APPENDIX "R."

SUPPLY AND CONSUMPTION OF FOREST PRODUCTS IN THE UNITED STATES.

(By B. E. Fernow, U. S. Forestry Report for 1893.)

Regarding the supply of forest materials, which may be drawn from the virgin forests still in existence, we have no data. The difficulties of obtaining even the crudest approximations, except for certain species, as the white pine, the longleaf pine, the whitewood, etc., are not only great in the first place, for many reasons, but are still further increased by the fact that the methods of using the supplies change with their waning, with methods of transportation, and with other economic developments. Thus the statistics of white pine and longleaf supplies, given by the Tenth Census in 1880, were as approximately correct as could be expected, adverse criticisms notwithstanding; but the lengthening out of the supplies, especially of the white pine, beyond the time when those figures foretold their practical exhaustion, has been possible only through the reduction of the average merchantable log by from 27 to 57 per cent-i. e., while during the census year in Wisconsin (Wausau) for instance, the average log was, say, 200 feet per log or 18 inches in diameter, in 1893 it had dwindled down to 84 feet or 13 inches in diameter. While the census statistics were based on the then practice of taking nothing less then 10 inches in diameter, the lumbering is now extended to logs as low as 5 or 6 inches in diameter.

No more striking statement of the decline in white pine supplies could be made than to cite the number of feet in logs which passed the nine leading booms in the lower peninsula of Michigan in 1887, namely, 2,217,104,985 as against 505,134,656 feet in 1893, a decrease of nearly 80 per cent, chargeable no doubt in part to other modes of transportation, but nevertheless foreshadowing unmistakably the practical exhaustion of supplies.

EXTENT OF FOREST AREAS.

While we can not then with any degree of even approximate accuracy speak of the amounts of standing and growing timber, we have somewhat better (although far from accurate) data of the forest areas, from which at least the capacity of wood production may be surmised. But here, too, absence of knowledge as to the condition of these areas makes a statement of the actual supplies possibly on hand or growing mere guesswork. Not only are there to be distinguished the timber areas which contain supplies ready for the axe and for present consumption, but in the so-called second growth we must distinguish the areas which promise new supplies of value and those brush lands which are not only not growing a new timber crop, but on the contrary prevent the growth of timber and will for generations to come be mere waste lands.

It will appear astonishing to those who have not paid attention to the question of the settlement of this country to learn from the subjoined table that while of the total country only 18 per cent is improved, the better developed eastern part (east of Colorado) shows only 29 per cent improved, and even the long-settled Atlantic coast which we are apt to consider fully occupied, still possesses 65 per cent of unimproved land, of which we estimate 43 per cent as woodland, while the percentage of woodland for the whole country is 25. There would be woodland enough to satisfy our needs for many decades if attention were but paid to its rational use and to the recuperation of the cutover areas; but the condition of the wooded areas, which have been culled, is well