

What Grandmother Had.

Grandmother used to go and see folks who were sick, and make them tea of bonnet and of camomile.

Unless they met her at the door And put up an emphatic roar About it's being smallpox, or Some ailment to be watchful for.

She'd only found the texts that said: "Sick have ye tended," "hungry fed," And such old-fashioned foolishness.

Now, when we hear a neighbor's ill We close our door and wash the sill With antiseptics, so we'll not Get the disease the friend has got.

Should we catch what grandmother had!—Strickland Gillilan, in Leslie's Weekly.

TESTS OF FRIENDSHIP.

There is a general idea that friendship is chiefly tested by adversity, that it is easy to retain our friends when things go well with us, but that they are likely to be driven off by our troubles.

It is the very nature of true friendship to thrive best in an atmosphere of trouble. Assuming that we are sincere, we all know that we are never drawn so closely to a friend as when he is in difficulties and needs us.

It may seem that this friendship in adversity is a very noble thing; certainly there may be much beauty, much tender self-sacrifice and loving service in its manifestation.

The trouble of a friend makes its appeal to our vanity; we feel that we are needed, and this is always a gratifying knowledge; we feel that we are of importance and that is ever a pleasure to our self-esteem.

Of course the difference in our friend's condition is really only superficial; he truly needs our friendship always, as much in prosperity as in trouble.

We may therefore say that a man's prosperity is the greatest trial of his friends—that is, of his true friends.

It ought to be true that friendship shares the joys as well as the sorrows of life, but in the case of the joys the sharing is more difficult.

It is not difficult to share each other's love of art or music or literature or science. Comradeship in these things may become very close, very stimulating and satisfying; but mere comradeship, good fellowship is not quite enough for friendship.

Can we be truly glad when our friend is doing better than we are in any one of these pursuits, when he succeeds, while, perhaps, we are doing poorly, when he wins applause that is denied us? Is it not easy to think that his success is a little beyond measure and ours is a little below? Or if fortune comes to him as it has never come to us; if riches are poured into his hands, so that he can gain whatever money will purchase and do whatever he has a mind to; is it then so easy to remain his loyal and devoted friend, assuming that we are far above any desire to sponge upon his wealth?

Our very self-respect renders us sensitive, quick to be hurt, apt to imagine that his prosperity has changed our friend for the worst. It may be possible that it has; which proves that he never needed our friendship more. For prosperity is the supreme test of a man, because its tendency is to enervate and weaken; adversity rouses and rallies all that is strongest in us.

our sympathy, our tender affection and counsel; he may also long for our acceptance of that which it will be a joy to him to expend upon us. To give nobly is a very fine thing; it is an equally fine thing to accept nobly.

It is easy to be true to our friend when he is in trouble, when he is down, when others fly from him, when others despise and neglect him. The response to such a call is one of friendship's deepest joys. But in times when we can do nothing for him, when he makes no claim upon us, when he is in the sunshine and all things go well with him—it is then that the sifting of our friendship comes.

Automobile Horns.

The first auto signal-horn used to murmur, "Please look out!" in mellow, musical tones. The latest roar discordantly or bray hoarsely. Yet this was far-fung, convincing, and says plainer than shouted words: "Car coming! Out of the way!"

The signal-horn industry has advanced step by step with the building of cars. Without devices of the present sort, automobiling would not have progressed nearly so rapidly. For the car in rapid motion needs its warning sound far ahead of it. With such a sound a part of the machine, automobiling has now attained a measure of safety that could have been reached in no other way.

The first auto signal-horn came from France and was a reed horn. The first French machines that were brought to America were equipped with it. The reed horn was not effective, because it developed too little power. It could not be heard at any great distance, and to build it so as to produce any great sound would have been impracticable.

Much scientific study and investigation has been put into making just the proper sort of warning sounds. The first problem was to invent a noise that should be sudden and decisive and should mean to everyone "Automobile!" Then mechanism had to be devised to make that noise carry a long way. Then a third factor appeared for the successful signal-horn—it must be simple and easy of operation and unfailling. The man or woman driving a car at high speed has plenty to do without bothering with a horn.

All that is mortal of the man who unseemingly gave life and talents to the upbuilding of companies of men, of fire, and smoke, and who strove with the persistence of his generous nature to bring about the formation of the organization that stands represented here today,—all that is mortal of this man lies beneath this sod, and the gap he left in our ranks is a gap we have found hard to fill.

It was in England that he first saw the light of day. There among castles, when knighthood was in flower, to which the tendrils of the ivy cling as if hiding from profane eyes the decaying grandeur of a day long past,—there under the gnarled limbs of stately oaks that shaded rose-gardens, and patterned and stand like sentinels of cotter and lawn, and lawns bordered by ancient hedges,—there in old England—the cradle in which was nurtured and rocked the glory of the Anglo-Saxon race—he spent his boyhood days, and it was there he met, courted and married the partner of his joys and sorrows. To the manor born, sturdy, clean-cut young Englishman, surrounded by the friends of his youth, and with bright prospects before him, it seemed that he was destined to succeed—destined to live proper and die under the flag of his native land.

It sounded. The noise was so sudden, so piercing, so thoroughly automobile-like—it could not have been mistaken for anything else than a signal-horn—that the countess dropped into a chair unable to say a word. The count seemed half terrified and, uttering astounded, she was compelled to realize the possibilities of the curious metallic cry that was like nothing else under the sun. "I must have it—now!" he cried. "Quick! How much is it?"

Fully half a dozen signal-horns have been perfected today, is very much in category as the short, sharp blasts of a locomotive whistle. This is on the theory that an automobile is practically a locomotive, though on a highway with many other classes or traffic. The highway it travels over—to make the situation more difficult—has no flagmen, no gates, no precautions against accident. Nothing remains to warn the careless pedestrian against disaster but a signal that shall be so powerful that no one can probably miss hearing it.

Johnny—"Pa, is it wrong to steal from a trust?" Johnny's Pa—"Don't let that question bother you any, my son. It's impossible."

TRIBUTE TO ALEX SMITH.

Memorial Address Delivered by James A. Gleason, Esq., at the Unveiling of the Monument Erected to the Memory of Alexander Smith, at the British Cemetery, on Thursday, August 22nd, 1912.

Here among the monuments of time mark the last resting place of those who have gone before and sleep the sleep of peace, we meet for a solemn purpose. From the very moment of our birth we begin to die, and with lives fast ebbing away, we have stopped in the market place of human activity and pleasure to pay tribute to one whose familiar form has gone from earth, but whose memory lingers like the scent of a fading rose.

Painted on the eye of memory, he rises before us as we last saw him in life, but each recurring year the picture grows dimmer and dimmer until the forgetfulness of our common nature blurs, if not obliterates, the lineaments of that face we once knew so well. All that is mortal of him tenanted the grave. The vase is broken, the flower is gone. Like a burned-out candle, nothing remains but the charred and smoldering stub. The spot merged all the acts of his life, and here in peace repose his body,—that temple of clay which once throbbled and pulsed responsively to the animated action of an immortal soul. The mystic strings of his nature radiating from the very cradle to the tomb, have long since broken, no matter how widely diverged by the shifting scenes of life's tempestuous battle, and here are so eternally fastened that no vicissitude of time or fate will ever in the least disturb them.

The fulfilment of which he played the leading role is ended. The last curtain has hung down—its folds never to rise again. We are here, however, because we were also actors in certain scenes of that drama which we desire unfolded in speech and immortalized in stone. This monument that is soon to be unveiled was not hewn from nature's rock-ribbed bosom and hewn down to the shining surface of the hand of man, merely to stand here as a thing of beauty to chasten and decorate the spreading scene before us. No, far from it. It is to commemorate the unselfish zeal that chapters the story of the life of him who sleeps beneath it.

Along with the old reed horn—it is old by comparison now, though but three years away—came the electric bell and the shaft-driven siren. These signals had precisely the same faults as their contemporary; they had not nearly enough power and no distinct raucous sound. Much scientific study and investigation has been put into making just the proper sort of warning sounds. The first problem was to invent a noise that should be sudden and decisive and should mean to everyone "Automobile!" Then mechanism had to be devised to make that noise carry a long way. Then a third factor appeared for the successful signal-horn—it must be simple and easy of operation and unfailling. The man or woman driving a car at high speed has plenty to do without bothering with a horn.

As representative of the firemen of the central district of Pennsylvania, I now dedicate this monument to the public. May it also teach the truths of resurrection's morn. This tomb is the womb of life everlasting. The grave instead of a stumbling block, is a stepping stone to a life replete with bliss. Death is life, for the hand of death, that like whitened frost lays low the blushing violet with the bearded wheat, is but the harbinger of another spring. Hence the great Apostle of the Gentiles said: "O Death! where is thy sting? O Grave! where is thy victory?"

The fetters of time that bound Alexander Smith to things earthly, clogging his spiritual nature like marsh weeds, and seeking insidiously his soul's destruction, have fallen from his body of clay and dissolved, he has stood in the essence of our common corrupt nature before Heaven's high throne. With us he is the offspring of a sinful race, and we trust that his soul, suffused in the God-given blushes of awakened repentance, has been tenderly gathered to the bosom of Him, "Who is the Way, The Truth, and the Life."

In conclusion, when we all shall have been brought to the grave to remain in the tomb, the clod of the valley shall be sweet unto us, and we shall all follow as there are innumerable gone before. All power will have forsaken the strongest, and the loftiest laid low, every eye lid closed, every voice here hushed, and every heart will have ceased its beating, then in the written words found penned by an unknown hand and in crumpled form stuffed in the skull of a skeleton in the British Museum, in the land that gave us Alexander Smith, it can be well said, standing here in contemplation of this grave that will ere long contain nothing but the bleaching and whitened skeleton of our first president, our friend and brother whose kindly features will have been blotted out by time's effacing finger.

Behold the ruin, 'twas once a skull of ethereal spirit full. This narrow cell was life's retreat. This spot was thought's mysterious seat. What dreams of beauty filled this spot. What hopes and pleasures long forgo. No hope, nor joy, nor love, nor fear. Have left no trace of record here.

Beneath this mouldering canopy, Once shone the bright and busy eye. But start not at the dismal void. If social love he eye employed. If with no lawless fire it glared. But through the dew of kindness beamed. That eye should be forever bright. When sun and stars are sunk in night.

Within this hollow cavern hung, The ready, swift, and tuneful tongue. If falsehood's honey it disdained. And when it could not praise was chained. If bold in virtue's cause it spoke. Yet gentle concord never broke. That silent tongue shall plead for the. When time unveils eternity. Say, did these fingers delve the mine. Or with the envied ruby shine? To hew a rock or wear a gem. Can little now avail to them. But if the page of truth they sought, And comfort to the mourner brought, These hands a richer meed shall claim. Than all that wait on wealth or fame.

And all that wait on wealth or fame. Avail it whether bare or shod. These feet the path of duty trod. If bold in virtue's cause it spoke. To seek affliction's humble abode. If grandeur's guilty bribe they spurned. And home to virtue's cot returned. These feet with Angel's wings shall vie. And tread the palace of the sky.

that has grown oak-like from its acorn proportions until today the marshalled hosts of fire-fighters marching in proud array along the streets of Houtzdale, drums beating, banners waving and flags flying, represent the departments and companies of twenty-five towns in eight counties, joining the membership of the Volunteer Firemen's Association of the Central District.

The first president of this association, gone from earth since 1896, will sleep beneath the shadow of this monument until time merges into eternity, and many a sunrise and sunset will paint these hills and valleys, many a tear-stained face and crushed heart will enter these portals to find sweet solace in reveries of the past, and many a name now honored and sung, will be buried amid the accumulated and accumulating dust of oblivion, but this poor sleeper, our friend and our organization's first president will lie here waiting the trumpet call that shall summon body and soul, reunited, to take a place in our Heavenly Father's home, before the great Omnipotent Ruler of the Universe, who makes the trembling earth His footstool.

The nature and world about us is so strong, regular and constant in all its changes and revolutions. The sun sinks to rest to rise more luminous than when quenched. The moon fades away into the womb of night to beam out again as brightly as if new born. The planets, legion in number, each revolving in its orbit, revolve and illuminate the blue dome of heaven without conflict or collision. The warmth of spring, the heat of summer, the coolness of autumn, and the frost of winter succeed one another, as the day the night. But man, the king of creation, his subject, frail, how weak and insignificant: Once born, his life is brief, but can never be born again. In a short time his name lives not in himself, but in his children.

The name of this man whose memory we honor to day lives in his children, but it lives in an idle across the waters. His children and his children, shortly after his death returned, broken-hearted, to the land of his nativity,—back to the scenes of his boyhood, to meet old friends on every side, and there pointing to the distant west, to tell how friendly hands in a foreign clime had laid to rest all that was mortal of their kind, loving husband and father.

The organization here assembled, composed of men with rough hands and ready hearts, true to its ideals of unselfishness, is about to unveil this monument, not only as a debt of gratitude to the dead whose name it bears, but as an inspiration to the young, so that in the future when a man steps forth from the ranks of his fellows to serve others in the spirit of purest sacrifice, without hope of compensation or reward, posterity will not forget his memory. We honor the memory of the brave, the noble and the true by showing that his heavenward as if to elbow his way, while the memory of the rank and file, those who by the infamy of their lives, lived despised and died unwept, unhonored, and unsung, is charitably buried with their remains.

As representative of the firemen of the central district of Pennsylvania, I now dedicate this monument to the public. May it also teach the truths of resurrection's morn. This tomb is the womb of life everlasting. The grave instead of a stumbling block, is a stepping stone to a life replete with bliss. Death is life, for the hand of death, that like whitened frost lays low the blushing violet with the bearded wheat, is but the harbinger of another spring. Hence the great Apostle of the Gentiles said: "O Death! where is thy sting? O Grave! where is thy victory?"

The fetters of time that bound Alexander Smith to things earthly, clogging his spiritual nature like marsh weeds, and seeking insidiously his soul's destruction, have fallen from his body of clay and dissolved, he has stood in the essence of our common corrupt nature before Heaven's high throne. With us he is the offspring of a sinful race, and we trust that his soul, suffused in the God-given blushes of awakened repentance, has been tenderly gathered to the bosom of Him, "Who is the Way, The Truth, and the Life."

In conclusion, when we all shall have been brought to the grave to remain in the tomb, the clod of the valley shall be sweet unto us, and we shall all follow as there are innumerable gone before. All power will have forsaken the strongest, and the loftiest laid low, every eye lid closed, every voice here hushed, and every heart will have ceased its beating, then in the written words found penned by an unknown hand and in crumpled form stuffed in the skull of a skeleton in the British Museum, in the land that gave us Alexander Smith, it can be well said, standing here in contemplation of this grave that will ere long contain nothing but the bleaching and whitened skeleton of our first president, our friend and brother whose kindly features will have been blotted out by time's effacing finger.

Behold the ruin, 'twas once a skull of ethereal spirit full. This narrow cell was life's retreat. This spot was thought's mysterious seat. What dreams of beauty filled this spot. What hopes and pleasures long forgo. No hope, nor joy, nor love, nor fear. Have left no trace of record here.

Beneath this mouldering canopy, Once shone the bright and busy eye. But start not at the dismal void. If social love he eye employed. If with no lawless fire it glared. But through the dew of kindness beamed. That eye should be forever bright. When sun and stars are sunk in night.

Within this hollow cavern hung, The ready, swift, and tuneful tongue. If falsehood's honey it disdained. And when it could not praise was chained. If bold in virtue's cause it spoke. Yet gentle concord never broke. That silent tongue shall plead for the. When time unveils eternity. Say, did these fingers delve the mine. Or with the envied ruby shine? To hew a rock or wear a gem. Can little now avail to them. But if the page of truth they sought, And comfort to the mourner brought, These hands a richer meed shall claim. Than all that wait on wealth or fame.

And all that wait on wealth or fame. Avail it whether bare or shod. These feet the path of duty trod. If bold in virtue's cause it spoke. To seek affliction's humble abode. If grandeur's guilty bribe they spurned. And home to virtue's cot returned. These feet with Angel's wings shall vie. And tread the palace of the sky.

FOR AND ABOUT WOMEN

DAILY THOUGHT.

What though corroding and multiplied sorrows Legion-like, darken this planet of ours? Hope is a balsam the wounded heart borrows. Even when anguish hath palsied its powers. —From the German.

To be a successful hostess one must first possess the true spirit of hospitality and the priceless gift of tact and intuition and must be willing to give up for a time one's ideas, and perhaps, in a measure, one's ideals, too, and be able to put one's self in the place of the guest, to remember that guests have been uprooted from the midst of environment and the shelter of traditions and customs that have encompassed them perhaps since childhood and placed them in an altogether different atmosphere.

To be sure, the responsibility is not all on the shoulder of the hostess, but with the giving, each to the other, of the best that is in one's self, sympathy, considerations and the genuine desire to please and to be of service to the other, the relationship of hostess to guests should be one of absolute joy and satisfaction—the bond of cement a friendship, instead of being as is often the case, the cause of discomfort and discipline.

Until one can invite a guest to her home feeling the responsibility and willing to efface herself to a certain extent, it is better never run the risk of losing what otherwise might remain a happy friendship. It is not only a question of food and shelter and a round of pleasures, but it is the companionship, the coming in contact with one in the intimacy and privacy of one's home that one offers in the capacity of hostess and she must be pretty sure of herself before taking such chances.

It is quite as difficult to be a hostess as it is to be a successful guest.

Baked Alaska.—Bake a sponge cake in an oblong pan and when it is cool split it into two sheets with a sharp knife. Have a square or cylinder-shaped brick of ice cream, around which the sheets of cake are wrapped. The cake should project beyond the brick of ice cream for an inch or so. Cover the cake with a thick meringue and pack the ends of the brick with it. Then put in a hot oven for a minute, or until the meringue is just tinged with golden brown. Brown on a board covered with white paper, and when browned slip onto a platter and serve.

Not even in the days when the sash represented a Royal Order did it count for so much as it does today. Now one must be sashed, and by that sash shall you be known to your dearest friend and bitter enemy as the wearer of a Calot, a Paquin or a Cheruit creation—or some nondescript product of would-be-creators, who confess their inefficiency nowhere so plainly as in the sash.

Paris is sash-mad, and, willy-nilly, one must follow the fad. Since designers have made this so important a detail, naturally there is variety aplenty from which to choose, and women may be sashed becomingly as well as with chic. Apparently, two inches can be added to the height, another two subtracted from the hip measure, or, more wonderful still, unnecessary five or six years can be sliced from one's age, all by the skillful application of a sash!

A collar that is much seen comes from the house of Cheruit. It is rounded and very deep, dropping almost to the waist in the back, but does not extend over the shoulders at all, and tapers away to almost nothing in front. The collar is of chiffon or tulle and is extremely plain, finished only with a narrow, hemstitched hem, or more often simply the picot edge given by the hem-stitching machine. Frequently the collar is double, that is, two collars, only slightly different in size, posed one over the other.

There are certain kinds of silks, especially crepe de chine, that make into the best kind of one-piece frocks for the warmer weather, provided she has a heavy top coat to cover them up in the street. They are warm enough for heated buildings, and they are not too chilly for cold days if one is properly covered. The average woman wrinkles her brows when it is proposed that she have a black crepe de chine one-piece frock as an off-set to her coat suit, for she thinks that black is too somber.

If she were only wise she would realize that black, enlivened by white, is more reliable than colors when one has to wear the gown constantly. It is ultra fashionable today; it can be made becoming by the use of a collar or gimp of white net and it has an air of generosity and good taste that no color gives but dark blue. In such a gown the wage earner can cheerfully go to dinner and the theater and look far better than she could in a coat suit with a separate blouse. There is economy also in this choice because she can wear it without a coat in the spring if it is still in good condition.

The woman of today has borrowed much from man's wardrobe, but probably the most useful garment, next to the shirtwaist is the overcoat, says a New York Times writer. It is called a top coat because it is not so carefully drawn in distinction to the overcoat, as the shops where women often get their overcoats in the man's department, and find them entirely satisfactory.

It looks now as though the man's overcoat, especially the one with the raglan sleeves, would be the chosen style for the coming winter. The wage earner who cannot have many clothes does not want to buy a conspicuous top coat nor one that easily soils. There are suitings in indistinct colors, and black and white checks in rough materials, that will serve for years. The latter is essentially good. She must not choose very large checks, as she would then put the coat in a conspicuous class, but in a moderate size check the coat is not only snappy looking, but goes with every variety of gown and hat, which is another important feature.

Spanish Chocolate Cake.—One cup of sugar, half cup sweet milk, three cups flour, two eggs, one teaspoon soda dissolved in hot water. Put on the stove one cup milk, half cup unsweetened chocolate, grated; stir until dissolved; then stir into it one cup sugar and the yolk of one egg stirred together; when cool, flavor with vanilla. While this is cooking beat up the first part of the cake and add the chocolate custard. Bake in layers. Ice on top and between the layers.

—For high class Job Work come to the WATCHMAN Office.

FARM NOTES.

Crushed bone is a valuable fertilizer for fruit trees and may be used to advantage whenever it may be secured at a reasonable price. An application of 400 to 600 pounds of bonemeal per acre will prove helpful on silt and clay soils.

The vigorous appetite of the cows will indicate whether the food is well digested or not. Weighing the milk and the feed will determine the profit, while the ratio between the feed and the milk will make clear to a certain extent, whether or not the ration is balanced.

A curious interference on the part of the honey bee in our economical questions has occurred in the tobacco-growing sections of the country. They gather nectar from the tobacco blossoms, and some of the apiarists complain that the honey is flavored in a way that is neither delightful nor wholesome.

If the cows need a laxative, oilmeal is better than any kind of salts. Like ensilage and roots, it has a natural laxative and helps to keep the cow in healthy condition. When an animal is run down from wrong feeding a medicine has little value. It is only by right feeding and clean, well-ventilated quarters and good care that health and vigor may be restored.

Do your chickens or your neighbor's fly over your picket fence into your garden? If so nail a little strip to each post and stretch a white twine string about six or eight inches above the top of the pickets. The same plan will apply to woven wire fencing. A white twine string stretched along each panel of fence has all the horrors of the inquisition for a hen, and she will positively avoid it.

Last year this country exported 13,250,000 dozen eggs, valued at \$2,700,000. Most of these went to Cuba, Canada, Panama and Mexico. It is evident that eggs are becoming a high-priced article of food the world over, for notwithstanding their high cost in this country, their export is steadily increasing. Not many years ago the United States was a heavy importer of eggs and from the countries to which it now exports them.

The Kentucky experiment station has for two years been carrying on experiments to determine the rate of seedling that will give the best yield. It was found that rich soil in a normal season relatively thick planting will give the highest yields. In dry seasons thin planting gives the best results. On poor land the best yields will be secured from rather thin planting. On good corn land of fair fertility three stalks per hill, or the equivalent in drilled corn, will probably give the best results when an average of years is considered.

If your orchard trees have decayed portions in them clean out the rotted wood, then bore diagonally from the bottom in different directions from the filling of the hole in order that the filling will hold. Fill the cavity with the following cement compound: Portland cement, one pound; sand, two pounds; cinders, two pounds. Pack the cement in well and seal all around the filling with a tar mastic. Leave no projections beyond the plane of the bark and immediately the wood ring and the bark will form over the patch, and the tree will ultimately be as good as new. The entire heart of the tree may be cleared out and filled in this way and the tree will continue to flourish.—Farm Progress.

Not all soils are benefited by an application of lime. Probably the great majority of soils will not be benefited by an application of lime. There is only one sure way of determining whether a soil needs lime, and that is by a soil analysis. The application of lime over a whole field would be a waste of both time and money if the field were not in need of such an application. It is suggested that the farmer who has not already proved for himself whether his soils need lime would better conduct a few simple experiments at different points on his farm. Barrels of lime or a few tons of limestone or a few loads of marl would not cost a great deal, and the labor of treating a strip with lime or ground limestone here and there across different fields in which crops were to be grown, or to treat a small area here and there with different points in fields in which crops are to be grown, would involve but a small amount of labor. These areas should be very carefully located and marked and the results of the applications should be carefully studied on the succeeding crops. It is possible that the effects, good or bad, may be easily apparent. It is possible that there will be no effects, and it is possible that the effects can be discovered only by carefully cutting and weighing the crop from portions of the treated areas and comparing them with the crops produced upon equal adjacent areas.

In a bulletin on insects which do serious damage to the apple the United States department of agriculture treats of the lesser apple worm. The larvae, it says, do not reach full development as early in the fall as those of the codling moth and may find their way to the fruit with the fruit, where they continue to feed, often doing considerable damage. The lesser apple worm is probably a native insect, and it infests other fruits, wild and cultivated, including apples, haws, plums, prunes, cherries, peaches and species of crataegus. It has also been reared from the black knot of plum and from galls on oak and elm.

Its life history and habits probably parallel those of the codling moth. It is known to be present quite generally in orchards from Canada south to Georgia and west to the Rocky mountains. It has been found abundantly in apples in the Puget sound district in Washington and is known also from British Columbia.

The schedule of treatments recommended for the codling moth will be effective in the control of this species. The treatment for the codling moth is limited almost entirely to spraying the trees with arsenicals, such as paris green or arsenate of lead. The latter is now principally used. In the east the poison is usually combined with a fungicide. In some sections banding of trees is also employed and under special conditions is a valuable adjunct to spraying. From two to five spray applications are given according to the section of the country and the season.

Of all treatments the first is much the most important. This is given as soon as the blossoms have fallen and has for its object the placing of poison in the calyx cup of each little apple. This treatment may be successfully given during the eight or ten days between the dropping of the petals and the closing of the calyx lobes.