

I visited the forest academies at Neustadt-Eberswalde (Prussian), Tharandt (Saxon), Aschaffenburg (Bavarian), and Mariabrunn (Austrian), and saw some of the most interesting and characteristic forests of each State, and of those belonging to the Prince of Furstenberg in the Black Forest.

The time at my disposal did not permit my attending a course of lectures at one of the forest academies, as recommended in Dr. Brandis's Memorandum for the Guidance of Forest Officers. I have no doubt I should have derived great benefit from doing so; but as the term extends over five months, it would have prolonged my tour to eight or nine months, a longer period than I could afford to devote to the subject.

The system and general management in Hanover may be considered as typical, and the forests of that Province are admitted throughout Germany to be well managed under the supervision of Forest-Director Burckhardt, assisted by a numerous and well-trained staff. For this reason, and as I am more intimately acquainted with the Hanoverian forests than with those of any other State, I devote the main portion of this report to a description of the science and administration of forestry as there understood and carried out, and confine myself with regard to the other countries to a brief statistical record, and allusion to any points which appeared to me particularly noteworthy, or in which they differ widely from the Hanoverian plan or mode of procedure. To describe *all* that I saw would be impossible within the limits of any ordinary report, and entail much unnecessary repetition, so I do not attempt it.

My best thanks are due to Herr Burckhardt, "Forst-direktor," in Hanover; Herr Judeich, "Oberforstrath," in Saxony; the Baron Clummecky, Chief of the Austrian Agricultural Department, and "Forstrath" Tchuppitch, in Vienna; "Oberforstrath" Roth, in Donaueschingen; and to all the forest officers whose acquaintance I had the honor of making, for the pains which they took and the anxiety they evinced to enable me to see and understand as much as possible during my tour. The interest evinced by all the German forest officers in the progress of forestry in India was also very gratifying and encouraging.

HANOVER.

Area and classification.

The forests of Hanover under State management extend over an area of 1,435,329 Prussian *morgen*, equal to upwards of 900,000 English acres. (The Prussian *morgen* is $\frac{1}{63093}$ of the English acre, the old Hanoverian *morgen* being $\frac{1}{6477}$ of the English acre.) This extent is classed as—

- a. 937,673 *morgen* Government forest (591,000 English acres).
- b. 53,806 *morgen* Ecclesiastical or "Kloster" forests now secularized (34,000 English acres).
- c. 261,116 *morgen* Communal forests (165,000 English acres).
- d. 182,734 *morgen* Government moors and peat mosses (115,000 English acres).

The forests under class *a* are entirely the property of the State, although burdened in many cases with communal or individual rights and servitudes; those under *b* were formerly church property, now secularized by Act, and are managed by the Forest Department on behalf of the special department or board appointed for their administration. The profits are mainly devoted to educational and charitable purposes.

Class *c* are Communal forests under Government management, in accordance with the provisions of an Act which provides that they shall be managed entirely by the Government officers, but that the surplus annual yield of wood shall be entirely the property of the community, to devote to their own purposes or sell as they may think best. The community pay one groschen (1½d.) per *morgen* towards the pay of the officers in charge, unless the forest is of sufficient extent to justify the employment of a special officer, in which case they are debited with the total amount of his pay and allowances as well as with the disbursements for subordinate establishments and working charges.

Under class *d* are included extensive waste tracts, which in many cases are now being gradually planted with Scotch fir, and a considerable area of peat-bog or moss.

Yield.

The annual yield of the forests during the four years from 1859 to 1863 inclusive was nearly 45 millions of cubic feet (of which about 10 millions of cubic feet were handed over to persons having rights and privileges) representing an average yield per *morgen* of the cultivable area of about 37, and of the area actually covered with forest of 40 cubic feet per annum.

In the tables from which this information is taken, the average yield of the hill forests is shown as much higher than that of those in the plains, the former yielding from 52 to 64 cubic feet per *morgen*, whilst the latter did not average more than 30.

Receipts and disbursements.

Director Burckhardt gives me the annual receipts from the Government forests at two millions of thalers, or £300,000, whilst the annual disbursements during the years 1859 to 1863 amounted to thalers 455,138 for working charges, and th. 390,688 for establishments, pensions, land tax, &c., making a total of th. 846,426, say £128,000, and a net surplus revenue of £162,000.

These figures must not, however, be taken as perfectly accurate. The fullest information is given in Burckhardt's "Forstliche Verhältnisse des Königreichs Hanover" (published in 1864), section VIII. pp. 69 to 99; but, as there pointed out, it is difficult to separate some of the charges, as the Harz Forests were until recently worked separately, and payments on account of mines, post roads, &c. included in the forest budgets, whilst the contributions of communities towards the payment of fixed establishments introduce an element of complication, especially in the case of Communal forests with no actual cash receipts, or where these fall below the total amount of disbursements. Again, the annual value of grazing, forest products, &c., is estimated at thalers 741,420, or £108,213, but only a tithe of this sum is actually collected and credited in the accounts, the rest being free to all or to the inhabitants of certain villages in the neighbourhood of the forests.

The charges include considerable sums paid in commutation of rights and servitudes, and for forest surveys and valuations (*Massenaufnahmen*), which will gradually diminish.

Establishments.

Hanover being now, and since the year 1866, a province of the kingdom of Prussia, the forest establishments are gradually being remodelled and organized on the Prussian system, the leading characteristics of which are strong control and supervision.