Iowa State University
Digital Repository

Volume 6 Article 4

1-1-1920

Some Problems of Land Ownership in the National Forests

E. A. Sherman
United States Forest Service

Follow this and additional works at: http://lib.dr.iastate.edu/amesforester

Part of the Forest Sciences Commons

Recommended Citation
Sherman, E. A. (1920) "Some Problems of Land Ownership in the National Forests," *Ames Forester*: Vol. 6 , Article 4.
Available at: http://lib.dr.iastate.edu/amesforester/vol6/iss1/4

This Article is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Ames Forester by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Some Problems of Land Ownership in the National Forests

E. A. Sherman.
Associate Forester, United States Forest Service.

In every study of the future needs of this country for wood and wood products, and in every intelligent plan for supplying such needs, the existing National Forests play a prominent part. These forests, on June 30, 1919, numbered 151, and embraced a total net area of 153,933,460 acres. This area, bearing as it does a stand of usable timber, aggregating perhaps six hundred billion feet, is properly considered the most important anchor which the nation has thrown to windward to prevent our drifting upon a reef of disaster resulting from a famine shortage of one of the natural resources absolutely necessary to industrial activity and progress.

Millions of acres in words or figures give one very little conception of the magnitude of these properties. The immensity of this territory only begins to dawn upon one when he realizes that out of our net National Forest area, if consolidated, you could carve four States the size of Iowa, duplicate Vermont, Massachusetts, and Rhode Island, and have 252,320 acres left over for small change.

But the National Forests are not solid blocks of Government-owned lands as a majority of people imagine them to be. Too often even the professional forester thinks of them as being areas entirely under the control of the Federal Government. This is largely due to the fact that the map of the United States showing our National Forests is on so small a scale that it is only practicable to show them as compact areas. Few people realize how different the actual situation is upon the ground from that indicated by the maps or by any statement of the acreage under Government control. The fact is that practically every one of the 151 National Forests is honeycombed with private holdings to such an extent as to seriously hamper Government regulation, and materially modify ideal plans of management.

Intermingled with the National Forest lands are millions of acres of land which do not belong to the Federal Government. To be exact, the total area within the National Forest boundaries June 30, 1919, was 174,261,393 acres, and of this total 20,327,933 acres were adversely-owned. This included State lands and lands under private and corporate ownership, which were required by specific grants or were filed upon and patented

Looking across Spirit Lake toward Mt. St. Helens in the Columbia National Forest, Washington. Within this area every odd-numbered section is railroad land, every Section 16 and 36 belongs to the State, and the remaining even Sections are, in part, the property of the Government. Picture this area after a lumber company has stripped the odd sections of their timber.

under various forms of the public land laws before the creation of the National Forests. It also included 2,341,238 acres of agricultural land, listed after examination and classification by the Department of Agriculture for homestead entry and used by 20,946 individual applicants.

The railroad grants, which embrace the odd sections within a definitely specified distance from certain land grant roads, include a greater acreage than that of any other class of alienation within the National Forests. If these lands were still owned in every case by the railroads it would be exceedingly interesting to compute the total amount of lands within the National Forests held under such ownership. But a considerable percentage has been sold to live stock companies, lumber companies, land holding companies, settlers, and others, so that the origin of the original alienation has lost much of its significance. The important thing from the standpoint of Forest administration is that the title to these lands is not vested in the Government, and the owner of the lands has interests and holds ideals not in harmony with the interests and ideals of the public.

Of the total area of alienated land within the National Forests perhaps 5,000,000 acres may be classified as agricultural. This includes the 2,341,238 acres classified by the Department of Agriculture as agricultural and opened to homestead entry. It is probable that the State lands, railroad lands, and lands taken up by individual settlers and homesteaders before the establishment of the National Forests embrace agricultural lands sufficient to bring the total to the figure named.

No reasonable objection can be raised to the alienation of lands which are chiefly valuable for agriculture. These usually lie in relatively compact bodies in small valleys or along the stream courses. Where proper provision has been made for rights-of-way by which to reach the adjoining National Forest lands and over which to remove the products therefrom, such alienations do not materially interfere with reasonable plans of administration and protection. Indeed, the presence of settlers in such localities is usually desirable from every standpoint. If all the adversely-owned lands in the National Forests were of such a character that they had been taken up for their agricultural value only, the problem of administration would be simplicity itself compared to the present situation.

After agricultural lands and railroad grant lands, mineral lands come next in order of importance among the adversely-owned lands in the National Forests. Approximately 1,000,000 acres of land in the National Forests have been patented under the mineral laws. This figure is not exact, since the data have never been compiled. It is believed, however, that the estimate

is not far out of the way. Prior to August, 1911, a total of 42,033 mining claims had been surveyed for patent within areas now embraced in National Forests. These were distributed among the field administrative districts as follows: District 1, 5,057; District 2, 19,214; District 3, 1,505; District 4, 4,237; District 5, 11,259; District 6, 761. Considerably more than half the total were located in California and Colorado, indicating the influence of the earlier mining activities in those two States. As the National Forests are subject to the operation of the mineral laws the same as though they were public domain, the process of disintegration is continuous. Probably close to 50,000 claims all told have been surveyed in the National Forests up to date and new surveys for patent are being made at the rate of 500 a year. The claims run from fractional parts of an acre up to a maximum area of 160 acres. The average will not exceed 20 acres. It is upon this total of 50,000 claims at 20 acres a claim that the estimate of 1,000,000 acre total is based. However, not all claims surveyed for patent are finally patented, so this approximation is subject to an indefinite discount for such cases.

Prior to the creation of the National Forests, much land was acquired under the mining laws without scrupulous regard to legal requirements. Every claim is now subject to careful examination by a responsible Forest officer before being passed for patent, and, if there is any doubt as to the merits of the case, by a qualified Mineral Examiner. The 10,000 acres of National Forest lands which are now being acquired under the mineral laws each year fairly meet the requirements of the law. It may be well, also, at this point to state that the real miner seldom causes any trouble or embarrassment to National Forest administration. He is bent on extracting substantial wealth from the ore bodies which he believes to lie beneath the surface of the claim which he has staked. He is not engaged in the picayune business of holding up some other miner or some lumberman or the Government by refusing to allow him to cross his location without paying a good round sum. The real miner does not rush in on a proposed timber sale area and locate claims in order to hold up contemplated logging operations. Such things are done under the cover of the mineral land laws, but they are not usually done by real miners, and real miners when informed of the facts never defend such practices.

Lands granted to the States for public schools and other purposes at one time figured very prominently in the list of alienations in the National Forests, but during the past ten years this problem has been greatly simplified. As the result of an agreement between the State of South Dakota and the

Forest Service, dated January 4, 1910, the problem in that State has been solved by the State's securing from the Government two relatively compact bodies of National Forest land equalling, in area and value, all the State's school sections scattered throughout the Forest. In this way the Government secured all such scattered school sections and the State secured title to two blocks of land, one in the Harney National Forest embracing 47,937 acres, valued at $1,120,993, and a tract of 12,212.17 acres in the Sioux National Forest valued at $67,168.94.

Similarly, the Government of Idaho entered into an agreement October 4, 1911, with the Secretary of Agriculture, whereby the State relinquished to the Government all unsurveyed school sections within the National Forests, amounting to 548,157 acres, and secured 193,039 acres from the Kaniksu National Forest bearing merchantable timber valued at $1,242,971.07, and selected from the public domain timber lands and grazing lands aggregating 355,118 acres.

The Governor of Montana and the Acting Secretary of Agriculture entered into an agreement December 23, 1912, by which the State finally secures in exchange for unsurveyed sections 16

Land in the Boise National Forest, Idaho, classified as agricultural and opened to homestead entry. Good example of land suited for such private use. Note sharp distinction between cultivated area and steep slopes which should remain permanently forested.

and 36 within the Natioal Forests 106.608 acres carryig 618,-875,000 feet B. M. of timber. valued at $1,089,354, and in addition has secured from the public domain unoccupied non-mineral grazing or agricultural lands sufficient to make up the difference in acreage between the timbered area secured and the total unsurveyed sections 16 and 36 relinquished to the Government.

The Secretary of Agriculture and the Commissioner of Public Lands of the State of Washington entered into a similar agreement December 22, 1914. Under this agreement the State will relinquish its interest in unsurveyed sections 16 and 36 within the National Forests aggregating 485,000 acres and will secure in lieu thereof about 85,000 acres of grazing land from the public domain, and four or more reasonably compact bodies of land from the National Forests equalling in area and value the remaining acreage given up by the State. Owing to delays caused by the war and the fact that the lands which will be given to the State were unsurveyed, this exchange has not yet been consummated. However, all important points have been agreed to and most of the field work has been completed so that final adjustment satisfactory to all parties may be confidently anticipated.

By an agreement dated August 14, 1919, and signed by the Secretary of Agriculture and the Governor of Nebraska, an area embracing 8,958.63 acres of Government land was eliminated from the Nebraska National Forest by a Presidential proclamation dated November 25, 1919, in order that the State might select such land in lieu of scattered sections 16 and 36 within the National Forest aggregating 8,960 acres. This entirely disposes of the State land problem in National Forests in Nebraska.

In several public land States the remaining State problem is not so simple. Montana still owns a considerable acreage of surveyed school sections within the National Forests in that State. The addition of about 1,000,000 acres of land to the Idaho and Payette National Forests by special act of Congress, effective December 27, 1919, included 14,961.05 acres of surveyed and 43,680 acres of the unsurveyed school sections granted to Idaho. In addition, Idaho owns in other Forests in the southern half of the State 82,626.25 acres of surveyed school sections and State selections aggregating 23,912.68 acres. The State has already expressed a wish to relinquish its remaining school lands to the Government and to secure equal value of National Forest lands in a comparatively solid body agreeable to the Forest Service.

An agreement has also been signed by the Secretary of Agriculture and the Governor of Utah looking to a similar dispo-

Homestead in the Rainier National Forest, Washington, taken for its timber value and patented before creation of Forest. Note heavy timber and slopes too steep for cultivation. Such land in a National Forest should be acquired by the Government for forest purposes.

sition of the State school lands remaining within National Forests of that State. The total area involved will probably fall considerably short of 100,000 acres, the State having already selected other lands in lieu of most of its National Forest base.

The situation in Colorado is very similar to that of Utah. The State still retains its interest in probably 145,000 acres of National Forest school sections, but is favorably disposed to making a consolidation exchange to the mutual advantage of both State and Forest Service.

Nevada has no school lands within the National Forests. California has disposed of her interest in all such lands, and New Mexico and Wyoming have done the same. Oregon has indemnity rights for about 50,000 acres of unsurveyed school sections in the National Forests based upon about 37,000 acres of timberland and 13,000 acres of grazing or waste land. Several bills have been introduced in Congress granting to the State of Oregon about 50,000 acres of timber land of much greater value in lieu of this acreage, with the proviso that the grant should be retained and administered as a State forest. It has doubtless

been due to the great disparity of values that Congress has never acted favorably upon such a measure. Meanwhile the Forest Service stands ready and willing to negotiate an exchange based upon equal area and value, but such an arrangement has never met with the approval of the State authorities.

Arizona, of all the public land States, occupies the most fortunate position with respect to its school lands within the National Forests. This State has steadfastly retained her interest in such lands except where agricultural in character and desirable to open to homestead settlement. There have been two very good reasons for following this policy. First, the State has had no little difficulty in finding sufficient desirable surveyed lands non-mineral in character and unoccupied by settlers to make up the quantity grants given it by Congress. It would obviously be absurd for it to give up lands in the National Forests in exchange for other lands from the public domain or elsewhere while its drafts upon the public domain remained unfilled. Second, its school sections in the National Forest already compare favorably as revenue producers with the lands the State owns outside the National Forest. Arizona and New Mexico were admitted into the Union with the special proviso that Sections 2, 16, 32 and 36 within the National Forests should not pass to the State so long as they remained within National Forests, but that the State should receive from the United States Treasury each year an amount bearing the same proportion to the total receipts from the National Forests in the State as the area of such Sections 2, 16, 32 and 36 bear to the total area of National Forest land in the State. Under this arrangement the State of Arizona received $18.60 for each such school section in the National Forests during the fiscal year ending June 30, 1917, as compared with an average of $19.20 per section for its lands outside the Forests. Since the $18.60 was obtained without any administrative costs whatever to the State it is evident that the present arrangement is eminently satisfactory locally. At the close of the fiscal year ending June 30, 1917, the total area of unrelinquished school sections in the National Forests of Arizona aggregated 1.375,320 acres. This total has remained substantially unchanged.

When the Washington and Montana State exchanges are consummated the State school lands in National Forests still controlled by the State, exclusive of Arizona, will be reduced to a grand total of about 650,000 acres. This does not include lands selected by the States prior to the creation of the National Forests. The great bulk of such selected lands, however, has already been purchased from the States by individuals and corporations so that the total acreage of selected lands lying within National

Forests and still owned by the States probably does not now exceed 100,000 acres.

In short, the State land problem in the National Forests is well advanced toward permanent solution, in most of the States by exchange and consolidation, and in Arizona by statutory provision and satisfactory administration. In Arizona and New Mexico such sections are the absolute property of the Government so long as the National Forests are maintained, and, as the Forests are established under boundaries which are believed to be permanent, the question of jurisdiction is settled. Because of these provisions of law the school sections in National Forests in Arizona and New Mexico are not included in the list of adversely-owned-lands, and do not make up any part of the twenty-million-acre total.

But the State land problem is easier of solution than any other land problem presented by the National Forests. The foregoing discussion unfolds only a fraction of the existing intricacies of the land title situation on these great Government properties. In addition to State lands, railroad grant lands, mineral lands, and homestead lands which are truly agricultural, we find in the National Forests several million acres of land which, before the establishment of the Federal reservation, were acquired under various forms of the public land laws. First among these are lands acquired by the payment of $2.50 per acre under the iniquitous timber and stone act. Next come lands valuable only for their heavy stands of timber acquired under the homestead law with only the merest pretense at residence and cultivation by entrymen who had already exercised their rights under the foregoing act. This is followed by areas acquired under the lieu selection provision of the Act of June 4, 1897, and other forms of "scrip." Some of these are still owned by the orginal entrymen, but most of them have passed into the hands of innocent purchasers for value. But even without such transfers the titles are protected by limiting statutes.

Out of all this mass of confusion the situation as to titles may be summed up as follows: There are 20,327,933 acres of adversely-owned land in the National Forests. The adjustment of State equities will probably reduce this about 1,150,000 acres, and will at the same time probably reduce the net acreage of National Forest land about 800,000 acres, the remainder being selected by the States from public domain. Of the 19,117,533 acres of adversely-owned land which would then be left within the Forests we may consider about 5,000,000 acres of agricultural lands as of such character that their being left in private control permanently is desirable from the standpoint both of sound public policy and good economics. In this category will be found a con-

siderable acreage of land which was acquired originally under the placer mining laws, but which was really desired for farm purposes and is being so used. This applies to probably 10 per cent of the total area alienated under the mineral laws, or, say, to 100,000 acres. The use for mining purposes by individuals or companies is the highest economic use of the surface rights to probably 150,000 acres more in the National Forests. This includes unworked placer ground, sites for mining camps, hoists, mills, tailing grounds, etc. The surface of the remaining 750,-000 acres of land in the National Forests which are claimed under mineral patent is chiefly valuable for timber production or watershed protection, the same as the surrounding National Forest lands. This does not mean that such lands are of no value for mineral, but that their topography is such that any minerals which they contain may be exploited, removed and utilized without reference to surface activities.

Hydraulic placer mining in the Boise National Forest, Idaho. As the miner advances he leaves behind him a boulder-strewn chaos from which the gold has been removed and the soil washed away. It is no longer of value for mining but in time will grow timber. Title should revert to the Government as it otherwise presents an abstacle to good administration.

Making due provision for the adjustment of State obligations and due allowance for agricultural and mining lands which should remain under private ownership and control, it is seen that we have within the boundaries of the National Forests an aggregate estimated area of 13,927,533 acres of adversely-owned lands which are, generally speaking, chiefly valuable for timber production and watershed protection, the very purpose

for which the National Forests were established and are being protected and maintained. In short, 3 per cent of the gross area in the National Forests is chiefly valuable for agricultural and mining and 88½ per cent is publicly-owned lands chiefly valuable for timber production and watershed protection, and 8½ per cent is privately-owned land of the same character.

But watershed protection cannot be made a source of private profit, and timber production on privately-owned land has naturally been unable to yield a profit in competition with the great free source of supply which the public has had placed at its disposal in the past. Consequently these lands have been used by their owners for other purposes that would yield them an immediate property return. Lands have been overgrazed. Timber has been cut regardless of consequences. Unchecked fires have spread permanent havoc.

The misuse of these lands in themselves has an effect upon the intermingled lands out of all proportion to their area. Although the 88½ per cent of the National Forests are Government lands, the remaining 11½ per cent often practically controls the entire area because such privately-owned lands were largely carefully selected with an eye to strategic control. We, therefore, have scattered throughout our reserved areas lands owned by men whose interests are totally different from the public interests and whose plans of management have quite a different basis than the broad public interests which must regulate National Forest administration. Naturally lands in which holdings representing divergent interests and policies are indiscriminately intermingled require an administration which takes such conflicting factors into account, otherwise the result could only be a deadlock injurious to all. Just as naturally the private owners are certain to use to the utmost the power of their strategic location to force plans of management and use most favorable to their own interests. There are other considerations entering into the question, but it does not appear necessary to go farther in order to see clearly that the private ownership of forest and watershed lands in the National Forests is undesirable from every standpoint of good administration, good economics, and good public policy.

It would seem that the foregoing presentation of the adversely-owned land problem in our National Forests revealed a sufficiently plethoric Pandora's box of difficulties; but only a part of the story has yet been told. These properties are still open to the operation of a great many of the public land laws under which various rights are every day being acquired.

All National Forest lands, excepting those purchased under the Weeks Law, are subject to acquisition under the mining

laws the same as lands in the unreserved public domain. This situation in itself presents endless possibilities of complication, a detailed explanation of which would require a chapter in itself. The Act of February 25, 1920 (Public No. 146), authorizing the leasing of coal, phosphate, oil, oil shale, gas and sodium, was a long step in the right direction. This law provides that Government lands containing deposits of minerals of the character named are no longer subject to private acquisition, but the mineral bodies may be worked under leases issued and regulated by the Secretary of the Interior. Possibly some modification of this principle should eventually apply to other mineral lands within the National Forests, perhaps limiting the patent to the ore bodies and such use of the surface as may be required for their development and exploitation. Such adjustments as may eventually be necessary will no doubt be worked out without injury either to the public forests or to the mining interests.

Much more intricate is the application of the various right-of-ways acts to lands within the National Forests. Rights-of-way for canals, ditches, or reservoirs for irrigation purposes may be obtained in the National Forests under the ct of March 3, 1891; rights-of-way for dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals, for municipal or mining purposes, may be secured under the Act of February 1, 1905; rights-of-way for telephone and telegraph lines and power lines may be obtained through the National Forests under the Act of March 4, 1911; rights-of-way for railroads may be obtained under the Act of March 3, 1899. Nor does this entirely exhaust the list of laws under which easements of various kinds may be obtained within the National Forests.

To make the situation even more complex, the Government has not followed a uniform policy in handling such lands as are under its control within the various National Forests. The most glaring case is presented by the situation in a number of National Forests in the State of Oregon. By the Act of June 9, 1916, the Government became revested with the title to 2,300,000 acres of land formerly granted in aid of construction to the Oregon and California Railway Company. These lands passed into the possession of the Southern Pacific Railway Company, and through failure to comply with the terms of the grant the Government, based upon a decree of the Supreme Court, reassumed title and jurisdiction, at the same time reimbursing the railroad for the loss of the grant. In recovering possession of these lands, Congress made provision for the sale of the timber and the distribution of the land to homesteaders and others. Over a half million acres of these lands entirely unsuited for agricultural

use lie within the boundaries of existing National Forests. The even sections are National Forest lands belonging to the Government. Upon such even sections the Government plans to practice forestry. Upon the odd sections which it recovered from the railroad the Government does not plan to practice forestry, but proposes to sell the timber, allow such indiscriminate cutting and waste as suits the fancy of the purchaser, and permit the lands to pass to private ownership. It is hard to imagine a more illogical situation, and hard to believe that it will not eventually be remedied by Congressional action. Surely such a monstrosity cannot be perpetuated.

The land title problem in the National Forests then comes down to five broad classes:

(1) Agricultural lands which should remain in private ownership. These present merely an unavoidable, but necessary, administrative problem. In a large measure the same thing may be said of the land which has been acquired under the mineral laws and the surface of which is actually used or needed for mining purposes.

(2) State lands, a problem which is being removed by a method satisfactory both to the State and Federal Government.

(3) Rights-of-way secured under various forms of public land laws. Like the agricultural and true mining lands, these are merely an unavoidable, but necessary, administrative problem. They require careful consideration and should not be extended by legislation beyond the actual needs of the broad public purposes which they are intended to serve.

(4) Special legislative problems, such as is presented by the Oregon and California Railway lands already referred to.

(5) Approximately 13,927,533 acres of land which are chiefly valuable for timber production and watershed protection but, although within the boundaries of the National Forests, are now owned by individuals or corporations.

This last class of land presents the greatest opportunity for constructive work in rounding out these great forest-producing properties, making them most useful in the future, and simplifying their administration, protection, use and development.

The urgency of this problem is apparent when one studies the area tables for the different National Forests. Some of the forests are more than 50 per cent in private ownership. The Tahoe National Forest in California contains 677,319 acres of privately-owned land, as compared with 545,063 acres of Government land. The Shasta National Forest in the same State presents a comparable situation, having only 809,014 acres of Government land intermingled with 777,866 acres of adversely-

owned lands. There were over 300,000 acres of adversely-owned lands in each one of 14 different forests June 30, 1919. There were between 200,000 and 300,000 acres of adversely-owned lands in each one of 23 other National Forests on the same date. Thirty-one National Forests contained between 100,000 and 200,000 acres of adversely-owned land each. The nearest approach to complete Government ownership is found in the case of the Kaibab National Forest in Arizona, which contains only 561 acres of privately-owned land as contrasted with 752,339 acres of National Forest lands.

Some little progress has already been made by Congress in placing in the hands of the Forest Service administrative authority and machinery for the ultimate solution of the more vexing problems presented by privately-owned lands in National Forests. This legislation, however, has been of a fragmentary character.

Lodgepole pine on the Medicine Bow National Forest, Wyoming.

By special act of Congress enacted March 4, 1911, the State of Oregon was granted the right to select certain desert lands in that State in exchange for certain school lands within the National Forests of that State. These exchanges have been consummated, thereby simplifying the problem to that extent.

Another special act of Congress, enacted July 31, 1912, enables the Federal Government to exchange public lands in the State of Michigan and to secure from the State private lands

desired for National Forest purposes. Exchanges approximating 50,000 acres are already under way in that State, and it is hoped by this means the problem presented by the 74,000 acres of adversely-owned land in the National Forests of the State of Michigan may be substantially eliminated.

Congress has also authorized the Executive Department to acquire privately-owned land within the Paulina (now the Deschutes) National Forest in the State of Oregon by giving in exchange National Forest land of equal area and equal value. Exchanges approximating 40,000 acres have been made under this provision and the lines of the forest reformed so as to exclude the consolidated area. On the Zuni (now Santa Fe) National Forest in Mexico, a considerable area of privately-owned land is being acquired under the provisions of a special act which passed Congress August 22, 1912, National Forest timber being given in exchange therefor. In this instance Congress fixed the basis of exchange, Government timber and privately-owned timber being valued at 62½ cents per acre.

The Ochoco National Forest in Oregon was made the subject of a special act of Congress passed June 24, 1914, authorizing the acquirement by the Government of privately-owned land within the exterior boundaries of the forest by giving in exchange equal area and equal value of National Forest land. Under the provisions of this act several exchanges have been consummated and the boundary lines may now be revised so as to exclude the greater part of the privately-owned lands.

A more advanced form of legislation is furnished by the Act of July 3, 1916, which authorizes the acquirement of privately-owned lands in the Florida National Forest by giving in exchange an equal value of National Forest lands, area in this case being disregarded. Under the provisions of this act the privately-owned lands within the Forest, which now considerably exceed in area the National Forest lands, are being rapidly acquired. The Government now owns only 308,268 acres of land within boundaries, embracing a gross area of 675,420 acres. Within ten years the land exchange work upon this forest should be substantially completed, at the end of which time the Government will probably be the owner of approximately 550,000 acres of land practically free of alienations. It is possible to acquire a large acreage because of the cut-over condition and low market value of the privately-owned lands, $2.00 per acre being the valuation accorded such lands in exchanges thus far consummated, although they are very fair lands for producing timber.

The Forest Service has been given authority by Congress,

in an act passed September 3, 1916, to acquire privately-owned lands within the Whitman National Forest in Oregon by giving in exchange an equal value of Government timber. This is the most desirable form of exchange legislation thus far sanctioned by the law-making body. With this authority the Forest Service will eventually be able to acquire all the privately-owned lands within the National Forest chiefly valuable for timber production or watershed protection, provided the owners are willing to dispose of them at a fair valuation. On the day Congress passed this law it also gave the Forest Service authority to acquire privately-owned lands in the Oregon National Forest in the State of Oregon upon the same basis as in the Florida National Forest. This measure is being used chiefly as a means by which to acquire the privately-owned lands on the watershed furnishing the water supply used by the city of Portland, thereby safeguarding the water supply from the danger of contamination through misuse of private lands.

Finally, at the present time there is pending in Congress 36 individual exchange bills very similar to the foregoing measures. Eighteen of these are in the House and eighteen in the Senate. These bills involve 26 different National Forests, and, while varying somewhat in their particulars, are all of the same general tenor. The multiplicity of measures originating from so many different parts of the country indicates an urgent need for general legislation of this kind, this fact being recognized by Congress to the extent that the Public Lands Committee, before whom these individual bills are pending, has turned aside from the study of this multitude of special measures and has now under consideration a bill general in its nature. The passage of such a measure, which is apparently merely a question of time, will place in the hands of the Forest Service a reasonably adaptable instrument with which to solve a considerable number of the most pressing land title problems now hampering the administration of the National Forests. The solution of these problems, however, will not be the work of a single season, but will require the best efforts of at least a generation.

The important fact for the public to hold always in mind is that it will take fully a generation of hard and earnest work, and the transfer of probably $100,000,000 worth of Government land and timber, to repair the injury already inflicted upon our great National Forests by land alienation, much of it needless and unwise. Surely, with such an example as a warning, the mistakes of the past will not be repeated in the future.