FORESTRY COMMISSION.

EIGHTH ANNUAL REPORT

OF THE

FORESTRY COMMISSIONERS.

Year ending September 30th, 1927.

(Presented pursuant to Act 9 & 10 Geo. V., c. 58, s. 8(4).)

Ordered, by The House of Commons, to be printed, 11th June, 1928.

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EIGHTH ANNUAL REPORT

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FORESTRY COMMISSIONERS.

Year ending September 30th, 1927.

FOREST POLICY.

There has been no interruption in policy during the year and the Commissioners' planting programme has been carried out in its essentials.

Resignation of Lord Lovat.

On the 3rd March, 1927, the Rt. Hon. Lord Lovat, to the regret of his colleagues of all ranks, resigned from the Forestry Commission on taking up another appointment. As first Chairman of the Commission he will always be remembered for the manner in which he laid the foundation of a new organisation and for the skill with which he overcame the difficulties which inevitably arise in bringing a new Act into operation. His gift for administration and his practical knowledge of forestry were of the utmost value in shaping the Commission's policy, while his keen and untiring work, in office and forest, set a high standard of duty, which the Service built up under his guidance was quick to appreciate.

Finance.

The balance remaining in the Forestry Fund at 30th September, 1926, was £251,936. Payments into the Fund amounted to £773,164, and out of the Fund to £618,997. The balance at the end of the year was consequently £406,103, an increase of £154,167 over the corresponding figure for the previous year.

Out of the total amount of £3½ millions due to be paid into the Forestry Fund, under the Forestry Act, 1919, before the 31st March, 1929, £3,014,400 had been paid to the 30th September, 1927, leaving £485,600 still to be provided. The Treasury has now intimated that this balance will be made available for the financial year 1928-29 and adding to this the sum of £136,000 estimated to be in the Fund at 1st April, 1928, a net expenditure of £621,600 will be possible during that year.

Land Acquisition.

Acquisitions during the year amounted to 36,039 acres, of which 30,755 acres were classified as plantable. Acquisitions to the end of the forest year 1927 are compared in the table below with the proposals of the Acland Report. The total area of plantable land acquired to the 30th September, 1927, amounted to 244,838 acres, or 39,962 acres less than the proposed area.

Acquisition of Plantable Land.

Year	By 1	Lease or 1	Feu	Ву	Purobas	se.	Total.				
ended 30th Sept.	Proposed (Acland Report).	Actual.	Excess (+) Deficit (-).	Proposed (Acland Report).	Actual.	Excess (+) Deficit (-).	Proposed (Acland Report).	Actual.	Excess (+) Deficit (-).		
1920 1921 1922 1923 1924 1925 1926	Acres. 8,800 9,200 8,800 8,800 17,600 18,000 17,600 18,000	Acres. 24,776 19,774 22,703 21,885 8,099 16,194 10,476 11,301	Aores. +15,976 +10,574 +13,903 +13,085 - 9,501 - 1,806 - 7,124 - 6,699	Aores. 22,000 22,000 22,000 22,000 24,000 22,000 22,000 22,000	Acres. 6,434 13,186 687 6,704 12,356 24,835 25,974 19,454	Acres15,566 - 8,814 -21,313 -15,296 -11,644 + 2,835 + 3,974 - 2,546	Acres. 30,800 31,200 30,800 30,800 41,600 40,000 39,600 40,000	Acres. 31,210 32,960 23,390 28,589 20,455 41,029 36,450 30,755	Acres. + 410 + 1,760 - 7,410 - 2,211 -21,145 + 1,029 - 3,150 - 9,245		
Total	106,800	135,208	+28,408	178,000	109,630	-68,370	284,800	244,838	-39,962		

Note.—In addition, 4,866 acres were acquired in Ireland to 31st March, 1922.

Planting Programme.

(A) STATE FORESTS.

Conifers.—The progress made in the realisation of the 150,000-acre programme is shown in the table below. The area planted during the year was 21,963 acres, compared with 23,300 acres under the Acland Programme and 22,600 acres under the Commissoners' revised programme. The total to the end of the year was 90,156 acres, compared with 93,300 acres for the Acland Programme and 92,900 for the revised programme.

Taking into account the area of land now available for planting and the probable course of acquisition for the next year, it is estimated that the Commissioners will plant over the whole 10-year period approximately 135,000 acres of conifers which, for reasons fully explained in previous reports, will leave them 15,000 acres short of the 150,000-acre programme.

			Acland	Com-			18 (+) it (-) оп
	Year.		Com- mittee's Pro- gramme.	missioners' Revised Programme.	Actually planted.	Acland Com- mittee's Pro- gramme.	Com- missioners' Revised Pro- gramme.
		,	Acres.	Acres.	Acres.	Acres.	Acres.
1st y	year, 1919-20		Nil)	1,094	+1,094	1
2nd	,, 1920–21	•••	3,300	li l	5,660	+2,360	
3rd	,, 1921–22		6,700	51,900	9,387	+2,687	1 704
$4 \mathrm{th}$,, 1922–23		10,000	7 21,900	9,758	_ 242	- 1,704
5th	,, 1923–24		13,300		10,015	-3,285	
6th	,, 1924–25		16,700	[j	14,282	-2,418)
7th	,, 1925-26	•••	20,000	18,400	17,997	- 2,003	- 403
8th	,, 1926–27	•••	23,300	22,600	21,963	1,337	— 637
9th	,, 1927–28	•••	26,700	26,800			
10th	,, 1928–29	•••	30,000	30,300	90,156	-3,144	-2,744
	Total		150,000	150,000			

Note.—Owing to a re-survey the figures in respect of the area planted in the seasons 1919-25 have been reduced by 250 acres.

In addition to the areas indicated above, 1,697 acres were planted in Ireland to

31st March, 1922.

Broadleaved Species.—No definite programme has been laid down for the 10-year period. The areas actually planted in Great Britain are:—

		\mathbf{A} cres.
1919-20		116
1920-21		269
1921-22		175
1922-23		656
1923-24		454
1924-25		575
1925-26		378
1926-27		1,510
	Total	4,133
	10tal	4,100

It is estimated that the total area which will be planted with hardwoods in the 10-year period will be approximately 5,000 acres. This is additional to the few hundred acres which are in process of regeneration by natural means in the former Crown Woods.

Total.—The total area planted to 30th September, 1927, was 94,289 acres* and this added to the estimate for the remaining two years gives a figure of 140,000 acres for the 10-year period.

^{*} As another planting season has passed since the period to which this report relates, it may be of interest to note that the total area planted by the Commissioners to the end of May, 1928, amounted to approximately 117,300 acres.

(B) Assistance to Local Authorities and Private Owners.

The area proposed, under the Acland Report, to be afforested or replanted by local authorities and private owners with State assistance during the 10 years was 110,000 acres, or an average of 11,000 acres per annum. The following work has been carried out by means of grants.

Year.		Planted.	Prepared for Planting.	Cleared of Scrub.
		Acres.	Acres.	Acres.
1921-22	• • •	10,192	9,127	3,322
1922 - 23	•••	6,148	6,075	2,015
1923-24	•••	6,530	2,772	1,721
1924 - 25	•••	7,467	2,597	1,391
1925-26		4,675	-	267
1926-27	•••	6,849	-	538
Total	al	41,861	20,571	$\overline{9,254}$

Recipients of grants for "preparation for planting" undertook to plant up without payment of a further grant. The area planted will consequently exceed 62,000 acres.

The following planting work has also been done in connection with two proceeds-sharing schemes initiated by the Development Commissioners:—

		Acres.
1919-20		357
1920-21		213
1921-22		257
1922-23		91
1923-24		320
1924-25		316
1925-26		197
1926-27		230
	${f Total}$	1,981

It is estimated that the total area which will be planted by local authorities and private owners in the 10-year period with the assistance, in one form or another, of the Commissioners will be approximately 75,000 acres.

Education and Research.

There have been no changes in the organisation and course of this work which has made steady progress.

Forest Workers' Holdings.

The systematic formation of forest workers' holdings was begun in the summer of 1924, and had therefore been running for rather less than three and a half years at the end of the year under review. Up to September 30th, 1927, 357 holdings had been completed (171 in the year under review), and 219 were in process of formation.

OPERATIONS—FOREST YEAR 1926-27.

The Forestry Fund.

The position of the Forestry Fund at September 30th, 1927, and at the same date in previous years is shown in Table I.

			${f Re}$	ceipts.		Payments.	
Year ending 30th Sep-	Balance from pre- ceding Year.		stry Fund	For Relief of Unem- ployment.		Table II. Heads	Balance remaining in the Fund 30th Sep-
tember.		Parlia mentary Votes.	Other (Table II. Head Z.)	Parlia- mentary Votes.	10031.	A. to L.	tember.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	£	£	£	£]	£	£	£
1920	Nil.	478,000	12,229	_	490,229	106,858	383,371
1921	383,371	200,000	29,149		229,149	318,768	293,752
1922	293,752	20,000		250,000	294,544	398,431	189,865
1923	189,865	153,000	40,736	100,000	293,736	271,615	211,986
1924	211,986	453,000	85,942	80,000	618,942	332,748	498,180
1925	498,180	300,000		<u> </u>	421,933	517,452	402,661
1926	402,661	335,000	122,341		457,341	608,066	251,936
1927	2 51,936	645,400		-	773,164	618,997	406,103
Total	_	2,584,400	564,638	430,000	3,579,038	3,172,935	

Receipts and payments by Parliamentary Heads of Accounts are shown in Table II. As compared with 1926, changes are comparatively small. Total payments rose from £608,066 to £618,997, an increase of £10,931. The cost of Forestry Operations declined slightly from £451,124 to £450,854, but expenditure on Forest Workers' Holdings increased from £63,939 to £73,354. Receipts rose from £122,341 to £127,764, and net payments were therefore only £5,508 greater than in the previous year.

Table II.—Payments and Receipts by Parliamentary Heads of Account.

30th September.	Salaries, Wages and P	Headquarters E Charges.	ပ်		Forestry Operations. E	Advances for Afforestation 'E Purposes.		Research and H Experiment.	Agency and Advisory Services.	Special X Services.	Forest Workers' F Holdings.	Total Pay- ments.	Z. Re- ceipts.	Net Pay- ments.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
20	£ 25,156	£ 577	£ 1,825	£ 4,829	£ 66,550	£	£ 4,547	£ 1,538	£ 1,577	£ 259	± —	£ 106,858	£ 12,229	£ 94,6 2 9
21	71,925	1,256	3,880	10,207	208,630	352	9,222	3,340	9,557	399	_	318,768	29,149	289,619
22	51,459	4,454	5,242	7,514	201,139	51,050	10,386	2,686	68,395	1,006	_	398,431	24,544	373,887
23	38,050	2,137	2,439	4,722	156,965	30,790	8,717	2,308	15,151	10,336	_	271,615	40,736	230,879
124	37,685	1,847	1,512	5,287	224,438	45,247	4,830	2,810	2,096	1,960	5,036	332,748	85,942	246,806
125	49,191	2,315	2,770	7,643	369,281	31,166	7,460	2,601	_	2,850	42,175	517,452	121,933	395,519
926	51,769	2,097	2,864	8,685	451,124	12,012	8,192	3,981	-	3, 403	63,939	608,066	122,341	485,725
927	53,836	2,934	3,108	8,455	450,854	14,024	7,525	4,424	_	483	73,354	618,997	127,764	491,233
otal	379,071	17,617	23,640	57,442	2,128,981	184,641	60,879	23,688	91,776	20,696	184,504	3,172,935	564,638	2,608,297

The working results for 1927 and previous years are shown in Table IIa, in which all salaries, wages, allowances and similar charges which have to be kept separate for Parliamentary purposes are allocated to the appropriate objects of expenditure. Income and expenditure for each year are brought to account irrespective of whether they have been received and paid respectively. Table IIa, which is the basis of the financial tables appearing later in the Report, consequently differs in some respects from Tables I and II, which show cash transactions only.

Table IIa.—Expenditure and Income Classified by Objects.

_			ibneqx loD asel		(S)	C4	340 343	350 570	225.288	238,583	386,786	481,767	416,963	481,892		2,514,229	64,473	632,276 2,578,702
	(81)	O4 (8	Jola. (12 sive.	O latol uloni	(19)	CH.	38 294	34 179	35,264	91,130	136,579	RCE,021	143,907	143,907		606,235	26,041	632,276
1		.89	Servic	sio9qé	E	4	1	959	12	11	36	<u> </u>	1	1	T	314	26 /	340
	Z.6	101 n	ces restatio sees.	_	(11)	4	1	411	89	64		1 1	1	1		765		765
Income.	Z.5		Worke Jinge.	Forest	(16)	લા		1	j	8 0	1,257	# - -	6,074	6,074		10,713	!	10,713
I	Z.4	pur	s do timent.	Resear Expe	(15)	વર		567	10	6	110	<u> </u>	93	93		832		832
	Z.3	4d-		опэ <u>я</u> повіч зовіч	(14)	લો	889		36			1	218	218		2,237	25,245	27,482
	Z.2		.noit	Educa	(13)	વર	199	1,396	1,510	324	939	1	107	107		4,033	8	4,113
	Z.1	-BI6	oqO vi	lastoT noit	(12)	વા	37,337			8 3	122.846		137,415	137,415	İ		9	1
	(01)	oq (1	Cols. (3 usive.		(11)	48	387,567	384,742			608,726		560,870	625,799		3,120,464 587,341	90,514	3,210,978 588,031
	ļi	sia,	. Worke ldings.	teeroH oH	(10)	બર	1	1		5,901	75,820	8,253	74,303	82,556		51,728 220,815	1	220,815
	ж.	ces.	ivise L	siosq8	6	વર	5,401	_	6,827	_		2,750	411	3,161		51,728	10,215	61,943
	٦.	Ad-	y and v	А gеле Товіт	€	વર	7,809	60,658	18,148	3,785	2,007	1,544	١	1,544		95,907	57,965	153,872
ture.	Ħ	and t.	for nemire	Resea	3	વા	15,472	6,646	5,125	6411	7,432	1,381	6,961	8,342		56,567]	56,567
Expenditure.	<u>ب</u>		.noita	Eqnœ	9	ભ	21,544					1,235	8,278	9,513		84,010	2,877	86,887
	ř.	tol noi	nces orestati rposes.	gyb <u>a</u> Na mq	9	બ	1,373	60,426	37,605	34 300	14,950	2,823	14,010	16,833		506 212,633 84,010	1	212,633
	庭 .	•01 0 -	otry Op	aeroT roit	⊕	વા	334,148	229,644	181,099	406,156	493,323	47,192	455,907	504,099		2,395,506	18,674	180
	o D., uper-		nl (Un- cated).	stiqaO solla	(E)	વર	1,820	1,516	906	246	193	- 249	ı	-249		3,298 2,395,6	783	4,081 2,414,
	Sub-heads A. to D., i.e. Superior Supervision and Overhead	charges.		Sub E. to	<u>a</u>	વર	85,170	51,868	26 496	57.453	61,805	65,178		65,178		402,186	26,479	428,665
	Sub-he i.e. Suf vision	Ċ			$\widehat{\Xi}$	대	066'98	53,384	44,342	57,207	61,998	64,929	Direct	64,929		405,484 402,186	27,262	432,746
		Year ending	ber.		_ -	0601	: :	:	_	: :	:	:		Total, 1927	Total: Great Britain	1920-27 4	1920–23	Grand Total 432,746 428,665

Note.—Salaries of Instructors in Schools and of Research and Experiment Officers are shown under Salaries, Wages, etc. (A.) in Table II, but under Education (G.) and Research (H.) in the above Table.

Sub-heads A to D, General Organisation: Expenditure: £64,929.

There is an increase in expenditure over 1926 of £2,931 due to the expansion of operations. During the year the number of District Officers increased from 26 to 29.

Sub-head E, Forestry Operations: Expenditure, £504,099; Income, £137,415.

Details of expenditure and income are given in Table E below. Compared with 1926, gross expenditure is increased by £10,776 and receipts by £14,569. Cultural operations cost £29,654 more at £230,543, due to the expansion of the planting programme, but expenditure on acquisition of land was £18,740 less at £99,867 and on stores and miscellaneous £15,140 less at £54,711.

Overhead Charges, £23,059; Superior Supervision, £24,133, and Local Supervision, £27,430.—Overhead charges is an apportioned sum representing the expenditure on all salaries, allowances and office charges other than those of Divisional Officers, District Officers, Deputy Surveyors and their Assistants (all of which are included under superior supervision), and foresters and foremen (included under local supervision). During the year the number of foresters and foremen was increased by 18 from 150 to 168.

Table E.—Analysis of Forestry Operations.

Col. (12).)	Other. Total. Net Expenditure.	(13) (14) (15)	$\left \begin{array}{c c} \pounds & \pounds \\ 153 & 9,879 \end{array}\right $	$1,955 \mid 27,458 $	16,702 30,999 198,645	9,854 33,607 147,492	11,743 90,698 156,339	16,391 134,439 271,717	19,698 122,846 370,477	14,418 137,415 366,684	90,914 587,341 1,808,165
(Table II a .	Fотевt Produce.	(12)	£ 9,272	20,444	7,283	16,902	42,852	55,055	44,664	74,047	270,519
Income. (7	Rents.	(11)	£ 154	5,059	6,474	5,951	25,264	39,367	42,086	45,483	169,838
I	Sales of Land, Buildings, etc.	(10)	£ 300 ∫	 - ~	240	006	10,839	23,626	16,398	3,467	56,070
	Total.	(6)	£ 334 148	OF 1,120	229,644	181,099	247,037	406,156	493,323	504,099	2,395,506
	Stores and Miscellaneous.	(8)	2,432	15,766∫	30,516	19,879	26,404	45,129	69,851	54,711	264,688
Col. (4).)	Roade and Buildinge.	(7)	£ 1,472	7,986	4,779	5,049	7,318	18,485	17,954	20,813	83,856
	Preparation and Sale of Produce.	(9)	£	1,680	3,918	4,287	9,217	15,684	16,576	23,543	75,262
(Table IIa.	Cultural BanditaredO.	(5)	. 19,611	85,638	129,414	82,359	114,356	164,125	200,889	230,543	1,026,935
enditure.	Acquisition of Land, etc.	(4)	£ 40,393	85,803	17,191	27,768	49,418	101,471	118,607	298'66	540,518
Exp	Local Supervision.	(3)	£ ∫ 1,236	6,093	9,816	10,552	14,352	18,433	24,224	27,430	111,136
	Superior. Supervision.	(2)	£	<u> </u>	17,639	12,709	16,447	24,046	24,444	24,133	147,645
	Overhead Chargea.	(1)	£	2	16,371	18,496	9,525	18,783	20,778	23,059	145,466
	Year ending 30th September.		1920	1921	1922	1923	1924	1925	1926	1927	Total

Note.—The figures relating to Ireland (during 1920-23) are omitted.

Acquisition of Land, Buildings and Standing Timber: Expenditure, £99,867.—During the year £82,138 was paid in respect of purchases of land, including the standing timber and buildings thereon, and £17,729 in respect of land held on long lease or feu.

The average rent or feu duty for land acquired for forestry operations during the year by lease or feu is approximately 2s. 7d. per acre and the average price for the land purchased approximately £3 10s. per acre, or if the whole be charged against plantable land only, 2s. 10d. and £4 respectively. Land and buildings for forest workers' holdings are excluded.

Land acquired from 29th November, 1919, to 30th September, 1927.

	By Le	ase and	Feu.	Ву	Purchas	se.	Total by
	Plant- able (in- cluding planted).	Other Land.	Total.	Plant- able (in- cluding planted).	Other Land.	Total.	Lease, Feu and Pur- chase.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
England and Wales—	66.010	- 0-0	70.000	61.046	10.074	71 600	140 000
Finally completed Entry secured	66,212 13,298	5,850 864	72,062 14,162	61,246	10,374	71,620	143,682 14,162
Entry secured	15,255		14,102				14,102
Total	79,510	6,714	86,224	61,246	10,374	71,620	157,844
Scotland—							
Finally completed	47,848	39,425	87,273	44,116	56,106	100,222	
Entry secured	7,850	16,120	23,970	4,268	17,934	22,202	46,172
Total	55,698	55,545	111,243	48,384	74,040	122,424	233,667
Total, Great Britain	135.208	62,259	197.467	109.630	84,414	194,044	391,511
Ireland (to 31st March, 1922)	2,287	532	2,819	2,579	795	3,374	
Grand Total	137,495	62,791	200,286	112,209	85,209	197,418	397,704

Note.—The Forestry (Transfer of Woods) Orders 1924 to 1926 transferred to the Forestry Commissioners the bulk of the Crown Woodlands. The area so transferred, additional to the 391,511 acres above-mentioned, amounts to approximately 120,000 acres of which some 60,000 acres are carrying timber or are under forestal treatment.

The total area acquired during the forest year 1926-27 amounted to 36,039 acres, of which 30,755 acres were classified as plantable.

The area in Great Britain in respect of which the legal formalities of acquisition by the Department had been completed by the 30th September, 1927, was 331,177 acres, the corresponding figures in the two previous annual reports being 278,807 and 233,297 acres. In addition to these completed acquisitions, entry has been secured to a number of other properties. Details are given in the above table, which also shows the area of "plantable" and "other land." i.e., land which is either too poor to plant or is required for other purposes.

The total area acquired in Great Britain to 30th September, 1927, is 391,511 acres, of which 244,838 acres were classified at the time of acquisition as plantable. Of the plantable area, 140,756 acres (57 per cent.) are situated in England and Wales and 104,082 acres (43 per cent.) in Scotland.

Cultural Operations: Expenditure, £230,543.—Expenditure on cultural operations relates to plantations and nurseries, of which the former absorbed £165,882 and the latter £64,661. An analysis of expenditure is given in Table E 5.

Plantations.—The total area planted or sown during the year was 23,473 acres, of which 21,963 acres were placed under conifers and 1,510 acres under broadleaved species.

The total addition to the woodland area of Great Britain was 18,159 acres, the remaining plantations being on the site of felled woodlands. In making these plantations and in beating-up the previous years' plantations 45,342,000 trees were planted, of which 44 per cent. were Scots and Corsican pines, 26 per cent. Norway and Sitka spruces, 12 per cent. European and Japanese larches and 10 per cent. Douglas fir.

Table E.5.—Analysis of Cultural Operations (Table E, Column (5)).

Plant-ing and ing. Weed-ing and ing. Forest Pro-ing and ing. Forest Pro-ing and ing. Forest Pro-ing. Total. Works. New Seed. Seed. Image of the proping and ing. Image of the proping and ing. <th>-</th> <th>-</th> <th></th> <th> -</th> <th>PLANTATION6.</th> <th>TIONS.</th> <th></th> <th></th> <th></th> <th></th> <th>NURS</th> <th>Nurseries.</th> <th></th> <th></th>	-	-		-	PLANTATION6.	TIONS.					NURS	Nurseries.		
Fencing. Ing. and ing. Dearly clean. ing. Pro- ing. and ing. Ing. and ing. ing. Dearly clean. ing. Ing. and ing. ing. Pro- ing. and ing. Ing. and ing	repara		iii		_	Weed-				;	Upk	reep.		Grand Total.
£ £	tion of Ground.		age.	Fencing.		ing and Clean- ing.	beating up.		_	New Works.	Seed.	Labour and Other.	Total.	
£ £	(3)	- 1	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)	(11)	(12)	(13)
12,550 •27,310 1,860 665 2,342 57,302 3,731 5,297 12,231 24,137 3,070 3,767 2,869 68,167 3,848 8,253 10,577 12,622 6,423 2,135 3,385 50,757 1,050 2,739 14,448 13,901 15,089 5,897 6,334 72,834 999 5,665 20,311 22,615 22,620 9,526 9,152 111,659 2,955 3,173 26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,635 112,557 44,371 55,536 675,889 21,580 39,791	£ 3,375		£ 843	£ 3,279	£ 3,561	£ 705	વ્યા	£ 183	£ 11,946	£ 1,090	£ 1,127	£ 5,448	£ 7,665	$^{\pounds}_{19,611}$
12,231 24,137 3,070 3,767 2,869 68,167 3,848 8,253 10,577 12,622 6,423 2,135 3,385 50,757 1,050 2,739 14,448 13,901 15,089 5,897 6,334 72,834 999 5,665 20,311 22,615 22,620 9,526 9,152 111,659 2,955 3,173 26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791	10,781		1,794	12,550	•27,310	1,860	999	2,342	57,305	3,731	5,297	19,308	28,336	85,638
10,577 12,622 6,423 2,135 3,385 50,757 1,050 2,739 14,448 13,901 15,089 5,897 6,334 72,834 999 5,665 20,311 22,615 22,620 9,526 9,152 111,659 2,955 3,173 26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,635 112,557 44,371 55,536 675,889 21,580 39,791	17,741		4,352	12,231	24,137	3,070	3,767	2,869	68,167	3,848	8,253	49,146	61,247	129,414
14,448 13,901 15,089 5,897 6,334 72,834 999 5,665 20,311 22,615 22,620 9,526 9,152 111,659 2,955 3,173 26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791	11,550		4,065	10,577	12,622	6,423	2,135	3,385	50,757	1,050	2,739	27,813	31,602	82,359
20,311 22,615 22,620 9,526 9,152 111,659 2,955 3,173 26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791 2	12,804		4,361	14,448	13,901	15,089	5,897	6,334	72,834	666	5,665	34,858	41,522	114,356
26,684 28,621 28,262 13,071 13,527 137,342 4,309 6,170 36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791	16,920		10,515	20,311	22,615	22,620	9,526	9,152	111,659	2,955	3,173	46,338	52,466	164,125
36,354 35,928 34,528 9,310 17,744 165,882 3,598 7,367 136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791	18,052		9,125	26,684	28,621	28,262	13,071	13,527	137,342	4,309	6,170	53,068	63,547	200,889
136,434 168,695 112,557 44,371 55,536 675,889 21,580 39,791	19,522	,	12,496	36,354	35,928	34,528	9,310	17,744	165,882	3,598	7,367	53,696	64,661	230,543
	110,745		47,551	136,434	168,695	112,557	44,371		. 	21,580	39,791	289,675	351,046	1,026,935

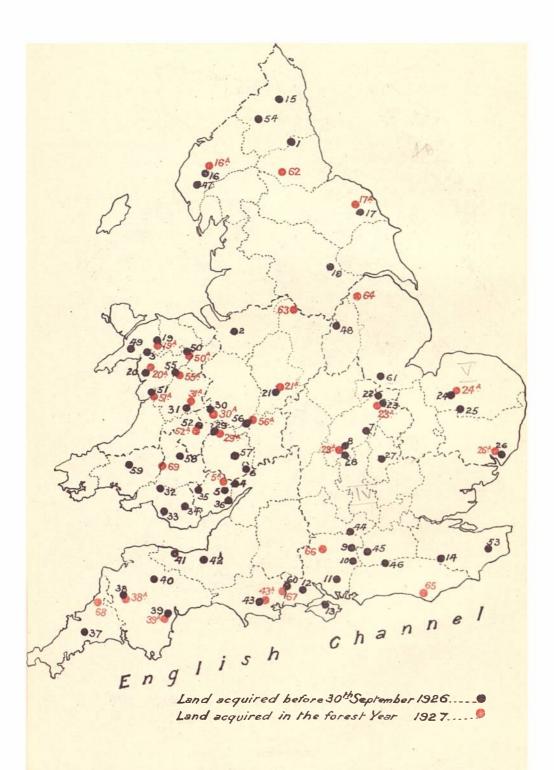
Note.—The figures relating to Ireland (during 1920-23) are amitted.

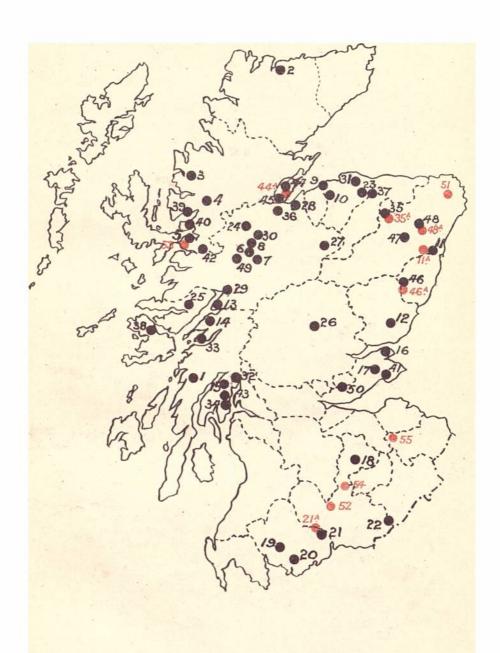
ENGLAND AND WALES.

FORESTRY COMMISSION AREAS.

1.	Chopwell.*	33.	Margam.
$\frac{1}{2}$.	Delamere.*	34.	Llantrisant.
3.	Hafod Fawr.*	35.	Llanover.
$\frac{3}{4}$.	Dean Forest.*	36.	Chepstow.
5.	Tintern.*	37.	Bodmin.
5. 5a.	Do. (addition to).	38.	Halwill.
6.		38A.	Do. (addition to).
	Dymock.*		
7.	Salcey.*	39.	Haldon. Do. (addition to).
8.	Hazelbrough.*	39a.	
9.	Alice Holt.*	40.	Eggesford.
10.	Woolmer.*	41.	Exmoor.
11.	Bere Woods.*	42.	Quantocks.
12.	New Forest.*	43.	Wareham.
13.	Parkhurst.*	43A.	
14.	Beagebury."	44.	Bramshill.
1 5.	Rothbury.	45 .	Churt.
16.	Thornthwaite.	46.	Chiddingfold.
16A.	•	47 .	Ennerdale.
<u>17</u> .	Allerston.	4 8.	Clipstone.
17A.		49.	Beddgelert.
18.	Selby.	50.	Cynwyd.
19.	Gwydyr.	50A.	Do. (addition to)
19a.	Do. (addition to).	51.	Corris.
20.	Vaughan.	51A.	Do. (addition to).
20a.	Do. (addition to).	52.	Radnor.
21.		52A.	
21a.		53.	Lyminge.
22 .	Westhay.	54.	· ·
23.	Rockingham.	55.	Dovey.
23A.	· · · · · · · · · · · · · · · · · · ·	55A.	
24.	Swaffham.	56.	Wyre.
24A.	· · · · · · · · · · · · · · · · · · ·	56A.	
	Thetford Chase.	57.	Haugh Wood.
26.		58.	Brecon.
26A.	- ·	59.	Glangwili.
27.	Ampthill.	60.	Ringwood.
28. 28a.	Brackley Hatch. Do. (addition to).	61.	Bourne.
29.	Do. (addition to). Mortimer.	62.	Hamsterley.
29. 29a.	Do. (addition to).	63.	<u>*</u>
30.	Walcot.	64. 65.	Laughton.
30a.	Do. (addition to)		Friston. Micheldever.
31.	Kerry.	66. 67.	Ferndown.
31. 31a.		68.	
32.	Rheola.	69.	Wilsey Down.
04.	TVIIGUIA.	∪∂.	Glasfynydd.

^{*} Former Crown Woods.





Land acquired before 30 1h September 1926 9
Land acquired in the Forest Year 1927

SCOTLAND.

FORESTRY COMMISSION AREAS.

1.	Inverleiver.*	30.	Craig-nan-Eun.
2.	Borgie.	31.	Altonside.
3.	Slattadale.	32.	Ardgarten.
4.	Achnashellach.	33.	Barcaldine.
5.	Ratagan.	34.	Benmore.
6.	Inchnacardoch.	35.	The Bin.
7.	South Laggan.	35a.	Do. (addition to).
8.	Port Clair.	36.	Craig Phadrig.
9.	Culbin.	37.	Ordiequish.
10.	Monaughty.	3 8.	
11.	Kirkhill.	3 9.	North Strome.
11a.	Do. (addition to).	4 0.	South Strome.
12.	${\bf Montreathmont.}$	41.	Torloisk.
13.	Glen Righ.	42 .	Glenshiel.
14.	Glenduror.	43.	Glenfinart.
15.	Glenbranter.	44.	Findon.
16.	Tentsmuir.	44A.	Do. (addition to)
17.	Edensmuir.	45.	Kessock.
18.	Glentress.	46 .	Drumtochty.
19.	New Galloway.	46a.	Do. (addition to).
20.	Screel Hill.	47.	Midmar.
21.	Aucheninnes.	4 8.	Kemnay.
21a.	Do. (addition to).	48a.	Do. (addition to).
22.	Newcastleton.	49.	Glengarry.
23.	Teindland.	50.	Blairadam.
24.	Glenurquhart.	51.	Deer.
25.	Glenhurich.	5 2.	Closeburn.
26.	Drummond Hill.	53.	Eilanreach.
27.	Glenmore.	54.	Greskine.
28.	Culloden.	55 .	Lauderdale.
29.	Nevis.		

^{*} Former Crown Wood.

		A	rea pla	nted (acr	es).	
Forest.	Affo	rested.	Re-aff	forested.	T	otal.
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Alice Holt, Hants* Allerston, Yorks Ampthill, Bedford Beddgelert, Carnarvon Bedgebury, Kentand Sussex* Bere, Hants* Bodmin, Cornwall Bourne, Lincoln Brackley, Bucks and Northants Bramshill, Berks and Hants Brecon, Brecknock	577 — 11 231 — 72 — — — — — — — — — — — — — — — — — — —	104 11 25 	41 — 113 — 39 113 — 23 393 10	16 2 	41 577 — 124 231 39 113 72 23 393 120	16 104 — 11 2 — 25 —
Cannock Chase, Stafford	560	2	30	_	590	_2
Chepstow, Glos. and Mon- mouth	-	-	163	68	163	68
Chiddingfold, Surrey and Sussex Chopwell, Durham* Clipstone, Nottingham Corris Valley, Merioneth Cynwyd, Merioneth Dean Forest, Glos., Hereford, and Monmouth* Delamere, Cheshire* Dovey, Merioneth and Montgomery Dymock, Gloucester Eggesford, Devon Ennerdale, Cumberland Exmoor, Somerset Friston, Sussex Glangwili, Carmarthen Glasfynydd, Brecknock Gwydyr, Carnarvon Hafdod Fawr, Merioneth*		125 	55 20 42 	116 1 143 9	20 520 116 217 187 26 298 20 26 27 140 118 185 108 308 37	116 1125
Haldon, Devon Halwill, Devon Hamsterley, Durham Haugh, Hereford Hazelborough, Northants	264 60 — 62 —	 1	80 165 —		264 140 165 62 —	- 3 1 -
Kerry, Montgomery Laughton, Lincoln Llanover, Monmouth Llantrisant, Glamorgan Lyminge, Kent Margam, Glamorgan Mortimer, Hereford and	266 100 — 210 342	15 	296 	 	296 266 180 — 157 210 355	
Radnor New Forest, Hants* North Tyne Valley, Northumberland.	110	_5	467 —		467 110	20 5

September, 1927—England and Wales.

	Species	s planted,	including	beating	g up (t	housan	ds).		
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.
36 473 3 — 29 — —	9 130 — 39 54 59 100 5	16 132 5 - 172 1 56 - 8	23 618 — 175 140 — 8 — 79	78 — — — — — — — —	- - - - 3 - 30	80 	$\begin{bmatrix} - \\ 14 \\ - \\ 6 \\ 7 \\ - \\ 2 \\ - \\ 1 \end{bmatrix}$	163 1,447 8 181 387 70 125 130 93	Alice Holt.* Allerston Ampthill. Beddgelert. Bedgebury.* Bere.* Bodmin. Bourne. Brackley.
1,196 30 1,059		30 9 — 95	44 73 4	_ 		- 4 33	1 - 11	1,271 175 1,096	Bramshill. Brecon. Cannock Chase. Chepstow.
_	60	18	32	155	12	_	18	295	Chiddingfold.
1,009 	3 64 30 90 180	9 4 73 61 72	21 89 201 117			1 33 7 5 195	22 10 - 39	58 1,132 209 397 890	Chopwell.* Clipstone. Corris Valley. Cynwyd. Dean Forest.*
125 9	_5	- 149	364	_	=	_1	-8	131 530	Delamere.* Dovey.
	24 8 	31 39 10 277 59 99 12 27		51	3 - - - - - - - - - - - - - - - - - - -	5 2 9 - 98 - 3 - - 6 1	3 - 57 - 19 3 - 2 2	80 48 177 223 353 288 160 662 65 541 401 298 90	Dymock.* Eggesford. Ennerdale. Exmoor. Friston. Glangwili. Glasfynydd. Gwydyr. Hafod Fawr.* Haldon. Halwill. Hamsterley. Haugh. Hazel- borough.*
286 148 — — 74 95	109 - 30 85 397	67 	491 157 121 3 1 252 21	- - - - -	 	3 27 2 4 — 1 11	14 4	568 484 406 10 197 417 708	Kerry. Laughton. Llanover. Llantrisant. Lyminge. Margam. Mortimer.
100 103	321 3	146	237 127	27	2	18 11		855 246	New Forest.* North Tyne Valley

Plantations. Year ended 30th

		A	rea pla	nted (acre	es).	
Forest.	Affo	rested.	Re-aff	orested.	To	otal.
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Parkhurst, Isle of Wight* Quantocks, Somerset Radnor, Radnor Rendlesham, Suffolk Rheola, Glamorgan Ringwood, Hants Rockingham, Northants Rothbury, Northumberland Salcey, Bucks and	40 430 503 152 358	94	16 150 — 20 60 56 89	28 - - - - - - - 1	16 190 430 503 172 418 56 89	28 — — — — — 94 —
Northants* Selby, Yorks		17 487 4	232 266 98		661 3,436 363 98	17 487 38
Vaughan, Merioneth Walcot, Salop Wareham, Dorset Westhay, Northants Wyre, Worcester Total	261 102 325 — 159 — 10,974	1 - - - - 932	3,923		261 102 325 — 159 — 14,897	$ \begin{array}{c} 1 \\ - \\ 49 \\ - \\ \hline 1,422 \end{array} $
By direct sowing (included above)	447	120	33	17	480	137

^{*} Former Crown Woods.

Plantations. Year ended

		A	rea plan	ted (acre	s).	
Forest.	Affo	rested.	Re-aff	orested.	T	otal.
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Achnashellach, Ross	156	_	_	_	156	
Ardgarten, Argyll	147	_	_	_	147	_
Barcaldine, Argyll	188	12	_	_	188	12
Benmore, Argyll	_		107	_	107	- - - - - - 1
Bennan, Kirkcudbright	164	_	-	-	164	
Bin (The), Aberdeen	274	_	l —	_	274	_
Blairadam, Fife and Kinross	60	_	<u> </u>	_	60	
Borgie, Sutherland	53		—	<u> </u>	53	_
Closeburn, Dumfries	99	_	_	<u> </u>	99	_
Craig-nan-Eun, Inverness	69	_	94	_	163	
Craig Phadrig, Inverness	_	_	5 3	1	53	1
Culbin, Elgin	385	-		— ₋	385	
Culloden, Inverness	· -		61	2	61	2
Dalbeattie, Kirkcudbright	8	_	209	_	217	_

September, 1927—England and Wales—contd.

	Species	planted,	including	beating	up (th	ousand	в).		
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.
35 30 54 1,071 30 111 - 84	28 84 189 ———————————————————————————————————	15 99 155 25 92 104 63 81	9 32 336 — 241 9 35 47	28 	 65 2	3 - - - - - - 9	3 2 13 — — — — — — 5	118 250 747 1,096 558 224 266 226 18	Parkhurst.* Quantocks Radnor. Rendlesham. Rheola. Ringwood. Rockingham. Rothbury. Salcey.*
1,467 5,755	7 114 824	50 229 324	_ 	18 12	<u>-</u> -	20 897	22 1 101	79 1,849 7,913	Selby. Swaffham. Thetford Chase.
102 34 46 5 187 —	84 71 24 24 — — — — 122	243 65 51 104 72 — 67	170 7 463 4 —————————————————————————————————	4	14 25 — — — — — 1	30 6 1 10	22 2 11 1 - 26 1	665 208 601 139 259 27 221	Thornthwaite. Tintern.* Vaughan. Walcot. Wareham. Westhay. Wyre.
14,927	4,497	3,896	5,715	546	231	1,537	467	31,816	Total.

30th September, 1927—Scotland.

	Species	planted,	including	beating	g up (tl	housand	s).		
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.
22	10	9	105			1 0	5	240	Achnashellach.
	68	4	185 139	_	_	9	19	233	Ardgarten.
6	23	18	252	_	-	26	10	335	Barcaldine.
27	68	13	17	11111	_	10	10	145	Benmore.
76	28	13	206	_	-	10	6	316	Bennan.
256	24	_	260	_	-	-	"	540	Bin (The).
22		_	90	-	-	-		112	Blairadam.
43		-	73	_		_	34	152	Borgie.
4	2		152		_	-	J-1	158	Closeburn.
123		36	93			_		253	Craig-nan-Eun.
50		22	2	-	-	1 1	1 1	75	Craig Phadrig.
883	_			_ _ _	-	1	4	887	Culbin.
85	3	28	11	_		3	10	140	Culloden.
111	127	46	168	_	_	_	1 1	453	Dalbeattie.

			rea pla	nted (acr	es).	
Forest.	Affo	rested.	Re-afi	forested.	T	otal.
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Deer, Aberdeen	175	16	172 	2	175 172 111 93 128 327 116 125 103 262 274 95 155 66 243 123 43 131 98 83 182 213 136 115 39 157 148 111 145 — 107 102 326 7,066	16 2 3 2 - 4 4 5 3 1 1 - 6 10 1 1 1 3 13 88
By direct sowing (included above).	_	_	_			

^{*} Former Crown Wood.

Plantations.	Year	ended
A tareattoris.	100.	•.•

England and Wa Scotland	les 		10,974 6,174	932 79	3,923 892	490 9	14,897 7,066	
Total	•••	•••	17,148	1,011	4,815	499	21,963	1,510

30th September, 1927—Scotland—contd.

	Species	planted, i	ineluding	- beating	up (th	ousand	s).		:
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others,	Total.	Forest.
116 100 38 125 192 4 3 24 345 93 130 53 26 17 110 53 62 65 273 406 - 45 25 45 164 702	10 149 74 5 1		169 11 29 75 32 521 210 65 191 313 178 138 207 34 163 64 15 254 65 — 44 21 112 75 192 392 87 22 160 173 149 200 26 90 35 3			17 7 8 4 1 5 10 15 13 2 4 5 3 4	7 8 11 3 1	321 291 183 212 227 528 268 179 191 323 530 139 303 200 443 174 53 360 193 89 118 139 502 194 393 174 69 278 269 231 279 34 170 210 731	Deer. Drummond Hill. Drumtochty. Edensmuir. Findon. Glenbranter. Glenduror. Glenfinart. Glengarry. Glenhurich. Glenmore. Glen Righ. Glenshiel. Glenstress. Glenurquhart. Inchnacardoch. Inverliate. Inverliever. Kemnay. Kessock. Kirkhill. Midmar. Monaughty. Montreathmont. Nevis. Newcastleton. North Strome. Ordiequish. Port Clair. Ratagan. Salen. Slattadale. South Laggan. South Strome. Teindland. Tentsmuir.
5,015	934	780	6,163		2	161	471	13,526	Total.

30th September, 1927—Summary.

14,927 5,015	4,497 934	3,896 780	5,715 6,163	546 —	231 2	1,537 161	467 471		England & Wales. Scotland.
19,942	5,431	4,676	11,878	546	233	1,698	938	45,342	Total.

Cost of Planting.—The outlay per acre on labour and material on the area planted between 1919 and 1927 was as follows:—

	£	s.	d.	
England and Wales	8	9	9	
Scotland	9	10	3	
Great Britain	8	16	4	

These figures include the cost of preparation of ground, drainage, fencing, plants, planting, replacement of failures and weeding.

Forest Fires.—During the year 104 fires occurred, affecting 563 acres. The damage done was estimated at £2,073, the amount recoverable being £120. Of the total number of fires, 38 were caused by sparks from railway engines.

Nurseries.—The total area under nurseries at 30th September, 1927, was 730 acres stocked with 213 million seedlings and 115 million transplants. Comparative figures for the three years 1925-27 are given in the following table:—

Nurseries.

Year end-			s	leed Sow	n	Stock of Plants at 30th September (thousands).								
ing 80th	Country.			(lbs.).		T	ransplan	ts.	Seedlings.					
Sep- tem- ber.	-			Broad- leaved.	Total.	Conifer-	Broad- leaved.	Total.	Conifer- ous.	Broad- leaved.	Total.	Area (Acres).		
1927	England	and	8,412	52,470	60,882	68,182	3,157	71,389	141,883	6,394	148,277	495		
	Wales. Scotland	••	2,397	1,413	3,810	43,183	874	44,057	64,024	776	64,800	235		
	Tot	al	10,809	53,883	64,692	111,365	4,031	115,396	205,907	7,170	213,077	730		
1926	England	and	7,829	18,797	26,626	55,842	3,285	59,127	129,132	3,455	132,587	468		
	Wales. Scotland	•••	1,767	297	2,064	43,945	866	44,811	86,848	737	87,585	260		
	Tot	al	9,596	19,094	28,690	99,787	4,151	103,938	215,980	4,192	220,172	728		
1925	England	and	7,024	17,780	24,804	38,195	2,358	40,553	101,501	2,398	103,899	378		
	Wales. Scotland		8,699	445	4,118	33,522	788	34,310	100,550	698	101,248	227		
	Tot	al	10,723	18,225	28,922	71,717	3,146	74,863	202,051	3,096	205,147	605		

Seed Supply.—The Sitka spruce crop of the autumn of 1926 was very good both in Canada and the United States of America but only small supplies of Douglas fir seed were available and these were of poor quality. Seed of European species such as

larch, Norway spruce and Corsican pine was plentiful and of good quality but Japanese larch failed completely.

As regards home-collected seed, oak, chestnut, ash and beech gave good crops and in Scotland a considerable quantity of larch was obtained. Scots pine cones were not so plentiful as in the autumn of 1925 but sufficient seed was obtained to meet the Commission's requirements.

The quantity of seed sold during the year amounted to 3,577 lbs.

The Commissioners have to express their gratitude for gifts of seed from the Hon. Charles Lathrop Pack, the Hon. Henry D. Maclaren and the forest authorities of France and Canada.

Sub-Head F.—Advances for Afforestation Purposes: Expenditure, £16,833.

Of the total expenditure, £2,823 was in respect of overhead and supervisory charges and £2,028 was in respect of a proceeds-sharing scheme. The remainder, viz., £11,982, was in respect of grants to private individuals and local authorities for planting and scrub clearing. The grants were as follows:—

- (1) Conifers.—Up to £2 per acre for every acre planted and thereafter maintained as a forest crop.
- (2) Hardwoods.—Up to £4 per acre planted with approved species and thereafter maintained as an area for the production of hardwoods.
- (3) Clearance of Scrub, &c.—Up to £1 per acre (in exceptional cases up to £2 per acre) for every acre cleared. Limited to selected schemes involving not less than 50 acres.

Particulars of the schemes in respect of which grants were paid during the year are given in the Table below:—

	England and Wales.	Scotland.	Total.
No. of Schemes	 210	125	335
Planting Conifers Planting Hardwoods Scrub clearing	 Acres. 2,617 640 56	Acres. 3,527 65 482	Acres. 6,144 705 538

Sub-head G.—Education: Expenditure: Gross, £9,513; Net, £9,406.

Details of expenditure and income are given in Table G below:

Table G.—Analysis of Education.

			Expendi	ture (Tal	ble IIa, (Col. (6)).			Income (Table IIa, Col. (13)).			
Year	Superior		Appre	ntices' Sc	hools.							ıre.
ending 30th Sep- tember.	Super- vision and Over- head Charges.	Salaries and Expenses of Instructors.	Purchases and Rent of Land and Buildings.	Allowances to Apprentices.	Stores and Equipment.	Fuel and Light and Sundry Expenses.	Grants to Insti- tutions.	Total.	Labour of Apprentices	Other.	Total.	Net Expenditure.
1920 1921 1922 1923 1924 1926 1927	£ 3,432 1,092 1,617 983 1,245 1,357 1,235	£ { 1,343 3,493 2,793 1,614 1,447 1,150 1,138 769	£ 2,033 2,479 127 311 421 166 235 185	£ 1,417 2,468 3,157 4, 20 2 1,440 1,718 2,059 2,067	£ 425 982 411 163 56 127 267 133	£ 605 1,625 2,513 1,287 843 804 1,013 989	£ 1,242 2,264 2,598 3,059 4,743 4,239 4,135	£ 21,544 12,357 11,792 8,243 9,953 10,608 9,513	£ {- 1,258 282 33 12 39	£ 108 96 1,396 252 42 435 17 68	£ 1,396 1,510 324 468 29 107	£ 21,345 10,961 10,282 7,919 9,485 10,579 9,406
Total	10,961	13,747	5,957	18,828	2.564	9,679	22,274	84,010	1,624	2,409	4,033	79,977

The figures relating to Ireland (during 1920-23) are omitted.

Apprentices' Schools: Expenditure, Gross, £4,143; Net, £4,036.—During the year 49 forest apprentices were undergoing courses of instruction in the schools at Parkend (Forest of Dean) and at Beaufort (Inverness-shire). At the final qualifying examination 19 men who had successfully completed the two years' course were granted certificates of proficiency.

Grants to Universities and Colleges: Expenditure, £4,135.— The following Universities and Colleges received grants during the year:—Oxford University; Cambridge University; University College of North Wales, Bangor; Aberdeen University; Edinburgh and East of Scotland College of Agriculture.

These centres provide courses of training for forest officers and also forestry courses for those engaged in allied occupations such as estate management and agriculture. The number of students who were studying forestry during the period under review was 121. The number of forestry degrees granted was 32, and 4 candidates were successful in gaining forestry diplomas.

Imperial Forestry Institute: Expenditure, £2,000.—The Imperial Forestry Institute is financed from the Forestry Fund to the extent of £2,000 per annum for a period of five years from

October, 1924. The contribution from the Colonial Governments was originally fixed at £3,000, but was subsequently increased to provide for special work in which the Colonies are particularly interested.

The number of students who attended the various courses of study for the whole or part of the Academic year 1926-7 was 32. These included post-graduate probationers, Great Britain 1, India 3, South Africa 2, Colonial Services 6; Forest Officers on leave, India 2, Colonial Services 14; private students 4.

Sub-head H.—Research and Experiment: Expenditure: Gross, £8,342; Net, £8,249.

Details of expenditure are stated in Table H below:—

Table H.—Analysis of Research and Experiment.

		$\mathbf{Expendit}$	ıre (Tabl	e IIa, Colui	nn (7)).			
Year ending 30th Sept.	Superior Super- vision and Overhead Charges.	Salaries and Ex- penses.	Instru- ments, Stores, etc.	Labour, Seed and Sundry Expenses.	Grants to Insti- tutions.	Total.	Income (Table IIa, Col. (15)).	Net Expen- diture.
	£	£	£	£	£	£	£	£
1920 1921	} 3,380 {	4,078 5,983	30 169	137 945	<u> </u>	} 15,472	_	15,472
1921	556	4,463	75	983	750 569	6,646	567	6,079
1923	625	2,981	168	843	508	5,125	10	5,115
1924	1,789	2,981	94	1,009	1,266	7,139	9	7,130
1925	1,669	3,030	93	1,019	600	6,411	43	6,368
1926	1,487	3,336	68	1,878	663	7,432	110	7,322
1927	1,381	3,492	233	2,479	757	8,342	93	8,249
Total	10,887	30,344	930	9,293	5,113	56,567	832	55,735

Work on research and experiment has continued on the same lines as in previous years.

Production.—In England and Wales 28 plots have been remeasured and 4 new plots established during the year, while 18 plots have been re-measured and 5 new plots established in Scotland.

The gale in January, 1927, did considerable damage to sample plots in Scotland, Douglas fir being the species to suffer most. The number of plots lost owing to this storm was eight. At 30th September, 1927, there were 158 plots of which 85 were in England and Wales and 73 in Scotland. Out of the total number, 48 plots have been measured once, 89 twice and 21 three times or more.

Nursery and Plantation.—Nursery experiments have included work on density of sowing, effect of surface caking on germination, weed control in seedbeds, etc., and also investigation on the spacing and grading of transplants. A series of studies has been started on nursery work in connection with the raising of oak. The results of the nursery investigations to date are being published in bulletin form.*

The year has seen a considerable expansion on the plantation side of the work. Numerous experiments have been initiated at the four centres mentioned in the previous report, and the work extended to deal with a wider range of soil and locality conditions. The application on a large scale of an experimental method of planting spruce has given very satisfactory results. New centres have been established in the south of England for an investigation into the methods of raising oak plantations.

Entomological and Mycological.—A serious outbreak of pine sawfly in Rendlesham Forest was investigated and it was found that the attack had been brought to an end by a bacterial disease which destroyed the caterpillars. The spraying of oak seedlings and transplants against oak-leaf mildew has shown that this fungus can be successfully controlled. What is believed to be the first case of Dutch elm disease in this country was discovered in Hertfordshire. Immediate steps have been taken to investigate the matter. A survey was carried out during the summer to determine the distribution of a needle-cast disease on Douglas fir caused by Rhabdocline Pseudotsugae.

Botanical.—At Aberdeen University investigations on peat and research into the functions of mycorrhiza in relation to tree growth were continued.

Utilisation.—Further investigations on the properties of homegrown, as compared with imported, pitprops have been conducted in collaboration with the Forest Products Research Laboratory. A practical test was carried out in a group of coal mines in South Wales with encouraging results. Progress has been made with the enquiries into the uses of small oak timber.

Sub-head J.—Agency and Advisory Services: Expenditure: Gross, £1,544; Net, £1,326.

No direct expenditure was incurred under this head, the item £1,544 representing the time of various officers of the Commission, who have been engaged in answering enquiries and advising owners of woodlands as to the treatment of their woods.

^{*} Forestry Commission. Bulletin No. 11. Nursery Investigations. H.M. Stationery Office, 1928.

The sum of £130 was received from the Board of Trade in respect of the Census of Production, 1924, of which the Commissioners conducted the forestry section. Statistics have been compiled showing the production of home-grown timber and these will shortly be published in the form of a report.*

Sub-head K.—Special Services: Expenditure: £3,161.

Table K.—Analysis of Special Service	Services.	Special	of	.—Analysis	K	Table
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og iber.		Expenditu	re (Table	IIa, Col.	(9)).		Income	
Year ending 30th September	Superior Supervision and Overhead Charges.	Consultative Committees' Expenses. Publications. Special Inquirates. Special Inquirates.		Total.	(Table IIa, Col. (18)).	Net Expen- diture.		
	£	£	£	டி	£	£	£	£
1920 1921	3,766 {	37 111	319 659	218 291	= }	5,401	_	5,401
1922	2.188	92	479	576	10,160	13,495	252	13,243
1923	1,372	65	122	669	4,599	6,827	12	6,815
1924	3,268	44	55	1,817	5,069	10,253	14	10,239
1925	3,240	50	78	4,824	<u> </u>	8,192	36	8,156
1926	3,042	32	74	1,251	_	4,399	! —	4,399
1927	2,750	13	43	355	_	3,161	-	3,161
Total	19,626	444	1,829	10,001	19,828	51,728	314	51,414

The figures relating to Ireland (during 1920-23) are omitted.

Publications.—During the year under review the Commissioners issued the following publications:—

Leaflet No. 15.—The Felted Beech Coccus.

Leaflet No. 16.—Larch Canker.

Seventh Annual Report of the Forestry Commissioners, being the report for the year ending 30th September, 1926. In addition, leaflet No. 11 (Larch-shoot Moths) was revised.

Exhibits at Agricultural Shows.—Forestry exhibits were sent by the Commissioners to the shows of the Royal Agricultural Society at Newport, the Bath and West Society at Bath, the Royal Welsh Agricultural Society at Swansea, and the Highland and Agricultural Society at Edinburgh.

Imperial Conference, 1926.—In connection with the Imperial Conference held in London during October and November, 1926, a special sub-committee was appointed to report on Empire forestry matters. Under the Chairmanship of Lord Lovat the

^{*} Report on Census of Woodlands and Census of Production of Homegrown Timber, 1924.—H.M. Stationery Office, 1928.

forest policy of the Empire was reviewed and the report* of the Committee was accepted by the Conference delegates, who also adopted a resolution endorsing the conclusion arrived at by the Committee.

Colonial Office Conference, 1927.—A Colonial Office Conference took place in London in May, 1927, and the Forestry Commissioners assisted in the preparation of a memorandum† for this Conference. The principal problems of forest policy were discussed with the Colonial Governors and other officials present.

Census of British Woodlands.—The report! on this Census will shortly be published by H.M. Stationery Office.

Consultative Committees.—Formal references were submitted by the Commissioners to the Committees for their views on the following matters dealt with in the Seventh Annual Report of the Department:—

- (1) The method adopted in connection with the establishment of forest workers' holdings.
 - (2) The census of woodlands, 1924.
 - (3) Forest policy.

The following subjects were considered by some of the Committees:—

- (a) Prospective areas for State afforestation.
- (b) The manufacture of houses from small oak, etc.
- (c) The beneficial results of establishing forest workers' holdings.
 - (d) Afforestation grants.
 - (e) Timber testing.

Stationery Office.

Mr. Leslie S. Wood was appointed Vice-Chairman of the English Committee in the place of The Earl of Chichester, deceased. Mr. John Jones resigned from the Welsh Committee.

Sub-Head L.—Forest Workers' Holdings: Expenditure, £82,556. Income, £6,074.

Details of expenditure and income are given in Table L below. The main items of expenditure are acquisition of land and buildings by purchase £8,727 and erection of new buildings £54,632. On the income side rents amount to £5,889.

^{*} Imperial Conference, 1926. Summary of Proceedings (Cmd. 2768). Appendices (Cmd. 2769).—H.M. Stationery Office, 1927.

† Report of the Colonial Office Conference, 1927 (Cmd. 2883).—H.M.

[‡] Report on Census of Woodlands and Census of Production of Homegrown Timber, 1924.—H.M. Stationery Office, 1928.

Table L.—Analysis of Forest Workers' Holdings.

September.			Expe	nditure	(Tabl	e IIa, (Col. (10)).			Inco IIa,			
pter	on es.	œ,	В	uilding	s.	etc.	cs.	etc.						иге.
Year ending 30th Sc	Superior supervision and overhead charges	Acquisition of land, buildings, etc., by purchase.	New.	Adaptation, etc., of existing Buildings.	Repairs and Renewals.	Fencing, Drainage, e	Rents and Feu Dutics.	Rates and Taxes, et	Other.	Total.	Rents.	Other.	Total.	Not Expenditure.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1924	£ 826	£ 5,000	£ _	£ 75	£ _	£	£	£	£	£ 5,901	£	£	£	£ 5,893
1925	3,684	27,173	16,069	7,415	23	620	183	17	1,354	56,538	876	381	1,257	55,281
1926	5,355	23,028	37,519	7,130	441	2,136	325	224	—338	75,820	3,266	108	3,374	72,446
1927	8,253	8,727	54,632	4,959	744	3,942	831	360	608	82,556	5,889	185	6,074	76,482
Total	18,118	63,928	108,220	19,579	1,208	6,698	839	601	1,624	220,815	10,031	682	10,713	210,102

During the year the work of forming forest workers' holdings has made satisfactory progress as shown below:—

Progress in Formation of Holdings.

	At 30th Sept., 1926.	At 30th Sept., 1927.
In course of formation.Equipped with new buildings .Equipped with adapted or recorditioned buildings.	93 n- 81 174	156 63 219
Completed. Equipped with new buildings. Equipped with adapted or recorditioned buildings.		177 180 357
Total T	3 60	576

The above figures apply only to holdings which comply with the conditions laid down in the scheme that 150 days' work is guaranteed to the holder. There are also in England and Wales 17 "bare land" holdings, i.e., land let to forest workers occupying cottages which are not the property of the Commissioners.

The demand for these holdings remains good and the tenants appear to be contented. In most forests the full number of five holdings per thousand plantable acres will be created as finance becomes available, but there is a considerable area,

particularly in the north and west of Scotland, where the existence of a full crofter population makes additional workers' holdings unnecessary. There are also, both in England and Scotland, certain forests where no land suitable for holdings is available. While this reduces to some extent the number of holdings that can be created, the time is approaching when employment in the forests will not be confined to planting work alone but thinning operations will begin and then a larger number of men can be provided with holdings.

Some increase in the rate of progress may be anticipated if additional forest workers' holdings can be used as a part solution of the problem of unemployed miners. The miners that have hitherto been employed as seasonal workers have proved satisfactory, and a number should be quite fitted to occupy holdings of the smaller size.

Co-operative marketing, commenced in 1926, of produce from the workers' holdings at Thetford, about 120 in number, shows signs of development. Supplies of poultry, eggs, and honey are consigned direct to the consumer in London at prices lower than those prevailing there but considerably better than can be obtained locally. For eggs alone about £50 is received weekly, and there is a good demand for poultry. The trade in bush and tree fruit, which at one time appeared likely to increase, is almost at a standstill owing to the cost of transport.

As intimated in the last Annual Report, the Estate side of the work was taking up more time than the Assistant Commissioners could afford, and it has been necessary to appoint one Estate Officer in England and Wales and another in Scotland to deal with the general work of letting land, the management of sheepstocks, the creation of workers' holdings and the erection and maintenance of buildings.

Particulars of costs and rentals of the 357 holdings completed to 30th September, 1927, are as follows:—

Holdings equipped with new buildings:

177 holdings. Average cost of buildings, £603; of land, £89; total, £692. Average rental, £14 3s. per annum.

Holdings equipped with reconditioned buildings:

180 holdings. Average cost of buildings, £236; of land, £118; total, £354. Average rental, £17 14s. per annum.

Average for holdings of both kinds:

357 holdings. Cost of buildings, £418; of land, £103; total, £521. Rental, £15 19s. per annum.

Sub-head Z.—Income, £143,907.

The sources of income are given in Table IIA (page 10). Details of income from forestry operations, which shows an increase of £14,569 as compared with 1926, are given below:—

	Commission's Forests.	Transferred Crown Properties.	Total from Forestry Operations.
Land and buildings Rents (including mining rents and	£ 2,302 17,549	£ 1,165 27,934	£ 3,467 45,483
royalties). Forest produce Other sales (including stores, live		54,584 4,426	74,047 14,418
stock, rabbits, gravel, etc.).	49,306	88,109	137,415

Rents and royalties include £15,765 from the Forest of Dean mines; forest produce comprises £70,611 from the sale of timber and £3,436 for nursery stock and seed; other sales include live-stock, £4,076, and sand and gravel in New Forest, £3,750.

Total Employment in the Commission's Forests.

The number of persons employed in the Commission's forests is stated in the table below:—

				Numbers Employed.				
			Summer (Minimum).	Winter (Maximum).				
1920		••••		210	1920/21		935	
1921	•••	•••	***	495	1921/22		1,780	
1922	•••	•••		525	1922/23	•••	1,775	
1923	•••	•••		880	1923/24	•••	2,220	
1924		•••		1,620	1924/25		2,650	
1925		•••		1,980	1925/26		2,960	
1926		•••		2,335	1926/27	•••	3,185	
1927		•••		2,735	1927/28		3,495	

Note.—450 employees were transferred to the Commission with the Crown Woods on 1st April, 1924.

(Signed) CLINTON (Chairman).

F. D. ACLAND.

L. FORESTIER-WALKER.

HUGH MURRAY.

R. L. Robinson.

W. R. SMITH.

W. STEUART-FOTHRINGHAM.

J. STIRLING-MAXWELL.

A. G. HERBERT,

Secretary.

22, Grosvenor Gardens, London, S.W.

APPENDIX.

Imports of Timber, Wood Manufactures and Pulp of Wood.

Statistics relating to these imports are given in the appended table, the figures in all cases being for the year ended 31st December.

Imports of timber in 1927 amounted to 10,980,000 loads valued at £49,671,000, as compared with 8,194,000 loads valued at £39,259,000 in 1926. Sawn softwoods rose by 1,255,000 loads and pitprops by 1,282,000 loads, but in the latter case imports in 1926 were reduced owing to the coal stoppage.

Wood manufactures, which are recorded by value only, amounted to £7,314,000, an increase of 7.6 per cent. A similar increase occurred in the case of pulp of wood, of which 1,431,000 tons, valued at £10,992,000, were imported.

Imports of Timber, Wood Manufactures and Pulp of Wood.

	Quantities (thousands).				Value (thousands).			
Description.		Average 1914-18.		1927.		Average 1914-18.		1927.
		-		Тімв	ER.			
Hewn-Hard-	Loads.	Loads.	Loads.	Loads.	£	£	£	£
Mahogany Walnut		-	51 1	46			626 9	590
Oak	= :	_	16	(_		152]]
Teak		_	1	79	_	_	25	} 700
Other sorts	i — i	_	54		l —		513	IJ
Hewn-Soft (Fir, pine,	542	129	281	320	1,353	583	1,042	1,248
spruce. etc.).					′	_	,	-,
Sawn-Hard—	! !							
Mahogany	! /	- !	34	34	l —	-	633	609
Walnut	· -	-	11) (- 1	_	309)
Oak	–		181	> 563		_	2,301	6,846
Teak	- 1		42	[["]	_		1,045	0,010
Other sorts Sawn-Soft—	-	_	228) 4		-	2,333	יו
Dool ond Dianter	[]		1 400		į į		7.000	١.
Bonwda.		_	1,483	6,026	-	_	7,262	1 00 045
Other conte	- I	-	1,296 1,992	6,0203		_	6,077	28,247
Planed or Dressed—	i — I	_	1,992	, (_		8,576	!
Fluorinas			451	ا ، ا			2,554	1
Matchines		_	75	689 }			432	4,039
Other sorts		_	80	("")		'	479	(1,000
Other Descriptions—			00	,			110	,
Pitprops	2,944	1,673	1,582	2,864	3.510	4,425	2,988	5,458
Staves	161	71	106	104	795	648	864	740
Sleepers		130	223	248		602	887	963
Veneers and panel	_	_	3	4			131	206
wood.								
Not elsewhere speci-	6,557*	3,550*	3	3	21,903*	24,362*	21	18
fied.								
Total unmanufactured	10.004		0.101		07.501	00.000		40.051
timber.	10,204	5,553	8,194	10,980	27,561	30,620	39,259	49,671
·· ·	!			<u></u>		'		-
Rnanituus 3			Wo	OD MANU				
Furniture and cabinet ware.		- ;	_	_	416	115	724	859
Builders' woodwork		ł			100	co	1 490	1 -00
(window frames,	-	-	_	_	180	62	1,430	1,592
doors, etc.).	1	- 1						
						i	1,603	1 500
Plywood				1	-	_	1,003	1,582
Plywood Chip Boxes	_							
Plywood Chip Boxes Tool handles	=	_	_	_	_ !	_		
Plywood Chip Boxes Tool bandles Domestic woodwork	=	=	_	=	=	_	215	
Plywood Chip Boxes Tool handles Domestic woodwork	_ _ _	_	_	_ _ _	=	_		3,281
Plywood Chip Boxes Tool bandles Domestic woodwork (bread platters,	=	=		_ _ _	=	_	215 240	3,281
Plywood Chip Boxes Tool handles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci-	_ _ _ _	_		<u>-</u> -	2,099	1,821	215 240	3,281
Plywood Chip Boxes Tool bandles Domestic woodwork (bread platters,	_ _ _ _	_		- -	2,099	1,821	215	3,281
Plywood Chip Boxes Tool bandles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fied.			 				215 240 2,580	<u> </u>
Plywood Chip Boxes Tool handles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fied. Total manufactured	- -		-	- -	2,099	1,821	215 240	3,281
Plywood Chip Boxes Tool bandles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fied.		_ _ _		- -			215 240 2,580	<u> </u>
Plywood Chip Boxes Tool handles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fied. Total manufactured		_ _ _	— —	- -	2,695		215 240 2,580	<u> </u>
Plywood Chip Boxes Tool bandles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fled. Total manufactured timber.				PULP OF	2,695		215 240 2,580	<u> </u>
Plywood Chip Boxes Tool handles Domestic woodwork (bread platters, trays, etc.). Not elsewhere speci- fied. Total manufactured	Tons. 859	Tons. 682	Tons.	PULP OF Tons. 1,431	2,695		215 240 2,580	<u> </u>

^{*} These figures apply mainly to sawn softwoods. It is not possible to differentiate according to the various categories enumerated above owing to a change in the Board of Trade classification from 1920 onwards.

The direct formula of the figures for 1926.

The direct foreign trade of the Irish Free State has been excluded from the figures for 1926 and 1927.

⁽⁶⁸⁰²³⁾ Wt. 4927—4530/270 1250 7/28 H. St. G. 17