



# THE MARCH MEETING

of the

SOUTHERN CALIFORNIA CAMELLIA SOCIETY

will be held on

THURSDAY EVENING, MARCH 14, 1946

in Odd Fellows Temple, 175 North Los Robles Ave., Pasadena, Calif.

**7:30 P.M.—INFORMAL FLOWER SHOW.** Camellia gardens are now a riot of color. This month's exhibit should exceed even last month's—if such a thing is possible. Don't "let George do it." Bring your choice blooms. Have them on the tables by 7:30 p.m., marked with name of variety and exhibitor. The lucky exhibitor will take home Camellia "MATOSI."

**8:00 P.M. (Precisely)—BUSINESS!** Action on amendments to constitution and by-laws (see page 2 for the amendments to be acted upon). Report of Nominating Committee, Victor Wagoner, chairman (in cahoots with Jack Hudlow and Paul Scott).

**8:15 P.M.—PLANT NUTRITION.** Camellias give so much and ask so little—but they **do** have to be fed. Feeding time is approaching. What to feed them? When? How?

**Dr. David Appleman**, Associate Professor of Plant Nutrition, University of California at Los Angeles, will speak on this important topic. Bring your note book! See page 2 for further details.

**9:00 P.M.—PRIZES.** To save time, tickets will be sold **only** at the door. Members door prize is Camellia "Pink Ball." Publications fund, Camellia, "Paul William Jannoch 3rd." These, and the exhibitor's prize, are donated by the Jannoch Nurseries, 2295 Windsor Ave., Altadena. The prize for the test garden fund—hold on to your seats, folks—will be a new variety. Application for its registration is now pending. A. A. Dontanville, 2775 Lincoln Ave., Altadena, associated with Jannoch Nurseries, has donated his own personal "new one," "LADY OF LOURDES." **Remember**—tickets at door, on your way in.

**9:15 P.M.—TRANSPLANTING OF CAMELLIAS.** Have you a plant you wish were in another spot in your garden? Here is your chance to find out when and how to transplant. Leslie Marshall will give a ten-minute talk, backed by worlds of experience. Mark Anthony will follow with a few remarks, also based upon wide experience. Questions and general discussion.

**9:30—or thereabouts—TAPS.**

**DON'T FORGET . . . WEAR YOUR LAPEL TAG!**

# Roster of Officers

## *Southern California Camellia Society*

### President:

DR. DAVID W. McLEAN  
2508 South Santa Anita Avenue, Arcadia  
ATwater 7-2703

### Vice President:

DR. LLOYD J. TAYLOR  
810 Highland Drive, Flintridge  
SYlvan 0-2088

### Secretary:

THOR PETERSEN  
1670 Las Flores Avenue, San Marino  
SYcamore 9-3748

### Treasurer:

ROBERT A. WARD  
4947 Hartwick, Eagle Rock  
ALbany 5721

### Directors:

ROY M. BAUER — ATLantic 1-2183  
MRS. CARLO GALLI — SYcamore 9-2108  
J. HOWARD ASPER — SYlvan 0-1938

### Committee Chairmen:

Membership—  
C. E. PEAK — STate 4-0426  
Program—  
ETHEL CAMPBELL — SYcamore 9-5256  
Prizes—  
MRS. VERN O. McCASKILL — SYcamore 3-4677  
Reception—  
JOHN A. HUDLOW — SYcamore 9-3504  
Exhibit—  
MRS. FLORENCE DOUGLASS — CHarleston 6-14  
Nomenclature Research—  
MRS. CARLO E. GALLI — SYcamore 9-2108  
314 Arroyo Drive, South Pasadena  
Horticultural Research—  
ROBERT CASAMAJOR — SYcamore 2-7641  
Camellia Book Distribution—  
E. C. TOURJE — SYlvan 0-1630  
Librarian—  
MRS. ROY M. BAUER — ATLantic 1-2183  
2035 Sherwood Road, San Marino

### HONORARY MEMBERS

William Hertrick, Huntington Botanical Gardens  
Dr. H. Harold Hume, University of Florida

### MARCH MEETING—(Continued)

DR. APPLEMAN will discuss, among other things:

- 1—The correct (or incorrect) use of aluminum sulfate, iron sulfate, epsom salts, sulfur, gypsum, etc.
- 2—The value of redwood fibre, redwood shavings, tan bark.
- 3—Soil testing kits and correct methods for testing soils.
- 4—Drainage in heavy soil.
- 5—Are there special growth activators in barnyard manure? Are these growth activators found in other organic fertilizers?

**AMENDMENTS**—By order of the Board of Directors, the following amendments will be submitted to the membership for action:

1—**Constitution, Article 4, Officers:** Amend to read as follows (**bold face** denotes words added): "The officers of this society shall be a President, a Vice-President, a Secretary, a Treasurer, **an Editor and Business Manager of the Official Bulletin**, and five Directors, of whom one shall be a professional grower. These officers shall be elected annually. The Board of Directors shall from time to time survey the membership and establish zones from which directors shall be chosen in order to maintain equitable representation of the membership. No professional grower shall be eligible for the office of president of this society."

Amend Article 8 as follows: Strike out the words "one dollar per year" so the article will read: "The dues of this society shall be payable in advance on January 1 of each year..."

2—**Administrative By-laws, Article 1, Paragraph 1:** "The Treasurer shall collect all dues and have charge of all funds of the society; he shall keep an accurate record of all receipts and disbursements; he shall pay out moneys **subject to the approval of the Board of Directors**, and shall prepare an annual budget for submission to the Board of Directors."

**ADD A NEW PARAGRAPH 5:** "The Editor of the Official Bulletin shall have full charge of the editorial policy and procedures relating to the official bulletin of the society, subject to the approval of the Board of Directors. He shall be an ex-officio member of all committees."

**ADD A NEW PARAGRAPH 6:** "The Business Manager of the Official Bulletin shall have charge of all business matters relating to the publication of the official bulletin of the society, subject to approval of the Board of Directors. All moneys received from the activities of the official bulletin shall be paid into the general fund of the society, and the Treasurer shall set up a special bookkeeping account for the Bulletin."

**AMEND ARTICLE 2 AS FOLLOWS:** "... Board (of Directors) shall adopt an annual budget for the activities of the society, and the payment of all bills shall be subject to the approval of the Board; it shall pass upon applications for membership and shall elect Honorary Members at its discretion and shall ratify appointments to all committees of the society."

The Board shall from time to time survey the membership and establish zones from which Directors shall be chosen in order to maintain an equitable representation of the membership in the Board of Directors.

**FEBRUARY WAS A BUSY MONTH.** Camellias were blooming their heads off. So were camellia fans. The joint meeting of this society with the Southern California Horticultural Institute, held in Elks Temple, Los Angeles, on February 27 was outstandingly successful. An attendance of 1100 filled all four sides of the room; the center was filled with large tables covered with a splendid display of camellias. Robert Asamajor, president of the Institute, presided in his usual genial manner. Your own president explained the activities and objectives of this society, purposely refrained from giving any information as to the time and place of the February meeting, knowing full well that the meeting place could not begin to accommodate such a crowd. A wise precaution, as you will realize when reading the account of our own meeting.

Howard Asper, superintendent of Rancho Descanso, talked to the joint meeting on camellia culture and gave a list of 20 varieties he considers especially desirable. They were: Debutante, Kumasaka, Francine, Enrico Bettoni, Madame Hovey, Te Deum, Pope Pius IX, El Firey, Prof. Sargent, Julia Drayton, Alba Regia, Lotus, Caprice, Mathotiana Alba, Pax, Kagura, Emperor Wilhelm, Laurel Leaf, Berme and Candida Elegantissima.

Our own February meeting fulfilled this prophecy's prediction — caused the Odd Fellows Temple to bulge at the seams. Its capacity of 65 chairs left 150 persons standing in the back of the room throughout the meeting. Ten large tables were covered with specimen blossoms by 25 amateur exhibitors plus the professional ones. Mrs. Lloyd J. Taylor had secured the town, obtained black velveteen enough to cover all ten tables (34 yards!). With the aid of indefatigable Secretary Peter, the cloth was cut and prepared. The exhibitors got it to the tables at 6:20 p.m., just in time for the first exhibitor!

The vice-president, Dr. Lloyd John Taylor, made a poised and gracious presiding officer in the president's absence. Program Chairman of Excellence Ethel Campbell introduced the speaker of the evening, Bill Woodruff, whose interesting and valuable talk was taken down in shorthand and will appear, in digest, in next month's Bulletin.

In addition to our usual camellia prizes, three redwood tubs suitable for camellias were donated by George Widmenn of San Gabriel.

The prizes at the February meeting brought \$8.50 into the treasury. Half of this went to the publications fund, while half completed payment for the public address system, set up reserve of \$25 for its maintenance, and started the new test garden fund with a balance of \$4.25. Nice going!

The February meeting was the largest in our history. A year ago, the February meeting, high spot of the year, saw over 50 persons standing around the back of the room in the Pasadena Public Library; sharply pointed the necessity for a larger meeting place. This year's top meeting, with 150 standing (many of them faithful old-timers on our membership roster, while a very large number of casual visitors enjoyed seats), together with a traffic jam around the exhibit tables which would have fazed both traffic officers and stop-and-go signals, have pointed up a major problem for our Board to solve.

**THE BOARD OF DIRECTORS** met on February 27 at the home of Secretary Thor Petersen. After inspecting Thor's immaculate and very beautiful garden and colonial lath house, and bowing low before Thor's "High Hat," the Board settled down to a heavy agenda.

**The Treasurer** reported in the general fund, \$407.07; publications fund, \$556.07; public address fund reserve, \$25; test garden fund, \$24.25; total, \$1022.43. We are still solvent!

**The Secretary** read communications from various parts of the United States relative to out-of-state memberships, subscriptions to our Bulletin, applications for registration of new varieties.

The following applicants were voted to membership:

Paul Seidl, Los Angeles; Elam Sprunger, No. Hollywood; Mr. and Mrs. Harold Young, Bell, Calif.; Mrs. F. W. Andrews, So. Pasadena; Victoria Reynolds, Covina; Mrs. Frazee Burke, Los Angeles; Mr. and Mrs. Don M. Fowler, Wilmar; Ethel Keary, Glendale; M. P. Brandrup, Wilmar; Mrs. W. L. Rifenberick, Glendale; Mr. and Mrs. L. H. Robinson, Covina; Lester F. Harrell, Pasadena; Mr. and Mrs. Peter Morat, Downey; Mrs. John R. Lodge, Pasadena; Mrs. Edythe Dial, Pasadena; Miss Marjorie Cooke, Pasadena; Earl W. Mallory, Temple City; Mr. and Mrs. Frank E. Ford, So. Pasadena; Mr. and Mrs. James A. Perry, East San Gabriel; Mrs. LeRoy E. Knowles, Los Angeles; Edmund E. Taylor, Kaweah, Calif.; Mr. and Mrs. G. Wyman Hope, Pasadena; Mr. and Mrs. Harry D. Machin, Pasadena.

**Reinstated:** John R. Lodge, Pasadena; Col. C. M. Gale, Pasadena; LeRoy E. Knowles, Los Angeles; Fred Willard.

**San Diego:** Mr. and Mrs. C. R. Clerk, Alpine; Mr. and Mrs. Elmer C. Hall, San Diego; Mrs. Dorothy K. Hanigan, Ramona; Mr. and Mrs. Harper A. Kelly, San Diego; Mr. and Mrs. M. A. Parrish, Chula Vista; Mr. and Mrs. F. H. Tylor, Lamesa; Dr. and Mrs. Reuban Tellem, Ramona; Mr. and Mrs. C. W. Brown, San Diego; Mr. and Mrs. H. G. Ploger, La Jolla; Mr. and Mrs. A. L. St. Clair, San Diego; Mrs. George Wills and Miss Frances Wills, Lemon Grove.

This brings our membership to a total of 432.

**The Registration Committee** reported favorably on applications for the registration of

new varieties "High Hat" and "General George Patton." The Board of Directors voted that these varieties be registered and their descriptions published in the Bulletin. They will be found elsewhere in this issue.

**The Nominating Committee** suggested to the Board that two new officers be established in the society: an editor of the Bulletin and a business manager of the Bulletin. The Board so voted and the necessary amendments will be submitted at the March meeting. The Nominating Committee also suggested that two additional directors be so selected that the Board may become more truly representative of our principal areas of membership. Such a plan is being prepared.

A member of the Horticultural Research Committee sent a communication urging that the secretary be given a substantial honorarium, pointing out that a great deal of clerical work fell to his lot. This member pointed out that we have emerged from the period of the "small Thursday night prayer meeting" into much larger activities, and that we cannot "straddle, with one foot in the Thursday night prayer meeting and one foot in a larger sphere; we must either remain in the one or advance into the other."

Following upon the heels of that crowded February meeting, this suggestion gave much food for thought. A special committee of the Board is studying the problem, for which we hope to find the solution before the end of the current season.

Dr. McLean reported, as a director of the American Camellia Society, that a meeting of that society's Board of Directors had been held in Savannah, Georgia, on February 9, and that routine business had been transacted. Dr. Hume was appointed chairman of a committee on nomenclature and registration. Dr. McLean, asked to nominate someone from this area to serve on that committee, had nominated Mrs. Carlo E. Galli, who is chairman of the same committee in our Southern California Society and thus able to establish an important liaison with the work of the national society. Our Board of Directors approved the nomination.

Asked also to nominate someone from this area to write an article on "Camellia Culture in Southern California," Dr. McLean had nominated the Horticultural Research Committee of our society. Our Board of Directors approved the nomination.

The American Camellia Society has now enrolled 700 members and has \$7,000 in the treasury.

On February 23, the Board of Directors and those who had contributed as individuals to the California Test Garden, of which this society is joint sponsor with the Huntington Botanical Gardens in San Marino, made a trip through the "Camellia Canyon," "personally conducted" by Curator William Hertrich. Those who had visited the project a year ago were amazed by the amount of work that had been

accomplished in these most difficult times. Many more seedlings have been established in the canyon; a new path and steps have been built and much other planting and grafting have taken place.

Those who had not before seen the test garden were also amazed—at the vastness of the project and the boundless possibilities for making the test garden a mecca for camellia lovers throughout the world. Hats off to the indomitable and indefatigable curator of the gardens, to Anne Galli, whose brain child the test garden is, to the committee who have walked the floor with it, and to all faithful buyers of test garden prize tickets. Even those buyers can't all win, they still cannot lose!

**REPORT FROM OUR SAN DIEGO COMMITTEE**—First, congratulations on the February Bulletin. It was splendid!

Our San Diego group surely had a delightful experience last Sunday, the 10th, in visiting Mr. and Mrs. L. H. Boyle's camellia garden in Del Mar. The lath houses and grounds were surely sparkling, and I was told, confidentially of course, that Mr. Boyle was out early Sunday morning shining and polishing each individual leaf! Although his plants were just past the peak performance, no one was disappointed. I can assure you; in fact, the 75 to 80 guests were all very enthusiastic over his fine array of blossoms.

His working displays of rooting cuttings with specimens showing each stage of root development, from the cutting to the potted stage, and his vivid samples of the various steps in grafting, were very well presented.

No little part of the enjoyment were the tea and refreshments served by Mrs. Boyle, assisted by Mrs. R. E. Lee. It was so pleasant that "four o'clock" was completely ignored.

Clarisse M. Carlton, Secretary

**MORE RETURNS FROM RECENT BALLOT**  
20 choicest camellias:

Number	Variety	Votes
42	Lady Hume's Blush.....	10
43	Donkleri (Middleton No. 15 (3); Southern (4); English (1); Tea Garden (1) ).....	9
44	Gaiety .....	8
45	Ella Drayton.....	7
46	Anita .....	6
47	Alexander Nowlin.....	5
48	Rose Queen.....	4
49	Nobilissima .....	3
50	Pink Shell .....	2
51	Ville de Nantes.....	1
52	Otome (Pink).....	1
53	Aurora Borealis.....	1
54	Monarch .....	1
55	Barrone de Bleichroeder.....	1
56	K. Sawada.....	1
57	Donkleri (Western, Monjisu var.).....	1
58	Mathotiana Alba .....	1
59	Ecstasy .....	1
60	Fanny Bolis.....	1
61	Enrico Bettoni.....	1
62	Mrs. Chas. Cobb.....	1

In later issues, a few lists by experts.

## REGISTRATION OF NEW VARIETIES

**CAMELLIA HIGH HAT**, registered by Coolidge Rare Plant Gardens, is a Sport of Daikagura, and was first bloomed November 15, 1938. It blooms from October through March. The plant grows, with average rapidity, to compact form. The leaf is heavy, elliptic in form, with acuminate tip, margin deeply and irregularly serrate; vening, pinnate; length, 9 to 11 cm.; width, 4 to 5 cm.; color of top of leaf, holly green, with some variegation; under surface, boxwood green. Length of petiole, 1 cm. Buds, round.

The blossoms are of peony form, of softest pink, feathered in white; size, 11-12 cm.; has 20 petals and many petaloids.

**CAMELLIA GENERAL GEORGE PATTON**, registered by Coolidge Rare Plant Gardens, is a seedling, one of whose parents is C. Purity, the other unknown. It was first bloomed January 1, 1939, and its blooming period is December-March.

The plant grows rapidly, is of open form, bushier than Purity.

The leaf is heavy, elliptic, has slightly serrated margin, with pinnate veining; length, 10 cm.; width, 5-6 cm.; color, top, dark holly green; under surface, boxwood green. Length of petiole, 6 cm. The buds are round.

The blossoms are of rose form, neyron rose color (623/1, horticultural color chart); they are 9-11 cm. in size, and have 46 petals.

**HISTORICAL**—The organization meeting of the Southern California Camellia Society, called together by Mr. R. C. Long, was held on January 8, 1940. It was a dinner meeting, attended by 32 persons. Temporary officers elected were: chairman, Harry Davis; vice-chairman, John Lodge; secretary, Mark Anthony; treasurer, E. H. Carter.

Paul Shepp, Clarence Hearn and Mrs. Carlo E. Galli were appointed to draw up a constitution and by-laws. Mr. Long was appointed membership chairman, with Messrs. Bordier, Dreifus and George Hill as local members and Messrs. Schmekel, Swim and Burkhard as Ontario members.

The matter of dues was discussed, suggestions being \$1.00, \$2.00 and higher dues for commercial than for amateur members. Voted that \$1.00 be donated by any who might wish, to be later credited toward dues.

Messrs. Shepp and Bordier suggested that a camellia show be held. (Perennial suggestion, but as yet no formal show has materialized. What about next year?)

Miss Opal Scarborough told of the winter flower show to be held February 6, 7, 8, 9, and suggested that a member of the society appear on the Aggeler & Musser radio program Sunday over KECA. Mr. John Lodge was selected to speak, "and did a very fine job of it."

The society was given its present name. Voted to hold the next meeting at the Pasadena Public Library two weeks later.

"The meeting closed with everyone in good humor."





# The Staggered Lath Roof

Much interest has been shown hereabouts, during the last two or three years, in what might be termed the **staggered lath roof**. Formerly it had been customary to use  $1\frac{3}{8}$ " laths, spaced one lath apart, the laths in one plane, nailed to the top of a strip of  $1" \times 4"$  wood. The newer design staggers the laths above and below the  $1" \times 4"$  strip.

The staggered roof is said to have been used in the East for many years. At any rate, it seems to have been introduced here by Dr. G. A. L. Melquist, formerly Assistant Professor of Floriculture at the University of California at Los Angeles. Dr. Melquist recommended the use of  $1\frac{3}{8}$ " laths spaced horizontally about one inch apart (five to one foot), but attached **alternately above and below** a  $1" \times 4"$  strip. This places the laths in two planes, with  $\frac{3}{4}"$  vertical separation between them. The object is to reduce the penetration of the vertical rays of the sun at noon and to permit increasingly more sunlight to penetrate through the wider diagonal spaces between upper and lower laths when the rays also are diagonal during the morning and afternoon.

Having some lath roof to build, this pseudo-scientific scribbler embarked upon an analysis of the staggered lath roof to see what happens, whether vertical separation of the strips is desirable and, if so, how much vertical separation to use.

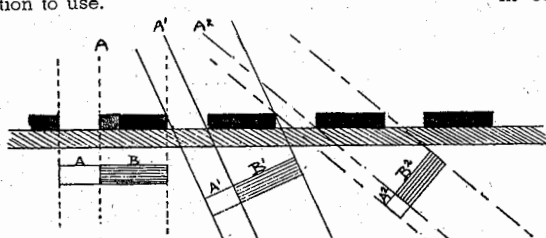


FIGURE 1

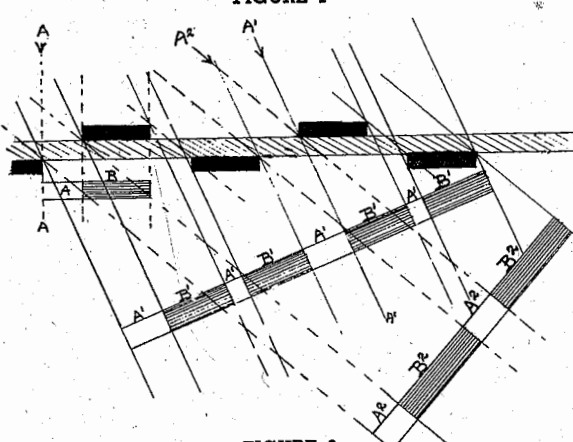


FIGURE 2

Drawings were made to scale, using lath  $\frac{3}{8}"$  thick,  $1\frac{3}{8}"$  wide, spaced horizontally,  $1\frac{1}{2}"$  apart. In one drawing (Figure 1), the lath strips were all placed in one plane; in Figure 2,  $\frac{3}{4}"$  of vertical separation was introduced; in Figure 3,  $1"$  of vertical separation; in Figure 4,  $1\frac{1}{2}"$ .

Vertical lines drawn between the lath strips indicate the noontime vertical rays of the sun. True, the types having vertical separation between alternate laths might admit more light that would have to be measured with a luximeter. The amount of **actual vertical sunshine and shadow** would be indicated by the luximeter and would be the same in all four types of roof. The ratio of sun to shadow at noon is 37.5% sun to 62.5% shadow.

In all four drawings we then passed diagonal lines between the lath strips at an arbitrary angle which we assume to be that of the sun at midmorning and midafternoon; these are the solid diagonal lines in all four drawings marked  $A^1$ ; the areas of vertical sunshine are marked  $A$ , while the areas of shadow are marked  $B$ . In all four drawings will be found broken lines passing between the laths at a lower angle, arbitrarily representing the sun rays of early morning and late afternoon. These lines are marked  $A^2$ ; the areas of sunshine are marked  $A^2$  and the areas of shadow are marked  $B^2$ .

In considering the old-fashioned lath roof having the laths all in one plane (Figure 1), all of the strips of lath are equal; all of the strips of shadow are equal; the computations are simple. The early morning ratio is 20% sun to 80% shadow; the midmorning ratio is 31.8% sun to 68.2% shadow. The noon ratio is 37.5% sun to 62.5% shadow. The midafternoon ratio in the diagrammatic calculations will be the same as the midmorning ratio and the late afternoon ratio will be the same as that of early morning.

Turning now to a staggered type of construction having  $\frac{3}{4}"$  of vertical separation (Figure 2) we find the slanting sun rays passing through the diagonal space between laths and causing a broad strip of sun; the next diagonal space, however, faces away from the sun and only a narrow strip of sunshine penetrates; the strips of sun and shadow are equal. The early morning (and later afternoon) ratio is 28% sun to 72% shadow; at midmorning and midafternoon the ratio is 30% sun to 70% shadow; at noon, 37.5% sun to 62.5% shadow.

In the staggered lath type, having one inch of vertical separation (Figure 3), still more interesting things happen. At midmorning and midafternoon we find every band of sun to be extremely narrow while, again, the shadow bands are equal. In early morning and late afternoon, the shadows of two loths join to create a broad band of shadow; thus there are only two bands of sun between two of shadow in a drawing which shows four horizontal spaces and four loths. The ratios are more interesting. Early morning and late afternoon, 40% sun to 60% shadow; midmorning and midafternoon, 31% sun to 69% shadow.

In the staggered lath roof having 1 1/2" vertical separation (Figure 4), we have, in the early morning and late afternoon, more sun than shadow, the ratio being 45.2% sun to 54.8% shadow. At midmorning and midafternoon, the combined shadow of two loths creates a band of shadow twice as wide as that of sun, the ratio being 33.3% sun to 66.6% shadow.

Figure 5 shows these percentages graphically. Analyzing it is interesting to note that:  
 1. Noon, the ratio of actual sun to actual shadow remains constant in all four types of roof.  
 2. Midmorning and midafternoon the variation between the percentages of sun in roofs Nos. 1, 2, 3 and 4 is only 3.3%.

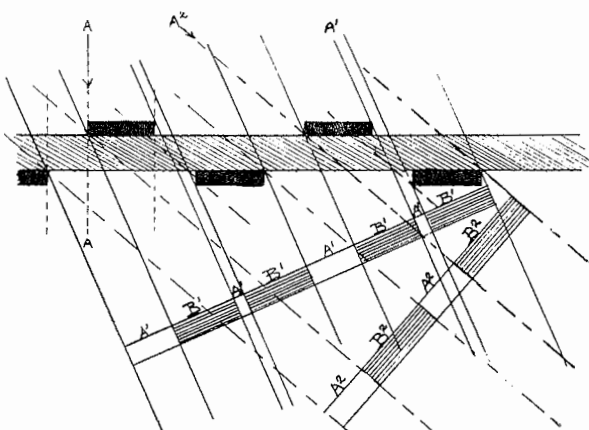


FIGURE 3

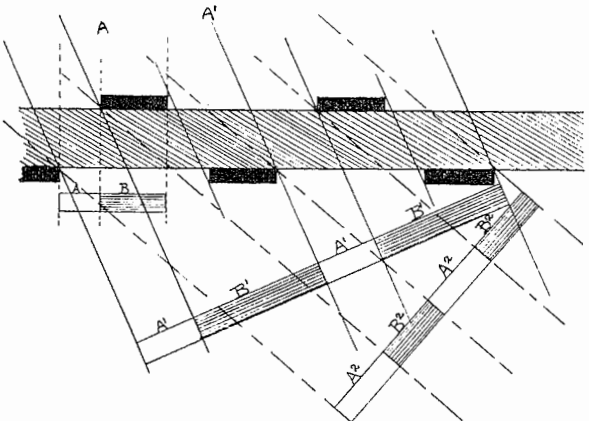


FIGURE 4

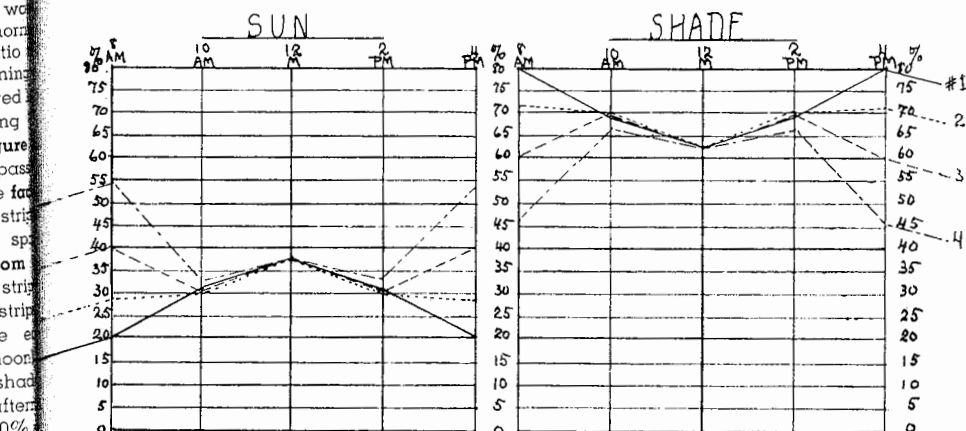


FIGURE 5

prisingly, the staggered lath types having small vertical separation show at this hour of the day a smaller sun ratio than does the old-fashioned lath roof, and this would recommend those types for inland areas where the sun is especially intense between midmorning and midafternoon. One should be mindful, however, that the broader band of sun (Figures 2, 3 and 4) will take longer to pass over a given leaf than would the narrower sun band of Figure 1. On the other hand, the leaf has a longer period of shadow before and after the sun beam crosses it.

3—**Early morning and late afternoon.** The widest variation in the amount of admitted sun occurs in early morning and late afternoon, when the rays are weakest and when the most sun and light are desirable. Whereas the old-fashioned roof admitted only one-fourth

as much sun as shadow, the  $1\frac{1}{8}$ " vertical separation type admits **more** sun than shadow (121% as much sun as shadow).

4—Aside from the question whether the broader band of sun during the middle of the day actually burn foliage or flowers, the value of the vertical spacing of alternate laths must be determined by metering the **light** that enters through each type. We do not know of the optimum amount of light having been determined for camellias. W. M. James, of Calif., has stated that a light of 100 by Weston meter, at noon, is optimum for camellias. This pseudo-scientifico hopes to meter the light under the staggered roof types shown in Figures 3 and 4 at intervals throughout the year, and report again later. Meanwhile, comment which may throw more light on the subject will be welcomed. We are not trying to prove something, but to learn something.