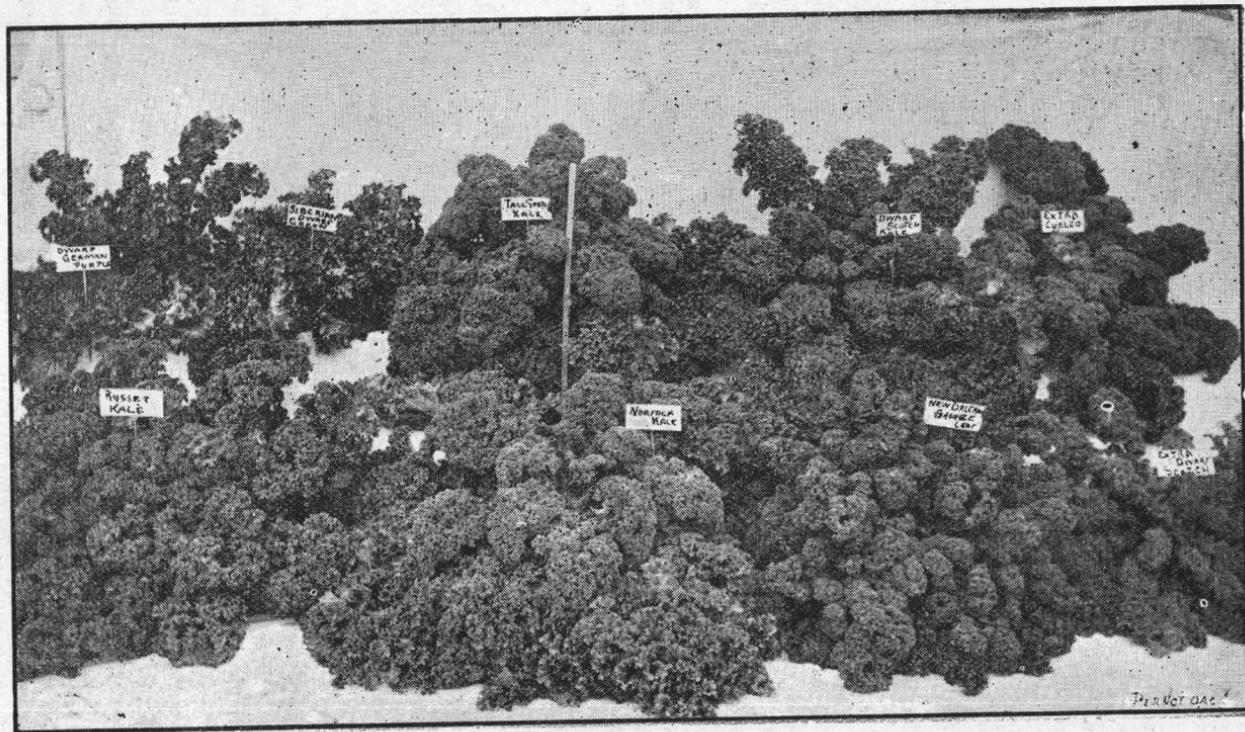
Seeds of each was purchased from D. Landreth & Son Philadelphia.

*Norfolk*.—A dwarf close growing variety; leaves much curled, resembling parsley in the distance; height 6 in.; across heads 21. in.; is somewhat tender; is easily cut by frost, especially if the least damp.

*Tall Scotch Curled*.—This is a very hardy variety; good for general use; not so much curled as the foregoing variety, but stands the winter well.

*Siberian*.—Extra dwarf, dark green, tinged with purple, stooling out into several heads close to the ground; height 16 inches.

*New Orleans Broad Leaf*.—Plant has the habit of the Siberian Kale with the exception that the leaves are broader, color dark green; not much curled, resembles the rape plant in habit.



*Bloomsdale*.—Resembles the Norfolk in appearance, is not so dwarfed in habit; height 10 in.; extra good for table use.

*Dwarf Scotch Curled*.—Quite feathery; very handsome and hardy, one of the best for general purposes; height 16 inches.

*Dwarf German*.—This has the habit of the Siberian and New Orleans, only being of a much more purplish color.

*Extra Curled Dwarf German*.—The leaves are somewhat inclined to turn in; is valuable for winter use, plants stocky, branching out close to the surface of the soil.

*Rosette*.—In habit of growth resembles the German Kale in every respect.

The cut on preceding page represents the nine varieties described above.

#### COMPARATIVE TRIAL OF BEANS.

During the last three years, trials have been made with the several varieties of Lima beans; but we have not been successful at any time, in bringing them to maturity. The plants have made a strong growth at all times, and produce an abundance of bloom and a good set of pods have been made; yet in spite of all these good points, the plants have failed to mature their seed, in any one of the three seasons. All varieties grown this year, were not more than half matured, owing to the cool nights. Our season is too short. The plants do not make rapid growth early enough in spring, to enable them to mature their seed before the frost overtake them. Therefore the Lima is not a success in this locality.

#### NOTES ON BEANS.

*Golden Max Bean*.—Oregon Seed Co.—This proved valuable, as a late sown variety, sown on well pulverized soil. July 15th, matured Sept. 15th, without rain or irrigation, last picking on Oct. 15th.

*Bush Lima*—Burpee & Co.—Seed germinated well; plants made a vigorous growth; was well set with bloom; pods set well; failed to mature.

*Willow Leaf*—Burpee & Co.—A pole bean of medium growth; vine produces well; but did not mature its seed.

*Early Black Lima*—Burpee & Co.—Pole bean, of strong growth; failed to mature its seed.

*Dwarf Black Wax*—Posson & Son—Plants 12 in. high, of medium strength, rather small leaves; pods 4 to 5 in. long; yellow, of fair quality.

*Early Golden Cluster*.—Posson & Son—Pole bean; medium to tall; large leaves, bearing white flowers; pods 8 to 10 in. long from  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch wide; very handsome and prolific, producing until cut by frost.

*Extra Refugee*—Posson & Son—Vines twenty inches high, somewhat branching; leaves medium in size; pods, large; and of fair quality; productive.

*Sun Rise Wax, Pole*—Burpee & Co.—A strong growing variety; pods large, somewhat flat and of excellent quality.

## NOTES ON VARIETIES OF FRUIT.

*Keswick's Codlin Apple*.—Medium to large; conical and ribbed; greenish yellow, changing to quite yellow; stem from  $\frac{1}{2}$  to  $\frac{3}{4}$  inches; cavity varies in depth; calyx large; juicy with a pleasant acid flavor; good quality for cooking; an early bearer; very hardy and productive; in season from the middle of Aug. until the last of Dec. It is not a table apple but is very valuable for cooking in its green state, as well as when matured, requires careful handling. Is an excellent variety to plant in the orchard, with other varieties, as it is a great pollen producer.

*Prunus Simoni*.—The Simon Plum has been growing for several seasons, but on account of its early blooming has been cut by late frost. This last season the trees were protected from the heaviest frost, by spreading a light canvas over them, during the night. By this means, quite a number of the plums were saved and came to maturity. The fruit is very attractive to the eyes being of a dark red, mottled with the lighter shades. The stem is short; large suture; flesh yellow; very firm; clings well to the stone, good keeping qualities; having kept it in perfect condition for 30 days. The longer it is kept, the darker the color of the fruit becomes. The flavor is unpleasant to the taste, being very bitter, quite equal to quinine. It is not improved by cooking. The tree makes a very compact growth, is very hardy; commences to bloom quite young. In appearance it is a fine fruit, but very deceptive.

*Amelauchier Canadensis*.—Dwarf Juneberry, or service berry.—This bush resembles the variety found wild; it needs no farther description. Only by a high state of cultivation has the fruit been much improved in color and size, as well as flavor. The fruit is liable to attacks of fungus (*Roestelia lacerata* Fr. ?); size of fruit about as large as the medium sized peas; ripening the last week in June, and the first week in July. It has a mild pleasant flavor; bushes dwarf, at present only two feet high.

*White Black Currant*.—Bush makes a strong growth, resembling the black Naples, in every respect, excepting that the fruit is of a dull gray color; large and productive; when cooked it is a much paler color than any of the other varieties of the Black currant.

*Gooseberry; Powell's Seedling*.—This is a chance seedling, found in the garden of J. S. S. Powell, Philomath, Oregon. This is the first season of fruiting. Fruit in circumference  $2\frac{5}{8}$  in.; length  $2\frac{7}{8}$  in.; roundish approaching oblong, slightly downy; skin thin; flavor good; color pale green; medium growth; with few spines; form erect.

*Child's Golden Queen Raspberry*.—Canes of medium growth. Its tendency is to throw up a great many suckers; berries medium in size; firm and sweet; color light yellow; moderately productive; valuable for immediate table use and for mixing with other varieties for contrast of color, also good for making a light colored jelly, matures early.

*Child's All Summer Raspberry*.—Plants strong; fruit large; moderately firm and acid; color dark red; very promising.

*Crimson Raspberry*.—Canes medium in growth and close jointed; fruit

large and soft. The first fruits to ripen are quite acid, but later in season improves in flavor being much milder. Name indicates color.

*Wilson Junior Blackberry*.—Canes have made a weak growth; this is perhaps caused from the location, it being too dry for them. Fruit large; rather soft, too much so for a distant market, good quality. A further trial will be made.

*Downing Mulberry*.—Tree a strong grower; making as much as six to seven feet in one season; produces from the end of June, until cut by frost.

#### NOTES ON VARIETIES OF GRAPE.

*Green Mountain*.—Vine a vigorous grower; very productive; fruit of excellent quality; early; a grand acquisition to the list; is free from disease. It has been grown here four years. Can be highly recommended for this locality.

*August Giant*.—Resembles Black Hamburg in color; berries inclined to be oblong, rich; makes a very strong growth. Ripened the first week in September.

*Faith*.—A vigorous grower; berries medium white with a tinge of yellow; good quality. Ripened the 2nd week in October.

*Pocklington*.—Vine made a medium growth, clusters of medium size. Berries large, pale green tinged with yellow. Matured October 29th.

*Warden*.—In general make up, and appearance is very much like Concord, (a purplish black); bunches rather large; berries a little above the average. The vine made a good average growth; matured Sept. 27th.

*Wilber*.—Vine makes a vigorous growth, bunches large; berry round; color very dark purple; juicy and rich, with a slight flavor of the Muscat. Ripening the 1st week in October.

*Goethe*.—Vine a very strong grower, producing stout long canes, bunches large and of good form, but did not mature its fruit.

*Delaware*.—Vine not a strong grower, an early bearer, producing small compact bunches, berries, small round and light red, also sweet, an excellent quality, matured its fruit Sept. 22nd.

#### PEACHES.

*S. g. French*.—Fruit medium to large slightly enlarged on one side, deep suture half round; whitish green in shade; marbled; deepening into dark purple; crimson in sun; flesh greenish white, very sweet and juicy; cling; resembles Waterloo very much. Bloomed April 9th, matured Aug. 9th.

*Alexander*.—Tree after blooming, died down to the ground below the graft. Have been badly affected with curl leaf, in previous years. The wood was not well matured, consequently was very easily affected by the hard freezing. Bloomed April 9th.

*Hardy Tuscany*.—The tree itself is very hardy, seldom affected by curl leaf, and very thrifty. It has failed to produce fruit as yet on account of late frost in spring. Bloomed April 22nd.

*Columbia*.—Tree very hardy, has made a vigorous growth; is not affected by curl leaf, and has not fruited. Age of tree five years. Bloomed April 24th.

*Honest Abe*.—This variety has been very much affected by curl leaf; two trees having died out from its effects. The remaining tree is not thrifty. Too tender for this location. Bloomed April 11th.

*Reeves Favorite*.—This variety has not proved in any way suitable to this location, being badly affected by curl leaf, and dying back every spring until the trees have nearly died out.

*Elison*.—Has made a moderate growth; although it has been somewhat affected by curl leaf. The tree matures its wood well. So far has had the bloom cut off by late frost; consequently, has not as yet produced any fruit. Bloomed April 16th.

*Burnice*.—This variety died from the effects of curl-leaf in 1892.

*Perkins*.—A very hardy and thrifty growing variety; so far has been free from curl leaf, but owing to late frost it has not produced fruit. Bloomed April, 23.

*Hales Early*.—Tree, much too tender for this location, has been killed down to ground line, from the effects of frost.

*Miller's Seedling*.—Very weak growing variety, wood very healthy, not much affected by cur. leaf.

*Austin Cling*.—A very free growing tree, seldom attacked by curl leaf.

*Comet*.—Tree a vigorous grower, matures its wood well, and is not affected by curl leaf. Bloomed April 17.

*Pallas*.—This variety has been badly affected by curl leaf in former years. This season the trees made good growth. Bloomed April 23.

*McKivett Cling*.—Trees perfectly healthy, produced but few blooms; was affected by late frost. Bloomed April 16.

*Alpha Cling*.—Tree vigorous grower, has produced but few blooms; one of the varieties that have been free from leaf blight. Bloomed Ap'l 23.

*Oriole*.—Has proved too tender even to make good wood growth. Two trees have already died, and the third is not looking well.

*Boston*.—Has made but little growth in any year since planted out.

*Bishops Early*.—Tree makes a healthy and vigorous growth, matures wood well. Bloomed April 20th.

*Miss Lola*.—This variety has been affected so badly by curl leaf, that two trees have died from the effects. The tree remaining is gaining in strength. Bloomed April 20th.

*Indian Blood*.—Tree has made weak growth, from the time of planting. Is not affected by curl leaf, so much as some other varieties.

*Wheatland*.—Has proved to be quite worthless here.

*Ulati*s.—Tree has proved to be quite hardy, with but little curl leaf; fruit medium size greenish-white in shade; deep red in sun, mixed with purplish red; flesh firm, juicy and sweet, melting, cling. Bloomed April 12th, matured Aug. 10th.

*Tuscany Cling*.—Of no value; too tender for this locality.

*Sellers*.—Tree of no value, altogether too tender for this locality.

*Mays Choice*.—Has not produced fruit, as yet, tree a vigorous grower.

*Clements*.—Tree very healthy; not affected by curl leaf. Bloomed April 12th.

*Elberta*.—Tree is very tender, is not suited for this location.

*Fishers Late*.—So far, this variety has proved to be of no value whatever.

*Alexander*.—This variety is grafted on the Myrobalan plum, which has a tendency to dwarf the tree. Has made a sturdy growth; very healthy; wood ripening well. No signs of curl leaf. Fruit of good size; round, with a deep suture, skin covered with rough down; pale with a few red spots on the side next the sun; flesh tender and of good quality. Bloomed April 11th. Matured Aug. 12th.

#### STRAWBERRIES.

*Anna Forester*—Plant makes a sturdy growth; foliage light green; berry round to conical, slightly ribbed, good quality, soft; productive; an excellent exhibition variety. Age of plant, 2 years

*Alabama*.—Perfect. Not a strong growing plant. Shy in setting its fruit. Medium size; form, round to conical, not productive. Age 2 years.

*Crawford*.—Perfect. Plant of medium growth, foliage dark green, berry large; conical to flat; color red; flesh light red; rather soft; flavor good. Age of plant 2 years.

*Captain Jack*—Perfect. Not a strong grower; producing but few runners, fruit conical. Not of good quality. Not productive. Age 2 years.

*Chambers*—Berry soft; color light red; medium in size, affected with mildew and rust, not of much value here. Age 2 years.

*Crystal City*—Plant makes a strong growth, but very shy in setting; its fruit has not proved to be of value. Age 2 years.

*Crescent*—Imperfect. A strong grower; foliage dark green. Color of fruit bright red of medium size, conical, soft and insipid; productive. Age 2 years.

*Enhance*—Perfect. Plant of strong growth; fruit light red; borne on long fruit stalk, large, conical, slightly ribbed, soft, medium in flavor; resembling Anna Forester very much. Midseason, too late. Age 2 years.

*Wilson*—Plant of medium growth; fruit conical; midseason, productive; standard market berry here. Age of plant 2 years.

*Triumph de Grand*—Perfect. Plant makes a vigorous growth; berry large, crimson, flesh rather soft, good flavor; cockscomb in shape. Useful for home and near market. Plants of this variety were supplied by Salem Nursery Co. Salem, Oregon. Age of plant, 2 years.

*Gypsy*—Imperfect. Plants make a very dwarf and compact growth; foliage, dark green; fruit conical to round, color bright red, good quality; a little soft, productive. Plant aged two years.

*Lady Jane*—Perfect. Plant, a vigorous grower; fruit, bright red and evenly colored; solid, round, of a sharp flavor, quite productive.

*Sadie*—Imperfect. A dwarf growing variety, foliage dark green, fruit small; good flavor, soft, color pink; productive; requires to be grown with good pollen producing variety to bring it to perfection.

*Eureka*—Imperfect. Plant close growing; is not a desirable variety.

*Slayman*—Perfect. Plant in growth, resembles Cumberland, midseason; fruit, long, conical, color dark crimson, not productive.

*Greenville*.—Imperfect. Habit of plant above the medium growth, fruit inclined to be a little soft, only moderately productive.

*Smeltzer's Seedling*.—Perfect. This is an early variety, ripening with Michael's Early, and May King.

*Boon*.—Berry conical, some pertaining to Cockscomb in shape, large, good quality, firm, midseason, not productive. Plant of moderate growth.

*Jewel*.—Resembles the Wilson, in growth of plants; fruit is not so acid, medium in size. Productive.

*Perry*.—Imperfect. Plant of medium growth; berry good in form, firm, large, excellent flavor; round to conical, produced on long stalks.

*West Lawn*.—Imperfect. Foliage large, only moderately productive, fruit irregular, conical in shape, color, bright red, plant a strong grower; an early variety, berry, firm; of a sprightly flavor. Age of plant 2 years.

*Edgar Queen*.—Perfect. Plant medium in growth, fruit of medium size, soft and insipid, has not proved to be of any value here. Age of plant 2 years.

*Lady Rusk*.—Perfect. Above the average in growth of plant; foliage, light green; color of fruit, light red; slightly ribbed, some berries cockscomb in shape; good flavor; productive. Age of plant 2 years.

*Parker Earle*.—Perfect. Plant makes but few runners, foliage dark green; of medium growth; fruit above the average size; conical, excellent quality; good for both market and home use. Age of plant 2 years.

*Shuster Gem*—Perfect. Plant a strong grower; berry large, dark red; conical to flat; good flavor but very soft. Age of plant two years.

*Tippecanoe*.—Imperfect. Plant made a strong growth but failed entirely to fruit so far. Age of plant two years.

*Collier*—J. C. Bauer, Kansas. Perfect. Foliage dark green; fruit solid; cockscomb in shape; dark red; borne on long pedestals. Has proved so far only moderately productive. Age of plant two years.

*Barton's Eclipse*.—J. C. Bauer, Kansas. Imperfect. Plant a vigorous grower, foliage dark green, fruit very large; conical, soft, and of excellent flavor, season late. Age of plant two years.

*Beder Wood*—J. C. Bauer, Kansas, Perfect. Foliage dark green, fruit bright scarlet, of medium size, flesh pink, only moderate in firmness; season early. Age of plant 2 years.

*Great Pacific*—J. C. Bauer, Kansas, Imperfect. This variety is an extra strong grower; berries conical and large; dark red in sun, changing to light red where shaded. Does not ripen evenly, being quite unripe at apex sometime after other portions of the berry have matured. Very large and productive. Age of plant two years.

*Charles Downing*—Perfect. Plant vigorous, fruit medium in size; color dark red; flesh firm; good quality. Productive.

*Felton*—J. C. Bauer, Kansas. Perfect. Plant a compact grower; foliage dark green, fruit large, conical; flavor good, dark red; solid; productive; midseason. Age of plant 2 years.

*Banquet*—Perfect. Foliage light green of medium growth; berry, conical, color red, good quality, shy producer. The plants do not stand the damp winters well, is late in commencing to grow in the spring. The blooms are very weak. To make a successful test plant, will have to be planted in different soil and locality.

*Bidwell*—Perfect. Plant a strong grower; berry conical, color crimson, flesh firm, flavor good, slightly sub-acid; only a moderate producer, second early. Age of plant 3 years.

*Gen. Putnam*—Perfect. This variety resembles the Bidwell in every respect.

*Standard*.—Perfect. Plant has made but medium growth; fruit large, excellent flavor, but flesh rather soft.

*Swindle*.—Imperfect. A compact growing plant, foliage dark green; berry dark red, of good quality. Need further trial.

*E. P. Roe*.—Perfect. Has failed to produce, plants made but a very weak growth.

*Southard*.—Made but a very weak growth, has produced but little fruit. Medium in size. Color bright scarlet, long conical. Plants have made a very poor growth, but the fruit that has been produced is of good quality.

*Jucunda Improved*.—Perfect. Plant of medium growth; berry conical, color scarlet, flesh pale salmon, firm, of fair quality, a little soft, productive, good for near market. Midseason, too late. Age of plant 3 years.

*Beverly*.—Perfect. Plants made good growth; foliage dark green; failed to produce fruit.

*Leader*.—Perfect. Has done no good here, so far.

*Dayton*.—Perfect. Failed to produce; plants have done badly, not a promising variety.

*Yale*.—Perfect. Plant of robust habit, foliage of light green, berry large, conical, very dark red; good quality.

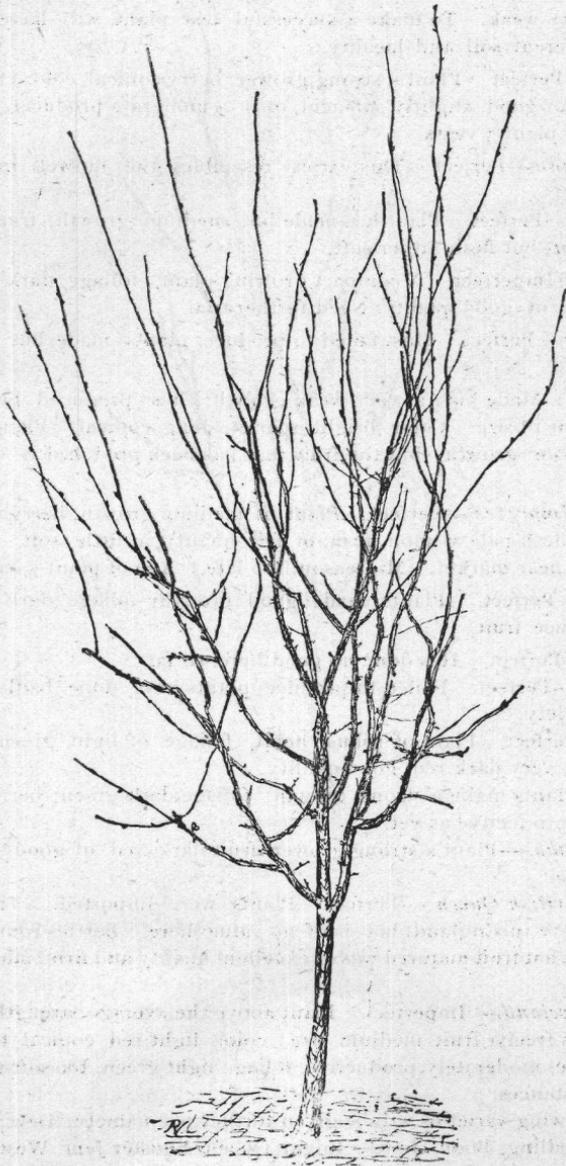
*Dew*.—Plants make a strong growth; foliage dark green; berry large, has not been productive as yet.

*Early Idaho*.—Plant a strong grower, fruit dark red, of good quality; not productive.

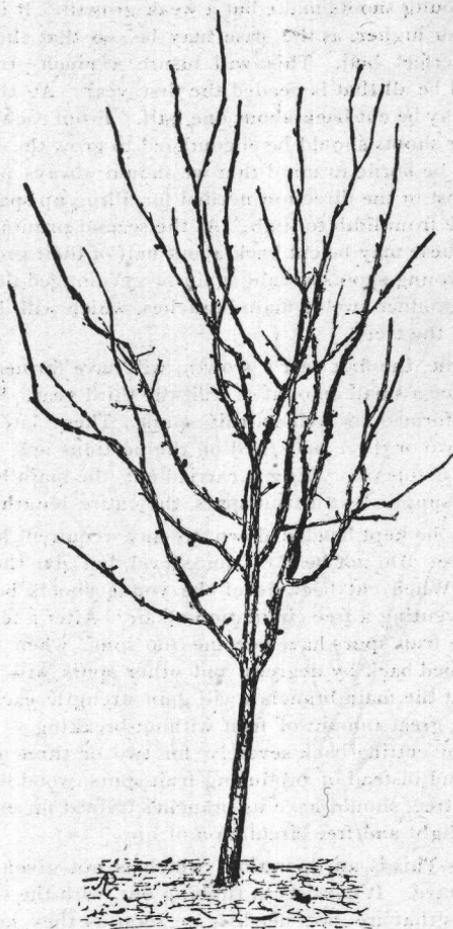
*Myatts British Queen*.—Perfect. Plants were imported. This is a standard variety in England, but is of no value here. Berries rounded to cockscomb; what fruit matured was of excellent quality and firm, midseason, too late.

*Mrs. Cleveland*.—Imperfect. Plant above the average strength. Produces runners freely, fruit medium size, color light red, conical to cockscomb in shape, moderately productive, foliage light green, too soft for shipment long distances.

The following varieties will be given further test, namely: Dew, Collier, Smeltzer's seedling, Boon, Jewel, Edgar Queen, Shuster Jem, West Lawn, Felton, Gen. Putnam, Standard, Early Idaho, Swindle, E.P. Roe, Beverly, Leader, Dayton.



The above cut represents a Prune tree five years old before pruning.



The above cut represents the same Prune tree after pruning.

#### NOTES ON PRUNING THE PLUM & PRUNE.

The cultivation of the prune, is now quite extensively practiced throughout the state of Oregon. A few remarks on the manner of pruning, may be of benefit.

In pruning back young trees, that are one year of age from the bud, care should be taken to see that the buds cut back to, are perfect, especially if the trees have been transported any distance. In such cases, the trees on the outside of the bundles often have their buds rubbed off in handling. If the pruner is not very careful, he may not notice this. It often happens, when it is cut back to a damaged bud, that the stem dies back to

a perfect bud, or that the latent buds are forced into growth. When this is the case, the young shoots make but a weak growth. It is better to head off a trifle lower or higher, as the case may be, so that the trees may be cut back to a perfect bud. This will insure a much stronger growth. Three shoots will be all that is needed, the first year. At the next winter pruning, these may be cut back about one half. From each of these three shoots, two other shoots should be encouraged to grow the following summer. It should be borne in mind that we should always prune back to a bud pointing most in the direction needed for filling up space, and to regulate the distance from limb to limb. At the second pruning there will be six branches. These may be cut back about half of their growth, and from these two other young shoots should again be encouraged during the summer. This will produce twelve main branches, which will be sufficient to form the head of the tree.

During this time, the first year's growth, will have formed fruiting spurs which will produce a small amount of fruit the third year. There will also be lateral shoots formed, as well as fruit spurs. These laterals should be pruned back to two or three buds, and on the portions left, fruit buds will form. If this principle of pruning is carried out, the main branches of the tree will be well supplied with fruit spurs, the entire length.

The tree may be kept headed down to any required height that the grower may desire. Do not head off quite level, but give the trees a symmetrical form. When cut back level the young shoots become too much matted, thus preventing a free circulation of air. After a few years, it will be found that the fruit spurs have become too long, when this is the case they may be pruned back by degrees, and other spurs will be formed. It will be found that the main branches will gain strength each year, and be enabled to carry a great amount of fruit without breaking.

The system of cutting back severely for two or three years, produces strong growth, and instead of producing fruit spurs, wood buds are formed. The head of the tree, should have its branches trained far enough apart, to afford plenty of light and free circulation of air.

Disbudding—This is an operation, which is not given that attention which it should have. It consists in rubbing out with the thumb and finger, young shoots that are not needed, as soon as they have pushed out far enough to be taken hold of, thus doing away with a great deal of young wood. This concentrates the strength to the rest of the tree, during the growing season; and, on the other hand, it does away with much of the winter pruning.

#### WEBFOOT FERTILIZER.

In the spring of 1892, we received from F. L. Posson & Sou, Portland, Or., a quantity of Webfoot fertilizer for trial. Tests was made on the following varieties of fruit and vegetables. Strawberries were increased both in foliage and fruit 75 per cent. Applied to peas, the growth was increased 50 per cent., advancing the maturity seven days. The effect on corn was the same as on peas. It was used on turnips, tomatoes, and applied as a top dressing to pot plants with excellent results.