Forest as a large diversified farm, the main products of which are timber and forage crops. With a net area of 1,135,764 acres, this forest contains some two billion feet of standing timber, and provides grazing annually for 200,000 head of sheep. It has 600 miles of fishing streams, 150 miles of roads and 1,200 miles of trails.

The annual crop of timber is represented by the total annual growth of all the trees in the forest. In any one year the crop is taken only from a part of the forest. Operations are confined to the cutting of ripe or mature trees, and the weeding out of those that are overmature, diseased or defective. This leaves a stand of thrifty immature trees in a condition favorable for increased growth. Timber production is thus continuous. Although the annual growth of timber now amounts to about 20,000,000 board feet, present local demand for lumber has not warranted harvesting the full annual crop, and most of the accumulation is being "stored on the stump."

Deer, elk, mountain sheep, bears, mountain lions, bobeats, blue and willow grouse, ptarmigan, ducks and many other kinds of game and wild life range on the forest. It is the policy of the Forest Service in handling the grazing of domestic livestock to reserve adequate range for the wild animals in parts of the forest which can not be used efficiently for domestic stock. Hunting is allowed under Colorado State game laws, but elk and mountain sheep are protected the year round.

Watershed protection is one of the primary considerations in the administration of the Rio Grande. The welfare of a large territory in southwestern United States and northern Mexico is dependent upon the waters of the Rio Grande, and protection from fire, overgrazing and destructive logging is necessary to maintain adequate watershed cover.

Within the forest is the Wheeler National Monument, a grotesquely eroded geological feature, set aside by presidential proclamation and named in honor of George Wheeler, United States engineer. The monument is reached by a trip of 12 miles from Creede, Colorado, over a Forest Service trail.

A descriptive booklet, "The Rio Grande National Forest, Colorado," has just been published by the Department of Agriculture, from which copies may be obtained.

## REFUGES FOR MIGRATORY BIRDS

THE protection of migratory birds by the establishment of refuges in all the states and Alaska is proposed in a bill introduced by Representative Andresen, Republican, of Minnesota, and unanimously passed by the House on February 9. A similar measure, sponsored by Senator Norbeck, Republican, of South Dakota, has passed the Senate.

The house bill provides for an appropriation of \$75,000 for the first year, \$200,000 for the second year, \$600,000 for the third year and \$1,000,000 annually for the next seven years to bear the cost of land and water areas on which 125 bird refuges would be erected. The senate bill differs in that it provides an annual appropriation for an indefinite period.

The two bills will be harmonized in conference and the completed measure submitted to President Coolidge, who is said to be in sympathy with the proposed legislation. One of the purposes of the bills is to meet more effectively the obligations of the United States under the migratory bird treaty with Great Britain by lessening the dangers threatening migratory game birds from drainage and other causes.

The Andresen bill provides for the creation of a commission for the purchase and establishment of bird sanctuaries in which the states are to have representation. State approval must be had before any area is set aside within its borders for this purpose. Jurisdiction in civil and criminal cases is expressly reserved to the states, and the bill provides that in carrying out the law there shall be no interference with their game laws.

The commission will be composed of the secretary of agriculture as chairman, the secretary of commerce, the secretary of the interior, two members of the senate, to be named by the vice-president, and two members of the house, to be designated by the speaker. The governor of each state will pass on all matters arising under the law affecting his state.

## AWARD OF THE LAMME MEDAL

The Lamme Medal Committee of the American Institute of Electrical Engineers has awarded the first (1928) Lamme medal to Mr. Allan Bertram Field "for the mathematical and experimental investigation of eddy current losses in large slot-wound conductors in electrical machinery." Arrangements for the presentation of the medal will be announced later.

The Lamme medal was founded as a result of a bequest in the will of the late Benjamin G. Lamme, chief engineer of the Westinghouse Electric and Manufacturing Company, who died on July 8, 1924, to provide for the award by the institute of a gold medal (together with a bronze replica thereof) annually to a member of the American Institute of Electrical Engineers, "who has shown meritorious achievement in the development of electrical apparatus or machinery" and for the award of two such medals in some years if the accumulation from the funds warrants.

Mr. Lamme made similar bequests to the Society for the Promotion of Engineering Education and the Ohio State University, providing in the former for