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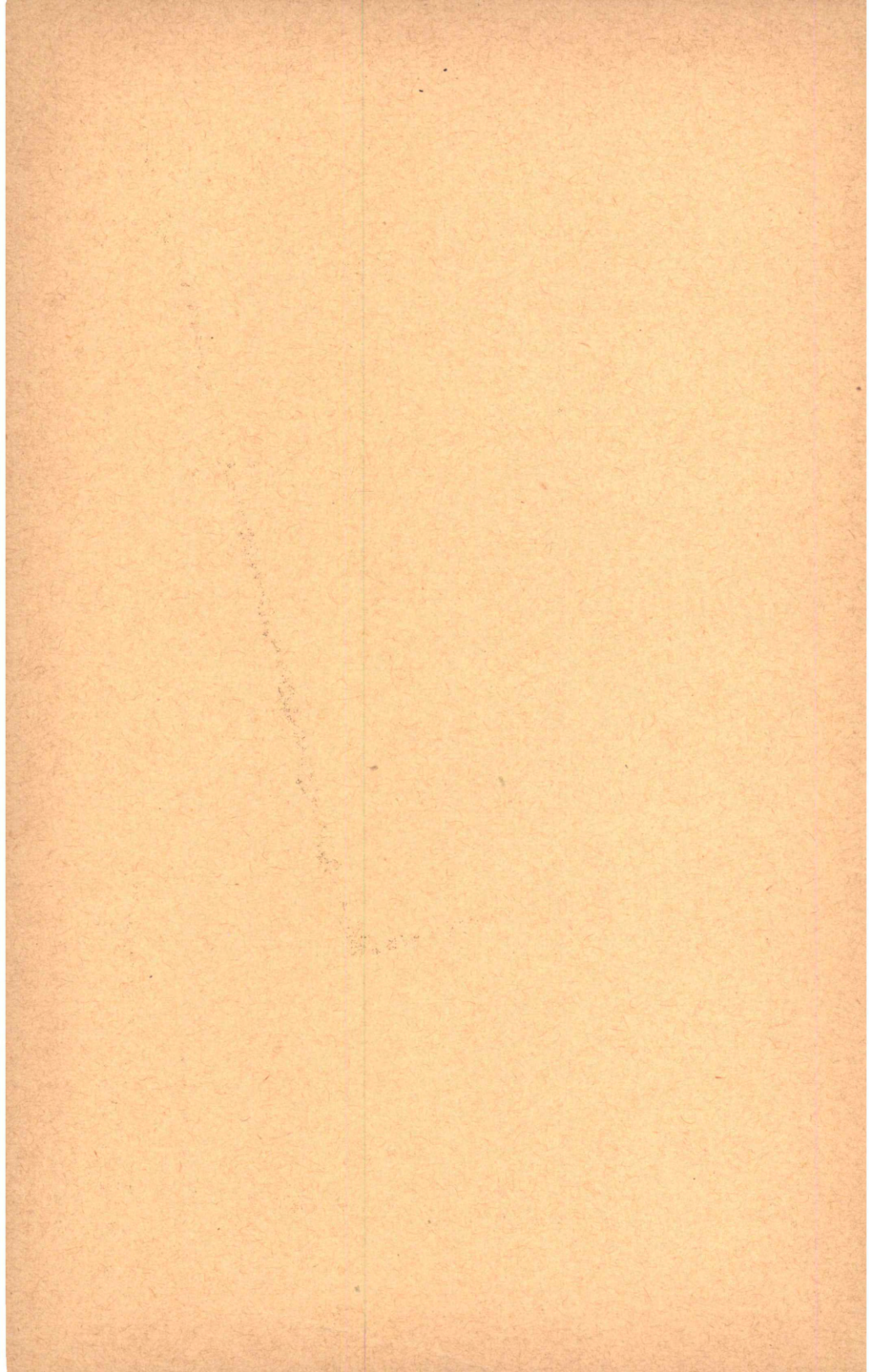
**JOURNAL
OF THE
ROYAL NEW ZEALAND
INSTITUTE
OF
HORTICULTURE**

(Incorporated under the N.Z. Institute of Horticulture Act, 1927)

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*Edited under the authority of the Executive Council of the
Institute.*



Journal of the Royal New Zealand Institute of Horticulture

VOL. 14.

WELLINGTON, APRIL, 1945.

No. 4.

WHITHER HORTICULTURE?

By HON. B. ROBERTS,
Minister of Agriculture and Marketing.



Assembled at Massey College, Palmerston North, over 80 members of the Institute and visitors, heard an inspiring address given by the Hon. Minister of Agriculture, Mr B. Roberts, on the place occupied by horticulture in our national life and the part it would play in the future development of the Dominion. The authority with which the Hon. Minister's remarks were invested originated from his own practical experience of horticulture and the keen interest which he has shown in this aspect of his portfolio during his Ministerial term.

"I extend to you my sincere congratulations on organising Horticultural Week 1945. I know of no period in my lifetime when Horticulture held such promise of reward for those who are engaged in it, or when Horticulture could expand itself into one of the most fundamental industries of our Dominion; in fact, I will go further and say that Horticulture, in all its ramifications, could become, not the Cinderella of our primary industries, but one of the major ones—in money value, in workers employed, in distributing purchasing power, in drawing population to the land, in decentralisation of industry, in resource development, in feeding our own people and perhaps adjacent territories, in promoting health and saving hospital expenses, and last, but certainly not least, in promoting those aesthetic spiritual values of human existence, without which man is a clod instead of the flower of creation.

The greatest event in all our lives, and in the life of the world during this generation, has been the War, to which we are all pledged individually and collectively until Victory crowns our arms.

But the next greatest event in our generation will be the post-war period, and the blue print for that event is the Atlantic Charter. Since the signing of the Atlantic Charter there have been held in the U.S.A. five Conferences whose purpose is to put foundations under this great international conception of freeing the world from want and war.

Next October, in London, will see a British Commonwealth Conference of farmers, pledged to the same magnificent purpose. In the Hot Springs Conference decisions, New Zealand, in general, must play a great part, and in particular, her horticulturists will have an opportunity of expansion which they never had before.

This Dominion, together with the other 44 nations at Hot Springs Conference, is committed to a policy of planned and plentiful production. We are also under a moral obligation to develop our Dominion to the limit of our capacity in the post-war world, and to that end we have set up an Organisation for National Development.

As Minister in charge of Primary Production, I want Horticulture to see the wonderful vision of its possibilities and potentialities, and thus lay a foundation of quality and knowledge which is worthy of the ancient art of gardening.

What are the problems we have to deal with?

1. REHABILITATION:

We are training men to be carpenters, brick-layers, painters and plumbers; but we also need trained horticulturists, and I am glad to know of the increase of students in Horticulture at this College.

Modern psychology teaches us that the greatest medium to mend shattered lives is to bring men and women back to the fundamentals of Nature, to get their minds saturated with the consciousness of life and growth, and away from death and destruction. The healing balm of Horticulture will restore men, when the wheels of machinery would grind their nerves and life away.

Horticulture can play a great part in Rehabilitation.

2. POPULATION:

But this Dominion needs a much larger population.

If we are to avoid large city populations, we must discover a way to get people on the land. Sheep farms and dairy farms can never adequately people the land. Five to ten acres of nursery, vegetables or small fruit and flowers, would settle more people on the land than a 100 acre dairy farm, or a 500 acre sheep farm, and I hardly need say that there is no better place to raise families than on the small garden and fruit farm.

3. NUTRITION:

While war and devastation are taking a terrible toll of human life to-day, a silent but nevertheless sure revolution is taking place in the world in respect of nutrition and better feeding of the people.

In that documentary film "The World of Plenty," Sir John Orr comes to the screen to say:—"It is not enough to **eat more food**—it is the **kind of food** that matters most."

Great Britain has found more national health in milk and garden stuff than meat. If I were a young man starting life over again, I would start a "Vitamin Farm." I would charge my land with living compost and fertility, and sell salads and small fruits, out of which the public would get more iron tonics than out of any medicine bottle.

Horticulture has it in its own hands to cut down Social Security and hospital taxation.

4. ORGANISATION FOR NATIONAL DEVELOPMENT:

I have already said that the blue print for the post-war world is the Atlantic Charter and that five Conferences have been held to put foundations under that Charter. We as signatories to the Charter and the Hot Springs Conference have set up an Organisation for National Development, under which sub-Committees have been formed to cover such horticultural pursuits as the culture of pip and stone fruits, citrus and sub-tropical fruits, vegetables and small farming of all kinds.

As Sir John Orr says, "It is not so much the total quantity of food eaten but the kind of food that is of such vital importance in the health of the nation."

At the Hot Springs Conference the standard daily requirements for good health were tabled, and these standards have been confirmed by our own Department of Health in its booklet "Good Nutrition." Converting the daily standards on to a tonnage basis it is interesting to note the importance of horticultural products. In fact, the requirements of horticultural products exceed those of our main industries—dairy produce, meat, and wheat.

Only 63,000 tons of meat, fish and cheese are required for good health, whereas 56,000 tons of Vitamin C rich fruits, a further 56,000 tons of leafy green and yellow vegetables and an additional 84,000 tons of other vegetables and fruits are required.

Grain products total 157,500 tons, but starch rich tubers, such as potatoes, and mature leguminous seeds, total 147,000 tons.

For a country such as New Zealand, which can produce so many horticultural products, it is astonishing that in the year before the war we imported the following quantities of these products:—

Apricots	369 tons
Currants	661 "
Peaches	168 "
Lemons	374 "
Oranges	10,726 "
Citrus fruit pulp	2,196 "
Walnuts	258 "
Onions	1,276 "

to quote those of the greatest importance and of which we should be able to grow an adequate supply in New Zealand.

5. AFFORESTATION :

So much has been said about this aspect of our national life, that I need only say that the post-war period will demand millions of trees to plant for timber for utility purposes, housing and cases, etc., and we look to Horticulture to supply them.

6. SEED GROWING AND EXPORTS :

But Horticulture is not confined to our internal economy. It can make a major contribution to our sterling funds in the shape of seed exports. We already have an export trade worth half a million pounds in farm seeds. I don't see why we should not extend our seed certification system to flowers and vegetables. Here is another avenue for vision and action by horticulturists.

7. EDUCATION :

With regard to Horticultural Education, I feel that the industry is so important to-day, and in the future life of the Dominion, that my Department and you people should clearly define the purposes of each necessary institution. We must have the highest and soundest scientific knowledge at the top to guide and direct the industry, added to which there should be that **creative vision and practice** which the New International World we want to build is worthy of.

But I want to see other leaders trained. I want to see some leaders come away from text book and office, and carry technical knowledge of growing things into the paddock. We need to use in the post-war world the words "Expansion and Co-operation" more. The scientist should look through a telescope as well as through a microscope. In fact, if this Dominion and the British Commonwealth of Nations are to hold their own, with our Allies like the United States of America and Russia, in the post-war world, we must all look through a telescope and realise "That the world is **one** world." The key to our success in war has been Lend-Lease and organisation. The key to success in Horticulture is to organise for mass production—quality and variety.

8. TIME FACTOR :

And now what about the time factor?

Every section of the community is jostling for a place in the post-war world—manufacturers and industrialists—merchants and distributors.

The drive is for thousands of houses and mass production. Neither the Government nor myself can stay this modern pressure, but it is up to us as rural leaders in Horticulture, to make our voice heard now, and to organise the greatest of all sciences and arts for the use and service of mankind.

I would now declare this Conference open, and in doing so, I

would like to wish you all every success in your deliberations, and to close with these words of an American, Mr. Edwin O. Glover:—

“I believe that the country, which God made, is more beautiful than the city, which man made; that life out-of-doors and in touch with the earth is the natural life of man. I believe that work is work wherever I find it, but that work with nature is more inspiring than work with the most intricate machinery. I believe that the dignity of labour depends not on what we do, but on how we do it: that opportunity comes to a boy on the farm as often as to the boy in the city; that life is larger, and freer, and happier on the farm than in the town; that my success depends not upon my location but upon myself—not upon my dreams but upon what I actually do, not only luck but upon pluck. I believe in working when you work, and playing when you play, and in giving and demanding a square deal in every act of life.”

PERSONAL:—Congratulations were extended by the President at National Horticultural Week, 1945, Palmerston North, to Mr. J. A. McPherson, N.D.H. (N.Z.) on his appointment as Superintendent of Parks and Reserves, Auckland, upon the retirement of Mr. T. S. Aldridge, N.D.H. (N.Z.).

Mr. B. P. Mansfield, N.D.H. (N.Z.) recently resumed his position as Superintendent of Parks and Reserves, Invercargill, upon his recent return from Great Britain where he has been serving with the New Zealand Forestry Corps.

OBITUARY—PROFESSOR T. L. LANCASTER

A severe loss to horticulture was recently sustained in the passing of Professor T. L. Lancaster, M.Sc., F.L.S., of Auckland. A Vice-president of the Institute for many years and a member of the Auckland District Examining Board, Professor Lancaster has made a liberal contribution to horticulture which will be remembered for many years to come. He was known particularly for his vigorous support in favour of the preservation of our native flora, and the work which he achieved in imparting to his students a knowledge of this branch of horticulture was of a very high order. He maintained an excellent Native Plant Table of living specimens, established a wide collection of teaching material and arranged regular field camps for students.

ANNUAL CONFERENCE

REPORT OF PROCEEDINGS AT PALMERSTON NORTH.

MINUTES of the Twenty-second Annual Meeting of the Royal New Zealand Institute of Horticulture (Inc.) held in the Assembly Hall, Massey College, Palmerston North, on Thursday, 1st February, 1945, at 10 a.m.

PRESENT: A roll call of members disclosed that the following members and visitors were in attendance:—

Mr. Hope B. Gibbons (President) in the Chair.

In Attendance: Hon. B. Roberts, Minister of Agriculture, accompanied by Mrs Roberts and Mr A. M. W. Grieg; Mr W. K. Dallas, Director of the Horticulture Division, Mr L. V. Phillips, Dominion Secretary.

Hawke's Bay District: Messrs B. Teague, J. G. C. MacKenzie, C. W. Corner.

Wairarapa District: Messrs. L. Robinson, W. Kenny.

Manawatu District: Messrs. A. W. Buxton, G. H. Hocking, F. J. Melhuish, F. J. E. Jollie, P. Black, A. T. Blakeley, C. M. Mitchell, K. Mitchell, R. T. C. Scott, Professor G. S. Peren, Mrs. K. H. Dowrick.

Wellington District: Mrs. Knox Gilmer, Messrs. Geo. Cooper, G. S. Nicoll, F. A. Jones, R. L. Macalister, E. Hutt, J. G. MacKenzie, H. L. Cummings, C. F. Pilcher, L. F. Sired, T. S. Waugh, J. W. Andrews, A. E. Morgan, R. A. Anderson, Misses E. M. Newton, R. Lewis.

Taranaki District: Messrs. J. C. McDowall, P. Thomson, H. Thomson, R. J. Rouse, J. H. Hooper, V. C. Davies, J. A. Blyth, A. S. Allen, D. Watkins, H. Watkins, E. P. Blanchard, J. H. Pettigrew, Mrs. P. Blyth.

Wanganui District: Messrs. P. Benefield, M. E. Chittick, Mrs. E. Gower, Miss E. H. Robinson.

Hamilton District: Messrs. T. B. Roach, E. Henham, C. J. Buttimore.

Auckland District: Messrs. L. F. Coakley, T. S. Aldridge

Gisborne District: Mr. W. Douglas Cook.

Canterbury District: Messrs. J. W. Clarke, M. J. Barnett, W. J. Humm, J. N. McLeod, T. R. N. Lothian, J. A. McPherson, E. Paterson, A. W. Anderson, C. Gibbons.

Otago District: Mr. and Mrs. D. Tannock, Mr. and Mrs. J. Tait, Messrs. M. R. Skipworth, D. C. Jolly, F. Chittick, E. J. Hutt, C. H. Wallis, K. O. Ramsay, N. M. Morrison.

Southland District: Messrs. A. D. Johnston, W. Stapleton.

Nelson District: Sir Theodore Rigg, Mr. A. White.

OFFICIAL OPENING OF CONFERENCE: The Hon. Ben Roberts, Minister of Agriculture and Marketing, was present for the purpose of officially declaring the Conference open. (For the text of the Hon. Minister's address see page 61).

APOLOGIES: Messrs. E. J. Fawcett (Director-General of Agriculture), G. V. Wild, W. C. Hyde, A. H. Shrubshall, A. R. Entrican, T. Waugh and Dr. J. G. MacDonald

The Secretary was requested to send telegrams conveying the greetings of the Conference to Messrs. T. Horton and T. Waugh, both of whom had been indisposed.

MINUTES OF PREVIOUS CONFERENCE: The Minutes of the 1944 Conference having been circulated, were taken as read, and on the motion of the Chairman duly confirmed.

CHANGE IN NAME OF NATIONAL SHOW: The following notice of motion was submitted by Messrs. W. K. Dallas and W. C. Hyde:—

That the "National Flower Show" should be "National Horticultural Show."

This motion was duly carried.

CHAIRMAN'S ADDRESS: In moving the adoption of the Executive's Report and Statement of Accounts, the President of the Institute, Mr. Hope B. Gibbons, stressed the necessity for the encouragement of and more assistance to Horticultural Societies. Reference was made to the success of the Institute's scheme of training and examinations in horticulture with an expression of thanks from Conference to the Examining Board and to all others who had assisted with the examinations. Appreciation was recorded of the invitation to hold National Horticultural Week, 1945, at Massey College and of the great assistance accorded by Professor Peren and his staff throughout the Week.

EXECUTIVE'S REPORT AND STATEMENT OF ACCOUNTS: On the motion of the Chairman seconded by Mr. P. Black, the Annual Report and Statement of Accounts which had been previously circulated, were taken as read and adopted.

REPORTS ARISING OUT OF 1944 REMITS: The Secretary reported upon the action which had been taken arising out of the remits passed at the 1944 Conference.

RESIGNATION OF SECRETARY—MR. G. S. NICOLL: The Chairman made appreciative reference to the very efficient and valuable services of Mr. G. S. Nicoll, who had recently resigned from the Secretaryship of the Institute. Mr. Nicoll had put his heart and soul into the work of the organisation since he had assumed office in 1932, and the position had been filled with great credit to himself as well as with outstanding benefit to the Institute. He stated that he would be associated with its work in the future by reason of his selection as the representative of the Horticultural Societies on the

Executive Committee, so that the loss would not be as great as it might otherwise have been. As an expression of the high esteem in which members held Mr. Nicoll, the Chairman presented him with a travelling bag, on behalf of the Executive.

ELECTION OF OFFICERS: The following members were appointed to Executive positions for the ensuing year:—

President: Mr. Hope B. Gibbons.

Vice-Presidents: Professor T. L. Lancaster (Auckland), Messrs. J. C. McDowall (Taranaki), C. W. Corner (Hawke's Bay), P. Black (Palmerston North), J. G. MacKenzie (Wellington), A. White (Nelson), M. J. Barnett (Canterbury), G. E. Knowles (South Canterbury), D. Tannock (Otago), Dr. J. G. Macdonald (Southland), and Hon. Secretaries of District Councils.

Executive Committee: Mrs. Knox Gilmer, Messrs. T. Waugh, W. T. Goodwin, W. C. Hyde, E. Hutt, A. McMillan, J. A. McPherson, H. L. Esau and F. S. Pope.

In addition to the elective positions filled as above, the Conference confirmed the appointment of the representatives of the various national organisations forming part of the Executive Committee under its Rules.

VENUE FOR 1946 CONFERENCE: The Secretary reported that two recommendations had been received, the first from the Annual Conference of the Association of Directors of Parks and Reserves, that Timaru should be the site, and the second from the N.Z. Horticultural Trades' Association's Annual Conference that Hastings should be selected.

It was resolved that this matter should be left in the hands of the Executive Committee to make what recommendations it thinks fit to the standing Conference Committee.

REMITTS: Membership:

THAT consideration be given to ways and means of retaining and increasing the membership of the Institute, including more publicity for the concession in the registered rules that the yearly subscription includes both a member and his wife, provided that they both wish to become members.

THAT all Horticultural Societies, Beautifying Societies and kindred organisations be urged to affiliate with the Institute.

These two remits were moved by Mr. Nicoll seconded by Mr. Barnett, and carried.

It was a recommendation that the affiliation of kindred organisations should be implemented as far as possible through the agency of District Councils.

It was pointed out, however, that membership in itself was not a matter of great moment to the Institute, which was differently

constituted to other organisations which were representative of trade interests and required a complete membership.

Editorial:

THAT this Conference records its appreciation and directs that a hearty vote of thanks be conveyed to Dr. H. H. Allan for his able Honorary Editorship of the Journal from December, 1938 until July, 1944.

This remit was moved by Mr. W. K. Dallas, seconded by Sir Theodore Rigg and carried.

THAT it be a recommendation to the incoming Executive Council that an Editorial Sub-Committee be set up.

Mr. W. K. Dallas, in moving this remit, expressed the opinion that a Journal of high quality would do more to establish the value of the Institute and assist it to implement its programme than any other means.

Under the terms of the remit it was proposed to set up an Editorial Committee whose responsibility it would be to raise and maintain a high standard of publication. In his opinion the talent which could be used in the preparation of suitable articles was available in the Dominion, and was only waiting to be tapped.

The remit was seconded by Mr. J. A. McPherson, who stated that the standard of the Journal had fallen, not through any fault on the part of those who had been responsible for it, but rather because those who were able to assist and could have contributed had neglected to do so.

Mr. J. C. McDowall was of the opinion that one purpose which the Journal could serve was to publish the results of scientific experiments and to destroy theories which had no basis in fact.

The remit was carried.

Rules for Judging:

THAT it be a recommendation to the incoming Executive Council that a Rules for Judging Sub-Committee be set up to revise the Institute's Judging Rules, in view of modern requirements, including the Department of Agriculture's (Horticulture Division) Standardised Rules for Judging Fruits.

Carried on the motion of Mr M. J. Barnett, seconded by Mrs Knox Gilmer.

It was considered that there was much confusion among Horticultural Society Judges and contributors through the lack of uniformity in judging rules, and it was recommended that, when the standardised Rules had been brought down, they should be printed and made available to all Societies,

Educational:

THAT this Conference records its appreciation and directs that a hearty vote of thanks be conveyed to Professor H. B. Kirk, original Chairman of the Examining Board, for his outstanding service to the Board and to the Institute's Scheme of Training and Examination for the Institute's Certificates and Diploma in Horticulture, ever since the inception of the Institute—about twenty years ago.

THAT it be a recommendation to the incoming Executive Council that the Scheme of Training and Examination for the Institute's Certificates and Diploma in Horticulture should be reviewed.

Note: It should be emphasised that the Oral Test is a separate examination from the Practical Test with a separate percentage and with, at least, two joint examiners.

These two remits were moved by the Chairman, Mr. Hope B. Gibbons, and seconded by Sir Theodore Rigg.

Mr. Nicoll reported that an expression of appreciation had been forwarded to Professor H. B. Kirk in regard to his outstanding work on behalf of the Institute, and that a reply had been received.

Sir Theodore Rigg stated that he was concerned about the available facilities for training in horticulture. There was a great need for the scientific training of the rank and file. He cited circumstances in the Waimea County which indicated the large economic value of the agricultural products of that area, and considered that there should be better training facilities for those producers concerned. He also felt that consideration should be given to the recognition of training in other approved courses of instruction as a substitute for certain sections of the practical Diploma syllabus.

Mr. J. A. McPherson stated that an important stage had been reached in horticultural education. There should be convened a conference of all interested bodies to discuss with the Examining Board new problems that had arisen.

Mr. M. J. Barnett expressed his conviction that in any revision of the syllabus no steps should be taken to shorten the course.

The Diploma was largely the hall-mark of the practical horticulturist, and to be of any value at all the practical experience prescribed by the syllabus was most necessary.

Profesor G. S. Peren, who was a member of the original Committee which drew up the existing syllabus, stated that the contributions of Massey and Lincoln Colleges towards education in horticulture could dovetail into the Institute examination procedure. The utmost co-operation had been sought, and the Board of Governors of his College had co-opted members to the Committee of Control to ensure that the horticultural influence was maintained. Effective liaison had, therefore, been the objective. He considered that the

teaching facilities could be effectively harnessed to fit into the national scheme of horticultural education.

Mr. T. S. Waugh, representing the N.Z. Florists' Telegraphic Exchange, announced his organisation's interest in the proposed revision, and offered the co-operation of its members in any investigations which it was proposed to be made.

Mr. W. K. Dallas announced that there was a Sub-Committee appointed by the Examining Board which was already working on the review, and it was his suggestion that, when the report was available a conference of interested parties including educationalists, should be called to consider the whole matter.

Technical Information Service:

THAT it be a recommendation to the incoming Executive that consideration be given to the provision to affiliated bodies and members of technical information service regarding e.g. plant identification, plant protection and horticultural matters generally.

Carried on the motion of Sir Theodore Rigg seconded by Professor G. S. Peren.

Horticultural Activities:

THAT it be a recommendation to the incoming Executive that it set up a Sub-Committee to keep in touch with new horticultural developments with a view to rendering assistance where such, after due inquiry, is found to be warranted.

Proposed by Mr. T. S. Waugh, seconded by Mr. G. S. Nicoll.

Organisations' Relationship:

THAT it be a recommendation to the incoming Executive Council that it should go into the matter of its relationship (a) with other bodies set up for the purpose of fostering horticultural activities within the Dominion, and (b) with similar bodies in the United Kingdom, United States of America, South Africa, Australia and elsewhere.

In proposing this remit, Mr. V. C. Davies stated his opinion that horticulture in New Zealand was at a very important stage of development, and it was most desirable that a firm liaison should be established among the various national bodies set up to foster horticulture. In such fields as rehabilitation and research a great service could be done by the marshalling of all the resources and ability which could be supplied by these organisations.

BARNETT/LAUDER MEMORIAL PRIZE: An announcement was made that a Memorial Prize commemorating the loss of two Institute students of Massey College, namely Messrs. Ted Barnett and Walter Lauder, had been established and a letter describing the nature of the award and the proposed rules attaching thereto was received from Mr. F. J. E. Jollie, of Massey College,

TRENDS IN SCIENCE

A state of affairs which the most visionary among scientists foresaw is now becoming increasingly plain to all—that science by its developing growth and intricacy is tending to defeat its own purpose. It is becoming more and more like an organism built up of exceedingly complex parts, each beautiful in its structure and admirably fitted for its purpose, and yet useless, for it is not related to the other parts with which it must act if the purposes of the organism are to be fulfilled. Professor Wardlaw, of the University of Manchester, gave expression in a recent article in "Nature" to aspects of the problem which have particular concern to him as a botanist. He can offer no solution, for, indeed, a solution seems difficult to find. The problem in brief is that each subdivision of botany—and the same applies to the other branches of biology—has now reached a stage of progress where to master it and keep pace with developments within it, specialization is absolutely essential. One brain simply cannot do more than master one subject when that subject is a branch of modern science, and to do even that requires intellectual development of no ordinary kind. Here then we have the condition in which a vast amount of invaluable knowledge is stored in many garnerers where it may moulder, for there is no one to sort it out and see what it all amounts to. Some may take and use a little from this store, and others a little from that, but the result is often the product of guesswork, and far from happy. Indeed it is the realization of the extreme danger of this haphazard procedure that is worrying scientists such as Professor Wardlaw, for science can now harness and exploit tremendous forces—but often only as a child can put a match to a keg of gunpowder—without an idea of what is likely to happen except that it will probably be something exciting. What can happen when one branch of science outstrips another branch in application we have all, in the past four years, become only too painfully aware, and that is only a foretaste of what will happen unless there is a considerable change in essential attitudes toward sociology and heredity. In the fields of biology we are encouraging the perpetuation of types which from many points of view would be better extinguished. Undesirable factors, which in Nature are lethal, are permitted to multiply until the healthy becomes as the unhealthy. The soil is raped, regardless of the effects on its fundamental health and real fertility, so that short-termed policies of temporary expediency may be served, and as though we neither knew nor cared what we do. Altogether, those who watch the course of progress cannot but be filled with anxiety and forebodings. We are as children playing with knives which we know how to sharpen but do not know how to use.—"The Gardeners' Chronicle" (Eng.).

Mr. G. S. NICOLL

(A TRIBUTE TO A CAPABLE SECRETARY.)

The resignation of Mr. G. S. Nicoll, Dominion Secretary of the Institute, took effect on the 31st January last and completed over fifty-one years of public service.

Upon the death of Mr. A. R. Stone, the former Dominion Secretary, in August, 1932, Mr. Nicoll was appointed to that position and he also took over the Secretaryship of the Wellington Horticultural Society held by Mr. Stone, but this latter office was relinquished in June, 1936.

In the first year, he had the main responsibility for the preparation, in the course of a few weeks, of three Horticultural Show Schedules viz. National Flower Show, Wellington, 1933 and the 1932-1933 Schedule of the Wellington Horticultural Society and also of the Karori Horticultural Society of which he continued as Secretary for that year.

In normal times there was a good deal of work in connection with National Horticultural Week arrangements, National Flower Show Schedules, Institute Conference Remits from the Executive Council and District Councils, preparation of Agenda paper etc. until discontinuance of the Week after National Horticultural Week, 1941, although the schedule of the National Flower Show, 1942, Hastings, was actually printed and circulated when National Horticultural Week, 1942, Hastings was abandoned through increased war restrictions.

Mr Nicoll desires that mention should be made of the good work carried out by the Joint Permanent Committee representative of the Institute (President Mr. F. S. Pope succeeded by President Mr. Hope B. Gibbons), the New Zealand Horticultural Trades' Association (Mr. T. Waugh) and the Association of Directors of Parks and Reserves (Mr. J. G. MacKenzie). Mr. Nicoll acted throughout as Secretary of this Committee and he desires to have placed on record the individual efficiency and tact of each representative and their co-operation in the interest of the Week and of all the National Bodies associated therein.

As Secretary of the Institute's Examining Board, he always took a keen personal interest in each student registered in the various stages of the examinations including his articles in the Journal on Horticultural Training and Examinations, in connection with which he desires to thank Mr. M. J. Barnett, Christchurch, for his valuable notes on examination scripts. He found congenial work in connection with examination papers, appointment of examiners and examination arrangements, and in assisting towards the placing of examination procedure on its present sound basis. Reference should also be made to the happy relations with both Chairmen and individual members and their heartiest co-operation.

Mr. Nicoll has always been a keen amateur gardener with a lengthy experience in growing, exhibiting and later judging of practically all flowers including National Daffodils. He is interested in every phase of Horticultural Societies' activities and was elected, at the recent Annual Conference, as representative of Horticultural Societies on the Institute's Executive Council.

Last but by no means least, he has always been keenly interested in the Institute's Journal on which, in recent years, he has had to play a rather lone hand. He is pleased, however, that an Editorial Committee has since been set up by the Executive Council, following on a remit from the Institute's 1945 Conference.

OUR NEW SECRETARY

In undertaking the difficult task of selecting a successor to replace Mr. George S. Nicoll, whose resignation took effect at the beginning of the year, the Executive Council's choice fell upon a young man. Mr. L. V. Phillips, A.P.A., N.Z., A.C.A.A., A.A.I.S., is a Public Accountant practising at Lower Hutt, a director of several companies in that City and known in horticultural circles as the Secretary of the N.Z. Horticultural Trades Association, the Dominion Council of Commercial Gardeners (the N.Z. Market Gardeners' Federation) and the N.Z. Florists' Telegraphic Exchange.

COMMERCIAL POSSIBILITIES OF PINUS INSIGNIS

The growing of forestry trees, principally *pinus insignis* in quantities previously considered fantastic is likely to be a subject which will soon engage our attention. We know from reports released from time to time that the Government intends to implement an extensive policy of afforestation. This will serve a number of requirements—first it will yield in a relatively short time a large super footage of timber for housing construction. The prejudice against this timber which has existed in the past has largely been dissipated within recent months, due first of all to the necessity to conserve what little remains of our Rimu and Kauri forests, and also to research work which has taken place which show that this timber grown properly is quite suitable for such construction. In America, we have been informed, that *pinus ponderosa* very similar in its fundamental qualities to the New Zealand grown *pinus insignis*, is the principal timber being used in the construction of sashes, doors, frames, interior finishings and other joinery work. The proportion of this timber has been gradually increased year by year and a great deal of research work has been carried out. For exterior work the Americans were toxic treating the timber to resist attacks of borer and to reduce the tendency to swell and contract with changing atmospheric conditions, and also to prevent decay.—Mr. L. Robinson in his presidential address to the recent H.T.A. Conference.

LODER CUP FOR 1944

The Loder Cup was presented by the late Gerald W. Loder, afterwards Lord Wakehurst, of Sussex, to be competed for annually in accordance with such conditions as might be approved by the Minister of Agriculture in whose custody the Cup was placed.

Under the present rules the award is to be made to any properly nominated person or body of persons who may have excelled the other nominees in the year of the award in furthering the wishes of the donor as engraved on the Cup:—"To encourage the protection and cultivation of the incomparable flora of the Dominion."

For 1944, the award has been made to Mr. Norman Potts, of Opotiki, Bay of Plenty, whose nomination was put forward by the Royal Society of New Zealand.

Mr. Potts' chief qualification for the award was the fine work which he has performed during his term of association with the Hukutaia Domain Board, of which he has acted as Honorary Chairman since 1934. The Domain was set aside by the Crown in 1926, and Mr. Potts was appointed in 1933 as Chairman of the Domain Board. He immediately set about restoration of what had been a deteriorated tract of forest country and pursued a policy of making the Domain a living museum where as many species of native plants as possible could be collected together, and where species in danger of extinction could be preserved.

During this period Mr. Potts himself has planted in the Domain some thousands of plants, and has kept a record of the place of origin of each. The Domain is not a suitable habitat for alpine plants, or grasses of the open country. Mr. Potts has therefore concentrated upon growing there forest and shrub species, together with a large number of ferns and it is as a specialised collection of such forest vegetation that it deserves credit; and its register of plant origins is a special and unusual feature of the greatest merit. He has also performed a national service, by making available to various public gardens and societies throughout New Zealand, various seeds and plants which he was particularly able to supply. In the field of research he has regularly made visits to distant parts of the country in search of rare and new plants of which his more important discoveries have been a yellow-flowering *Pittosporum* and a small but very ornamental bronze *Coriaria*.

INSTITUTE NOTES

POST-CONFERENCE ACTIVITY:—The successful and well-attended Annual Conference held at Palmerston North on 1st February has provided the Executive Council with a very active programme of work. The impetus given to the work of the Institute through this agency has been reflected in many progressive decisions being reached at two Council meetings held since that occasion.

ATTENDANCE OF SOUTH ISLAND MEMBERS:—Significant of nascent and growing interest in the work of the Institute, was the presence at the March Executive Meeting of Mr. G. E. Knowles, of Timaru, a Vice-President of the Institute, and Mr. W. J. Humm, of Christchurch, the recently-elected President of the N.Z. Horticultural Trades Association (Inc.).

JOURNAL:—An editorial Committee consisting of Dr. W. R. B. Oliver (Convener), Hope B. Gibbons and R. Owen (Editor of the "Journal of Agriculture") has been appointed. The function of this Committee is to enhance the value of the publication by every means at its disposal, and to develop its standing as an organ representing on a national basis the interests of organised horticulture in the Dominion.

MEMBERSHIP:—The implementation of the wish of Conference that a widening of the Institute's membership should be attempted this year is the care of the Sub-committee consisting of Messrs. W. K. Dallas (Convener), Geo. Cooper, Hope B. Gibbons and Mrs. Knox Gilmer.

RULES FOR JUDGING:—Mr. M. J. Barnett has been appointed to convene a Sub-committee of Christchurch members to draft standard judging rules in terms of the relative Conference remit.

TECHNICAL INFORMATION SERVICE:—Another "ad hoc" Committee comprising Messrs. Hope B. Gibbons, E. Hutt, Dr. W. R. B. Oliver and the new-appointed horticulturist, J. P. Hudson, of the Department of Agriculture (upon his arrival in New Zealand), has been elected to study the possibilities of providing a technical information service to members.

J. A. CAMPBELL AWARD:—This award, which is made annually in the best Intermediate Student, was gained by Mr H. Blumhardt, of Auckland.

REVISION OF EXAMINATION SYLLABUS:—On behalf of the Sub-Committee set up last year to undertake a revision of the Syllabus, Mr. W. C. Hyde stated to a recent meeting of the Examining Board that its final report would be tabled within the next two months.

ANOTHER NEW PLYMOUTH GARDEN

(By Walter D. Rough.)

During a recent visit to New Plymouth, where organising duties in connection with the "Dig for Victory" campaign were carried out, the writer had the very great privilege of visiting one of the most interesting private gardens it has been his pleasure to see and one which would awaken the enthusiasm of any garden lover who may be able to view it.

The assurance of the owner, Mr. J. Murch, that something different and out of the ordinary would be seen, did not prepare one for what had been accumulated and laid out in a tiny section, that is but one-sixteenth of an acre in extent, and also accommodates a five-roomed bungalow.

Mr. Murch's home in Ngaio Street, New Plymouth, is not unknown in that town but, to the new-comer, its first appearance creates a sense of the usual small dwelling, set in a pleasingly elevated site, with colourful borders around a neatly kept sloping lawn, and nothing outstanding to attract the attention.

On passing through a gate in a high trellis fence set in line with the house front, the visitor is soon cognizant that here is something different. It seems a touch of Nature grafted on to man's handiwork. Not only that, but a selected section of Nature in its primal glory and completeness of detail, that can only be found in the incomparable forest that clothes Mount Egmont's lower slopes. Almost it seems to be the untrammelled hand of Nature itself that devised the setting that meets the eye, until the attention is drawn from noting the various specimens of native flora to a far corner where can be seen a replica of a Maori whare, almost wholly obscured by the surrounding trees and ferns. An illusion is created by the variety of plants thriving in apparently congenial surroundings, where they have found lodgment around the whare and even on the roof itself. The illusion is that here is a by-gone Maori dwelling, now taken possession of by the encroaching forest plants.

The door opens and the interior reveals a riot of ferns and sub-alpine species living under almost natural and ideal conditions. The light is diffused and a regulated mist-like spray, so essential to the well-being of the elite of our ferns, takes the mind back to some scene in the deep bush, where a gully is fernclad and a stream of water falling, sends up a moistening spray of health.

The creator of this little bit of Paradise is a true artist in the very highest sense, for this section was, but a few years ago, a bald patch of ground, swept by Mount Egmont's most bitter gusts in

winter time and baked by the sun in the summer. Infinite patience and observation must have gone into its planning and making, and infinite time and labour devoted to collecting the specimens from deep in bush and gully, and planting them in their new home and surroundings.

This is not simply a collection of varieties. It is ever so much more than that. The specimens must have been most carefully chosen, not only for their form and quality as such, but also for their suitability in creating the semblance of natural law in the forest world. To say that the arts of Nature have been faithfully copied and not overdone would be true, and therein lies the true genius of the creative artist, to reproduce in faithfulness the details of the vision he sees.

Of necessity, the specimens are as yet all youngsters, though they are ranging high enough to give colour to the stateliness of the true forest of New Zealand with its dense undergrowth and floor carpeting of ferns and its high aerial plants growing on the willing hosts they so well adorn.

One would like to enumerate the various species, and thus add some conception of concrete facts to one's evident enthusiasm, but as the range is far beyond one's knowledge, it is suggested that Mr. Victor Davies be appealed to so that, at some future date, an authoritative list might be supplied to lend colour to the statement that it is a truly comprehensive and valuable collection.

Quite apart from that section of the garden already reviewed, Mr. Murch, who is a keen composter and has a set of bins in regular use, believes in returning to the soil all that he possibly can of what he has taken out of it. His great success is due to this procedure, for he has had to build his soil fertility as well as his plant collection right from the beginning.

He also demonstrates, in his vegetable raising, that much can be got from very little. This is done solely in boxes that are built up to fence height between the house and the dividing fence, where the space between is only three feet wide. Genius and perseverance is there demonstrated in the great variety of vegetables that can be grown in nothing more than a row of boxes and in what would otherwise have been a disused space. It is, of course, a makeshift for space, but the results are remarkable, and not at all make-believe or makeshift in any way. Mr. Murch, from his box garden, is able to provide his household with ample supplies of the finest salads, carrots, turnips, onions, leeks and tomatoes, and is justifiably proud of his achievement.

It is not just another garden. It is ever so much more, for it has satisfying qualities that make it more than unique and one leaves it feeling that it is wonderful and well worth while.

THE UNIVERSITY IN THE HORTICULTURAL WORLD

(By D. C. MacKenzie, N.D.H. (N.Z.).

For several centuries, in the Old World especially, the University has played a leading and vital part in the social and economic life of the people. In matters spiritual and material, it has helped to lay and maintain the basis of national life and outlook. The conception of learning and understanding, as practised by the University, is reflected in the life and well-being of the people, their interests, and their work.

In New Zealand, the University's two Agricultural Colleges have played an essential part in the development of our rural industries and in the education of young farmers in the modern methods and practices of Agriculture. Its main function is educational, in both theory and practice, along avenues of creative endeavour.

1944 saw the commencement of the first Course in Horticulture to have been conducted by a University College in this country. In many parts of the world, horticultural training is undertaken by the universities, many of which have their own botanic gardens, arboreta and research facilities. In some of the American colleges it is possible to gain a Degree in Horticultural Science after four years' study, whereas the course in this country leads to the Diploma of the Royal New Zealand Institute of Horticulture.

The New Zealand Course commenced at Massey Agricultural College, Palmerston North, with an enrolment of sixteen students. These included both men and women, whose ages ranged from sixteen to more mature years. The Syllabus for the Course is extensive in scope and deals with almost every phase of horticulture practised in this country. It includes general horticulture in all its phases—such as fruit-growing, vegetable-growing, landscape gardening and nursery work—all of which are dealt with in keeping with New Zealand's soil, climate and economic conditions.

Massey College is ideally suited for this course. Its grounds of twenty-three acres, surrounding the Main Building, have been dedicated by the Board of Governors of the College as a national arboretum and, with the future development of the College, the area should be considerably extended. Already there is a large and varied collection of trees and shrubs well established and thriving, and this basis is being added to each year by purchased and donated material. Rock gardens, bog gardens and herbaceous borders have been developed or are in process of construction, and each will contain as many genera and species as possible.

The College has been fortunate in acquiring about twelve acres of native bush, situated on the east side of the Manawatu river, adjacent to the College. This is one of the few remaining patches of that great rain forest which existed in that district prior to settlement. It will be kept in its original state, with the addition of suitable plant material, as a living plant museum for the instruction of students in the recognition and characteristics of our New Zealand flora.

The Parks and Reserves Department of the Palmerston North City Council is co-operating in the conduct of the Course, in that the Director of Reserves, Mr. Peter Black, N.D.H. (N.Z.) regularly lectures at the College, and demonstrations are held at regular intervals at the City Council's Esplanade Gardens and Centennial Glasshouse. Mr. Black has, for many years, been recognized as one of the leading horticulturists and exponents of garden craft in the Dominion, and he has accumulated a great store of general information on all aspects of horticulture, which naturally gives added interest to his lectures and demonstrations.

The local nurserymen have wholeheartedly co-operated with the Course, and have given employment to students who did not wish to take the practical work at the College, but only to attend the lectures and demonstrations. This type of experience is especially valuable for those who wish to undertake commercial nursery work as a career.

It should prove a distinct asset to Horticulture in this country, and it should be the means of fully equipping those who choose horticulture as their career and calling.

Members of the staff responsible for teaching this new Course in Horticulture are:—The Principal, Professor G. S. Peren, B.S.A. (Toronto), F.R.H.S., Messrs. P. Black, N.D.H. (N.Z.), and F. J. E. Jollie, N.D.H. (N.Z.)—Horticulture; Dr. J. S. Yeates, M.Sc., Ph.D. (N.Z.), Ph.D. (Camb.)—Horticultural Botany; Mr. A. W. Hudson, B.Agr., B.Sc.—Soils and Manures; Mr. R. Waters—Plant Diseases; Mr. J. H. Tetley, M.Agr.Sc., F.R.S.A.—Insect Pests; and Mr. E. Ball, Head Gardener and Demonstrator. Mr. D. C. Mackenzie, N.D.H. (N.Z.) acted as locum tenens during Mr. Jollie's absence overseas.

NOTES AND JOTTINGS

Mr. A. W. Hawkins, a native of London and formerly in business in Nelson and Wellington, has a worthwhile garden in Raumati South, a favourite seaside resort about thirty-two miles north of Wellington and a few degrees warmer on the average.

Although this garden was only commenced six years ago, it shows greatly increased growth and many improvements since then.

The original section consisted of sand in stratas above ironstone succeeded by yellowish then brownish sand drying out to a lighter shade with couch grass the greatest weed enemy and seab in the potatoes.

Conservation of moisture necessitated the raising of each separate plot and banking with turves a foot wide, afterwards trimmed down to about six inches at the top to give a batter. The effect of this banking in retention of moisture was wonderful but it was afterwards found that it would have been better and easier to have used boulders pointed with cement. Boulders are comparatively cheap in this district and are used to great advantage in rock walls for soil protection and later beautification. The retained moisture, with the addition of compost and manure, have altered the appearance of the sand to that of dark soil. In the absence of a local water supply, artesian water is available on this section at sixteen feet from a pump and the residence has an overhead two thousand gallon cement tank and two large iron tanks so that ample rain water is available when required. The cement tank stood a severe earthquake in recent years and, although it shifted slightly and developed a few slight cracks, it came through triumphantly to the relief of the household. A forty gallon steel drum provides ample liquid manure, mostly cow and fowl.

It is hoped that a few notes on a stroll round this garden with the owner early in February may prove of interest —

Sturdy Leeks were doing well with weekly waterings of liquid manure, following on rainwater and Green Peas grow practically the year round.

Brown Spanish Onions were tied in small bundles and hung from a metal rod in the sunshine. A seventy pound crop had been gathered from a plot twelve feet by fourteen feet, after a profit of thirty shillings from thinnings.

Tomatoes showed a fine heavy crop, although the owner had not been able to obtain his favourite variety. Twenty-seven plants occupied fourteen feet by seven feet and were in no way crowded although each was heavily laden. In another part of the garden, self-sown plants were noticed with a few of these bearing as many as eighteen to the bunch.

A plot twenty feet by seven feet produced eighty-four pounds

of Epicure Potatoes, and is now carrying a fine crop of Flower of Spring Cabbage well hearted and also Silver Beet and Lettuce.

Gooseberries and Strawberries grow excellently. The plants were there when the place was taken over and the crop of the latter had again been a very heavy one but, unfortunately, the name of the variety had not been passed on to the present owner.

Apple Cucumbers, Bush Marrows and Pumpkins rioted in one bed and the latter, in various shades of red, pink, yellow, fawn, maize and straw added colour to the other vegetables. Queensland Blue was said to be the best keeper and would have graced a decorated basket of vegetables.

Carrots and Parsnips were doing exceptionally well. The seed had been sown on two inch drills filled with compost and with a sprinkling of the same on top. We had previously sampled the carrots, which were fine specimens with hardly any core. A Parsnip was thought by the writer to be a good specimen. A pull of the owner's hand alone brought it to the surface and it was found to be two feet long in the root with beautiful dark green foliage on a top three feet three inches in length!

A trench of White Plume Celery, about three dozen plants, occupied fourteen feet by two and a half feet. There were traces of Bordeaux Mixture and strong evidence of liquid manure with rain-water in the green and luxuriant growth of these fine plants.

One of the most valuable vegetables in this garden is the Borecole or Kale, *Brassica oleracea acephala*, which is cooked with Cabbage or by itself like Silver Beet and is, in this household, a favourite vegetable all the year round.

The growth and cropping of Scarlet Runner Beans should be seen to be believed and evidently the conditions suit this crop well.

The flower garden is the special care of the wife, and the Asters, Dahlias and other flowers do her credit and they are all well selected varieties. There is no sign of wilt in the well-grown Asters and vivid colours and sturdy plants of Dahlias etc. leave nothing to be desired.

The owner is very methodical in all his gardening operations and not the least of these is his complete garden diary from which the following is an extract:—

Sowed Onions 19th April.

Planted Spring Cabbage 1st May.

Sowed Tomatoes 1st July.

Planted Early Potatoes 20th August.

Sowed Red Beet 1st September.

Sowed Carrots and Parsnips 1st September.

Sowed Pumpkins, Scarlet Runners and French Beans October.

Planted Main Crop Potatoes November.

Planted out Tomatoes November.

Started digging Early Potatoes 30th November,

Raumati South:--On a recent holiday at Raumati South Motor Camp differences were noted in temperature, climate, soil and gardening operations, when compared with Wellington and its suburbs.

Reference to the sandy nature of the soil has already been made and the difference in the digging effort was thoroughly enjoyed.

There were three valuable gardening adjuncts—cows grazing in the Camp for a limited period, a small number of fowls under cover and the old Camp horse designated "Roaney" on account of the colour of his coat, who grazed alone in the hilly home paddock just above the garden.

On a visit to a poultry farm in the district a quantity of fowl manure was ordered and the writer has since been advised by two prominent nurserymen that fowl manure, which has been kept dry, is the only manure used in their nurseries. In each case, an inch layer is spread on the surface soil and hoed in lightly and also from time to time. It is particularly recommended for Hydrangeas.

In parts of the Camp, there is strong growth of Lupins in the sandy soil and outsize Scotch Thistles abound. Some planting of perennials in an exposed plot had been made in recent months but busy times with campers had precluded weeding. The writer thought he would try some easy weeding in the sandy soil and it was quite an enjoyable change to be able to use hands only to pull up the weeds by the roots. The main weed in this plot was Fat Hen, *Chenopodium album*, which was remembered in Otago as usually a few inches high. An average local specimen measured five feet seven inches above the ground, with a spread in proportion and there was over one foot of root.

EDITORIAL NOTICES

COMMUNICATIONS.

All communications should be directed to the Editor, Journal of the Royal N.Z. Institute of Horticulture, P.O. Box 53, Lower Hutt.

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LITERARY CONTRIBUTIONS.

Contributors should note that articles for publication should be type-written on one side of the paper only, and the typescript should be double-spaced.

FIELD OF CIRCULATION.

Copies of this journal are filed with all the principal Dominion libraries, and are also mailed to students studying for the Institute's examinations, to leading horticultural institutions and to research institutes throughout the world.

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