

Horticultural Points

TONGUE AND CLEFT GRAFTING

Ability to Change Unprofitable Vine Into One of Real Value Is Big Accomplishment

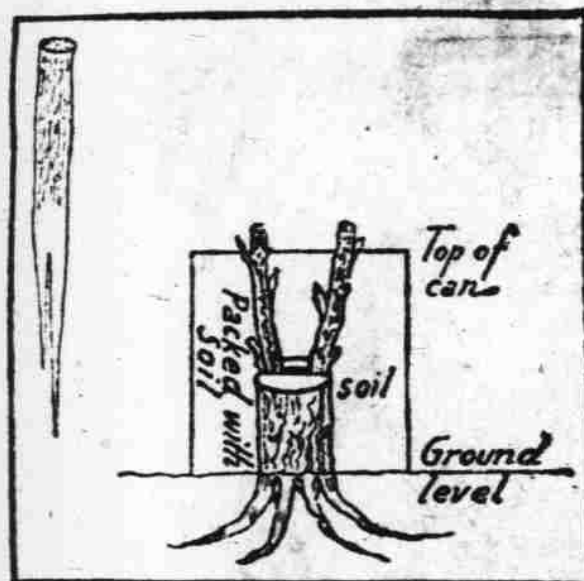
A knowledge of how to graft the grape would frequently be of considerable value to a farmer. A wild vine may have been left growing near the house and where there is a vineyard seedling plants often come up in unexpected places. Then there is the frequent case of vines proving unsatisfactory. In all these cases the ability to change the unprofitable vine into one of real value is an accomplishment worth having, writes L. R. Johnson of Cape Girardeau county, Missouri, in *Lawn and Home*.

The art of grafting is not difficult to acquire. It varies to some extent according to the age of the stock; that is, the vine to be grafted upon. In the case of one and two-year-old vines the process is this: Before growth begins cut scions from the vine desired. They should be about the diameter of the stock and contain two or three buds, usually three.

Beginning even with the lowest bud make a slanting cut about an inch and a quarter long. A similar cut is made on the stock. Then about a third of the way back from the point of the cut insert the knife and split back with the grain a half inch or so, as shown at the left of the cut. This forms a tongue and gives the name of tongue grafting to this process.

Treat the stock in same way and then fit the two cut surfaces together, inserting respective tongues of stock and scion in the respective splits. This will make a close union, but the important point is to see that the inner bark of the one is exactly in contact with that of the other on at least one side, for it is this inner bark that knits together and makes the graft possible.

Then wrap union with raffia or yarn thread and mound up around and graft with moist rich soil to the top bud of scion, being very careful not to



Tongue and Cleft Grafting.

move the scion so as to disturb point of union. If successful the buds will start and grow into canes. Buds that start from the stock below the union must be broken off.

Another process of grafting is employed on old and large vines. Saw them off near the ground, leaving enough straight-grained wood to split open for an inch or more. Split this stump with chisel and mallet and gag it open with a narrow wooden wedge driven in the center. Then take two scions like those already described and beginning opposite lowest bud shunt them on both sides down to sharp edge in wedge shape, leaving side with bud on slightly thicker.

Set these scions in the split, one on each side, bud out, so that inner bark may match. To insure contact of this bark or cambium layer, lean scions a trifle out at top so as to insure contact at least in one place where one bark crosses the other layer. Then take out wedge in center and the thick stock will press tightly against the inserted ends of the scions, holding them firmly in place. Then mound up very carefully, for to move a scion might break contact of cambium layers, covering all the scion but top bud.

A better and surer way than this is to take a can of proper size without bottom and set it around graft. Then sift in fine rich soil until can is full, wetting soil down with water to solidify it. The can is a fine protection and prevents any washing or wearing away of the soil from the scion, holding all firmly in place.

BEST TIME TO APPLY SPRAY

Work May Be Done Any Time During Winter Season, but a Warm Day Should Be Selected.

The dormant spray may be applied at any time during the winter, but a warm day should be selected for the work. Probably more of the work is done in March than any other month, and that time is particularly favorable. The days are getting warm and the buds are about to start. Trees are less susceptible to injury just before the buds begin to swell and doubtless that is the best time to apply the dormant spray to apple, peach and pear trees.

THE KITCHEN CABINET

Would you throw away a diamond because it picked you? One good friend is not to be weighed against the jewels of the earth. If there is coolness or unkindness between us, let us come face to face and have it out. Quick, before love grows cold.—Robert Smith.

TASTY TIT-BITS.

A most delicious and economical accompaniment to roast beef is



Richmond Corn Cakes.—To three-fourths of a cupful of canned corn add one-half cupful of milk, one-half table-spoonful of sugar and two eggs well beaten. Mix and

sift seven-eighths of a cupful of flour, one teaspoonful of salt, one table-spoonful of baking powder. Combine mixtures and drop by spoonfuls in buttered muffin rings; set in a buttered dripping pan; bake in moderate oven.

Cadillac Chicken.—Wipe a chicken dressed as for broiling; sprinkle with salt and pepper; place in a well-greased broiler and broil over a clear fire for eight minutes. Remove to a pan and rub over with the following mixture: Cream four table-spoonfuls of butter, add one teaspoonful of mustard, one-half teaspoonful of salt, one teaspoonful of vinegar and one-half teaspoonful of paprika. Sprinkle with three-fourths of a cupful of buttered crumbs and bake until the chicken is tender.

Swedish Halibut.—Wipe a slice of halibut weighing one pound. Place in a shallow earthen baking dish; sprinkle with salt, pepper and brush with melted butter. Drain canned tomatoes and add three-fourths of a cupful of pulp; add a teaspoonful of powdered sugar and spread over the fish. Cover with one-half sliced onion. Bake 20 minutes; pour over one-third of a cupful of heavy cream, and bake ten minutes. Remove the onion and garnish with parsley.

Jellied Prunes.—Pick over, wash and soak one-third of a pound of prunes in two cupfuls of cold water; cook in the same water until soft. To the prune water add enough water to make two cupfuls. Soak two and one-half table-spoonfuls of gelatin in half a cupful of cold water; dissolve in the hot liquid and add one cupful of sugar, one-fourth of a cupful of lemon juice; add prunes and chill. Stir twice while cooling to keep the prunes from setting.

Why this longing, this forever sighing, For the far off, unattained and dim? While the beautiful, all around thee lying, Offers its low, perpetual hymn.—Harriet Winslow.

SEASONABLE DISHES.

We may still indulge in the favorite shell fish. Try this recipe:



Norfolk Oysters.—Cover the bottom of a baking dish with three-fourths of a cupful of hot boiled rice; cover the rice with one-half a pint of oysters; pour over one-half cupful of white sauce, dot with butter and sprinkle with salt and pepper; repeat, using the same amount of ingredients. Cover with buttered crumbs and bake in a hot oven 30 minutes.

Barbecued Ham.—Soak two thin slices of ham in lukewarm water 24 minutes. Drain, wipe, cook in a hot frying pan until delicately browned, and remove to a hot platter. To the fat in the pan add two table-spoonfuls of vinegar, one teaspoonful of mustard, one-eighth of a teaspoonful of paprika and one-half teaspoonful of sugar. When thoroughly heated pour over ham and serve at once.

Cracker Plum Pudding.—Pour four cupfuls of scalded milk over one and one-fourth cupfuls of rolled cracker crumbs and let stand until cool; add one cupful of sugar, four beaten eggs, one-half a grated nutmeg, one teaspoonful of salt and one-third of a cupful of melted butter. Parboil one and one-half cupfuls of raisins in boiling water, cover, add to the mixture. Turn into a buttered baking dish and bake slowly two and one-half hours, stirring the first half hour. Serve with any preferred sauce.

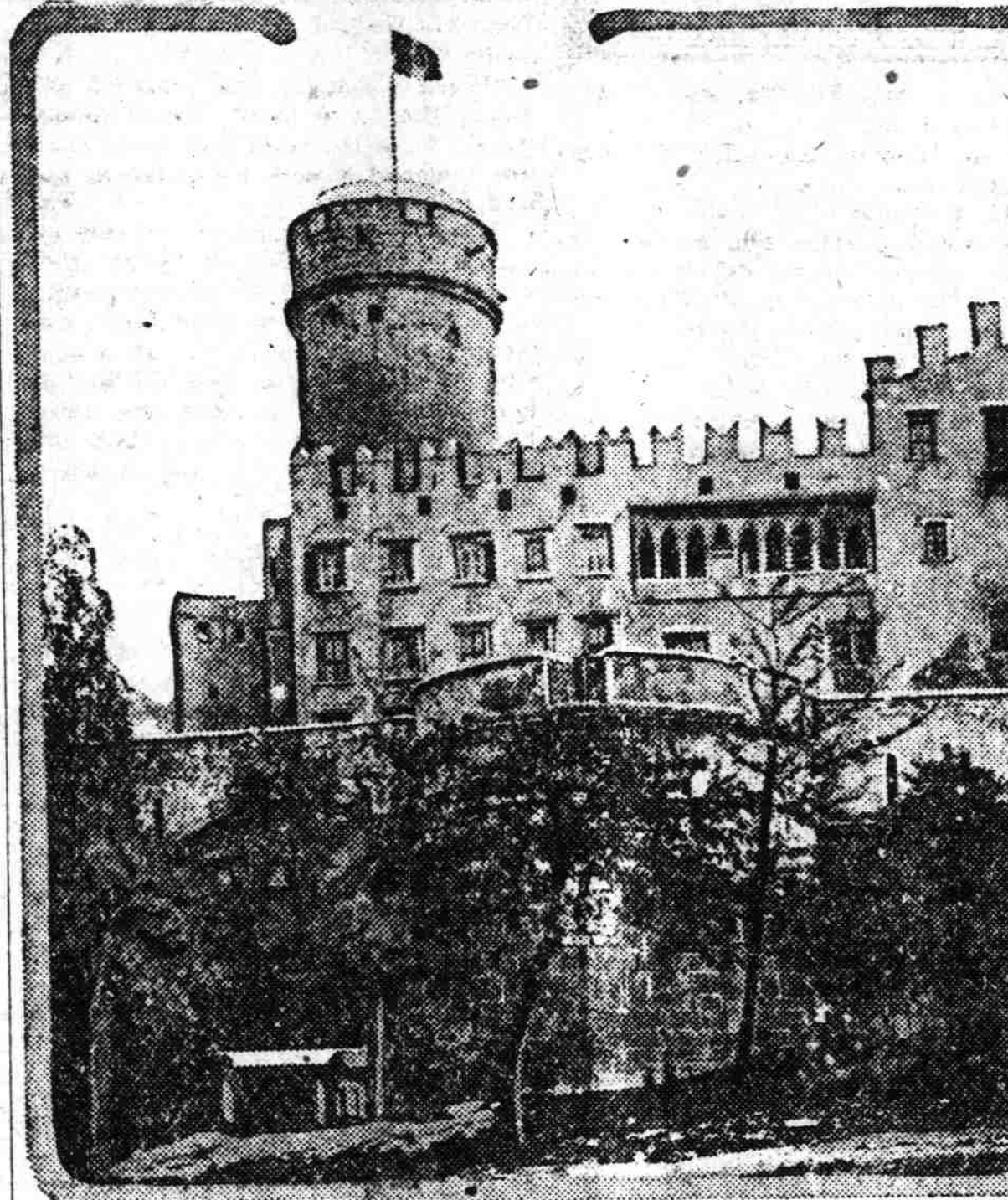
Fruit Cream.—Soak a table-spoonful of granulated gelatin in one-fourth of a cupful of cold water, dissolve in one-fourth of a cupful of scalded milk and add one-half a cupful of sugar and one teaspoonful of lemon juice. Strain into dish and set into ice water, stirring constantly, and when the mixture begins to thicken add the whites of two eggs beaten stiff and one cup of heavy cream beaten stiff, one-third of a cupful of stoned prunes cut in bits, three figs chopped and two table-spoonfuls of blanched and chopped almonds. Mold and chill.

Nellie Maxwell

Concerning Mirrors.

In the early part of the sixteenth century mirrors first became articles of household furniture and decoration. Previous to that time—from the twelfth to the end of the fifteenth century—pocket mirrors or small hand mirrors, carried at the girdle, were adjuncts to ladies' toilets. The pocket mirrors consisted of small circular plaques of polished metal fixed in shallow circular box covered with

IN RECOVERED TRENT



Old Consiglio Castle in Trent.

By LLOYD ALLEN, Special Staff Correspondent.
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TRENT, in the upper valley of the Adige, has just been restored to Italy, and at the peace conference the final pact between the nations that fought Germany will undoubtedly give Trent to the Italian nation for all time.

Leaving Padua early in the morning in one of the powerful automobiles of the Italian supreme command, in the first party of newspaper men to visit these lands reclaimed from Austria, I arrived in Trent by way of Verona after a five-hour ride, during which we passed through the wrecked villages that mark the old mountain battle fronts of the Austrian and Italian armies.

Along the fine rock roadways that run along the Adige river, a swift-flowing mountain stream, a small line of refugees was plodding along, on foot for the most part, returning to homesteads deserted during more than two years of war.

Just a few miles north of Verona the first sight of war's destruction was the little wrecked village of Marco, for two years under shell fire. As we passed through the place the evidences of battle were still ample. Austrian trench helmets, clips of cartridges and discarded trench spades were to be seen scattered among the piles of stone and timber of wrecked homes. The beautifully frescoed village church was nothing but a shell of walls.

On the roadway leading up to Marco hundreds of Austro-Hungarian prisoners were busy repairing the roadbeds. Some wore their very ornamental dress overcoats lavish in the display of knotted braid and fur.

Towns of the Trentino.

Trent in itself is a rather inconsiderable town. It had a war-time population of some 25,000 persons, a large majority of whom were Italians, we were told. In peace times the population is around 40,000. But in the whole province of Trentino there are more than half a million people, and it is the province, as well as the town, that Italy fought for at the cost of 460,000 men killed and nearly a million wounded.

Back of the Italian demand for the Trentino is a sentimental reason, and a practical commercial reason. For the sentimental and national side first, Italy points out, through her biggest statesmen, generals and propagandists, that 420,000 of the 600,000 persons living in the Trentino are Italians speaking the Italian language. Trent as well as the smaller towns in the Trentino, such as Rovereto, Ala, Arco, Levico and Pergine, are filled with buildings of Italian design, decorated with Italian art and using the Italian language in the schools and offices.

We passed through several of these towns. The people on the streets were as Italian as the street crowds of Padua, Verona and Vicenza, cities of the Venetian plain through which we passed in the earlier stages of our trip. Signs, decades old, on the buildings of the Trentino were in Italian, advertising the wares certain Italian merchants were trying to sell.

The practical reasons that Italy has for keeping her tricolor flying from the mountain cities of the Trentino are numerous and vital.

Every Available Inch Tilled.

First of all the Trentino is a very productive region where vineyards and grain fields flourish on both sides of the Adige, producing large quantities of foods. It can be said truthfully that every available inch of land in this section is in a state of cultivation. To an American farmer the intense method of soil tilling would prove a revelation.

Only through centuries of careful work with hoe and plow has it been possible to create the garden that extends from Verona, where the Adige river strikes the Venetian plain, to the impassable mountain valleys many miles away where the absolute absence of soil forbids any attempt at farming.

The fields on either side of the river are broken into small lots, thousands being as small as a city block; many are much smaller in order to completely fill a segment of rock-locked earth. On these plots, that have been leveled with infinite care, the farmer of the Trentino grows grain, garden truck, grapes, and often other fruit. The grapevines are kept pruned to about four and a half feet high for the main stem, which grows to the thickness of a man's wrist, while the tendrils are trained onto sticks, or in many cases to trees that are kept pruned down to a thick stump six or seven feet high with small branches half an inch in thickness protruding in a sheaf from the stump.

Ancient Consiglio Castle.

During the middle ages Trent was a typical fortified city crowned with an old feudal castle. Built in 1490, this stronghold, Castle Consiglio, has come down to the present generation in a beautiful state of preservation. While the Austrians held Trent the place was used as a kind of town jail. Cesare Battisti, native of Trent, an ardent pro-Italian who had the nerve to enlist in the Italian army against Austria, was shot in the courtyard of the castle, and is today the town and the Italian nation's martyr.

Stored in the wonderful old castle were 80,000 captured Austrian rifles. Piles of gas masks, trench tools, murderous trench knives and other odds and ends of fighting man's equipment were stacked in several of the large rooms.

In one of the main corridors was a typical Austrian torture machine. It consisted of two rings, the first about nine inches from the floor and the second about four feet above ground. The practice was to fasten a prisoner's ankles to the lower ring by means of a piece of rope, while the unfortunate man's hands were tied behind him through the upper ring. This threw all the prisoner's weight on the wrists and ankles. Usually a man fainted after several hours.

Inspection of the old Consiglio castle revealed how the war machine of the sixteenth century—for the castle itself was a fort—had been made to serve the purposes of the twentieth century war lords.

In the highest room of the place, a circular chamber of the tallest tower, was all that remained of a German wireless outfit. The operators had made themselves comfortable in the damp old place by putting storm windows in the loopholes that were originally cut for the convenience of cross-bow men.

To get to the tower one has to pass through a frescoed courtyard where men were hanged centuries ago. About five or six feet from the old gallows, a double affair, runs a sheltered gallery from which the dukes and their courtiers, sheltered from the weather, could witness the execution.

Some of the public squares in the city of Trent have fine old buildings in Italian architecture, decorated from ground to roof with gorgeous frescoes the coloring of which is still vivid.

Concrete Piles.

Concrete piles have been driven nine feet into coral rock at Honolulu with 3,100 blows of an ordinary drop hammer.

FARM ANIMALS

MANAGEMENT OF A PIG CLUB
It is Duty of Agent to Furnish Information to Supervisors Who Instruct Members.

(Prepared by the United States Department of Agriculture.)

The boys and girls' club work is carried on through co-operation between the animal husbandry division of the bureau of animal industry and the states relation service representing the department of agriculture and the various state agricultural colleges represented by their respective extension departments.

A swine specialist, supported by funds appropriated by congress for the work of the animal husbandry division, is placed in each of the states desiring such a man (so far as funds permit). The specialist's work is administered by the director of extension, who furnishes office room and equipment, stenographic assistance, and pays his traveling expenses. He is a unit in the extension staff and works in closest co-operation with the state leader of other club work. All the work is done in co-operation with the county agent force and the various interested departments of the college and extension force. The subject matter taught by the specialists is agreeable to the animal husbandry department of the college and the animal husbandry division of the department of agriculture. A simple project or agreement covering the work is arranged by the states relations service between the extension service of the agricultural college and the animal husbandry division.

The pig-club agent is the leader of the animal-club work in the state. It is his duty to provide technical instruction for the club members; to provide supervisors or local leaders and to train them so that they may impart the information to the members. In some cases the duty of organizing the pig clubs falls to the lot of the state agent, while in other states the state leader of general club work and his staff attend to the organization. He works with and through the county agent force and makes use of such local leaders as are available. He projects his vision of the work into the minds of the local leaders and through them into the lives and minds of the members. He must impart his technical information in terms that can be understood by the local leaders and applied by the members. He meets the swine breeders of the state and seeks to win their approval, support, and co-operation. His work must be constructive and must strike at the swine-

husbandry problems of the state. He will plan and arrange for the statewide exhibits, judging contests, etc. He visits members on their farms and helps them solve their problems. He conducts demonstrations, simple in nature, yet effective in solving the problems of the members and the adults. His work must win the support of the parents of the members if it is to be successful.



Members of Pig Club and Result of Their Work.

The individual effort of the agent would accomplish little were it not for the splendid co-operation extended by the extension forces, by the bankers and business men, breeders, local interested people, etc. The work succeeds because the agent multiplies his influence through all the co-operating agencies.

The pig club has not only stimulated the demand for better breeding stock, but also has been the means of introducing community breeding or breed standardizing in numerous counties in various states where the pure bred part of the industry is practically new and where there were not numerous breed preferences to contend with. The pig club boys have not only taught the adults, where the industry is new, the superiority of the pure bred over the scrub, but have taught them that good individuals bring good prices.

"Before this year," says one county agent, "it was hard to get a farmer to pay \$10 for a good hog; now they pay \$50 to \$100."

In addition to these benefits the pig club work is stimulating pork production to an extent extremely important at this time, stimulating home curing of meat through the organization of "ham and bacon" clubs, teaches the members better working methods, inspires pig club boys to better work by educational exhibits and increases their knowledge through judging contests. These are in addition to the indirect results, such as awakening a new spread of comradeship between father and son and the teaching of intelligent borrowing and good business methods through the financing of members by bankers.

POULTRY



HOW TO SET A HEN PROPERLY

Nest Should Be in Some Quiet Place Where She Won't Be Disturbed—Handle Carefully.

(Prepared by the United States Department of Agriculture.)

The first sign of a hen being broody (wanting to set) is that she stays longer on the nest when laying, and on being approached will quite likely remain and make a clucking noise, ruffle her feathers and peck at the intruder. When it is noted that a hen sets on a nest from two to three nights in succession and that the feathers are disappearing from her breast which should feel hot to the hand, she is ready to be transferred for setting to a nest which has pre-



Well-Selected Flock of Young Hens of Uniform Size.

viously been prepared. The normal temperature of a hen is from 106 to 107 degrees F., which varies slightly during incubation.

The nest should be in some quiet, out-of-the-way place, where the sitting hen will not be disturbed. Move her from the regular laying nest at night and handle her carefully in doing so. Put a china egg or two in the nest where she is to sit and place a board over the opening so that she cannot get off.

Toward the evening of the second day quietly go in where she is sitting, leave some feed and water, remove the board from the front or top of the nest, and let the hen come off when she is ready. Should she return to the nest after feeding remove the china egg or eggs and put under those that are to be incubated. If the nests are slightly darkened the hens are less likely to become restless.

At hatching time they should be confined and not be disturbed until the hatch is completed, unless they become restless, when it may be best to remove the chicks that are hatched first. In cool weather it is best not to put more than ten eggs under a hen, while later in the spring one can put twelve to fifteen, according to the size of the hen.

Dust the hen thoroughly with insect powder, and in applying the powder hold the hen by the feet, the head down, working the powder well into the feathers, giving special attention to regions around the vent and under the wings. The powder should also be sprinkled in the nest.

POULTRY NOTES

Guineas, like geese and pigeons, pair when the number of males and females is equal.

The turkey does not fully mature until two years old, and is at its best at three years.

Sometimes the old hens of the heavy breeds will not need fattening, as they have a tendency to take on fat with age.

The poultry house should have no draughts; it should be clean and kept clean and no damp floors should be tolerated.

A fowl consumes about three ounces of mash in the morning, two ounces of grain at noon, and four ounces of grain at the evening feed.

Proper equipment in the poultry-house often is the deciding factor in successful poultry keeping and should be given due consideration.

Hens lay best in damp weather, even during winter. It will be noticed that they are more prolific during showery spells than they are when it is dry. The theory is that moisture produces expansion and growth, whereas dry, cold or dry warmth contracts.