

keepers. After eight years they must have passed the foresters' test, which consists in a six months' probation as a forester or overseer in charge of a tract of forest, and an oral and written examination. On the expiration of the twelve years' term of service, they receive their final discharge from the Jäger corps, and certificate entitling them to employment according to seniority in the forest conservancy establishments. The appointments are much sought after, and for the year 1867 there were 221 certified candidates for 145 vacancies; but many are absorbed by employment in communal and private forests, and doubtless the war has since thinned the ranks of the Jäger corps, and put an end to the aspirations of many a would-be forester by death or wounds.

Owing to the rapid growth and development of the Prussian kingdom of late years, there cannot be said to be any forest act or code of forest laws for the whole kingdom. Each province has still its own forest act or regulations, and it will probably be found very difficult to introduce one general code, although I have little doubt, from what I know of the Prussian character and love of uniformity and order, that it will be done ere long. In some provinces the Government has a certain legal status and *say* with regard to the management of communal and even private forests; in others it has none. It would serve no purpose to detail here the exact state of things in this respect.

I visited no forests in Prussia with the exception of those in Hanover, but have thought it right to enter into this brief statistical notice, considering the vast area and yield of the forests and the excellence of the system under which they are administered.

I am mainly indebted for a knowledge of what I have here described to notes made during my visit to Neustadt-Eberswalde, and "Bernhardt's Forst Statistik Deutschland," a work recently published in Berlin, and containing much valuable information.

SAXONY.

THE State forests of the kingdom of Saxony extend over an area of 288,133 Saxon acres, 394,165 English acres (one Saxon acre = 1.368 English), of which only 11,414 acres are classed as not under timber. The average annual yield of the forests, from 1864 to 1868 inclusive, was 340,878 *klafters*, representing 1.23 *klafter* (98.5 cubic feet) per Saxon acre of the area actually under crop (*vide* remarks at page 27). This quantity realized 2,329,450 thalers (say, £350,000). The average annual expenditure during the same period amounted to 672,923 thalers (say, £101,000), leaving a net profit of 1,656,533 thalers (£249,000) per annum, representing a clear yield, or rental, per Saxon acre of 5.75 thalers, or 17s. 3d. (say, 12s. 6d. per English acre).

The expenditure is divided into 1, *onera realia*; 2, improvements and repairs, which include planting, draining, construction of roads, and improvement of unproductive tracts; 3, working charges, including cost of felling and transport of timber, destruction of insects, daily wages, &c.; 4, fixed establishments. An average area of 4,297 Saxon acres was planted yearly, during the period of five years to which these statistics refer, at an average cost per Saxon acre of about 13½ thalers, or about 30s. per English acre; but it must be borne in mind that this includes the cost of planting avenues, filling up hard-wood plantations with conifers, as shelter for the ground, and, in particular, replanting in the deer-park at Moritzburg, where the cost in some instances reached 26.65 thalers per acre.

The forests are divided into 14 circles or divisions, containing 131 reviers or districts, being an average of nine to each division. The area of the divisions varies according to situation, accessibility, &c., from 17,500 to 47,500 English acres. The fixed establishment consists of one inspector (Oberland-forstmeister), who is also a councillor in the finance department; 15 Ober-forstmeisters, *i.e.*, 14 in charge of the several divisions, and one in charge of the control (*Einrichtung*) office; 120 over and revier forsters in charge of the several districts (11, which are of small extent, are in charge of foresters), 16 collectors or receivers of forest revenue, 13 forest engineers, 27 foresters, and 83 sub-foresters. The forest academy at Tharandt has a separate staff of professors, with Herr Judeich as director.

The duties of the respective employes do not differ materially from those of the corresponding grades in Hanover, the Oberland-forstmeister and Ober-forstmeisters forming the control and supervising branch, the Oberforsters and Revierforsters, aided by the foresters and sub-foresters, the executive; whilst the forest engineers are employed in surveying, &c., and the "*Forstrent-beamte*" as paymasters or accountants. All ranks are provided with house accommodation, or granted an allowance in lieu thereof.

I spent some days at Tharandt, and visited the Tharandt revier (3,000 acres) with Professor Greifenhahn, and the Spechtshausen and Grillenburg reviers with Oberforst Rath Judeich. Great damage occurred in all these reviers by very high winds in 1866 and 1868, when whole tracts were blown down, the loftiest beech and spruce trees being uprooted and thrown down pell-mell. The establishments are still occupied in converting and transporting this timber, and, as a natural consequence, other work, such as thinning and felling, in other portions of the forest is in arrears. In fact, the whole course of operations has been interrupted, and it is impossible to carry out the plans as laid down beforehand. One most serious result of such disasters is, that, the whole tract being levelled at once, little or no natural reproduction takes place, and the whole has to be replanted artificially. In other portions of these reviers they are experimenting with a system of "*vor verjüngung*," or reproduction prior to felling, in opposition to the ordinary "*nach verjüngung*." Seed is sown, and the growth of the young trees to form the next crop encouraged, before any, or when only a small portion, of the old crop is cleared; and by the time the old trees are entirely removed, the young crop should already cover the ground, and be several feet high. The system promises well, and does not differ much from the very gradual clearing of mature tracts in the Rippoldsau forests (*vide* page 19).

I was present at a forest excursion of the students at the academy (who number 60, including three Englishmen, probationers for the Indian Forest Department). Oberforst Rath Judeich and the other professors explained the various methods of felling, working up, estimating height and contents