

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

GIFFORD PINCHOT, Forester

THE USE BOOK

REGULATIONS AND INSTRUCTIONS
FOR THE USE OF THE
NATIONAL FORESTS

1907

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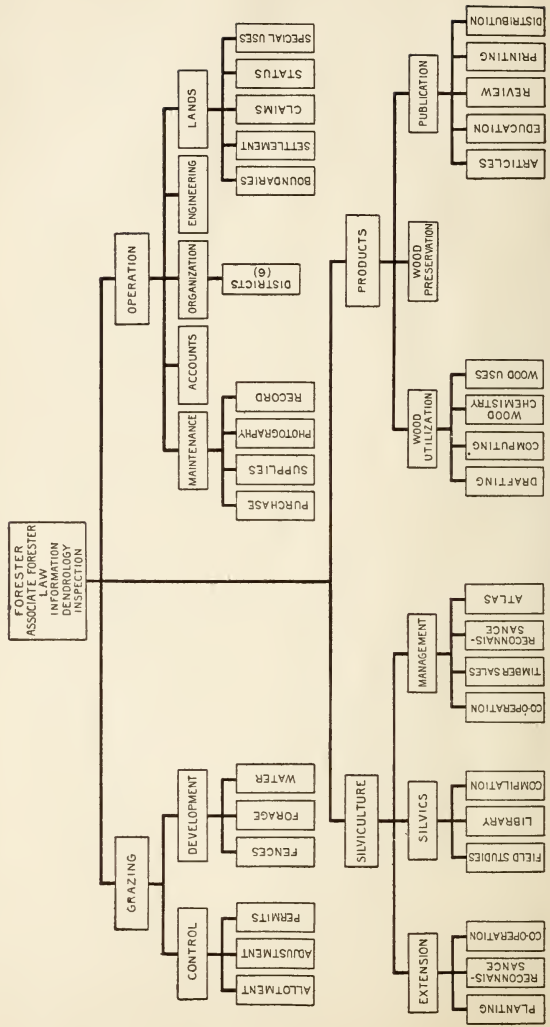
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Frontispiece.



Organization of the Forest Service.

Issued June 14, 1907.

U. S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE.
GIFFORD PINCHOT, FORESTER.

THE USE BOOK

REGULATIONS AND INSTRUCTIONS FOR
THE USE OF THE NATIONAL FORESTS.

ISSUED BY THE SECRETARY
OF AGRICULTURE JULY 1, 1907.

WASHINGTON:
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1907.

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U. S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D. C., June 1, 1907.

SIR: I have the honor to present for your approval a second revision of the regulations and instructions for the use of the National Forests.

Very respectfully,

GIFFORD PINCHOT,
Forester.

HON. JAMES WILSON,
Secretary.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 3, 1907.

The accompanying regulations, bearing date June 1, 1907, are under authority conferred by law upon the Secretary of Agriculture, hereby approved, to take effect July 1, 1907, and all previous regulations in conflict with them are hereby revoked. The Forester is authorized to issue instructions for the execution of these regulations and regulations hereafter established.

JAMES WILSON,
Secretary.

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TO THE PUBLIC.

The timber, water, pasture, minerals, and other resources of the National Forests are for the use of the people. They may be obtained under reasonable conditions without delay. Legitimate improvements and business enterprises are encouraged.

National Forests are open to all persons for all lawful purposes.

Persons who wish to make any use of the resources of a National Forest for which a permit is required should consult the nearest Forest officer.

Ten per cent of all receipts from National Forests are given to the counties in which they lie, to be used for schools and roads.

No one but the Fiscal Agent, Forest Service, Washington, D. C., and the Special Fiscal Agent, Ketchikan, Alaska, is authorized to receive payments for any use of the Forests.

Payments must be in the form of postal or express money orders or national-bank drafts on New York City. Other forms of drafts, checks, certified checks, or postage stamps will not be accepted. (Reg. 65, p. 122.)

Complaints should be made in writing, both to the immediate superior of the officer complained against and to the Forester, at Washington.

Every user of a National Forest will be held responsible for knowing the regulations and obeying them.

Throughout this book general information and directions are printed in this type.

Regulations are printed in this type.

Special instructions to Forest officers are printed in this type.

THE USE BOOK.

HISTORY AND OBJECTS OF NATIONAL FORESTS.

National Forests are created to preserve a perpetual supply of timber for home industries, to prevent destruction of the forest cover which regulates the flow of streams, and to protect local residents from unfair competition in the use of forest and range. They are patrolled and protected at Government expense for the benefit of the community and the home builder.

We know that the welfare of every community is dependent upon a cheap and plentiful supply of timber; that a forest cover is the most effective means of maintaining a regular stream flow for irrigation and other useful purposes, and that the permanence of the livestock industry depends upon the conservative use of the range. The injury to all persons and industries which results from the destruction of forests by fire and careless use is a matter of history in older countries, and has long been the cause of anxiety in the United States. The protection of the forest resources still existing is a matter of urgent local and national importance. This is shown by the exhaustion of lumbering centers, often leaving behind desolation and depression in business; the vast public and private losses through unnecessary forest fires; the increasing

use of lumber per capita by a rapidly increasing population; the decrease in the summer flow of streams just as they become indispensable to manufacture or irrigation; and the serious decrease in the carrying capacity of the summer range. It can not be doubted that, as President Roosevelt has said, "the forest problem is in many ways the most vital internal problem of the United States."

As early as 1799, and again in 1817, Congress provided for the purchase of timber lands to supply the needs of the Navy. Other acts, from time to time, made similar provisions for setting apart forest land for specific purposes, but the first attempt to secure a comprehensive administration of the forests on the public domain was in 1871, by a bill introduced in the Forty-second Congress, which failed of passage.

In 1876 \$2,000 was appropriated to employ a competent man to investigate timber conditions in the United States, and on June 30, 1886, an act was approved creating a Division of Forestry in the Department of Agriculture. On July 1, 1901, this division became the Bureau of Forestry (now the Forest Service, since the act of March 3, 1905), employing practically all the trained foresters in the United States, and engaged in almost every branch of forest work in every State and Territory except the actual administration of the Government forest lands, which remained in the Department of the Interior.

In the meantime, with the increasing realization that the nation's timber supply must be protected, and with the immense growth of irrigation interests in the West, the necessity for retaining permanent Federal control

over selected forest areas was recognized by a brief section inserted in the act of March 3, 1891, which authorized the President to establish forest reserves, now called National Forests. (Appendix, p. 169.) The first exercise of this power was in the creation of the Yellowstone Park Timber Land Reserve, proclaimed by President Harrison March 30, 1891.

The mere creation of National Forests, however, without provision for their administration, was both ineffectual and annoying to local interests dependent upon their resources. Consequently the Secretary of the Interior, in 1896, requested the National Academy of Sciences to recommend a national forest policy. This resulted in the passage of the act of June 4, 1897 (Appendix, p. 169), under which, with several subsequent amendments, National Forests are now administered.

On the theory that the management of land, not of forests, was chiefly involved, this law gave the Secretary of the Interior authority over the Forests and provided that their surveying, mapping, and general classification should be done by the United States Geological Survey and the execution of administrative work by the General Land Office.

But the technical and complex problems arising from the necessary use of forest and range soon demanded the introduction of scientific methods and a technically trained force, which could not be provided under the existing system. The advice and services of the Bureau of Forestry were found necessary, but, under the law, could be but imperfectly utilized. The necessity of consolidating the various branches of Government forest work became apparent and was urged upon Con-

gress by the President and all the executive officers concerned. Finally, the act of February 1, 1905, transferred to the Secretary of Agriculture entire jurisdiction over the National Forests, except in matters of surveying and passage of title. (Appendix, p. 173.)

The regulations and instructions for the use of the National Forests here published are in accordance with the act last mentioned and the various supplementary and amendatory laws passed since June 4, 1897. They are based upon the following general policy laid down for the Forest Service by the Secretary of Agriculture in his letter to the Forester dated February 1, 1905:

“In the administration of the forest reserves it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people, and not for the temporary benefit of individuals or companies. All the resources of forest reserves are for *use*, and this use must be brought about in a thoroughly prompt and businesslike manner, under such restrictions only as will insure the permanence of these resources. The vital importance of forest reserves to the great industries of the Western States will be largely increased in the near future by the continued steady advance in settlement and development. The permanence of the resources of the reserves is therefore indispensable to continued prosperity, and the policy of this Department for their protection and use, will invariably be guided by this fact, always bearing in mind that the *conservative use* of these resources in no way conflicts with their permanent value.

“You will see to it that the water, wood, and forage of the reserves are conserved and wisely used for the

benefit of the home builder first of all, upon whom depends the best permanent use of lands and resources alike. The continued prosperity of the agricultural, lumbering, mining, and live-stock interests is directly dependent upon a permanent and accessible supply of water, wood, and forage, as well as upon the present and future use of these resources under businesslike regulations, enforced with promptness, effectiveness, and common sense. In the management of each reserve local questions will be decided upon local grounds; the dominant industry will be considered first, but with as little restriction to minor industries as may be possible; sudden changes in industrial conditions will be avoided by gradual adjustment after due notice, and where conflicting interests must be reconciled the question will always be decided from the standpoint of the greatest good of the greatest number in the long run."

Any regulation or instruction whose enforcement would not secure the objects for which National Forests are created should be brought to the attention of the Forester.

CREATION OF NATIONAL FORESTS—ADDITIONS AND ELIMINATIONS.

The act of March 3, 1891 (Appendix, p. 169), provides that the President may set aside, by proclamation, in any public land State or Territory, lands wholly or in part covered with timber or undergrowth, as public reservations. Under the authority of this act practically all of the existing National Forests have been created. Congress may, however, take such action, and

has done so in a few cases. (Appendix, pp. 178, 179.) In an amendment to the agricultural appropriation bill approved March 4, 1907, it is provided that "hereafter no forest reserve shall be created, nor shall any addition be made to one heretofore created within the limits of the States of Oregon, Washington, Idaho, Montana, Colorado, or Wyoming except by act of Congress." The power of the President to create or enlarge National Forests in other States and in the Territories is unimpaired.

The boundaries of the earlier Forests were not always carefully drawn. In 1903 the need of better choice of Forest boundaries led to the establishment of a force of trained men devoted exclusively to this work, under a uniform and complete system of field study and report. The results were satisfactory, and the system remains in effect. Before any National Forest is created, or any change is made in the boundary of an existing Forest, a member of the Forest Service familiar with the work and with western conditions makes a careful investigation, not only of the lands, but also of the interests involved. The claims of all industries and classes of residents are weighed, in order that no injustice may be done.

The region is carefully mapped and described, and the boundary of the Forest is drawn to include only lands suitable for forest purposes. Possible agricultural areas are always excluded unless they are small and isolated.

In some cases areas temporarily withdrawn from entry, pending examination, contain land unsuitable for forest purposes, and their withdrawal is viewed

with alarm by local residents. It should be remembered that such withdrawals are not final and that unsuitable portions will be restored to the public domain.

All communications relating to the creation of National Forests or to changes in their boundaries should be addressed to The Forester, Forest Service, Washington, D. C.

Whenever a supervisor decides that there should be a change in the boundary of his Forest he should report the area recommended for examination by townships and sections, if possible, accompanying his report by an outline map. If an addition is recommended, he should state exactly what area, if any, should be withdrawn from settlement pending field examination.

In case of small additions or eliminations the Forester will, as a rule, instruct the supervisor to have the necessary examination made by the local force. Maps and reports will be prepared with sufficient detail to serve as a basis for final action without further examination.

THE FOREST SERVICE UPON NATIONAL FORESTS.

RELATION OF FOREST OFFICERS TO THE PUBLIC.

Forest officers are agents of the people. They must answer all inquiries fully and cheerfully, and be at least as prompt and courteous in the conduct of Forest business as in private business. They must obey instructions and enforce the regulations for the protection of the Forests without fear or favor, and must not allow personal or temporary interests to weigh against the permanent good of the Forests; but it is no less their duty to encourage and assist legitimate enterprises.

They must make every effort to prevent the misunderstanding and violation of Forest regulations by giv-

ing information fully and freely. The object should be to prevent mistakes rather than to have to punish them. Information should be given tactfully, by advice, and not by offensive warnings. Members of the Forest Service are urged to keep in mind that they are officers of the Government, and that the honor of the Service is at stake in the faithful performance of their duties.

Forest officers will be required to be thoroughly familiar with every part of this book, and to assist the public in making applications for the use of the Forests.

ORGANIZATION.

The permanent field force of the National Forests now contains the grades of chief inspector, inspector, forest supervisor, deputy forest supervisor, forest assistant, planting assistant, lumberman, forest ranger, and forest guard.

GENERAL QUALIFICATIONS AND DUTIES.

INSPECTORS.

Inspectors are appointed only from those who by their qualifications, training, and experience have gained great familiarity with Forest problems and unusual efficiency in the conduct of Forest business.

The inspector advises with all Forest officers and has free access to all official books, reports, or other records. He may call upon any supervisor for all necessary assistance, but he has no authority to give orders to any supervisor, or to any ranger, except one detailed by a supervisor to assist him.

His duties are to inspect the Forests in his district, see and report on existing conditions, and recommend changes for the better in both the business and technical management, and in personnel. He also assists the local officers, by suggestion and advice, in all Forest matters.

Inspection is organized by districts, with a chief inspector in charge of each, as follows:

District 1. Montana, Northern Idaho, and Northern Wyoming. Headquarters, Missoula, Mont.

District 2. Colorado, Southern Wyoming, South Dakota, Nebraska, and Kansas. Headquarters, Denver, Colo.

District 3. Arizona, New Mexico, and Oklahoma. Headquarters, Albuquerque, N. Mex.

District 4. Utah, Western Wyoming, Southern Idaho, and Eastern Nevada. Headquarters, Salt Lake City, Utah.

District 5. California and Western Nevada. Headquarters, San Francisco, Cal.

District 6. Oregon, Washington, and Alaska. Headquarters, Portland, Oreg.

Each chief inspector has immediate supervision of the work of the inspectors assigned to his district. The need for inspection in any district may be indicated by the Forester, by chiefs of offices, or by the chief inspector. Inspectors may, whenever necessary, make investigations on their own initiative with the approval of their chief inspector. All instructions from Washington dealing with inspection are addressed to the chief inspector concerned and are signed by the Forester.

Inspectors address all reports to the Forester and submit them through the chief inspector, who is responsible for the form and completeness of reports from his inspectors and for the consistency of their recommendations with the needs of the district as a whole.

Every administrative officer from the Washington office, when in the field, should get in touch with the chief inspector whose district he plans to visit, in order to avoid possible duplication in work.

The chief inspector has general supervision of the Forest boundary men in his district. He directs their work, except when they are engaged in the examination of additions to or eliminations from existing Forests, in which case they are under the instructions of the supervisor concerned. Needed boundary work will be indicated to the Forester by the chief inspector. Reports upon Forest boundaries are submitted to the Forester through the chief inspector, who handles them as inspector's reports. When the work is under the supervisor the reports are submitted by him to the Forester through the chief inspector.

The district headquarters are the official headquarters of the chief inspectors, inspectors, and Forest boundary men.

SUPERVISORS.

For the purpose of encouraging good men to enter the service and do good work, as well as to utilize their experience, appointments to the position of forest supervisor are made by the promotion of competent deputy forest supervisors, forest rangers, or forest assistants, when they can be found in the State or Territory in which the vacancies exist. Should there be no thoroughly satisfactory resident deputy forest supervisors, forest rangers, or forest assistants, examinations of other applicants are held.

The qualifications for the position of supervisor include all those required of rangers, as hereafter outlined, with superior technical, business, and administrative ability. Applicants should be familiar not only with every detail of ranger work and with the conditions of the forest region involved, but should be able to handle men, to deal with all classes of persons, and to conduct the business and correspondence of the office. Knowledge of technical forestry is most de-

sirable, but not always essential. Candidates for the position of supervisor are required to furnish the most convincing proof of their moral and business responsibility.

While certain general qualifications are required in every case, special fitness for employment in a special region is always considered. For example, in many heavily forested regions knowledge of timber and lumbering is more important than familiarity with the livestock business.

Supervisors must give their entire time to the Service. They have full charge of their Forests, plan and direct all work, have entire disposition of rangers and other assistants, and are responsible for the efficiency of the local service. Under instructions from the Forester, supervisors deal with the public in all business connected with the sale of timber, the control of grazing, the issuing of permits, and the application of other regulations for the use and occupancy of National Forests. They keep the records and accounts and conduct the correspondence and general office business of their Forests and make reports to the Forester on all matters under their jurisdiction.

During his absence the supervisor should detail a member of his force to the charge of the office, when this is necessary to avoid serious delay in the transaction of Forest business. The officer so detailed should be definitely instructed, preferably in writing. So far as authorized by the supervisor, he should handle the business of the office during the absence of the latter and should sign correspondence and documents as acting supervisor.

Supervisors have authority to suspend or to recommend the discharge of any subordinate and also to recommend such changes in their force as the good of the Service may demand. The supervisor should exercise his power of suspension only in cases of flagrant misconduct or gross negligence, and in such cases should at once report in full with recommendations to the Forester.

Each supervisor is required to keep at his own expense one or more horses, with necessary equipment, for his transportation in the Forest.

Supervisors are allowed necessary expenses for board, lodging, and horse feed when absent from headquarters on official business, and transportation when it is impracticable to use their own horses.

DEPUTY SUPERVISORS.

Deputy Supervisors may be appointed on Forests whose area or business warrants their assignment. The position requires the same qualifications as that of supervisor, and is filled by promotion from the ranger force or by selection from the civil-service register for supervisor. Supervisors may delegate to their deputies as much authority as they deem advisable. They may be given charge of all field work in a certain district, or over only one line of work, such as grazing or timber sales.

FOREST ASSISTANTS.

The position of forest assistant requires technical qualifications of high order and is secured only through an examination which no man may expect to pass unless he has been thoroughly trained in forestry and

lumbering. Forest assistants may be assigned to any part of the United States, and must be competent to handle technical lines of work, such as the preparation of working plans and planting plans, the investigation of the silvics and uses of commercial trees, the study of wood preservation, and other investigations requiring a trained forester. They may be assigned to National Forests to assist in technical work, such as the examination and mapping of forest areas, and reports on applications for the purchase of timber; in the marking, scaling, and management of timber sales, the survey of boundaries; nursery work and forest planting; examination of special privileges, and other lines of work which require technical training. The forest assistant is placed directly under the supervisor, who directs his work and to whom he submits his reports.

The supervisor is held responsible for the proper assignment of the forest assistant and the utilization of his technical training and experience.

Forest assistants are required to own and keep horses when necessary.

LUMBERMEN.

Lumbermen are appointed after civil-service examination, to pass which requires much previous experience in woods work and a high degree of proficiency in cruising, logging, and milling. A thorough knowledge of scaling methods is absolutely necessary.

Lumbermen will be assigned temporarily to the Forests where the need for their work arises. The supervisor should fully understand that they are subject to transfer on very short notice from one Forest to another when the need for their services elsewhere is urgent.

After the assignment of a lumberman to a Forest and until he is assigned elsewhere, the supervisor will direct his movements and see that his services are utilized to the best advantage.

It is expected that the lumbermen will be of great assistance to the local officers in supervising logging and in check-scaling. They will also be of assistance in cruising and reporting on tracts of timber for which there is either an application or chance of an early sale.

The lumbermen should report fully to the supervisor on the scaling methods in practice in the locality in which they are working, and should recommend changes and improvements if any are necessary.

PLANTING ASSISTANTS.

The position of planting assistant requires special training in nursery and planting work. Planting assistants execute their work under the direction of the supervisor. Their duties include the preparation of seed beds, seed sowing, transplanting and care of seedlings, and field planting. The planting assistant may be assigned to the regular duties of a ranger during the winter when nursery work is suspended.

RANGERS.

A ranger of any grade must be thoroughly sound and able-bodied, capable of enduring hardships and of performing severe labor under trying conditions. He must be able to take care of himself and his horses in regions remote from settlement and supplies. He must be able to build trails and cabins, ride, pack, and deal tactfully with all classes of people. He must know

something of land surveying, estimating and scaling timber, logging, land laws, mining, and the live-stock business.

On some Forests the ranger must be a specialist in one or more of these lines of work. Thorough familiarity with the region in which he seeks employment, including its geography and its forest and industrial conditions, is usually demanded, although lack of this may be supplied by experience in similar regions.

The examination of applicants is along the practical lines indicated above, and actual demonstration, by performance, is required. Invalids seeking light out-of-door employment need not apply. Experience, not book education, is sought, although ability to make simple maps and write intelligent reports upon ordinary Forest business is essential.

For duty in Arizona and New Mexico the ranger must know enough Spanish to conduct Forest business with Mexicans.

Where saddle horses or pack horses are necessary in the performance of their duty, rangers are required to own and maintain them. The Forest Service furnishes no personal or horse equipment.

The entire time of rangers must be given to the Service. Engagement in any other occupation or employment is not permitted.

Rangers execute the work of the National Forests under the direction of the supervisor. Their duties include patrol to prevent fire and trespass, estimating, surveying, and marking timber, the supervision of cuttings, and similar work. They issue minor permits, build cabins and trails, oversee grazing business, in-

investigate claims, report on applications, and arrest for violation of Forest laws and regulations.

Forest rangers may act as assistants to the supervisors. They may be given charge of the field work of any portion of a Forest to which the supervisor is unable to give adequate personal supervision, or of the whole Forest during periods when press of office work prevents the supervisor from taking the field. No ranger is authorized to hire assistants himself except in cases of fire.

Deputy rangers and assistant rangers have charge of definite districts, to which they are assigned by the supervisor. They supervise forest guards stationed within their districts, and may also be given temporary laborers when necessary.

It is the policy to fill vacancies in higher positions by promotion of rangers rather than by appointment of men without experience on the National Forests, although otherwise well fitted.

REG. 1. The promotion of Forest officers will be considered only once a year, and all promotions for the year will be made on January 1, except in cases of transfers or reassignment.

Annual ranger meetings.—In order to give the rangers the benefit of each other's experience, to keep them in touch with the entire work of the Forest, and to promote esprit de corps, a general meeting of the entire force on each Forest should be held annually. The time and place of the meeting will be left to the discretion of the supervisor. If possible he should hold a joint meeting with the supervisors of adjacent Forests. Such meetings should generally be held during the winter or in the spring shortly before the beginning of the fire season.

The supervisor should give a brief statement of the affairs

of the Forest, an outline of the work accomplished in the past year, and of plans for the future, to give the rangers some knowledge of what is going on outside their immediate districts. He should especially invite discussion and suggestions. Any doubtful points on which a ranger desires information should be brought up and thoroughly discussed. Informal talks should be given by forest assistants on technical problems, such as mapping and timber estimating, the different systems of marking, and silvics, which should be supplemented by actual demonstration in the woods. Such topics as trail and bridge building, fire fighting, and brush burning should be thoroughly discussed, and the rangers encouraged to give each other the advantage of their individual experience. The necessary transportation charges and expenses for lodging and subsistence of all the officers not on a per diem may be authorized on application to the Forester.

FOREST GUARDS.

Forest guards are temporary employees whose duties are the same as those of assistant forest rangers. They may be appointed when additional men are required for temporary patrol and protective work, or when it is impossible to get rangers from the list of eligibles furnished by the Civil Service Commission.

In all cases application for employment as forest guard should be made to the supervisor. Preference will always be given to local residents recommended by him, and to persons who desire to take the civil-service examination for forest ranger.

In recommending the appointment of a forest guard, supervisors will state his full name, the date on which applicant is to begin work, and the need for his services. A telegram which recommends the appointment of a guard should contain only his full name and the date he is to begin work. In every case, however, a letter with full information should follow.

Supervisors should fully inform all applicants of the conditions under which they will serve. Guards must not begin work until the supervisor has been informed of the date on which their appointment takes effect.

EXAMINATIONS.

In accordance with the law which requires the selection of rangers and supervisors, when practicable, from the States and Territories in which they are to be employed (Appendix, p. 173), and the President's order placing them in the classified civil service, examinations for these positions are held, as required, in each State and Territory in which National Forests are situated.

Examinations for the position of forest ranger are along thoroughly practical lines and are supplemented by field tests to determine the applicant's fitness to do the actual work on the Forest. The Civil Service Commission appoints Forest officers to conduct these examinations.

REG. 2. Only legal residents between the ages of 21 and 40 are eligible for the ranger or supervisor examinations. This qualification will not be waived under any circumstances.

Applicants are examined as to fitness for positions in the State or Territory of which they are legal residents. An applicant may, however, take the examination at any place which is most convenient, even though it may not be in the State of which he is a legal resident.

The restriction as to residence is not imposed upon applicants for the forest assistant examination, for which the age limits are 20 and 40 years.

Information as to the times and places at which examinations will be held and the steps necessary to secure admission may be obtained only from the United States Civil Service Commission, Washington, D. C.

FOREST OFFICERS' RIGHT TO ENTER LAND.

Officers of the Forest Service are prohibited from entering, or becoming interested in, directly or indirectly, any of the public lands of the United States, with this exception: A Forest officer may exercise his right under the town-site, homestead, or desert-land laws if he intends to make the claim his actual and permanent home. By so doing he may be compelled to choose between the claim and his position, should his duties make it impossible for him to comply with the residence and improvement requirements. Forest officers must not make application for the examination and listing of lands under the act of June 11, 1906.

INSURANCE.

To secure insurance at the lowest possible rate a mutual benefit association has been formed of employees of the Forest Service, the Geological Survey, and the Reclamation Service. This is solely to give employees health, accident, and life insurance at cost and to prevent unnecessary burdens falling upon the associates of sick or disabled men. Information concerning membership in this association can be obtained from the supervisor.

SPECIAL STUDIES UPON NATIONAL FORESTS.

It is the active policy of the Forest Service to manage the National Forests upon a sound technical, as well as business, basis. Improvement in the standard of the technical management alone can secure steady and constant increase in returns without depleting the

Forests. To this end careful investigation is essential. This includes special study of the habits and requirements of trees as a basis for the regulation of cutting of every kind. Special attention will be given to finding new uses for species at present valueless or little used, as well as for the trees already classed as commercial. Studies will be made of damage by fire and the best means of preventing it, and, in cooperation with the Bureau of Entomology, of the prevention and control of insect ravages. In these and in many other ways the basis of knowledge necessary for the best forest work will be laid.

To sum up, the National Forests will be studied with reference to their best use for every purpose. These studies will not be limited to the present applications for the use of the Forests. They will aim to develop wider uses, as well as to meet the present demand in the most satisfactory way.

It will be the duty of the supervisor to plan and direct such studies and investigations. If no members of the regular force are able to conduct the work or all are engaged on duties from which they can not be spared, the matter should be reported to the Forester. If possible, an expert will be detailed temporarily to assist the supervisor.

PROTECTION OF CITY WATER SUPPLIES.

The Forest Service aims to improve and protect the forest cover of watersheds within National Forests on which adjacent cities and towns are dependent for their water supply. If the authorities of any such town have determined by investigation that the decrease of the water supply is caused by overgrazing,

excessive cutting, or fire, they are invited to apply to the Forest Service for assistance after consulting with the supervisor.

The supervisor on receipt of requests of this nature will immediately report to the Forester, in detail, and give definite recommendations as to steps the Forest Service should take to improve or protect the watershed by planting, trail building, extra fire patrol, closing to stock, or prohibiting the sale of timber.

CREATION OF NATIONAL MONUMENTS.

Under the act approved June 8, 1906 (Appendix, p. 192), the President is authorized to declare, by public proclamation, historic landmarks, historic and prehistoric structures, and other objects of historic and scientific interest as National monuments.

Forest officers should report to the Forester the location and description of all objects of great scientific or historic interest which they find upon National Forests, that may be set aside as National monuments.

CLAIMS.

IN GENERAL.

A valid claim is defined as one initiated in good faith under some act of Congress and continued by use consistent with the character of the claim and necessary for its actual development. The Forest Service will endeavor to protect valid claims within National Forests and make the Forests contribute to their development.

The determination of questions involving title to unperfected valid claims to lands in National Forests are entirely within the jurisdiction of the Secretary of the Interior.

REG. 3. Persons having valid claims under the public land laws or legal titles to lands within National Forests are free to occupy and enjoy their holdings, but must not interfere with the purposes for which the Forests are created, and must not cut timber or make use of National Forest land without a permit, except within the limits and for the actual development of their claims. Any other use is forbidden and is a violation of the act of Congress. (Pp. 196 and 199.)

REG. 4. The supervisor may, within six months from the cancelation or abandonment of any claim to land in a National Forest, permit the claimant to remove his improvements, if such removal will not injure National Forest interests.

Forest officers should endeavor to ascertain the status of all unpatented claims in National Forests and any facts which show the good or bad faith of the claimant. Information regarding a claim should be in the form of an affidavit signed by the person communicating it. Copies should be forwarded to the Forester with the supervisor's reports on the claims to which they relate.

Forest officers should make special examinations and reports when they believe that the claimant settled unlawfully upon lands withdrawn for National Forest purposes and is making unlawful use of the lands claimed by him or is injuring National Forest interests.

When notified by the local land office that a claimant has applied to make final proof, the supervisor should examine the claim, if not already examined, and make report to the Forester upon the proper form (654 or 655). Report on Form 654 or 655 should not be sent to the local land office, but the notice from the land office must be returned before the time fixed for taking final proof. If the Forest officer knows that no objection to the claim exists, his indorsement should be "No protest." If he knows that the claim should not pass to patent and has so

reported to the Forester, he should return the notice to the local land office with the notation: "The Forest Service protests against this claim; complete report sent to the Forester —— day of ——, 190 .". If he does not know that the claim is valid and has not reported adversely to the Forester, he should return the notice to the local land office with the indorsement, "The Forest Service protests against this claim and requests time to make further investigation." In every case the Forest officer should date and sign the indorsement on the notice, using his title, and notify the Forester of his action. If the proof is taken near his headquarters, the supervisor should be present, if possible, to cross-examine the claimant and witnesses and submit testimony in rebuttal, which will be permitted without previous notice. The witness fees for this testimony and the cost of reducing it to writing will not be paid except under a special letter of authorization from the Forester. If he can not attend the taking of final proof, he should in all cases, in which he doubts the validity of the entry or the compliance with law by the entryman, submit to the officer taking proof, questions which he desires asked the claimants and their witnesses.

If a Forest officer is subpoenaed to attend and testify as a witness for the United States in a case pending in the courts he should present his claim for reimbursement to the clerk of the court and not charge his expenses to the Forest Service. If subpoenaed to appear and testify as a witness for any other party, he must obey the subpoena, if he receives proper assurance that his fees and mileage will be paid.

If he can not safely leave his Forest, he must ask the local land officers for a continuance to a date when he can appear, but to avoid expense and inconvenience to others his request should be made promptly. If the request for continuance is denied, he should report the fact of subpoena and the emergency which prevents his obeying it to the Forester, by wire, if necessary, and ask for instructions. In no event would he be justified in leaving a fire on his Forest when his presence is necessary to check it.

AGRICULTURAL.

Homestead claimants are required to live upon and to cultivate or graze the land embraced in their claims. The Interior Department excuses temporary absences when rendered necessary (see also Appendix, p. 192), but they must be the exception and not the rule, and the land embraced in the entry must be used for the home of the claimant to the exclusion of a home elsewhere. Lands may not be appropriated and patented under the homestead laws if entrymen use them merely for grazing headquarters during a few weeks or months each year and maintain their homes elsewhere.

REG. 5. Squatters who settled on National Forest land before its withdrawal and are awaiting survey to make entry have the same rights to occupy and enjoy their holdings as homestead entrymen, and may at their option await survey or apply for the examination of their lands under the act of June 11, 1906, with a view to opening them to homestead entry.

Desert land entries can be made for all land, exclusive of timber and mineral land, which will not, without artificial irrigation, produce some agricultural crop; and water sufficient to irrigate all of the land entered which is susceptible of irrigation must be conducted to each legal subdivision; and at least one-eighth of the land entered must be cultivated before the entry will be approved by the Interior Department. (See "Circular from the General Land Office * * * January 25, 1904.")

Claims may be initiated under the act of June 11, 1906, for agricultural land in National Forests as soon

as it has been declared open by the Secretary of the Interior. The act does not apply to certain counties in southern California. In parts of certain counties in South Dakota only land which was settled upon before January 1, 1906, can be opened under the act. (Appendix, p. 189.)

Applications under the act of June 11, 1906, must be signed in person and mailed to the Forester, Washington, D. C. Applicants will secure preference in the order of the receipt of their applications, unless the lands were occupied by bona fide settlers prior to January 1, 1906, in which case the settlers have the preference.

All applications must give the name of the National Forest and describe the land by legal subdivisions, section, township, and range, if surveyed, and if not surveyed, by reference to natural objects, streams, or improvements with sufficient accuracy to identify it.

If for any reason an application is rejected or withdrawn, application may be made for another tract.

The fact that an applicant has settled upon land will not influence the decision with respect to its agricultural character. Settlers must not expect to include valuable timberland in their entries. Settlement made after January 1, 1906, and in advance of opening by the Secretary of the Interior, is not authorized by the act, will confer no rights, and will be trespass.

Settlement and entry under the act is within the jurisdiction of the Secretary of the Interior, who will determine preference rights of applicants.

Applicants entitled to a preference right under the act of June 11, 1906, will be permitted to occupy the

land applied for by them under the instructions found on pages 227-230.

MINING.

Mineral lands within National Forests may be freely prospected, located, developed, and patented in accordance with the mining laws and National Forest regulations. (Appendix, p. 172.)

Any recognized mineral substance, if found in sufficient quantity, will warrant entry under the mining laws—for example, building stone, china or fire clay, coal, limestone, oil, salt, slate, etc., but not brick clay, sand, or gravel. (Appendix, p. 225.)

It is the policy of the Government to favor the development of mines of gold and silver and other metals, and every facility is afforded for that purpose; but it requires faithful compliance with the conditions stipulated. There must be a discovery of mineral and a sufficient exploration of the ground to show it beyond question. (Appendix, pp. 223-226.)

When application for patent is made it must appear that the land contains enough mineral to warrant its disposal under the mining laws. The character of the land is the primary question in determining whether a mining claim is valid. If the applicant has had ample time and opportunity to show by exploration and development whether valuable mineral deposits exist on the land, and has not done so, his location can not be held to be a valid mining claim. (Appendix, p. 223.)

When making an examination and report upon a mining claim, the Forest officer should observe the following provisions:

If active mining operations are being conducted on the claim and ore is being marketed and the general outlook indicates a

bona fide mine, a close examination will not be necessary. The Forest officer should, in such cases, report the facts generally after going through the mine.

Where the validity of the discovery is doubtful, a more careful examination should be made. It is not necessary that the claim should be a paying mine. If valuable mineral has been found and the nature of its occurrence would justify working the ground, the discovery would be legal and valid.

To determine whether or not such a discovery has been made, the Forest officer should proceed as follows:

The general character of the country and the distance from paying mines should be stated. The entire claim should be examined for mineral.

The method of working the claim, as well as water power and transportation facilities, should be ascertained when possible.

In selecting the dirt for panning or ore for samples, the officer should rely upon his own judgment, and should consider, but not necessarily follow, the suggestion of the claimant. Special care should be taken to avoid salted samples.

Answers should be given, whenever possible, to each question on Form 654. If more space is needed, an additional sheet may be used and attached to the form. The answer to question 30 of the form should show whether the claim is used for any purpose other than mining and in what manner.

Reports should be made separately on each claim of a group, and when work on one claim is alleged to develop others, the extent and plan of development with relation to each should be shown.

Pans, hammers, picks, and crowbars are considered Forest equipment where needed under this order, and may be purchased.

If the field force on any Forest have not the necessary scientific and practical knowledge, mineral experts will be sent to make special examination, especially in cases which involve large areas of land and seriously jeopardize National Forest interests or prevent the proper management and protection of the Forests.

Definite evidence by qualified witnesses is necessary to sustain charges against any claim.

Good judgment, care, and initiative on the part of the Forest officer to add to or vary, for proper reason to be explained by him, the nature of the report will add greatly to its value, and will assist and protect legitimate mining and the interests of the United States by preventing fraudulent appropriation of nonmineral land under the guise of compliance with the mineral land laws.

Lode claims.—The Forest officer should examine the dimensions of the outcropping of the vein or lode on the ground, and note the general character of the rock in which the deposit is contained.

He should search for discovery shafts, pits, or tunnels which the owner has made in an effort to find or disclose the vein and ore. He should make notes of the appearance and extent of the vein or ore exposed in the excavations, and should particularly note whether there is a distinct deposit of ore minerals, or whether, for example, there is merely iron pyrites distributed in slight amount throughout the rock of the claim.

He should measure the width of the vein between the rock walls or the thickness of the mineralized zone of rock exposed in the excavations, and should observe the dip—that is, the inclination downward from the horizontal—of the vein or mineralized rock, as well as the strike or course of the vein, noting the latter as NW., W., etc.

He should take a sample of each important grade of ore found in the excavation or in any vein on the claim and observe the proportion of each kind of ore. He should then select a sample consisting of a number of pieces which, in his opinion, represents the average value of the vein or mineralized rock, being careful that these samples are actually taken from the vein, and have not been brought from elsewhere. These samples need not weigh more than three pounds each, and they should be carefully wrapped and the wrapper labeled with the name and location of the claim, the name and address of the claimant and of the officer examining the claim, and the date of the examination. Each package should be numbered, the number being also entered in the field notebook.

Notes should be made at once and the samples should be referred to in the notes by number, description, color, and name, if known, of the rock containing the mineral. This will assist the officer in making his report.

The samples of ore when wrapped, and the package when labeled, should be stored, if possible, under lock and key.

Immediately upon being notified that a hearing has been ordered upon the claim by the Commissioner of the General Land Office, the supervisor should send the sample by express, charges prepaid, to the assayer of the mint at Denver, Colo., Deadwood, S. Dak., Carson City, Nev., or Seattle, Wash., whichever is most accessible, or to such other address as may be supplied hereafter. The charge for expressage, supported by the proper subvoucher, should be submitted in the supervisor's next expense account. The supervisor should notify the assayer of the shipment, give description of the sample used upon the label, request him to make the assay and give an assay certificate for the use of the Forest Service, and inform him, if possible, on what date the certificate will be used.

Placer claims.—The Forest officer should search for the discovery shaft, pit, or tunnel, pan some of the dirt, and record the results. Several pannings should be made in each excavation. His report should verify or dispute the nature of the deposit claimed.

ADMINISTRATIVE USE OF LAND.

Lands needed for supervisors' and rangers' headquarters, gardens, or pastures, and Forest Service nursery sites should be selected, so far as possible, from non-mineral, unclaimed lands, and will be specially reserved from any form of location or entry. Supervisors should recommend sufficient reservations to meet the future as well as the present needs of the Service. If it becomes necessary to recommend the reservation of land probably valuable for mining purposes or embraced in an invalid claim, a special report should

accompany the recommendation, showing the necessity for reservation and the character of the claim. Supervisors should recommend also necessary diversion of water.

A record of each actual diversion of water for use in the administration of a National Forest should be kept on file in the office of the supervisor. It should give the name of the stream, the date on which the diversion was made, the method of diversion, the use to which the water is put, the description of the place of diversion, the subdivision of land if surveyed, and if not, the description of the land by reference to natural objects, and the amount taken, in cubic inches. This statement should be prepared in duplicate and both original and duplicate should be dated and signed by the Forest officer making the diversion, and witnessed by any persons present or assisting him. Both should be approved by the supervisor and the original forwarded to the Forester.

STATE LANDS.

Indemnity selections may be made by the States and Territories for granted school sections 16 and 36 when in a National Forest, and these sections will then become part of the Forest. (Appendix, p. 222.) If the Forest was established before the survey of sections 16 and 36 they become National Forest lands, and the grant of these sections will not take effect on unsurveyed Forest lands, except for indemnity selection, unless they are eliminated from the Forest. (Appendix, p. 222.)

The removal of timber from unsurveyed National Forest lands without permit is trespass, and will be promptly reported in all cases, without regard to the fact that after survey such lands may become sections 16 and 36, or railroad sections. (Appendix, p. 226.)

TOWN SITES.

Lands in National Forests embraced in valid town-site settlements made before the establishment of the Forest may, unless abandoned, be entered and patented under the town-site laws, without regard to the length of time which has elapsed after their settlement or after the establishment of the Forest. If a petition addressed to the Forester and an investigation made under his direction show that it is necessary and advisable to use National Forest land for town-site purposes, an Executive order to exclude the land may be issued, in which case provision will be made for its entry under the town-site laws and the regulations of the Department of the Interior.

RAILROAD LANDS.

A railroad does not acquire title to nor the right to use, lease, or sell land within the primary limits of its grant before Government survey, nor within its indemnity limits before Government survey and approval of selection. (Appendix, p. 226.) When the plats and field notes of survey show land in National Forests to be mineral in character, use, lease, or sale by a railroad will not be allowed, unless its selection of such land has been approved by the Department of the Interior.

LIEU SELECTION.

No right now exists to exchange private holdings within National Forests for lands elsewhere, except when such right was established before March 3, 1905, and except the indemnity-selection right for school sections 16 and 36, referred to above.

USES.

JURISDICTION OF THE DEPARTMENT OF AGRICULTURE.

The Secretary of Agriculture has entire jurisdiction over National Forests, except in matters of surveying and title. He can not convey any kind or degree of title to the land itself. He has authority to grant permits for the occupancy of lands and the use of resources of National Forests.

All applications for permits should be filed with the supervisors. They may be granted under the provisions of the act of June 4, 1897, which authorizes the Secretary of Agriculture to regulate the occupancy and use of National Forests (Appendix, p. 200), or under the act of February 15, 1901 (Appendix, p. 185), which authorizes him to permit the use of rights of way in National Forests.

JURISDICTION OF THE DEPARTMENT OF THE INTERIOR.

The Secretary of the Interior has entire jurisdiction in matters affecting the passage of title to lands in National Forests. Therefore he alone has authority to approve maps of location filed under the several laws which grant rights of way amounting to easements affecting the title to the lands.

PERMITS.

REG. 6. Permits are necessary for all occupancy, uses, operations, or enterprises of any kind within National Forests, whether begun before or after the National Forest was established, except: (a) Upon patented lands; (b)

upon valid claims for purposes necessary to their actual development and consistent with their character; (c) upon rights of way amounting to easements for the purposes named in the grants; (d) prospecting for minerals, transient camping, hunting, fishing, and surveying for lawful projects.

REG. 7. Permits for the use of the National Forests, unless otherwise specifically fixed by regulation, may be granted by the Forester for any term consistent with National Forest interests. If, however, land covered by any permit is excluded from a Forest, the permit then expires. The Forester may also make a reasonable charge for any permit, right, or use.

Preference in the use of National Forest lands and resources will be given to local residents.

REG. 8. Permits are not assignable, and abandonment in favor of another necessitates new application and permit. In case of abandonment and issuance of new permit, the original permittee may sell his improvements to the new permittee, and any payments made by him may apply on the new permit, in the discretion of the Forester.

REG. 9. Occupancy under permit secures no right or claim against the United States, either to the land or to any improvements upon it, beyond the uses conferred by the permit. Improvements made by the permittee, except fences, may not be removed except with the written consent of the supervisor.

SPECIAL USES.

All uses of National Forest lands and resources, except those which relate to timber and grazing, are known as "special uses."

The following are some of the purposes for which special-use permits are issued: Residences, farms, pastures, drift fences, corrals, apiaries, dairies, schools, churches, roads, trails, telephone and telegraph lines, stores, mills, factories, hotels, stage stations, sanitariums, camps, summer resorts, wharves; miners' and prospectors' cabins, windmills, dipping vats, tanks, dams, reservoirs, water conduits of all kinds, power houses, power transmission lines, aerial tramways and cable conveyors, railroads, tramroads, and the purchase of sand, stone, clay, gravel, hay, and other National Forest products except timber.

REG. 10. The Forester and such Forest officers as he may designate may issue, extend, or renew permits for special uses within National Forests, with such conditions as to area, time, and requirements as they may deem best, and they may make reasonable charges for such permits. The Forester alone may revoke special-use permits.

Forest supervisors may issue permits for all special uses except the following, which can be issued only by the Forester:

(a) Commercial power plants, consisting of dams, reservoirs, water conduits of any kind, power houses, and transmission lines.

(b) Any uses involving the cutting or destroying of more timber upon the land to be occupied or used under the permit than the supervisor is authorized to sell under the timber-sale regulations.

(c) Sawmills with a capacity of more than 20,000 feet per day not operating in connection with sales of National Forest timber.

(d) Examination of ruins, excavations of archaeological sites, and the gathering of objects of antiquity. (See Appendix, pp. 192, 193, 230-232.)

Supervisors may authorize other Forest officers to issue permits to cut wild hay. The charge should be by the acre.

Commercial power plants.—A commercial power plant is one for the generation of electrical energy for sale.

All supervisors' permits for power plants must specifically stipulate that if any of the power developed under the permit is sold the permit shall thereupon be subject to modification, in the discretion of the Forester.

Applications for special-use permits for commercial power plants must be accompanied by certified evidence of water right or appropriation under the local laws if the use of water is involved, maps in duplicate on tracing linen showing the project as surveyed, and field notes in duplicate, both maps and field notes bearing the surveyor's certificate.

Permits for dams, reservoirs, and conduits for storing and conducting water do not carry any right to the water itself, the appropriation of which is subject to the State or Territorial laws.

Sawmills.—Permits are not required for sawmills on patented lands, but they must not be operated so as to endanger the National Forests. This is because no person may use his own property in a way to harm another, and the United States has property which is in danger from any sawmill which uses fire within a National Forest.

Forest officers should properly warn all owners of sawmills on patented lands. If the method of running a mill (lack of spark arresters, disposal of refuse, etc.) actually endangers the Forest, report should be made at

once to the Forester, in order that injunction proceedings may be instituted if advisable.

PROCEDURE IN SPECIAL-USE PERMITS.

Applications for all special uses should be prepared on Form 832. Each application should cover one use only. When the supervisor receives the application he should prepare a card and folder. Every action taken on each case will be noted on its card. The supervisor will retain copies of all applications, reports, form letters, and other essential papers in special-use cases, so that at all stages of each transaction his record will be complete.

Supervisors' permits.—If the special use sought is one for which permit may be issued, the supervisor will prepare a proper agreement on Form 832, making four copies and stamping them "Original," "Duplicate," "Supervisor's Copy," and "Ranger's Copy," and send two copies, the original and duplicate, to the applicant for execution, using Form 946a or Form 946b, as the case may require, and inclosing a properly prepared letter of transmittal (Form 861), to be used by the applicant in making any advance payment required. If a timber-settlement payment is required, a separate Form 861 must be used. The ranger's copy of the agreement should in every case be sent to the ranger at the time the original and duplicate are sent to the applicant for execution.

When the applicant returns the original and duplicate properly executed, the supervisor will approve both copies, immediately send the original to the Forester with a report on Form 964, and return the duplicate to the permittee after properly filling out the supervisor's copy to show all dates and signatures. When an advance payment is required, the permittee's copy of the approved agreement must not be mailed to him before the supervisor receives the certificate of deposit from the Fiscal Agent, but in every case the certificate of deposit must be forwarded to the permittee as soon as the supervisor receives it, regardless of whether the executed agreement has

been received from the permittee and approved by the supervisor.

Permits issued by supervisors should be made "terminable at the discretion of the Forester," unless otherwise specifically authorized.

General instructions and suggestions will be issued from time to time by the Forester as a guide for the preparation of supervisors' permits.

Forester's permits.—If the special use sought is one that can not be granted by the supervisor, the application should be forwarded to the Forester for action, accompanied by a complete report, on Form 964, and in every case a copy of the application and of the report must be retained by the supervisor. Only one copy of the application need be sent to the Forester.

If the special use applied for is allowed, the Forester will prepare an agreement, and send four copies to the supervisor, one for his files, one for the ranger, and two to be forwarded to the applicant for execution, with an appropriate form letter of transmittal (also prepared by the Forester) to be signed by the supervisor. The letter of transmittal will inform the applicant that to avoid delay he may begin enjoyment of the special use applied for immediately upon mailing any required payment to the Fiscal Agent and returning to the supervisor the agreement properly executed in duplicate. The ranger's copy of the agreement must be sent to the ranger at the time the copies are sent to the applicant for execution.

As soon as the applicant executes the agreement in duplicate and returns it to the supervisor, both copies must be mailed at once to the Forester for approval. When an advance payment is required, the Forester will not approve the agreement until the Fiscal Agent receives the money. When the supervisor receives the certificate of deposit from the Fiscal Agent, he must forward it immediately to the permittee, regardless of whether the approved agreement has been received from the Forester. The approved agreement will be returned to the permittee through the supervisor.

PAYMENT FOR SPECIAL USES.

The charge for permits is based chiefly upon the value of that which is actually furnished to the permittee by the Forest Service, including advantageous location and other indirect benefits, and not directly upon the profits or the magnitude of the business which is to be carried on. Applicants should not send any payments to the Fiscal Agent until notified of the approval of their applications.

Whenever a special use involving a charge is granted by the Forester, a prepared copy of Form 861, ready for the signature of the supervisor, will be sent with the agreement, and this must be furnished to the applicant to accompany his remittance to the Fiscal Agent (Reg. 65). When Form 861 is prepared in the Forester's office, a duplicate need not be furnished the Forester by the supervisor (p. 47). As a rule, full payment in advance for special uses will be insisted upon; but when great hardship would result the annual payment may, in the discretion of the Forester, be made in not more than three equal installments. After the first payment for a special use has been made, the Forester will, one month before any subsequent payment falls due, send to the permittee, through the supervisor, a notice to make payment. This will be done by the Forester in both Forester's and supervisors' permits, if an annual charge is made.

A collection calendar record for all special-use permits, both Forester's and supervisors', is kept by the Forester. Therefore supervisors need not keep any record as to payments, except upon their regular special-use cards, and will call upon permittees for payments only by forwarding notices from the

Forester. Supervisors' permits must always name the date upon which the first and subsequent annual payments become due. When preparing agreements, the supervisors should, as a rule, insert the nearest subsequent first or fifteenth of the month as the date for the first payment.

ABANDONMENT OF SPECIAL USES.

Whenever it is certain that a permittee has abandoned a special use, the supervisor should immediately record the case as closed and notify the Forester. If an applicant does not execute and return an agreement within a reasonable time, the supervisor should make inquiry, and if he refuses to execute the papers, the supervisor should secure possession of them, close the case, and notify the Forester. In the case of Forester's permits the supervisor should return the unexecuted agreements to the Forester.

SPECULATIVE APPLICATIONS.

The policy of the Forest Service is to prevent applicants from securing and holding valuable permits as speculative ventures, awaiting either the development of the country to make them more valuable, or until financial assistance to carry them out can be secured. To avoid this speculative feature applicants must, before permit is issued, make all required payments and agree that any necessary construction work will commence within some definitely stated reasonable time; that the work will be completed within a certain period, and that beneficial use of the permit will be made for at least a certain stated period each year. Such time is to be reckoned from the date of execution of the agreement by the applicant. The Forester and Forest officers will therefore, in recommending the time for commencement and completion of special use, take into consideration the physical conditions, such as cli-

mate, facilities for transportation, availability of laborers and materials, etc.

After any permit has been granted, the Forest officer should carefully note whether the time limitations for beginning and completing construction and enjoying the special uses are observed by the permittee. They should promptly inform the Forester of any breach of the agreement in these particulars, and unless permittees can show good reason for failure to comply with their agreements the permits will be revoked.

EMERGENCY USES.

REG. 11. National Forest material may be taken without previous permit in serious emergencies for the protection of life or property, provided a permit for the material so used and for the special use involved is secured at the earliest opportunity.

SCHOOLS AND CHURCHES.

The use of tracts not larger than 2 acres for a school and 1 acre for a church is specifically provided for by law, subject to regulation by the Department and any other disposition of the land by the Government. (Appendix, p. 172.) Timber for the construction of church and school buildings may be secured under the free-use regulations. (Reg. 18.)

CULTIVATION OF AGRICULTURAL LAND.

The occupancy and cultivation of agricultural land in National Forests will be allowed, though no permit should cover more than 160 acres.

Persons who settled in trespass before January 1, 1906, and have not abandoned their claims, may, if qualified, take advantage of the act of June 11, 1906, and in the meantime may occupy and enjoy their holdings without permit. Other applicants under the act of June 11, 1906, who appear to have the preference right of entry under that act, may secure without charge, a permit for the agricultural use of so much of the land applied for as, in the opinion of the supervisor, is chiefly valuable for agriculture, provided that the land is not adversely claimed under settlement made before its withdrawal, or after its withdrawal and before January 1, 1906. Applications for listing will not be affected by such permits.

The Forester will send to the supervisor of each Forest monthly lists of applications under the act of June 11, 1906, in such form as to show who appears to have the preference right of entry. Upon receipt of such lists the supervisor should notify the applicant appearing to have the preference right of entry, if the land is considered to be chiefly valuable for agriculture and is not adversely claimed under settlement as above defined, that upon request a special permit will be granted to him without charge to occupy and use the land for agricultural purposes. Upon receipt of such request, the supervisor should prepare a special-use application on Form 832 and send it to the applicant for signature, and return it for action in the usual manner under the special-use regulations.

The following paragraph should be incorporated in each permit:

In the examination of the land under the act of June 11, 1906, to determine its agricultural character, this permit shall not be considered; neither shall it be construed to give the permittee any preference right of entry under that act. This permit shall terminate when the land is opened to entry under that act; but if it is shown that the permittee has not the

preference right of entry, the listing of the land for opening to entry will be deferred by the Secretary of Agriculture to protect growing crops.

ROADS AND TRAILS.

REG. 12. Wagon roads and trails may be constructed, changed, widened, extended, or repaired upon National Forest lands when needed, but permit must first be secured, except for road and trail work when it will certainly be an improvement of the National Forest, in which case it may be done without formal permit if constructed under the supervision and with the consent of a Forest officer. Permits will not give any right to exclusive use, or to charge toll, or against future disposal of the land by the United States.

If an application for road or trail construction involves the cutting or destruction of more timber within the right of way than the supervisor is authorized to sell under the timber-sale regulations, it must be submitted to the Forester for approval; otherwise it may be granted by the supervisor.

When the construction of a road or trail is completed the permit need not be revoked, but the supervisor will record the case as closed and notify the Forester.

REG. 13. The supervisor may, in his discretion, grant during any one year to any road district, county, person, or noncommercial corporation the right to use not more than \$100 worth of timber, stone, sand, gravel, and other National Forest products free for the construction, maintenance, or repair of roads or trails within National Forests, without prejudice to any free-use application they may make in the same year for material for other purposes.

The regular free-use permit form must be used in granting timber under this regulation.

REG. 14. Applicants for wagon road or trail construction who are not entitled to free-use permit must pay for all merchantable timber cut or destroyed within the right of way, under timber-settlement regulations; or, if National Forest timber outside the right of way is required for construction or repair, under timber-sale regulations.

REG. 15. A county road established prior to the creation of a National Forest may be changed, widened, or repaired by the county authorities without permit, if the operations are within the right of way fixed for such roads by the State law.

Any attempt to abuse this right, such as the unnecessary use of material or the leaving of dangerous refuse, should be forbidden, and, if necessary, reported to the Forester for instructions.

RIGHTS OF WAY AMOUNTING TO EASEMENTS.

Maps of location, or applications under the several laws granting rights of way amounting to easements affecting the title to the lands, must be filed in the proper local land office of the Department of the Interior and not with any Forest officer. The laws granting rights of way are:

The act of March 3, 1875, as extended to National Forests by the act of March 3, 1899 (Appendix, pp. 180 and 182), granting rights of way to railroad companies for railroads. The act of March 3, 1891 (Appendix, pp. 182 and 183), granting rights of way across the public lands and National Forests for irrigation reservoirs and canals. Section 4 of the act of February 1, 1905 (Appendix, p. 184), granting rights of way for reser-

voirs, conduits, and water plants for municipal and mining purposes.

All maps for approval under these grants must be filed in the proper local land offices of the Department of the Interior.

REG. 16. Whenever a right of way under the jurisdiction of the Secretary of the Interior is located upon a National Forest, the Forester may, in his discretion, before making recommendation that it be approved, require the applicant to execute such stipulation and bond as he may deem necessary for the protection of National Forest interests. (Appendix, p. 227.)

Such stipulations may include clearing right of way; disposal of refuse; payment, under timber settlement regulations, for all merchantable timber cut or destroyed; necessary precautions against fires by the use of oil as fuel, etc., and any other conditions needed to protect National Forest interests.

Particular attention is called to the fact that the laws above mentioned granting rights of way amounting to easements for railroads, irrigation reservoirs and canals, and reservoirs, canals, and water plants for mining and municipal purposes, do not in any way prevent or interfere with the securing of special-use permits for these purposes from the Forest Service, although such permits do not, of course, convey any easement running with the land. The issuance of a special-use permit for any of the purposes named will not in any way prevent the permittee from filing a map of location for approval and record by the Secretary of the Interior under the right-of-way grant.

ADMINISTRATIVE USE OF TIMBER.

REG. 17. The Forester may, with as little expense to the Government as possible, dispose of any timber upon the National Forests, by sale or otherwise, when such disposal is actually necessary to protect the Forest from ravages or destruction.

Timber may be disposed of under this regulation to remove an actual menace from insects, disease, or other sources. Where supervisors discover that the timber on National Forests is endangered, they should report to the Forester at once and suggest the readiest and most economical means of removing the danger.

FREE USE OF TIMBER AND STONE.

The law gives the Secretary of Agriculture authority to allow the free use of timber and stone on National Forests, under such regulations as he may prescribe, by "bona fide settlers, miners, residents, and prospectors for minerals, for firewood, fencing, building, mining, prospecting, and other domestic purposes as may be needed by such persons for such purposes, such timber to be used within the State or Territory, respectively, where such reservations may be located, and by the United States." (Appendix, p. 172.)

REG. 18. Free-use permits may be granted to settlers, farmers, prospectors, or similar persons who may not reasonably be required to purchase, and who have not on their own lands or claims, or on lands controlled by them, a sufficient or practicably accessible supply of material suitable for the purposes named in the law. It may also be granted to school and road districts, churches, or cooperative organizations of settlers desiring to construct

roads, ditches, reservoirs, or similar improvements for mutual or public benefit. Free use of material to be used in any business will be refused, as, for example, to saw-mill proprietors, owners of large establishments or commercial enterprises, companies, and corporations. No trespasser is entitled to free use. Green saw timber will not be granted to any applicant who does not do his own logging, unless he is physically incapacitated. Exceptions, however, may be made in unusual cases in the judgment of the supervisor. Necessary cutting of timber in surveying for lawful projects may be done without permit. Unnecessary cutting is trespass.

Whether an applicant is entitled to free use must be decided by the Forest officer who receives the application. In all cases not clearly covered by the letter of the regulations he should be guided by their spirit, especially as expressed by the term "those who may not reasonably be required to purchase," and by the distinction between personal and commercial use. A member of a corporation is not necessarily debarred from free use of fuel for his own home, although his ability to secure it from another source should be considered, if the Forest supply is limited and in demand by more needy applicants. Residents of towns and villages engaged in business or earning a livelihood are reasonably expected to purchase fuel and building material for town dwellings and other home structures. A settler may receive a liberal allowance for his own use, but he is not entitled to free material for sale or profit. There is no more reason for giving a hotel keeper or merchant timber solely to build or warm his hotel or store than for giving him a stock of goods, yet it need not be refused the proprietor of a small establishment when it will be used chiefly by himself and his family. Prospectors should be assisted to develop their properties, but owners of mines, who employ men on wages, should be required to buy. Free timber for use on alleged invalid claims may be granted for fuel only, pending the final determination of title to the claims.

The appraisement set upon free-use material should not be less than for any sales from the National Forest or the district from which the timber is to be taken. Every supervisor should issue to his force at the beginning of each fiscal year, July 1, a schedule of minimum rates for the free-use business. The rates for the same class of material may be varied in different districts if the conditions are widely different. In general, posts should be valued at a given rate per post, and poles at a given rate per linear foot. Cordwood should never be measured on the basis of the board foot. Dead timber should be valued at the same price as green in National Forests where the prices are equal in sales. The scaling or measuring of free-use material may be omitted in a few exceptional cases, when it incurs a much greater expense than the value of material justifies. For example, if a bona fide settler, who has given proof of his desire to comply with the regulations of the Forest Service, asks for permission to obtain a small amount of free-use material, scaling, measuring, or counting may be omitted if it would require two or three days' riding on the part of the ranger in whose district the applicant lives.

REG. 19. Except in cases of great and unusual need, no applicant will be given more than two free-use permits in one year, nor may the aggregate amount of material granted in the two permits exceed \$20 in value, except in the case of schools or road districts, churches, and non-commercial cooperative organizations, when the supervisor may, in his discretion, extend the amount to any value not exceeding \$100. The duration of any permit will be fixed by the issuing officer and will not exceed six months. If the permittee fails to remove timber within the time stated in the permit, the Forest officer may grant the timber to another applicant. A permit will not be renewed to an applicant who has failed to use it, until the tract has been open to application by

others for thirty days. In cases of unusual emergency, however, it may be extended by the supervisor, or, if for \$20 or less, by a ranger authorized to grant free use.

REG. 20. All supervisors and such other Forest officers as the supervisor may designate are authorized to grant free-use permits up to \$20 in value under these regulations, and to make such restrictions as to quality, kind, amount, location, and removal as they deem necessary to protect the National Forests. It is their duty to furnish cheerful assistance to applicants, to act promptly upon all applications, and, in general, to follow as liberal a policy in the matter of free use as the interests of the National Forests and the proper performance of their other work will allow.

The free-use business of the National Forests will be conducted mainly by the rangers, subject only to the general restrictions, instructions, and supervision outlined in "The Use Book." and the general plan and policy outlined by the supervisors.

The Forest officer issuing the permit should designate the timber to be cut in the simplest and most economical way practicable. Living timber should be marked. In the case of dead timber, an area may be blazed or defined by natural boundaries, and the class of trees to be taken specified.

When numerous applications for free use are expected, Forest officers should notify the public, in any convenient manner, that they will be at designated places on certain days prepared to transact free-use and other Forest business.

On many Forests it will be possible to reduce the work of handling free-use business by designating free-use areas, preferably in dead timber. These should be mapped and reported upon to the supervisor, who, if he approves the selection of the area, will authorize the ranger to mark or specify the timber which should be removed and to designate the boundaries. After issuing a permit, the Forest officer may send the permittee

to this area, thus avoiding the necessity of a visit to the timber with each applicant before cutting. Each applicant should clear up the brush from his own cutting and be responsible for his share of the area.

REG. 21. No free-use material, except the small quantities actually needed by transients, may be taken without a permit. Free use must never be granted verbally.

The Forest officer who issues the permit will fill out Form 874-8 and Form 874-9. This may be done very conveniently by the use of a carbon sheet. The applicant will sign both copies and the Forest officer, after approving both copies and filling out the stubs, will give the permit to the applicant, send the duplicate to the supervisor, and record the date on the stub. The supervisor will use the duplicate free-use permits in preparing his annual free-use statement. The copy of the permit will usually contain sufficient information to enable the supervisor to record it properly. Additional facts may be stated on Form 874-13.

When the permittee has secured the material desired, or when the time allowed has expired, the officer in charge of the cutting should report to the supervisor on Form 874-14.

Although simple methods and the exercise of judgment are encouraged, there should be no tendency to underrate the importance of free-use business or the necessity of considering the good of the National Forest. The use of dead material should be encouraged in every possible way and the assignment of green timber, when really necessary, must be where it can best be spared. Whenever practicable, dead and defective trees and inferior species should be taken. The cutting will thus improve the forest by taking out the less desirable trees. Special care must be taken to insure reproduction. Low stumps and full use of all trees cut must be required, as well as careful disposal of refuse. Officers in charge of cutting will be held responsible if unnecessary damage is done to young growth or standing timber or if the reproduction of the forest is not properly considered. The violation of any of the regulations governing free use, or of the terms of permit, constitutes trespass

and should be dealt with accordingly, but there should be no failure on the part of the Forest officer to make all points clear to the applicant before the permit is granted.

REG. 22. All free-use material may be sawed, and all, except green saw timber, may be cut, for the permittee by an agent, but the work so done must not be paid for by a share of the material. An exception may be made in the case of green saw timber when the permittee is physically incapable of doing the work.

TIMBER SETTLEMENT.

REG. 23. When a right of way or other special use is granted within a National Forest, the Forester or the supervisor who approves the permit may, in his discretion, without advertisement, fix the price and require payment for all timber cut or destroyed on National Forest land occupied in direct connection with the enjoyment of the right of way or special use.

Such transactions are called timber settlements. The Forest officer, when reporting upon the special use, must submit as soon as possible a separate report on Form 578 to cover the timber to be cut or destroyed. As in a timber sale, this report should recommend the stumpage rates, the rules for cutting, and for the disposal of the refuse. It should also be stated whether the timber should be paid for on the basis of the estimate or of the actual scale. If payment is to be made upon the actual scale, scale reports should be submitted in the same manner as in timber sales. Timber settlements are closed in the same way as timber sales.

There is no separate form of application or agreement for timber settlements. The special-use agreement (Form 832) must contain stipulations governing payments for the timber, disposal of refuse, etc.

TIMBER SALES.

All timber within the National Forests which can be cut safely and for which there is actual need is for sale. Applications to purchase are invited. Green timber may be sold except where its removal would make a second crop doubtful, reduce the timber supply below the point of safety, or injure the streams. All dead timber is for sale. (Appendix, p. 171.)

In all cases the first step for the prospective purchaser is to consult the nearest Forest officer. Inquiries or applications should never be sent to Washington directly.

The prime object of the National Forests is use. While the forest and its dependent interests must be made permanent and safe by preventing overcutting or injury to young growth, every reasonable effort will be made to satisfy legitimate demands.

Timber cut from National Forests may be handled and shipped like any other timber, except that it will not be sold for shipment from regions where local consumption requires the entire supply, or is certain to do so in the future. The law prohibits export from the State of timber cut from the Black Hills in South Dakota, except under special conditions. (Appendix, p. 176.)

Anyone except a trespasser may purchase upon the National Forest or the public domain. There is no limit but the capacity of the forest to the quantity which may be sold to one purchaser, except that monopoly to the disadvantage of other users of forest products will not be tolerated.

The time allowed for the removal of timber will depend upon the amount purchased and the amount which the purchaser is able to cut and remove each year, but will in no case exceed five years. It will always be sufficient for reasonably diligent work, but speculation by holding for rise in value will not be permitted.

The question whether the Government has or has not the right to sell timber from a mining or other valid land claim upon which final proof has not yet been made has never been settled in the courts. When a claimant is actually occupying and developing his claim, the timber should not be disposed of by the Forest Service. If, however, any claimant is not actively using his claim, Forest officers should not hesitate to allow, either under sale or "free use," the cutting and removal of dead, down, diseased, or insect-infested timber, especially when they consider such timber a danger to the Forest. If the danger is great, it should be reported to the Forester, even though the claim is actively used.

No attempt should be made to sell the sound standing green timber upon unperfected valid mining or other claims, whether they are being actively used or not.

The Forest Service has the undoubted right to sell any timber upon a land claim to the rightful claimant for any use whatever. A sale may be made, also, to a third party, with the consent of the rightful claimant, which should be in writing and filed with the other papers in the case.

CLASSES OF SALES.

REG. 24. All Forest officers whom the supervisor may designate, with the approval of the Forester, are authorized to sell dead and green timber not exceeding \$50 in value. All supervisors are authorized to sell green and dead timber not exceeding \$100 in value. The Forester is authorized to make timber sales for larger amounts and to delegate this authority in special cases.

Under Reg. 24 sales fall into these three classes:

(A) *Rangers' sales*.—Not over \$50 in value of dead or living timber.

No delay is involved. The applicant should consult in person the nearest Forest officer, who will designate the timber, fix the terms of sale, and at once, upon assurance that the required payment has been forwarded to the Fiscal Agent, permit cutting and removal.

Formal application is made in duplicate and signed by the purchaser, who sends the required payment to the Fiscal Agent, with a letter of transmittal given him by the Forest officer, who will at once fill out a copy, mark it "Duplicate," and forward it to the Forester through the supervisor (p. 122).

The duplicate should state, in addition to information given in the original, the kind of timber, whether green or dead, and the approximate total amount of each where both are included, the amount of each species included in the sale, the price per thousand feet or other unit, the location of the cutting area, and the time allowed by contract for the cutting and removal of the timber. This information should always be made complete, since the Forester does not receive other information until the scaling reports are forwarded. The Forest officer, upon being shown the receipt, if the payment is made by express or postal money order, or the draft itself, if by national-bank draft on New York, as assurance of payment, will approve both

copies of the application and at once permit cutting and removal. He will at once forward one copy to the supervisor, give the other copy to the purchaser, and record the terms of the sale in his note book. He will forward scale reports on Form 820 as often as required by the supervisor. He will notify the supervisor, as directed on page 92, as soon as the timber is removed and all terms of the agreement are fulfilled, and recommend that the sale be closed. In sales in which only dead timber is involved, a map and forest description need not be sent to the supervisor, otherwise they are required.

(B) *Supervisors' sales.*—Not over \$100 in value of dead or living timber, or such larger amounts as may be authorized by the Forester. Application may be made through any Forest officer, but the supervisor must approve the sale. If the value of the timber applied for is not over \$100, the only delay involved is the time required for the estimate and the report to the supervisor. If the latter approves the sale, the applicant forwards to the Fiscal Agent the payment required, and receives from the supervisor an approved copy of his application, which becomes his permit. He may then begin cutting.

When the value of the timber applied for is more than \$100, the sale must be advertised for at least thirty days in one or more newspapers of general circulation in the State or Territory. The applicant will be required to forward \$50 to the Fiscal Agent to cover the cost of advertising. If the amount applied for is over \$100 in value, but still within the limit established by the Forester for sales by the supervisor, the latter prepares an advertisement and has it published. The advertisement should state the period during which bids will be received, the area from which timber is to be

sold, its kind and estimated amount, the minimum stumpage price or prices, the sum to be deposited with the Fiscal Agent at the time bids are sent to the Supervisor, and that the right to reject any or all bids is reserved. On the expiration of the period of advertising, the supervisor will open the bids and award the sale.

The supervisor then prepares the contract and, if necessary, the bond, and sends them to the successful bidder for execution. When the contract and bond have been executed and the necessary deposits made with the Fiscal Agent, cutting may begin.

The sale will be awarded to the highest bidder unless such an award would create a monopoly, unless the highest bidder is debarred from the use of the National Forest by his previous acts, or unless some unforeseen objection to the sale arises.

An examination on the ground is made by the supervisor or such forest officer as may be designated by him. The results are recorded and are discussed with the applicant and form the basis of the formal application which is filled out in duplicate and is signed by him. A copy of the letter of transmittal accompanying the payment is at once forwarded to the Forester by the supervisor, after he has noted on it the additional information required, as in Class A sales. One copy of the approved application is retained by the supervisor and one is returned to the purchaser through the ranger concerned, who should have a copy for his own use. In sales of this kind, where no living timber is involved, no map or forest description need be prepared, unless they are required by the supervisor or are necessary in the judgment of the Forest officer making the examination.

Since the law definitely limits the amount of timber which can be sold without advertisement to a stumpage value of not

more than \$100, great care should be taken in making unadvertised Class B sales that the value of the timber does not exceed \$100. It is better to make the sale for a value a little under the \$100 limit to allow for a possible excess cutting. If by any accident the value of the timber actually cut exceeds \$100, it will be necessary to make a new sale for the excess. Otherwise any over-cut should be reported as excess cutting on the original sale.

In sales involving more than \$100 worth of timber, but within the limit which each supervisor is authorized to sell, the supervisor should have the timber examined, as described on page —, and a map, estimate, and report submitted to him. If he thinks the timber can be sold with safety, he should then prepare, or have prepared, a formal application and have it signed in duplicate by the applicant.

As soon as they are prepared an extra copy of the application and contract should be sent to the ranger who has charge of the cutting.

Copies of all papers in an advertised Class B sale, including the application, notice of sale, report, estimate, contract, and bond, if required, should always be sent to the Forester.

(C) *Forester's sales*.—Sales exceeding in value the amount to which the supervisor is authorized to sell:

Since the timber in all sales of this class exceeds \$100 in value, all must be advertised. Applications are submitted through the supervisor to the Forester. Upon the Forester's approval, and after a deposit of \$50 to cover cost of advertising has been received by the Fiscal Agent, a notice of sale is published in the local newspapers for a period of not less than thirty days. On the expiration of the period named in the advertisement, the bids are opened by the Forester and the sale is awarded. If the sale is awarded to another person, the applicant's deposit is returned. The contract, based

on the application, is drawn up in the Washington office and sent to the supervisor to be executed by the purchaser. After the contract has been executed and the required deposits made, cutting may begin at once.

The steps are the same as in advertised Class B sales until the supervisor has received the formal application signed in duplicate by the applicant. If the supervisor decides to recommend the sale, he notifies the applicant to forward to the Fiscal Agent a deposit of \$50 to cover cost of advertising, and sends one copy of the application to the Forester with the report, estimate, and map. If he recommends the approval of the application without modification, he should initial in the lower left-hand corner of the first page. If he wishes to recommend any modification of the application or to give a more detailed explanation of any features of the examination or application, he should do so in a letter to be sent with the other papers. If the application is approved by the Forester subject to modification in any way, the supervisor should obtain the consent of the applicant before advertisement is made.

As soon as the advertisement begins, the supervisor should forward Form 935 to the Forester and notify all prospective bidders that advertisement has begun, instructing them to forward their bids within the period specified in the notice of sale. He should furnish them with copies of Form 941 and bid envelopes. The original applicant should be informed that his application does not constitute a bid. At the expiration of the period of advertisement, and not until then, the bids will be opened by the Forester. Upon evidence that the necessary deposit has been received the award is made. The contract is then prepared, and four copies are sent to the supervisor. The copies marked Original and Duplicate should be executed as soon as possible and returned to the Forester for approval. Of the other two copies, one should be retained by the supervisor for his files, and the fourth given to the Forest officer in charge of the sale. After approval by the Forester the original copy of the contract is retained and the duplicate returned to the

purchaser through the supervisor. Cutting may begin when the purchaser has signed the contract and need not await final approval by the Forester. Every reasonable effort should be made by supervisors to secure the prompt execution of all contracts.

REG. 25. The supervisor may in his discretion require that a deposit be made with the Fiscal Agent before examination of or report on any application to purchase timber.

PAYMENTS AND DEPOSITS.

REG. 26. All timber must be paid for before it is cut. If in any sale the timber available does not reach the amount estimated and paid for, the necessary refund will be made, provided the purchaser has complied with the terms of the sale.

Deposits to cover cost of advertising and to accompany bids apply on the first payment if the sale is awarded to the depositor. Otherwise they will be refunded in accordance with Reg. 32 and Reg. 66.

REG. 27. In any sale the timber may be paid for in one or more payments, as agreed. In sales of \$100 or less the partial payments must not exceed three.

The payor will be furnished by the Forest officer with a form letter of transmittal bearing the designation of the sale, which must accompany the remittance to the Fiscal Agent. (Reg. 65.)

If possible, in sales of \$100 or less, payment should be made in full in advance of cutting.

CONDITIONS OF SALE.

REG. 28. The period allowed for the removal of timber, which in no case will exceed five years, must be fixed in the agreement, and in sales in which a period of

two or more years is allowed for the removal of the timber the amount to be removed each year must be specified, except in unusual cases. If at the expiration of the period named in the contract the purchaser has not removed all the timber, he forfeits all right to any timber not yet removed and to his purchase money; but if his failure to comply with the restriction was unavoidable, the Forester may, in his discretion, extend the limit to prevent hardship.

Supervisors may extend the time allowed for the cutting and removal of timber in sales of Class A and Class B. In any sale, unless it is otherwise specified in the contract, they may allow the postponement of brush piling when snow makes it impracticable. The supervisor may require the purchaser to give bond to comply with the terms of the application for such postponement. Extension of time in a Class C sale may be granted only by the Forester or such officers as he may designate.

A sale should be closed when the time allowed for cutting and removal has expired or when the purchaser has fulfilled all conditions of the contract. The definite recommendation of the supervisor is necessary before any sale can be closed. In most cases this recommendation can be made by answering "yes" to the last question on the final scale report.

Extensions of time should be granted only when some unavoidable circumstance has delayed the purchaser's operations. When an extension of time is not granted, any timber which may have been cut but not removed will revert to the Forest Service.

When the postponement of brush piling is necessary, blank copies of the application and bond to be used will be furnished to the supervisor, upon request by letter. The amount of the bond, if one is required, should be at least twice the estimated cost of brush piling. Before postponement of brush piling under

a contract, which contains no provisions for delay and on which bond was required, it will first be necessary to have the consent of the sureties.

Extension of time or the postponement of brush piling should never be granted verbally.

REG. 29. Timber cut from any National Forest may be sold in any market anywhere, except that from the Black Hills National Forest in South Dakota dead and insect-infested timber only may be exported from that State.

REG. 30. In Class A and Class B sales bonds will be required only in exceptional cases. In Class C sales in which the value of timber involved is less than \$3,000, bonds will not be required unless definitely recommended by the supervisor. In all sales for amounts of \$3,000 or more bonds will be required, except in special cases. The responsibility of the sureties must be established by the supervisor and reported upon in all bonds requiring the approval of the Forester. Supervisors may approve any bonds in sales of Class A and Class B.

In Class C sales, to an incorporated company, supervisors should require the officer who signs for the company to furnish the Forester a copy of or extract from the articles of incorporation or the by-laws or resolutions of the board of directors, authorizing the officer to execute the papers for the company. This copy or extract should be certified by the secretary of the company under the corporate seal.

When witnesses are required to the execution of any contract, if possible one should be a Forest officer and the other the notary public who takes the acknowledgment.

An officer of a company or corporation should not be allowed to apply for or purchase in his own name timber for the use of a company or corporation, but the application should be made in the name of the company.

REG. 31. Failure to observe any of the terms of the agreement constitutes breach of contract. The violation of any of the following four rules constitutes trespass:

(a) No timber may be cut until it is paid for.

(b) No timber may be removed from the place agreed upon for scaling until it has been scaled and stamped by a Forest officer.

(c) Timber may be cut only on the area designated by a Forest officer.

(d) No living trees may be cut until marked or otherwise unmistakably designated by a Forest officer.

ADVERTISEMENTS AND BIDS.

The law requires that advertisements of all sales over \$100 must be published for not less than thirty days in one or more newspapers of general circulation in the State or Territory. (Appendix, p. 171.)

REG. 32. Advertisements of sales must announce the time and place of filing bids, the location and approximate amount of timber, the minimum prices, the amount to be deposited, and the name and address of the supervisor from whom full information can be obtained. Deposits will be credited on the purchase price of the timber if the sale is awarded to the depositor. If the sale is awarded to another or if the application is not approved, the deposits will be refunded. If the applicant should fail to submit a bid, the amount previously deposited may, at the discretion of the Forester in Class C sales, and at the discretion of the supervisor in Class B sales, be retained to cover the cost of advertising. The right is reserved to reject any or all bids.

Upon definite recommendation by the supervisor, timber for which there is likely to be a demand and which may be cut with benefit to the forest, may be advertised in advance of application to purchase.

The last day for receiving bids must be at least thirty days from the first appearance of the advertisement. The last day for receiving bids need not be the date of the final appearance of the advertisement. As soon as any notice of sale has appeared once, the supervisor should secure a copy of the advertisement and send it to the Forester on Form 935. In order that large sales may be given publicity, supervisors should, during the period of advertising, post copies of Form 975 where they will attract the notice of the general public.

REG. 33. In sales above \$500, allotments, at the highest price offered, may be made to several bidders to prevent monopoly. In any sale, areas may be reserved for free use and local needs.

REG. 34. After timber has been advertised, but not sold, or if a purchaser has failed to complete his contract, the Forester and such officers as he may designate may sell any portion without further advertisement at private sale. (Appendix, p. 171.)

Timber may be sold at private sale when no bid satisfactory in price and conditions is received. In no case, however, can the timber be sold at a lower rate than that named in the advertisement.

ADVANCE CUTTING.

REG. 35. The Forester and such officers as he may designate may permit the cutting and removal of timber in advance of the award in an advertised sale, when the applicant has made a deposit covering the value of the timber to be cut and removed, and has agreed to pay for all timber actually cut under the privilege of advance

cutting at the rate of the highest price bid. (Appendix, p. 171.)

The permit for advance cutting does not give the applicant the right to take all the timber at the rate of the highest bid, but merely to take such timber as he cuts before the completion of the advertisement. In no case will he be allowed to cut timber in excess of the amount covered by his deposit. When, however, it is evident that the applicant for advance cutting has submitted the only bid which will be received, the supervisor may allow advance cutting to continue after the expiration of advertisement and until the contract is presented for execution. Supervisors should inform applicants that the permit for advance cutting does not do away with the necessity of submitting a bid. Advance cutting will not be allowed when it is evident that it will discourage competition.

The application for advance cutting should be signed in duplicate, one copy retained by the supervisor, and the other given to the applicant. When it is necessary to apply to the Forester for advance cutting, two copies of the application should be forwarded with the definite recommendations of the supervisor and a statement of the reasons making advance cutting necessary. If approved by the Forester, one copy will be retained and the other returned to the applicant through the supervisor. A third copy will be prepared and sent for the information of the supervisor. The following form of application for advance cutting in timber sales should be used:

———— (I or we), ——— of ———, apply for advance cutting under ——— (my or our) timber sale application dated ———, and hereby expressly agree, if this application is allowed by the ————— (Forester or supervisor) to pay for all timber cut under this agreement prior to the completion of the advertisement the full amount of the highest bid resulting from such advertisement. A deposit of \$—— has been sent to the Fiscal Agent of the Forest Service at Washington, D. C., to cover the estimated value of such timber as will be cut in advance of advertisement of sale.

Signed in duplicate this —— day of ——, 190—.

EXAMINATION OF TIMBER APPLIED FOR.

Should the Timber be Cut?—Unless full information is already at hand, the first step upon receipt of an informal application is the examination of the timber applied for. The Forest officer must decide whether the timber is mature, and whether, if it is cut a second growth will replace it, or if the land will become waste, and whether the water supply will be seriously endangered by the cutting. The need for the timber should always be investigated with special reference to the future local demand and supply.

Applications for all the merchantable timber on a watershed should not be recommended for approval if a community is dependent upon it.

The Future Stand.—In any sale of green timber, good reproduction, and in mixed forests, reproduction of the more valuable kinds must be assured before a sale can be recommended. Whenever possible, a stand of young, thrifty trees should be left to form the basis of a second crop. In selecting kinds or sizes of trees which should be left, the present and the future value of the manufactured product, the rate of growth, power of reproduction, liability to windfall, resistance to fire, and present and prospective damage from insects or fungus disease should be borne in mind.

Method of Cutting.—If the timber can be cut safely, then it must be determined whether all trees below an approximate diameter or only selected seed trees of valuable kinds should be left, or if seed trees are to be used, whether they should be left singly or in groups or strips.

If an approximate diameter limit is recommended, it should not be so low as to include thrifty, young trees or rapidly growing trees in which the taper is excessive. The cutting limit should always be placed as low as possible for undesirable species. In some cases only a few trees can be cut safely, to avoid danger from windfall or injury to the watershed. The object of a sale of green timber is not only to realize a money return from the forest, but to secure a better stand.

The Cutting Area.—Small sales should usually be made by amount. Large sales should include all the merchantable timber on a given area. In either case, all small, isolated bodies of timber should be included, since if left they would not be salable. It is very seldom desirable to define the boundaries of the cutting area by legal subdivisions, except where it is bounded by patented lands or valid claims.

When the timber is on a given watershed or slope, the cutting area can be bounded by topographic features, such as ridges and streams. If only part of the timber on a slope or watershed is wanted, the cutting area should not include only the most desirable portion. When successive sales are made from the same compartment, the cutting areas should be contiguous.

If the cutting area includes claims of any sort they should be carefully investigated and reported on. Timber on valid claims is always exempted from sale, unless the written consent of the claimant is obtained. Timber on invalid claims may be included in a sale if the examining officer is satisfied he can prove that the claim is invalid, which his report must show conclusively.

Prices.—In all sales the stumpage prices should be based, not upon local custom, but upon the actual value of the timber. This must be determined by a careful study of the quality of the timber and the cost of logging. Timber on a gentle slope and within a mile of a drivable stream may be worth more than twice as much as less accessible timber. If dead timber has the same market price and value as green, the stumpage rates should be the same. In some cases it will be possible to simplify the scaling and administration of the sale by recommending an average price for all species.

The Forest officer making the study should ascertain the cost of each step in logging and manufacture, the sale value of the product, and the prices of competing lumber from outside sources. In some sales it may be desirable to introduce a sliding scale of prices, providing for an annual increase in prices for timber cut after the first year of the contract. In others

it may be best to make provision for readjustment of stumpage prices at a definite time upon a definite basis. The estimated profit to the purchaser at prices recommended should always be given.

Stumpage rates should not be reduced for any purchaser because his methods of manufacture are imperfect and utilization is incomplete. In recommending prices for timber to be sold to mining companies, power companies, and the like, for their own use, the cost of securing it from the nearest source outside the National Forest must be fully reported upon. The basis for stumpage prices in regions where timber from outside sources can not enter into competition must be very carefully considered.

No application will be approved by the Forester or by a supervisor unless the report of the examining officer shows definitely that the full market value of the timber will be received. There is no way to prevent favoritism and graft except to treat a timber sale as a business matter and get the full value of the timber sold.

Logging.—The method of logging to be used should be ascertained and its effect upon the forest considered. If it will cause serious damage to the reproduction or is likely to cause erosion, the examining officer should recommend measures to prevent this damage. He should always recommend the period to be allowed for the cutting and removal of the timber. This should never permit the holding of timber for a rise in value. If the period recommended is two years or longer, the amount of timber which the purchaser should be required to log each year should be determined. If it will be necessary to build logging camps or other buildings, flumes, or roads, their proposed location and their disposition when logging is completed should be ascertained. The value of these improvements to the Forest Service should be considered, as, for example, the use of buildings for rangers' quarters. The examining officer should recommend whether full payment for the timber used in these improvements should be required or whether a reduction in the price should be made. If no reduction is made, the purchaser will be allowed a definite period after completion

of the logging for their removal. If they are not removed within this period they will revert to the Forest Service.

Reliability.—The reliability of the applicant and his reputation in the community should be ascertained. If he has previously made use of the National Forest resources, his methods of business should be reported.

Form of report.—The result of the examination should be forwarded to the supervisor in the form of a map, forest estimate, and description, and a report containing further information and explanation. In all Class C sales recommendations for marking should accompany the report. Where all the facts and the examining officer's definite recommendations can be stated on the description and estimate sheet, no further report is necessary. If Form 578 does not provide sufficient space, the information should be given in a report, but in most cases it is best to fill out the form and submit additional information and recommendations.

Map.—Every report upon timber recommended for sale must contain at least one map. This must show not only the proposed sale area, but also its location with reference to surrounding forest, topographic features, such as ridges, streams, and roads, proposed roads, camps, and mill sites, lands under patent, or claims, and surveyed lines, if any.

The map must include enough of the surrounding forest to show that the timber applied for may be removed without rendering the surrounding timber inaccessible and unsalable. Burns, barren or open land, forest types, and the limits of merchantable timber on slopes should be shown so far as they affect the desirability of allowing the sale. Within the area applied for the forest types should be shown, and the topography should be indicated in sufficient detail to demonstrate the ease or difficulty of logging the timber, and to show the natural boundaries of compartments or logging areas. In small sales one map will show all these data, so that compartment maps are unnecessary, the compartments being indicated by dotted lines. This map should be drawn to a scale of not less than 4 inches to the mile.

Large tracts require location maps on a small scale, showing only the outline of the proposed cutting, the section lines or other location points, the private lands, if any, and dotted lines to represent the accompanying compartment maps on a larger scale. The latter may then be numerous and large enough to show necessary detail.

The proposed cutting area, as recommended by the examining officer and covered by his estimate and description, whether or not he agrees with the applicant, must always be clearly defined on the map; so must every part for which there is a separate estimate, description, or recommendation.

Estimate.—Always estimate the timber upon a definite cutting area recommended and shown on the map. An average for any large area of which this tract forms a part is insufficient. If uncertain conditions of sale or differences between the Forest officer and the applicant make it likely that the area recommended may be extended or reduced, then estimates for both the larger and the smaller area are required; otherwise, the cutting area should be fixed and estimated without reference to other lands. Where applications for adjoining timber are expected, and where the whole body could be most economically examined at one time, the work of estimating may with advantage include a large area, so that subsequent sales may be made without further examination. In such cases the estimate of the cutting area covered by the present application must be kept separate and an estimate and report submitted for each area which comprises a natural logging operation. The same methods should be followed in estimating large bodies of timber which are to be sold at once, when estimates should be made of each compartment or body of timber. Whenever the Forest on different compartments requires different treatment or different stumpage prices, the details of the estimate and report should show the reasons.

When there is more than one forest type within a cutting area or compartment, the estimate must be based upon separate estimates in each type. When the application does not include all the merchantable timber on the cutting area, the Forest officer must submit an estimate of the merchantable timber which will

be left after logging. This estimate should include seed trees, young timber which it is inadvisable to cut, and timber of sizes or species not desired by the applicant and which can properly be left.

The work of estimating should be done as carefully as conditions will allow. Only in the largest sales may less than 5 per cent of the total area be actually estimated, and wherever possible a much larger percentage should be taken. Estimates should be conservative, but over-cuts should not ordinarily be more than 10 per cent of the estimated amount of the sale.

PREPARATION OF FORMAL APPLICATION.

If the Forest officer decides to recommend a sale, he will explain to the applicant all the requirements of the regulations and the special conditions for that particular sale. All points about the proposed cutting must be discussed fully with the applicant before the formal application is signed. The following points are given as guides for this discussion, but the Forest officer who prepares the application will be held responsible for the applicant's clear understanding of all the conditions of the application and of the manner agreed upon for conducting the sale.

To what approximate minimum diameter limit at a point $4\frac{1}{2}$ feet from the ground will cutting be allowed for the different species?

Will seed trees be left; if so, of what species and how many per acre? Will they be evenly distributed or left in groups or strips?

To what diameter in the tops will trees be used?

Will brush be lopped and piled, or lopped and otherwise disposed of? If lopped and scattered, will brush help to secure reproduction or prevent erosion?

Will the purchaser be required to clean up down timber not cut by him and burn brush and tops in the presence of and under the direction of a Forest officer?

To what maximum height will the purchaser be allowed to cut the stumps? Unless swell-buttled, hollow, badly burned out, or of great size, they should usually not be higher than 18 inches.

Will felling and cutting be done with saws?

During what months will cutting be allowed? When there is deep snow on the ground will cutting be allowed in the sales which include much down timber?

What timber may be used for skidways, camps, or other improvements, and will it be paid for? What disposition will be made of camps and other improvements upon the expiration of the contract?

Where will camps, roads, dams, etc., be located?

Are the approximate minimum diameter limits to be varied to reduce the proportion of the undesirable species in the stand? Can these species be reduced in any other manner?

Will the cutting of desirable species only be allowed or will the purchaser be required to remove all merchantable timber on the tract?

What special precautions will be taken to prevent damage to the young growth by the lumbering?

How and where will logs be skidded for scaling? If logs are not skidded, how will extra cost of scaling be paid? What allowance will be made for trimming lengths?

What private claims are included in the sale area? Are the claims valid or invalid? If invalid, will the timber be exempted from sale?

What precautions are necessary to prevent forest fires, and how many employees of the purchaser will be available to assist Forest officers in fighting fires?

If a bond is required, what will be its amount?

If engines or locomotives are to be used in the logging operations, will oil be used as fuel?

What period will be allowed for the completion of the contract? Has the purchaser facilities for completing the logging within this period? Is the time longer than is actually necessary?

What are the stumpage rates? If the sale is for a long period is provision made for the readjustment of the stumpage rates at a definite time? On what basis? Is provision to be made for a sliding scale of stumpage rates?

Will the purchaser be required to furnish any data of value to the Forest Service?

In applications for dead timber the following points should also be considered:

Will all, or only standing, dead timber be taken? May trees which are nearly dead be included in the sale to good advantage?

Should all wood sound enough for fuel be taken?

Should all trees above a given size be taken? What size?

Will the menace from fire be materially lessened or will any advantage be gained by piling refuse or unused portions of down trees?

Dead timber includes only trees which have no green branches, and in no case trees which are apparently dying. Since deciduous trees, such as most hardwoods,

have no foliage in winter, special care is needed to decide when they are dead. Trees dead at the top and green below, generally called spike-topped trees, are classed as living and must never be cut under dead-timber permits.

If the applicant agrees to the conditions after they have been explained to him, a formal application is prepared according to the instructions given above for each class of sales. The quantity and location of timber described is based upon the Forest officer's examination, and must agree with the map and the description and estimate. All conditions and restrictions to govern the cutting must also be included.

MARKING.

When the sale of any green timber is assured, the supervisor will order that all trees which are to be cut shall be marked or otherwise unmistakably identified for cutting. This is imperative. Where only dead timber is purchased and no living timber will be cut, the Forest officer may, instead of marking or designating for cutting every tree, blaze and mark the boundary of the cutting area and instruct the purchaser in the manner of cutting.

When the plan of marking is followed, standing timber must be marked "U. S." near the ground, so that every stump will show the mark. Where snow may conceal the marking from the cutters, each tree must also be marked at a point several feet from the ground.

Witness trees or any tree blazed to mark the line of any Government survey should never be marked or otherwise designated for cutting. (Appendix, p. 197.) Timber included in a sale area upon which mineral locations have been made *after* the execution of the timber-sale contract should be marked for cutting in the same manner as the remainder of the timber.

Marking the timber for cutting is the most important part of any sale. If possible, a forest assistant should be assigned to the work. Timber should be marked when it can be done most

economically. The work should not, however, be done too far in advance, and the cut-over area should be watched for mistakes. In no case should timber be marked outside the area designated in the contract. In a sale for a definite amount, only timber enough to yield that amount should be marked. The marking should be done thoroughly, and no groups of mature trees should be left on the area unless so isolated that the purchaser can not reasonably be required to log them.

Forest officers will not mark for cutting any witness trees or any tree blazed to mark the lines of a Government survey. The destruction of such trees by anyone is, under the act of June 10, 1906, a serious offense.

The following instructions for marking are general, and can not all be applied in any specific case. Modified to meet local conditions, they should serve as a basis for marking in all sales and in free use.

All mature and over-mature trees should be marked, since they have practically finished growing. Unless needed for seed, all trees which show such defects as punk knots, spike tops, bad crooks, low forks, fire scars, cat faces, or frost cracks, should be marked. The officer doing the marking should not be unreasonable in requiring purchasers to take defective trees, but as a general rule those which will yield one merchantable log should be marked.

An approximate diameter limit, if one is given in the contract, should be flexible. Thrifty, young, rapidly growing trees of desirable species should not be marked even if larger than the stated diameter. Defective trees of any usable size should be marked.

Where the danger of windfall is great, the removal of a few trees only should be allowed. This rule should also be followed where a dense forest cover is needed for the protection of a watershed or to prevent erosion. The probable harm from too heavy marking on all steep slopes and in exposed places must be carefully considered.

Each tree left should have its crown free enough for vigorous growth. If usable, trees which have been badly crowded and have only a small, sickly crown should be marked.

When there are not enough young trees to form a good stand in the future, seed trees must be left. These should be thrifty and capable of bearing large quantities of seed at once. Occasionally it will be possible to secure seed from trees too misshapen or defective to be merchantable, but as a rule young trees which will yield good lumber in the future should be chosen. In mixed forests, all seed trees should be of the more valuable species.

Where partial reproduction is already present, fewer seed trees should be left than where there are no seedlings. If there is danger that fire will run over the area, enough trees should be left to seed the ground fully whether reproduction is present or not. To give good results, seed trees of most species should not be farther apart than twice their height, and should be evenly distributed over the area. Always leave a number of seed trees on the edge of openings, such as old burns, on the side from which the prevailing winds blow. Do not mark isolated thrifty trees of desirable species, unless it is evident that the species will not grow well on that particular situation.

Decide first which trees should be left, and then mark the trees to be removed.

SUPERVISION.

The Forest officer in charge of a sale must require full compliance with all conditions of the contract. If any of the conditions are found to be unjust or unreasonable, he should report the facts with his recommendations. So far as practicable, all branches of the logging operations must keep pace with one another. The handling of brush should never be allowed to fall behind the cutting and removal of timber, except when delay is allowed by the contract or by a supplemental agreement.

The best way to dispose of brush is not everywhere the same. It may often be found advisable to lop and scatter the tops to prevent erosion or to favor reproduction. Burning is necessary wherever there is danger of fire.

Frequently the most economical way to dispose of brush is to burn it as the cutting progresses, if weather conditions make

it safe. Fires are started at convenient points, and as the brush is lopped off it is thrown on the nearest fire. When this is impractical, all lops and débris, including large chips, made in hewing ties, should be piled at a safe distance from standing trees. The piles should be large and compact enough to kindle easily and burn cleanly. Do not allow brush to be piled on stumps, large tops, or unmerchantable logs. Do not allow piles to be made in groups of seedlings or young growth. Whenever possible, have the piles placed in openings, adjusting the size of the piles to the size of the openings.

SCALING.

All timber must be scaled, counted, or measured by a Forest officer before it is removed from the cutting area or from the places agreed on for the scaling, counting, or measuring. Rough averaging of diameters or lengths instead of scaling is not allowed. Log lengths should be accurately measured at frequent intervals to be sure that they do not overrun the extra inches allowed for trimming. In large sales, a record of the scale of each log must be kept on file in the office of the supervisor. It will be open to inspection by the purchaser at all times, but only in the presence of the supervisor or an inspector. An approved copy of the weekly abstract of the log scale in large sales will be sent to the purchaser.

Logs should be skidded for scaling if the cost of scaling will be materially decreased by this requirement.

All timber will be scaled by the Scribner "Decimal C" log rule. This rule drops the units and gives the contents of a log to the nearest ten. When the total scale of a log is desired, all that is necessary is to add one cipher to the sum of the numbers read from the scale stick, excepting the contents of 6 and 8 foot logs 6 and 7 inches in diameter. These are given as 0.5, which multiplied by 10 gives 5 feet as their actual contents.

Instructions to Scalers.—Measure diameters inside the bark.

Round off the diameter to the nearest inch above or below the actual diameter.

Make proper deductions for defects in logs.

Make no deduction for curve or sweep in logs over 16 feet long.

Logs and other timber which are so defective as to be absolutely worthless should not be stamped.

Scale logs over 16 feet long as two or more logs, if possible in lengths not less than 12 feet.

The following table shows how the lengths should be divided when scaling logs 18 to 60 feet long. The number of inches to be added to the diameter at the small end of each log, to cover taper, is placed under each length.

For example, a 42-foot log 16 inches in diameter at the top would be scaled as—

One 12-foot log with a diameter of 16 inches.

One 14-foot log with a diameter of 17 inches.

One 16-foot log with a diameter of 19 inches.

Total length.		Log lengths.				Total length.		Log lengths.			
Feet.		Butt log.	Sec- ond log.	Third log.	Top log.	Feet.		Butt log.	Sec- ond log.	Third log.	Top log.
18	.....	10'	.....	.....	8'	40	.....	16'	12'	.....	12'
	Increase ..	1"	.....	.....	0"		Increase ..	3"	1"	.....	0"
20	.....	10'	.....	.....	10'	42	.....	16'	14'	.....	12'
	Increase ..	1"	.....	.....	0"		Increase ..	3"	1"	.....	0"
22	.....	12'	.....	.....	10'	44	.....	16'	16'	.....	12'
	Increase ..	1"	.....	.....	0"		Increase ..	3"	1"	.....	0"
24	.....	14'	.....	.....	10'	46	.....	16'	16'	.....	14'
	Increase ..	1"	.....	.....	0"		Increase ..	4"	2"	.....	0"
26	.....	14'	.....	.....	12'	48	.....	16'	16'	.....	16'
	Increase ..	1"	.....	.....	0"		Increase ..	4"	2"	.....	0"
28	.....	14'	.....	.....	14'	50	.....	14'	12'	12'	12'
	Increase ..	2"	.....	.....	0"		Increase ..	4"	3"	1"	0"
30	.....	16'	.....	.....	14'	52	.....	16'	12'	12'	12'
	Increase ..	2"	.....	.....	0"		Increase ..	4"	3"	1"	0"
32	.....	16'	.....	.....	16'	54	.....	16'	14'	12'	12'
	Increase ..	2"	.....	.....	0"		Increase ..	5"	3"	1"	0"
34	.....	12'	12'	.....	10'	56	.....	16'	16'	12'	12'
	Increase ..	3"	1"	.....	0"		Increase ..	5"	3"	1"	0"
36	.....	12'	12'	.....	12'	58	.....	16'	16'	14'	12'
	Increase ..	3"	1"	.....	0"		Increase ..	5"	3"	2"	0"
38	.....	14'	12'	.....	12'	60	.....	16'	16'	14'	14'
	Increase ..	3"	1"	.....	0"		Increase ..	5"	3"	2"	0"

This table is intended to be used simply as a guide. The allowances for taper may be varied to conform to the *actual* taper when necessary.

All saw timber should be scaled. Ties may be actually scaled, or reckoned as follows:

Eight-foot ties, standard face, $33\frac{1}{3}$ board feet each, or 30 ties to the thousand; 8-foot ties, second class, and 6-foot ties, standard face, 25 board feet each, or 40 ties to the thousand.

Shake and shingle-bolt material should be measured by the cord or by the thousand feet board measure, in accordance with the local custom.

Lagging may be measured by the cord or linear foot, or by the piece, or, where split lagging is used, by the board foot, each cubic foot counting as 12 board feet.

Poles, posts, piles, converter poles, telephone poles, and stulls may be scaled, sold by the linear foot, or sold by the piece, as circumstances warrant.

Unsound or crooked logs will be scaled down to the actual contents of merchantable material. All partially unsound but merchantable stuff must be scaled, whether removed or not. In ground-rotten timber, butts which, though unsound at heart, contain good lumber toward the outside, are frequently left in the woods. Where such material will pay for sawing, the Forest officer will scale it at what he considers its true value and include it in the amount purchased.

Logs which are not round will be scaled on the average diameter.

In the absence of a scale stick, or where the position of logs in the pile makes its use difficult, the diameters and lengths may be tallied and the contents figured from a scale table later.

When necessary and possible, the purchaser will be required to mark top ends of logs to avoid question when they are scaled in the pile.

The purchaser may be required to skid logs of different lengths in separate piles for convenience in scaling.

The Forest officer should always insist on having one end of piles or skidways even, so that ends of logs may be easily reached.

When scaled, each stick of sawlogs, timbers, ties, posts, poles, or piles must be stamped on at least one end. Cordwood must be stamped at both top and bottom of each pile and at least 12 pieces in each cord must be stamped.

THE USE BOOK.

Scribner Log Rule.

[Decimal "C."]

Diameter.		Length—Feet.						Diameter.
	6	8	10	12	14	16		
<i>Inches.</i>	<i>Bd.ft.</i>	<i>Bd.ft.</i>	<i>Bd.ft.</i>	<i>Bd.ft.</i>	<i>Bd.ft.</i>	<i>Bd.ft.</i>	<i>Inches.</i>	
6	0.5	0.5	1	1	1	2	6	
7	0.5	1	1	2	2	3	7	
8	1	1	2	2	2	3	8	
9	1	2	3	3	3	4	9	
10	2	3	3	3	4	6	10	
11	2	3	4	4	5	7	11	
12	3	4	5	6	7	8	12	
13	4	5	6	7	8	10	13	
14	4	6	7	9	10	11	14	
15	5	7	9	11	12	14	15	
16	6	8	10	12	14	16	16	
17	7	9	12	14	16	18	17	
18	8	11	13	16	19	21	18	
19	9	12	15	18	21	24	19	
20	11	14	17	21	24	28	20	
21	12	15	19	23	27	30	21	
22	13	17	21	25	29	33	22	
23	14	19	23	28	33	38	23	
24	15	21	25	30	35	40	24	
25	17	23	29	34	40	46	25	
26	19	25	31	37	44	50	26	
27	21	27	34	41	48	55	27	
28	22	29	36	44	51	58	28	
29	23	31	38	46	53	61	29	
30	25	33	41	49	57	66	30	
31	27	36	44	53	62	71	31	
32	28	37	46	55	64	74	32	
33	29	39	49	59	69	78	33	
34	30	40	50	60	70	80	34	
35	33	44	55	66	77	88	35	
36	35	46	58	69	81	92	36	
37	39	51	64	77	90	103	37	
38	40	54	67	80	93	107	38	
39	42	56	70	84	98	112	39	
40	45	60	75	90	105	120	40	

Scribner Log Rule—Continued.

Diameter.	Length—Feet.						Diameter.
	6	8	10	12	14	16	
<i>Inches.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Inches.</i>
41	48	64	79	95	111	127	41
42	50	67	84	101	117	134	42
43	52	70	87	105	122	140	43
44	56	74	93	111	129	148	44
45	57	76	95	114	133	152	45
46	59	79	99	119	139	159	46
47	62	83	104	124	145	166	47
48	65	86	108	130	151	173	48
49	67	90	112	135	157	180	49
50	70	94	117	140	164	187	50
51	73	97	122	146	170	195	51
52	76	101	127	152	177	202	52
53	79	105	132	158	184	210	53
54	82	109	137	164	191	218	54
55	85	113	142	170	198	227	55
56	88	118	147	176	206	235	56
57	91	122	152	183	213	244	57
58	95	126	158	189	221	252	58
59	98	131	163	196	229	261	59
60	101	135	169	203	237	270	60
61	105	140	175	210	245	280	61
62	108	145	181	217	253	289	62
63	112	149	187	224	261	299	63
64	116	154	193	232	270	309	64
65	119	159	199	239	279	319	65
66	123	164	206	247	288	329	66
67	127	170	212	254	297	339	67
68	131	175	219	262	306	350	68
69	135	180	226	271	316	361	69
70	139	186	232	279	325	372	70
71	144	192	240	287	335	383	71
72	148	197	247	296	345	395	72
73	152	203	254	305	356	406	73
74	157	209	261	314	366	418	74
75	161	215	269	323	377	430	75

Scribner Log Rule—Continued.

Diameter.	Length—feet.						Diameter.
	6	8	10	12	14	16	
<i>Inches.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Inches.</i>
76	166	221	277	332	387	443	76
77	171	228	285	341	398	455	77
78	176	234	293	351	410	468	78
79	180	240	301	361	421	481	79
80	185	247	309	371	432	494	80
81	190	254	317	381	444	508	81
82	196	261	326	391	456	521	82
83	201	268	335	401	468	535	83
84	206	275	343	412	481	549	84
85	210	281	351	421	491	561	85
86	215	287	359	431	503	575	86
87	221	295	368	442	516	589	87
88	226	301	377	452	527	603	88
89	231	308	385	462	539	616	89
90	236	315	393	472	551	629	90
91	241	322	402	483	563	644	91
92	246	329	411	493	575	657	92
93	251	335	419	503	587	671	93
94	257	343	428	514	600	685	94
95	262	350	437	525	612	700	95
96	268	357	446	536	625	715	96
97	273	364	455	546	637	728	97
98	278	371	464	557	650	743	98
99	284	379	473	568	663	757	99
100	289	386	482	579	675	772	100
101	295	393	492	590	688	787	101
102	301	401	502	602	702	803	102
103	307	409	512	614	716	819	103
104	313	417	522	626	730	835	104
105	319	425	532	638	744	851	105
106	325	433	542	650	758	867	106
107	331	442	553	663	773	884	107
108	337	450	563	675	788	900	108
109	344	459	573	688	803	917	109
110	350	467	583	700	817	933	110

Scribner Log Rule—Continued.

Diameter.	Length—feet.						Diameter.
	6	8	10	12	14	16	
<i>Inches.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Bd. ft.</i>	<i>Inches.</i>
111	356	475	594	713	832	951	111
112	362	483	604	725	846	967	112
113	369	492	615	738	861	984	113
114	375	501	626	751	876	1,001	114
115	382	509	637	764	891	1,019	115
116	389	519	648	778	908	1,037	116
117	396	528	660	792	924	1,056	117
118	403	537	672	806	940	1,075	118
119	410	547	683	820	957	1,093	119
120	417	556	695	834	973	1,112	120

Scale Reports.—When a cutting area is laid off and timber marked or otherwise designated to be cut, the Forest officer in charge of the work will notify the supervisor, and will also report the date when cutting actually begins. While cutting is in progress he will report to the supervisor, in all classes of sales, upon the form provided, the amount of timber cut and the condition of the tract.

Reports will cover periods of one, two, three, or four weeks, as may be required by the supervisor. The period will in every case end with Saturday. These reports may be omitted when the work is discontinued for a considerable period, as in winter.

In large sales, a summary of the scale, on Form 606, will be sent to the supervisor each week. This is in addition to the regular cutting report. The supervisor will send an approved copy of this summary to the purchaser. Cutting reports will be sent to the supervisor in duplicate. One copy will be kept by the supervisor, the other, when approved, will be sent to the Forester. In Class A and unadvertised Class B sales only the final cutting reports need be sent to the Forester.

When full advance payment is not made, the supervisor should require the purchaser to make additional payments, as required by the contract, before all the timber covered by previ-

ous deposits has been cut. When all the timber has been removed and the cutting area cleaned up satisfactorily, the supervisor should notify the Forester, with a recommendation that the sale be closed.

SPECIAL REGULATIONS FOR ALASKA.

All regulations for the use of the land and resources of the National Forests are applicable to the Forests in Alaska, except as modified by the following special regulations:

REG. 36. Trails on National Forest lands in Alaska may be constructed, extended, or repaired without permit. Wagon roads may be constructed, widened, extended, or repaired when needed, but permit must first be obtained from the supervisor. Permits will not give any right to the exclusive use, or to charge toll, or against future disposal of the land by the United States.

REG. 37. When a right of way or other special use is granted within a National Forest in Alaska, the supervisor may, without charge, allow the cutting of timber when this is necessary for the proper enjoyment of the special use. (See Reg. 23.)

REG. 38. Without permit, and free of charge, settlers, farmers, prospectors, fishermen, or similar persons residing within or adjacent to National Forests in Alaska are granted the privilege of taking green or dry timber from the Forests, and driftwood, afloat or on the beaches, for their own personal use, but not for sale; provided that the amount of material so taken shall not in any one year exceed 20,000 feet board measure, or 25 cords of wood; and provided further, that the persons enjoying this privilege will, on demand, forward to the supervisor a statement of

the quantity of material so taken and a description of the location from which it was removed.

Timber cut from any National Forest in Alaska may be exported from the district and sold in any market anywhere, upon certification by the supervisor that the timber has been purchased and cut from a National Forest in Alaska.

Remittances in all cases must be sent to the Special Fiscal Agent, Ketchikan, Alaska, and checks or orders made payable to him.

GRAZING.

The Secretary of Agriculture has authority to permit, regulate, or prohibit grazing in the National Forests. Under his direction the Forest Service will allow the use of the forage crop as fully as the proper care and protection of the forests and the water supply permit. In new National Forests, where the live-stock industry is of special importance, full grazing privileges will be given at first, and if reduction in number is afterwards found necessary stockmen will be given ample opportunity to adjust their business to the new conditions. Every effort will be made to assist the stock owners to a satisfactory distribution of stock on the range in order to secure greater harmony among citizens, to reduce the waste of forage by tramping in unnecessary movement of stock, and to obtain a more permanent, judicious, and profitable use of the range.

The leading objects of the grazing regulations are:

The protection and conservative use of all National Forest land adapted for grazing.

The permanent good of the live-stock industry through proper care and improvement of the grazing lands.

The protection of the settler and home builder against unfair competition in the use of the range.

On the other hand, the Forest Service expects the full and earnest cooperation of the stock owners to carry out the regulations.

Permits will be issued to graze a certain number of live stock in each National Forest or part thereof so long as no marked damage is done by such stock; but whenever a National Forest is being injured by too much stock or by the way it is being handled the number will be reduced until the damage is stopped. In extreme cases, if necessary, all stock will be excluded.

Cattle and horses will usually be allowed to graze in all National Forests. Sheep and goats will be allowed to graze in National Forests or in parts thereof where special conditions warrant such grazing, but will be restricted to the areas and grazing periods fixed by the Forest officers.

ADVISORY BOARDS.

REG. 39. Whenever any live-stock association whose membership includes a majority of the owners of any class of live stock using a National Forest or portion thereof shall appoint a committee, an agreement on the part of which shall be binding upon the association, such committee, upon application to the Forester, may be recognized as an advisory board for the association, and shall then be entitled to receive notice of proposed action and

have an opportunity to be heard by the local Forest officer in reference to increase or decrease in the number of stock to be allowed for any year, the division of the range between different classes of stock or their owners, or the adoption of special rules to meet local conditions.

In setting any date of meeting with an advisory board the supervisor must give sufficient time to afford all members of the board an opportunity to attend, but in case they fail to attend either in person or by proxy, then the Forest officer will be relieved from all obligation to delay action.

Favorable consideration will be given the recommendations of an advisory board except when such recommendations are in conflict with the regulations or when there is good reason for their disapproval.

Live-stock associations desiring to take advantage of this regulation must file an application with the Forester, giving the names of all members of the association, the name of the National Forest or Forests in which its members are interested, and the names of the committeemen who are to act for the association. The advisory board must not consist of more than five members, and a majority of the board must constitute a quorum.

The application must be accompanied by a copy of the constitution and by-laws of the association and a statement that the action of the board will be binding upon the association. Upon the approval of such application by the Forester the association will be entitled to the recognition given under this regulation.

ALLOTMENT.

REG. 40. The Secretary of Agriculture will prescribe each year the number of stock to be allowed in each National Forest. The period during which grazing will be allowed will be determined by the Forester. The supervisor will issue grazing permits in accordance with the instructions of the Forester.

The grazing season for which permits are issued must not exceed the period authorized, and the total number of stock included in all permits issued must not exceed the number allowed by the Secretary's order.

The supervisor may allow stock to enter not more than fifteen days in advance of the date fixed for the beginning of a grazing period, when the needs of the people demand such action and the condition of the range warrants it.

The period covered by year-long permits will begin at the opening of the regular summer grazing season and end on the day previous of the following year.

Applicants for grazing permits will be given preference in the following order:

(a) Small near-by owners.

Persons living in or close to the National Forest and owning improved ranches, whose stock regularly graze upon the National Forest range and who are dependent upon its use.

(b) All other regular occupants of the range.

After class (a) applicants have been provided for, the larger near-by owners will be considered, but limited to a number which will not exclude regular occupants whose stock belong or are wintered at a greater distance from the National Forest.

(*c*) Owners of transient stock.

The owners of stock which belong at a considerable distance from the National Forest and have not regularly occupied the range within its limits.

Priority in the occupancy and use of the range and the ownership of improved stock ranches or farming land in or near the National Forests will be considered, and the preference will be given to those who have continuously used the range for the longest period.

The number of stock on which class (*a*) applicants will be allowed exemption from reduction or to which new owners may be restricted will be fixed to fit the conditions in each National Forest, and will not exceed the number necessary to insure the successful maintenance of a home.

The applications of new settlers owning small bands of stock will be considered in all cases except where the range is fully occupied by small owners.

The number of stock allowed an applicant will be determined upon the merits of each case.

Whenever it is found necessary to reduce the number of stock allowed in any National Forest or portion thereof the class (*a*) owners of stock are first provided for; the reduction is then made on the number allowed the class (*b*) owners on the basis of a sliding scale suited to the conditions in each case. Class (*c*) stock will be excluded before the other classes are reduced.

When necessary for the protection of small owners, a limit in the number of each class of stock will be established, and renewals to all persons whose permits are within such limit will be without reduction in the

number of stock. Persons owning a less number of stock than the established limit will be allowed to increase their permit number gradually, but may be restricted in the number added each year.

When necessary to prevent range monopoly, a maximum limit in the number of stock allowed any one applicant will be established, and no permit will be issued for a number in excess of such limit.

The owners of stock which belong in the State or Territory in which a National Forest is located will be given the preference, and resident owners will be considered first, but owners of stock coming from adjoining States or Territories will also be considered when circumstances warrant it.

DISTRICTS AND DIVISIONS.

REG. 41. National Forests in which grazing is allowed will be divided into districts approved by the Forester, who will determine the kind of stock to be grazed in each district. The supervisor will make such range divisions among applicants for the grazing permits as appear most equitable and for the best interest of the National Forest and its users. When required for the protection of camping places, lakes and streams, roads and trails, etc., or of areas which are to be reforested, the supervisor may exclude stock from specified areas for such period of time as is necessary. Stock will be excluded from areas where they will destroy young growth or will prevent reproduction.

At the end of each season the supervisor will go over the grazing grounds without delay and examine the effect of grazing on the National Forest. He will make a full report to the Forester,

with recommendations as to the number of stock to be allowed the following year, the division of the range into districts, and the areas to be opened or closed to grazing. In making estimates of the grazing capacity of lands only stock six months old and over will be counted, but with the understanding that the natural increase will also be grazed.

PERMITS.

REG. 42. All persons must secure permits before grazing any stock in a National Forest, except for the few head in actual use by prospectors, campers, and travelers, or which are used in connection with business of the National Forests, and milch or work animals not exceeding a total of ten head owned and in use by bona fide settlers residing in or near a National Forest, which require no permit.

No stock may be grazed without a permit, except milch or work animals which are in actual use. A settler owning only ten head or less of stock which are neither milch nor work animals will be required to apply for permit and pay the grazing fee, while a settler owning any number of stock will be allowed to graze ten head of milch or work animals without permit and free of charge.

All saddle, pack, and work animals actually used in caring for stock grazed under permit or in connection with timber sales or improvement work are exempt from grazing fees.

Rangers will report the approximate number of stock entitled to graze without permit in each district, in order that the supervisor may consider it in his recommendation for grazing. This class of stock will not be counted against the number which is allowed to graze under permit.

REG. 43. Permits will be granted only for the exclusive use and benefit of the owners of the stock and will be forfeited if sold or transferred in any manner or for any consideration. Speculation in the use of grazing permits will not be allowed, and permits will be refused or canceled for intentional false statement of the number of stock owned.

In case a permittee shall sell the stock covered by permit to a purchaser who wishes to continue grazing it on the National Forest, upon presentation to the supervisor of evidence that the sale is bona fide, the permit will be canceled and a new permit, numbered in the regular serial order, will be issued to the purchaser, without cost, for the remainder of the grazing period allowed in the original permit. The transfer of a permit does not carry with it any guaranty that a renewal will be allowed for the number of stock the original permittee might have been entitled to graze, but is granted with the understanding that the purchaser will be considered solely upon the merits of his case in subsequent permit allotments.

The mere purchase of stock which has been grazed upon the National Forest will not entitle the purchaser to share in the grazing, but when both the stock and the ranches used in connection with it are purchased, then an equitable share of the grazing will be allowed the new owner. The preference given on account of prior use of the range is a personal privilege and is not transferable. All transfers of grazing permits will be subject to the maximum limit restrictions after the expiration of the ensuing permit period, and no person, partnership, or corporation will be allowed a renewal

of permit for stock purchased, when the total number applied for exceeds the maximum limit established by the Forester.

APPLICATIONS FOR PERMITS.

REG. 44. The supervisor will set and give public notice of a date each year on or before which all applications for grazing permits must be presented to him. Permits may be refused to persons who do not file their applications within the required limit, unless satisfactory reasons are given.

In setting the date on or before which applications for grazing permits must be presented ample time will be given to insure all persons who are entitled to share in the range an opportunity to file their applications.

In case the total number of any kind of stock applied for before the date which has been set does not equal the number allotted to the National Forest, applications received subsequently may be approved until the total allotment has been reached.

REG. 45. Grazing applications must not cover more stock than the applicant desires to graze in the National Forest, and must show the marks and brands of the stock, the portion of the National Forest or district in which pasture is desired, and the grazing period.

Applications will be divided into two classes—cattle and horses and sheep and goats—and will be numbered separately. The cattle and horse grazing applications will begin each season with No. 1, and the sheep and goat applications with a number such as 301, 501, etc., which will be above the highest number given any cattle and horse grazing application for the same National Forest. When an owner of cattle or horses also wishes to graze sheep or goats, he should make separate application for each class of stock. Hogs will be included in appli-

cation for cattle or horses. Mules and burros will be counted and charged for as horses. Amended applications increasing or reducing the number of stock before the issuance of the permit will be given the same number as the original, but when a second application is made subsequent to the issuance of the first permit it will be given a new number in the regular serial order and a cross reference made on the folder.

Whenever any special action is taken in the approval of an application or the issuance of a permit an explanatory note will be made on the lower left-hand corner of the blank.

Applications will not be numbered until they have been acted upon, and those which are disapproved will not be included in the numbered series. Disapproved applications will be filed alphabetically under a separate guide card.

Applications for the use of private lands or for crossing permits will be filed alphabetically under a separate guide card placed behind the applications for regular permits.

Upon approval of a grazing application the supervisor will immediately notify the applicant of the action taken, stating the number of stock allowed and the amount to be paid for grazing fees. A duplicate copy of each notice of approval (Form 762) will be sent to the Forester at once, but a duplicate letter of transmittal (Form 861) will be sent only when a demand is made upon a person for trespass damages.

Whenever a grazing application is disapproved the supervisor will at once notify the applicant to that effect by letter, giving the reason for such action, and also send a copy of the letter to the Forester.

REG. 46. Whenever there is a dispute between grazing applicants for the same area, the supervisor will notify them to appear before him at a stated time and place, to make a statement of their claims. After all evidence has been presented the supervisor will decide who shall be granted permits, and will forthwith notify each party to the dispute of his decision and his reasons therefor, which will be final unless written notice of appeal to the Forester

is given him within ten days thereafter. Appeal will avail only in case of error.

An appeal to the Forester as provided in Reg. 46 should set forth the facts which, in the opinion of the appellant, make the supervisor's decision unwarranted by the law and the regulations. It should be filed in duplicate with the supervisor, who will at once transmit one copy to the other party, with notice that ten days are allowed for answer, plus a reasonable time, to be specified in the notice, for the transmittal of the appeal and the answer. The answer should be filed in duplicate, and one copy transmitted at once by the supervisor to the appellant, who will be allowed ten days in which to make final reply. Both appeal and answers must be in writing and verified by oath, and may be accompanied by affidavits of witnesses having knowledge of the facts. No other evidence will be taken unless called for by the Forester. When the appeal and answers have been filed, the supervisor will transmit the originals to the Forester, with a copy of his decision and his reasons and any further report that he may wish to make upon the case. Pending a decision by the Forester upon the appeal, the party occupying the range will be allowed to continue its use, but must remove his stock within ten days from the date of notice that the Forester has decided against him.

REG. 47. Persons owning cattle and horses which regularly graze on ranges located along the boundary line and only partially included within a National Forest may be granted permits for such portion of their stock as the circumstances appear to justify, but may be required to

herd or so handle their stock as to prevent trespassing by that portion for which a permit is not granted, and to sign a supplemental agreement to that effect.

In the approval of applications from the owners of stock which graze on and off the National Forest, the Forest officers will make an estimate of the average number which will probably be grazed upon the National Forest lands, and will require the full grazing fee to be paid upon this number. The supplemental agreement to prevent the grazing of unpermitted stock need not be required unless this number is in excess of that which the applicant would be entitled to graze and is willing to pay the grazing fee upon.

Persons who allow their stock to drift and graze on the National Forests without a permit, whether they do so intentionally or otherwise, must under the law be regarded as trespassers, and will lose all right to permits of any kind upon National Forests.

Any person who without a permit intentionally drives stock not under permit or allows it to drift on a National Forest will be liable to prosecution for trespass and suit for damages.

FEES.

REG. 48. A reasonable fee will be charged for grazing all classes of live stock on National Forests. The minimum prices will be as follows, depending upon the advantages and locality of the Forest: From twenty (20) to thirty-five (35) cents per head for cattle and horses for the summer grazing season, and from thirty-five (35) to sixty (60) cents per head for the entire year; from ten (10) to fifteen (15) cents per head for hogs for the summer grazing season, and from twenty (20) to thirty (30) cents per head for the entire year; from five (5) to eight (8)

cents per head for sheep for the summer grazing season, and from ten (10) to eighteen (18) cents per head for the entire year; and from six (6) to ten (10) cents per head for goats for the summer season, and from twelve (12) to twenty (20) cents per head for the entire year. An extra charge of two (2) cents per head will be made for sheep or goats which are allowed to enter the National Forests for the purpose of lambing or kidding. All stock six months old and over at the time of entering will be counted as grown stock.

In calculating the number for which permit will be required and the amount to be paid for grazing cattle and horses no count will be made of calves or colts under 6 months of age at the time of entering, or for those born during the year for which permit is granted. The intent is that calves and colts born during any calendar year shall be counted and charged for during the following year.

In counting sheep and goats no count will be made of lambs or kids under 6 months old at the time of entering. The number of sheep and goats allowed upon a National Forest or for which a permit is granted will be calculated on a flat-rate basis, counting only stock 6 months old and over.

REG. 49. All grazing fees are payable for each year strictly in advance. When an applicant for a grazing permit is notified by the supervisor that his application has been approved, he will remit the amount due for grazing fees to the Fiscal Agent, Forest Service, Washington, D. C., and upon return of the certificate to the supervisor a permit will be issued allowing the stock to enter the Forest and remain during the period specified.

No permit will be issued until payment in full has been made.

Persons who fail to pay the grazing fee thirty days before the beginning of the grazing period must notify the supervisor and give satisfactory reasons, or they may be denied a grazing permit the following season.

When payment of a fee is required by the Forester the Forest officer will furnish the applicant with a printed letter of transmittal, which must accompany the remittance to the Fiscal Agent. (Reg. 65.) No duplicate letter of transmittal, Form 861, will be sent to the Forester for payments on account of grazing, except for grazing damages.

When the Fiscal Agent's certificate is received, showing that payment in full has been made, the permit will be issued. Each permit will be given the same number as the application upon which it is based, and a duplicate copy will be sent to the Forester at once.

Whenever payment in excess of the amount due is made, the amount overpaid will be refunded upon receipt of the duplicate permit by the Forester. (Reg. 66.)

REG. 50. The fees paid on account of a grazing permit which has been duly issued will not be refunded for non-use of the permit, except when, in the opinion of the Forester, the applicant is prevented from using the range by circumstances over which he has no control.

Refunds will not be made on account of the stock having been sold after the issuance of the permit.

Applications for the refund of money paid on account of a grazing permit must be accompanied by a written statement giving the reasons for not using the permit. Upon receipt of such application and statement by the supervisor he will forward it to the Forester with a recommendation for its approval or rejection. The Forester will decide whether or not the refund will be made.

RESTRICTIONS IN HANDLING STOCK.

REG. 51. When an owner who has a permit is ready to drive in his stock he must notify the supervisor, by mail or otherwise, stating the number to be driven in; he must also notify the supervisor when the stock is removed. If called upon to do so, he must provide for having his stock counted before entering the National Forest, or at any time afterwards when the number of stock appears to be greater than the number covered by permit. Whenever any stock is removed before the expiration of the permit, it can be replaced by other stock to fill out the number covered by permit if the nearest Forest officer is notified of such action at once. The owners of stock which is kept under herd upon the National Forests will be furnished with cards for the identification of their herders by Forest officers.

REG. 52. Each person or group of persons granted grazing permits will be required to repair all damage to roads or trails caused by the presence of their stock in any portion of a National Forest, and to build any new roads or trails found necessary for the proper handling of the stock. They will also be required to fence any spring or seep which is being damaged by tramping, and, if necessary, pipe the water into troughs for watering stock. Such troughs must be open for public use.

REG. 53. Sheep must not be bedded more than six nights in succession in the same place, except when bedding bands of ewes during lambing season, and must not be bedded within 300 yards of any running stream or living spring, except in rare cases where this restriction is clearly impracticable.

REG. 54. The carcasses of all animals which die in the close vicinity of any water must be removed immediately, and buried or burned.

REG. 55. All stock grazed under permit must be salted regularly at such places as are designated by the Forest officers, and the owners of stock must notify the Forest officers when any such order has been complied with.

REG. 56. All persons holding grazing permits are required to extinguish camp fires started by them or their employees before leaving the vicinity thereof, and to aid in extinguishing all forest fires within the division or district of the National Forest in which they are grazing stock.

REG. 57. Whenever an injury is being done the National Forest by reason of improper handling of the stock, the owner must comply with the orders of the Forest officers or the permit will be canceled and the stock removed. The grazing of stock upon a closed area or upon range not allowed by the permit will constitute a trespass, and the owner of the stock will be held liable for damages.

It is within the authority of the Forest officers to drive unpermitted stock from the National Forests, and to drive permitted stock from any portion of a National Forest not included in the permit; but permitted stock must not be driven from the range to which it has been assigned without authority from the Forester, by wire if necessary. In all cases of violation of the regulations, when immediate removal of the stock is deemed necessary, a report will be made to the Forester, and upon its receipt by him, if the recommendations are approved, the permit will be canceled and authority will be given to remove the stock.

All persons who violate the regulations in regard to the repairing of damage to roads and trails, fencing of springs, bedding of sheep near streams or too long in the

same place, removal or burial of dead animals, salting of stock, extinguishing fires, or complying with the orders of Forest officers when damage is being done to the forest or range will make themselves liable to a reduction in the number of stock allowed the following year or may be denied permits altogether.

Whenever it is necessary for the protection of a National Forest, or of the interests dependent upon it, the supervisor may require the owners of transient stock or nonresidents of the State or Territory in which a National Forest is located to give a good and sufficient bond to insure payment for all damages caused by any violation of the regulations or the terms of the permit.

In all cases where a bond is required the supervisor will prepare it, using the regular blank form, stating the number and kind of stock to be grazed and the portion of the range to be occupied, and send it to the applicant with the notice of approval of the application. The bond must be executed and returned to the supervisor, who will forward it to the Forester. The permit will not be issued until the bond has been approved by the Forester and the grazing fees paid in full.

USE OF PRIVATE LAND.

REG. 58. Persons who own, or who have leased from the owners, land within any National Forest which they desire to use for grazing purposes will be allowed to cross the Forest lands with their stock to reach such private holdings, but when the stock will be grazed on National Forest land en route, they must make application to the supervisor for a permit to cross. The application must be accompanied by a personal certificate of title showing the description and ownership of the land, and, if leased from an owner, a copy of the lease, and must state the

number of stock to be taken in, the length of time required to cross the National Forest land, the route over which the stock is to be driven, the period during which the stock will remain upon the private land, and how much stock the owned or leased land will pasture during the period specified.

When the private land is unfenced a special clause may be inserted in the agreement waiving the right to the exclusive use of the private land and allowing it to remain open to other stock grazed under permit, in consideration of which a permit will be issued free of charge allowing the stock to be grazed at large upon the National Forest, but the grazing fee must be paid on all stock over the estimated grazing capacity of the private lands.

When any such application is made to the supervisor he will examine it, and if he finds it reasonable and just and made in good faith for the purpose of utilizing such private holdings only, he will approve it and forward it, accompanied by all papers supporting it, to the Forester. After the Forester approves the application, due notice will be given the supervisor, who may then issue a permit allowing the stock to enter.

The determination of all questions involving the title of land is within the jurisdiction of the Secretary of the Interior, and therefore it is necessary to ascertain from the records of the General Land Office that the title to the land claimed has passed from the United States before the rights of the claimant can be recognized.

The right to graze sheep and goats at large upon National Forest lands, in consideration of waiving the right to the exclusive use of private lands, will be allowed only upon such National Forests or portions thereof as are open to this kind of stock.

Persons grazing stock under this regulation who fail to make the special agreement allowing other stock to enter upon the land will be required to keep their stock within the limits of the land under their control either by herding or fencing.

CROSSING PERMITS.

REG. 59. Persons wishing to drive stock across any part of a National Forest must make application to the supervisor or other Forest officers, either by letter or on the regular grazing application form, for a permit to graze stock en route, and must have a permit from the supervisor, or such other Forest officer as he may designate, before entering the National Forest. The application must state the number of stock to be driven, the date of starting, and period required for passage. Grazing must be confined to the limits and along the route designated by the Forest officers, and will only be allowed for the period actually necessary for stock to cross the National Forest.

Permits will not be required for driving small bands of stock along public highways, or when the stock will not be grazed upon National Forest lands en route.

Whenever it appears necessary for stock to cross regularly any portion of a National Forest in which grazing is prohibited, the supervisor will make a full report of the facts, with a description of the regular route traveled, the width of driveway necessary to allow the proper grazing of stock across the National Forest, the number and class of stock which will probably cross, and the number of days required for crossing. Upon receipt of such report by the Forester, if the circumstances warrant such action, a regular driveway will be established and the rights to be granted will be defined.

If occasion demands, rangers will be detailed by the super-

visor to accompany the stock and see that there is no delay or trespassing.

No charge will be made for permits issued under Regulations 58 and 59. The regular blank, Form 656, will be used, and a copy of each permit will be sent to the Forester.

QUARANTINE AND LOCAL LAWS.

REG. 60. All stock which is grazed under permit in or allowed to cross any National Forest will be required to conform to the quarantine regulations of the Bureau of Animal Industry, U. S. Department of Agriculture, and all live-stock laws of the State or Territory in which the National Forest is located.

Whenever the stock in any locality is known to be infected with a contagious disease, or notice to that effect has been given the Forester by the Bureau of Animal Industry, the owners of all stock to be grazed in National Forests must, if required to do so, subject the stock to inspection, and, if found necessary, have such stock dipped or otherwise treated before it is allowed to enter. At any time during the period for which a grazing permit has been issued, if the stock is found to be infected with a contagious disease, it must be dipped or otherwise treated in accordance with the instructions of the inspectors of the Bureau of Animal Industry, or the permit will be canceled and the stock removed from the National Forest.

The owners of all stock grazed under permit must comply with the live-stock laws of the State or Territory, or their permits will be canceled. Rangers will report at once any violation of the live-stock laws, and will assist the stock owners to protect their property against loss by theft.

DRIFT FENCES AND INCLOSURES.

REG. 61. The construction and maintenance of drift or division fences will be allowed when they will be a benefit to the National Forest or its administration and will not interfere with the use of the range by all who are equitably entitled to share in the grazing.

A fence may be constructed or maintained if it does not give control of an area in excess of that actually required for pasturage of the stock which the person or persons maintaining it would be entitled to graze. If the range controlled by a fence is excessive in area, and should be shared by applicants other than those now using it, the fence must be either removed or changed, or the range opened to other permittees who are entitled to share in its use.

Whenever drift fences are needed for the better control of stock grazed under permit, all forest material needed for use in their construction may be furnished from the National Forest, free of charge, if the stockmen using the range are willing to construct such fences with the understanding that they will become the property of the United States.

All drift or division fences must be provided with gates at such points as are necessary to allow proper ingress and egress.

This permit is granted by the supervisor without charge other than the regular grazing fee. A map showing the location of the drift fence must accompany the report in each case.

REG. 62. The construction of corrals upon National Forest lands covering an area of not more than one (1) acre, to be used in connection with the proper handling of live stock which is permitted to graze thereon, will be allowed without charge wherever in the judgment of the Forest officers such corrals are necessary and will not be detrimental to the proper care of the Forest. The construction of inclosures upon National Forest lands containing not

more than three hundred and twenty (320) acres will be allowed, when such inclosures are necessary for the proper handling of the stock allowed to graze upon the Forests, under a special permit, for which an annual rental of not less than four (4) cents per acre will be charged in addition to the regular grazing fee. The fencing up of watering places for the purpose of controlling adjoining range will not be allowed, and in fencing pastures, provision must be made to allow free access to water by any stock grazing under permit. The application must be made on Form 832 in the same manner as for other special uses. (See p. 46.)

Under this regulation the construction and maintenance of pastures will be allowed for the following purposes:

To pasture saddle horses, milch or work animals, graded or thoroughbred breeding stock, and bulls or rams.

To pasture beef steers or stock cattle which are being gathered and held just previous to their removal from the Forest.

To give settlers who live upon lands either within or on the border of a Forest the exclusive use of adjoining pasture lands during a portion of the year, when needed for protection against other stock which is permitted to graze on the National Forest.

In the approval of applications for the construction of inclosures upon National Forest lands, only such area as is needed for the purpose mentioned will be allowed. An inclosure of 320 acres will not be allowed when a smaller area would be sufficient for the needs of the applicant.

The character of the land, whether ordinary grazing or meadow land, whether or not there is living water upon it, and the demand for the use of the land should be considered in fixing the price to be charged. An advance over the minimum charge will be made whenever the area applied for is largely meadow land or so located as to be in special demand for pasturing purposes. The minimum price is four (4) cents per acre in addition to the regular grazing fee; but in no case will the permit be given for less than two dollars (\$2) per annum.

When the area applied for includes land now bearing trees the probable effect which grazing would have upon reproduction of the forest should be given careful consideration before the application is approved.

The permits granted under the two preceding regulations confer no property rights other than ownership of the improvements constructed, and all such improvements must be removed within ninety days after the expiration of an agreement unless sold to a successor who is entitled to continue in their use. Otherwise they will become the property of the United States.

The agreement will be made terminable at the discretion of the Forester, and will stipulate that failure to secure a renewal of the grazing permit, in connection with which it is granted, will cancel the agreement for the maintenance of the drift or division fence or pasture.

Stock-watering reservoirs with a necessary inclosure of not more than 40 acres will be permitted. The plans will be approved by the supervisor, and the permit issued by him will call for an annual rental of not less

than \$2. The reservoirs will be kept in repair by the permittee, will remain the property of the United States, and will be open to other stock on the Forest.

The supervisor will treat an application in the same manner as any other special use, and upon payment to the Fiscal Agent, Forest Service, Washington, D. C., of the rental or grazing fee for the year, the construction or occupancy may begin.

A map showing the exact location of the pasture or reservoir must accompany the report in each case.

PROTECTION OF GAME AND STOCK.

REG. 63. All Forest officers will cooperate with State or Territorial officials, so far as they can without undue interference with their regular Forest work, to enforce local laws for the protection of game and stock. When authorized to do so by the proper State officers, they will, without additional pay, except such bounties and fees as are offered by associations, act as game wardens and stock inspectors with full power to enforce the local laws. If not so authorized, they will promptly inform the State officials of all violations discovered. (Appendix, p. 175.)

Rangers should, when necessary, inform all persons of the local stock and game laws and endeavor to prevent their violation. This can best be done by courtesy and tact. If actual violation of the law is discovered by the ranger, he will at once notify the proper State officer, if practicable, and report this action to the supervisor. If unable to communicate with the State officer, or if no action follows, he will give the facts to the supervisor, who will transmit them to the proper State authority.

When extra expense is incurred by Forest officers in performance of their duties as game wardens or stock inspectors, for which they will not be reimbursed by the State or Territory, it will be paid by the Forest Service. Such expenses should be submitted in accordance with the instructions of the Green Book.

It is desirable that supervisors should communicate with the State or Territorial game warden, and obtain appointment for themselves and all the rangers under their supervision as deputy State game wardens. This appointment is sufficient warrant to arrest for offenses against the State or Territorial game laws.

Whenever it is found that the stock interests are suffering or that the number of game animals or birds is on the decrease on account of wolves, cougars, coyotes, bobcats, or other predatory animals, a report should be made to the Forester, with recommendations for such action as is necessary to get rid of them.

Forest rangers and guards may be assigned to the work of hunting predatory animals for a limited time each year, and will be furnished with necessary ammunition, poisons, and traps. If none is sufficiently experienced or can be spared for the work, professional hunters may be recommended for appointment as guards for such period as their services are required.

TRESPASS.

CIVIL ACTION.

The United States has all the civil rights and remedies for trespass possessed by private individuals.

If any Forest officer discovers a trespass he will notify the trespasser, if possible in the presence of a witness, to discontinue the trespass, and note the hour, day, and place of notice. He will also report the facts immediately to the supervisor on Form 856, and when danger of removal or destruction is imminent will seize all material involved in the trespass and, if necessary, arrest the offender.

The Commissioner of the General Land Office has instructed special agents to transfer to supervisors all cases of unlawful timber cutting on lands afterward included in a National Forest.

Supervisors will report all cases of trespass to the Forester, setting forth the damage done or threatened, including the actual expense incurred in investigating the trespass. If an offer of settlement is not made or is not accepted, and the damage

seems sufficient to warrant a recommendation by the supervisor that civil action be brought, the Department of Justice will be requested by the Forester to institute suit against the trespasser. Thereafter the supervisor will do all in his power to collect evidence for and assist the district attorney in the prosecution of the suit, and promptly inform the Forester of each step in the case. Forest officers may administer oaths in securing testimony.

Injunction.—When facts reported by a Forest officer make it advisable, the Forester will seek an injunction to restrain trespass on National Forests.

Damages.—Civil action may be brought to recover damages caused by any trespass or breach of contract, in addition to criminal action.

Compromise.—The Secretary of Agriculture has no power to compromise criminal cases, and a proposition of settlement submitted with the understanding that if accepted criminal proceedings for the trespass will be waived will be rejected.

Settlement.—The Secretary of Agriculture has power to settle with any trespasser for the actual civil damages. The rule for measure of damages for timber cut in trespass is as follows: When the trespass is willful, the value of the timber where found; when unintentional, the stumpage value only. Damages for timber trespass may be collected from the original trespasser or from any subsequent purchaser.

Forest officers will notify trespassers that they may make, upon Form 653, offers of settlement to accompany the trespass reports, but no such offer will be considered unless the amount offered in settlement is remitted by postal or express money order or national-bank draft on New York to the Fiscal Agent, Forest Service, Washington, D. C. (Reg. 65.)

Punitive damages.—When trespass can be shown to be malicious or due to such negligence as implies malice or a reckless indifference to the rights of the Government, especially when a person trespasses after notice, punitive damages may be recovered, although the act constitutes an offense punishable under the criminal statutes.

CRIMINAL ACTION.

REG. 64. Under authority given to the Secretary of Agriculture regarding National Forests “to regulate their occupancy and use and to preserve the forests thereon from destruction,” the following acts within National Forests are hereby forbidden, and under the act of June 4, 1897, constitute trespass punishable by fine and imprisonment. (Appendix, p. 170.)

(a) Grazing upon or driving across a Forest any live stock without a permit, or in violation of the terms of a permit, except as otherwise allowed by regulation.

(b) Erecting or maintaining a fence or inclosure without a permit, except upon patented land or upon a valid claim when necessary for the actual development of such claim consistent with the purposes for which it was initiated.

(c) Squatting upon land within a Forest, or making settlement, except in accordance with the act of June 11, 1906. (Appendix, p. 189.)

(d) Building roads, trails, railways, or tramways, and constructing ditches, dams, canals, pipe lines, flumes, tunnels, or reservoirs without a permit, or in violation of the terms of a permit, except as otherwise allowed by law, and except upon patented land or upon a valid claim when

necessary for the actual development of such claim consistent with the purposes for which it was initiated.

(e) Erecting or conducting telephone, telegraph, or power lines, hotels, stores, sawmills, power plants, or other structures, or manufacturing or business enterprises, or carrying on any kind of work, except as allowed by law and National Forest regulations, and except upon patented land or upon a valid claim for the actual development of such claim, consistent with the purposes for which it was initiated.

(f) Willfully removing any timber which has been unlawfully cut, either previously or subsequently to the creation of the National Forest.

(g) Willfully tearing down or defacing any notice of the Forest Service.

(h) Willfully destroying or damaging any property belonging to or used by the United States for National Forest purposes.

(i) Willfully setting on fire, or causing to be set on fire, any timber, brush, or grass, or leaving or suffering fire to burn unattended near any timber or other inflammable material in a National Forest.

The following trespasses within National Forests are forbidden by specific acts of Congress, and are punishable by fine and imprisonment:

(1) Unlawfully cutting or removing, or wantonly destroying timber. (Appendix, pp. 193, 199.)

On a valid unpatented claim timber may be cut, but only to the extent necessary for its actual development consistent with the purposes for which it was initiated. (Appendix, p. 196.) Timber cut from one claim can not lawfully be used upon another, unless such use tends

directly to develop the claim from which it is cut; and the burden of proof is upon the claimant to show this.

(2) Destroying, defacing, changing, or moving any corner, meander post, monument, or bench mark, or cutting down any blazed line or witness tree on any Government line of survey. (Appendix, p. 197.)

(3) Cutting, chipping, chopping, or boxing any tree, even though on an unperfected claim, for the purpose of obtaining any pitch, turpentine, or other substance; or knowingly buying any pitch, turpentine, or other substance so obtained. (Appendix, p. 197.)

(4) Appropriating, excavating, injuring, or destroying any historic or prehistoric ruin or monument, or any object of antiquity without a permit. (Appendix, p. 192.)

Arrest.—All Forest officers have power to arrest without warrant any person whom they discover in the act of violating the National Forest laws and regulations, or to secure a warrant from a United States commissioner, or, if one is not convenient, from a justice of the peace, and use it as the visible sign of the right to arrest, and also to arrest for any such violation on a warrant obtained by any competent person. (Appendix, p. 203.)

All Forest officers are directed to be vigilant in discovering violations of National Forest laws and regulations and diligent in arresting offenders, either on a warrant secured from a United States commissioner of the district or a justice of the peace, or without such warrant when the offender is taken in the act of violating any provision of Regulation 64, or any criminal law relating to National Forests. Unless, however, the trespass threatens damage to the Forest or interference with its management, or the offender is likely to escape, no arrest should be made, or other step taken to institute any criminal or

civil suit, until a report of the trespass, with signed statements from the witnesses, has been sent to the Forester, in order that he may give appropriate instructions.

Any Forest officer making an arrest must, as soon as practicable, take the offender before the nearest United States commissioner, and thereafter stand ready to carry out any mandate of the commissioner relative to the custody of the prisoner. He will also at once inform the supervisor within whose jurisdiction the offense was committed. It is the duty of each supervisor to inform the district attorney promptly of any such arrest, and to render him the fullest assistance in collecting evidence. Each supervisor will also keep the Forester fully informed of each arrest and of further steps in the prosecution.

When a Forest officer makes an arrest he will be reimbursed for the necessary expense incident to such arrest. When such expenses are incurred by a ranger he will be reimbursed through the supervisor.

RECEIPTS.

REG. 65. The Fiscal Agent, Forest Service, Washington, D. C., is authorized to receive all payments to the Forest Service. The Special Fiscal Agent, Ketchikan, Alaska, is authorized to receive payments on account of transactions in Alaska. All other Forest officers are prohibited from receiving any payments. Payments must be by postal or express money orders or national bank drafts on New York City. Payments to the Fiscal Agent must be accompanied by printed form letters of transmittal (Form 861), which will be furnished the payor by the Forest officers. The letter of transmittal must designate the transaction on account of which the payment is made, and must be signed by the payor and the Forest officer conducting the transaction. A duplicate of the form letter of transmittal, signed only by the Forest officer, for all payments except grazing fees must at the same time be sent to the Forester.

Forest officers will explain to persons making payments the requirements of Reg. 65. At the time the letter of transmittal is signed by the Forest officer and delivered to the payor, the form in which the remittance must be made should be fully explained. No action will be taken on any application if the remittance is not made as required by this regulation, but the remittance will be returned to the sender. Forest officers should make out the letter of transmittal for the payor and see that it is correct in every particular. Before signing any letter of transmittal the Forest officer will make a copy, except when prepared in the Forester's office (p. 47), and except when payments are for grazing fees (see instructions on p. 102) mark it on the upper margin with rubber stamp or pen and ink with the words "*Duplicate, for the information of the Forester,*" and send it to the supervisor, who will make the proper record, initial it on the lower left-hand corner, and send it to the Forester.

REFUNDS.

REG. 66. Claims for refund of payments, made on the Forest Service, must be addressed to the supervisor, who will forward them to the Forester with his recommendations. If the Forester approves the claim, the amount found not due the United States will be refunded by the Fiscal Agent upon presentation of a voucher prepared in accordance with the Fiscal Regulations and approved by the Forester.

Claims for refunds should be sent to the supervisor of the Forest on which the original payment was made, who will send them to the Forester with his recommendations. If the claim is allowed, a voucher will be prepared and sent to the claimant for his signature and returned to the Forester, who will instruct the Fiscal Agent to pay the claim. Refunds on grazing permits are subject to special restrictions (p. 106).

BONDS AND CONTRACTS.

REG. 67. The Forester and such officers as he may designate may demand and approve such bonds, require such stipulations, and approve and execute such leases and other contracts as are required or permitted by law or these regulations, or as the Secretary of Agriculture is required or permitted to demand, approve, require, or execute in matters affecting the Forest Service and the National Forests.

Final acceptance of any bid or informal offer made to the supervisor or Forester should be postponed until the formal papers embodying the contract are submitted to the proper officer for approval. The reply to the bid may be made in substantially the following form:

"The bid of John Smith will be accepted upon approval by the Forester (or supervisor as the case may be) of the contract of sale."

When a bond is required to secure the performance of any contract, the bond and contract should be approved upon the same date, and the identical date of approval should be noted in writing upon both the contract and the bond in substantially the following form:

Approved _____, 1907.

(Signature) _____,
Forester (or Supervisor).

The bond should give the date upon which the contract was signed by the applicant, and should specify the land involved, the use contracted for, and in a timber sale the kind, estimated amount, and price of the timber sold.

The supervisor should see that both the sureties and principals sign their names uniformly throughout the bond. Thus, anyone who signs his name "John B. Smith" on the face of the bond should not sign elsewhere as "J. B. Smith." It is not desirable that members of a corporation which is a party to the contract should act as sureties on the bond executed by the corporation. Bonding companies usually issue continuing bonds

for an indefinite period. This form of bond is excellent and may be made to cover all the operations of an applicant. Such a continuing bond must describe as accurately as the circumstances admit the future contracts intended to be secured by it.

PROTECTION AGAINST FIRE.

Probably the greatest single benefit derived by the community and the nation from National Forests is through the protection of property, timber resources, and water supply against fire. The direct annual loss from this source on *unprotected* lands reaches many millions of dollars; the indirect loss is beyond all estimate.

The Forest Service, by its protective measures, has greatly reduced the damage by fire on the National Forests. During the last three years the total area burned over has steadily diminished. For the last year it was but one-tenth of 1 per cent of the total area of the National Forests.

The burden of adequate protection against fire can not well be borne by the State or by its citizens, much as they have to gain, for it requires great outlay of money to support a trained and equipped force, as well as to provide a fund to meet emergencies. Only the Government can do it, and, since the law does not provide effective protection for the public domain, only in the National Forests can the Government give the help so urgently needed.

Through its fire patrol the Forest Service undertakes to guard the property of the resident settler and miner, and to preserve the timber, water, and range upon which the prosperity of all industries depends. The help it

can give to the development of the West may be greatly increased by the cooperation of citizens. Destructive forest fires are not often set willfully, but far too commonly they result from failure to realize that carelessness will be followed by injury and distress to others. The resident or the traveler in forest regions who takes every precaution not to let fire escape, and who is active in extinguishing fires which he discovers, contributes directly to the development and wealth of the country and to the personal safety and profit of himself and his neighbors. He who does not assume a great responsibility by endangering not only his own welfare, but that of countless others.

Citizens' fire brigades have been organized successfully in many National Forests. Not only is the prevention of fire to the interest of all property owners, but men under obligation to fight fire because they hold permits will profit greatly by such prevention, because it reduces the work which they may be called upon to do. An organization which will put out a fire before it gathers headway may save many days' hard work.

Residents in the vicinity of Forests, and especially those holding permits of any kind, are urged to cooperate with the Forest officers by holding themselves in readiness to respond with a fixed number of men to a call from the Forest officer. If, for example, one man in each of ten different districts had previously notified the supervisor that he would hold himself responsible for the appearance of himself and nine others at any fire that could not be controlled by the Forest force, by calling on the ten men a force of a hundred would be quickly available. The local ranger should keep these

leaders informed of his movements as far as practicable. Towns and cities, lumber companies, water companies, railroads, and others interested are invited to cooperate with the Forest Service in guarding against fire.

Care with small fires is the best preventive of large ones. The following simple regulation may easily be observed by all, and its violation will be treated as trespass. (Appendix, p. 170.)

REG. 68. Camp fires must not be larger than necessary; must not be built in leaves, rotten wood, or other places where they are likely to spread, or against large or hollow logs, where it is difficult to be sure when they are completely out. In windy weather and in dangerous places camp fires must be confined to holes, or all vegetable matter must be cleared from the ground around them. A fire must never be left, even for a short absence, before it is completely extinguished.

Officers of the Forest Service, especially rangers, have no duty more important than protecting the Forests from fires. During dry and dangerous periods this work should be given first place. Methods and equipment for fighting fire should be brought to the highest efficiency.

A ranger should never start on fire-patrol duty without an ax or a shovel, or both, and in case he sights a smoke on his district, or near to it, he must absolutely assure himself of its cause.

The Forests must be thoroughly posted with fire notices. The fact that some of them are destroyed is no excuse for neglecting this important duty. Often the notices can be posted on or near signboards along trails, or notices of Forest boundaries, limits of districts, or excluded areas in grazing ranges, etc. The destruction of these notices is willful trespass, punishable by law. If destroyed, they should be replaced as soon as their loss is discovered. The notices should be posted on private lands

near the Forests whenever permission from the owner can be secured.

Forest officers should cheerfully and politely tell hunters, campers, and others about the rules and regulations governing camp fires. An officer who loses his temper or uses improper language in talking with persons who are careless because they do not know about the rules, or have no experience in camping, fails in one of his principal duties. He should call their attention to the mistake and instruct them courteously in the proper way of building and handling fires.

REG. 69. Lumbermen, settlers, miners, prospectors, and other persons using the National Forests are cautioned against making dangerous slashings, and must not fire them in very dry weather. If it is necessary to burn slashings, ample notice must always be given the nearest Forest officer before burning, so that he may take steps to reduce the danger. If notice is not given, or if the ranger's instructions are not followed, the person responsible for the burning will be held strictly accountable for all damage to the Forest, and will be liable, in aggravated cases, to criminal prosecution.

There is no desire to hamper the work of settlers and lumbermen, nor to limit the rights of property holders, but it is not just that other forests and improvements, whether owned privately or by the Government, should be endangered by carelessness.

The utmost tact and vigilance should be exercised where settlers are accustomed to use fire in clearing land. Public sentiment is rightly in sympathy with home builders, and the control of their operations should give the least possible cause for resentment and impatience with the Forest administration, but it should be exercised firmly, none the less. Settlers should be

shown the injury to their own interests, as well as to the public, which results from forest fires. Methods and times of burning should be discussed with them, and, if possible, an amicable agreement secured to have no burning except when authorized by the Forest officer and when he is present. But while the aim ought always to be toward cooperation and good will, it is equally important to have it well understood that Forest interests will be protected by every legal means.

When any tendency to ignore instructions is observed, notice must be given that action will be brought for any damage sustained by the United States and that willful negligence will be prosecuted criminally. If this is ignored and damage does result, prosecution must be prompt and vigorous. Where there is sufficient reason to anticipate danger, as from a large slashing which it is announced will be burned at a dangerous time, injunction may be secured. But in this, as in other matters, no civil or criminal suit should be begun or arrest made without instructions from the Forester, unless the circumstances do not admit of delay or the offender is likely to escape. Do not hesitate to use the telegraph to ask advice or report action taken to the Forester.

If private lands are in such a condition that fire is likely to spread to the Forest, a report should be made to the Forester, especially when operations involving dangerous or frequent use of fire are carried on, such as railroads, logging operations, or sawmills.

FIRE LAWS AND PENALTIES.

There is ample legal provision for the punishment of malice or carelessness with fires. The act of June 4, 1897 (Appendix, p. 170), instructs the Secretary to make provisions for the protection of the National Forests against fire, and provides for the punishment of any violation of his regulations. The act of May 5, 1900 (Appendix, p. 200), prescribes a maximum fine of \$5,000,

or two years' imprisonment, or both, for any person convicted of the willful setting of a fire on the public domain or for suffering a fire to burn unattended near any inflammable material. It prescribes a fine of \$1,000, or one year's imprisonment, or both, for building a fire and leaving it before it is totally extinguished. Any officer of the Forest Service may arrest violators of these laws.

The United States, having all of the remedies of a private citizen, can bring a civil suit in the State court to recover for loss by fire. Forest officers should report to the Forester all cases of fire trespass in detail. They should not content themselves with mere inquiry, but should secure affidavits as soon after the fire as possible from eyewitnesses and from others whose information might lead to the establishment of the case for the Government.

The State criminal laws regarding fire are often adequate, and in certain cases criminal prosecution under the State laws may be necessary. Proof in criminal cases must be very specific. Great care should be taken to collect evidence by affidavit, not only to secure evidence to convict, but rebutting evidence to possible excuses of the malefactor.

No proceeding should be taken in a State court except under the instructions of the Forester.

PATROL.

Each supervisor is responsible for the division of his Forest into patrol districts and the assignment of a suitable patrol force to each district. At the beginning of the summer season, or before March 15, each supervisor will recommend to the Forester the number of men needed adequately to protect his Forest, the rate each should be paid, and the number of months each should serve. After consideration of these recommendations the Forester will fix the number for the full summer force of each Forest, and this allotment will be final.

Bear in mind the fact that appointments can not be dated back, and that they must bear the full name of the appointee.

Every ranger or guard must fight every fire he sees or hears

of, at once, unless he clearly can not reach it or is already fighting another fire. If he can not put it out alone, he must get help. The fact that it may not be in his district has no bearing unless he is certain another ranger is there already.

Rangers on fire-patrol duty should avoid spending time and work in places or along routes where there is little danger or small outlook. A clean fire record rather than hours spent or miles ridden is the best indication of efficient patrol. Often a short trip to a commanding point is better than a long ride through a wooded valley. During dry and dangerous periods the selection of headquarters, camping places, and routes should be made with the single object of preventing and discovering fires. It is often necessary for a ranger to be detailed to patrol certain much-used trails or roads by which parties enter the mountains.

Fires caused by lightning are not rare, especially in dry mountain regions. After every electric storm a special effort is needed to locate and extinguish any such fires before they are well under way.

HOW TO FIGHT FIRE.

When once a fire has spread over an acre or more, especially where much dead and down timber makes it very hot, it may be so far beyond the control of one man that it is best to leave it and get help. The character and condition of the woods, the weather, and even the time of day have so much to do with such cases that general directions have little value, and all depends upon the experience and good judgment of the ranger.

Generally the best tools for fighting fire are the shovel, mattock, and ax. The ranger should always carry at least an ax during all the dangerous season.

In a damp, heavy forest, fire usually travels slowly, and a few men, if persistent, can keep it in check by

trenching, even though they may not extinguish it, and must continue the watch until rain falls. In dry, open woods fire travels faster, and it is often best to go some distance to open ground, and back fire from there. In handling back fires great care is needed to avoid useless burning; therefore they should never be set except by Forest officers, unless in great emergencies.

The night or the early morning is the best time to work whenever any choice exists, for nearly all forest fires die down, more or less, during the cool of the night and flare up again during the heat of the day.

Following are several general principles to be borne in mind:

Protect the valuable timber rather than the brush or waste.

Never leave a fire, unless driven away, until it is entirely out.

Young saplings suffer more than old mature timber.

A surface fire in open woods, though not dangerous to old timber, does great harm by killing seedlings.

A fire rushes uphill, crosses a crest slowly, and is more or less checked in traveling down. Therefore, if possible, use the crest of the ridge and the bottom as lines of attack.

A good trail, a road, a stream, an open park check the fire. Use them whenever possible.

Dry sand or earth thrown on a fire is usually as effective as water and easier to get.

A little thinking often saves labor and makes work successful. Ill-planned efforts suggested by haste and excitement rarely lead to success.

ACTION AND REPORT.

Small fires, extinguished without difficulty by the officer who discovers them, may be reported to the supervisor at the end of the month. He should be notified at once of large ones which require help from residents or other rangers, purchase of supplies, or attendance for several days. But if help is needed, the Forest officer on the ground should get it at once. He should hire men and messengers, if necessary, send for supplies, and notify the supervisor of the action taken. The supervisor will furnish any further help needed and telegraph the Forester if an amount in excess of \$300 is required. He will also notify the Forester as soon as the total cost of any fire requiring extra help and expense is ascertained.

In reporting upon fires three classes should be distinguished, as follows:

A. Camp fires and other small fires covering not more than a few square rods.

B. Small forest fires, extinguished without any extra help or expense, and generally not covering over 5 acres.

C. Large fires, requiring extra help and expense.

On the last day of each month every ranger and guard will fill out his monthly fire report on Form 944, using a separate column for each fire, or, if such is the case, writing "No fires on District _____ during _____, 190—." In case of large Class C fires, if in the opinion of the supervisor it is essential for his information, the ranger will supplement his monthly report form with a letter.

On January 1 of each year the supervisor should submit an annual report on fires, which should cover the twelve months ending November 30.

EXPENDITURES FOR FIGHTING FIRE.

Every supervisor is authorized, in person or through a subordinate, to hire temporary men, purchase tools and supplies, and pay for their transportation from place to place to extinguish a fire. No expense for fighting a fire outside a Forest must be incurred unless the fire threatens it.

To promote willing assistance, in every possible instance the supervisor should, when practicable, pay the extra labor in cash on the ground immediately after the fire is extinguished. Reimbursement for such expenses will be made in accordance with the instructions in the Green Book.

When the supervisor finds it impossible to pay these emergency assistants in cash, Form 143 may be used, as explained in the Green Book. If there is any delay, the reason for it should be carefully explained to the men.

Fire fighters should be paid by the hour, actual working time, at the current local rates. The time consumed in going to and from the fire may be included.

Government employees and persons having any sort of permits within a National Forest are not entitled to compensation for fighting fire.

While the Forest Service is anxious to prevent and fight fires, only a limited amount of money can be devoted to this purpose. Experience has proved that usually a reasonable effort only is justified, and that a fire which can not be controlled by from 20 to 40 men will run away from 100 or even more men, since heat and smoke in such cases make a direct fight impossible.

Extravagant expenditures will not be tolerated. Fires are sometimes started for the sake of a job. In and about every Forest it is possible to enlist the cooperation of the better citizens, so that in time of need enough men of the right kind will be on hand. A crowd of men hastily gathered about a town, without organization, interest, or experience, is valuable only as a last resort.

FOREST PLANTING.

IN GENERAL.

As a result of severe forest fires and destructive lumbering there are several million acres in the National Forests which have been denuded. Wherever there is no possibility of the natural reseeding of this land within a reasonable time, it is the purpose of the Forest

Service to restore it to a state of productiveness by forest planting, and thus renew as soon as possible the ability of extensive watersheds to control and regulate stream flow.

The supervisor should report to the Forester what land requires planting within his Forest, covering the following heads:

Area and condition of cover on watersheds directly controlling streams from which adjacent towns and cities obtain their water supply, and those which are the source of streams of value for irrigation purposes, or both.

Area and condition of cover on denuded land not of immediate importance for the control of stream flow, but which should be planted with forest trees for the production of commercial timber to meet future local needs.

Before establishing a nursery in a National Forest a reconnaissance is necessary to determine the feasibility of forest planting, the area to be reforested, the species best adapted to accomplish the desired results, the site of a nursery, etc. Experimental planting may be needed before extensive operations are begun.

Planting operations of the Forest Service are at present centered in planting stations within or near National Forests. In addition to these, numerous sites for small experimental nurseries have been selected at ranger's headquarters, the most desirable of which, in each National Forest, may be enlarged into a planting station hereafter. At the stations nursery stock of many valuable timber trees is grown for local planting and for shipment to adjacent National Forests.

A limited amount of nursery stock for planting on private land within National Forests may be secured from planting stations by making application to the supervisor. Stock is furnished only to residents in or near the National Forests who will agree to plant it on

private or Government land within the National Forest, and for watershed improvement only.

Requests from individuals for nursery stock, in case less than 1,000 trees are desired, may be granted by the supervisor. Requests for 1,000 or more plants should be referred, with recommendations, to the Forester.

NURSERY AND PLANTING OPERATIONS.

The following instructions are primarily for the use of Forest officers in charge of nurseries. It will be necessary, however, for the officer to use his own judgment in applying them.

Seed collecting.—The chief points in collecting seed are to collect mature cones, before the seed scales open, from large, well-formed trees; to open the cones by exposure to the sun, if possible; if not, by the use of artificial heat; to clean the seed by screening or winnowing; to store the seed in a cool, dry place, away from mice and rats.

Nursery site.—Comparatively level, deep, moderately fertile, well-drained soil is best. If available, at least one-half acre should be set aside for a ranger nursery. Of this, much the larger part will be required for transplant beds after the first or second year. Larger nurseries will, of course, require proportionately more ground. A ranger's nursery site should be located as near as possible to headquarters.

Seed beds.—In ranger nurseries a convenient size for seed beds is from 4 feet to 6 feet wide and 12 feet long. In larger nurseries the beds should be longer. Paths 18 inches wide should separate the beds. To insure drainage, the beds should be raised from 2 to 3 inches above the surface of the ground. The soil should be thoroughly prepared and the surface made smooth before the seed is planted.

Seed sowing.—The seed may be sown either in shallow drills or broadcast on the beds. Drills are best, since the seedlings can be cultivated more easily. The drills should be 6 inches apart, deep enough to cover the seed, and should run across the beds. They may be made by dragging a sharpened stick along

one side of a 6-inch board. A still more rapid method is to nail triangular strips the desired distance apart on the underside of a board and to mark the drills by pressing the board down on the bed. Unless the soil is free from weeds broadcast sowing is not advisable. Some species, however, do remarkably well when sown broadcast, and it would be well to plant a few square feet of some of the beds experimentally in this manner. Sowing should ordinarily be done in the spring, about the time early garden seed would be planted. If done too early, while the ground is still cold and wet, germination will be slow and many of the seeds will rot. Seed should be very carefully covered, for if not enough cover is given them they may wash out, and if too much, they may either rot or lie over until another season. A safe rule is to cover small seeds to a depth of about twice or three times their diameter. Firming the beds with a board will prevent the soil from washing when sprinkled. Immediately after planting it is well to cover the beds with a very thin mulch of clean leaves, moss, or needles. This keeps the surface moist and hastens germination. Water in limited quantities should be applied even to mulched beds. The mulch should be thin and light enough to allow the seedlings to break through the surface.

Quantity of seed required.—Enough seed should be sown to provide for 30 plants to the running foot at the end of one year. Seed of low germination per cent, such as firs, larches, and cedars, should be sown thickly. Species with a higher germination per cent, such as pines and spruces, should be sown so that each seed will alternate with an open space approximately equal to its width.

Shade.—In practically all situations conifers require partial shade for the first year. In nurseries this must be supplied artificially by covering the seed beds with screens of lath, shakes, or brush. The most convenient size is a 4 by 12 foot rectangular frame constructed of 2 by 2 inch strips, with laths nailed crosswise, so that each lath alternates with an opening equal to its width. Where lumber is not available, slender saplings of aspen or pine split in the center can be used for the side strips, with split shakes as substitutes for laths. Even

brush may be used for a temporary shade. The shade frames should be supported on stakes from 18 to 24 inches above the surface of the beds, and set about 3 feet from each end of the frame. A crosspiece of inch material should connect the stakes on opposite sides of the bed. In semiarid regions, or where material is cheap and plentiful, a lath house is the best method of shading. One can be constructed by setting posts about 12 feet apart and connecting them at the top with 2 by 4 inch stringers, and covering the entire structure with lath or woven-lath fencing. When lath or woven-lath fencing can not be secured readily, brush or light poles can be spread over the framework until half shade is produced. The top of the frame should be about 7 feet above the ground.

Care of seedlings.—All conifers, and some broadleaf species, while in the seed beds are subject to "damping off." This disease is very prevalent and often destroys a large per cent of the seedlings. It is caused by a fungus which attacks the young plants near the surface of the ground. To prevent or check this disease, if it should become prevalent, it is necessary to adhere closely to the rules for regulating shade, watering, cultivating, etc. Dry sand, charcoal, or fine gravel spread on the beds will often check the trouble. The proper application of water to the seed beds before and after germination is particularly important. The soil should be kept uniformly moist from the time the seed is sown until the seedlings are a week or ten days old. After that water should be applied less frequently, though the soil should never be dry enough to powder when dug up. Water should be applied with a sprinkling pot or hose and the soil should be thoroughly wet each time. Irrigation by flooding or by running water through ditches or paths is usually not advisable, and if practiced great care should be taken not to keep the ground too wet. Watering should be done early in the morning or late in the afternoon. Shade frames should be allowed to remain over the seed beds at all times, except during damp, cloudy days. In localities where heavy rains are followed by high temperature, the frames should be raised or removed as soon as the sunshine disappears from the seed beds, and kept so until the sun appears the fol-

lowing morning. This should not be neglected, since proper drying and airing of the soil after rain checks damping off. If water has been applied excessively the instructions just given for drying out the soil should be followed.

Seedlings should be cultivated often, in order to subdue weeds, stimulate growth, and keep the soil in good condition. Cultivation should be shallow and should pulverize the soil thoroughly. Cultivation should be given after rains or when the soil shows signs of baking or drying. This can be done either with a narrow hoe or with a small rake made of nails, like an onion hoe.

When "damping off" occurs the soil should be stirred frequently to hasten surface drying. If this precaution and that of removing the shade frames is taken, a serious attack of "damping off" can often be arrested.

Keep weeds out of the seed beds, since they weaken the seedlings.

Where the winters are severe it is advisable to mulch the seed beds to protect the seedlings from injury by cold, drying winds, as well as to keep the ground from heaving in the spring. Where snow lies all winter, mulching is unnecessary. Any substance, such as leaves, straw, or moss, which is free from weed seed, will serve as a mulch. A layer from 3 to 4 inches deep is sufficient. The mulch can be held in place by laying sticks or strips of boards across the beds between the rows. It should be removed at the beginning of the growing season.

Practically all evergreen seedlings should be transplanted to open nursery rows when one or two years old. Transplanting should be done in the spring when the soil is in good workable condition, but before new growth begins. Transplant beds should be near the seed beds and on good soil which has been prepared as thoroughly as for a garden. A convenient width for transplant beds is 6 feet, with any convenient length. They should be elevated slightly. The rows should be 8 inches apart and should run across the beds. The seedlings should be set from 2 to 4 inches apart in the rows, the exact distance depending upon the size of the plants. In transplanting great care should be taken not to allow the roots of the seedlings to be

come dry, since even a short exposure to sun or air will be fatal. They can best be carried roots downward in a pail containing 4 or 5 inches of water.

FIELD PLANTING.

After the seedlings have remained in the transplant beds one or two years they should be taken up and planted on permanent sites, chosen for their adaptability to the particular species grown.

Field planting should usually be done in the spring, just before the growth begins. In regions like California, where there is a rainy and a dry season, planting should be done during the rainy season, as soon as the soil is sufficiently wet to furnish the necessary moisture.

For transportation to the field the roots of the trees should be packed either in moss or wet burlap. During the planting they should be carried root downward in a pail partly filled with water.

The most satisfactory method of planting is to plant the seedlings in holes dug with a mattock.

To exclude air from the roots of newly planted trees and to bring the soil in close contact with them, the surrounding earth should be firmly packed. It is absolutely necessary for success that this rule be followed strictly.

Trees may be planted 4 by 4, 5 by 5, or 6 by 6 feet apart. In many cases the last spacing will be found best. The roughness of planting sites will often prevent regular spacing, but an effort should be made to conform to a system.

PERMANENT IMPROVEMENTS.

The construction on the National Forests of suitable headquarters for the field force, the completion of a good system of communication, and on some Forests the building of fences, corrals, and other works for the control of grazing is of great and immediate importance. Supervisors should study the present and future conditions on their Forests with the greatest care before submitting plans and estimates, since the improvements

when once constructed can not be changed without great trouble and additional expense.

Each piece of trail, road, telephone line, fence, fire line, and each bridge, cabin, corral, or other improvement should be treated as a separate case and designated by some appropriate name. The Forester will pass upon the recommendations, and if they are approved, authorize their construction and allot a sum of money to cover the necessary expenses.

If a supervisor finds his estimate or the sum allotted for the work is insufficient to complete it, a full report on the subject should be made to the Forester, and if possible a further sum will be provided. As soon as any project is completed, the supervisor should so report to the Forester, giving the exact cost in detail, including ranger labor.

The reports and estimates on the various improvements should be prepared in accordance with the instructions which follow.

ROADS.

To make the resources of the National Forests accessible and to protect them, the Forest Service hopes eventually, with the cooperation of the local authorities, to build a complete road and trail system through each.

The Forest Service is not only willing but anxious to cooperate in the construction and maintenance of roads, trails, and bridges within the National Forests.

Any community which desires to take advantage of this office should communicate with the Forest officer in charge through the supervisor.

The supervisor will transmit the request to the Forester in a report covering the following points: Location and length of the road, width of roadway, and proposed maximum grade. Advantages to be gained and necessity of construction. Number and class of residents benefited. Exactly what the local residents or county will contribute toward its construction and maintenance in money, labor, tools, powder, or construction

material. Definite recommendations as to what action should be taken by the Forest Service.

A detailed estimate of cost to the Forest Service covering the following points (this outline should also be followed in reporting on roads to be built entirely by the Forest Service) :

Cost of survey. Unless it is certain that a good grade can be had a survey should be made of the route. What the survey will cost will depend upon whether it is necessary to run more than one line or not and whether or not there is much brush.

Cost per mile for clearing the right of way for the road.

Cost per mile for grading. This will involve a thorough knowledge of the country through which the road will pass, and can only be obtained by a thorough inspection of the route. The character of the soil should be carefully noted in addition to the slope, size of openings necessary for waterways, and approximate location of turn-outs. Bear in mind that there is a vast difference in the cost of grading in earth and in solid rock, the former costing from 16 cents to 25 cents per cubic yard, while the latter will cost from 80 cents to \$1.50 per cubic yard, depending in a great measure upon the labor employed. Under this head will come also the cost of turn-outs, retaining walls, side ditches, and all other items pertaining to the roadbed.

Cost per mile for culverts and any other small waterways. With the necessary size noted it is an easy matter to estimate the cost of each culvert and bridge.

Cost of powder, tools, and other supplies.

TRAILS.

There is urgent need of more and better trails on most of the National Forests. They are of capital importance, because they are not only the best insurance against fire, but one of the chief means by which the Forests can be seen and used.

A general system or scheme of trails for the whole Forest should first be carefully thought out and decided upon, and those of the greatest immediate importance for protection and patrol should be built first. Trails urgently needed may be

made good enough for ordinary saddle-horse or pack-train travel at once, with a view to improvement and permanence later on.

The most important part of trail work, and that for which the supervisor will be held directly responsible, is the preliminary location of the line and grade. Construction work should not begin until he is satisfied that the best route has been selected.

The maximum grade of all Forest trails should be 20 per cent, unless the expense of keeping within this limit is absolutely prohibitive. When it is found necessary to build switch backs, the turns should be level and wide enough to give plenty of room for a loaded pack animal.

Logs, snags, brush, or limbs that require turn-outs on a traveled trail will be considered as marks of inefficiency on the part of the ranger in whose district they are found.

Trails through timber should be well blazed. The Forest Service has adopted a distinctive blaze for trails on the Forests, consisting of a blaze at breastheight, with a notch above, which should be used in all future work. For the benefit of the traveling public, all Forest trails should be equipped with sign-boards stating the name of the trail, its destination, and the distance in each direction to its terminal points.

BRIDGES.

Bridges should be built only where fording is impracticable, but when they are necessary should be strong enough so there will be no danger of their going out with the first high water. Rod iron and sawed lumber should not be used wherever suitable logs can be obtained from Forest timber.

In making reports on proposed bridges, give the length between supports and width, kind and cost of piers or supports for bridge ends, cost of cutting and hauling timber, cost of placing timber in the bridge, and cost of nails, bolts, and other iron.

TELEPHONE LINES.

Telephone lines may be constructed in National Forests under special-use permits, and the Forest Service will encourage and cooperate in their construction.

Arrangements will be made as rapidly as possible to construct telephone lines to connect the supervisor's headquarters with rangers' headquarters and lookout stations, so that fires may be reported and other business of the Forest conducted expeditiously.

In many cases this work may be carried on in cooperation with towns, associations of settlers, or telephone companies, and the cost to the Service thus be considerably reduced. It should be borne in mind that the greater the amount of cooperation of this kind the more rapidly can the system be extended.

The number of telephones that can be allowed on the lines are of necessity limited, and before promising anyone that they may connect with the line the supervisor should ascertain how many telephones can be accommodated on the line. The length of the line, size of wire, and manner of construction will determine the number.

Where the line is built entirely by the Forest Service the following points should be observed:

Private telephones will be allowed on Forest Service lines, for which a reasonable charge will be made. Application forms will be furnished.

Persons wishing telephones on the Forest Service lines will furnish their own instruments and make their connection with the line, subject to the approval of the supervisor.

The right to connect with the Forest Service line does not give the subscriber the right to use the exchange of any commercial company with which this line may connect. If it is desired to use the exchange,

arrangements must be made by the subscriber with the owners of the exchange.

No telephone company will be allowed to collect toll from subscribers for the use of the Forest Service line.

Persons using Forest Service lines must agree to the following conditions:

To immediately repair any breaks or remove any cause of trouble occurring on their lines; that is, that part of the lines from their instruments to the Forest Service line. To disconnect their lines from the Forest Service line during any period exceeding one week in length when their houses are not occupied. To permit Forest officers to use their instruments and lines free of charge, and to allow Government business to have precedence of all private business. To install a telephone instrument to be approved by the Forest officer of such make and construction as not to interfere with the best operation of the Forest Service line.

When it is necessary to construct lines off of the National Forests, in order to connect a Forest Service line with some desired point, right of way should be obtained from the owners of the land on a form which can be obtained upon request from the Forester.

The supervisor will, in his recommendations for telephone lines within his Forest, report on the following points:

The length of the lines it is recommended to build during the year covered by the estimate and the suggested extension of these lines during the year following.

The distance between towns, settlers' houses, rangers' headquarters, and lookout points to be touched by the recommended line and the number and location of instruments to be installed.

The kind, quality, and height of the timber available for poles

along the proposed route, noting distances which timber will have to be hauled to the line.

If cooperative work, exactly what will be contributed toward its construction and maintenance in money, labor, tools, or construction material.

When possible, a map of the proposed route, showing the private telephone lines, towns, settlers' houses, rangers' headquarters, lookout points, rivers, creeks, canyons, mountains, ridges, roads and trails, and railroads, with their relative elevations, should be prepared and submitted with the estimate.

Definite recommendations as to what action should be taken by the Forest Service.

The detailed estimates of the cost of each proposed line should cover the following points: Cost of survey, if necessary. Cost per mile for clearing the right of way for the telephone line. Cutting poles. Hauling poles, including distribution. Treating poles with preservatives; this can be estimated at 40 cents per pole. Digging holes; particular care should be taken in making this estimate, as the cost of digging in solid rock, cemented gravel, or hardpan is much more than in earth; in earth the holes will cost about 15 cents each; in the other materials much more; where powder will be used this can be estimated separately or included in the cost of digging. Erecting poles; the average price for this is 15 cents per pole. Stringing the wire; the average cost is \$4 per mile. Cost of wire, brackets, and insulators at nearest railroad station. Cost of hauling material from railroad to point where it will be used. Number and cost of instruments, allowing one instrument at each Forest officer's headquarters, at lookout stations, and at other necessary points; the average cost, including freight, will be about \$15 each. In making estimate allow for enough extra wire, insulators, and brackets to enable each Forest officer's headquarters to have a small supply on hand for repairs.

CLEARING STREAMS FOR LOG DRIVING.

Where this class of work is necessary the distance to be cleared and the average width of the stream should be stated, and an estimate of the cost, covering the following points, should be sent to the Forester: Removing rock obstruction;

building dams, if needed; building new channels to cut off bends, increase the rapidity of the current, or deepen the channel; necessary clearing on each side of the stream; removing log jams; powder, tools, and other supplies.

FIRE LINES.

On a number of the Forests fire lines must be constructed as a protection against disastrous fires. Where this is done to protect the direct water supply of adjacent towns, cities, or ranches, or the range of permitted stock, the cooperation of the interested residents is earnestly requested.

Range fire lines, or lines through open mature timber on easy ground may be cheaply constructed by plowing four or five furrows on each side of a strip 4 rods wide and burning out the intervening strip when conditions render it safe. Lines through chapparral or heavy underbrush should usually be 30 feet wide, cleaned out with an ax, mattock, and brush hook, and the stumps of all strong-sprouting species, such as scrub oak, grubbed out.

RANGERS' HEADQUARTERS.

Eventually all the rangers who serve the year round will be furnished with comfortable headquarters. It is the intention of the Forest Service to erect the necessary buildings as rapidly as funds will permit. Usually they should be built of logs with shingle or shake roofs.

The hardware, glass, and door frames may be purchased on authorization from the Forester. Dwellings should be of sufficient size to afford comfortable living accommodations to the family of the officer. He will be held responsible for the proper care of the buildings and the ground surrounding them. It is impossible to insist on proper care of camps if the Forest officers themselves do not keep their homes as models of neatness.

Rangers' headquarters should be located where there is enough agricultural land for a small field and suitable pasture land for a few head of horses and a cow or two, in order to decrease the often excessive expense for vegetables and feed.

The amount of agricultural land necessary to supply a ranger's family with vegetables and to raise hay and grain enough to winter his saddle and other stock will vary, as a general rule, from 10 to 40 acres.

The pasture should be of sufficient size to support the stock necessary for the ranger's use. They will vary in size, according to the quality of the feed, from 40 to 200 acres. A two or three wire fence strung on posts or trees 30 feet apart will, in most cases, be sufficient to protect these pastures from range stock.

FENCES, CORRALS, TANKS, WELLS, AND WINDMILLS.

Whenever fences, corrals, tanks, wells, windmills, or any other improvements are needed in order to better control the grazing of stock on the Forests or to open to grazing areas heretofore unused on account of the lack of water, the supervisor should report to the Forester. The report should give the location, state, the conditions which render the construction of the work advisable, and give a detailed estimate of the cost.

MARKING NATIONAL FOREST BOUNDARIES.

For the benefit of the public and for the protection of the Forests, Forest officers will do their utmost to see that all boundaries are established and clearly marked.

All supervisors will be supplied with boundary posters, and with stamps and ink for filling the spaces left on each poster for the name of the Forest and boundary on which the notice is posted. They will see that the Forest limits are kept amply marked, not only at the entrance of trails and roads, but at frequent intervals along the entire boundary where any entrance is probable. There should be at least one notice to each quarter mile where grazing or timber trespass is likely to occur, and the entire line, where it runs through timber, should be plainly marked with fore-and-aft blazes with two notches above to distinguish them from trail blazes. Each blaze should be stamped in the center with the United States marking hatchet. None of these marks should be used, however, until the lines are definitely fixed and approved.

Every notice posted must bear the name of the Forest and the proper boundary. Where the Forest officers can not locate the boundaries of a Forest with sufficient accuracy, or the lines of interior claims or holdings of any kind, the Forester should be informed in order that surveys may be made either by the United States Geological Survey or by experts in the employ of the Forest Service.

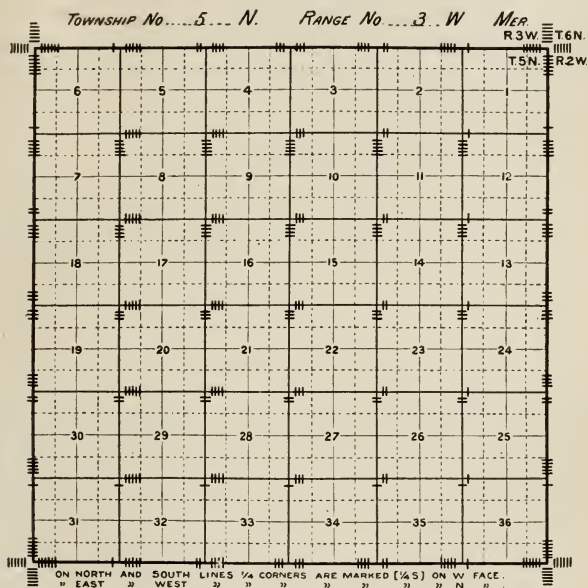


FIG. 1.—System of notching corners.

The boundaries of interior holdings should be marked in accordance with the blazes used by the Department of the Interior. (See Regulations of General Land Office governing survey of public lands.)

Whenever a Forest officer finds an old survey corner, either on the boundary or inside the Forest, which is in danger of becoming obliterated, he should take time to reenforce it properly.

SURVEYS WITHIN NATIONAL FORESTS.

The act of March 3, 1899, makes the surveying of National Forest lands identical, in all but the establishment of boundaries, with that of the public domain. Where survey to permit the patenting of valid claims is desired, application should be made to surveyors-general, and action thereon will be governed by the usual considerations.

(For special surveys allowed in the National Forests see appendix, p. 190.)

SUPERVISORS' OFFICES.

Headquarters should be located in the nearest town to the Forest that offers proper railroad, telephone, telegraph, and mail facilities, and may be secured only through the permission of the Forester. In every case an office should be equipped with a sign, for example: "U. S. Department of Agriculture, Forest Service, Office of Black Hills National Forest." Request for authority to rent an office must describe the location and condition of the building and the rooms, and give in detail what is secured with the office, as light, heat, telephone, or janitor service. The danger from fire should be carefully considered and reported upon. In every case a lease will be prepared in the Washington office for execution by the lessor. Supervisors must never occupy an office that is furnished rent free by a company or individual.

FOREST LIBRARY.

To aid the work of Forest officers, supervisors' offices are being provided with small libraries of books on

forestry and allied subjects. These libraries are being enlarged as rapidly as new books can be secured. In addition all available Government publications of interest will be sent to any member of the Forest Service, free of charge, on application to the Forester.

EXPENDITURES AND SUPPLIES.

All payments for expenses incurred in the administration of the National Forests must be in accordance with the acts of Congress making appropriations for the purpose, the Fiscal Regulations of the Department of Agriculture, and the instructions in the Green Book of the Forest Service. Detailed instructions for the custody and use of supplies are contained in the Green Book, a copy of which should be in the hands of every Forest officer.

RECORDS.

RANGERS' RECORDS.

All rangers and guards, in addition to recording the necessary information and reports upon the regular blank forms for free use, timber sales, supervision of cutting, fire, etc., are required to keep a diary of the Forest work or business upon which they have been engaged each day. The regular field notebook may be used for this purpose.

A brief but comprehensive summary of what was done each day should be given on Form 874—2 and 3 of the ranger's notebook. If patrol was performed, the exact country ridden over and the miscellaneous work done should be stated; also whether any fires were discovered or extinguished. If scaling was done, the sale and the amount scaled should be designated. The names of people with whom Forest business was transacted and the nature of the business should be given. It is not necessary to give the number of miles traveled. Above all things a perfunctory, cut-and-dried report should be avoided.

These forms constitute the officer's service report and should be sent to the supervisor on the 1st of each month with the signed salary voucher. Willful omission in or falsification of service reports is cause for dismissal from the Service. Laborers will be reported for by the ranger to whose district they are assigned.

The following is a sample of a ranger's diary correctly made out:

August 10, 1906.—Rode up Copper Creek Trail to Frog Pond Basin. Trail washed half mile below forks. S. J. Smith's cattle off their range. Drove them back over ridge. Scaled 5,345 feet bug-killed pine on J. R. Hurst's sale. Took application for agricultural lease in basin from Jack Wade. Issued F. U. permit to Mrs. Grant for 5 cords dead fir from ridge back of her place. Fixed trail on return to camp. No fires. Wrote supervisor about Smith's cattle.

Started work 7.45 a. m.

Quit work 6.15 p. m.

SUPERVISORS' RECORDS.

Every supervisor is required to record the condition and business of his Forest under the following heads. These records furnish the basis for his reports:

Ranger service. (Card record.)

Free use of timber. (File of duplicate permits.)

Sale of timber. (Card record.)

Forest mapping and estimating. (File of correspondence and maps.)

Grazing. (Card record.)

Claims and patents. (Data from local land office.)

Special uses. (Card record.)

Fires. (Rangers' monthly reports.)

Trespass. (Card record.)

Miscellaneous work. (File of rangers' service reports.)

Accounts. (Supervisor's books.)

Every supervisor is required to keep a diary, in which he will record for each day of service his work and movements and the progress and notable happenings of his Forest. This constitutes the supervisor's service report which will be examined and signed by each inspector who visits the Forest.

It is essential that the supervisor's office be equipped with accurate large-scale maps of his Forest, both for the information of Forest users and for the supervisor's records. As far as possible black and white photographic prints or lithographic prints, United States Geological Survey topographic sheets, and Land Office plats will be furnished from the Washington office on request. As fast as maps are supplied they should be used to record much of the detail of progress of timber sales and other Forest business.

THE FOREST ATLAS.

As rapidly as possible the Forest Service will furnish to Forest officers standard maps of the National Forests, showing topography, drainage, improvements, etc.

The central part of the map system is a Forest Atlas. The Atlas will aim to show all data of use in connection with the administration of the Forests. Copies of the Atlas sheets for a particular Forest, as soon as completed, will be placed in the hands of the supervisor.

Data to be recorded in the Forest Atlas will be obtained by the field force of the Service, and will usually be mapped on township plats, or Atlas sheets, following the scheme of the Forest Atlas legend page, which will be furnished to all members of the field force of the Service. The data will be transferred from these plats to the Atlas, or the township plats or sheets, where mapped with sufficient accuracy and care, will be inserted in the Atlas sheets directly.

The usual scale for the Atlas will be 1 inch to 1 mile, on which scale a standard sheet may show as much as a group of six townships. The scale may vary above or below this standard. If a smaller scale is used, as, for instance, to cover larger areas or for general maps, it is made either one-half inch to 1 mile or one-fourth inch to 1 mile. A larger scale than the standard will frequently be used. In many cases a single township on the scale of 2 inches to 1 mile will be shown. Where necessary to show a small area in still greater detail, a scale of 4 inches to 1 mile or even 8 inches to 1 mile may be employed. Whatever the scale used it will always sustain a simple relation

to the standard, as 2:1, 4:1, or 8:1, as the case may be. It can then readily be reduced to the standard.

Township plats.—Forest officers are supplied with plats of the townships included within their respective Forests. These plats are upon the uniform scale of 2 inches to 1 mile. Each plat represents a township or fractional township and in a few cases a township plus a fractional township. The plats have been compiled from various sources and bring together, though not always perfectly, the data at hand for the area represented. So far as the topographic sheets of the Geological Survey cover an area, they have been used. Where township or section lines have been run they are shown by full lines; where not run, by dotted lines. Tracts which have been alienated—that is, are in private ownership—are indicated by line shading.

The township plats should be forwarded to rangers as needed for use in three general ways: First, to correct topography or land lines where errors exist; second, to record data for the Forest Atlas; third, to report upon any matter which can be shown graphically, even though the record is only of temporary value.

The plats will be found in error in some cases. Where errors exist they should always be corrected and the corrections forwarded to the Forester.

In recording data for the Forest Atlas the signs and symbols given on the legend page should be closely followed. If additional conditions are to be shown, any convenient symbol may be used, with an explanation on the margin. Legend pages will be sent to supervisors in sufficient numbers to supply all rangers. The data should be placed upon the plats with as much accuracy and neatness as possible. Well-drawn township maps will not be redrawn, but will be mounted directly upon the sheets of the Atlas. It should be the aim of every Forest officer to make his maps good enough to be handled in this manner.

On no Forest will all the data suggested in the legend page be of equal importance. Supervisors will decide what class of data is to be taken up first. On well-timbered Forests data relating to timber classification and sales would be most

important. Distinct lines should represent the boundaries of the classifications; but since the stands of timber on each unit of area will be averaged, classification of minor differences in density of stand within an area is unnecessary. The tree species in each timber classification should be noted whenever possible. To avoid confusion, either the appropriate symbol or the common name of the species shown in the legend should be used, not the local name. On practically all Forests the improvements, special uses, and alienations should be recorded. Beginning with the most important townships and data, the Forest officers should send in the completed township plats as rapidly as their duties will permit.

The township plats may also be used in Forest work to show the location of burned areas, insect-killed timber, timber sales, trespasses, and special uses involving rights of way or tracts of land of considerable size. In fact, the plats may be used for reporting upon any matter which can be shown by map, although they may not always be desirable for small explanatory sketches sent in with correspondence.

Grazing maps.—The grazing map legend is not for use on the 1 inch to 1 mile Atlas sheets. Data relating to grazing will be drawn on a smaller scale map, which will form one page of the Atlas. It will be colored with crayons, so that alterations may easily be made when changes occur in the areas open to any kind of stock or when areas are closed against grazing.

REPORTS.

Supervisors' reports should be as concise as possible, but must give full information. Special attention should be given to recommendations.

POLICY.

Annual report due in Washington December 1, covering the following points:

Suggested changes in the Use Book.

Changes in boundaries of the Forest.

Condition of local sentiment, with recommendations for Forest policy.

PERSONNEL.

The annual report on personnel on which the consideration of promotions in the field force will be based is due in Washington November 15. This report should be prepared in accordance with the following outline:

(1) Is the present force sufficient for the business? What work is being neglected for lack of men? To what extent do users of the Forest complain of inadequate or tardy service? What is the average area of the ranger districts? Submit a map showing the permanent ranger districts.

(2) How do the salaries of the rangers compare with those which they could earn outside the Forest Service? State approximately the average expenditure of a ranger per year for each of the following items: Lodging and subsistence, horses, horse feed, field outfit.

(3) A full report upon each member of the force.

Give name, recommendation as to promotion or reduction in salary, or change in title, number of years' service, and date and amount of last promotion. Age, physical condition, and ability to perform the work of a ranger. Occupation and salary before entering the Forest Service. Ownership or interest in land or other property upon or adjacent to a National Forest, or in cattle, horses, or sheep grazing upon or adjacent to a Forest. Standing in community and personal habits. Past and present work in the Forest Service, with particular reference to ability to handle men, attitude toward other members of the Service and Forest users, industry, reliability, thoroughness, capacity to prepare reports, kind of work for which best suited.

Make the statements regarding the men as specific and as plain as possible. Omit nothing that will aid in the consideration of each individual case. Avoid general recommendations covering several men in the same grade.

Probationary employees.—Under the rules of the Civil Service Commission original appointments to classified positions are made for a probationary period of six months, at the expiration of which time absolute appointment is made if satisfactory service has been given.

Supervisors are expected to keep the work of the probationary appointees constantly in view, so as to be able to recommend that they be or be not given absolute appointments, according as their work is satisfactory or otherwise.

Hereafter supervisors will submit a report to the Forester upon each probationary employee at the end of the fifth month of probationary employment. The report must definitely recommend either that at the close of their probationary period they be given absolute appointments or that their services be discontinued.

ESTIMATE AND PLAN FOR ENSUING YEAR.

Estimate of administrative expenses and plan of work for the ensuing fiscal year, due in Washington March 1, covering the following points (the fiscal year begins July 1 and ends June 30) :

Salaries.—Number and grade of men necessary for proper administration. Give estimate by months and summary.

Expenses.—For lodging, subsistence, and transportation where allowable. Purchase of equipment and supplies not obtainable by requisition. Nursery work, field planting, protection to plantations, and other items connected with their maintenance. Extra labor needed for marking timber, scaling, burning brush, etc. Office rent, janitor service, light, and heat, when not included in the office rent. Telephone rent, toll charges, repairs, signs, printing, and miscellaneous expenses, not properly chargeable to any other item.

Improvement.—For construction and repair of headquarters and other buildings, pastures, wells, etc. Trails, roads, bridges, telephone lines, fire lines, drift fences, and corrals. Treat each project separately, in accordance with instructions under Permanent Improvements.

FIRES.

Annual report due in Washington January 1.

In addition to this report a brief history of all large fires should be submitted in a letter to the Forester immediately after each is extinguished.

FREE-USE BUSINESS.

Annual statement for calendar year due in Washington August 1, covering the following points: Number of permits issued in each ranger district. Amount of material used in cords, poles, posts, and house logs or sawlogs (in thousand board feet) on whole Forest. Rate per unit of measure for each class of timber and total value. Approximate area cut over under free-use permits. General statement of the manner in which the business was conducted, and recommendations for any improvement.

TECHNICAL AND SILVICAL.

At the end of each quarter the forest assistant will submit a report in duplicate on the technical Forest business to the supervisor, who will forward the duplicate to the Forester, together with any comments he wishes to make. The forest assistant will also on April 1 submit a report on the silvical characteristics of important timber trees in accordance with the outline furnished June 15, 1906. The report should include information upon the condition of all the cut-over areas which the forest assistant has had a chance to examine.

PLANTING.

Reports in duplicate should be submitted by assistants in charge of planting stations on or before the dates designated to the supervisor, who will approve and forward one copy to the Forester.

July 15: Seed record—Form 977.

December 1: Tabulated card summaries of nursery and planting operations—Forms 131 to 135, inclusive.

December 1: Condensed progress report of station operations from July 1 to December 1, prepared according to the outline in use at stations.

June 1: Tabulated card summaries of nursery and planting operations—Forms 131 to 135, inclusive.

June 1: Nursery stock distribution report—Form 150.

June 1: Complete annual report treating in detail the work of

the current fiscal year, prepared according to the outline in use at stations.

The supervisors should keep all reports, cost-keeping records, photographs, or publications dealing with nursery and planting at the planting stations whenever such stations are not maintained at the supervisor's headquarters.

GRAZING.

Annual reports upon grazing business and condition of the range, to be mailed within thirty days after the close of the grazing season, and not later than December 15, covering the following points:

General range conditions.—A general statement of amount of rainfall and forage as compared with other years. The condition of the range at the close of the season, and whether or not any portion of it is being injured by overgrazing. The condition of the stock at the time of entering and leaving the Forest. The market conditions in reference to the sale of stock during the season. Matters of general interest concerning the welfare of stock grazing upon the Forest. (Poison, predatory animals, etc.)

Range divisions.—Changes desired in the division of the range into general grazing districts. The division of districts between different kinds of stock or their owners. The closing of areas against sheep, goats, cattle, or horses, for the protection of watersheds or of lands to be reforested. The construction of drift fences for the purpose of effectively dividing or protecting the range. The building of stock-watering reservoirs or the improvement of springs. The distribution of stock upon the range in reference to changes in the number allowed upon districts or divisions. The establishment of driveways and restrictions in their use.

Permit allotments.—Report on the general plan adopted in the approval of grazing applications. The necessity of any special rules in reference to the allotment of grazing. The establishment of protective limits for the benefit of small owners or of maximum limits to prevent range monopoly.

Live-stock associations.—The cooperation of associations, through their advisory boards or otherwise, in matters pertaining to range management. Methods used in settling controversies and adjusting range disputes.

Grazing map.—A map showing the range divisions and drive-ways within the Forest and indicating changes recommended; also showing areas closed or to be closed against grazing any class of stock and areas which have been badly overgrazed.

Recommendations.—Increase or decrease in the number of stock to be grazed on the Forest during the coming season. The distribution of the stock between districts. The period during which grazing should be allowed in different portions of the Forest and for different classes of stock. The prices to be charged for grazing each class of stock. Special rules to meet local conditions.

CORRESPONDENCE.

To facilitate filing, every letter or report from a Forest officer should contain but one subject. Every application, sale, privilege, trespass, improvement, or other transaction identified by an individual name or number must be treated separately.

Never write a letter of transmittal in forwarding any document unless some special statement about it is needed. Indorse the document "Respectfully forwarded to the Forester," add your recommendation, if any is required, sign, and mail, addressing only "The Forester, Forest Service, Washington, D. C."

To maintain the standard of correspondence of the Forest Service the following instructions will be carefully observed:

Use direct, clear-cut language. Avoid unwieldy words where shorter, simpler ones will express the idea equally well. Be concise, but courteous. Avoid laborious statements, the essence of which might well be expressed in half the space.

Very few letters need be longer than one page.

Never use the substance of the letter received as a preamble to the reply. Unless the incoming letter has already been acknowledged and further reference to it is necessary its sub-

ject should not be indicated. Example: "In further reference to your letter O of March 20, concerning the repair of Black Mountain cabin."

For acknowledgments or replies the first sentence should always refer to the initial in the upper left-hand corner of the letter answered, and its date; for example: "In reply to your letter (OL) of March 30:" followed by a colon and a new paragraph.

Except on printed forms, writing must be on one side of the sheet only.

All rangers' correspondence and reports must be in ink or indelible pencil.

Supervisors will conduct all their correspondence in typewriting, except when away from their offices. Machines will be furnished upon requisition.

Letters and reports of subordinates transmitted by a supervisor to the Forester must be originals, not copies made by the supervisor. The supervisor will keep copies when needed for his own records, or, when necessary, request the return of the originals.

All supervisors will register their telegraphic addresses at the nearest telegraph office. In large towns this should be done with both the Western Union and the Postal Telegraph companies. This address, as it counts as part of the message, should consist only of the last name of the supervisor, his headquarters town, and the State or Territory. For example: "Edwards, Metropolis, Wyoming." Whenever this is done the Forester should be notified by mail of the address registered. In communicating with the Washington office by wire address only "Forester, Washington, D. C.," and sign the last name only. Whenever a supervisor leaves his headquarters with no one in charge he should notify his telegraph office of the place where he can be reached by mail when not in direct telegraphic communication. Supervisors need not hesitate to use the wire when important matters demanding quick action arise, but they must make all telegrams as brief as possible.

FILING.

Letters will not be press-copied. A carbon copy will be made of every letter written in the supervisor's office, and attached by a metal fastener to the letter answered. The carbon copy will not be filed until all corrections in the original letter are reproduced upon it, and the name of the signer affixed with rubber stamp or pen and ink. The most recent letters will be filed on top.

If correspondence in one case bears on another, cross reference should be made by notation. When a letter is received which deals with two subjects for each of which there is a file, the letter itself should be filed under one subject and a yellow cross-reference sheet filed under the other.

Standard filing cases have been adopted for Forest headquarters. The record case will consist of four units with top and base. These units will be designated Sections 1, 2, 3, and 4. Section 1 consists of a 4-drawer map unit. Section 2 consists of a 2-drawer vertical unit. Section 3 consists of a 9-drawer correspondence unit. Section 4 consists of a 6-drawer document unit. Additional units (except section 4) will be furnished, when required, on requisition to the Forester.

The library case will consist of three units, which will be designated Sections 5, 6, and 7. Section 5 consists of a cupboard base. Section 6 consists of a 14-drawer (21-compartment) legal-blank unit. Section 7 consists of a bookcase unit.

USE OF FILING CASES.

RECORD FILING CASE.

Section 1 will be used for keeping maps, stationery, etc.

Section 2 will be used for filing documents, correspondence, and other papers relating to designated transactions. Subject guides with printed headings as follows will be used: "Timber sales," "Timber settlements," "Free use," "Special uses," "Claims," "Trespass" "Grazing—cattle and horses," "Grazing—sheep and goats," "Disapproved applications," "Use of

private land," and "Crossing permits." Behind each subject guide will be filed the papers relating to the transactions under that subject. The papers relating to a particular transaction will be kept in a folder, upon the upper left-hand margin of which will be written the proper designation of the transaction. Folders containing papers relating to any subject except grazing will be arranged alphabetically by the name of applicant, trespasser, claimant, or mine, as the case may be. Folders containing papers relating to approved grazing applications will be arranged numerically by the number of application. When warranted by the number of folders under any subject, except approved grazing applications, alphabetical (A to Z) guides may be used. When warranted by the number of folders under grazing, guides with blank tabs may be used to indicate the relative positions of the numbers on the folders.

Section 3 will be used for filing correspondence and reports. One or more drawers will be used for miscellaneous correspondence with the public. This drawer will be supplied with an alphabetical (A to Z) index. Letters relating to a designated transaction do not fall under this head and will be filed in section 2 in the folder containing all papers in the case. One or more drawers will be used for filing National Forest orders and for reports of rangers other than of service, and not relating to a particular designated case, and for copies of special reports to the Forester; no indexes will be furnished for these drawers. One or more of the remaining drawers will be used for filing letters from the Office of the Forester relating to administrative subjects and not to particular designated cases; the others will be used for filing correspondence with rangers and other Forest officers with whom the supervisor carries on a regular correspondence. These drawers will be supplied with special indexes containing 12 blank guides each, upon the tabs of which should be written the subject into which the business of the Forest is divided and the names of the Forest officers.

Section 4. This section will be used for filing rangers' service reports and papers of similar nature, but must not be used to file folded papers.

CARD-RECORD CASE.

The record filing case (section 2) is supplemented by the 2-drawer card-record case. In this the card records will be kept. Subject guide cards with the following printed headings will be used: "Personnel," "Timber sales," "Timber settlements," "Free use," "Special uses," "Claims," "Trespass," "Grazing—cattle and horses," "Grazing—sheep and goats," "Grazing—use of private lands," and "Grazing—crossing permits." All record cards will be filed alphabetically behind their respective subject guide cards. When warranted by the number of cards under any subject, alphabetical (A to Z) guide cards may be used.

LIBRARY CASE.

Section 5 will be used for stationery and office supplies.

Section 6 will be used exclusively for blank forms.

Section 7 will be used as a bookcase for the office library.

TRANSFER CASES.

The 2-drawer vertical unit (section 2) will be supplemented by cardboard transfer cases, which will be without indexes. They will be numbered consecutively in series as used. When a sale, special use, or other transaction is officially closed, the folder containing all the papers will be removed from the file and placed in the last numbered transfer case. Each transfer case will hold from four to ten folders, according to the number of papers and letters involved. The order in which the folders are filed is immaterial, since it will be comparatively easy among so few to find a particular folder if its designation is known. As an index to the closed and transferred cases, the words "Closed ———, Tr. No. ———" will be placed along the top margin of the record card with a rubber stamp. To this will be added in writing the date the folder is transferred and the number of the transfer case.

The drawers for filing correspondence, card records, and reports (section 3) will be supplemented by cardboard transfer

cases. These will be furnished with indexes identical with those in the drawers. When a correspondence drawer becomes so full as to be inconvenient for handling, the entire contents, including the index, will, by means of the metal attachment, be removed bodily from the drawer and placed in a transfer case, from which the empty index has first been removed in a similar manner. The empty index will be inserted in the drawer, which will then be ready for continued use. These transfer cases will also be numbered consecutively in a separate series. The number on the case to which the correspondence is transferred, with the opening and closing dates of the period covered by the correspondence, will be entered in the blank pasted on the bottom of the drawer.

The card-record case will be supplemented by cardboard transfer cases, to which the inclosed transaction will be transferred.

SYSTEM OF IDENTIFYING TRANSACTIONS.

National Forest transactions, to facilitate their identification and the filing of records, will be divided into the following subjects: Timber sales, free use, special uses, claims, trespass, and grazing.

For the complete identification of each particular transaction under these subjects the following system of designations will be used in filling in printed forms and card records, referring to the particular transaction in letters, and labeling document folders for section 2 of the supervisors' filing cases.

Under timber sales.—By name of applicant, subject, date of application, and name of Forest. Thus:

“John Jones, timber sale, February 15, 1906, Shawnee National Forest.”

Under timber settlements.—By the name of the applicant, subject, kind of use, date of application, and name of Forest. Thus:

“John Jones, timber settlement, reservoir, February 15, 1906, Shawnee National Forest.”

“John Jones, timber settlement, reservoir (Interior), February 15, 1906, Shawnee National Forest.”

Under free use.—By name of applicant, subject, date of application, and name of Forest. Thus:

“John Jones, free use, February 15, 1906, Shawnee National Forest.”

Under special uses.—By name of applicant, name of use, date of application, and name of Forest. Thus:

“John Jones, sawmill, February 15, 1906, Shawnee National Forest.”

“John Jones, reservoir, February 15, 1906, Shawnee National Forest.”

“Great Northern Lumber Company, railway, February 15, 1906, Shawnee National Forest.”

The name of any other special use applied for will be used instead of those given above.

In designating rights granted by the Secretary of the Interior the word “Interior” will be inserted in parentheses after the name of the right. Thus:

“John Jones, reservoir (Interior), February 15, 1906, Shawnee National Forest.”

On the folder and record card (Form 619) the word “Interior” will be written in the upper right-hand corner.

Under trespass.—By name of trespasser, kind of trespass, date of “report of trespass,” and name of the Forest. Thus:

“John Jones, timber trespass, February 15, 1907, Shawnee National Forest.”

“John Jones, grazing trespass, February 15, 1907, Shawnee National Forest.”

Any trespass other than timber, fire, and grazing will be designated as a “special use trespass.”

Under claims.—By name of claimant or mine, kind of claim, and name of Forest. Thus:

“John Jones, homestead settlement, Garfield land district, Shawnee National Forest.”

“John Jones, homestead entry 35412, final certificate 7896, Garfield land district, Shawnee National Forest.”

“John Jones, desert-land entry 53124, final certificate 9867, Garfield land district, Shawnee National Forest.”

“John Jones, timber and stone, sworn statement 14352, entry 8697, Garfield land district, Shawnee National Forest.”

“John Jones, National Forest lieu selection 41345, Garfield land district, Shawnee National Forest.”

“John Jones, soldiers’ additional application, final certificate 8769, Garfield land district, Shawnee National Forest.”

“John Jones, coal declaratory statement 34125, entry 25143, Garfield land district, Shawnee National Forest.”

“Kitty B. placer claim, John Jones, mineral location, Garfield land district, Shawnee National Forest.”

“Kitty B. placer claim, John Jones, mineral application 324, mineral entry 452, Garfield land district, Shawnee National Forest.”

“Golden Gate lode claim, John Jones, mineral location, Garfield land district, Shawnee National Forest.”

“Golden Gate lode claim, John Jones, mineral application 324, mineral entry 254, Garfield land district, Shawnee National Forest.”

Forest officers will designate claims according to their status at the time of investigation or report, and always use the proper land office numbers when known. They will complete the record on cards and folders from time to time as such numbers become known. Land office abbreviations may be used.

Under grazing, approved permits.—By name of applicant, subject, number of application, and name of Forest. Thus:

“John Jones, grazing, No. 10, Shawnee National Forest.”

Under grazing, disapproved applications.—By name of applicant, subject, and name of Forest. Thus:

“John Jones, disapproved, grazing, Shawnee National Forest.”

Under grazing and use of private land.—Name of applicant, subject, and name of Forest. Thus:

“John Jones, use of private land, Shawnee National Forest.”

Under crossing permits.—Name of applicant, subject, and name of Forest. Thus:

“John Jones, crossing permit, Shawnee National Forest.”

In Forests where both cattle and horses, and sheep and goats, are allowed, the cattle and horse applications will begin each season with No. 1, and the sheep and goat applications with a number, such as 301, 501, or 1001, which is certain to be above the highest number given any cattle and horse grazing application for the same Forest.

APPENDIX.

STATUTES.

Creation and Administration of National Forests.

CREATION AND MODIFICATION.

ACT OF MARCH 3, 1891 (26 STAT., 1095).

[1103] SEC. 24. That the President of the United States may, from time to time, set apart and reserve, in any State or Territory having public land bearing forests, in any part of the public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as public reservations, and the President shall, by public proclamation, declare the establishment of such reservations and the limits thereof.

Creation of National Forests.

ACT OF JUNE 4, 1897 (30 STAT., 11).

[34] To remove any doubt which may exist pertaining to the authority of the President (in regard to the National Forests) the President of the United States is hereby authorized and empowered to revoke, modify, or suspend any and all such Executive orders and proclamations or any part thereof, from time to time, as he may deem best for the public interest. * * *

President empowered to revoke, modify, or suspend Executive orders or proclamations.

[36] The President is hereby authorized at any time to modify any Executive order that has been or may hereafter be made establishing any forest reserve, and by such modification may reduce the area or change the boundary lines of such reserve, or may vacate altogether any order creating such reserve.

President may modify any Executive order, etc.

ACT OF MARCH 4, 1907 (34 STAT., 1256).

[1271] Hereafter no forest reserve shall be created, nor shall any additions be made to one heretofore created within the limits of the States of Oregon, Washington, Idaho, Montana, Colorado, or Wyoming, except by act of Congress.

No new Forests to be created in certain States.

ADMINISTRATION.

ACT OF JUNE 4, 1897 (30 STAT., 11).

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[34]^a All public lands heretofore designated and reserved by the President of the United States under the provisions of the act approved March [35] third, eighteen hundred and ninety-one, the orders for which shall be and remain in full force and effect, unsuspended and unrevoked, and all public lands that may hereafter be set aside and reserved as public forest reserves under said act, shall be as far as practicable controlled and administered in accordance with the following provisions:

No public forest reservation shall be established, except to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States; but it is not the purpose or intent of these provisions, or of the act providing for such reservations, to authorize the inclusion therein of lands more valuable for the mineral therein, or for agricultural purposes, than for forest purposes.

The Secretary of the Interior shall make provisions for the protection against destruction by fire and depredations upon the public forests and forest reservations which may have been set aside or which may be hereafter set aside under the said act of March third, eighteen hundred and ninety-one, and which may be continued; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction; and any violation of the provisions of this act or such rules and regulations shall be punished as is provided for in the act of June fourth, eighteen hundred and eighty-eight, amending section fifty-three hundred and eighty-eight of the Revised Statutes of the United States. (See page 199.)

National Forests, when to be established.

Provisions for protection against fire, etc.

Rules and regulations.

Penalty.

Vol. 25, p. 166.

R. S., sec. 5388, p. 1044.

^aThe stars indicate the omission of the timber sale advertisement provisions of this act which were modified by the act of June 6, 1900 (31 Stat., 661), and repealed by the Agricultural appropriation act of June 30, 1906 (34 Stat., 684).

For the purpose of preserving the living and growing timber and promoting the younger growth on forest reservations, the Secretary of the Interior, under such rules and regulations as he shall prescribe, may cause to be designated and appraised so much of the dead, matured, or large growth of trees found upon such forest reservations as may be compatible with the utilization of the forests thereon, and may sell the same for not less than the appraised value in such quantities to each purchaser as he shall prescribe, to be used in the State or Territory in which such timber reservation may be situated, respectively; but not for export therefrom (but see p. 176).

[Before such sale shall take place notice thereof shall be given by the Commissioner of the General Land Office, for not less than thirty days, by publication in one or more newspapers of general circulation, as he may deem necessary, in the State or Territory where such reservation exists: *Provided, however,* That in cases of unusual emergency the Secretary of the Interior may, in the exercise of his discretion, permit the purchase of timber and cord wood in advance of advertisement of sale at rates of value approved by him and subject to payment of the full amount of the highest bid resulting from the usual advertisement of sale: *Provided further,* That he may, in his discretion, sell without advertisement, in quantities to suit applicants, at a fair appraisement, timber and cord wood not exceeding in value one hundred dollars stumpage: *And provided further,* That in cases in which advertisement is had and no satisfactory bid is received, or in cases in which the bidder fails to complete the purchase, the timber may be sold, without further advertisement, at private sale, in the discretion of the Secretary of the Interior, at not less than the appraised valuation, in quantities to suit purchasers,]^a

Timber.
Appraisal and sale of dead, etc.
Sale of timber. Advertisement.
Provisos.
Emergency, etc., sales in advance of advertisement.
Private sale where bid unsatisfactory, etc.
Payments, how made.

of sale at rates of value approved by him and subject to payment of the full amount of the highest bid resulting from the usual advertisement of sale: *Provided further,* That he may, in his discretion, sell without advertisement, in quantities to suit applicants, at a fair appraisement, timber and cord wood not exceeding in value one hundred dollars stumpage: *And provided further,* That in cases in which advertisement is had and no satisfactory bid is received, or in cases in which the bidder fails to complete the purchase, the timber may be sold, without further advertisement, at private sale, in the discretion of the Secretary of the Interior, at not less than the appraised valuation, in quantities to suit purchasers,]^a payments for such timber to be made to the receiver of the local land office of the district wherein said timber may be sold, under such rules and regulations as the Secretary of the Interior may prescribe; and the moneys arising therefrom shall be accounted for by the receiver of such land office to the Commissioner of the General Land Office, in a separate account, and

^aThe matter in brackets is taken bodily from the act of June 6, 1900 (31 Stat., 661), and, since the passage of the Agricultural appropriation act of June 30 1906 (34 Stat., 684), is the timber-sale law for all National Forests. (See p. 174.)

shall be covered into the Treasury. Such timber before being sold, shall be marked and designated, and shall be cut and removed under the supervision of some person appointed for that purpose by the Secretary of the Interior, not interested in the purchase or removal of such timber nor in the employment of the purchaser thereof. Such supervisor shall make report in writing to the Commissioner of the General Land Office and to the receiver in the land office in which such reservation shall be located of his doings in the premises.

The Secretary of the Interior may permit, under regulations to be prescribed by him, the use of timber and stone found upon such reservations, free of charge, by bona fide settlers, miners, residents, and prospectors for minerals, for firewood, fencing, buildings, mining, prospecting, and other domestic purposes, as may be needed by such persons for such purposes; such timber to be used within the State or Territory, respectively, where such reservations may be located.

[36] Nothing herein shall be construed as prohibiting the egress or ingress of actual settlers residing within the boundaries of such reservations, or from crossing the same to and from their property or homes; and such wagon roads and other improvements may be constructed thereon as may be necessary to reach their homes and to utilize their property under such rules and regulations as may be prescribed by the Secretary of the Interior. Nor shall anything herein prohibit any person from entering upon such forest reservations for all proper and lawful purposes, including that of prospecting, locating, and developing the mineral resources thereof: *Provided*, That such persons comply with the rules and regulations covering such forest reservations.^a

* * * * *

The settlers residing within the exterior boundaries of such forest reservations or in the vicinity thereof, may maintain schools and churches within such reservation, and for that purpose may occupy any part of the said forest reservation, not exceeding two acres for each schoolhouse and one acre for a church.

The jurisdiction, both civil and criminal, over persons within such reservations shall not be affected or changed by reason of the existence of such reservations, except so far as the punishment of offenses against the United States therein is concerned; the intent and meaning of

^aThe stars indicate the omission of the lieu-selection law which was repealed by the act of March 3, 1905 (33 Stat., 1264).

this provision being that the State wherein any such reservation is situated shall not, by reason of the establishment thereof, lose its jurisdiction, nor the inhabitants thereof their rights and privileges as citizens, or be absolved from their duties as citizens of the State.

All waters on such reservations may be used for domestic, mining, milling, or irrigation purposes, under the laws of the State wherein such forest reservations are situated, or under the laws of the United States and the rules and regulations established thereunder.

Upon the recommendation of the Secretary of the Interior, with the approval of the President, after sixty days' notice thereof, published in two papers of general circulation in the State or Territory wherein any forest reservation is situated, and near the said reservation, any public lands embraced within

the limits of any forest reservation which, after due examination by personal inspection of a competent person appointed for that purpose by the Secretary of the Interior shall be found better adapted for mining or for agricultural purposes than for forest usage, may be restored to the public domain. And any mineral lands in any forest reservation which have been or which may be shown to be such, and subject to entry under the existing mining laws of the United States and the rules and regulations applying thereto, shall continue to be subject to such location and entry, notwithstanding any provisions herein contained.

TRANSFER OF NATIONAL FORESTS.

ACT OF FEBRUARY 1, 1905 (33 STAT., 628).

The Secretary of the Department of Agriculture shall, from and after the passage of this act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the act entitled "An act to repeal the timber-culture laws, and for other purposes," approved March third, eighteen hundred and ninety-one, and acts supplemental to and amendatory thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any of such lands.

SEC. 2. That pulp wood or wood pulp manufactured from timber in the district of Alaska may be exported therefrom.

SEC. 3. That forest supervisors and rangers shall be selected, when practicable, from qualified citizens of the States or Territories in which the said reserves, respectively, are situated.

SEC. 4. That rights of way for the construction and maintenance of dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals within and across the forest reserves of the United States are hereby granted to citizens and corporations of the United States for municipal or mining purposes, and for the purposes of the milling and reduction of ores, during the period of their beneficial use, under such rules and regulations as may be prescribed by the Secretary of the Interior, and subject to the laws of the State or Territory in which said reserves are respectively situated.

SEC. 5. That all money received from the sale of any products or the use of any land or resources of said forest reserves shall be covered into the Treasury of the United States and for a period of five years from the passage of this act shall constitute a special fund available, until expended, as the Secretary of Agriculture may direct, for the protection, administration, improvement, and extension of Federal forest reserves.

NOTE.—The Department of Agriculture and the Department of the Interior have concurred in the opinion that the above law divides the jurisdiction over forest reserves as follows: All grants of rights or privileges within forest reserves, which do not affect the title to the land or cloud the fee, are under the jurisdiction of the Secretary of Agriculture. All grants which dispose of title to or give an easement running with the land are under the jurisdiction of the Secretary of the Interior.

AGRICULTURAL APPROPRIATION.

ACT OF JUNE 30, 1906 (34 STAT., 669).

* * * * *

[684] That the forest-reserve special fund provided for in section five of the act approved February first, nineteen hundred and five, entitled "An act providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture," shall continue until otherwise provided by law; but after June thirtieth, nineteen hundred and eight, it shall not be expended except in accordance with specific estimates of expenditures to be made from said fund for the succeeding fiscal year, to be submitted by the Secretary of Agriculture with the estimates of appropriation in the annual Book of Estimates.

* * * * *

[684] Hereafter sales of timber on forest reserves in the State of California shall in every respect conform to the law governing such sales in other States, as set forth in the act of June sixth, nineteen hundred

Timber-sales rules made uniform.

(Thirty-first Statutes at Large, page six hundred and sixty-one);

Deposit of National Forest receipts.

and hereafter all moneys received as deposits to secure the purchase price on the sale of any products or the use of any land or resources of the forest reserves shall be covered into the Treasury in the manner provided by section five of the act of Congress approved February first, nineteen hundred and five, entitled "An act providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture," and the fund created by

Refunds.

that act shall be available, as the Secretary of Agriculture may direct, to make refunds to depositors of money heretofore or hereafter deposited by them in excess of amounts actually due to the United States;

Cooperative contributions.

and hereafter all moneys received as contributions toward cooperative work in forest investigations shall be covered into the Treasury and shall constitute a special fund, which is hereby appropriated and made available until expended, as the Secretary of Agriculture may

Refunds.

direct, for the payment of the expenses of said investigations by the Forest Service and for refunds to the contributors of amounts heretofore or hereafter paid in by them in excess of their share of the cost of said investigations.

ACT MARCH 4, 1907 (34 STAT., 1256).

[1269] GENERAL EXPENSES, FOREST SERVICE: To enable the Secretary of Agriculture to experiment and to make

Experiments and investigations in forestry.

and continue investigations and report on forestry, forest reserves, which shall be known hereafter as national forests, forest fires, and lumbering; to advise the owners of woodlands as to the proper care of the

Timber testing.

same; to investigate and test American timber and timber trees and their uses and methods for the preservative treatment of timber; to seek, through investigations and the planting of native and foreign species, suitable trees for the treeless regions; to erect necessary buildings: *Provided*, That the

National Forests.

cost of any building erected shall not exceed one thousand dollars; to pay all expenses necessary to protect, administer, improve, and extend the national forests; and hereafter officials of the Forest Service designated by the

State stock, game, and fire laws.

Secretary of Agriculture shall, in all ways that are practicable, aid in the enforcement of the laws of the States or Territories with regard to stock, for the prevention and extinguishment of forest fires, and for the protection of fish and game.

To ascertain the natural conditions upon and utilize the national forests; and the Secretary of Agriculture may, in his discretion, permit timber and other forest products cut or removed from the national forests of the United States, except the Black Hills National Forest in South Dakota, to be exported from the State, Territory, or the district of Alaska, in which said forests are respectively situated: *Provided*, That the exportation of dead and insect-infected timber only from said Black Hills National Forest shall be allowed until such [1270] time as the Forester shall certify that the ravages of the destructive insects in said forest are practically checked, but in no case after July first, nineteen hundred and eight; to transport and care for fish and game supplied to stock the national forests or the waters therein; to employ fiscal and other agents, clerks, assistants, and other labor required in practical forestry, in the administration of national forests in the District of Columbia or elsewhere; and hereafter he may dispose of photographic prints (including bromide enlargements), lantern slides, transparencies, blueprints, and forest maps at cost and ten per centum additional, and condemned property or materials under his charge in the same manner as provided by law for other bureaus; to collate, digest, report, illustrate, and print the results of experiments and investigations made by the Forest Service; to purchase law books to an amount not exceeding five hundred dollars, necessary supplies, apparatus, office fixtures, and technical books and technical journals for officers of the Forest Service stationed outside of Washington; and to pay freight, express, telegraph, and telephone charges, and for electric light and power, fuel, gas, ice, washing towels, and traveling and other necessary expenses. * * * And hereafter the employees of the Forest Service outside of the city of Washington may, in the discretion of the Secretary of Agriculture, without additional expense to the Government, be granted leaves of absence not to exceed fifteen days in any one year, which leave may, in exceptional and meritorious cases where such an employee is ill, be extended, in the discretion of the Secretary of Agriculture, not to exceed fifteen days additional in any one year.

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And there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of five hundred thousand dollars, to be expended as the Secretary of Agriculture may direct for the proper and economical administration, protection, and development of

Permanent im-
provements.

Examining Na-
tional Forests.

Export of timber.

Dead and insect-in-
fectd timber, Black
Hills.

Transportation of
fish and game.

Employees.

Sale of photo-
graphs, etc.

Printing.

Purchase of sup-
plies, etc.

Annual leave.

Sick leave.

the national forests, one hundred and twenty-five thousand dollars of which amount is to be immediately available: *Provided*, That hereafter on or before the first day of January of each year the Secretary of Agriculture shall submit to Congress classified and detailed reports of all receipts by the

Reports and estimates.

Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year: *Provided further*,

Deposits in special fund discontinued.

That all money received after July first, nineteen hundred and seven, by or on account of the Forest Service for timber, or from any other source of forest reservation revenue, shall be covered into the Treasury of the United States as a miscellaneous receipt and there is hereby appropriated and made available as the Secretary of Agriculture may direct out of any funds in the Treasury not otherwise

Refunds.

appropriated, so much as may be necessary to make refunds to depositors of money heretofore or hereafter deposited by them to secure the purchase price on the sale of any products or for the use of any land or resources of the national forests in excess of amounts found actually due from them to the United States: *And provided further*,

Ten per cent of receipts to be paid to States and Territories for use of counties.

That ten per centum of all money received from each forest reserve during any fiscal year, including the year ending June thirtieth, nineteen hundred and six, shall be paid at the end thereof by the Secretary of the Treasury to the State or Territory in which said reserve is situated, to be expended as the State or Territorial legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which the forest reserve is situated: *Provided further*, That when any forest [1271] reserve is in more than one State or Territory or county the distributive share to each from the proceeds of said reserve shall be proportional to its area therein: *And provided further*, That there shall not be paid to any State or Territory for any county an amount equal to more than forty per centum of the total income of such county from all other sources: *Provided further*, That hereafter no forest reserve shall be created, nor shall any additions be made to one heretofore created within the limits of the States of Oregon, Washington, Idaho, Montana, Colorado, or Wyoming, except by act of Congress.

TIMBER FOR RECLAMATION SERVICE.

ACT OF FEBRUARY 8, 1905 (33 STAT., 706).

In carrying out the provisions of the national irrigation law approved June seventeenth, nineteen hundred and two, and in constructing works thereunder, the Secretary of the Interior is hereby authorized to use and to permit the use by those engaged in the construction of works under said law, under rules and regulations to be prescribed by him, such earth, stone, and timber from the public lands of the United States as may be required in the construction of such works, and the Secretary of Agriculture is hereby authorized to permit the use of earth, stone, and timber from the forest reserves of the United States for the same purpose, under rules and regulations to be prescribed by him.

Reclamation Service may use material from National Forests.

MINNESOTA NATIONAL FOREST.

NOTE.—Act of June 27, 1902 (32 Stat., 400), provides for the creation of a forest reserve from the ceded Chippewa Indian lands in Minnesota.

MEDICINE BOW NATIONAL FOREST.

NOTE.—By act of March 2, 1907 (Public 185), the city of Boulder, Colo., was granted certain lands within the Medicine Bow National Forest for municipal water supply purposes.

YOSEMITE PARK AND SIERRA FOREST.

ACT OF FEBRUARY 7, 1905 (33 STAT., 702).

Part of the Yosemite National Park added to the Sierra National Forest.

The tracts of lands in the State of California known and described as follows:

* * * * *

[703] are hereby reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States, and set apart as reserve forest lands, subject to all the provisions of the act of Congress approved October first, eighteen hundred and ninety, entitled "An act to set apart certain tracts of land in the State of California as forest reservations:" *Provided*, That all those tracts or parcels of land described in section one of the said act of October first, eighteen hundred and ninety, and not included within the metes and bounds of the land above described, be, and the same are

hereby, included in and made part of the Sierra Forest Reserve:
And provided further, That the Secretary of the Interior may

Secretary of the Interior authorized to charge.

require the payment of such price as he may deem proper for privileges on the land herein segregated from the Yosemite National Park and made a part of the Sierra Forest Reserve accorded under the act approved February fifteenth, nineteen hundred and one, relating to rights of way over certain parks, reservations, and other lands, and other acts concerning rights of way over public lands; and the moneys received from the privileges accorded on the lands herein segregated and included in the Sierra Forest Reserve shall be paid into the Treasury of the United States, to be expended, under the direction of the Secretary of the Interior, in the management, improvement, and protection of the forest lands herein set aside and reserved, which shall hereafter be known as the "Yosemite National Park."

Special fund.

* * * * *

UINTA NATIONAL FOREST.

ACT OF MARCH 3, 1905 (33 STAT., 1048).

[1070] That before the opening of the Uintah Indian Reservation the

President to proclaim addition to the Uinta Nat'l Forest.

President is hereby authorized to set apart and reserve as an addition to the Uintah Forest Reserve, subject to the laws, rules, and regulations governing forest reserves, and subject to the mineral rights granted by the act of Congress of May twenty-seventh, nineteen hundred and two, such portion of the lands within the Uintah Indian Reservation as he considers necessary, and he may also set apart and reserve any reservoir site or other lands necessary to conserve and protect the water supply for the Indians or for general agricultural development, and may confirm such rights to water thereon as have already accrued: *Provided,* That the proceeds from any timber on such addition as may with safety be sold prior to June thirtieth, nineteen hundred and twenty, shall be paid to said Indians in accordance with the provisions of the act opening the reservation.

SAN JUAN NATIONAL FOREST.

NOTE.—Act of March 1, 1907 (34 Stat., 1053), grants certain lands for reservoir purposes in the San Juan National Forest, to the city of Durango, Colorado. In this act it is provided—

[1054] That the Forest Service of the United States Department of Agriculture shall have full power to patrol the said lands and to protect

them from fire and trespass: *Provided further*, That the Forest Service may dispose of the timber upon the said lands, except so much thereof as may be growing within one hundred feet from the margin of any natural or constructed reservoir or of the main creeks within the said boundary flowing into such reservoirs under said additional rules for lumbering, to protect said waters from pollution, as shall be prescribed by the Forester and approved by the mayor of the city of Durango: *And provided further*, That if said city shall fence all or any part of said lands it shall provide practicable gates in such fence at points to be designated by the supervisor of the San Juan National Forest.

Rights Within National Forests.

CONTRACTS NONTRANSFERABLE.

REVISED STATUTES, SECTION 3737.

No contract or order, or any interest therein, shall be transferred by the party to whom such contract or order is given to any other party, and any such transfer shall cause the annulment of the contract or order transferred, so far as the United States are concerned. All rights of action, however, for any breach of such contract by the contracting parties, are reserved to the United States.

RAILROADS.

ACT OF MARCH 3, 1875 (18 STAT., 482).

The right of way through the public lands of the United States is hereby granted to any railroad company duly organized under the laws of any State or Territory, except the District of Columbia, or by the Congress of the United States, which shall have filed with the Secretary of the Interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of one hundred feet on each side of the central line of said road; also the right to take, from the public lands adjacent to the line of said road, material, earth, stone, and timber necessary for the construction of said railroad; also ground adjacent to such right of way for station buildings, depots, machine shops, side tracks, turn-outs, and water stations, not to exceed in amount twenty acres for each station, to the extent of one station for each ten miles of its road.

Right of way for
railroads granted
through public lands.

Width of right of
way.

Station buildings,
etc.

SEC. 2. That any railroad company whose right of way, or whose track or roadbed upon such right of way, passes through any canyon, pass, or defile, shall not prevent any other railroad company from the use and occupancy of said canyon, pass, or defile, for the purposes of its road, in common with the road first located, or the crossing of other railroads at grade. And the location of such right of way through any canyon, pass, or defile shall not cause the disuse of any wagon or other public highway now located therein, nor prevent the location through the same of any such wagon road or highway where such road or highway may be necessary for the public accommodation; and where any change in the location of such wagon road is necessary to permit the passage of such railroad through any canyon, pass, or defile, said railroad company shall, before entering upon the ground occupied by such wagon road, cause the same to be reconstructed at its own expense in the most favorable location, and in as perfect a manner as the original road: *Provided*, That such expenses shall be equitably divided between any number of railroad companies occupying and using the same canyon, pass, or defile.

SEC. 3. That the legislature of the proper Territory may provide for the manner in which private lands and possessory claims on the public lands of the United States may be condemned; and, where such provision shall not have been made, such condemnation may be made in accordance with section three of the act entitled "An act [to amend an act entitled an act] to aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean, and to secure to the Government the use of the [483] same for postal, military, and other purposes, approved July first, eighteen hundred and sixty-two," approved July second, eighteen hundred and sixty-four.

SEC. 4. That any railroad company desiring to secure the benefits of this act shall, within twelve months after the location of any section of twenty miles of its road, if the same be upon surveyed lands, and, if upon unsurveyed lands, within twelve months after the survey thereof by the United States, file with the register of the land office for the district where such land is located a profile of its road; and, upon approval thereof by the Secretary of the Interior, the same shall be noted upon the plats in said office; and thereafter all such lands over which such right of way shall pass shall be disposed of subject to such right of way: *Provided*, That if any section of said road shall not be completed within five years after the location of said section, the rights herein granted shall be forfeited as to any such uncompleted section of said road.

Joint use of canyon, pass, or defile.

Condemnation over private lands and possessory claims.

Filing of map.

Surveyed and unsurveyed lands.

Approval.

Forfeiture.

SEC. 5. That this act shall not apply to any lands within the limits of any military, park, or Indian reservation, or other lands specially reserved from sale, unless such right of way shall be provided for by treaty stipulation or by act of Congress heretofore passed.

SEC. 6. That Congress hereby reserves the right at any time to alter, amend, or repeal this act, or any part thereof.

ACT OF MARCH 3, 1899 (30 STAT., 1214).

[1233] In the form provided by existing law, the Secretary of the Interior may file and approve surveys and plats of any right of way for a wagon road, railroad, or other highway over and across any forest reservation or reservoir site when in his judgment the public interests will not be injuriously affected thereby.

IRRIGATION.

ACT OF MARCH 3, 1891 (26 STAT., 1095).^a

* * * * *

[1101] SEC. 18. That the right of way through the public lands and reservations of the United States is hereby granted to any canal or ditch company formed for the purpose of irrigation and duly organized under the laws of any State or Territory, which shall have filed, or may hereafter file, with the Secretary of the Interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of the ground occupied by the water of the reservoir and of the canal and its laterals, and fifty feet on each side of the marginal limits thereof; also the right to take, from the public lands adjacent to the line of the canal or ditch, material, earth, and stone necessary for the construction of such canal or ditch: *Provided*, That [1102] no such right of way shall be so located as to interfere with the proper occupation by the Government of any such reservation, and all maps of location shall be subject to the approval of the department of the Government having jurisdiction of such reservation, and the privilege herein granted shall not be construed to interfere with the control of water for irrigation and other purposes under authority of the respective States or Territories.

^a This act was amended by act of May 11, 1898 (30 Stat., 404), sec. 2, quoted at p. 184.

SEC. 19. That any canal or ditch company desiring to secure the benefits of this act shall, within twelve months after the location of ten miles of its canal, if the same be upon surveyed lands, and if upon unsurveyed lands, within twelve months after the survey thereof by the United States, file with the register of the land office for the district where such land is located a map of its canal or ditch and reservoir; and upon the approval thereof by the Secretary of the Interior the same shall be noted upon the plats in said office, and thereafter all such lands over which such rights of way shall pass shall be disposed of subject to such right of way. Whenever any person or corporation, in the construction of any canal, ditch, or reservoir, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

SEC. 20. That the provisions of this act shall apply to all canals, ditches, or reservoirs heretofore or hereafter constructed, whether constructed by corporations, individuals, or association of individuals, on the filing of the certificates and maps herein provided for. If such ditch, canal, or reservoir has been or shall be constructed by an individual or association of individuals, it shall be sufficient for such individual or association of individuals to file with the Secretary of the Interior, and with the register of the land office where said land is located, a map of the line of such canal, ditch, or reservoir, as in case of a corporation, with the name of the individual owner or owners thereof, together with the articles of association, if any there be. Plats heretofore filed shall have the benefits of this act from the date of their filing, as though filed under it: *Provided*, That if any section of said canal or ditch shall not be completed within five years after the location of said section, the rights herein granted shall be forfeited as to any uncompleted section of said canal, ditch, or reservoir, to the extent that the same is not completed at the date of

the forfeiture.

SEC. 21. That nothing in this act shall authorize such canal or ditch company to occupy such right of way except for the purpose of said canal or ditch, and then only so far as may be necessary for the construction, maintenance, and care of said canal or ditch.

ACT OF MAY 11, 1898 (30 STAT., 404).

* * * * *

SEC. 2. That the rights of way for ditches, canals, or reservoirs heretofore or hereafter approved under the provisions of sections eighteen, nineteen, twenty, and twenty-one of the act entitled "An act to repeal timber-culture laws, and for other purposes," approved March third, eighteen hundred and ninety-one, may be used for purposes of a public nature; and said rights of way may be used for purposes of water transportation, for domestic purposes, or for the development of power, as subsidiary to the main purpose of irrigation.

Use for subsidiary purposes.

MUNICIPAL AND MINING.

ACT OF FEBRUARY 1, 1905 (33 STAT., 628).

* * * * *

SEC. 4. That rights of way for the construction and maintenance of dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals, within and across the forest reserves of the United States, are hereby granted to citizens and corporations of the United States for municipal or mining purposes, and for the purposes of the milling and reduction of ores, during the period of their beneficial use, under such rules and regulations as may be prescribed by the Secretary of the Interior, and subject to the laws of the State or Territory in which said reserves are respectively situated.

Mining and municipal rights of way.

* * * * *

MEDICINAL SPRINGS.

ACT OF FEBRUARY 28, 1899 (30 STAT., 908).

The Secretary of the Interior * * * is hereby authorized, under such rules and regulations as he from time to time may make, to rent or lease to responsible persons or corporations applying therefor suitable spaces and portions of ground near, or adjacent to, mineral, medicinal, or other springs, within any forest reserves established within the United States, or hereafter to be established, and where the public is accustomed or desires to frequent, for health or pleasure, for the purpose of erecting upon such leased ground sanitariums or hotels, to be opened for the reception of the public. And he is further authorized to make such regulations, for the convenience of people visiting such springs, with reference to spaces and

Pleasure and health resorts.

locations, for the erection of tents or temporary dwelling houses to be erected or constructed for the use of those visiting such springs for health or pleasure. And the Secretary of the Interior is authorized to prescribe the terms and duration and the compensation to be paid for the privileges granted under the provisions of this act.

Compensation provided for. SEC. 2. All funds arising from the privileges granted hereunder shall be covered into the Treasury of the United States as a special fund, to be expended in the care of public forest reservations.

Special fund for care of National Forests.

ELECTRICITY AND WATER.

ACT OF FEBRUARY 15, 1901 (31 STAT., 790).

The Secretary of the Interior * * * is authorized and empowered, under general regulations to be fixed by him, to permit the use of rights of way through the public lands, forest and other reservations of the United States, and the Yosemite, Sequoia, and General Grant national parks, [791] California, for electrical plants, poles, and lines for the generation and distribution of electrical power, and for telephone and telegraph purposes, and for canals, ditches, pipes and pipe lines, flumes, tunnels, or other water conduits, and for water plants, dams and reservoirs used to promote irrigation or mining or quarrying, or the manufacturing or cutting of timber and lumber, or the supplying of water for domestic, public, or any other beneficial uses to the extent of the ground occupied by such canals, ditches, flumes, tunnels, reservoirs, or other water conduits or water plants, or electrical or other works permitted hereunder, and not to exceed fifty feet on each side of the marginal limits thereof, or not to exceed fifty feet on each side of the center line of such pipes and pipe lines, electrical, telegraph, and telephone lines and poles, by any citizen, association, or corporation of the United States, where it is intended by such to exercise the use permitted hereunder or any one or more of the purposes herein named: *Provided*, That such permits shall be allowed within or through any of said parks or any forest, military, Indian, or other reservation only upon the approval of the chief officer of the Department under whose supervision such park or reservation falls and upon a finding by him that the same is not incompatible with the public interest: *Provided further*, That all permits given hereunder for telegraph and telephone purposes shall be subject to the provisions of title sixty-five of the Revised Statutes of

Licenses to be granted within National Forests.

Width of right of way.

Licenses must not be incompatible with the public interest.

Telegraph and telephone.

the United States, and amendments thereto, regulating rights of way for telegraph companies over the public domain: *And provided further*, That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor in his discretion, and shall not be held to confer any right, or easement, or interest in, to, or over any public land, reservation, or park.

Licenses revocable and confer no easement.

EDISON ELECTRIC COMPANY.

ACT OF MAY 1, 1906 (34 STAT., 163).

Upon the conditions herein named the Edison Electric Company, a corporation existing under the laws of the State of Wyoming, and engaged in generating and distributing electric energy for use by municipalities and the public generally for lighting and power purposes, is hereby granted a permit, the duration of which shall be fixed by the Secretary of the Interior immediately after the passage of this act, revocable during the term fixed by said Secretary only in the manner and for the causes hereinafter specified, to occupy and use lands, to be designated in the manner hereinafter specified, within the San Bernardino, Sierra, and San Gabriel forest reserves, in the State of California, for canals, conduit lines, pole lines, power houses, diverting dams, necessary grounds to be submerged above the diverting dams, and necessary buildings and structures for the water-power plants hereinafter described, for the generation, transmission, and distribution of electrical power, namely:

Rights of way granted to Edison Electric Company.

power purposes, is

Duration of permit.

* * * * *

[166] Permits for the construction of each of the foregoing power plants having been heretofore granted by the Interior or Agricultural Departments.

SEC. 2. That the ground covered by the permit hereby granted shall include fifty feet on each side of the center of said canals or conduit lines and on each side of said pole lines, or so much thereof as may be actually necessary for their installation, maintenance, and use, and the ground actually occupied by and necessary for power houses, diverting dams, and necessary buildings and structures to be used in connection with the operation and maintenance of said water-power plants, together with fifty feet on each side of the marginal limits of all of such buildings and structures, or such portion of said fifty feet as may be actually necessary for the efficient operation and maintenance of said power plants, dams, and other structures; also the right to submerge and flood at the intake of each of said power plants within said forest reserves, not to exceed thirty acres in each case, such area only as may be actually

Width of right of way.

necessary to divert the water into the several canal or conduit lines for said several power plants.

SEC. 3. That within six months after the passage of this act the Edison Electric Company shall file with the register of the United States land office for the district where said power plants are located, and

Maps to be filed.

with the Forester of the Department of Agriculture, a map and such copies thereof as the Secretary of the Interior may prescribe, showing separately as to each power plant the ground occupied or proposed to be occupied by such canals or conduit lines, pole lines, power houses, and other buildings and structures used in connection with said electrical power plants. These maps shall show the dimensions of each building and structure and each diverting dam, and the areas which it will be necessary to submerge at the point of intake of each power plant and, after the filing of said maps, all lands covered by this permit as shown on the maps, or to be occupied by such buildings and structures as shown, together with such portion of fifty feet on each side of the marginal limits thereof as may be actually necessary for the operation of the power plants, and such land as may be submerged by the construction and operation of said power plants shall, when disposed of by the Government, be disposed of subject to the rights hereby granted unless said rights shall have terminated or shall have been revoked as herein provided prior to such disposal.

SEC. 4. That said company shall conform to all regulations adopted

Timber destroyed to be paid for.

or prescribed by the Secretary of Agriculture or the Secretary of the Interior governing said forest reserves, or the use or the users thereof, and shall not take, cut, or destroy any timber within the forest reserves except such as it may be actually necessary to remove to construct its power plants and the structures pertaining thereto, and it shall be required to pay to the proper officer of the Forest Service the full value of all timber and wood cut, used, or destroyed by it within the forest reserves.

SEC. 5. That the privileges herein granted shall not be construed

Permit not to interfere with irrigation.

to interfere with the control of water for irrigation and other purposes under laws of the United States or of the State of California.

SEC. 6. That no private right, title, or interest owned by any person, persons, or corporation in such forest reserves shall be interfered with or abridged, except

Private rights protected.

with the consent of the owner or owners, or by due process of law and just compensation to said owner or owners.

SEC. 7. That if the said permittee shall fail to consummate and

Forfeiture for failure to complete.

put in operation the said power plant specified in subdivision (f) of section one hereof within two years from the date of the passage of this act, or the power plant specified in subdivisions (g), (h), and (i) of section [167] one hereof within five years from the passage of this

act; then as to each of said power plants not completed and put in operation within the time herein limited this permit shall be deemed to be revoked without judicial or other proceeding; and a failure during any year after completion to operate any power plant provided for in this act for a total time of ninety days in such year shall operate as a like revocation of this permit as to such plant or plants.

SEC. 8. That the enjoyment of the permit hereby granted shall be subject at all times to all laws relating to the forest reserves and to all rules and regulations authorized and established thereunder, and that for infraction of such laws, rules, or regulations the owner or user of said permit shall be subject to all fines and penalties imposed thereby, and shall also be liable in a civil action for all damages that may accrue from such breach, and that for any continued infraction of such laws, rules, or regulations, or failure to pay any amount due the Forest Service from said company within sixty days of notice thereof, the Secretary of the Department of the Interior may, upon request of the Secretary of Agriculture, after due notice and hearing, revoke and vacate this permit: *Provided*, That the transfer of any lands from the jurisdiction of one Department to that of another shall in no wise affect this permit, but the power hereby vested in the Secretary shall, upon such transfer, be deemed to be transferred with the land.

SEC. 9. That the said company shall pay annually in advance to the proper officer of the Forest Service, as compensation for the privileges hereby granted, such reasonable sum as the Secretary of Agriculture may fix from year to year, and shall pay for wood or timber cut, removed, or destroyed as fast as the value thereof may be ascertained and charged by the Forester: *Provided*, That the Secretary of Agriculture, his agents and employees, and all officers of the Forest Service, shall have free and unrestricted access in, through, and across all lands and structures covered by said permit in the performance of their official duties, and the Secretary in charge of forest reserves may construct or permit to be constructed in, through, or across any land covered by said permit roads or trails, public or otherwise, or other means of transportation, not inconsistent with the enjoyment of the permit hereby granted: *Provided further*, That the Edison Electric Company shall, under penalty of immediate forfeiture of the permit hereby granted, when requested to do so, assist the forest officers in fighting fire, and shall furnish any men under its employ necessary for that purpose, and shall otherwise assist to the extent of its power in protecting the forest reserves and maintaining good order upon them.

Subject to National Forest laws, rules, and regulations.

May be revoked.

Annual charge for permit.

Right of access to members of Forest Service.

Company to assist in fighting fire.

SEC. 10. That Congress shall have power at any time to amend, modify, or repeal this act.

HOMESTEADS IN YELLOWSTONE NATIONAL FOREST.

ACT OF MARCH 15, 1906 (34 STAT., 62).

The general provisions of the homestead laws of the United States be, and the same are hereby, extended to and over the surveyed lands in townships forty-eight, forty-nine, and fifty, and ranges one hundred and five and one hundred and six, within the Yellowstone Forest Reserve, and the said lands shall be subject to entry ninety days after the passage of this act, within which ninety-day period the Secretary of Agriculture may set aside such portions of said lands as were not occupied by a bona fide settler January first, nineteen hundred and six, not to exceed in the aggregate one [63] hundred and sixty acres, as may be necessary for forest-reserve administrative purposes, which lands so set aside shall not be subject to settlement entry or location during the life of the forest reserve: *Provided*, That the commutation clause of the homestead laws shall not apply to the said lands, and any bona fide settler who made settlement on said lands prior to January first, nineteen hundred and six, and who had prior to that time lost or exercised his homestead right, may enter and perfect title to the lands settled upon by him as though his homestead right had not been lost or exercised, upon the payment of the sum of one dollar and twenty-five cents per acre for the land included in his entry at the time of making final proof.

AGRICULTURAL SETTLEMENT.

ACT OF JUNE 11, 1906 (34 STAT., 233).

The Secretary of Agriculture may, in his discretion, and he is hereby authorized, upon application or otherwise, to examine and ascertain as to the location and extent of lands within permanent or temporary forest reserves, except the following counties in the State of California: Inyo, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, and San Diego, which are chiefly valuable for agriculture, and which, in his opinion, may be occupied for agricultural purposes without injury to the forest reserves, and which are not needed for public purposes, and may list and describe the same by metes and bounds, or otherwise, and file the lists and descriptions with the Secretary of the Interior, with the request that the said lands be opened to entry in accordance with the provisions of the homestead laws and this act.

Upon the filing of any such list or description the Secretary of the Interior shall declare the said lands open to homestead settlement and entry in tracts not exceeding one hundred and sixty acres in area and not exceeding one mile in length at the expiration of sixty days from the filing of the list in the land office of the district within which the lands are located, during which period the said list or description shall be prominently posted in the land office and advertised for a period of not less than four weeks in one newspaper of general circulation published in the county in which the lands are situated: *Provided*, That any settler actually occupying and in good faith claiming such lands for agricultural purposes prior to January first, nineteen hundred and six, and who shall not have abandoned the same, and the person, if qualified to make a homestead entry, upon whose application the land proposed to be entered was examined and listed, shall, each in the order named, have a preference right of settlement and entry: *Provided further*, That any entryman desiring to obtain patent to any lands described by metes and bounds entered by him under the provisions of this act shall, within five years of the date of making settlement, file, with the required proof of residence and cultivation, a plat and field notes of the lands entered, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of such lands, which shall be distinctly marked by monuments on the ground, and by posting a copy of such plat, together with a notice of the time and place of offering proof, in a conspicuous place on the land embraced in such plat during the period prescribed by law for the publication of his notice of intention to offer proof, and that a copy of such plat and field notes shall also be kept posted in the office of the register of the land office for the land district in which such lands are situated for a like period; and further, that any agricultural lands within forest reserves may, at the discretion of the Secretary, be surveyed by metes and bounds, and that no lands entered under the provisions of this act shall be patented under the commutation provisions of the home[234]stead laws, but settlers, upon final proof, shall have credit for the period of their actual residence upon the lands covered by their entries.

Secretary of the Interior shall open such lands to settlement.

Advertisement.

Preference rights of settlement and entry.

Surveys by metes and bounds.

Posting notices.

Secretary may survey by metes and bounds.

Entries may not be commuted.

SEC. 2. That settlers upon lands chiefly valuable for agriculture within forest reserves on January first, nineteen

Additional homestead right given to actual settlers prior to January 1, 1906.

hundred and six, who have already exercised or lost their homestead privilege, but are otherwise competent to enter lands under the homestead laws, are hereby granted an additional homestead

right of entry for the purposes of this act only, and such settlers must otherwise comply with the provisions of the homestead law, and in addition thereto must pay two dollars and fifty cents per acre for lands entered under the provisions of this section, such payment to be made at the time of making final proof on such lands.

SEC. 3. That all entries under this act in the Black Hills Forest

Quartz and lode mining laws.

Reserve shall be subject to the quartz or lode mining laws of the United States, and the laws and regulations permitting the location, appropriation,

and use of the waters within the said forest reserves for mining, irrigation, and other purposes; and no titles acquired to agricultural lands in said Black Hills Forest Reserve under this act shall vest in

Restriction on water rights.

the patentee any riparian rights to any stream or streams of flowing water within said reserve; and that such limitation of title shall be expressed

in the patents for the lands covered by such entries.

SEC. 4. That no homestead settlements or entries shall be allowed in that portion of the Black Hills Forest Reserve

Lawrence and Pennington counties excepted.

in Lawrence and Pennington counties, in South Dakota [except the following described townships in the Black Hills Forest Reserve, in Pennington

County, to wit: Townships one north, one east; two north, one east; one north, two east; two north, two east; one south, one east; two south, one east; one south, two east; and two south, two east, Black Hills meridian,^a] except to persons occupying lands therein prior

Actual settlers prior to January 1, 1906, excepted.

to January first, nineteen hundred and six, and the provisions of this act shall apply to the said counties in said reserve only so far as is necessary to give and perfect title of such settlers or occu-

pants to lands chiefly valuable for agriculture therein occupied or claimed by them prior to the said date, and all homestead entries under this act in said counties in said reserve shall be described by metes and bounds survey.

SEC. 5. That nothing herein contained shall be held to authorize any future settlement on any lands within forest

Settlement before opening is trespass.

reserves until such lands have been opened to settlement as provided in this act, or to in any

way impair the legal rights of any bona fide homestead settler who has or shall establish residence upon public lands prior to their inclusion within a forest reserve.

^aThe words within brackets are from the Act of February 8, 1907 (34 Stat., 883).

TEMPORARY LEAVES OF ABSENCE FOR HOMESTEAD SETTLERS.

JOINT RESOLUTION OF JANUARY 18, 1907 (34 STAT., 1419).

Homestead settlers upon the public domain in North Dakota, South Dakota, Wyoming, Minnesota, Idaho,^a Washington,^a and Montana are hereby granted a leave of absence from their land for a period of three months from the date of the approval of this resolution: *Provided*, That the period of actual absence under this resolution shall not be deducted from the full time of residence required by law.

EXTENSION OF TIME.

JOINT RESOLUTION OF FEBRUARY 2, 1907 (34 STAT., 1421).

All persons who made homestead entry in the States of North Dakota, South Dakota, Idaho, Minnesota, Montana, Washington, and Wyoming, where the period in which they were, or are, required by law to make entry under such declaratory statement or establish residence expired or expires, after December first, nineteen hundred and six, are hereby granted until May fifteenth, nineteen hundred and seven, within which to make such entry or actual settlement and establish residence upon the lands so entered by them: *Provided*, That this extension of time shall not shorten either the period of commutation or of actual residence under the homestead law. * * * * *

COLLECTION OF ANTIQUITIES. NATIONAL MONUMENTS.

ACT OF JUNE 8, 1906 (34 STAT., 225).

Any person who shall appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall, upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

SEC. 2. That the President of the United States is hereby authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part

Historic and prehistoric monuments protected. Trespass.

Objects of historic and scientific interest may be reserved as national monuments.

^aAdded by joint resolution of February 2, 1907 (34 Stat., 1421).

thereof parcels of land the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected: *Provided*, That when such objects are situated upon a tract covered by a bona fide unperfected claim or held in private ownership, the tract, or so much thereof as may be necessary for the proper care and management of the object, may be relinquished to the Government, and the Secretary of the Interior is hereby authorized to accept the relinquishment of such tracts in behalf of the Government of the United States.

Permits for examination, excavation, and collection.
 SEC. 3. That permits for the examination of ruins, the excavation of archæological sites, and the gathering of objects of antiquity upon the lands under their respective jurisdictions may be granted by the Secretaries of the Interior, Agriculture, and War to institutions which they may deem properly qualified to conduct such examination, excavation, or gathering, subject to such rules and regulations as they may prescribe: *Provided*, That the examinations, excavations, and gatherings are undertaken for the benefit of reputable museums, universities, colleges, or other recognized scientific or educational institutions, with a view to increasing the knowledge of such objects, and that the gatherings shall be made for permanent preservation in public museums.

Uniform rules and regulations.
 SEC. 4. That the Secretaries of the Departments aforesaid shall make and publish from time to time uniform rules and regulations for the purpose of carrying out the provisions of this act.

NOTE.—For the uniform rules and regulations, see pp. 230–232.

Trespass and Fire Laws.

TIMBER ON LANDS OF THE UNITED STATES.

REVISED STATUTES, SEC. 2461.

Timber trespass on lands of the United States.
 If any person shall cut, or cause or procure to be cut, or aid, assist, or be employed in cutting, or shall wantonly destroy, or cause or procure to be wantonly destroyed, or aid, assist, or be employed in wantonly destroying any live-oak or red-cedar trees, or other timber standing, growing, or being on any lands of the United States which, in pursuance of any law passed or hereafter to be passed, have been reserved or purchased for the use of the United States, for supplying or furnishing therefrom timber for the Navy of the United States; or if any person shall remove, or cause or procure to be removed, or aid, or assist, or be employed in removing from any such lands which have been reserved or purchased any live-oak or red-cedar trees, or other timber, unless duly authorized so to do, by order, in writing, of a competent officer, and for the use of the Navy of the United States; or

if any person shall cut, or cause or procure to be cut, or aid, or assist, or be employed in cutting any live-oak or red-cedar trees, or other timber on, or shall remove, or cause or procure to be removed, or aid, or assist, or be employed in removing any live-oak or red-cedar trees or other timber, from any other lands of the United States acquired, or hereafter to be acquired, with intent to export, dispose of, use, or employ the same in any manner whatsoever, other than for the use of the Navy of

Penalty. the United States, every such person shall pay a fine not less than triple the value of the trees or timber so cut, destroyed, or removed, and shall be imprisoned not exceeding twelve months.

NOTE.—The penalty here imposed applies to all timber on public lands.

Rulings with regard to timber trespass on public land.

U. S. v. Briggs, 9 How., 351.

Homestead settlers may sell timber cut for cultivation purposes, but not otherwise.

Shiver v. U. S., 159 U. S., 491.

Stone v. U. S., 167 U. S., 178.

Ignorance of the law is no defense.

U. S. v. Murphy, 32 Fed. Rep., 376.

It is error for the court to instruct the jury that the Government has always tacitly permitted the pioneer settlers to cut timber from the public domain.

U. S. v. Mock 149 U. S., 273.

Persons may not carry off timber or other property from public lands and sell it for profit.

U. S. v. Mock 149 U. S., 273.

TIMBER ON MINERAL LAND.

ACT JUNE 3, 1878 (20 STAT., 88).

(This act applies only to unreserved land not within National Forests.)

SEC. 1. All citizens of the United States and other persons, bona fide residents of the State of Colorado, or Nevada, or either of the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, or Montana, and all other mineral districts of the United States, shall be,

May cut timber in mineral districts.

and are hereby, authorized and permitted to fell and remove, for building, agricultural, mining, or other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to entry under existing laws of the United States, except for mineral entry, in either of said States, Territories, or districts of which such citizens or persons may be

at the time bona fide residents, subject to such rules and regulations as the Secretary of the Interior may prescribe for the protection of the timber and of the undergrowth growing upon such lands, and for other purposes: *Provided*, The provisions of this act shall not extend to railroad corporations.

Secretary of the Interior to regulate.
Not to extend to railroads.

NOTE.—By virtue of power granted to the Secretary of the Interior under act of June 3, 1878 (20 Stat.,

Disposal of tops, brush, and other refuse.

88), said Secretary provides, in his "rules and regulations governing the use of timber on the public mineral lands" (29 L. D., 571): "SEC. 9. Persons felling or removing timber under the provisions of this act must utilize all of each tree cut that can be profitably used, and must dispose of the tops, brush, and other refuse in such manner as to prevent the spread of forest fires."

SEC. 2. It shall be the duty of the register and the receiver of any local land office in whose district any mineral land may be

Duty of land officers.

situated to ascertain from time to time whether any timber is being cut or used upon any such lands, except for the purposes authorized by this act, within their respective land districts; and, if so, they shall immediately notify the Commissioner of the General Land Office

Trespass.

of that fact; and all necessary expenses incurred in making such proper examinations shall be paid and allowed such register and receiver in making up their next quarterly accounts.

[89] SEC. 3. Any person or persons who shall violate the provisions of this act, or any rules and regulations in pursuance thereof made by the Secretary of the Interior, shall be deemed

Penalty.

guilty of a misdemeanor, and, upon conviction, shall be fined in any sum not exceeding five hundred dollars, and to which may be added imprisonment for any term not exceeding six months.

NOTE.—The Federal courts have held that this act applies only to the States and Territories of Arizona, Colorado, Idaho, Montana, New Mexico, North Dakota, South Dakota, Utah, and Wyoming.

U. S. v. Smith, 11 Fed., 487.

U. S. v. Benjamin, 21 Fed., 285.

U. S. v. English et al., 107 Fed., 867.

TRESPASS UNDER TIMBER AND STONE ACT.

ACT OF JUNE 3, 1878 (20 STAT., 89).

(This act is not a part of the above act of the same date, and since the act of August 4, 1892, has applied to all the public-land States, but not to the Territories.)

* * * * *

[90] SEC. 4. After the passage of this act it shall be unlawful to cut, or cause or procure to be cut, or wantonly destroy, any timber growing on any lands of the United States [in any public-land States], or remove, or cause to be removed, any timber from said public lands with intent to export or dispose of the same; and no owner, master, or consignee of any vessel, or owner, director, or agent of any railroad, shall knowingly transport the same, or any lumber manufactured therefrom; and any person violating the provisions of this section shall be guilty of a misdemeanor, and, on conviction shall be fined for every such offense a sum not less than one hundred nor more than one thousand dollars: *Provided*, That nothing herein contained shall prevent any miner or agriculturist from clearing his land in the ordinary working of his mining claim, or preparing his farm for tillage, or from taking the timber necessary to support his improvements, or the taking of timber for the use of the United States; and the penalties herein provided shall not take effect until ninety days after the passage of this act.

SEC. 5. Any person prosecuted in * * * [any public-land States] for violating section 2461 of the Revised Statutes of the United States who is not prosecuted for cutting timber for export from the United States, may be relieved from further prosecution and liability therefor upon payment, into the court wherein said action is pending, of the sum of two dollars and fifty cents per acre for all lands on which he shall have cut or caused to be cut timber, or removed or caused to be removed the same: *Provided*, That nothing contained in this section shall be construed as granting to the person hereby relieved the title to said lands for said payment; but he shall have the right to purchase the same upon the same terms and conditions as other persons, as provided hereinbefore in this act: *And further provided*, That all moneys collected under this act shall be covered into the Treasury of the United States. And section 4751 of the Revised Statutes is

Criminal trespass on public timber.

lands with intent

Vessels and railroads not to transport such timber.

Penalty.

Farmers, miners, and officers of the U. S. allowed proper timber use.

Compromise for timber not cut for export from the United States.

No title granted to party relieved.

Fines to be covered into U. S. Treasury. R. S., sec. 4751, repealed for public-land States.

hereby repealed, so far as it relates to [* * * the public-land States].

NOTE 1.—The words in brackets in above section are inserted in place of the words “in said States and Territory,” as ordered by amending act of Aug. 4, 1892 (27 Stat., 348).

NOTE 2.—This section relieves the trespasser from criminal but not from civil liability at common law.

U. S. *v.* Scott, 39 Fed. Rep., 900.

NOTE 3.—The other sections of this act, which is known as the “Timber and stone act,” provide for purchase of public timber land.

CUTTING FOR TURPENTINE.

ACT OF JUNE 4, 1906 (34 STAT., 208).

Every person who shall cut, chip, chop, or box any tree on any lands belonging to the United States or on any lands covered by or embraced in any unperfected settlement, application, filing, entry, selection, or location, made under any law of the United States, for the purpose of obtaining from such tree any pitch, turpentine, or other substance; and every person who shall knowingly encourage, cause, procure, or aid any such tree to be so cut, or who shall buy, trade for, or in any manner acquire any pitch, turpentine, or other substance, or any article or commodity made from any pitch, turpentine, or other substance, when he has knowledge that the same has been so unlawfully obtained from such trees, shall be guilty of a misdemeanor, and upon conviction thereof be punished by a fine of not more than five hundred dollars or by imprisonment not exceeding twelve months, or by both such fine and imprisonment.

Cutting or boxing trees on public or entered land a misdemeanor.

SURVEY MARKS.

ACT OF JUNE 10, 1896 (29 STAT., 321).

[343] Hereafter it shall be unlawful for any person to destroy, deface, change, or remove to another place any section corner, quarter-section corner, or meander post on any Government line of survey, or to cut down any witness tree or any tree blazed to mark the line of a Government survey, or to deface, change, or remove any monument or bench mark of any Government survey. That any person who shall offend against any of the provisions of this paragraph shall be deemed guilty of a misdemeanor, and upon conviction thereof in any court shall be fined not exceeding two hundred and fifty dollars, or be imprisoned not more than one hundred days. All the fines accruing under this paragraph shall be paid into the Treasury, and the informer, in each case of conviction, shall be paid the sum of twenty-five dollars.

Changing or removing survey marks a misdemeanor.

FENCE LAW.

ACT OF FEB. 25, 1885 (23 STAT., 321).

[321] SEC. 1. That all inclosures of any public lands in any State or Territory of the United States, heretofore or to be hereafter made, erected, or constructed by any person, party, association, or corporation, to any of which land included within the inclosure the person, party, association, or corporation making or controlling the inclosure had no claim or color of title made or acquired in good faith, or an asserted right thereto by or under claim, made in good faith with a view to entry thereof at the proper land-office under the general laws of the United States at the time any such inclosure was or shall be made, are hereby declared to be unlawful, and the maintenance, erection, construction, or control of any such inclosure is hereby forbidden and prohibited; and the assertion of a right to the exclusive use and occupancy of any part of the public lands of the United States in any State or any of the Territories of the United States, without claim, color of title, or asserted right as above specified as to inclosure, is likewise declared unlawful, and hereby prohibited.

Inclosure of public land without claim forbidden.

Assertion of exclusive right.

SEC. 2. That it shall be the duty of the district attorney of the United States for the proper district, on affidavit filed with him by any citizen of the United States that section one of this act is being violated, showing a description of the land inclosed with reasonable certainty, not necessarily by metes and bounds nor by Governmental subdivisions of surveyed lands, but only so that the inclosure may be identified, and the persons guilty of the violation, as nearly as may be, and by description, if the name can not on reasonable inquiry be ascertained, to institute a civil suit in the proper United States district or circuit court, or Territorial district court, in the name of the United States, and against the parties named or described who shall be in charge of or controlling the inclosure complained of as defendants; and jurisdiction is also hereby conferred on any United States district or circuit court, or Territorial district court, having jurisdiction over the locality where the land inclosed, or any part thereof, shall be situated, to hear and determine proceedings in equity, by writ of injunction, to restrain violations of the provisions of this act; and it shall be sufficient to give the court jurisdiction if service of original process be had in any civil proceeding on any agent or employee having charge or control of the inclosure; and any suit brought under the provisions of this section shall have precedence for hear-

Civil suit. Affidavit by any citizen.

Injunction.

ing and trial over other cases on the civil docket of the court, and shall be tried and determined at the earliest practicable day.

Summary destruction. In any case, if the inclosure shall be found to be unlawful, the court shall make the proper order, judgment, or decree for the destruction of the inclosure, in a summary way, unless the inclosure shall be removed by the defendant within five days after the order of the court.

[322] **SEC. 3.** That no person, by force, threats, intimidation, or by any fencing or inclosing, or any other unlawful means, shall prevent or obstruct, or shall combine and confederate with others to prevent or obstruct, any person from peaceably entering upon or establishing a settlement or residence on any tract of public land subject to settlement or entry under the public lands laws of the United States, or shall prevent or obstruct free passage or transit over or through the public lands: *Provided*, This section shall not be held to affect the right or title of persons who have gone upon, improved, or occupied said lands under the land laws of the United States, claiming title thereto, in good faith.

SEC. 4. That any person violating any of the provisions hereof, whether as owner, part owner, agent, or who shall aid, abet, counsel, advise, or assist in any violation hereof, shall be deemed guilty of a misdemeanor, and fined in a sum not exceeding one thousand dollars and be imprisoned not exceeding one year for each offense.

SEC. 5. That the President is hereby authorized to take such measures as shall be necessary to remove and destroy any unlawful inclosure of any of said lands, and to employ civil or military force as may be necessary for that purpose.

SEC. 6. That where the alleged unlawful inclosure includes less than one hundred and sixty acres of land, no suit shall be brought under the provisions of this act without authority from the Secretary of the Interior.

SEC. 7. That nothing herein shall affect any pending suits to work their discontinuance, but as to them hereafter they shall be prosecuted and determined under the provisions of this act.

TIMBER ON RESERVED LANDS.

ACT OF JUNE 4, 1888 (25 STAT., 166).

Section fifty-three hundred and eighty-eight of the Revised Statutes of the United States be amended so as to read as follows: "Every person who unlawfully cuts, or aids or is employed in unlawfully cutting, or wantonly destroys or procures to be wantonly destroyed, any timber standing upon the land of the United States which, in

pursuance of law, may be reserved or purchased for military or other purposes, or upon any Indian reservation, or lands belonging to or occupied by any tribe of Indians under authority of the United States, shall pay a fine of not more than five hundred dollars or be imprisoned not more than twelve months, or both, in the discretion of the court."

ADMINISTRATION AND PROTECTION.

ACT OF JUNE 4, 1897 (30 STAT., 11.)

[35] The Secretary of the Interior shall make provisions for the protection against destruction by fire and depredations upon the public forests and forest reservations which may have been set aside or which may be hereafter set aside under the said act of March third, eighteen hundred and ninety-one, and which may be continued; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction; and any violation of the provisions of this act or such rules and regulations shall be punished as is provided for in the act of June fourth, eighteen hundred and eighty-eight, amending section fifty-three hundred and eighty-eight of the Revised Statutes of the United States. (See p. 199.)

Provisions for protection against fire, etc.

Rules and regulations.

Penalty.
25 Stat., 166.
R. S., sec. 5388.

FIRE LAWS.

ACT OF MAY 5, 1900 (31 STAT., 169).

SEC. 1. Any person who shall willfully or maliciously set on fire, or cause to be set on fire, any timber, underbrush, or grass upon the public domain, or shall * * * leave or suffer fire to burn unattended near any timber or other inflammable material, shall be deemed guilty of a misdemeanor, and upon conviction thereof in any district court of the United States having jurisdiction of the same, shall be fined in a sum [170] not more than five thousand dollars or be imprisoned for a term of not more than two years, or both.

Setting fires to timber on the public domain. Feb. 24, 1897, c. 313, v. 29, p. 594, amended by May 5, 1900, c. 349, v. 31, p. 169.

Penalty.

NOTE.—Act of Feb. 24, 1897 (29 Stat., 594), is amended by the above section by omitting, where indicated by stars, the words "carelessly or negligently."

SEC. 2. Any person who shall build a * * * fire in or near any forest, timber, or other inflammable material upon the public domain shall, before * * * leaving said fire, totally extinguish the same. Any person failing to do so shall be deemed guilty of a misdemeanor, and upon conviction thereof in any district court of the United States having jurisdiction of the same, shall be fined in a sum not more than one thousand dollars, or be imprisoned for a term of not more than one year, or both.

Leaving fire unextinguished on the public domain.

Penalty.

NOTE.—Act of Feb. 24, 1897 (29 Stat., 594), is amended by the above section by omitting, where indicated by stars, the words “camp fire or other” and “breaking camp or” respectively.

SEC. 3. That in all cases arising under this act the fines collected shall be paid into the public school fund of the county in which the lands where the offense was committed are situated.

WICHITA GAME REFUGE.

ACT OF JANUARY 24, 1905 (33 STAT., 614).

The President of the United States is hereby authorized to designate such areas in the Wichita Forest Reserve as should, in his opinion, be set aside for the protection of game animals and birds and be recognized as a breeding place therefor.

Game refuge.

SEC. 2. That when such areas have been designated as provided for in section one of this act, hunting, trapping, killing, or capturing of game animals and birds upon the lands of the United States within the limits of said areas shall be unlawful, except under such regulations as may be prescribed from time to time by the Secretary of Agriculture; and any person violating such regulations or the provisions of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction in any United States court of competent jurisdiction, be fined in a sum not exceeding one thousand dollars, or be imprisoned for a period not exceeding one year, or shall suffer both fine and imprisonment, in the discretion of the court.

Hunting, etc., regulated.

Penalty.

SEC. 3. That it is the purpose of this act to protect from trespass the public lands of the United States and the game animals and birds which may be thereon, and not to interfere with the operation of the local game laws as affecting private, State, or Territorial lands.

Local game laws not interfered with.

GRAND CANYON GAME REFUGE.

ACT OF JUNE 29, 1906 (34 STAT., 607).

The President of the United States is hereby authorized to designate such areas in the Grand Canyon Forest Reserve as should, in his opinion, be set aside for the protection of game animals and be recognized as a breeding place therefor.

SEC. 2. That when such areas have been designated as provided in section one of this act, hunting, trapping, killing, or capturing of game animals upon the lands of the United States within the limits of said areas shall be unlawful, except under such regulations as may be prescribed from time to time by the Secretary of Agriculture; and any person violating such regulations or the provisions of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction in any United States court of competent jurisdiction, be fined in a sum not exceeding one thousand dollars, or by imprisonment for a period not exceeding one year, or shall suffer both fine and imprisonment, in the discretion of the court.

SEC. 3. That it is the purpose of this act to protect from trespass the public lands of the United States and the game animals which may be thereon, and not to interfere with the operation of the local game laws as affecting private, State, or Territorial lands.

PROTECTION OF BIRDS.

ACT OF JUNE 28, 1906 (34 STAT., 536).

That it shall be unlawful for any person to hunt, trap, capture, willfully disturb, or kill any bird of any kind whatever or take the eggs of such birds on any lands of the United States which have been set apart or reserved as breeding [537] grounds for birds by any law, proclamation, or Executive order, except under such rules and regulations as may be prescribed from time to time by the Secretary of Agriculture.

SEC. 2. That any persons violating the provisions of this act shall be deemed guilty of a misdemeanor and shall, upon conviction in any United States court of competent jurisdiction, be fined in a sum not exceeding five hundred dollars or be imprisoned for a period not exceeding six months, or shall suffer both fine and imprisonment, in the discretion of the court: *Provided*, That the provisions of this act shall not apply to the Black Hills Forest Reservation, in South Dakota.

ARRESTS.

ACT OF FEBRUARY 6, 1905 (33 STAT., 700).

All persons employed in the forest-reserve and national-park service of the United States shall have authority to make arrests for the violation of the laws and regulations relating to the forest reserves and national parks, and any person so arrested shall be taken before the nearest United States commissioner, within whose jurisdiction the reservation or national park is located, for trial; and upon sworn information by any competent person any United States commissioner in the proper jurisdiction shall issue process for the arrest of any person charged with the violation of said laws

CRIMINAL APPEALS.

ACT OF MARCH 2, 1907 (34 STAT., 1246).

A writ of error may be taken by and on behalf of the United States from the district or circuit courts direct to the Supreme Court of the United States in all criminal cases, in the following instances, to wit:

United States courts, writs of error in criminal cases to U. S. Supreme Court. From a decision or judgment quashing, setting aside, or sustaining a demurrer to, any indictment, or any count thereof, where such decision or judgment is based upon the invalidity or construction of the statute upon which the indictment is founded.

Demurrer to indictment. From a decision arresting a judgment of conviction for insufficiency of the indictment, where such decision is based upon the invalidity or construction of the statute upon which the indictment is founded.

Arrest of judgment. From the decision or judgment sustaining a special plea in bar, when the defendant has not been put in jeopardy.

Special plea in bar. The writ of error in all such cases shall be taken within thirty days after the decision or judgment has been rendered, and shall be diligently prosecuted, and shall have precedence over all other cases.

Time limit. Pending the prosecution and determination of the writ of error in the foregoing instances, the defendant shall be admitted to bail on his own recognizance: *Provided*, That no writ of error shall be taken by or

Bail. allowed the United States in any case where there has been a verdict in favor of the defendant.

GENERAL DECISIONS.

RESTRAINT OF UNAUTHORIZED GRAZING IN NATIONAL FORESTS.

UNITED STATES *v.* DASTERVIGNES ET AL.

(Circuit court, N. D. California. August 18, 1902. 118 Fed. Rep., 199.)

1. FORESTS—REGULATION—RULES—DELEGATION OF LEGISLATIVE AUTHORITY.

The act of Congress approved June 4, 1897 (30 Stat., 35), authorized the Secretary of the Interior, in his superintendence of all forest reservations, to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction." *Held*, that the authority given the Secretary is not unconstitutional as a delegation of legislative authority.

2. SAME—USE OF PUBLIC LANDS.

The pasturing of sheep on the Stanislaus Forest Reservation having been forbidden by rule of the Secretary of the Interior under authority of act of June 4, 1897 (30 Stat., 35), user can not give a right of pasturage there.

3. SAME—USER.

Inasmuch as laches can not be invoked against the Government, user of Government lands for pasturage gives no right so to do.

4. SAME—RESTRAINING USE—BILL—ALLEGATIONS.

A bill seeking to restrain defendants from pasturing sheep on a certain forest reservation alleged that defendants drove several bands of sheep upon the reservation. *Held*, that a demurrer on the ground that there was a misjoinder of defendants was of no merit, since, while it did not appear that the defendants committed several acts of trespass, it appeared there was a joint offense, and, even if the acts were several, they might all be included in one equitable action, the law and testimony applicable to each defendant being the same.

5. SAME—ALLEGATIONS—DAMAGES.

Where a bill to restrain the pasturage of sheep on a certain forest reservation alleged that the grasses, herbage, and undergrowth were injured by the tramping, traveling, and driving of the sheep, the allegations as to damage were sufficient to warrant continuance of a restraining order pendente lite.

DASTERVIGNES ET AL. *v.* UNITED STATES.

(Circuit court of appeals, ninth circuit. March 2, 1903. 122 Fed. Rep., 30.)

1. CONSTITUTIONAL LAW—DELEGATION OF LEGISLATIVE POWER—
ACT AUTHORIZING REGULATIONS FOR FOREST RESERVATIONS.

The provisions of the sundry civil appropriation act of June 4, 1897, relating to forest reservations (30 Stat., 35 [U. S. Comp. St., 1901, p. 1540]), which authorizes the Secretary of the Interior to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction," and which itself prescribes the penalty for violation of such regulations, is not unconstitutional as delegating legislative power to an administrative officer, but is a valid delegation of power to make administrative regulations in relation to details necessary to carry out the purpose of the act.

2. FOREST RESERVATIONS—VALIDITY OF REGULATIONS—EXCLUSION
OF SHEEP.

Rule 13, made and promulgated by the Secretary pursuant to such authority, which prohibits the pasturing of sheep and goats on public lands in the forest reservation, except in cases where permits for their limited grazing may be granted by the land department with the approval of the Secretary, is a proper and legitimate exercise of the authority conferred, which gives the Secretary the right to exclude from the reservations any class of live stock found to be destructive of the purpose for which they were created; and such rule can not be said to create an unjust or illegal discrimination against the owners of the sheep, which constitute a class of live stock differing from any other in respect to pasturage and which has uniformly been recognized as a proper subject for special legislation and regulation.

3. SAME—INJUNCTION AGAINST PASTURAGE OF SHEEP—GROUNDS.

A bill filed by the United States to enjoin the pasturage of sheep in a forest reservation, in violation of the regulations prescribed by the Secretary of the Interior, alleged that the sheep pastured within the reservation were committing great and irreparable injury to the public lands therein and to the undergrowth, timber, and water supply. Affidavits filed in support of such allegations recited that the sheep of defendants destroyed undergrowth, young and growing trees and seedlings, and ate and destroyed the roots of the vegetation and grasses, leaving the ground bare and subject to disastrous washings by the rains, to the

irreparable injury of the reservation. *Held*, that such allegation and showing constituted a sufficient ground for the granting of a preliminary injunction.

4. EQUITY—SUFFICIENCY OF BILL—MULTIFARIOUSNESS.

A bill by the United States against a number of defendants, to enjoin them from pasturing sheep in a forest reservation, is not subject to the objection of misjoinder and multifariousness where it alleges that defendants are pasturing two bands of sheep in the reservation, and contains no averments which show or indicate any separate or distinct rights or different interests as between the several defendants.

(See also *United States v. Tygh Valley Land and Live Stock Co.*; 76 Fed. Rep., 693.)

JOSEPH DENT *v.* THE UNITED STATES.

(Supreme court of Arizona. 76 Pac. Rep., 455.)

Appeal from the district court for the fourth judicial district, before Justice R. E. Sloan.

On rehearing.

The appellant was convicted of the crime of pasturing sheep upon the public lands in a forest reservation, in violation of the rules of the Secretary of the Interior promulgated under authority of the act of Congress of June 4, 1897 (30 Stat., 35), which act provides that any violation of such rules shall be punished by fine or imprisonment. The former opinion of the court will be found in 71 Pac., 920.

Opinion by Kent, C. J.

A rehearing having been granted at this term of court, this case has been again argued by counsel. Since we rendered our decision at a former term, the case of the *United States v. Dastervignes* (122 Fed., 30) has been reported. In that case the circuit court of appeals for the ninth circuit has held that the act in question did not delegate legislative power to the Secretary and was not unconstitutional. Inasmuch as under the act creating the circuit courts of appeal such court exercises appellate jurisdiction over this court in criminal cases, such as the one at bar, we feel that a decision of that court, although made in a civil and not a criminal case, expressly holding that the act in question is constitutional and a valid delegation of power, is binding upon us in this case; and if it be true that inasmuch as the sole question involved in this case is the

constitutionality of the act, an appeal will not lie in this case from our decision to the circuit court of appeals—a question which it is not proper for us to determine—we still feel that the determination of the circuit court of appeals is binding upon us. An appeal does not lie from our decision in this case to the Supreme Court of the United States, and yet if such court had determined the question of the constitutionality of the act such determination would be binding upon us.

Inasmuch as the circuit court of appeals is a court exercising appellate jurisdiction over us in criminal cases of this character, we are in like manner bound by its determination upon this question, although the record may prevent an appeal being taken to such court in the particular case before us. Indeed, if it be true that no appeal lies to any court from our decision in capital cases or in criminal cases where the constitutionality of a Federal statute is the sole question involved, but the right of review of our decisions in criminal cases is confined to the appellate jurisdiction of the circuit court of appeals in minor criminal cases, and when less important questions are involved, this somewhat anomalous condition of the law should not prevent our recognizing the binding force of a determination of such circuit court of appeals upon such constitutional questions, since if the record in this case presented other questions for review, thereby giving it jurisdiction, such court undoubtedly would have the right to, and would review in connection therewith our determination upon the constitutional question involved. Therefore, if it be that the correctness of our determination upon the constitutional question can not be passed upon by such court in this particular case, it is perhaps for that reason all the more incumbent upon us to follow in the path marked out for us by that court.

Farnsworth v. Montana, 129 U. S., 104;

Cross v. United States, 145 U. S., 571;

Chapman v. United States, 164 U. S., 436;

In re Heath, 144 U. S., 92;

Carter v. Roberts, 177 U. S., 496;

Holt v. Indiana Co., 80 Fed., 1;

Texas & P. R. Co. v. Blook, 60 Fed., 979;

Hubinger Co. v. Ry. Co., 98 Fed., 897;

Davis v. Burke, 97 Fed., 501.

As we feel that we are in any event controlled by the decision on the *Dastervignes* case, we do not think it necessary to state to what extent we have changed our views from our original holding in the light of a further examination of the question and the fuller discussion afforded us upon the reargument.

Judgment will be entered affirming the judgment entered in the lower court in favor of the United States.

THE UNITED STATES *v.* DOMINGO ET AL.

In the district court of the United States within and for the central division of the district of Idaho. March 14, 1907.

BEATTY, *District Judge.*

The indictment is for trespass upon a forest reserve by driving and grazing sheep thereon without a permit. To this indictment the defendants have demurred.

By the act of June 4, 1897, 30 Stat., 34-36, in modification of a prior act for the creation of forest reserves, it is, among other provisions, enacted, that

The Secretary of the Interior * * * may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use, and to preserve the forests thereon from destruction, and any violations of the provisions of this act or of such rules and regulations shall be punished as is provided for in the act of June fourth, eighteen hundred and eighty-eight;

which said last act provides as follows:

Every person who unlawfully cuts, or aids or is employed in unlawfully cutting, or wantonly destroys, or procures to be wantonly destroyed, any timber standing upon the land of the United States * * * shall pay a fine of not more than five hundred dollars or be imprisoned not more than twelve months, or both, in the discretion of the court.

By reason of such statutes the Secretary promulgated certain rules and regulations, a part of No. 72 of which is that

The following acts are hereby forbidden and declared to constitute trespass, punishable by fine and imprisonment:

(a) Grazing upon or driving across a forest reserve any live stock without a permit, except as otherwise allowed by regulation.

The defendants claim that the Secretary is not authorized by Congress to make the above rule, and that if it intended to grant such authority it was an attempt to delegate legislative power, which is *ultra vires*. It is too well settled to admit any doubt that Congress can not delegate to any other body or person any authority to legislate, but it is also as well settled that it may authorize an executive officer to formulate rules and regulations for the full and explicit enforcement of the law enacted and according to its full intent and spirit. To discuss either of these questions would be a wasteful use of time. Very many of the acts of Congress contain such delegation of authority. Had it not the power to do so, many of its statutes would be largely nugatory, for it is impossible for it

to anticipate the various questions that may arise in the enforcement of its laws and to provide for them. The objections made in this case to the rule is the same that is usually made to other like rules. The solution of the question must in each case be reached by determining whether the rule is an attempt to create a law or simply a regulation or means of enforcing a law already enacted. If the former, it is void; if the latter, it is as valid as the law itself. There is no doubt as to the rule of decision, but in some instances the question is so close that it is difficult to conclude how the rule should be construed. In this instance the statute says that the Secretary "may make such rules and regulations and establish such service as will insure the objects of such reservation." But it does not leave him to determine what such objects are; it states them: First, "to regulate their *occupancy and use*;" and, second, "to preserve the forests thereon from destruction." Clearly Congress contemplated that these reserves should be occupied and used, but in what manner, by whom, and for what purposes, it leaves the Secretary to regulate by rules. Rules to prevent any occupation or use would be contrary to the statute, but those simply to regulate such occupation and use are what the statute expressly authorizes, and are valid.

While the provisions of the statute for the preservation of the forests from destruction probably refers to the wanton destruction of the timber, yet the occupancy has an important effect upon such preservation. If the occupation by animals or otherwise is such as to destroy the growing, tender trees, the final deterioration and destruction of the forest must follow.

My conclusion is, that in so far as this regulation 72 forbids any grazing or driving of live stock upon on or across the reservation without a permit, it is not legislation, but is only a rule within the authority of Congress to regulate the occupation and use and is valid. But the rule goes further and directs a fine and imprisonment for such unpermitted acts. It must be doubted that the Secretary can direct any punishment that is not directly provided for, or distinctly implied by the act. The most that can be held against this portion of the regulation is that it is surplusage, but which does not invalidate the balance of the rule. If no punishment were provided by the act, he could not direct any; if the act does provide a punishment, he can not modify it. The act does, however, provide a punishment by applying to the offenses in this act, the penalty provided for offenses named in the act of June 4, 1888. By this latter act a punishment of not over \$500 fine, or imprisonment of not over twelve months, or both, is provided. But the regulation in directing fine *and* imprisonment is obnoxious to the statute which provides for fine *or* imprisonment. This statute of 1897 distinctly defines the penalty as the same prescribed by the statute of 1888. But defendants' counsel argues that as the penalty provided by the

act of 1888 is for the cutting of timber and other offenses therein named, and does not provide for the offense charged in this indictment, it follows that there is no penalty provided for this offense. Careful examination of the statute can not lead to such conclusion. It—the act of 1897—says that “any violation of the provisions of this act or such rules and regulations shall be punished as provided for in the act of June 4, 1888.” This is not a statement that the penalty prescribed by the former act can be applied only to the class of offenses therein named, but it is a direction that such penalty shall be applied also to the offenses described in the later act. Congress very often, in defining an offense, applies it to the same penalty provided for some other offense, described in some other act. Clearly that is all that is done in this case.

My conclusion then is that the Secretary in making the rule referred to was duly authorized, and that the statute itself has prescribed the penalty for its violation.

The demurrer is overruled.

NOTE.—To the same effect is the decision of Judge De Haven, rendered October 2, 1906, in the district court of the United States for the northern district of California in the case of *United States v. Deguirre*.

UNITED STATES *v.* SHANNON.

(Circuit Court, D. Montana. March 18, 1907. 151 Fed. Rep., 863.)

No. 725.

1. PUBLIC LANDS—FOREST RESERVES—REGULATIONS.

Article 4, § 3, of the Federal Constitution, which provides that “Congress shall have the power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States,” conferred ample authority on Congress to enact the legislation authorizing the establishing of forest reserves on the public lands and the making of rules and regulations by the Secretary of the Interior “to insure the objects of such reservations,” and the rules and regulations so made as contained in the compilation of October 3, 1903, relating to the grazing of stock on such reserves are within the authority so conferred, and reasonable and valid.

2. SAME—VALIDITY OF REGULATIONS—STATE POLICY OR LAWS.

The United States Government has always maintained its right to the exclusive possession of the public lands, although such right has not always been exercised, and the policy of a State to permit live stock to run at large and graze on all open lands,

or its laws enacted to carry such policy into effect, can not affect the right of the General Government to re[864]quire stock owners to restrain their stock from grazing on the national forest reserves except under prescribed regulations.

3. SAME.

Ordinance No. 1, Const. Mont., providing that "the people inhabiting the said proposed State of Montana do agree and declare that they forever disclaim all right and title to the unappropriated public lands lying within the boundaries thereof," which was adopted pursuant to the requirement of the enabling act, under which the State was organized, was a clear recognition of the exclusive authority of the General Government over the public lands within the State.

HUNT, *District Judge.*

The United States brought this action against the defendant, Thomas Shannon, to enjoin him from driving and conducting, or causing or permitting to be driven or conducted, cattle belonging to him to or upon the Little Belt Mountain Forest Reserve within Montana, and from permitting or allowing his cattle to go upon or remain upon the said reserve. Temporary injunction was issued, as prayed for by the complainant.

The bill alleges that the Little Belt Mountain Forest Reserve was created, by proclamation of the President, on August 16, 1902, and that during December, 1904, and prior thereto, the defendant wrongfully and unlawfully, and without right or authority, and without having obtained a permit from the Secretary of the Interior or the Commissioner of the General Land Office, and in violation of law and in disregard of the rules and regulations of the Secretary of the Interior, did drive and conduct, and cause to be driven and conducted, upon the said reserve three hundred head of cattle, and has permitted the cattle to remain upon the reserve for the purpose of grazing and feeding, to the permanent and irreparable damage and injury of the said reserve and destruction of the objects for which the reserve was created.

The defendant denied the material allegations of the bill with respect to permitting his cattle to go upon the reserve and to remain thereon.

Testimony was taken before a referee. Defendant appeared, but offered no evidence.

It appears that Shannon, the defendant, raises cattle and owns a tract of 320 acres of land, 160 acres of which he acquired under the homestead law, and which lies next to the forest reserve. The rest of his land he acquired under the desert land act; it lies within the limits of the reserve. Shannon's home ranch is from 6 to 10 miles northeast of the area particularly involved in this case, which

is that part of the reserve known as Lone Tree Park. The grazing privileges of the reserve are divided into four districts, Lone Tree Park being a district including a basin on the edge of the mountains. When Shannon bought part of his land there was a fence upon it, which was afterwards opened, or permitted to become open, by Shannon, so that Shannon's stock had free access to the reserve. He has not kept the fence up, his contention being that he is not obliged to.

Shannon [865] has no permit from the Interior Department permitting him to graze his cattle upon the reserve, and it clearly appears that he knew that his cattle were upon the reserve, and that he made no effort to remove them therefrom, his custom having been to turn his cattle upon his own land, and from there they went to the reserve. The Secretary of the Interior limited the number of cattle and sheep which could graze upon the reserve in 1904, 1905, and 1906. It sufficiently appears that damage to the water supply is done by the grazing of more cattle in Lone Tree Park than the number authorized by the Secretary of the Interior, and that the young growth of willows and underbrush is seriously injured by the tramping of the cattle.

In considering the several features of this case it must be conceded that defendant's counsel is correct in his argument that the general policy of the State of Montana, voiced through its laws, has been that owners of stock are permitted to have their cattle at large, and that they may feed upon the open public domain, and that an owner of lands not fenced is without remedy for the loss of grasses which may be eaten by animals so ranging; and, furthermore, that generally an owner of lands in Montana must fence out cattle if he would prevent their going upon lands which are his.

But, notwithstanding these things, the question is, Was it intended, and can it be, that this State policy obtains with sufficient force to curtail the power of the United States to forbid entry upon its forest reserves by cattle owned by a stock grower of the State?

The question is thus broadly put, because the facts justify a consideration of the case from the standpoint outlined, and because it is desirable that a ruling should be had defining the legal position of the General Government and the stock owner whose cattle may drift inside a forest reservation.

The substance of the argument of the learned counsel for the defendant is that Congress must have recognized the policy of the law of the State already referred to, and that therefore it should be deemed to have acted in all that it has done in the matter of forest reserves with the public policy of the State in view; hence, that no construction of the acts of Congress empowering the Secretary of the Interior to make rules and regulations insuring the objects for which forest reservations are created can be accurate if the effect is to require an owner of cattle to keep his animals off the reserve.

Let us remember that we are not now dealing with a question of a regulation by the Secretary of the Interior which makes a violation thereof a crime. Were such the point of inquiry, principles not necessarily here applicable would have to be discussed. (*U. S. v. Eaton*, 144 U. S., 677, 12 Sup. Ct., 764; *U. S. v. Mathews*, 146 Fed., 306.) We can therefore eliminate any question of the liberty of the citizen, and proceed to inquire into the matter of the policy of the State concerning cattle growers to ascertain the force of that policy in the present instance.

Long before the State was admitted, the policy of the United States was to preserve and exercise exclusive right of full dominion over the public lands belonging to it. True, in many cases the United States never interfered at all with use and occupancy of its unoccupied lands by individuals within the several States; for example, it did not seek to prevent [866] animals running at large upon the public domain within Montana and other Western States where stock growing is a principal industry. Until the last few years of its existence as a Territory Montana was very sparsely settled. Agriculture was limited; there was but slight demand for public lands, and comparatively none for the foothills of the mountains and for the grazing lands upon the great benches above the valleys. Stock growers could put their cattle or horses or sheep wheresoever they pleased upon such lands without apprehension that their ranges would ever be sought by homestead settlers desiring to enter the lands, cultivate them, and turn them into profitable farms, or that in time to come forest preservation would become a fixed national policy. Accordingly, under such conditions, the General Government not only took no action to exclude stock growers from using its lands, but rather lent such encouragement to the industry as naturally followed the privilege of unlimited open range. Nevertheless, the General Government has been consistent in its attitude of a proprietorship, which has enabled it not only to maintain its possession, but to maintain its possession exclusively if it pleased to do so, and to prosecute those who have trespassed upon the public lands if it has seen fit. That it has not always exercised the right of exclusive possession by action to prevent trespass or use is one thing; but that the right has always existed is another and a wholly different matter. The exercise of the right may have been a mere question of policy that has been availed of or not as circumstances may have justified; but the right is in the nature of a trust in the General Government for the people of the United States, never subordinate, but paramount to the policy or law of a State which would seek to curtail the full enjoyment of such right.

The public lands belong to the United States, and no trespass of any kind involved herein, even though countenanced for years by the Government, can imply authority in the trespasser as against

the United States or bar its right at any time to forbid a continuance of the trespass.

Article IV, section 3, of the Constitution provides "That Congress shall have the power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States."

This constitutional power is supreme, and the disposal of public lands in the State by act of Congress can in no way be limited by State statute. In *Jordan v. Barrett* (4 Howard 169) the power of disposal of the public lands was spoken of in these words:

By the Constitution Congress is given "power to dispose of and make all needful rules and regulations respecting the territory or other property of the United States." For the disposal of the public lands, therefore, in the new States, where such lands lie, Congress may provide by law, and having the constitutional power to pass the law, it is supreme; so Congress may prohibit and punish trespassers on the public lands. Having the power of disposal and of protection, Congress alone can deal with the title; and no State law, whether of limitations or otherwise, can defeat such title.

And later, in *Gibson v. Chouteau* (13 Wallace 92) Justice Field, for the court, said:

With respect to the public domain, the Constitution vests in Congress the power of disposition and of making all needful rules and regulations. That [867] power is subject to no limitations. Congress has the absolute right to prescribe the times, the conditions, and the mode of transferring this property, or any part of it, and to designate the person to whom the transfer shall be made. No State legislation can interfere with this right or embarrass its exercise; and to prevent the possibility of any attempted interference with it a provision has been usually inserted in the compacts by which new States have been admitted into the Union that such interference with the primary disposal of the soil of the United States shall never be made.

With full knowledge of this ownership and right of control of public lands the State of Montana entered the Union. To give special emphasis, however, to the right of the General Government as against possible claims of the State in the control over public lands Congress, in accord with action, has, when Missouri and other States were admitted, expressly required as a condition to be accepted before admission into the Union that the constitutional convention for the proposed State of Montana should provide by an ordinance, "irrevocable without the consent of the United States and the people of the State," that the people inhabiting the proposed State of Montana agree and declare that they forever disclaim

all right and title to the unappropriated public lands lying within the boundaries thereof. (Enabling act, approved February 22, 1889.) The solemnity of this condition imposed was understood by the framers of the State constitution, for, by ordinance made irrevocable, as required (ordinance No. 1, constitution of the State of Montana), it was duly ordained: "That the people inhabiting the said proposed State of Montana do agree and declare that they forever disclaim all right and title to the unappropriated public lands lying within the boundaries thereof."

It has been through action under the supreme power spoken of that Congress has provided for the creation of forest reservations. The Western States have greatly increased in population. The pursuits of the people are more varied than in Territorial days. In Montana lands once thought to be worthless for any purpose except grazing are now in cultivation. Immense areas of supposed barren wastes are being successfully reclaimed. Thus have come changes that seemed impossible of realization a few years ago. With this development it became obvious that the present and future welfare of the people should be guarded by protection of the forests. Agriculture, lumbering, mining, and live-stock interests are all more or less dependent upon a permanent and accessible supply of water, wood, and forage. It need scarcely be said that plainly the whole policy of forest reservation rests upon legislation having regard for the future welfare, and is intended to foster and protect living and growing timber on forest reservations. The act of June 4, 1897 (30 Stat. L., pp. 35, 36), may be called an essentially constructive statute.

In the furtherance of this policy, and to make its execution effective, Congress also provided, by the act just referred to, that the Secretary of the Interior might make such rules and regulations and establish such service as would "insure the objects of such reservations, namely, to regulate their occupancy and use, and to preserve the forests thereon from destruction." This was a delegation of significant power to the Secretary of the Interior. It gave to that official authority to construct in detail an administration which would make certain or "*insure*," as the law puts it, the will of Congress with respect to forest reservations. Protection of living timber, the cultivation of younger growths, protection against fire, protection against *depredation*—all are among the expressly enumerated features of the act. By explicit language, too, *regulation of occupancy and use* is included within the authority conferred, and was evidently regarded as a necessary part of the power which the Secretary should possess, to the end that the whole policy may be made as effective as possible. By other provisions in the law the Secretary may permit, *under* regulations to be prescribed by him, uses of timber for domestic and other specific purposes. Entry upon the forest reserves is allowed for proper and lawful purposes,

including prospecting and mineral development; as is also allowed the use of water on such reservations for domestic, or mining, or milling, or irrigation purposes.

A reading of these several provisions makes it clear that Congress not only declared that the forest reserves should be controlled by the Executive Department, but meant that such control should be effective to insure protection. By requiring such a control to preserve, the law demands not that there may be inaction or a mere nominal, yet weak and insufficient exercise of authority, to be asserted or not, as the Secretary of the Interior may deem expedient, but a control vigorous enough to make as certain as possible the protection of forest growth, consistent always, of course, with such uses and occupancy of the reserve as the law fairly contemplates may be allowed.

Now the Secretary of the Department exercising the authority just discussed, presumably having considered the matter of pasturing live stock within the forest reservations, among other rules, has promulgated this:

The pasturing of live stock other than sheep and goats will not be prohibited in the forest reserves so long as it appears that injury is not being done the forest growth and water supply and the rights of others are not thereby jeopardized. Owners of all live stock will be required to make application to the Commissioner of the General Land Office for permits to graze their animals within the reserves. (Laws and Rules Governing Forest Reserves, promulgated December 23, 1901.)

In May, 1903, these additional rules concerning the pasturing of live stock were issued:

Whenever it appears that grazing will do no marked damage to the reserves, it is allowed by the Department; but until the Secretary has decided that it will do no harm and that a certain number of either sheep and goats or cattle and horses may graze in a reserve or part of a reserve, the grazing of stock is prohibited, and all parties responsible for its presence in the reserve prior to such decision by the Secretary of the Interior are liable to suits for trespass and damages.

When the grazing has been allowed by the Secretary, all persons who desire the grazing privilege must make application on a blank form furnished by the Department and to be obtained from the forest supervisor. These applications must cover no more nor no less stock than the applicant actually owns and desires to graze in the reserve, and must show the brands of the stock and the grazing period allowed during the year.

No stock of any kind is allowed to graze in a reserve without permit based upon the application made. All permits, except those for 100 head or less of cattle and horses owned by persons

who live in the reserve, are issued by the Department on the application approved and forwarded by the supervisor.

The total number of cattle and horses or sheep that may be allowed in a reserve is fixed by the Secretary of the Interior for the following year at the end of each grazing season. (Compilation of laws and rules and regulations of October 3, 1903, pp. 62-65.)

The dignity of these rules and regulations is equal to that of the laws themselves, for the statute makes a violation of either the law or the rules and regulations punishable, as is provided for in the act of Congress of June 4, 1888, amending section 5388, Revised Statutes of the United States, which imposes a punishment for timber destruction on a reserve by fine or imprisonment, or both.

In themselves the rules are not beyond the power delegated to the executive authority that issued them. Nor can it be said the text of those quoted is at all out of harmony with the spirit or letter of the law. They do not prohibit the pasturing of cattle unless it appears injury is being done the forest growth and water supply, but they do prohibit use if the Secretary believes harm will ensue. Manifestly there must be some one clothed with authority to decide whether there is or is not injury being done the young trees of a particular locality. No unusual technical knowledge of tree life is requisite to understand that a hundred head of cattle grazing together in a basin of limited area in the mountains will tramp down a great many very young trees, and will cut the soil along the banks of the creeks in a way that will injure tree life. Surely, therefore, unless regulation can prevent such intrusions by making them unlawful, protection of the reserve by preservation of the young trees can not be had, and the power of delegation of authority to make rules and regulations "to insure" the will of Congress can be of no practical good except by fencing in the forest reserves or keeping a force of Government employees sufficient to police the boundaries thereof.

But where, as shown already, Congress has acted within its constitutional right, certainly it could delegate to the Secretary powers which it could rightfully exercise itself, in order to carry out and enforce the provisions of its laws; and I do not believe that to prevent trespass any physical barrier is indispensable on the part of the owner of the public lands. In the execution of the legislation concerning Forest Reserves, no attempt has been made by the rules heretofore quoted and adopted by the Interior Department to overthrow a law of the State. That the Secretary of the Interior could not lawfully make such rules is beyond dispute; but that as an administrative official he can adopt rules which carry out the will of Congress concerning the territory of the United States is well established by reason and authority.

In *Dastervignes v. United States* (122 Fed., 30) the court of ap-

peals for the ninth circuit upheld the rule of the Secretary of the Interior (No. 13), quoted in this opinion, as a valid and legitimate exercise of the authority delegated.

Judge Hawley, for the court, said:

The national courts have universally upheld and sustained such rules and regulations made by the administrative officers, under the authority given by an act of Congress, whenever made necessary to carry out and enforce the provisions of the law. It is a general principle of law, in the construction [870] of all powers of this sort, that, where the end is required, the appropriate means are given. (*United States v. Bailey*, 9 Pet. 238, 255; 9 L. Ed., 113.) There are many acts of Congress which are regulated by direct legislation, wherein general provisions are made concerning the subject-matter thereof, and in such acts, wherever it becomes necessary so to do, authority may be conferred and power given to an administrative officer, who is required by the law to act under its general provisions, to prescribe the details which must be pursued in the execution thereof, for, as was said by Chief Justice Marshall in *Wayman v. Southard* (10 Wheat., 43; 6 L. Ed., 253): "Congress may certainly delegate to others powers which the legislature may rightfully exercise itself."

As we have seen, the exclusive dominion and ownership being in the United States, it has a right to say that there shall be no use or occupancy of the reserve by stock growers, or it may allow occupation under rules and regulations to be made by a designated head of one of its Executive Departments. And if by its Forest-Reserve legislation it has inaugurated a policy restrictive of privileges formerly not withheld from stock growers, no policy of the State can lessen the right of Congress to assert its full control over lands belonging to the General Government, whether by forbidding use or occupancy, or by declaring that there may be certain use, provided the Secretary of the Interior believes that no injury may be done. (*United States v. Tygh Valley Land and Cattle Company*, 76 Fed., 693.)

If the use is lawfully forbidden, use can not be lawfully had. Any other construction of the right of the General Government would have to be rested on the foundation that the United States has only a limited dominion over its own lands, and that Congress is bound by an implied limitation that the policy of a State can control or circumscribe the power of legislation with respect to the public domain. Such a view would interfere with the exercise of the supreme power of Congress to pass laws making the forest policy effective. To state the doctrine contended for in its consequences: It would in effect be a denial of the right to prohibit trespass upon the national domain unless the State should see fit to conform to

the policy of the General Government by also forbidding trespass upon its lands. This would inevitably lead us to the conclusion that the constitutional power to which I have referred is not supreme, but is to be exercised under limitations reserved by the State, and that the power of national control over the lands of the United States is dependent upon the attitude of the State wherein such lands may lie.

I can not yield to this deduction, for I firmly believe it fundamentally wrong in the reasoning that when the State was admitted into the Union, the then present policy of the State and the then prevailing attitude of the Federal Government toward stock growers formed a part of the compact of admission which requires a construction of the constitutional power of Congress over the public lands, whereby the exercise of that power is hampered or limited because of conditions that may have existed when the Territory became a State.

By these views I am expressing no opinion which, fairly construed, can be regarded as sustaining obtrusion by the General Government upon the rights of the State, or which upholds the sovereignty of the one in any tendency to ignore the laws of the other.

[871] To my mind the State has recognized, and expressly intended to recognize, the right of the General Government to control its own lands, and the citizen can not successfully contend that there is a policy of the State which the General Government is bound to recognize, enabling him to use and occupy lands of the United States, and over which the State can exercise no control. The State can lawfully forbid the United States to use or occupy lands belonging to it, as the United States has power to forbid the State or its inhabitants to use its domain. One or both may exert the powers respectively possessed, but if only one does, the other may not be heard to say that an ownership or control exists which is interdependent, so that the policy of the two must be similar and concurrent to make that of the other effective.

The facts before me merely illustrate an instance not of a conflict of power, but simply where the need for exact preservation of the sovereignty of each within its appropriate sphere demands that the separate power of the General Government over its property and the separate power of the State over its property be distinguished, and that the principle be sustained recognizing each as a landowner with free right to forbid trespass upon its own property.

The difficulties of the question do not make it necessary to go further, and in advancing to a decision I am but impressed by the wisdom of the underlying principle, whereby the harmony of the system of our Government is to be preserved by upholding the sovereignty ceded to the General Government as, within its sphere of action, independent of the policy or action of the State.

Believing, therefore, that the Secretary of the Interior has been lawfully authorized to make rules and regulations which forbid the occupancy or use of the reserve by defendant for grazing his cattle, unless by permission, and that defendant has knowingly allowed his cattle to go upon and remain on the reserve, not having a permit therefore, as required by the rules of the Interior Department, it follows that injunction will lie to prevent him from allowing his cattle to enter or feed upon the reserve.

So ordered.

DEPARTMENT OF JUSTICE,
Washington, D. C., November 17, 1898.

The SECRETARY OF THE INTERIOR.

SIR: Section 5388 of the Revised Statutes, as amended by the act of June 4, 1888 (25 Stat., 166), provides as follows:

Every person who unlawfully cuts, or aids or is employed in unlawfully cutting, or wantonly destroys or procures to be wantonly destroyed, any timber standing upon the land of the United States which, in pursuance of law, may be reserved or purchased for military or other purposes, or upon any Indian reservation, or lands belonging to or occupied by any tribe of Indians under authority of the United States, shall pay a fine of not more than five hundred dollars or be imprisoned not more than twelve months, or both, in the discretion of the court.

The act of June 4, 1897, entitled "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1898, and for other purposes," provides (28 Stat., 35):

The Secretary of the Interior shall make provisions for the protection against destruction by fire and depredations upon the public forests and forest reservations which may have been set aside or which may be hereafter set aside under the said act of March 3, 1891, and which may be continued; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction; and any violations of the provisions of this act or such rules and regulations shall be punished as is provided for in the act of June 4, 1888, amending section 5388 of the Revised Statutes of the United States.

Under the authority thus conferred, the Secretary of the Interior, on June 30, 1897, promulgated certain rules and regulations for the purpose of regulating the occupancy and use of the forest

reservations and to preserve the forests thereon from destruction, among which was the following:

13. The pasturing of live stock on the public lands in forest reservations will not be interfered with so long as it appears that injury is not being done to the forest growth and the rights of others are not thereby jeopardized. The pasturing of sheep is, however, prohibited in all forest reservations, except those in the States of Oregon and Washington, for the reason that sheep grazing has been found injurious to the forest cover, and therefore of serious consequence in regions where the rainfall is limited. The exception in favor of the States of Oregon and Washington is made because the continuous moisture and abundant rainfall of the Cascade and Pacific coast ranges make rapid renewal of herbage and undergrowth possible, etc.

In view of the foregoing, you request my opinion whether a criminal prosecution will lie to punish a person who grazes sheep in a forest reservation in violation of the regulation quoted.

I recognize the existence of the salutary rule that Congress can not delegate its legislative power so as to authorize an administrative officer, by the adoption of regulations, to create an offense and prescribe its punishment. But here the statute proclaims the punishment for an offense which in general terms is defined by law, the regulation dealing only with a matter of detail and administration necessary to carry into effect the object of the law. The protection of the public forest is intrusted to the Secretary of the Interior. Section 5388 makes it an offense, punishable by fine and imprisonment, for any person wantonly to destroy any timber on a public reservation. In furtherance of this policy, the act of June 4, 1897, directs the Secretary to make provision for the protection of the forests and authorizes him to regulate the use and occupancy of the forest reservations and to preserve the forests thereon from destruction, making for such purpose proper rules and regulations. Any violation of such rules and regulations is by the statute made an offense, punishable as provided in section 5388.

By this law the control of the occupancy and use of these reservations is handed over to the Secretary for the purpose of preserving the forests thereon, and any occupancy or use in violation of the rules and regulations adopted by him is made punishable criminally. It seems to me Congress has a right to do this. Suppose Congress had provided that the occupation or use of a forest reservation by any person, without permission of the Secretary, should be a misdemeanor. Would not this be a valid exercise of legislative power? The present statute does no more. The regulation is reasonable and necessary. It restrains no one in the enjoyment of any

natural or legal right. To use the language of Mr. Chief Justice Fuller in *In re Kollock* (165 U. S., 526, 533):

The regulation was in execution of, or supplementary to, but not in conflict with, the law itself, and was specifically authorized thereby in effectuation of the legislation which created the offense.

Your question, therefore, is answered in the affirmative.

Very respectfully,

JOHN K. RICHARDS,
Solicitor-General.

Approved:

JOHN W. GRIGGS,
Attorney-General.

SCHOOL LANDS.

Where a forest reservation includes within its limits a school section surveyed prior to the establishment of the reservation, the State, under the authority of the first proviso to section 2275, Revised Statutes, as amended by the act of February 28, 1891, may be allowed to waive its right to such section and select other land in lieu thereof. The decision herein of December 27, 1894, 19 L. D., 585, recalled and vacated. Instructions of December 19, 1893, 17 L. D., 576, modified. (State of California, 28 L. D., 57.)

By the act of June 21, 1898, a grant, *in presenti*, of school lands is made to the Territory of New Mexico; and under the provisions of section 2275, Revised Statutes, as amended by the act of February 28, 1891, said Territory may relinquish its claim to such school sections as it may be entitled that are included within the limits of a forest reserve, and select other lands in lieu thereof. (Territory of New Mexico, 29 L. D., 365.)

Unsurveyed sections 16 and 36, embraced in land withdrawn for a forest reserve by proclamation dated September 28, 1893, plat of survey of which was approved January 13, 1894, and filed in local land office October, 1894, do not become property of State upon survey, but are a part of the forest reserve, and should be administered free from the claim of transferees of the State of Oregon. (Curtis Lumber Co., *ex parte*. Decision "R" of Commissioner of the General Land Office, unpublished, dated February 28, 1906.)

Under the grant of sections 16 and 36 made to the State of South Dakota for school purposes by the act of February 22, 1889, the State takes no vested interest or title to any particular land until it is identified by survey, and prior to such identification the grant, as to any particular tract, may be wholly defeated by settlement, the State's only remedy in such case being under the

indemnity provisions of said act and of the act of February 28, 1891, amending sections 2275 and 2276 of the Revised Statutes. (State of South Dakota *v.* Riley, 34 L. D., 657. Syllabus.)

[NOTE.—This decision applies also to North Dakota, Montana, and Washington. The grant to Idaho and Wyoming was in the same terms.]

TIMBER CUTTING ON MINING CLAIMS.

An occupant of a mineral claim, who has applied for a patent, has no right, before the purchase price is paid and he receives a certificate, to cut the timber on such claim with intent to export or remove the same, and a license from him to so cut the timber is no protection to the licensee, as against the Government. (Teller *v.* United States, 113 Fed. Rep., 273. Syllabus.)

The exclusive right to occupy and work a mineral claim, given to the locator by the mining laws during his occupancy, does not segregate such claim from the public domain so as to exclude such land from the operation of Rev. Stat., 2461, 20 Stat., 89, and 27 Stat., 348, making it a misdemeanor for any person to cut timber on the public lands. (Same.)

MINERAL LANDS.

While the statute does not prescribe what is necessary to constitute a discovery under the mining laws of the United States, it is essential that it gives reasonable evidence of the fact either that there is a vein or lode carrying precious minerals, or if it be claimed as placer ground that it is valuable for such mining; and where there is not enough in what a locator claims to have seen to justify a prudent person in the expenditure of money and labor in exploitation, this court will not overthrow a finding of the lower court that there was no discovery. (Chrisman *v.* Miller, 197 U. S., 313. Syllabus.)

In determining whether the claim here involved is a valid mining claim or possession, the question of the character of the land raised by the proceedings is a primary one. If the applicant has had ample time and opportunity to show by exploration and development whether valuable mineral deposits exist on the land, and has not done so, and has not in any manner established that the location embraced mineral land under the well-settled rules of determination in cases where the character of the land is directly in issue, his location can not be held to be a valid mining claim, or possession within the meaning of the law. (Brophy et al. *v.* O'Hare, 34 L. D., 596, 598.)

Should the question of the character of the land be properly presented at any time before patent, it would manifestly be the

duty of the [Interior] Department to ascertain whether or not the land contains "valuable deposits," in an *ex parte* case or a contest. The fact that a claim is contested would not change the character of the land to be taken under this law. In any event it must contain "valuable deposits." (Royal K. Placer, 13 L. D., 89.)

The Supreme Court has not determined what amount of gold will constitute "valuable deposits," and yet it has indicated in *U. S. v. Iron Silver Mining Company* (128 U. S., 673) that the deposit must be of substantial value. * * * The court says: "It is the policy of the Government to favor the development of mines of gold and silver and other metals, and every facility is afforded for that purpose; but it exacts a faithful compliance with the conditions required. There must be a discovery of mineral and a sufficient exploration of the ground to show this fact beyond question. * * * If the land contains gold or other valuable deposits in loose earth, sand, or gravel, which can be *secured with profit*, that fact will satisfy the demand of the Government as to the character of the land as placer ground." (Same.)

An actual discovery of mineral is a prerequisite to the location of a mining claim. (*Etling et al. v. Potter*, 17 L. D., 424. Syllabus.)

A certificate of the location of a mining claim can not be accepted as establishing the mineral character of a tract in the absence of other evidence showing an actual discovery of mineral. (Same.)

The existence of gold in nonpaying quantities will not preclude agricultural entry of the land. (Same.)

Under the established rule that, when public land is sought to be taken out of the category of agricultural lands, the evidence of its mineral character should be reasonably clear, the finding of colors of gold, even though fairly good prospects of gold, in placer prospecting, is not sufficient to establish the mineral character of the ground and to sustain a mineral location thereof as against a prior entry under the homestead laws. (*Steele v. Tanana Mines R. Co.*, 148 Fed. Rep., 678. Syllabus.)

Some few pieces of asphaltum were found, but the principal result of what little prospecting and developing have been done is the finding of "indications" of mineral, and it can not be said that the indications found on these lands in section 21 of oil and asphaltum demonstrate that there is a permanent deposit of these minerals which will pay to work. (*Tulare Oil & Mining Co. v. Southern Pacific R. R. Co.*, 29 L. D., 272.)

Where mineral is found, and it appears that a person of ordinary prudence would be justified in further expenditures with a reasonable prospect of success in developing a mine, the land

may be properly regarded as mineral in character. (Walker *v.* Southern Pacific R. R. Co., 24 L. D., 172. Syllabus.)

Land must be held nonmineral where no discoveries of appreciable value have been made, and it does not appear that a further expenditure would develop the presence of minerals in paying quantities. (Reed et al. *v.* Lavallee et al., 26 L. D., 100. Syllabus.)

A single discovery is sufficient to authorize the location of a placer claim, and may, in the absence of any claim or evidence to the contrary, be accepted as establishing the mineral character of the entire claim sufficiently to justify the patenting thereof, but such single discovery does not conclusively establish the mineral character of all the land included in the claim, so as to preclude further inquiry in respect thereto. (Ferrell et al. *v.* Hoge et al., 29 L. D., 12. Syllabus.)

The entire area that may be taken as a placer claim can not be acquired as appurtenant to placer deposits which are shown to exist only in a portion thereof. (Same.)

Where a part of the area embraced within a placer entry, in this instance twenty acres, is shown to contain no valuable mineral deposit subject to placer location, such part of the claim will be excluded from the entry. (Same.)

Deposits of fine clay or kaolin, being nonmetalliferous in character, are properly subject to entry as placers and not as lode claims. (The Dobbs' Placer Mine, 1 L. D., 565. Syllabus.)

Whatever is recognized as a mineral by the standard authorities, whether of metallic or other substances, when found in the public lands in quantity and quality sufficient to render the land more valuable on account thereof than for agricultural purposes, must be treated as coming within the purview of the mining laws. (Pacific Coast Marble Co. *v.* Northern Pacific R. R. Co. et al., 25 L. D., 233. Syllabus.)

Lands valuable only on account of the marble deposit contained therein are subject to placer entry under the mining laws. (Same.)

Lands containing valuable mineral deposits, whether of the metalliferous or fossiliferous class, of such quantity and quality as to render them subject to entry under the mining laws, are "mineral lands" within the meaning of that term as used in the exception from the grant to the Northern Pacific Company for railroad purposes and to the State for school purposes. (Same.)

A deposit of "brick clay" will not warrant the classification of land as mineral, or entry thereof as a placer claim. (Dunluce Placer Mine, 6 L. D., 761. Syllabus.)

The mineral character of the land is established when it is shown to have upon or within it such a substance as (a) is recognized as mineral, according to its chemical composition by the standard authorities on the subject, or (b) is classified as a mineral

product in trade or commerce, or (c) such a substance (other than the mere surface, which may be used for agricultural purposes) as possesses economic value for use in trade, manufacture, or ornamental arts; and it is demonstrated that such substance exists therein or thereon in such quantities as render the land more valuable for the purpose of removing and marketing the substance than for any other purpose, and the removing and marketing of which will yield a profit; or it is established that such substance exists in the lands in such quantities as would justify a prudent man in expending labor and capital in the effort to obtain it. (Rules for determining mineral character of land; Lindley on Mines, vol. 1, sec. 98.)

COAL LANDS.

The words "the existing mining laws of the United States" are to be construed, in legislative enactments, as embracing sections 2347 to 2352, inclusive, of the Revised Statutes, commonly known as the "coal-land law," unless an intention to the contrary is expressed. (T. P. Crowder, 30 L. D., 92.)

Coal lands are mineral lands within the meaning of the act of June 4, 1897, and as such are subject to entry, when found in forest reservations, the same as other mineral lands within such reservations. (T. P. Crowder, 30 L. D., 92.)

RAILROAD LANDS.

While the grant to the Northern Pacific Railroad Company under the act of July 2, 1864, was *in presenti*, and took effect upon the sections granted when the road was definitely located, by relation as to the date of the grant, the survey of the land and the identification of the sections—whether odd or even—is reserved to the Government, and the equitable title of the railroad company and its assigns becomes a legal title only upon the identification of the granted sections. Until the identification of the sections by a Government survey the United States retains a special interest in the timber growing in the township sufficient to recover the value of timber cut and removed therefrom. (United States *v.* Montana Lumber and Manufacturing Co., 196 U. S., 573. Syllabus.)

In a suit brought by the United States for that purpose private surveys made by the railroad company can not be introduced as evidence to show that the land from which the timber was cut were odd sections within the grant and included in a conveyance from the railroad company to the defendants. (Same.)

DEPARTMENTAL REGULATIONS.

RIGHT OF WAY FOR RAILROADS, CANALS, RESERVOIRS, ETC.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
WASHINGTON, D. C., *April 25, 1906.*

AMENDATORY CIRCULAR.

RIGHTS OF WAY (CLASS II.)

In accordance with the agreement made by and between the Department of the Interior and the Department of Agriculture, paragraph 2 of the circular of February 11, 1904 (32 L. D., 481), and paragraphs 3 and 66 of the circular of September 28, 1905 (34 L. D., 212), except the last clause in each relative to construction in advance of approval or specific permission, which will remain as at present, are hereby amended so as to read as follows:

Whenever a right of way is located upon a forest or timber-land reserve, the applicant must enter into such stipulation and execute such bond as the Secretary of Agriculture may require for the protection of such reserves.

This amendment applies to forest or timber-land reserves only, not to national parks.

W. A. RICHARDS,
Commissioner.

Approved, April 25, 1906.

E. A. HITCHCOCK,
Secretary.

REGULATIONS GOVERNING ENTRIES WITHIN NATIONAL FORESTS.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., September 7, 1906.

REGISTERS AND RECEIVERS, *U. S. Land Offices.*

SIRS: Your attention is called to the act of June 11, 1906 (34 Stat., 233). This act authorizes homestead entries for lands within forest reserves, and you are instructed thereunder as follows:

[NOTE.—For copy of the act see p. 189.]

1. Both surveyed and unsurveyed lands within forest reserves which are chiefly valuable for agriculture and not needed for public

use may, from time to time, be examined, classified, and listed under the supervision of the Secretary of Agriculture, and lists thereof will be filed by him with the Secretary of the Interior, who will then declare the listed lands subject to settlement and entry.

2. Any person desiring to enter any unlisted lands of this character should present an application for their examination, classification, and listing to "The Forester, Washington, D. C.," in the manner prescribed by regulations issued by the Agricultural Department.

3. When any lands have been declared subject to entry under this act the land office for the district in which they are located will be furnished with a list thereof, and the register and receiver will immediately, upon receipt of such list, file it in their office, and at the same time issue notices of such filing and name therein the sixty-first day after the day on which the list is filed by them as the date on which the lands listed therein will be open to settlement and entry under the homestead laws.

4. The notice mentioned in the preceding paragraph should be substantially in the form of the notice hereto attached, and you will keep a copy of the notice of the filing of each list prominently posted in your office during the sixty days following such filing, and also publish a copy of the notice during that period for not less than four weeks in a newspaper of general circulation published in each county in which any of the lands are located, and if there be no newspaper published in such county you will publish the notice in a newspaper of general circulation published nearest the land.

5. The cost of publishing the notice mentioned in the preceding paragraph will not be paid by the receiver, but the publisher's vouchers therefor, in duplicate, should be forwarded through your office to this office, accompanied by a duly executed proof of publication.

6. In addition to the publication and posting, above provided for, you will, on the day the list is filed in your office, mail a copy of the notice to any person known by you to be claiming a preferred right of entry as a settler on any of the lands described therein, and also at the same time mail a copy of the notice to the person on whose application the lands embraced in the list were examined and listed and advise each of them of their preferred right to make entry prior to the expiration of sixty days from the date upon which the list is filed.

7. Any person qualified to make a homestead entry who, prior to January 1, 1906, occupied and in good faith claimed any lands listed under this act for agricultural purposes, and who has not abandoned the same, has a preferred right to enter such contiguous tracts covered by his settlement as will not exceed 160 acres in area and not exceed 1 mile in length, at any time within sixty days from the date upon which the list of such lands was filed in your office.

8. The fact that a settler named in the preceding paragraph has already exercised or lost his homestead right will not prevent him from making entry of the lands settled upon if he is otherwise qualified to make entry, but he can not obtain patent until he has complied with all of the requirements of the homestead law as to residence and cultivation and paid \$2.50 per acre for the land entered by him.

9. The person upon whose application any land is listed under this act has, if he is qualified to make entry under the homestead laws, the preferred right to enter such contiguous tracts listed upon his application as will not exceed 160 acres in area and not exceed 1 mile in length, at any time within sixty days from the date on which the list embracing such lands was filed in your office, but his entry will be made subject to the right of any settler on such lands who makes entry within sixty days from the filing of the list in your office.

10. When an entry embraces unsurveyed lands, or embraces a tract which forms a fractional part of a quarter quarter section (40 acres), or embraces a fractional part of a lotted subdivision of a surveyed section, the entryman must cause such unsurveyed lands of such fractional parts to be surveyed by or under the direction of the United States Surveyor-General at some time before he applies to make final proof; but when all of any platted subdivision of a surveyed section is embraced in his entry he will not be required to resurvey such technical legal subdivision.

11. The commutation provisions of the homestead laws do not apply to entries made under this act, but all entrymen must make final proof of residence and cultivation within the time, in the manner and under the notice prescribed by the general provisions of the homestead laws, except that all entrymen who are required by the preceding paragraph to have their lands, or any portion of them, surveyed must within five years from the date of their settlement present to the register and receiver their application to make final proof on all of the lands embraced in their entries, with a certified copy of the plat and field notes of their survey attached thereto.

12. In all cases where a survey of any portion of the lands embraced in an entry made under this act is required the register will, in addition to publishing and posting the usual final-proof notices, keep a copy of the final-proof notice with a copy of the field notes and the plat of such survey attached posted in his office during the period of publication, and the entryman must keep a copy of the final-proof notice and a copy of the plat of his survey prominently posted on the lands platted for at least thirty days prior to the day on which he offers his final proof, and at the same time his final proof is offered he must file an affidavit showing the date on which the copies of the notice and plat were posted on the land, and that they remained so posted for at least thirty days thereafter.

13. This act does not apply to any lands situated in the counties of Inyo, Tulare, Kern, San Luis Obispo, Santa Barbara, Ventura, Los

- Angeles, San Bernardino, Orange, Riverside, and San Diego, in the State of California, and entries made for lands in the Black Hills Forest Reserve can only be made under the terms and upon the conditions prescribed in sections 3 and 4 of this act.

[NOTE.—The act of Feb. 8, 1907 (34 Stat., 883) excepted certain townships in the Black Hills from these conditions. (See p. 191.)]

14. This act does not authorize any settlements within forest reserves except upon lands which have been listed, and then only in the manner mentioned above, and all persons who attempt to make any unauthorized settlement within such reserves will be considered trespassers and treated accordingly.

Very respectfully,

G. F. POLLOCK,
Acting Commissioner.

Approved:

THOS. RYAN,
Acting Secretary.

UNIFORM RULES AND REGULATIONS.

By the Secretaries of the Interior, Agriculture, and War to carry out the provisions of the act for the preservation of American antiquities, approved June 8, 1906.

NOTE.—For copy of the act, see p. 192.

1. Jurisdiction over ruins, archeological sites, historic and prehistoric monuments and structures, objects of antiquity, historic landmarks, and other objects of historic or scientific interest, shall be exercised under the act by the respective Departments as follows:

By the Secretary of Agriculture over lands within the exterior limits of forest reserves; by the Secretary of War over lands within the exterior limits of military reservations; by the Secretary of the Interior over all other lands owned or controlled by the Government of the United States, provided the Secretaries of War and Agriculture may, by agreement, cooperate with the Secretary of the Interior in the supervision of such monuments and objects covered by the act of June 8, 1906, as may be located on lands near or adjacent to forest reserves and military reservations, respectively.

2. No permit for the removal of any ancient monument or structure which can be permanently preserved under the control of the United States *in situ*, and remain an object of interest, shall be granted.

3. Permits for the examination of ruins, the excavation of archeological sites, and the gathering of objects of antiquity will be granted by the respective Secretaries having jurisdiction, to reputable museums, universities, colleges, or other recognized scientific or educational institutions, or to their duly authorized agents.

4. No exclusive permits shall be granted for a larger area than the applicant can reasonably be expected to explore fully and systematically within the time limit named in the permit.

5. Each application for a permit should be filed with the Secretary having jurisdiction, and must be accompanied by a definite outline of the proposed work, indicating the name of the institution making the request, the date proposed for beginning the field work, the length of time proposed to be devoted to it, and the person who will have immediate charge of the work. The application must also contain an exact statement of the character of the work, whether examination, excavation, or gathering, and the public museum in which the collections made under the permit are to be permanently preserved. The application must be accompanied by a sketch plan or description of the particular site or area to be examined, excavated, or searched, so definite that it can be located on the map with reasonable accuracy.

6. No permit will be granted for a period of more than three years, but if the work has been diligently prosecuted under the permit the time may be extended for proper cause upon application.

7. Failure to begin work under a permit within six months after it is granted, or failure to diligently prosecute such work after it has been begun, shall make the permit void without any order or proceeding by the Secretary having jurisdiction.

8. Applications for permits shall be referred to the Smithsonian Institution for recommendation.

9. Every permit shall be in writing, and copies shall be transmitted to the Smithsonian Institution and the field office in charge of the land involved. The permittee will be furnished with a copy of these rules and regulations.

10. At the close of each season's field work the permittee shall report in duplicate to the Smithsonian Institution, in such form as its Secretary may prescribe, and shall prepare in duplicate a catalogue of the collections and of the photographs made during the season, indicating therein such material, if any, as may be available for exchange.

11. Institutions and persons receiving permits for excavation shall, after the completion of the work, restore the lands upon which they have worked to their customary condition, to the satisfaction of the field officer in charge.

12. All permits shall be terminable at the discretion of the Secretary having jurisdiction.

13. The field officer in charge of the land owned or controlled by the Government of the United States shall, from time to time, inquire and report as to the existence, on or near such lands, of ruins and archeological sites, historic or prehistoric ruins or monuments, objects of antiquity, historic landmarks and prehistoric structures, and other objects of historic or scientific interest.

14. The field officer in charge may at all times examine the permit of any person or institution claiming privileges granted in accordance with the acts and these rules and regulations, and may fully examine all work done under such permit.

15. All persons duly authorized by the Secretaries of Agriculture, War, and Interior may apprehend or cause to be arrested, as provided in the act of February 6, 1905 (33 Stat., 700), any person or persons who appropriate, excavate, injure, or destroy any historic or prehistoric ruin or monument or any object of antiquity on lands under the supervision of the Secretaries of Agriculture, War, and Interior, respectively.

[NOTE.—For copy of the act of February 6, 1905, see p. 203.]

16. Any object of antiquity taken, or collection made, on lands owned or controlled by the United States without a permit, as prescribed by the act and these rules and regulations, or there taken or made, contrary to the terms of the permit or contrary to the act and these rules and regulations, may be seized, wherever found and at any time, by the proper field officer or by any person duly authorized by the Secretary having jurisdiction, and disposed of as the Secretary shall determine, by deposit in the proper national depository or otherwise.

17. Every collection made under the authority of the act and of these rules and regulations shall be preserved in the public museum designated in the permit and shall be accessible to the public. No such collection shall be removed from such public museum without the written authority of the Secretary of the Smithsonian Institution, and then only to another public museum, where it shall be accessible to the public; and when any public museum, which is a depository of any collection made under the provisions of the act and these rules and regulations, shall cease to exist, every such collection in such public museum shall thereupon revert to the national collections and be placed in the proper national depository.

WASHINGTON, D. C., *December 28, 1906.*

The foregoing rules and regulations are hereby approved, in triplicate, and, under authority conferred by law on the Secretaries of the Interior, Agriculture, and War, are hereby made and established to take effect immediately.

E. A. HITCHCOCK,
Secretary of the Interior.

JAMES WILSON,
Secretary of Agriculture.

WM. H. TAFT,
Secretary of War.

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