

oak and beech—comprise from 70 to 80 per cent of the total. Scotch pine, the leading conifer, was limited to the poorer soils which locally comprised rather extensive areas. In the region south of Rheims extensive limestone wastes occurred at the beginning of the last century. About 1807 a movement was started to reforest these wastes. Little was accomplished, however, until about 1830 when reforestation began on a large scale. Just before the war began over 200,000 acres of this waste land had been stocked with trees, mostly Scotch pine. The outstanding feature of this remarkable accomplishment is the commendable fact that most of this vast area was not restored to a condition of super-pristine productivity by the state or nation, but by numerous self sacrificing owners of small holdings. Year after year the small woodlot owners upon clearing their land, again prepared it—often by spading or ploughing—for another forest crop, fully realizing that they would never live to harvest it. The new crops, as a rule, were established by planting small seedlings furnished by local foresters at a very reasonable price, usually the cost of production.

Land Prices Go Up.

That the line of endeavor along which these private owners were progressing was commendable and producing results is shown by the phenomenal rise of land prices. The very areas which sold for \$4 per acre before afforestation began were selling for \$75 to \$125 per acre just prior to the war. The sad part of this narrative is the regrettable fact that these numerous areas of forest land upon which so much private effort and money had been spent were either destroyed or damaged heavily during the battle of the Marne. Areas of forest devastation and destruction do not occur in local spots, but are distributed throughout northern France and all of Belgium.

The great size of the contending armies, the severe, frequent and often prolonged battles, and the almost stationary position of the battle line causes one to conclude that the damage is so great that an overestimate would be difficult. One may be able to comprehend in part the existing conditions in northern France from an announcement in the bulletin of the Southern Pine Association of January 17, 1916, which states that "Bids are being asked for 52,000,000 feet of southern yellow pine by the French Government, presumably for the erection of 10,000 houses which it has planned to build in northern France following the war."

Forest conditions along the eastern front in eastern Prussia, western Russia and Galicia stand in contrast with those found along the western front. The forests are larger in size, cover a much greater percentage of the total land area, and are composed almost entirely of evergreen species which comprise from 85 to 90 per cent of the stands, while along the western front not more than 20 per cent were evergreens. The forest structure is also much simpler, in fact, so simple and uniform over vast areas that it becomes monotonous, especially to an American, who is accustomed to find from 50 to 100 species of tree in one locality. Scotch pine and Norway spruce are the only common and important species. The former occurs in extensive pure stands on the sandy plains and in rolling country. It is at its optimum in the Baltic provinces of Prussia and the Riga district of Russia where it attains a large size, possesses straight and clean trunks, has uniform growth rings, and produces much pitch. The Norway spruce increases in abundance as one goes northward or ascends the mountains. Beyond Riga the White Birch becomes a distinctive feature of the forest, however, not on account of its abundance but rather due to its con-