

1. Amsden plum on Brompton with Mandel Nicolier-intershield
2. Kostliche aus Charneu pear on quince with Pastoren pear Nicolier-intershield
3. Clapps Liebling pear on quince with Pastoren pear Nicolier-intershield
4. Williams Christbirne pear on quince with Neue Poiteau pear Nicolier-intershield
5. Schoner aus Boskoop apple on Malling II with Malling IX Nicolier-intershield

May I express to Mr. Nicolin my deepest personal appreciation for his generosity in sending us this outstanding exhibit. May I also translate the concluding paragraph from his accompanying letter, "I wish this package to reach you in good time, a good outcome of your day and may this exhibit "rise high" as a friendly greeting of one of the German nurserymen. With friendly greetings. Peter Nicolin."

Chairman Fillmore read a translation of the paper of Peter Nicolin which described the budding technique. (Applause)

Nicolieren, a New Method of Grafting*

P. NICOLIN

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When my good old bearded teacher taught me grafting in the year 1911, I tried my luck with a twenty-year old apple tree.

I was not satisfied, however, with just a single kind, so six different ones were grafted: Teasgoods, Borsdorfer, Cellini, Gravenstein, Sternrenette and Goldparmane.

And they really all adhered!

Who could not imagine the joy and the pride of an eleven year old after such a success!

After this event, I have always kept in touch with trees and nurseries; I have tried many things, and now and then have been rewarded with good results.

The year before last I suddenly had a strange thought as I deliberated about the incompatibility of many pears with their quince understocks and what to do about it.

Of course, one can remedy this by introducing a more compatible intermediate. This is an old trick.

But one loses a whole year of culture by so doing. How would it be if one could reduce the intermediate to a single slice and, together with the incompatible piece, place them into the budding opening? I grafted twenty quinces with Clapps "darling" (Liebling) and Williams Christ-

*English translation of original article from *Deutsche Baumschue* Vol 5, No 7 for July, 1953. By permission Herr Gerd Krussman, Editor.

birne pears and placed in between a thin slice of Gellert's "butterpear" (Butterbirne) and Pleiner Mostpear under the eyes.

All twenty graftings adhered normally and made normal yearlings, even though they were grown upon a completely "tree tired" piece of land which had been loaned by the Institute for Plant Diseases in Bonn.

These bud-grafts, which were made in the summer of 1952, did not disappoint me. Among the first 20 trial bud-grafts, I placed on one plant two intermediate slices under the varietal bud and all these adhered naturally, but of course, this was only play on my part.

This spring I have used an intermediate slice while 'whip grafting and I believe this will also be successful.

It would be interesting to know if a bridge of the "Wagenstadt Schnapsplum" would do away with the incompatibility between the "Lutzelsachser Early Plum" and Brompton. Science might begin with tests to find out about it.

We know for example that Cox on Malling IX produces highly colored fruit; on Malling II, the fruit is striped, and upon Malling XI, the fruit remains unattractively greenish.

One might also try to find out how the adding of my intershield affects the color and the size of the crop.

I have named my method "Nicolieren" and tried to have it patented.

Now I should like to explain the technique of my method.

One has in readiness two scions, one for the intershield (without leaves and leaf stems) and one for the desired variety.

One cuts a bud from the scion as is done in budding, this bud, however, is not used. Then one cuts from the scion another thin slice from the place where the bud was removed. This makes a budless shield.

Now the Nicolier-intershield has the desired form. The slice should be about 1.5-2mm. thick (1 mm.—approx. 1/25 inch). It is then placed into the T-cut and then the bud of the incompatible sort is also placed into the cut. It is not too difficult to place the cambium layers of the Nicolier-intershield and the varietal bud exactly upon one another.

It is advisable to do this kind of budding as early as possible and only with ripe wood. The placing of the Nicolier-intershield and the varietal bud must be done by hand.

It is advisable to bind tightly.

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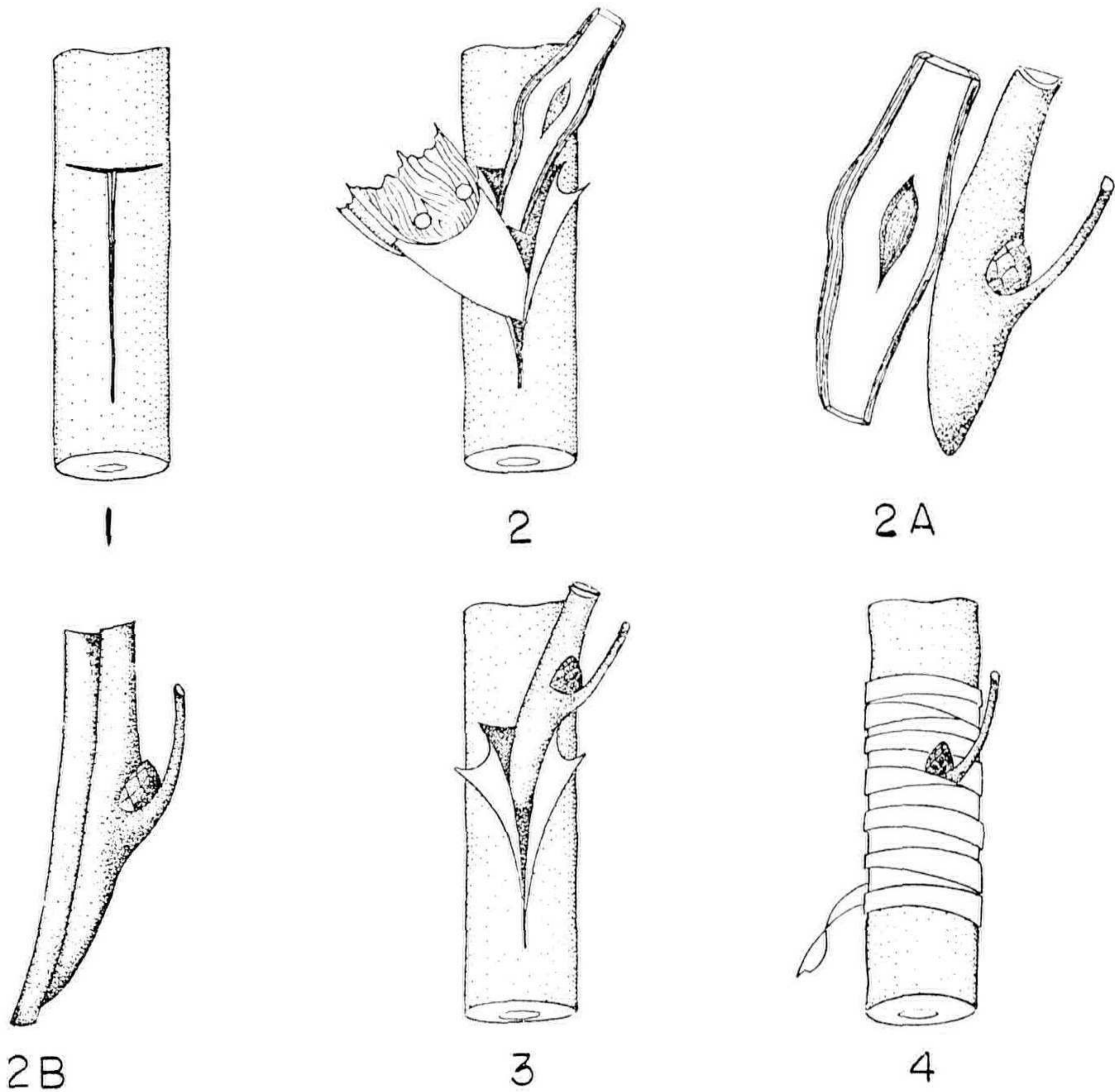
(Editor's Note: A similar budding method has been described by Mr. R. J. Garner, East Malling Research Station, East Malling, England, in the following publications:

Garner, R. J. Double-working pears at budding time. Annual Report, East Malling Research Station for 1952:174-175 ———. Double-working to overcome incompatibility. The Fruit Yearbook 1954:1-5.)

CHAIRMAN FILLMORE: It is realized that it will take five to ten years to adequately test this method of budding. It does seem to be practicable and Mr. Nicolien has shown great ingenuity. I predict that

this method is going to become important both experimentally and practically.

MR. LESLIE HANCOCK (Woodland Nurseries, Cooksville, Ontario): Mr. Chairman, this meeting should send a suitable message, either in the form of a wire or a letter acceptable to the Executive Committee, to Mr. Nicolin expressing the great appreciation of the Plant Propagators Society for the wonderful gesture he has made in freely sending this ma-



NICOLIEREN BUDDING TECHNIQUE

1. T-cut as in shield budding
 2. Nicolier-intershield inserted in T-cut
 3. Varietal bud placed on Nicolier-intershield
 4. Completed Nicolieren bud-graft tightly bound
- 2A and 2B illustrate possibilities for combining Nicolier-intershield and varietal bud before inserting them in the stock.

Adapted from Krüssman by J. P. Mahlstedt

terial and information to us. I move that such a resolution be formed and adopted by this body before the close of the meetings.

The motion was seconded by Mr. Pieter G. Zorg, Fairview Nurseries, Fairview, Pa., and was carried by an unanimous voice vote.

CHAIRMAN FILLMORE: The first discussion on cuttings is by Mr. John Bos of Clyde, Ohio. I was very much interested in the outline of the paper which Mr. Bos showed me, because he places a real emphasis on the management of the stock block. He believes in stock blocks, he believes in managing them, and he evidently believes that if we would culture the plants as carefully for the production of cutting wood as we culture them for sale, a good many of our propagation troubles would be overcome at the outset. Mr. Bos will discuss the rooting of cuttings of golden philadelphus.

Mr. Bos presented his paper, entitled "Some Experiences in Rooting *Philadelphus coronarius aureus* Cuttings in Ohio." (Applause)

Some Experiences in Rooting *Philadelphus coronarius aureus* Cuttings in Ohio

JOHN BOS

John Bos Nursery, Clyde, Ohio.

We find that the stock plants are the most important factors. We have a few hundred stock plants, about 18-24" that never seem to get any larger because we keep taking cuttings off them every year. In the early spring during a few warm days, the buds on these plants tend to swell and develop into tiny leaves. Then a cold rain or light frost damages the edges of the leaves. These leaves will later grow out, but make poor cuttings. In fact we lose about one half of them; no matter how carefully the small brown ends are cut off when making the cutting, the loss is still 50%. Last summer we went to a local nursery that had some beautiful plants in the field with a lot of young growth that was free of blemishes or black spot. This man wanted us to root some cuttings for him. We took 700 cuttings, and have now 685 potted up and in the frame.

In order to obtain healthy cuttings, we have wondered if putting the stock plants under lath would help prevent damage to the foliage in the early spring. The very best way would be to plant about 50 stock plants and sit back for 6 or 8 years waiting for them to grow up to about 4 by 4 ft. Once these plants are up to size, trim out all the fine wood in the winter and each plant will produce about 300 healthy, sturdy cuttings. This older wood does not develop as early as do the buds on young plants, and is therefore not so apt to get leaf spot during a cold wet spring. It is our experience that before even making a cutting you are already 50% successful if you have a healthy cutting to start with.

We take the cuttings from the middle to the end of June. They should