publication, namely, a list of scholars appointed during 1891–1922 and two lists of appointments since 1922 of overseas scholars and senior students respectively. These lists take up four-fifths of the space and cover brief biographical details of each scholar.

The final part contains the regulations for science research scholarships during 1891-1922, and, since 1922, those for overseas scholars and senior students. The overseas scholarships are worth £450 a year for two (occasionally three) years and are for postgraduate students less than twenty-six years old from the Dominions of the British Commonwealth, being chosen as follows: three from Canada, two from Australia and one each from South Africa, New Zealand, India, Pakistan and the Republic of Ireland. Senior studentships, of which four a year may be awarded, are worth £600 a year for two (or occasionally three) years and are open to any British subject less than thirty years of age. They are awarded to students of exceptional promise and proved capacity for original work, and a glance at the list of previous holders proves that it is rare for the Commissioners' choice not to be amply justified.

BRITAIN'S NATIONAL FORESTS

BEDGEBURY AND CANNOCK CHASE

THE Forestry Commission has recently published two booklets dealing respectively with the national pinetum and forest plots of Bedgebury, Kent, and the State forest at Cannock Chase, Staffs*.

For many years the officials of the Royal Botanic Gardens, Kew, had been alarmed by the increasing debility of many of the conifer trees in the Gardens, due to increasing unsatisfactory conditions of soil and atmospheric impurities. In 1922 Sir John Stirling Maxwell, a forestry commissioner, suggested to Sir Arthur Hill, then director of Kew Gardens, that it might be possible for the Forestry Commission and Kew jointly to undertake the formation of a new pinetum on Forestry Commission land; and Lord Lovat, chairman of the Forestry Commission, approved. Several sites were examined, and Bedgebury was selected. Bedgebury forest occupies 2,431 acres of undulating land in the High Weald of Kent, close to the Sussex border and within a few miles of the small towns of Goudhurst, Cranbrook, Hawkhurst and Tenterden. It is probable that this area has been under woodland, like so much of the Weald, for many centuries. The name "Frith Wood", still applied to the main block of the forest, is possibly of Celtic origin. The Manor of Bedgebury, of which the forest was formerly a part, is a very old one, being first mentioned in a deed of Kenwulf, King of Mercia, in A.D. 815.

In Tudor and Stuart times the estate was in private ownership. At that period the forest, as in other parts of both the Kentish and Sussex Wealds, was an important centre for the smelting of iron with charcoal. The sites of the old 'hammer ponds' which provided the water power for the ironworker's hammer are still visible. The trade ceased only in the nineteenth century. Hornbeam coppices also give evidence of the brick-making which formed an

industry, and chestnut coppies maintained for hop poles grown on a rotation of sixteen years. In either case oak standards were maintained over the coppies, though heavy fellings have taken place in the standards during and since the Second World War. A certain number of conifers were planted in the nineteenth century on the higher and less-fertile ground.

Eventually the Bedgebury woodlands were acquired by the Office of Woods and Forests, which transferred them in 1924 to the Forestry Commission. The woods at this time were of varying types. Oak, ash and birch were the main hardwoods occurring as standards, with sweet chestnut, hornbeam, hazel and some oak and ash as coppice. Scots pine was the chief conifer; but silver fir, Norway spruce, European larch and Douglas fir were present in belts and ornamental groups. Some damage was caused to the later plantings by a bad fire in 1942 and the difficulties of management during the Second World War. In round figures, the forest was made up in 1948 of 600 acres of plantations and 500 acres of chestnut coppice, 900 acres of Forestry Commission plantations and 150 acres of cleared land and scrub awaiting replanting. The pinetum occupies 64 acres and the forest plots 40 acres. There are three forest nurseries for raising forest trees.

In the Forestry Commission publication, which incidentally contains maps and some beautiful photographs, the national pinetum at Bedgebury is fully described by W. Dallimore, its real founder, and the forest plots are also considered. The more conspicuous genera in the pinetum are the larches, cedars, spruces, silver firs, Douglas firs, cypresses,

pines, yews and other conifers.

Turning now to the subject of the other publication, Cannock Chase has a long, ancient and very interesting history; but the forest standing on the area to-day is a modern creation. Most of the land was acquired by the Forestry Commission between 1920 and 1929, and a steady annual planting programme was carried out until by 1935 nearly all the area was afforested. In 1950 most of the plantations varied in age from 14 to 30 years and from 10 ft. to 40 ft. in height. The plantations present a remarkably even appearance as they stretch along the fine straight roads that intersect the high and breezy uplands of the Chase.

The State Forest of Cannock Chase is situated in the centre of Staffordshire, between the county town of Stafford, the ancient ecclesiastical centre of Lichfield, and the busy industrial district around Cannock, Walsall and Wolverhampton. It occupies 6,000 acres of the distinctive Cannock Chase country, a region of high open moorlands, with a gravelly soil and a heathery vegetation, strongly contrasting with the fertile agricultural land to the east, north and west, and the mining and manufacturing towns that border it closely on the south. The plantations established by the Forestry Commission since 1921 on the then unproductive lands are chiefly of pines. From these the first yield of poles and pit props, from the thinnings of the older woods, are becoming available in steadily growing amounts for the use of agriculture, mining and industry in the neighbourhood. Already the young trees, which in the areas first planted are 40 ft. in height, are beginning to show the characteristics of a mature forest. Soon they may restore to the Chase some at least of the sylvan scenery which it possessed in Norman and medieval times.

E. P. STEBBING

^{*} Forestry Commission. Guide to the National Pinetum and Forest Plots at Bedgebury. Pp. iv+66+8 plates. 2s. 6d. net. Britain's Forests: Cannock Chase. Pp. 16. 9d. net. (London: H.M. Stationery Office, 1951, 1950.)