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# THE WRONG AND RIGHT WAY TO PROPAGATE TREES. 

The Wrong Way Leads to Failure.

It is a deplorable fact that most Nurserymen, in their haste to multiply the leading commercial varieties of apple trees, cut the propagating wood from young trees in the nursery rows. This means the trees which they are offering you have been propagated from young, immatured trees, several years removed from a bearing age. It is largely due to this fact that many trees of all varieties produce apples of very inferior quality in uniformity of size, color, flavor and keeping qualities. Such trees are subject to all manner of disease and insects; they ase diposed to shed their fruit before it is ripe or in many cases they will die before bearing age. If they do live to be old, they will bear but little or no fruit. It is not strange that this is true, when you consider the fact that in propagating from young trees that have never proven to possess merit, you have no knowledge of the bearing qualities or the hardiness of the tree. it would be all guess work.

Why does the breeder of fine stock use matured rather than immatured animals for breeding purposes? What would be the result in the production of Corn, Wheat, Oats, Potatoes or other farm products, if in the selection of seeds, no care had been given to secure the Best? Would it not deterioate in quality and quantity?

Experience teaches that the apple or other fruits are as susceptible to improvement as live stock or grain by selecting the best to reproduce from.

## The Right Way Leads to Success.

In speaking of this we will simply relate our forty years of experience in growing commercial orchards. Judging from the quality of fruit our orchards produce, we are convinced this is the right way. We will use for illustration, the Ben Davis apple, as most every one knoivs it. What is true of the Ben Davis is true of all other leading varieties of apples. We also apply the same rule to all other fruits.

Over forty years ago when we commenced growing commercial orchards, we observed that no two Ben Davis trees bore exactly the same quality and quantity of fruit. Some would bear fruit of uniform size, good flavor, high color, keep well, hang on the trees until fully ripe, the trees were hardy, early and prolific bearers, while others were the opposite.

The idea came to us that it was possible to build up the standard of the apple by propagating from those trees showing the very Best quality and quantity of fruit, therefore we went through this orchard and marked such trees, and from these we cut scions to propagate trees for our next orchard. When they commenced bearing, we had a positive knowledge that we were on the right tra k , as the results obtained were far beyond our expectations. Now, being certain that improvement could be made, we went through this secon lorchard and marked trees showing the Best type of fruit, and from these we propagated trees for our third commercial orchard. The results were fully as great as in the first selection. The same principal was applied to our fourth large commercial orchard, which stands without a rival in the production of quality, and quanfily of fruit, hardiness of trees, early bearing and strong, healthy foliage. From the selects in this orchard, we planted a block of trees for propagating purposes which is now at bearing age; this makes the fourth çareful re-selection. Every apple tree you get from us has been propagated from the very Best in this stock.

Planting trees is not the work of a day, a month or a year, but the work of many years-a centralization of capital, time, labor and land rental for many years to come. Then how important it is that no mistakes be made in laying the foundation work of the orchard.

We are practical fruit growers of over forty years' experience, and have learned the value of "thoroughbred" trees. We have sought co-operation with a kind, just and never erring nature in producing of trees of the greatest possible bearing qualities and all other points of merits that it takes to make the most profitable tree. Our trees are especially grown for the practical fruit grower. By having rigidly followed up these rules from generation to generation for forty years, we claim that our trees are fully entitled to be classed as pedigreed and thoroughbred. We invite everybody to call and see our orchards and Nursery Stock and we will fully convince you that all we claim for our stock is true. Space forbids or we would give unlimited testimonials as follows:

Quincy. Ill., July 14. 1909.
Having visited many orchards and nurseries in most all the eastern and middle western states, I am convinced that there is no nursery stock on the market more thoroughly bred up or more entitled to be called pedigreed stock than is that grown by the Missing Link Apple Co., Clayton, Ill. I am planting from it and can heartily recommend it to others.
[Signded]
C. H. Williamson

Ex-President National Apple Packers` Association.
Fall Creek, Ill., July 24, 1909.
This is to certify that 1 am personally acquainted with the members of the Missing Link Apple Co., Clayton, III., and can most cheerfully recommend their trees for commercial planting. I have exhibited fruit side by side with them at many Horticultural Meetings and fairs, and am convinced that their strain of apples are bred up above the average class of nursery stock. I am now planting their trees myself.

> Henry C. Cupp. Esigned] Ex-President Central Illinois Horticultural Society

## Missing Link Apple Company, NURSERYMEN <br> CLAYTON,

This is a verbatim copy of a clipping out of "United States Trade Reports," published in Cincinnati, Ohio, March 9th, 1905, Vol. viii, No. 4, found on page 4.

Mising Link Applef Co.

## The Highest Grade Apple Trees.

The United States Trade Reports has received recently several inquiries from interested parties, who ask this paper to recommend, editorally, some leading firm of nurserymen from whom could be procured the very best apple trees that are known. Realizing the importance of this matter to our inquirers, as also the confidence which they would repose in our recommendation, we instigated a very thorough investigation of all the largest and best known nurserymen firms and concerns in the country. We desire to say, however, this in connection, that no one of these firms or concerns had the slightest intimation of our research, therefore the following report is based upon only the most carefully ascertained facts and gives credit where credit was found to belong. Personally we have no interest in making this recommendation, beyond a desire to furnish all interested readers with positive information upon a subject that is very important to the interest of every man who desires to plant an apple orchard which will yield the finest fruit. Space limit forbids our publishing the details of this investigation, but suffice to say, it was a very exacting one and no point of essential value was overlooked by us in arriving at our decision.

This report is of special importance because this is probably the first time that a trade paper has ever looked up the subject, and our recommendation being entirely unprejudiced, unpurchased or uninfluenced in any manner, can be relied upon.

We find as a result of our investigation, that The Missing Link Apple Company, of Clayton, Ill., is the proper concern for our inquirers to place their orders with. Of all the nursery stock of apple trees that are known, we must admit that the trees grown by The Missing Link Apple Company are the BEST. This stock of trees, we might say, without misusing the term is a scientific stock; or, to explain better, the trees are the
result of a series of growths extending back over a period of four generations since the original growth was planted. Each generation of trees has heen a marked improvement over its predecessor, and each generation has been treated to a culling out process which removed all trees of an inferior grade or which betrayed any signs of being sickly or diseased, or which did not bear the best color or properly shaped fruit. True, this culling out process required time, labor and expense, but The Missing Link Apple Company people, while thus spending forty years to develope a stock of PERFECT apple trees, were determined to make their Apple Trees the finest in the world, and we have to admit that such is now the case. We are not over estimating the quality of these trees or the perfect fruit that they bear when we say that no other stock of apple trees can equal these here named.

The present stock, which is the final result of four generations of scientific breeding, rearing and developing, possess uniformity of quality and perfection which assures the planter of three very important facts, viz: 1. The trees will bear early and heavily. 2 . The truit will be uniform in size and of the richest color and possessing a most delicious flavor. 3. The fruit from the trees grown by The Missing Link Apple Company will command the highest prices, and the demand will exceed the supply, unless planter has many acres on which to set out a very large number of the trees. Even then he would find a market always ready to purchase all the fruit he could furnish. These facts have already been too clearly demonstrated by those who have planted The Missing Link Company's trees to admit of any argument against them but now that the stock has been brought to its highest degree of perfection, those planters who secure these trees will be the greatest profit attainers.

There is no other stock of apple trees in the market to-day that has been so long and carefully and scientifically trained or "pedigreed" as has The Missing Link Apple Company's trees, therefore we have not the slightest hesitancy in advising our interested readers to address the Missing Link Apple Company for turther and detailed information regarding this unequaled stock of trees which, so we understand, are sold at most reasonable prices.


A SIX YEAR OLD MISSING LINK TREE,
Height, 17 feet 4 inches; width of Top, 20 feet; circumference at base 211.2 inches.

## MISSING LINK APPLE CO.

NURSERYMEN, CLAYTON, ILLINOIS.

## Nursery Established in 1881. Disseminators of Missing Link Apples.

STATE OF ILLINOIS, $\}$
County of Adams. $\}$ ss. I, Henry Bartlett, a Notary Public, in and for said County and State, do hereby certify that I was present when the above measarements were made, and that they are correct.

HENRY BARTLETT, Notary Public.

## THE MISSING LINK

Is a vigorous grower, exceeding any apple known to horticulturists for rapid growth, symmetrical form, never needing to be pruned while shaping the head. Branches heavily shouldered, making the tree absolutely wind and storm proof. Fruit large, oblong, flattened at ends, red and green when picked; green turning to rich golden yellow as the fruit comes into season for use. Stem long, thus enabling the fruit to sway with the wind, adhering firmly until picking time. Calyx large, basin open, deep furrowed, flesh yellowish marbled, tender and juicy, improving with age and highly aromatic. Season for use, March to September. Keeps twelve months or more in any cellar.

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MISSING LINK NATURAL SIZE
We hold certificate from State Entomologist as to healthy condition of our stock which will accompany each shipment of trees.

We hold United States Trade Mark, No. 76,492 on the words "MISSING LINK," as applied to plants and trees, All rights reserved.

Agents wanted in every locality. None but responsible people need apply.
PRICES:- $\$ 1.00$ each; six trees for $\$ 5.00$; twelve trees, $\$ 9.00$; twenty-five trees, $\$ 17.50$ fifty trees, $\$ 32.50 ; 100$ trees, $\$ 60.00 ; 200$ trees $\$ 100.00 ; 1000$ trees, $\$ 300.00$.

Small trees sent by mail securely packed, post-paid, on receipt of price, to any part of the United States.

Express charges prepaid on orders amounting to $\$ 5.00$ ( net) or over.

## THE MISSING LINK APPLE CO., CLAYTON, ILLINOIS.

Every person authorized to solicit orders to be filled by us will have a certificate of agency signed by the Missing Link Apple Co. No other will be recognized.


## AGENT FOR MISSING LINK APPLECO.

of Clayton, Ill.,...............one-year-old Missing Link apple
trees to be delivered at $\qquad$ . Co

State.
.in the.
$\qquad$
I agree to pay $\$ \ldots .$. cash on day of delivery, and in am nates there to receive said trees, they will be delivered at myth pence. Said apple trees are to be in tirclass condition, or purchaser will be under no obligation td rake than opurchas er will be allowed trees at one-napoprice fore any that may de during two years from date or plantise MSS IN LINK APPLE CO. hereby certify that grantee of five dollars is placed on each tree that it $y^{\prime} \boldsymbol{P}^{\circ}$ oe true to name.

> NO COUNTERMANDS ACCEPTED.


MISSING LINK APPLE CO., NURSERYMEN, CLAYTON, ILLINOIS.
Prices: $\$ 1.00$ each. Six trees, $\$ 5.00$. Twelve trees, $\$ 9.00$,

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(Purchaser's Copy)
TRADE *MMSSHNGLNNK', NO.
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1................... ................................................. Agent for
the Missing link apple co., of Clayton, Ill, have this day
sold to...... . ..................
Township, $\ldots \ldots . . .$.
 Coth De to delivered at 5 in the $\qquad$ State
to pay $\$ . . . . . . . .$. cash on day of delivery and if.................... is not there to receive said trees, they will be delivered at purchaser's expense. Said apple trees are to be in first-class condition, or purchaser will be under no obligation to take them. Purchaser will be allowed trees at one-half price for any that may die during two years from date of planting. The MiSSING LINK ARPLKCO.. hereby certify that a guarantee of five dollars is placed on each tree that it will be true to name.

NO COUNTERMANDS ACCEPTED.

MISSING LINE APPLE CO., NURSERYMEN, CLAYTON, ILLINOIS.
Prices: $\$ 1.00$ each. Six trees, $\$ 5.00$. Twelve trees, $\$ 9.00$

I,
of Section No Township
Oounty
State
Have this day bought of
Agent for

## The Missing Link Appie Co., of Clayton, Illinois,

The following bill of trees, to wit:


## Total amount, $\S$

To be delivered at
County of............................... State of.
in the spring of........... fall of...........for which I agree
to pay.................................................. .. Dollars and cents in cash on day of delivery.
And if I am not there to receive said trees on day of delivery, they will be delivered at my expense. Said trees are to be in first-class condition or purchaser will be under no obligation to take them. Purchaser will be allowed trees at one-half price for any that may die during two years from date of planting. We will replace free or refund the amount paid us for any stock not true to name, but are not liable for other damages. NO COUNTERMANDS AOCE PTED.
Dated
190.

Signed
P. O. ........... ........ .. ..... .... Co

State................................. Location.

## MISSING LINK AS A POLLENIZER

The practical orchardists are always on the lookout for ways of making the orchard more profitable. There are many ways of doing this, but one of the most essential things, is the question of cross-pollenation. We only need to look at the wonderful results obtained by Luther Burbank and other experiment stations in order to see what can be accomplished through cross-pollenation. This question is being strongly advocated by all Horticultural organizations. Experience is proving the importance of understanding more thoroughly this question.

While no one can give the minute details of how this work is done, yet suffice it to say, the pollen from one bloom to another is carried by the wind or insects, thus we need not expect the pollen to be carried any great distance in sufficient quantities to fecundate the weaker pollenizers.

We have been growing commercial orchards for over forty years and have given this question much study and attention, and experience has taught us that but few varieties of apples are good pollenizers within themselves; in this class the Missing Link has proven the BEST. Next to it would be the Grimes Golden, Yellow Transparent, Whitney, Golden Sweet, \&c. These varieties are not only good pollenizers, but are practicaily immune to fungi. The class most susceptible to fungi and a poor pollenizer is headed by the Ben Davis, next come the Wine Sap, Gano, Red June, \&c. Our experience gained while growing these orchards shows us the importance of intermingling strong pollenizers and fungi-immune varieties through the orchards.

We have an orchard near Clayton that is now twenty-one years old and in it we have on either side Missing Link trees, and it is interesting to note that, not only they bear full crops of apples almost every year, but the influence they have on the Ben Davis and other varieties growing near them. In fact, those trees growing near them often bear a heavy crop of good quality of apples, while at the same time those trees toward the center of the orchard or farther from the Missing Link trees have but few if any apples and they are of poor quality. Especially was this true in the years 1898, 1903 and 1908. Not only were the Ben Davis and other varieties near the Missing Link laden with choice fruit, but their foliage was practically free from fungus disease, this is certainly due to the power of the Missing Link as a disease resister.

So important a factor do we consider the Missing Link for every orchard, as a strong pollenizer and foliage disease resister, that for the present we have decided to put in ten per cent of this variety in every order of one hundred or more apple trees of our pedigreed general assortment, at the price of the latter. However, we would advise planting every third or fourth row Missing Link. All vacancies in the orchard should be filled with Missing Link apple trees, also all worthless trees should be removed and replanted with this variety.

Missing Link Apple Co.,
Nurserymen, Clayton, Illinois.
We, the undersigned, were present at the meeting of the Mississippi Valley Apple Growers' Association held in the orchard of the Missing Link Apple Co., September 10th, 1908, and after a careful investigation, we are led to say that the influence of the Missing Link over other varieties near it as a pollenizer and a foliage disease resister is marvelous. We observed those trees of different varieties, especially the Ben Davis, growing near the Missing Link, were loaded with a crop of fine apples and the foliage was strong and healthy, while those trees farther away from the Missing Link had a light crop of apples of only a fair quality and the foliage was weak. The farther the trees from the Missing Link, the poorer the crop and foliage, therefore, we can heartily recommend the Missing Link tó every orhcardist to be used as a pollenizer and a foliage disease resister. We will cheerfully answer any inquiries regarding the above.

> John R. Wallace, Ciayton, Ill.
> M. A. Root, Versailles, Ill.
> Capt. Jas. HaNDLY, Quincy, Ill,
> Sec. M. V. A. G. Ass'n.
> Jas. AND J. O. BURANK, Bluffs, Ill.
> J. L. ReEDer, Clayton, Ill.
> T. M. Lowery, Golden, Ill.

## FA'THER



DANIEL SHANK
Founder of the Nursery in 1881.


GEORGE A. SHANK
Office Manager


JOHN M. SHANK
Field Manager.

J. HENRY SHANK

Foreman.

These are people who are giving the world the famous Missing Link Apple, the apple that keeps ONE YEAR in any ordinary cellar. Since it keeps in prime condition until the new crop comes in, by one planting some of the trees means, they can have apples "Every Day in the Year." Keeping quality is not the only superior of merit of the Missing Link-See other side regarding its quality as a cross pollenizer.

