

JAMES A. GAMMIE.

THE honourable roll of the Kew Guild contains few names of members whose association with Kew is of longer standing, and no name more deserving of honour by its members than that of the President-elect for 1918.

Born on November 12, 1839, at Kingcausie, in the county of Kincardine, Mr. Gammie served his apprenticeship at Drum Castle, Aberdeenshire, where his father had charge of the gardens for 45 years. At the age of 17 he came south, working successively in the gardens of Stapleton Park, Yorks; Messrs. J. Veitch, Chelsea, and Stockwood Park, near Luton, entering Kew in the spring of 1861, among his colleagues of that year being Mr. W. B. Hemsley and Mr. J. R. Jackson. During a stay of four and a half years Mr. Gammie's work was wholly confined to the decorative and flower garden department under Mr. Craig. After this period of service at Kew, our President-elect was specially selected by the Secretary of State for India, in August 1865, to serve as Manager of the young and struggling Cinchona Plantation in Sikkim. The task he had to undertake was difficult. The cultural requirements of the various Cinchonas had still to some extent to be ascertained; the soil was indifferent; the climate was not ideal. The uphill work called both for knowledge and judgment as to what was feasible and for courage to attempt what might seem impossible. If the hour ever produces the man this happened when Mr. Gammie devoted his talents to the problem, and to him is largely due the success that, in the face of difficulties which might have disheartened the bravest, has rewarded the effort to produce Cinchona Bark on a commercial scale in the Government Plantations in Sikkim.

This, however, was but half the task that confronted the Cinchona Department. The other was to separate from the harvested bark the alkaloids it contained and to do this economically and on a commercial scale. In this, too, Mr. Gammie took an important share. Before a method of separating quinine had been devised, a process was adopted for the extraction as a mixed febrifuge of all the alkaloids in the bark. This process was worked by Mr. Gammie from 1879 onwards and called for the same skill and thoroughness that had marked his work as a planter. When Mr. Wood, the quinologist, who designed this process, retired in 1879, he and Mr. Gammie still kept the further aim of separating pure quinine in view. At last Mr. Wood invented, in his private laboratory in London, an admirable process which Mr. Gammie perfected in the factory in Sikkim. It is on official record that without Mr. Wood the process would not have been invented; without Mr. Gammie it would not have been successfully applied to manufacture. For his share in this great work Mr. Gammie, then Resident Manager of the Government Cinchona Plantations, was promoted to be Deputy Superintendent of the Cinchona Department. But for him the humane object of the Indian Government when they introduced Cinchona to the East, which was to place quinine within reach of the poorest, could not have been realised so early and so effectively as it was. After eleven years spent in working and improving this process Mr. Gammie retired in 1897.

If the thoroughness with which Mr. Gammie's work as a planter was done made the growing of Cinchona a success, it was this same quality that enabled him to prepare cinchona febrifuge and, later still, to separate quinine. The capacity for mastering his subject was accompanied by a corresponding ability to prevent his subject from mastering him. This double gift was nowhere more apparent than in the studies of his leisure hours, which were devoted to natural history. None have ever made more use of their opportunities in this field than our President-elect, and few have acquired a wider knowledge of the subject as a whole, the method followed being that of thoroughly mastering some particular branch of the fauna of British Sikkim before seriously undertaking the study of another.

D. P.

ANNUAL REPORT.

(1916-1917.)

THE COMMITTEE have pleasure in presenting the Report for the year ending April 30, 1917.

The Annual General Meeting was held at the Physic Gardens, Chelsea, on May 24, 1916. There were present 62 Members, Mr. A. W. Hill occupying the Chair.

The receipts for the year amounted to £60 14s. 11d. and the expenditure was £65 2s. 7d. Since the last Annual Report was published 21 Life Subscriptions have been paid, making a total of 348.

Over 150 Members of the Guild are serving with His Majesty's Forces; 8, as already recorded, have fallen in the service of their country, and, since the *Journal* was published, we regret to have further to report the loss of 2nd Lt. M. B. Scott, Cpl. H. M. Woolley, and Pte. A. E. Baggs.

The Committee also regret to have to report the deaths of the following Members:—Prof. Daniel Oliver, F.R.S., Prof. H. H. W. Pearson, F.R.S., Messrs. George Masee, V.M.H., F.L.S., William Foden, Gustav Mann, Robert Wright, James Forsyth, Hugh Price, John H. Stephen, William C. Trotter, and Harry Hughes.

The Members of the Committee who retire under Rule 4 are: Messrs. C. W. Mayhew, L. Recordon, G. H. Ridley and W. Taylor, and Mr. C. H. Curtis, as President, causes a fifth vacancy. The following have been nominated by the Committee to take their places: Messrs. T. A. Brown, S. A. Skan, H. Spooner, A. Menissier, and M. Free (nominated by the Association of Kew Gardeners in America). Messrs. J. Clark and D. Halkerston have been co-opted as representatives of the sub-foremen and gardeners respectively.

Messrs. W. Hales and J. Aikman are recommended as Auditors for the ensuing year.

Grants have been made from the Benevolent Fund to Mr. H. Price, and, since his death, to his widow. The Committee at the time of Mr. Price's death were actively engaged in soliciting votes on his behalf for the election of pensioners to the Gardeners' Royal Benevolent Institution. The votes secured were passed on to another old Kewite, Mr. W. Truelove, who proved to be one of the successful candidates.

The Committee have made grants totalling £17 to Mr. William Crisp, who, they regret to report, is gradually becoming weaker.

Balance Sheet, 1916-1917.

<i>Receipts.</i>		<i>Expenditure.</i>	
	£ s. d.		£ s. d.
Balance from 1915-16.....	10 19 6	Journal Printing A/c	45 5 0
Life Subscriptions.....	21 1 1	Postage on Journal	3 8 0
Annual Subscriptions and Sales	14 13 4	Printing Annual Report	1 13 6
Interest on £300 New South Wales Stock	7 17 6	Account Book	0 8 6
Interest on £25 War Loan Stock	1 2 6	Postage and Stationery	2 16 1
Interest on Deposits in Post Office Savings Bank	0 10 6	Secretary and Editor's Honorarium	10 0 0
Advertisements in Journal (1917)	9 10 0	Donations—	
Do. do. arrears (1916) ...	6 0 0	Gardeners' Royal Bene- volent Institution.....	1 1 0
		Royal Gardeners' Orphan Fund	0 10 6
		Balance in hand	6 11 10
	<u>£71 14 5</u>		<u>£71 14 5</u>

Capital Account.

<i>Liabilities.</i>		<i>Assets.</i>	
	£ s. d.		£ s. d.
Thomson Bequest	92 8 6	£300 New South Wales } 3½ per cent. Stock	300 0 0
To 348 Life Subscribers at the two-thirds rate as per Rule 7	232 0 0	£25 5 per cent. (1929- 1947) War Loan Stock.. }	25 0 0
Balance of Assets	7 3 4	Deposits in Post Office } Savings Bank	5 3 5
	<u>£331 11 10</u>	Cash in hand with Treasurer	1 8 5
			<u>£331 11 10</u>

Benevolent Fund.

<i>Receipts.</i>		<i>Expenditure.</i>	
	£ s. d.		£ s. d.
Balance from 1915-1916.....	12 3 6	Grants to the late Mr. H. } Price	2 0 0
Donations	1 13 6	Grants to Mrs. H. Price	2 0 0
		Postage and Receipts	0 4 0
		Balance in Post Office } Savings Bank	8 17 0
	<u>£13 17 0</u>	Printing 2000 Postcards	0 16 0
			<u>£13 17 0</u>

The William Crisp Fund.

<i>Receipts.</i>		<i>Expenditure.</i>	
	£ s. d.		£ s. d.
Balance from 1915-1916	49 18 10	Paid to Mr. Crisp	17 0 0
Donations	0 8 0	Postage and Receipts	0 0 6
		Balance in Post Office }	33 2 4
		Savings Bank.....	
		Balance with Treasurer	0 4 0
	<u>£50 6 10</u>		<u>£50 6 10</u>

Compared with Vouchers, Bank-books, etc.. and found correct,

J. COUTTS, *Treasurer.*
A. OSBORN, *Secretary.*

W. DALLIMORE, } *Auditors.*
W. HALES, }

May 3rd, 1917.

ANNUAL GENERAL MEETING.

THE 1917 Meeting was held in the Lecture Room, Royal Botanic Gardens, Kew on Saturday, June 2. The President, Mr. CHARLES H. CURTIS, occupied the Chair and was supported by about 50 members.

The Minutes of the last Annual General Meeting being printed and circulated in the 1917 *Journal*, the suggestion of the CHAIRMAN, that these should be taken as read, was agreed to.

The Annual Report and Balance Sheet, typewritten copies of which were in the hands of those present, were read by the Secretary, Mr. A. OSBORN.

In commenting on the Report, the CHAIRMAN remarked that though commendably brief in these times of paper shortage, he thought it touched on all the important matters connected with the work of the Guild during the year. The War was uppermost in their thoughts and, unfortunately, it was taking its toll of their younger members. They regretted, also, the loss of older members, notably Professor Oliver, Mr. George Masee, and Professor Pearson. Two colleagues during his time at Kew, Messrs. J. H. Stephen and W. C. Trotter, had passed away in their country's service in India before their allotted span. The subject of a permanent memorial to our Guild members who have fallen in the War had been mentioned at Committee meetings. Though nothing could be done until the close of the War, which he trusted would be before another Annual General Meeting arrived, the Committee would welcome suggestions from members. He was of opinion that whether it took the form of a tablet in the Garden Library, or a memorial in the Gardens, if they could obtain the permission of the Board of Agriculture and Fisheries, it should record the names of all Kewites who had served in the War.

The Committee had made grants from the Benevolent Fund to the late Mr. Hugh Price and his widow. At the time of Mr. Price's death they were actively engaged in soliciting votes on his behalf for the pension of the Gardeners' Royal Benevolent Institution. Fortunately, they were able to pass on most, if not all, the votes secured to another deserving member, Mr. William Truelove, who proved to be one of the successful candidates.

The PRESIDENT said the Guild was greatly indebted to their retiring President, Miss M. Smith, and those who were present at the Chelsea Physic Gardens would not soon forget her kindly welcome and hospitality at their 1916 Annual General Meeting. During her year of office Miss Smith had written more than one hundred personal letters to members, other than soldiers, whose annual subscriptions were in arrears. While on the subject of finance, he wished to impress on members who paid the 1s. annual subscription to forward it regularly in January, otherwise it made the Treasurer's position more difficult than need be. The Committee were seriously considering a reduction in the size of the *Journal*, owing to the falling-off in annual subscriptions, coupled with the increased cost of paper and printing.

In moving the adoption of the Report, Mr. W. DALLIMORE thought, under present conditions, it showed very satisfactory progress. They must all regret the falling-off in subscriptions; the soldiers they could understand, but 1s. was very little to ask for such an interesting book as their *Journal* had now become. Mr. J. WEATHERS, in seconding the adoption of the Report, drew attention to the large number of ladies present, whom they were very pleased to see carrying on while the young men were undertaking sterner duties at their country's call.

Some discussion took place with regard to the nomination of a lady to represent the present Kewites on the Committee. The PRESIDENT said he was sure the Committee would welcome a lady member at their meetings, but as the nomination did not conform to Rule IV. he was very reluctantly compelled to rule it out of order. As there did not seem to be a very clear understanding about the subject he thought the Secretary should be instructed to make suitable arrangements for the nomination of two representatives of present Kewites on the Committee, at one of the meetings of the Mutual Improvement Society.*

The re-election of Mr. J. Coutts as Treasurer was proposed by Mr. J. GOLDRING and seconded by the PRESIDENT, and carried. Mr. W. DALLIMORE proposed the re-election of Mr. A. Osborn as Secretary: this was seconded by Mr. A. C. WHIPPS, and carried.

Mr. J. WEATHERS brought forward the subject of a small badge or button to be worn by members of the Guild. This would enable Kewites, not known to one another personally, to become acquainted when travelling to shows, conferences, etc. He thought it was a subject the Committee might well consider; the cost need not be more

* [This has since been done. see list of Committee on title-page.—Ep.]

than 6*d.*, a stipulation being that the badge or button should be returned to the Committee on the death of the member. Mr. W. HALES said something of the sort was talked of in the early days of the Guild, a distinguishing button with the letters K. G., or O. K., being proposed. Mr. A. C. WHIPPS suggested that with such a badge it might be possible to enter the Gardens free, at least on students' days, instead of being subjected to the present fee of 6*d.* No definite conclusion resulted from the discussion, the PRESIDENT remarking that many of them sported badges indicating various War work in which they were engaged. The subject could be brought up again when conditions were more favourable.

The SECRETARY stated that three parcels of food had been sent by members of the Guild in the Gardens to Mr. Guy Neville, one of their members interned in the Civilian Prisoners of War Camp at Ruhleben. They had received from Mr. Neville postcards of acknowledgment for all three parcels. Asked if there were any other Kewite Prisoners of War, the SECRETARY said he had recently heard that Lieut. Beswick was missing, probably wounded, and a prisoner in the hands of the Germans.* Mr. H. COWLEY suggested that they should start a Prisoners of War Fund to assist members unfortunate enough to fall into the hands of the enemy.

No other business being brought forward, Mr. H. COWLEY proposed and Mr. W. TAYLOR seconded a vote of thanks to the President. In returning thanks, Mr. CURTIS said he very much appreciated the honour the members had conferred on him in electing him as their President. Such honours usually came when folks were old and grey-headed, and so he thanked them for a quite unexpected honour. They could rest assured he would do all he possibly could to further the interests of the Guild during his year of Office.

METEOROLOGICAL NOTES.

	Rainfall in inches.	Temperature.	
		Maximum.	Minimum.
1917.			
January	1.23	54° F.	25° F.
February	0.86	49	10
March	1.92	58	17
April	1.96	63	25
May	2.08	78	36
June	3.47	88	43
July	3.84	79	46
August	3.69	77	47
September	1.96	74	45
October	3.15	70	27
November	1.27	58	30
December	1.20	53	18
Total rainfall for 1917 ...	26.63	—	—

* See p. 422.

THE MUTUAL IMPROVEMENT SOCIETY.

SESSION 1916-17.

WITH Mr. Coutts as Chairman this valued Kew institution continues to maintain its popularity despite continual changes in the garden staff. At the preliminary meeting held in October it was arranged to hold fortnightly meetings. As the first six of these were well supported, weekly meetings were held after Christmas. As usual, the Syllabus embraced a wide variety of subjects, and included three lectures illustrated with lantern-slides. The average attendance was 28; on three occasions 37 members were present. Though only four women gardeners gave papers the majority attended regularly, actively supporting the Committee and taking part in the discussions. For the first time in the Annals of the Society the position of Secretary was filled by a lady, Miss M. L. Yeo, this lady also being awarded the Hooker Prize given by the Director to the member who, in the opinion of the members, has done the best work for the Society during the Session.

1916.

Syllabus.

Oct. 16.	Western North American Trees.	W. Dallimore.
„ 30.	The Proof and Use of Mendelism.	Miss L. H. Joshua.
Nov. 13.	Rhododendrons	T. W. Taylor.
„ 27.	Herbs	Miss A. Hutchings.
Dec. 11.	Diseases of the Rose	A. D. Cotton.
„ 18.	Hardy Fruits	C. F. Coates.
1917.		
Jan. 1.	Propagation	J. Bintner.
„ 8.	Hybrids and Hybridising	J. Clark.
„ 15.	Fruit Growing in France	W. L. Lavender.
„ 22.	Economy in the Garden	Miss M. L. Yeo.
Feb. 5.	Cross Pollination and Fertiliza- tion of Hardy Fruits (lantern)	E. J. Allard.
„ 12.	Liliums	(lantern) A. Osborn.
„ 19.	Question Night.	
„ 26.	Strawberries	Miss V. M. Harvey.
Mar. 5.	A Chat about Kew ... (lantern)	J. Coutts.
	Also General Meeting and Report by the Hon. Secretary, Miss M. L. Yeo.	

Chairman, J. COUTTS.*Hon. Secretary*, Miss M. L. YEO.*Vice-Chairman*, T. W. TAYLOR. *Assist.* „ „ „ Miss L. H. JOSHUA.*Committee*, Miss A. HUTCHINGS, Messrs. V. C. CROWE & W. L. LAVENDER.

ASSOCIATION OF KEW GARDENERS IN AMERICA.

KEWITES held their second annual reunion and banquet on March 16, 1917, at Shanley's, New York City. There was a good attendance of Kew men, their wives, lady friends, and several horticultural guests, amongst whom was Mr. J. Harrison Dick, the Editor of the *Florist Exchange*, formerly Editor of the *Journal of Horticulture*, London. The first section of the evening was taken up with the business of the Association, when the following business was transacted:—

All the officers were re-elected for another year.

The Secretary read letters from Mr. A. Osborn relating to the position of Mr. Guy Neville in Ruhleben Camp, also a letter containing the resolution from the Kew Guild, at their meeting of May 25, 1916; it was duly moved and seconded that the Secretary be instructed to write to the Kew Guild and send greetings of a similar nature.

Correspondence was also read from Mrs. Neville, the State Department, U.S.A., and the British Embassy, Washington.

The Secretary gave a report of work done in regard to helping Mr. Guy Neville, and reported that the sum of fifty-two dollars and thirty-five cents had been donated from twenty-two members.

It was proposed, seconded, and carried that the set of nine rules drawn up by the Committee be adopted and sent to each Kew man in North America, with the request that he indicate his opinion on the same.

It was proposed to hold a meeting in 1918, and it was decided to canvass the members as to the place of meeting as per rule 7.

The business session ending, the members adjourned to the banquet hall, where they were joined by their friends. After a very substantial banquet, which was thoroughly enjoyed, those present adjourned to the reunion room, where a very pleasant two hours was spent. All of those present helped to make the hours as enjoyable as possible and with great success; those assisting either with song, speech, or music were Mrs. Jennings, Messrs. O. Liden, M. Free, F. Cave, J. Harrison Dick, H. E. Downer, R. Barton, R. Cameron, and E. J. Canning.

The Secretary's greatest sorrow that night was that he had failed to acquire the art of shorthand, as the address of Mr. Otto Liden was well worth printing and would have made a fine article for the *Journal*. The whole theme of his address was that of a Kewite's undying patriotism and fidelity to Kew and all that Kew stands for. The addresses of Mr. Robert Cameron and Mr. Edward Canning were also very inspiring to the younger members present.

All present agreed that a most enjoyable evening had been spent, and looked forward to the following year when they would be able to meet again.

Those present were:—

W. S. Allt.	F. Cave.	J. Jennings.
R. Barton.	S. G. Comer.	J. Kundig.
J. Brown.	E. S. Dodd.	O. Liden.
R. Cameron.	H. E. Downer.	Wm. W. Stewart.
S. R. Candler.	A. Flowers.	J. Waits.
E. Canning.	M. Free.	

President, MONTAGUE FREE.

Vice-President, JAMES MACPHERSON.

Secretary and Treasurer,

S. R. CANDLER.

APPOINTMENTS.

IN addition to the position of Superintendent of the Swansea parks, Mr. DANIEL BLISS has charge of the cemeteries, with the title of Registrar.

MR. GEORGE MILLS, who left Kew in 1900, is now in charge of the gardens at Te Kituoa, Takapuna, Auckland, New Zealand, and is also Garden Editor of the *Auckland Star*.

MR. F. G. COUSINS has recently been promoted to the post of Deputy District Inspector in the Horticulture Branch of the Board of Agriculture and Fisheries.

HIS many friends will note with pleasure that Mr. W. HARRIS is now Government Botanist in addition to the important post of Superintendent of Public Parks, Jamaica.

MR. R. BAND has returned to his former position as Manager of the West African Rubber Plantations at Tajol.

MR. J. W. LONGFOOT has retired from the position of Head Gardener at Pull Court, and started in business on his own account at Dean Bridge, Holmfirth, Huddersfield.

MR. G. PRING has recently been promoted to the position of Floriculturist in the Missouri Botanic Gardens, St. Louis.

- E. Bass, Head Gardener, Leigh Lodge, Abbots' Leigh, nr. Bristol.
- A. Blackburn, Superintendent of Parks, Blackpool.
- J. Clark, Superintendent, St. Albans Cemetery.
- N. K. Clarke, Head Gardener, Orsett, Grays, Essex.
- C. H. Curtis, Secretary, British Wholesale Florists' Federation.
- W. R. Hibbins, Sub-Inspector, "H" Branch, Board of Agriculture and Fisheries.
- Miss A. Hutchings, Forewoman, Swanley Horticultural College.
- T. Juul, Head Gardener, Bregentved, Haslev Station, Denmark.
- H. H. Kidd, Curator, Pietermaritzburg Botanic Gardens, Natal, S.A.

- F. Lazenby, Superintendent, Mora Monada, Marion, Mass.
 C. H. Middleton, Sub-Inspector, "H" Branch, Board of Agriculture and Fisheries.
 J. W. Miles, Head Gardener, Welbeck Abbey, Notts.
 W. J. Newberry, Superintendent of Parks, Pietermaritzburg, Natal, S.A.
 W. H. Paine, Nursery Manager, Miranda, N.S.W.
 J. Renton, Superintendent, Provincial Nursery, Essondale, B.C.
 C. S. Walsh, Sub-Inspector, "H" Branch, Board of Agriculture and Fisheries.

WEDDING BELLS.

Mr. F. Birkinshaw	to Miss Eileen Allen	at South Croydon.	May 26, 1917.
Lieut. S. W. McLeod			
Braggins	„ Miss Bertha Mison	„ Dulwich.	Nov. 29, 1917.
Mr. T. Cartwright	„ Miss James	„ Haverfordwest.	1915.
Mr. W. G. Craib	„ Miss M. B. Turner	„ Edinburgh.	Aug. 2, 1917.
Mr. W. Davies	„ Miss Elizabeth Leigh	„ Cheddington Causeway.	Aug. 2, 1916.
Miss R. A. Davies	„ Mr. G. E. Bysouth	„ Clapham.	Oct. 24, 1917.
Miss E. A. Fuller	„ Mr. F. Meaker	„ Twickenham.	Jan. 15, 1918.
Mr. G. Mills	„ Miss A. A. Tickle	„ Mokoia, N.Z.	Dec. 5, 1911.
Mr. J. Murphy	„ Miss Murphy	„ Clonegal.	Aug. 23, 1916.
Mr. T. H. Parsons	„ Miss Edith Jones	„ West Croydon.	June 28, 1917.
Mr. B. B. Tindall	„ Miss G. E. Elders	„ York.	Oct. 27, 1917.
Mr. W. B. Turrill	„ Miss F. Homan	„ Woodstock.	Feb. 23, 1918.

NOTES AND GLEANINGS.

It is with the greatest regret the Committee deem it necessary to reduce considerably the size of the *Journal* for 1918. The two main causes are the lack of funds and the necessity to economise in the use of paper—a matter strongly urged by the printers. While reluctantly deciding not to publish the Directory, a complete list of alterations and additions to the 1917 issue will be found at the end of this number. Members can readily refer to the 1917 copy for the remainder. Several have written expressing surprise that its maintenance has been found possible. Deferring issue for a time and then publishing two numbers in one has been suggested, but the Committee feel that with a body of members so widely scattered an annual publication is justified. In view of the small balance in hand and the increased cost of printing and paper several members have written suggesting the raising of the membership fee. While this does not seem desirable, the Treasurer, in view of the abnormal conditions, will gladly acknowledge donations to the general fund towards the upkeep of the *Journal* and necessary expenses.

WE are by this time so used to the turnstiles at the gates and nursemaids with perambulators in the Gardens that it caused little comment last summer to see a regiment of soldiers preceded by an officer on horseback, a huge mastiff (the regimental mascot), and a band, enter the Gardens by the Main Gate and march through to the Lion Gate.

THE number of visitors to the Gardens during 1917 was 693,327, 20,595 fewer than in 1916. The total receipts from admission fees amounted to £4009 6s. 2d. The greatest monthly attendance was during May, the figures being 164,134. The highest Sunday attendance was 17,319 on May 27, the greatest single-day record being 42,409 on Whit Monday, May 28. The lowest monthly record was December with 5479, the lowest Sunday record 77 on December 16, and the lowest attendance for one day, on February 20, was 15.

DURING 1917 a large part of the depôt nursery ground and many of the flower-beds were devoted to the cultivation of vegetables. As these pages are being prepared for the printers a team of horses is ploughing up the lawns in front of Kew Palace preparatory to planting potatoes. Women gardeners are trenching the flower-garden in front of the Palm House, the intention being to crop it with onions.

WE note with pleasure the names of Mr. William Watson and Mr. William Jackson Bean in the Victoria Medal of Honour lists for January 1917 and January 1918 respectively.

WE are informed that His Highness the Sultan of Egypt has been graciously pleased to bestow the 5th Order of the Nile on Mr. F. S. Sillitoe in recognition of nearly fifteen years valuable work at Khartoum.

MR. W. H. PAINE writes from Miranda, New South Wales, July 25, 1917:—I have been to most places since I left England and am now dumped here with improved health. I tried to come home in khaki, but they would not have me, so am staying. It's a good country, only it's hot, has a lot of fleas, flies, and spiders, to say nothing of dry weather.

[Mr. Paine is Hon. Secretary of the Miranda Branch of the Agricultural Bureau of N.S.W.—ED.]

IN acknowledging the Committee's congratulations upon having seven sons serving with the forces, Mr. James Hopkins, who left Kew in November 1870, furnished us, by request, with the following interesting particulars:—

- Sapper James Hopkins, R.E. Home Service.
- Sapper F. Hopkins, Australian Tunnelling Co. France.
- First Air Mechanic John Hopkins. Invalided from the Dardenelles, now at Roehampton.
- Sapper H. Hopkins, R.E. France.
- Sergt. Herbert Hopkins, R. Welsh Fus. Served in the Dardenelles, now in Egypt. The only son following his father's profession.
- Pte. T. Hopkins, R. Sussex. Wounded on the Somme, now convalescent.
- Aircraftsman E. Hopkins, R.N.A.S. France.

THE introduction of many new species of *Berberis* from China, largely by Mr. E. H. Wilson, has considerably added to the Kew collection of these shrubs. They have now quite outgrown their former position in the centre of the *Berberis* Dell, and during the present winter the northern slope of the Flagstaff Mound has been planted to a large extent with the newer Chinese species.

THE leading article of the *Gardeners' Chronicle* for May 26, 1917, is devoted to an appreciative record of Mr. R. Hooper Pearson's twenty-five years with that paper.

MR. J. MACGREGOR has recently retired from the position of Head Gardener at The Hall, Shottermill, and is living at Little Brook, North Holmwood, Surrey.

THE War is indeed responsible for many changes and unforeseen circumstances. It has been necessary to send the garden carts to the gasworks for coke to keep the furnaces burning, a wait in queues for some hours last winter being not uncommon. Unloading barges of coke from the river near to the Works Yard entrance and delivery by motor-lorry on Sunday are other War-time necessities worth placing on record.

KEWITES AS AUTHORS.

THERE is comparatively little to record under this heading for the year 1917. The most interesting communication to hand is a pamphlet recording the Bibliography of Mr. Joseph Burt-Davy, F.L.S., F.R.G.S. From 1891, when Mr. Burt-Davy was at Kew, until the close of the year 1916 it records a long list of 311 items, including the authorship of books, pamphlets, reports, economic and botanical notes, and leaflets on a wide variety of subjects. Despite the War, the first edition of "Trees and Shrubs Hardy in the British Isles," by Mr. W. J. Bean, found a ready sale, and a second edition was published in May 1917. Readers will be interested to hear that during a visit extending over a fortnight to Burnham Beeches at the end of July, Mr. J. G. Baker, who is in his 84th year, studied the botany of the 374 acres of woodland and common. In a paper, entitled the "Botany of Burnham Beeches," published in the *Journal of Botany* for October 1917, Mr. Baker gives a list of 176 species and varieties found.

Mr. H. H. Thomas is the editor of three books published by the "House of Cassell." "Rockeries, How to Make and Plant Them," and "Gardening, A Complete Guide," are useful books for the amateur horticulturist, explaining in simple language many practical questions confronting those who make a hobby of gardening in their spare time. As the title of the third book, "1000 Garden Hints," suggests, it is a handbook quite off the beaten track. Each "Hint" explains a

garden problem, a remedy for a disease or insect-pest, or a simple way to overcome difficult phases confronting garden lovers.

With the view of assisting cultivators in the burning question of food-production, Mr. H. Cowley has written a handbook entitled "Vegetable Growing in War Time"; and another on somewhat similar lines, "The Workers' Garden," by Messrs. G. Butcher and Cyril Harding, have found a ready sale among new allotment-holders.

THE CAMEROON PLANTATIONS.

I HAVE had the exceptional advantage during the past year of helping to run the German plantations in the Cameroons. The civil authorities took over from the military a strip of country, formerly the north-west of the German colony, in April 1916. This strip includes the Cameroon Mountain, and it is on the slopes of this mountain that the majority of the plantations lie. They start at the foot and run up to an altitude of 3000 feet.

The Cameroons is one of the wettest countries in the world; there is practically no dry season. This makes the climate admirable for the cultivation of cocoa and rubber, and the Germans took full advantage of it. The country is governed on a totally different system from Nigeria. The British policy is to rule the African countries included in our dominions for the black man's benefit. The Germans administered the Cameroons for their own gain.

There are more than twenty large plantations (some over 6000 acres) at present being run by us. The headquarters of the department are at Bota (Victoria), and this is also the port for the shipment of the produce. A Kewite, Mr. F. Evans, is in charge, and under him are twenty Europeans; a very small number, considering that before the War one hundred and thirty Germans were employed on the same work. The plantations were owned by various German companies, but are all now being worked under the Plantations Department. The famous Victoria Botanic Gardens are also under our control. At Buea—the town 4000 ft. up the Cameroon Mtn., which has a climate not unlike that of Europe—are the farms, where pedigree European stock is kept. European vegetables, butter, and milk are supplied to the white population from here.

I have seen most of the plantations on the south side of the mountain, and everywhere one is struck by the way in which the places are laid out. The money question does not appear to have troubled the Germans much, for everywhere things have been done regardless of cost, probably to the detriment of the shareholders. At Ekona, one of the finest plantations, the director's bungalow was fitted with electric light and fans, and with both hot and cold water, and on the plantation were an ice-plant and soda-water factory. The under-managers, on the other hand, were not well housed—much worse than Britishers are accustomed to.

The plantation at which I was stationed was one of the most out-lying, being about 90 miles up country from Victoria. Owing to its out-of-the-way position Mukonje had been left neglected for nearly two years, when I arrived there in June 1916. Work had just been commenced by a native overseer with a few labourers. It was 6000 acres in extent, and, except where the clearing had been commenced, one could not see any cocoa; even rubber was invisible in places, owing to the growth of the bush. It took the whole year to get it into anything like shape; clearing the bush was no easy job, especially as it was difficult to keep up the labour supply. The number of men employed varied greatly, but was roundly about eight hundred most of the time. Very little rubber-tapping was attempted, as it took all my time to attend to the clearing of bush and harvesting of cocoa.

On most of the plantations light railways are used to bring the cocoa into the drying-houses, which on Mukonje were of the fire-drying type. There is not sufficient sun, as a rule, in the Cameroons to dry cocoa, and either fire-drying or rotary-machine drying has to be resorted to.

Labour has been difficult to get for various reasons. Indented labour for terms of six months is now being tried, but the Germans used to make the natives work for longer periods. Over 10,000 labourers were on the pay-books at a time, last year, and that is far from being an adequate number. When one has seen the obstacles which have to be met in taking over such a colossal task as the running of over twenty plantations, which were previously quite separate from each other, and with such a small staff of helpers, I think Mr. Evans is to be congratulated on the result achieved last year of obtaining 66,000 bags (each 60 kilos.) of cocoa.

I should like to mention the large palm kernel-crushing plants on some of the estates, the large banana farms at Tiko, whence the Germans intended to supply their home markets. In fact, they had built a fleet of vessels to carry the fruit, which was on the point of sailing on its maiden voyage when war broke out. It may be interesting to you to know that the German raider 'Moëwe,' which caused such a lot of damage, is said to have been one of these vessels. But space forbids; only let us hope that we may hear more of these splendid properties in a short time—when it is to be hoped they will be definitely taken out of German hands.

ALF. R. BELL.

RAMBLES IN THE ALPINE REGIONS.

OWING to ill-health I was given the opportunity of spending some months in Switzerland last summer. During my stay at a convalescent home for British officers at Arosa, in the Canton of Graubünden, I made a collection of 250 alpines and subalpines of the Swiss flora, which I have pressed and mounted.

When I arrived at Arosa in the early part of April, the snow was still some feet deep and not a sign of vegetation to be seen, but by the end of the month many patches of grass were visible. The first interesting plant collected was *Soldanella alpina*; this was quickly followed by *Primula farinosa*, *Hepatica triloba*, and others as the snow melted. By the middle of May and during June fresh flowers were making their appearance day by day. Unfortunately, being under the doctor, I could not climb some of the highest mountains. However, I managed to make one excursion up the Arosa Rothorn. Near the top *Draba aizoides*, *Valeriana montana*, and *V. supina* were collected. There was no vegetation on the summit, only huge massive rocks and a little snow. Later in the season I made a second excursion, this time to the summit of Schafriicken. There are numerous species of Orchids growing in the Arosa district. *Rhododendron hirsutum* and *R. ferrugineum* are purely alpine shrubs and the pride of the Swiss people. The grasses of Switzerland are numerous, many being the same as grow in England. *Lilium Martagon*, which thrives in the long grass, produces one of the most beautiful sights imaginable.

Whilst in Switzerland I visited the Botanic Gardens at Zürich.

My health has now improved and I expect shortly to rejoin my regiment.

P. C. E. JACKSON,
Lieut. South Stafford Regt.

A KEWITE'S XMAS DAY IN FRANCE.

I DARESAY you are wondering what we are doing this Xmas. Well, I am spending it underground in a 40 or 50 feet dug-out. There are five of us, and our work is pumping water. A hole down here fills up every three or four hours and has to be pumped out.—

Boxing Day.—We are still down in the dug-out, but owing to Xmas festivities and other things I did not manage to complete this epistle yesterday. You will like to know about our Xmas dinner; it was a scream. I think we all enjoyed it. Picture a compartment about 4 yards by 2 yards and 6 feet high. In the centre is a table—yes, a real table, made of oak and about a yard square. On this are a couple of empty sand-bags, in lieu of a tablecloth, and three jam-tins, in each of which there is a candle. Hanging by a piece of string from a beam in the ceiling is a real live piece of mistletoe with four leaves and three berries. What did we have for dinner, you will naturally wonder. I'll tell you, and "some" dinner it was. First course, fried onions, potatoes, and steak; it was O.K., only the meat was tough, and we couldn't eat it. We did our own cooking, and nobody knowing much about it and the fact that it was done over a wood fire, and damp wood at that, I think the result was very creditable. After this we had Xmas pudding—not our own make, this was issued. We had it cold, as nobody would risk heating it for fear of messing it up. We washed

it down with a little rum, and finished up with some really good tea. We also celebrated the day by not washing or shaving, so we looked like tramps; still, there was nobody much around these parts to see us. Have just had toasted cheese on bread, and pickles. My word, how the troops feast. Live like lords and fight like lions. (I don't think.)

J. N. W.

LETTERS FROM OLD KEWITES.

MR. GEORGE MILLS writes from Auckland, New Zealand, May 21, 1917:—

"I received the 1916 issue of the *Journal* a few days ago, and after a careful perusal must say that I consider it quite up to its predecessors. Kew men appear to be doing their bit in the present conflict, and one can only hope that very soon it will be over and they will have returned to their peaceful vocations.

"We are a long way off, but nevertheless we are on the earth, as the Germans and Turks have found to their sorrow.

"This is a beautiful country, and Auckland is the Queen City of the North Island and Takapuna is the gem of Auckland's suburbs. It may interest you to know that we have on the lawn here large bushes of *Poinsettia pulcherrima* and *Luculia gratissima*, and an arch covered with *Solanum Wendlandi*. *Erythrina Crista-galli* and *Jacaranda mimosaefolia*, *Rondeletias*, *Telopea*, *Dendrobium speciosum*, and *Billbergias* are amongst the plants that are perfectly hardy here. During the past season we flowered, fruited, and ripened bananas outside. *Musa ensete* makes one of our best ornamental plants; a specimen put out of a 5-inch pot two years ago is now 5 to 6 feet through at the base and the foliage rises to a height of 20 feet, the plant being a fine specimen with foliage touching the ground and being 20 feet through. *Platycerium* do very well; we have them on trunks of trees everywhere, and one of our best specimens entirely encircles a 'Cabbage-tree' (*Cordyline indivisa*), growing in full sun. *Strelitzia Reginae* and *S. augusta* do very well outside, making large clumps. The fruits we grow here are somewhat similar to yours, apples, pears, figs, peaches, nectarines, Japanese plums, guavas, loquats, oranges, lemons, grapes, loganberries, chokos (*Sechium edule*). Small fruits, such as currants, gooseberries, and raspberries, are not a success; but strawberries are a great line, and large supplies for the whole of the North Island are grown near here. Flowers are similar to yours, except that we bed-out *Cyclamen persicum*, and at present (November in England), May 20, we are cutting Paper White Narcissus, Perpetual Carnations, Bouvardias, *Salvia splendens*, and Nerines outside. Hippeastrums do well planted out, making great bulbs, like Crinums, and blooming twice a year—I refer to the hybrids, of course, not the *Amaryllis Belladonna*, which also does well. There are things we cannot do and, perhaps, the chief is Lily of the Valley."

Pte. A. F. BAKER, R.A.M.C., writes from Macedonia :—

“I am sending a few packets of seeds collected on the hills near here. Am sorry to have kept you so long without a letter, due to frequently moving about during the last few months. Transferred here from France, I left the London Ambulance for a base hospital, then a base dépôt, and now I am with the 66th Field Ambulance. It has proved very interesting during my travels, with some good hospital work. Now I am very lucky to be with a decent lot of fellows. You will be surprised to hear I had the pleasure of meeting Harcourt at the base. He had just arrived from England. We had two very pleasant evenings together before I was sent up the line. I received the *Journal* on April 28; it had evidently had a Cook's tour. You can bet I was pleased to get it and found it most interesting. The loss of Sergt. Anderson is a severe blow, he was such a fine fellow. I have managed to spend some very interesting hours botanising out here, and it has helped to take off the monotony of the country, which, by the way, is very different from France, where one could spend a few hours in a village when out of the line, but such is war. I had to smile when reading the remark of Ruck about being home in time for the old age pension. One thing, I think we shall all be grey-headed if they don't hurry up. There are a fine lot of autumn Crocus and Cyclamen about now (Nov. 10)—otherwise the country is rather bare.

“I am afraid you will say that news is very scarce from this part of the world, but I've no doubt they will publish a book about Macedonia one of these days. I had not been here long when Miles, Meads, Chapman, Ward, and Harcourt left for Palestine.”

Sergt.-Major G. CHAMBERS, R.E., who is attached as an anti-gas expert to the British Military Mission in the United States, writes under date November 21, 1917 :—

“At last I am in the States, safe and sound. Now for a brief *résumé* of what has occurred. We left — Station on the morning of October 18 and embarked at — on the R.M.S. ‘Grampian.’ We had a good voyage, although accommodation was rather limited, but the food good and plentiful. Land was sighted nine days later, and the next day we hove-to at Quebec. We continued up the St. Lawrence and passed under the new bridge—which, by the way, is a marvel of engineering—disembarking at Montreal. We left the same evening by rail for Washington, a train-journey of twenty-five hours. I remained for twelve days and, after two days in the train, arrived here. Although I had a first-class passage, I was not sorry to know my journeying *pro tem.* was at an end. This is some climate, one day below zero and the next up to 73° in the shade!

“I have not started any instructional work so far, the time being employed getting stores, etc., together. They are fitting up a most elaborate gas-house. There is not the least doubt the Yanks are going

in for this affair hot and strong. They are spending money too, and provide fine material. I am confident they will make a good show in Europe. If the people in the Old Country realized what the Yanks are doing and what it is possible for them to do it would buck them up a bit. Of course it will take some time to train such an army. The War-mad fanatic does not exist, but they are in real earnest, their intentions are sincere.

"I have not had a walk around as yet, so I am unable to give any details of the flora, except that grass does not exist. This is a cotton-growing area, and I noticed on the way down a few fields of maize. Trees appear to be stunted; water is a problem, and the only sources of supply are artesian wells."

MR. G. PRING writes from St. Louis:—

"Everybody here has the War spirit with a vim, saying he will stick at it until German autocracy is crushed. Our first draft called for all men between the ages of 21 and 31, and embraced ten million men. Of course, the physically unfit will bring that down at least 50 per cent. I went east to study water lilies. At Philadelphia I met several Kew men. From there I went on to New York, and came across several more old Kew boys. Whilst crossing the Hudson River I saw the big German liner —, which had steam up ready to take a few thousand of our boys across. I also went with my wife to Long Island camps, which were being erected as fast as thousands of carpenters could build them, and it was a sight. The big aeroplane camp is there with lots of the Royal Flying Corps boys to train the pilots.

"At the Niagara Falls I met a Kew man in charge of the Victoria Park, on the Canadian side. I had not seen him since the Kew days. I walked into his office and called him by name, but he did not know me for a while. But when he did recognize me I thought he would eat me. At Detroit I met another Kew boy, and also witnessed 30,000 men marching to the training camp. I represented our gardens as delegate at the National Gardeners' Convention in Chicago, and lectured on 'Kew' one night, showing about 60 lantern-slides."

Extracts from Postcards and Letters received from MR. GUY NEVILLE, Ruhleben Internment Camp:—

"Your letter of October 4 safely to hand, also two cuttings included in my mother's letter [report of Ruhleben Horticultural Society, published in the *Gardeners' Chronicle*—Ed.]. Thanks very much for your kind assistance; it cheers one up considerably to know one is remembered by Kew friends. I am instructor in theoretical and practical Botany, giving lectures in Plant Pathology in the Camp School, so find plenty of work to relieve the awful monotony of waiting for the end. I am glad to hear the Guild is going on well and that things are kept running in spite of the War.

"The papers at home have, apparently, a great deal of space for Ruhleben affairs and make people think that this beastly camp is a little paradise. The latest affairs in Russia and Italy will, I expect, give the papers at home something to talk about for some time. It will mean a considerable lengthening of the War, or a corresponding shortening of the same. I am about resigned to everything now. Have just written a report on a Celery disease in the R. H. S. plots. I am the official Mycologist for the Camp now. Everyone trots along the diseases they find, so I have some work to do attempting to discover what they are."

PRISONERS OF WAR FUND.

WITH the idea of helping any of our members unfortunate enough to be taken prisoners by the enemy, it was decided at the last Annual General Meeting to open a Kewite Prisoners of War Fund. As recorded in the *Journal* for 1917, Present Kewites were sending parcels of food to Mr. Guy Neville, a civilian prisoner at Ruhleben. At the Annual Meeting it was thought many Past Kewites would wish to assist such a worthy object, it being left with the Treasurer and the Secretary to make the necessary arrangements. A large sum not being immediately necessary, a beginning was made with the issue of a circular to fifty "Home" Past Kewites. This brought in the sum of £4 9s. 6d.; £3 of this amount has been sent to Mrs. Neville to purchase warm winter clothing to send to her son at Ruhleben, and 8s. to the Somerset Light Infantry Prisoners of War Fund, the cost of a food parcel sent in the name of the Kew Guild to Lance-Corporal Arnold Duley, who is a prisoner at Gefangenenlager. These will be continued at intervals as circumstances permit. The Treasurer will welcome further donations. It is a remarkable coincidence that before he was taken prisoner Lance-Corporal Duley sent a donation of 10s. from the trenches in France to the Secretary to be used on behalf of Mr. Neville.

Several American Kewites have written to Mr. Neville, and, previous to the United States entering the War on the side of the Allies, the Association of Kewites in America despatched parcels to Ruhleben and financial help to Mr. Neville through his mother.

It is well known how welcome the mail is to our British prisoners in Germany. Appended are the addresses of our prisoners. Most of the letters reach there safely, but members must not look for replies, as each prisoner is only permitted to write one postcard a week and two letters a month and, naturally, these are sent to near relatives.

British Military Prisoner of War.
Lance-Corpl. ARNOLD DULEY,
7th Somerset Light Infantry,
Gefangenenlager,
Dülmen I.W.,
Germany.

British Civilian Prisoner of War.
MR. GUY NEVILLE,
Baracke Nr. XI.
Box 23,
Engländerlager Ruhleben,
Germany.

OUR ROLL OF HONOUR.

WITH the continuation of the War our Roll of Honour is now of impressive length. With a membership so widely scattered it is most difficult to keep the list up to date. Additions or alterations to the subjoined lists will be welcome. To see that these names are put on permanent record for future generations of Kewites should be looked upon as a duty by all our members. While the larger number of our soldier Kewites are in France, letters continue to reach us from practically all spheres of military operations. Recent letters include interesting communications from Macedonia, Palestine, Italy, Egypt, Aden, India, and a postcard from Bagdad. Though engaged primarily in the sterner duties of war the flowers of the battlefields are not forgotten, and specimens for identification in letters are not uncommon. One Kewite in Macedonia, evidently hard pressed for paper, used the cover of the *Journal* for 1917, to make seed-packets to send home seeds to Kew.

We deeply regret to report that, in addition to the eight names recorded in the *Journals* for 1916 and 1917, eight more have made the supreme sacrifice for their country. These are fully recorded in the "In Memoriam" pages. Others have had their full share of wounds and sickness, several, including Messrs. M. J. Barrett and C. Little, New Zealand, and W. J. Goodrich, S. Africa, have received their discharge, the two last-named having been wounded, rendering them unfit for future service.

Captain R. R. Hayes, who was a young gardener at the outbreak of the War, has been awarded the Military Cross, and Lance-Corporal A. Duley, now a Prisoner of War in Germany, the Military Medal.

OLD KEWITES.

Adamson, J. Grenadier Gds.	Christie, J. C. Surrey Rifles.
Allen, C. E. F. Austrn. E.F.	Clements, T. Hants Rgt.
Armstrong, R. Canadian Inf.	*Cobbold, S. G. Rifle Brigade.
Aubrey, A. E. Prov. Batt.	Cowley, H. (dischg.) ... Lond. Rangers.
*Baggs, A. E. Canadian Inf.	*Digoy, Capt. C. L. 14th French I.
*Ball, C. F. R. Dublin Fus.	Douglas, G. Scottish Horse.
Baker, G. A. Hants Regt.	Duley, A. E., M.M. Somerst. Lt. I.
Barnett, M. J. (dischg.) N. Zeal. E.F.	Dunk, W. R.W.Kent Rgt.
Beale, J. H. Notts & D'by Rt.	Duval, R. French Infy.
Biggs, E. M. G. R. Units.	Eavis, H. R.W.Kent Rgt.
Bird, Lieut. D. H. Spts. Batt. R.F.	Feltham, E. A.S.C. (M.T.),
Birkinshaw, F. R.G.A.	Gammon, F. Rhodesian Rgt.
Bowell, E. C. R.A.M.C.	Gardiner, G. F. R.N. Brigade.
Braggins, Lieut. S.W.M. Worcester Rgt.	*Giles, J. Canadian Inf.
Briscoe, T. W. R.G.A.	Gill, R. E. A.S.C. (M.T.).
Bullock, T. G. R.G.A.	Glover, F. R.W.Kent Rgt.
*Campbell, J. M. Canadian Inf.	Goodrich, W. J. (dischg.) S. African E.F.
Campbell, Lieut. J. W. Malacca Rifles.	Green, Lieut. H. Labour Batt.
Chipp, Major T. F. Middlx. Regt.	Harris, C. H. Royal Navy.

* Killed or died on service.

OLD KEWITES (*continued*).

Hartless, A. J.	Essex Regt.	Peacock, Capt. Rev. H. D.	3rd Canadian B.
Harwood, A.	Warwick Regt.	Pettigrew, Capt. H. A.	Labour Batt.
Heald, E.	Canadian Inf.	Prondlock, A. W.	King's L'pool R.
Henderson, H.	Somerset L.I.	Pyman, G. W.	R.A.M.C.
Hiett, F. P.	W. Yorks Regt.	Quinton, J. P.	A.P.O.
Ing, W. J.	Middlx. Regt.	Richardson, J.	R.F.A.
Johnson, G. C.	Civ. Serv. Rifles.	Roife, F. W.	R.A.M.C.
Joyce, R.	Wilts Yeomy.	Ryall, H.	Aust. Field Am.
Kett, R.	Q. W'minsters.	Sanders, H.	R.A.M.C.
King, A. G.	R.F.A.	Sargeant, T.	R.F.C.
King, H. G.	London Regt.	Scott, J.	A.S.C. (M.T.).
Little, C. (dischg.)	N. Zeald. E.F.	Service, R.	Canadian Inf.
Little, Major W. B.	Border Regt.	Sharp, Lieut. H. B.	Arab Rifles.
Lloyd, H. B.	Canadian Rgs.	Smith, J. T.	Bedford Regt.
Lodge, J.	Somerset L.I.	Smith, Capt. Rev. W. C.	7th Austr. Bgd.
Lynch, Lieut. R. S.	Essex Regt.	*Southgate, H. W. L.	Norfolk Regt.
Mack, F. C.	R. Engineers.	Stayner, F. J.	S.A. Carabins.
MacLaggan, W.	R. Engineers.	Stirling, E.	Black Watch.
Mallett, G. B.	Northumb. Fus.	Stone, A. W.	Suffolk Regt.
Marks, J. T.	R.N.A.S.	Teasdale, J. J.	A.S.C. (M.T.).
Marriott, W. E.	S.A. Carabins.	Thompson, J. A.	R.G.A.
Maynard, A. W.	S. African Inf.	Timmers, A.	King's R. Rifles.
McNab, J.	R.W. Kent Rgt.	Tindall, H. B. A.	R.F.A.
Mein, G. W.	Seaforth H.	Tuck, Lieut. W. H.	R.A.M.C.
Mennessier, A.	French Col. I.	Ussher, C. B.	N. Irish Horse.
*Morland, W. H.	Royal Scots.	Veitch, Major J. L.	Devon Regt.
Murray, J. G.	A.S.C. (M.T.)	Walden, F.	Worcester Yeo.
Navel, H.	French San. C.	Wallace, J. C.	M. Cyc. Sc. R. E.
Oliver, G. H.	Manchest. Rgt.	White, A. H. J.	R.F.A.
Oliver, T.	R.G.A.	*Woolley, H. M.	Essex Regt.
Osborne, P. V.	Indian Artily.	Wright, W. N.	A.S.C. (M.T.).
Parsons, Lieut. T. H.	E.C.L.C.		

PRESENT KEWITES.

*Anderson, C. H., A.M.	Lond. Scottish.	Ferries, G.	Cameron H.
Bailey, Lieut. A. G.	R.G.A.	Flippance, F.	R.A.M.C.
Baker, A. F.	R.A.M.C.	Godfrey, W. F.	Civ. Serv. Rifles.
Bass, P.	Training Corps	Green, H.	R.F.A.
*Beswick, J. C.	Artists' Rifles.	Grinham, Lieut. F. B.	Hants Regt.
Boff, C.	R. Fusiliers.	Grout, G.	King's R. Rifles.
Brain, H. J.	K. R. Lances.	Hall, F. W.	R.A.M.C.
Brown, C. H.	R.G.A.	Harcourt, F. G.	R.A.M.C.
Butler, F. B.	R.A.M.C.	Harding, L. J.	R.N.A.S.
Buysens, P.	Belg. Red Cr.	Hayes, Capt. R. R., M.C.	Border Regt.
Chambers, G.	R. Engineers.	Hazel, C.	R.A.M.C.
Chandler, P.	Civ. Serv. Rifles.	Hill, Capt. A. W.	D.G.R. & E.
Chapman, H. L. R.	Q. W'minsters.	Hillier, G.	R.A.M.C.
Chollet, P.	R.G.A.	Jackson, Lieut. P. C. E.	S. Stafford Rgt.
Clark, W.	R.M.A.	*Jackson, J. K.	Royal Navy.
Collins, W.	King's R. Rifles.	Keys, A.	R.A.M.C.
Corbett, G.	Cameron H.	Little, A. J.	R. Naval Res.
Crowe, Cadet V. C.	R.F.C.	*Loughurst, H. J.	King's R. Rifles.
Cunningham, J. W. M.	R.M.A.	Matthews, C.	Middlx. Regt.
*Divers, J.	Q. Vict. Rifles.	*Meads, A. J.	Q. W'minsters.
Dunk, E. G.	R. West Surrey.	Melles, Lieut. A. B.	R.G.A.

PRESENT KEWITES (*continued*).

Miles, S. H.	Q. W'minsters.	Smith, E. J.	Civ.Serv.Rifles.
Newman, Lieut. F. A. ...	R.F.A.	Sparrow, Cadet J., M.M.	R.F.C.
Philpott, G. T.	E. Surrey Regt.	Sprague, T. A.	R.F.A.
Raffill, C. P.	G.R. Units.	Turrill, W. B.	SanitaryCorps.
Richardson, L. P.	E. Surrey Regt.	Vardy, M.	Q. W'minsters.
Rogers, F. M.	Civ.Serv.Rifles.	Winn, J. N.	Civ.Serv.Rifles.
Ruck, E.	E. Surrey Regt.	Wood, W. J.	Mach.G.Corps.
Ruck, H.	R.F.A.	Yuill, E. I.	R.A.M.C.

* *Scott, Lieut. M. B. ... Royal Scots.*

I N M E M O R I A M.

MUNRO BRIGGS SCOTT.

M. B. Scott was a native of East Wemyss, Fife, and was born on April 29, 1889. He studied botany under Professor Bayley-Balfour at Edinburgh University, where he took the degrees of M.A. and B.Sc. Being a keen student of systematic botany he competed for and won a post in the Herbarium, rendered vacant by the retirement of Mr. N. E. Brown. He arrived at Kew shortly after the outbreak of hostilities, and soon settled down to his work. During his short term he showed himself to be a careful and critical worker and a sympathetic and sociable colleague and friend. When he became interested in Australian botany it seemed likely that he would fill a long-felt want in the scientific work of the establishment, as there had been little done at Kew on the flora of that country since the death of Bentham. Like most Scotsmen he inherited a very considerable amount of caution, and he was ever ready to obtain the opinion of a colleague in settling knotty points. When he joined the East Surreys in February 1916, he was engaged on a revision of *Lightfootia*, an African genus of *Campanulaceæ*. From the East Surreys he was transferred to the Suffolk Regiment, whence he moved into an Officers' Training Corps, eventually being gazetted to the Royal Scots, the regiment of his choice. He went out to France on January 9, 1917—a month or two after his marriage—and, to the great sorrow of his many friends on the Herbarium and Gardens' staff, he was killed by a high-explosive shell in the battle of Arras on April 12, 1917.

Although not of a very robust constitution, Scott had been a keen footballer in his younger days, and he was a regular visitor at the bowling-green, where, in happier days ahead, his absence will be greatly felt. He was in his element when tramping the Surrey Downs in the writer's company, and many a happy week-end have they spent together with the camera and vasculum. He was deeply interested in the War and took up the study of Russian and Italian in his spare time. His death leaves a gap at Kew it will be difficult to fill.—J. H.

HERBERT MARTIN WOOLLEY.

A son of the Rev. G. H. Woolley, Vicar of Old Riffhams, Danbury, Essex, Mr. H. M. Woolley was born at Upper Clapton on September 27, 1883. He was educated at the Merchant Taylors' School. Horticulture as a profession appealed to him, and in 1899 he entered the local nursery of Messrs. Hugh Low & Co. After a stay here of nearly three years, Mr. Woolley crossed to the Continent and spent sixteen months on Mr. Ernest Benary's seed-farms at Erfurt. His next position was with Messrs. Hursts at Houndsditch, followed by five months at the Millfield Nursery of Messrs. H. B. May & Sons at Upper Edmonton while waiting for a vacancy at Kew.

By this time our young friend had his eye on the East and came to Kew in January 1906 with the hope of going there. Naturally, economic plants claimed attention, and we well remember his delight when he obtained a "shift" to the Economic Houses. One had only to mention the word rubber or cotton to start an animated discussion. Kewites of 1907 and 1908 will remember Woolley's active part in the "Mutual" debates. Leaving Kew in March 1908, Mr. Woolley obtained a post as Assistant on a Rubber Estate in British North Borneo.

Actively engaged in this work when war broke out, our friend felt he would be of more use to his country in Europe. Resigning his position, Mr. Woolley came home and obtained a commission in the Essex Regiment. This way of getting to grips with the enemy proved too slow, and, sending in his resignation, he joined the London Rifle Brigade. Training on Salisbury Plain, promotion to Corporal followed, and then the long wished-for crossing to France. He was one of the first party to enter Combles, but was killed soon after, on October 9, 1916, in an attack on the German trenches. From his Colonel we learn of his hard work and bravery on the battlefield and, only a few days before his death, the offer of a commission. Such is the brief record of another young life willingly given in the service of the Empire. A brother, Captain G. H. Woolley, was the first Territorial to gain the Victoria Cross.

 CHARLES LEOPOLD DIGOY.

One of the most interesting letters in our last *Journal* was from this French soldier Kewite. It is now our duty to record his death on the field of battle at Morourvilliers, in Champagne, on April 28, 1917. His letter, on page 359, describes better than any words we could write his thrilling experiences during nearly three years of war. Badly wounded on several occasions, Captain Digoy was five times mentioned in despatches, and was made a Chevalier of the Legion of Honour on the field of battle. He was also decorated with the Cross of St. Anne of Russia.

Born on February 18, 1890, M. Charles Digoy was an old student of the Versailles National School of Horticulture, passing out first at the

end of his three years' term, when he came to England, in 1909, to work in Mr. E. Vitor's nursery at Hampton-on-Thames. He entered Kew on May 6, 1912. His period of service came prematurely to a close in the autumn, military duties necessitating his return to France. In a letter making this known to the Curator, Digoy wrote: "I feel deeply sorry to leave the beautiful Gardens under your direction. I shall keep the best remembrance of the happy and interesting time spent in them. Our military service is the most troublesome but also the most sacred of a Frenchman's duties." Commenting on the death of Captain Digoy, *Le Jardin* says: "The School of Versailles loses one of its most brilliant scholars, the Army one of its bravest officers, and French Horticulture a man of great promise."

JOHN CHARLES BESWICK.

We deeply regret the loss of this promising young Kewite and a member of the Guild Committee. He joined the R.A.M.C. in the early days of the War, transferring later to the Artists Rifles, with whom he crossed to France. Mr. Beswick's ambition before leaving Kew was a commission, and this he eventually secured, being gazetted to the Royal Lancaster Regiment in France. His career as an officer was all too brief. The story will be best told by extracts from a brother officer's letter to his father:—"It was while looking about the field for wounded stragglers when the men were coming back from pursuing the Germans that your son must have been wounded. During the short time he was among us we got to like him very much and are extremely sorry to lose him so soon. His coolness and courage during the attack went a great way towards making it successful and made his platoon and company very proud of him. As far as we can gather from a German prisoner, your son was picked up wounded and carried to a German dressing-station." Information has since come to hand that 2nd Lieut. Beswick died of wounds in a German Field Hospital at Cambrai on April 28, 1917, and is buried in the Cambrai Military Cemetery No. 2.

Mr. Beswick was born on October 5, 1888. He came to Kew on September 9, 1912, from Lord Barrymore's famous garden at Fota Island, Queenstown, his father, Mr. William Beswick, being Head Gardener at that time. A keen student in the Lecture Room and a hard worker in the Garden, Mr. Beswick soon attracted attention and was advanced to the position of Sub-foreman of the Temperate House in November 1913. He was bracketed first in three courses of lectures, Physics and Chemistry, Plant Pathology, and Economic Botany, securing the maximum number of marks (250) in the last-named course. He was Assistant Secretary of the Mutual Improvement Society during the winter of 1913-14, and gave a lecture on Trees and Shrubs in South Ireland, illustrated by lantern-slides. During the summer of 1914

Mr. Beswick was Secretary of the British Botany Club. His unflinching courtesies endeared him to all with whom he came in contact, and no one was more generally liked at Kew than Beswick.

JOHN GILES.

His many friends have received with very great regret the news that this Old Kewite was killed by a shell in France on July 17, 1917, and is buried behind the lines. We echo the remark of a comrade: "Another good man we can ill spare gone West."

Mr. Giles was 24 years of age when he came Kew on November 25, 1903. Evidence of his progress and skill as a plantsman came in April 1905, when he was promoted to the important position of Sub-foreman of the Orchid Department. Mr. Giles was a keen cricketer, a prominent batsman during his four seasons with us, and a very useful change bowler. During 1905 he was captain of the club.

The following particulars are taken from a Vancouver paper, dated August 7, 1917:—

"Sergt. John Giles, a former president of the Vancouver Horticultural Society and well known in horticultural circles in Greater Vancouver and Victoria, was killed in action in France on July 17. Sergt. Giles was a native of England and as a boy was employed in the gardens of the Duke of Leeds, serving later as a gardener in the royal gardens at Windsor Castle, during the reign of Queen Victoria, and subsequently as a horticultural student at Kew Gardens. From Kew, Sergt. Giles went to Shanghai, China, as assistant superintendent of the municipal gardens, a position he held for several years. In 1912, he came to Vancouver, and for a time resided on Twenty-first Avenue West, South Vancouver, being employed by Mawson & Son, landscape gardeners. Prior to the outbreak of war Sergt. Giles, with his wife and little son, went to Victoria to lay out the grounds of a large residence on The Uplands, and while in Victoria he enlisted in a Highland battalion. Later he transferred to the 88th Victoria Fusiliers and for some time acted as Staff-Sergeant, but after going over to England he reverted to the ranks in order to get to the front and was drafted as a private in a B. C. battalion. In recent letters to his wife, who is now residing at 634 Michigan Street, Victoria, B.C., Sergt. Giles stated that he was not permitted to say where he was, but that he was on very dangerous duty. His death will be deeply regretted by all with whom he came into contact during his residence in British Columbia, his genial disposition and willingness to assist in the organization of horticultural exhibitions, etc., and to act as judge, endearing him to a wide circle of friends. He leaves a widow and one son, Roy, age 7."

ARTHUR EDWIN BAGGS.

Born at Bath on November 18, 1888, Mr. Baggs was apprenticed to the local nursery firm of Messrs. George Cooling & Sons, moving from there to the Battenhall Nurseries in February 1908. He entered Kew on September 13, 1909, working in the Decorative and Temperate House Departments. His parents, contemplating removal to British Columbia in the spring of 1911, Mr. Baggs reluctantly left before completing the usual two years' term to accompany them. On reaching Vancouver he secured a position on the staff of the Stanley Park, some 1000 acres in extent. In his spare time Mr. Baggs performed the duties of Honorary Secretary of the local Botany club. He was also a very active member of the British Columbian Mountaining Club, which camped annually in some of the mountainous districts of the Province.

When war broke out he joined the Vancouver Volunteer Reserve, and in May 1915 enlisted in the 72nd Seaforth Highlanders of Canada, coming overseas in April 1916. While training at Bramshott Camp, Mr. Baggs came to see us at Kew. He crossed to France in August 1916, taking part in the Somme offensive with the Canadians at Courcellette. Moving later, he took his share in the many trench raids carried out on the enemy's lines in the neighbourhood of Arras. It was during one of these attacks, on March 1, 1917, that he met his death in action. A brother Kewite, writing recently from Vancouver, where he had made many friends, says they feel his loss deeply.

HERBERT WILLIAM LEONARD SOUTHGATE.

A native of Norfolk, Mr. Southgate was born on September 19, 1888. He commenced his gardening career at Raynham Hall in that county, moving from there to Westonbirt, Gloucestershire. Coming to Kew early in March 1910 from this famous Orchid establishment, it was only natural that H. W. L. (as we often called him) should settle down in the Orchid Department. On the completion of two years' service Mr. Southgate returned to Westonbirt. Three months later, however, the Orchid Sub-foremanship became vacant, and on Mr. Watson's invitation, he returned to Kew, occupying that position until December 1913, leaving to join the staff of the *Gardeners' Magazine*. Preferring practical work to the pen, Mr. Southgate secured an appointment as Head Gardener. While with us Mr. Southgate was a very active member of the Mutual Improvement Society. He gave us two papers on Orchids, and during the Session 1912-13 was Vice-Chairman.

The outbreak of war followed soon after, and H. W. L. and a younger brother joined the Norfolk Regiment in October 1914. He came to see us at Kew while training at Dereham, Cambridge, Peterborough, and Tring. Together the two brothers sailed for Egypt on January 31, 1916. We heard of them in the Palestine campaign and on April 19, 1917, they took part in the first terrible battle of Gaza. Sergt. Southgate

was posted as wounded and missing with the possibility of his being a prisoner in the hands of the Turks. For seven months the War Office were unable to furnish definite information. In December his younger brother wrote from Egypt to say he had at last secured authentic news that Leonard's body had been found by one of our own burial parties. May his relatives find some little consolation in knowing that he was buried by our men and not by the enemy.

ARTHUR J. MEADS.

When war broke out Mr. Meads was the Sub-foreman of the Palm House. He enlisted in the Queen's Westminsters in January 1915, going out with a draft to France in June 1916. In November the regiment was transferred to Salonika, where he was wounded, moving on from there to Palestine some eight months later. Official information to hand records his death in action on December 1, 1917, presumably during the second battle of Gaza. Three of his Kew colleagues are in the same regiment, one of whom in a recent letter writes— "Meads died of wounds received on the night of November 26, when we had a sharp scrap with the Turks. Poor lad, I found him on the hillside that night with a wound in the abdomen, fetched the stretcher-bearers, and saw him made comfortable. We did not think it was so serious then, and it was a great shock to us when news came through from the Field Ambulance that he had succumbed."

Mr. Meads was born on February 22, 1890. He worked in the nurseries of Messrs. Lowe & Shawyer for three years and at Holbrook Place, Iver, Bucks, previous to entering Kew on March 4, 1912. In December, advancement to the position of Sub-foreman of the Palm House followed. To his young widow the sympathy of every member of the Guild will be extended.

CHARLES HENRY ANDERSON.

The *London Gazette* of June 29, 1917, announced the award of the Albert Medal of the First Class to Lance-Corporal Charles Henry Anderson, late of the 1/14th Battalion of the London Regiment, who lost his life in France in November last. The official narrative is as follows:—

On November 28, 1916, Lance-Corporal Anderson was in a hut in France with eleven other men when, accidentally, the safety pin was withdrawn from a bomb. In the semi-darkness he shouted a warning to the men, rushed to the door, and endeavoured to open it so as to throw the bomb into a field.

Failing to do this, when he judged that the five seconds during which the fuse was timed to burn had elapsed, he held the bomb as close to his body as possible with both hands in order to screen the other men in the hut.

Anderson himself and one other man were mortally wounded

by the explosion, and five men were injured. The remaining five escaped unhurt.

Anderson sacrificed his life to save his comrades.

The death of Lance-Corporal Anderson is recorded in the *Journal* for 1917, page 372.

GEORGE EDWARD MASSEE.

In the *Journal* for 1916 we recorded the retirement of Mr. Massee under the age limit on March 31, 1915, and his removal to Park Place, Sevenoaks. In less than two years news reached us of his death, after a brief illness, on February 17, 1917. As President of the year, Mr. Massee's portrait appeared as the Frontispiece to the *Journal* for 1908 with a general account of his life. A Yorkshireman by birth, Mr. Massee joined the Kew Staff in 1893. Known the world over as an authority on fungi, he was ever ready to help members of the garden staff when seeking advice, and his retirement was a severe loss to the establishment. If Mr. Massee had continued to reside in the neighbourhood, as we hoped, the loss would have been mitigated, but going right away left a void difficult to overcome, and to-day our thoughts sometimes wander to the Herbarium, Jodrell Laboratory, and Mr. Massee. "A. D. C.," writing in the *Kew Bulletin*, says: "Mr. Massee was a remarkable personality. Though quick and shrewd and often very outspoken, he was kind hearted. His sense of humour and breezy sayings were always fully appreciated in the Herbarium, and his presence was greatly missed on his retirement."

ALEXANDER GALT.

By the death of Mr. Alexander Galt on August 5, 1917, the Guild loses one of its oldest members. He was seventy-seven years old, and for the long period of forty-five years had held the important position of Head Gardener at Aldermaston Court, one of the "show" places in the Reading district. Mr. Galt was born in Perthshire, serving his apprenticeship in the gardens of Drummond Castle. He entered Kew on June 22, 1864, and left in June 1867 to take up a position at the Royal Agricultural College, Cirencester, later moving to Wivenhoe Park, Essex. During Mr. Galt's long term at Aldermaston Court, the pleasure-grounds and garden were entirely remodelled under his direction. Both under glass and outside there was evidence everywhere of the skilled craftsman. Mr. Galt was one of the surprisingly few older Kewites whose sons have sought experience at Kew, his third son, Mr. A. S. Galt, now on the staff at Leeds University, being a Kewite of 1893-94. Mr. Galt is survived by his wife, who was recently successful in securing election to the pension list of the Gardeners' Royal Benevolent Institution. The death of their eldest son in France early in the War was a severe blow to Mr. and Mrs. Galt. A second son is at present in France.

ROBERT SCRIVENER.

Mr. W. H. Judd, of the Arnold Arboretum, sends news of the death of this Old Kewite on January 2, 1918. Mr. Scrivener was born at Froyale on June 20, 1848. He was at Kew in the early 70's, leaving in February 1872 to take up the position of Head Gardener at Nascott Grange, Watford. About 1874 Mr. Scrivener emigrated to the States, settling in Hartford, Conn., and some four years later was appointed Superintendent of Cedar Hill Cemetery, Hartford, a position in which he is succeeded by his elder son, who has for some time been his father's assistant. *Horticulture* for January 12, 1918, in recording Mr. Scrivener's death, says:—"He was an active and highly esteemed member of the Connecticut Horticultural Society and widely known among the gardening fraternity throughout the land, to whom he had endeared himself by his many estimable qualities."

Mr. Scrivener has two sons and a daughter. His wife (*nee* Miss Martha A. Camp, of Barkway, Watford) died several years ago.

ERNEST WILLIAM MORSE.

Another young member has given his life for his country and crossed to the Great Beyond. Not on the field of battle, but a victim of fever in West Africa. Mr. Morse came to Kew in June 1908 from Coombe House Gardens, Westbury-on-Trym. He went out to the Gold Coast as Curator in the Botanical and Agricultural Department. Black-water fever laid him low towards the end of 1916, but Mr. Morse rallied and came home on six months convalescent leave. The change appeared to have done him good when he returned in June 1917. It was, unfortunately, only temporary, however, for two months after his return the dread malady claimed him as a victim in the Colonial Hospital; Cape Coast Castle, on August 30.

Mr. Morse was 30 years of age, having been born on June 30, 1887.

"SOMEWHERE IN FRANCE."

EXTRACT from G.H.Q. Troops Orders No. 840, dated Feb. 12, 1918:—

Gallant Conduct.

RO. S/236813, Staff-Sergeant C. P. Raffill, A.S.C., employed with a Graves Registration Working Party, when returning to his billets about 8.45 p.m. on Feb. 3, 1918, heard a slight sound in a field close by, investigated matters, and captured two German prisoners of war who had escaped from a P. of W. Camp some distance away. He marched them along the road until he met some troops, who furnished him with an escort.

The Commandant G.H.Q. Troops congratulates Staff-Sergeant Raffill on his action.

KEW STAFF (December 31, 1917).

		<i>Entered Kew.</i>
Director	*Lt.-Col. Sir David Prain, I.M.S., C.M.G., C.I.E., F.R.S., V.M.H., M.B., etc.	1905
Assistant Director	*Capt. Arthur W. Hill, M.A., F.L.S.	1907
Assistant, 1st Class	John Aikman	1888†
(Technical)	*Dr. B. Daydon Jackson, Sec., L.S.	1900
Keeper of Herbarium and Library	Otto Stapf, Ph.D., F.R.S., F.L.S.	1891
Assistant, 1st Class	Charles Henry Wright, A.L.S.	1884
" "	Robert Allen Rolfe, A.L.S.	1879†
" "	*Sidney Alfred Skan	1892†
Assistant, 2nd Class	T. A. Sprague, B.Sc., F.L.S.	1899
" "	Miss Elsie Maud Waketield, F.L.S.	1910
" "	William B. Turrill, B.Sc.	1909
" for India	John Hutchinson	1904†
Botanical Artist	Miss Matilda Smith	1878
Lecturer (Physics & Chemistry)	Paul Haas, D.Sc.	1909
(Soils and Manures)	H. B. Hutchinson, Ph.D.	1914
Sub-Assistant	Miss Ada F. Fitch	1892
" "	Miss M. O'Reilly	1915
Assistant (Temporary Technical)	Miss Mary L. Green, B.A.	1912
" " "	Miss Jessie Mash	1913
" " "	Miss D. M. Rolfe	1915
" " "	Miss E. Fitch	1917
Assist. Keeper, Jodrell Laboratory	Leonard Alfred Boodle, F.L.S.	1904
Keeper of Museums	John Masters Hillier	1879
Assistant, 1st Class	*John Henry Holland, F.L.S.	1895†
" 2nd Class	*William Dallimore	1891†
Preparer	George Badderly	1880
(Temporary)	L. J. Harding	1913
Plant Pathology Laboratory:—		
Assistant, 1st Class	Arthur Disbrowe Cotton, F.L.S.	1904
" " " " "	William Broadhurst Brierley, M.Sc.	1915
" 2nd Class	Mrs. L. Alcock	1915
" Temporary Technical	Miss M. G. Aikman	1915
" " " "	Miss M. N. Owen	1916
Curator of the Gardens	*William Watson, A.L.S., V.M.H.	1879
Assistant Curator	*William Jackson Bean, V.M.H.	1883†
1st Class	*William Nicholls Winn	1890†
(Temporary)	Miss N. Watson	1916
Foremen:—		
Herbaceous Department	*Walter Irving	1890†
Arboretum	*Arthur Osborn	1899†
Decorative Department	*John Coult's	1896†
Tropical Department	*William Taylor	1902†
Temperate House (Temporary)	*William L. Lavender	1899†
Tropical Department	*Charles P. Raffill	1898†
Storekeeper	*George Dear	1884
Sergeant-Constable	Walter Linney	1892
Clerk of the Works	G. D. Patterson	1911
" Foreman	J. E. Holman	1912
Medical Officer	*L. C. Burrell, M.B., M.A., B.C.	1899

† Entered as a young gardener.

SUB-FOREMEN.

<i>Name.</i>	<i>Department.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Balen, J. C. van..	Temp. House	Oct. 1915..	Hampton.
Coates, C. F. ..	Arboretum	Sept. 1915..	Manor Park, Potton, Beds.
Weeks, C. E. ..	Decorative	Dec. 1914..	J. Veitch & Sons, Feltham.
Field, W.	Ferrieries	Apr. 1915..	Richmond.
Bell, Miss V. S. .	Herbaceous	June 1915..	Glynde Sch. of Gardening.
Joshua, Miss L. H.	Temperate Pits ..	Aug. 1915..	Swanley Hort. College.
Williams, Miss R. M.	Flower Garden ..	June 1915..	Thatcham Fruit & Flower Farm.
Halkerston, D. .	Propagating Pits..	Nov. 1916..	Seapark Gds., Forres, N.B.
Freeman, J.	Palm House	Feb. 1916..	Launceston, Tasmania.
Lines, Miss I. L.	T. Rang e(Orchids).	Sept. 1915..	Miss Lister, Parkgate, Chester.

GARDENERS.

<i>Name.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Beer, A.	June 1914	Amos Peiry, Enfield.
Bowley, A.	Sept. 1914	Grove Park, Chiswick.
Higgott, O. F. A.	Sept. 1917	Waddesdon Manor.
Hughes, E. A.	Dec. 1917	Grappingham Hall, Warringtn.
Houten, A. W. van der .	Oct. 1917	Botanic Gardens, Regent's Pk.
Muraoka, R.	May 1917	World Fair, San Francisco, U.S.A.
Pearce, T. G.	Feb. 1915	Messrs. Fromow, Chiswick.

IMPROVERS.

Marshall, A.	Sparrow, A. E.	Wood, L.
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WOMEN GARDENERS.

<i>Name.</i>	<i>Where trained.</i>
Bishop, S. W.	Barrow Cadbury, Blackwell.
Boswell, D. A. L.	Studley Horticultural College.
Broadbridge, L.	Studley Horticultural College.
Bysouth, R. A.	Horticultural College, Hounslow.
Clark, A. M.	Atkinson & Statter, Locksheath, South'pton.
Davidson, H. W.	Government House, Newfoundland.
Ellis, C. F.	Kew trained.
Freda, A. B.	Chesham Gardens, Manchester.
Fuller, E. A.	Kew trained.
Garnett, R.	Kew trained.
Griffin, A. N.	Wrotham Park, Barnet.
Hart, R.	Botanic Gardens, Glasnevin.
Jacobs, A.	Ensbury Growers.
Kermode, D. M.	Kew trained.
Madden, H. P.	Perrystone Towers, Ross-on-Wye.
Mason, F. M. J.	Duncan & Davies, New Plymouth, N.Z.
Michôd, H.	University College, Reading.
Munro, M. E.	Kew trained.
Otto, E.	Osterley Park, Hounslow.
Robbie, H. N.	Glencarse Nurseries, Perthshire.
Robshaw, N.	Chesham Gardens, Manchester.
Rudolph, O.	Swanley Horticultural College.
Ruse, E.	Park House, Potters Bar.
Stalker, A. W.	Glencarse Nurseries, Perthshire.
Watson, M. W. E. C.	Swanley Horticultural College.
Watson, K.	Kew trained.
Wiltshire, N. M.	Evesham.

ALTERATIONS AND ADDITIONS TO THE 1917 DIRECTORY.

<i>Name.</i>	<i>Left</i>	<i>Kew.</i>	<i>Present Position and Address.</i>
Bally, P.	Aug. 1916 ..		Bd. de Grancy, 26, Lausanne, Switzerland.
Band, R.	Oct. 1908 ..		W. Afri. Rub. Plts., Birrimsu, Tajoe, <i>via</i> Accra, Gold Coast.
Bass, E.	Mar. 1899 ..		Leigh Lodge, Abbots Leigh, nr. Brist'l.
Bintner, J.	Sept. 1917 ..		8 Waterloo Place, Kew Green.
Bogemans, A.	Jan. 1911 ..		Bruyères-le-Châtel, S. & O., France.
Bullock, T. G.	May 1913 ..		Carsington, Wicksworth, Derbyshire.
Casey, Miss E. M.	Dec. 1917 ..		Ewell Castle, Ewell, Surrey.
Clark, John	Dec. 1900 ..		S., Cemetery Lodge, Hatfield Road, St. Albans.
Clarke, N. K.	Nov. 1909 ..		H. G., Orsett, Grays, Essex.
Coombes, G.	July 1915 ..		c/o Hodge & Co., 220 Church Street, Pietermaritzburg, Natal.
Dawe, M. T., F.L.S.	Sept. 1902 ..		D., Agric. Dept., San Lorenzo, Tolima, Colombia.
Gardner, L. W.	May 1913 ..		Chuikuli Estate, P.O. Box No. 8, Fort Jameson, N.E. Rhodesia.
Goad, Miss M. E.	April 1917 ..		Gunnersbury Park, Acton, Middlesex.
Grant, Miss N.	Sept. 1917 ..		Fairlight, Hassocks, Sussex.
Harper, Miss E. M.	Jan. 1918 ..		Ewell Castle, Ewell, Surrey.
Harper, Miss K. M.	Jan. 1918 ..		Ewell Castle, Ewell, Surrey.
Hart, Miss R.	Dec. 1917 ..		Woodside, Howth, Ireland.
Harvey, Miss V. M. H.	Dec. 1917 ..		Ewell Castle, Ewell, Surrey.
Hume-Spry, Miss P. C.	Jan. 1918 ..		Bryndorwen, Kingsland, Shrewsbury.
Hutchings, Miss A.	Jan. 1917 ..		F., Horticultural Coll., Swanley, Kent.
Jarrett, J. C.	April 1913 ..		Bradford, Victoria Av., Wellington, Salop.
Johnson, G. T.	Oct. 1904 ..		Applegarth, Ramgarth P.O., Naini Tal District, India.
Juul, T.	June 1917 ..		Bregentved, Haslev Station, Denmark.
Kidd, H. H.	April 1909 ..		C., Botanic Gard., Pietermaritzburg, Natal, S. Africa.
Lazenby, F.	Jan. 1900 ..		S., Mora Monada, Marion, Mass., U.S.A.
Long, F. R.	April 1908 ..		c/o Pulau Bulang Rubber & Produce Co. Ld., Pulau Bulang, <i>via</i> Singapore.
Longfoot, William	Feb. 1877 ..		Dean Bridge, Holmfirth, Huddersfield.
MacGregor, J.	Sept. 1874 ..		The Cottage, Little Brook, North Holmwood, Surrey.
Mackay, A.	July 1904 ..		c/o Miss Mackay, 8 Brunswick Mans., Brunswick Square, W.C. 1.
McNab, J.	Sept. 1911 ..		c/o Sander & Son, Nurserymen, St. Albans.
Middleton, C. H.	Mar. 1908 ..		Sub-Insp. B. of Agr. & Fish., 4 Whitehall Place, London, S.W. 1.
Mills, George	Mar. 1900 ..		S., Bracken Avenue, Takapuna, Auckland, N.Z.
Nash, Miss O.	Dec. 1917 ..		Sonamarg, Great Missenden, Bucks.
Newberry, W. J.	Mar. 1903 ..		S. Parks Dept., Pietermaritzbg., Natal.
Oliver, G. H.	Dec. 1912 ..		60 Fernwood Rd., Aigburth, Liverpool.
Paine, W. H.	Oct. 1905 ..		Miranda, <i>via</i> Sutherland, N.S.W.
Proudlock, A. W.	Sept. 1906 ..		30 Water Street, Northwich.
Quinton, J. P.	May 1901 ..		29 Sutherland Avenue, Maida Hill, London, W. 9.
Renton, J.	Dec. 1906 ..		S. Provincial Nursery, Essondale, B.C.
Service, R.	May 1914 ..		Canadian Army.
Shewell, Mrs. (Morland).	April 1899 ..		West Heath House, Northfield, Birmingham.
Smith, J. T.	April 1911 ..		80 Fearnley Street, Watford, Herts.
Stone, W. H.	June 1872 ..		3 Woodfield Cottages, Torquay.
Stubington, Miss E. M.	Sept. 1917 ..		Oaklands, North Havant.
Thomas, H. H.	Feb. 1899 ..		27 The Avenue, West Ealing, W. 13.
Walsh, C. S.	Oct. 1914 ..		Sub. Insp. H. Branch, 4 Whitehall Place, London, S.W. 1.
Willison, H.	Mar. 1902 ..		7 Warman's Cottages, Mill Hill, London, N.W. 7.
Ussher, C. B.	Oct. 1903 ..		Ulster Bk. House, Enniskillen, Ireland.