THE DEVELOPMENT OF FOREST LAW IN AMERICA

J. P KINNEY







THE DEVELOPMENT OF

FOREST LAW IN AMERICA

A Historical Presentation of the Successive Enactments, by the Legislatures of the Forty-eight States of the American Union and by the Federal Congress,

Directed to the Conservation and Administration of Forest Resources.

BY

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TO THE MEMORY OF

HARRY DAY EVERETT

A CAPABLE FORESTER, A FAITHFUL FRIEND AND AN ARDENTLY LOYAL AMERICAN, THROUGH WHOSE EXCEPTIONAL ABILITY AND ZEALOUS DEVOTION THE CAUSE OF FORESTRY MIGHT HAVE GAINED MUCH BUT FOR HIS UNTIMELY AND TRAGIC DEATH IN THE PHILIPPINE FOREST SERVICE.

THIS BOOK IS DEDICATED



Preface

In the year 1773 A. D. there was published at Newbern, North Carolina, a book bearing the title, "A Complete Revisal of all the Acts of Assembly of the Province of North Carolina now in force and use."

In dedicating this work to Josiah Martin, Governor of the Province of North Carolina at that time, James Davis, the author of the book, said: "The first edition of a Revisal of our laws being long since sold off, and a great length of Time elapsing since that Work was finished, they are now unavoidably thrown into as great perplexity as ever; as in a young and flourishing Country like this, the Face of Affairs must necessarily change with the Accession of Peoples, and their Application to Industry, and almost every Session of Assembly cause a Mutability in our Laws, according as the internal Policy and Regulations of the Province require."

Although the charter to the proprietors of Carolina had been granted on March 24, 1663 by Charles II of England and settlement had been established within the boundaries of the present state of North Carolina soon afterward, the total population of both North and South Carolina at the close of the seventeenth century has been estimated by competent authority to have been only eight thousand souls, ¹ and when the revisal of the laws of the royal province (established in 1692) was published in 1773, the total population of North Carolina, both white and colored, could not have been more than three hundred and seventy-five thousand, or less than one-sixth of its population in 1916.² Yet with this comparatively small population and

History of the United States, Bancroft, (authors last revision) Vol. 2, and p. 608.
 See a Century of Population Growth in the United States (1790-1900), Government Printing Office, Wash., D. C. 1909, table 105, p. 205, giving the total population of North Carolina in 1790 as 395,000.

with a social and industrial organization that we cannot, from the standpoint of the twentieth century, consider other than extremely simple, Mr. Davis found legislative innovations so frequent as to make it difficult to trace the thread of the law through a few decades in his own state.

Reference has been made to the perplexities of this pre-Revolutionary compiler of the laws of North Carolina only for the purpose of illustrating the character of the difficulties that have been encountered by the author in attempting to trace through approximately three centuries the development of forest legislation in America and with the aim of thus obtaining from the reader a tolerant consideration of the imperfections of the present work. Previous to 1773 a number of the English colonies and provinces had developed a more extensive body of laws than North Carolina and subsequent to that time the expansion of the thirteen sparsely populated and undeveloped colonies into a nation of forty-eight sovereign states, each having an independent legislative authority, has resulted in the accumulation of a mass of forest law that the writer found truly formidable.

In an earlier publication ¹ the author presented the development of legislation regarding forest subjects enacted in the English colonies, and provinces and in the thirteen American states under the Articles of Confederation; and in a book which was largely written contemporaneously with this volume he has discussed in a cursory manner the development, subsequent to the adoption of the Federal Constitution, of legislation directed to the regulation of timber inspection and of the transportation of timber products on inland waters. ² The writer at one time contemplated the tracing of the development of timber trespass legislation; but, after going over the field generally and gathering a large amount of material, he reached the conclusion that such a discussion could not be fittingly incorporated either in the book previously published or

Forest Legislation in America Prior to March 4, 1789, (published by Cornell University, Ithaca, N. Y. as Agricultural Experiment Station Bulletin No. 370, January, 1916.
 The Essentials of American Timber Law, Chapters XIII and XIV.

PREFACE VII

in the present volume. For the period prior to 1789 the development of timber trespass legislation has been thoroughly covered in the bulletin above mentioned. Subsequent to 1789 many timber trespass laws have been enacted in the original thirteen states and such laws may be found among the earlier enactments of every territory and state, with frequent modifications in many jurisdictions. However, these enactments have all exhibited a remarkable similarity, the variations consisting in unimportant detail rather than in principle. Practically all of these statutes have been directed solely to the protection of property interests, either public or private, and thus have little bearing upon the development of a state forest policy.

The writer has sought to confine this work to a logical presentation of the chronological development of legislation that was directed to the preservation of existing forest resources, the reforestation of cut-over or burned over areas, the extension of forest areas and the systematic management of forests for productive purposes. In doing this it has seemed advisable, for the sake of completeness, to include references to a number of laws regarding forest fires, shade trees and other related subjects that were not really forest conservation or forest administration laws. The forest fire problem is so important in all forestry practice that an attempt has been made to cite all state and federal acts dealing with fires, even though their object was primarily or solely the protection of existing life and property regardless of the interest of later generations in the maintenance of a forest cover or of a timber supply. To avoid the confusion that would have resulted from an attempt to present the innumerable changes in minor particulars effected by the fire laws enacted in the states and territories prior to the year 1885, only general comment has been made upon such laws. The reader who is interested in the development in any one state, or group of states, can readily attain his object through a use of the references given.

Subsequent to the year 1885, and more particularly subsequent to the year 1900, the multiplicity of laws in the various states and the bewildering rapidity with which one innovation after another has been introduced in several states has rendered the work undertaken by the writer extremely arduous and perplexing at times. Doubt as to whether certain detail should be included has often arisen. At such times the detail has been given where it was thought that it would probably be of interest and value to the student in forestry, law, or economics who desired to trace for himself the development of forest policy and administration in America.

In many publications one finds laws cited by the year and the chapter, in others by the year and the page of the session laws and in others by the date of the act only. Furthermore, uniformity does not exist as to the date to be given, some writers giving the date of the approval by the executive, some the date when the act is filed in the office of the secretary of state, others the date of publication and still others the date upon which the act becomes effective. To afford a complete means of identification, the author has in the great majority of instances given both the date of the act and the chapter number, and to facilitate a ready finding of the law he has often given the page in the session laws also. He has believed the date of approval by the executive to be generally the most satisfactory one for citation purposes and for the sake of uniformity has given this date to each act except where this date could not be determined from the sources of information, available to him.

With the purpose of enabling the reader to acquire a true perspective as to the development of the whole subject of forest conservation and management in individual states, the author has included in the two chapters upon state forest administration references to important legislation regarding fire control and forest extension. Although this treatment results in some repetition, it is believed the adoption of the plan will materially assist the uninitiated and will cause no inconvenience to those already familiar with the general progress of forest legislation in America.

J. P Kinney.

Washington, D. C., September 18, 1916.

The Development of Forest Law in America

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Errata

On p. 2, line 1, for Mass read Massa-

On p. 6, line 14, for interest read interests

On p. 25, line 22, for e- read ex-

On p. 37, line 11, for right read rights

On p. 48, footnote 2, for 4554 read 4654

On p. 54, line 21, for indication read either

On p. 89, line 22, for extended read expended

On p. 110, line 17, for negligently permitting read the negligent permitting of

On p. 118, line 5, for right read rights

On p. 121, line 2, cancel "to"

On p. 121, footnote 1 is upon p. 122

On p. 123, line 22, for, and to require read to require the

On p. 123, line 23, for to have authority read free of liability

On p. 174, line 8, for 19 read 1901

On p. 187, line 7, for t read to

On p. 220, line 20, for enactment read promotion

On p. 233, last line, for dmages read damages

On p. 241, line 26, for simlar read similar

On p. 251, line 18, for dis read dis-On p. 251, line 19, for fro read from



CHAPTER I

Forest Administration Legislation Enacted in American States Prior to the Year Nineteen Hundred

DEVELOPMENTS PREVIOUS TO THE YEAR 1885

From the earliest colonial times there were always individuals in America who urged the necessity of encouraging the maintenance of a forested area sufficient to supply future timber needs; and, although the great majority of the people were too deeply engaged in the task of acquiring a living and developing a new continent to give serious consideration to the formulation of a forest policy, the colonial legislatures enacted many laws against the destruction of forests by fire that disclosed a dim realization of the loss to the state, as well as to the individual, involved in the reckless indifference of many as to the common practice of setting open fires or allowing them to escape from control. 1 In fact, the first ordinance regarding the firing of the woods in Plymouth Colony in Massachusetts recited as a justification for the law that an inconvenience might result from a depletion of the timber supply. Massachusetts act of January 15, 1743 specifically recognized the damage caused by fire to young tree growth and to the soil, and a North Carolina act of 1777, imposing penalties for the unlawful firing of the woods, declared forest fires "extremely prejudicial to the soil."

Early in the seventeenth century, laws were enacted forbidding the waste of timber on common lands by unnecessary or indiscreet cutting, and in the month following that in which peace was concluded between Great Britain and

For a discussion of Colonial laws see Forest Legislation in America Prior to March 4, 1789, Kinney (Bulletin 370, Agr. Exp. Sta., Cornell University, 1916.).

the United States of America the General Court of Mass chusetts forbade the cutting or destroying of white pine trees twenty-four inches or upward in diameter one foot from the ground on any lands of the State without previous license from the legislature, under penalty of thirty pounds for each offense. However, the first century following the establishment of a national government witnessed the passing of the title to the greater portion of the public lands of American States into private possession.

Occasionally associations of persons interested primarily in other objects, like the New York Society for the Promotion of Agriculture, Arts and Manufactures, by its action in 1791, sought to awaken a general public interest in the need of conserving the forests of America. Although it is impossible to trace the connection between such private activities and specific legislative acts, these efforts doubtless had an important effect in shaping public opinion.

A Massachusetts act of 1818 1 authorized agricultural societies of the state to offer premiums to encourage the growing of oaks and other trees necessary to the maintenance of a supply of ship building material, and another act of the same year imposed a fine and imprisonment for the offense of cutting from public lands of the state any white pine tree twenty-four inches or over in diameter at two feet from the ground. 2 A New York act of April 9, 1805, ³ fixing treble damages for the cutting of timber from state lands, having proven ineffectual to prevent trespasses, an act of 1826 4 imposed a penalty of twenty-five dollars for each tree cut in trespass upon lands owned by the state. Acts imposing penalties for the cutting of timber, or the setting of fires upon public lands, were subsequently enacted in many states. Many of these acts had special reference to lands which were held by the states for the benefit of public schools. 5

^{1.} Acts and Resolves, Mass., 1818, p. 114, Sec. 5.
2. Act Feb. 23, 1818, Gen. Laws, Mass., Boston, 1823, Vol. 2 p. 446.
3. Session Laws, N. Y., 1805, ch. 94; Laws of N. Y., Web. & Sk., Vol. 4, p. 247.
4. Session Laws, N. Y., 1826, ch. 187, p. 209; cf. Session Laws 1889, ch. 256, p. 305.
5. Ark. Digest of Laws, 1846, p. 344 (school).
Fla. Act Mar. 6, 1877, ch. 3020 (all state lands).
Ill. Act Feb. 9, 1835, S. L. p. 34 (all state lands).
Ind. Rev. Laws 1831, p. 187, sec. 34 (all state lands).
(Footnote 5 continued on next page)

On November 24, 1827 the Congress of that portion of the Mexican Confederacy that included the present State of Texas, in decreeing that, for a term of three years, six designated towns might cut timber along the Sabine River without the payment of a certain tax, specified that the cutting be done during the proper season for the planting of trees, and required that anyone who should in such cutting, negligently cause a fire, must pay the damage and plant trees upon the area burned over. All cutting was to be done under a permit and necessary restrictions.

An ordinance of January 9, 1851 by the general assembly of the newly formed "State of Deseret" (the Mormon settlement later called Utah), granting to George A. Smith the exclusive control of the timber in the canons on the east side of the mountains west of the Jordan River in Great Salt Lake County, required that any person obtaining timber there, with the permission of the proprietor, should contribute to the cost of the private roads leading to the timber, and imposed a penalty of one hundred dollars in addition to the liability for all damage upon anyone who should waste, burn or otherwise destroy timber there. Timber left lying an unreasonable time after cutting might be removed by the proprietor and disposed of for the benefit of the public treasury.

A Wisconsin act of March 23, 1867 ³ authorized the state agricultural and horticultural societies each to appoint a person, and these persons a third one, who were to make investigations and report to the next session of the legislature whether the forests of the state were being destroyed as rapidly as had been claimed, what effect the destruction of forests had upon climate, whether the state should attempt to control the management of private forests, whether any convenient substitute for wood might be found in the

⁽Footnote 5 concluded from preceding page)

Kan. Act June 4, 1861, Comp. Laws 1862, p. 895 (school.).

La. Rev. Laws (N. O. 1856) Phillips p. 139 sec. 35 (All state lands)

Mich. Rev. Statutes, 1846, p. 246, sec. 61 (all state lands.). Act Feb. 12, 1857, S. L., p. 211 (Comp. L. 1857, Sec. 5927-36). (All.).

Mo. Gen. Statutes 1865, ch. 49, sec. 30, p. 286 (school).

Nev. Act Mar. 3, 1871, S. L., p. 113 (All state lands.).

Vis. Act Mar. 1, 1890, ch. 140, p. 308 (All state lands.).

Wis. Act Dec. 9, 1836, Laws 1st Terr. Ass., p. 95 (school.).

Laws and Decrees of State of Coahuila and Texas, Houston, 1839, No. 36, p. 92.

2. Acts of Utah Territory, 1851 to 1870, ch. 113, p. 174.

3. Session, Laws, Wis., 1867, ch. 36, p. 37.

Nev. N. H.

state, and what efforts the state should take to preserve the forests and encourage the extension of forest areas. Following the report of this committee, the legislature passed the act of March 4, 1868 1 providing a tax exemption and bounties for the preservation or the planting of belts of trees.

In January 1869, the State Board of Agriculture of Maine appointed a committee to present to the legislature the necessity of the preservation and production of forest trees. The act of February 29, 1872, 2 providing exemption of forest plantations from taxation, embodied one of the recommendations of this committee.

One of the most effective means of arousing an interest in the value of trees was first used in Nebraska in 1872. This means was the designation of a certain day as Arbor Day, upon which the inhabitants of the state were urged to plant trees. The idea of urging the general public to plant and care for trees found ready acceptance, not only in the plain and prairie states, but also in the states once heavily forested, and within twenty years Arbor Day had been officially recognized in a score of other states. Subsequent to 1892 legislative provision for the observance of one day in the year as especially appropriate for the planting of trees was made in a number of other states. 3

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    Session Laws Wis., 1868, ch. 102; same Rev. St. 1878, Sec. 1469-71.
    Session Laws, Me., 1872 ch. 66, p. 41.
    Ariz. Rev. Stat. 1901, Par. 310-313, Par. 2709; Rev. Stat. 1913, sec. 2837-40.
    Ark. Act Apr. 25, 1905, S. L. No. 209.
    Calif. Act Mar. 3, 1909, S. L. ch. 82.
    Colo. Act Mar. 22, 1889, S. L. p. 21; Rev. Stat. 1908, Sec. 2942-44.
    Conn. Act May 31, 1886, S. L. ch. 90 sec. 1; Gen. Stat. 1902, sec. 4438-50.
    Del. Act Mar. 9, 1901, S. L. ch. 216, sec. 8.

                                                                                                     Act Mar. 9, 1901, S. L. ch. 216, sec. 8.

Act Dec. 16, 1890, S. L. No. 60, p. 219; Code 1910, sec. 1526-27.

Act Feb. 1, 1887, S. L. p. ; Rev. Stat. 1887, sec. 1299; Act Mar. 10
1903, S. L. p. 215; act Mar. 7, 1911, S. L. ch. 159, sec. 188, (School code.)

Act June 10, 1887, S. L. p. 304.

Act June 10, 1887, S. L. p. 304.

Act Mar. 9, 1903, S. L. ch. 116, p. 214; act Apr. 30, 1913, S. L. p. 422;

Annot. St. 1914, sec. 7461a-7461c.

Act July 4, 1904, S. L. p. 259; act July 7, 1910, S. L. No. 261, sec. 16.

Act Mar. 10, 1887, S. L. ch. 79, p. 61.

Session Laws 1900, ch. 428, sec. 17 b; S. L. 1901 ch. 202; Act

Apr. 8, 1902, S. L. ch. 194; Act Apr. 12, 1904, S. L. ch. 584, sec. 17 B.

Resolve Apr. 9, 1886, ch. 32, p. 370.

Joint Res. No. 6; Mar. 26, 1885, S. L. p. 378.

Act Mar. 3, 1899, S. L. ch. 36.

Code of 1892, sec. 3970; code 1906, sec. 4491.

Act May 6, 1889, S. L. p. 260.

Act Sept. 13, 1887, S. L. p. 103; act Mar. 11, 1895, Codes & Stat.

1895, p. 171.

Comp. St. 1885, p. 389, Sec. 8; Comp. Stat. 1911 (Br. & Wh.) sec. 3855a

(195). Rev. St. 1913, Sec. 5512.

Act Feb. 10, 1887, S. L. p. 51; Rev. Laws 1912, sec. 3349-50.

Joint Res. July 10, 1885, S. L. ch. 103, p. 297.

(Footnote 3 continued on next page)
                                  Fla.
                                  lda.
                                  Ind.
                                  La.
                                  Md.
                                  Mass.
                                  Mich.
                                    Minn.
                                  Miss.
                                  Mo.
                                  Mont.
                                  Neb.
```

The first association for the sole purpose of promoting the planting of forest trees and the general practice of forestry was formed in Minnesota on January 12, 1876, and called the Minnesota Forestry Association. This association received legislative recognition in the appropriation of money for expenditure under its direction in the form of bounties for tree planting. 1

The first constitution of Colorado, adopted March 14, 1876 provided in section six, of article eighteen, that the general assembly should enact laws to prevent the destruction of and keep in good preservation the forests upon the lands of the state and upon such part of the public domain as Congress should place under the control of the state, and section seven of the same article authorized the legislature to exempt from taxation the increased value given to lands by the planting of trees thereon. In accordance with the latter provision an act of 1881 2 granted an exemption for trees planted on irrigated lands, but although Colorado was the first state to incorporate in its constitution a provision that specifically authorized a definite state forest policy, no legislation of this character was enacted for a decade and then nothing effective.

By act of May 23, 1872 3 the legislature of the State of New York appointed a commission of seven persons to inquire into the advisability of the establishment of a state

N. J.

N. M. N. Y. N. C. N. D.

Ohio

⁽Footnote 3 concluded from preceding page)

Act Apr. 14, 1884, S. L. ch. 109, p. 173; Joint Res. Apr. S, 1908, No. 6, p. 729; Act Apr. 13, 1908, S. L. ch. 187, p. 378; Act Mar. 21, 1912, S. L. ch. 120, p. 169.

Act Feb. 16, 1891, S. L. ch. 35, p. 82.

Act Apr. 30, 1888, S. L. ch. 196, p. 267.

Joint Resolution Mar. 6, 1893, S. L. p. 495.

Cf. Act Feb. 15, 1909, Ch. 201, p. 297, (Same comp. L. 1913, sec. 1204.)

Joint Res. Apr. 11, 1882, S. L. p. 243; Act Mar. 5, 1902, S. L. p. 38.

Act Mar. 5, 1901, S. L. ch. 5, p. 62.

Act Feb. 25, 1889, S. L. p. 110; Lord's Laws 1910, sec. 4135-36.

J. Res. Mar. 17, 1885, S. L. p. 300; J. Res. Mar. 30, 1887, S. L. p. 431.

Act May 6, 1887, S. L. ch. 641, p. 153; S. L. 1900-01, ch. 809, sec. 36.

Act Feb. 16, 1898, S. L. ch. 471, p. 760. Okla. Ore. Pa. R. I. S. C. S. D.

Act Mar. 23, 1887, chap. 172, p. 297; Shannon Code 1896, sec. 1416, Act Feb. 22, 1889, S. L. ch. 68, p. 78; Rev. Civ. St. 1911, sec. 4607, Act Mar. 5, 1892, S. L. ch. 26, p. 26; Act Feb. 5, 1909, Comp. L. 1907, Tenn. Tex.

sec. 1146.
Act Apr. 2, 1902, S. L. ch. 637, p. 753, code 1904, Vol. 1, sec. 222b.
Act Apr. 16, 1889, S. L. ch. 417, p. 591; act Mar. 17, 1897, S. L. ch. 61, Wis.

<sup>Wis. Act Apr. 10, 1868, S. L. ch. 417, p. 631, act Mar. 17, 1837, S. E. ch. 61, 91, p. 87.
Wyo. Act Mar. 9, 1888, S. L. ch. 87, p. 183; comp. Stat. 1910, sec. 3582.
Act Mar. 2, 1876, S. L., Minn., ch. 110, p. 120.
Act Feb. 12, 1881, S. L., Colo., p. 256, cf. Act Feb. 27, 1877, S. L. Colo., p. 99, secs. 49 and 50 (Board of Agriculture to gather information as to forest culture)
Session Laws, N. Y., 1872, ch. 848, Vol. 2, p. 2006.</sup>

park within seven specified counties lying north of the Mohawk River, and within the forested region of the Adirondack Mountains. After an investigation this commission recommended that the state make no further sales of land, and that it retain all lands which should come into its possession because of the non-payment of taxes ¹. It was not until 1883 ² that a law was enacted forbidding further sales of state land as the commission had urged in 1873. However, within the decade, through the acquisition of lands under tax sales, the state increased its holdings from forty thousand acres to over five hundred thousand acres.

By joint resolution of July 29, 1881 ³ a commission for inquiry regarding the forest interest of the state was created in Vermont. A report by this Commission was published in 1884, but it was followed by no action on the part of the legislature.

On July 29, 1881 ⁴ also the legislature of New Hampshire by joint resolution authorized the appointment of a commission to determine the extent to which the forests of the state were being destroyed by indiscriminate cutting and exportation; to investigate the effect, if any, of the destruction of forests upon rainfall, and to report as to the necessity of forest legislation in New Hampshire. A joint resolution of September 15, 1883 ⁵ extended the term of this commission until 1885, but no forest legislation resulted.

EXPERIMENTAL ADMINISTRATIVE LEGISLATION. BETWEEN 1885 AND 1900

In 1875 a notice had been issued for a national forestry convention, to meet at Chicago, Illinois, and the following year at a meeting in Philadelphia an organization was completed. Thus the Centennial of American Independence marked the beginning of a national movement for the conservation of American forest resources. No effective

Senate Doc. N. Y. No. 102, 1873.
 Session Laws, N. Y., 1883, ch. 13, p. 10 (cf. ch. 470, p. 645, state as tenant in common.)

^{3.} Session Laws, Vt., 1881, p. 518. 4. Session Laws, N. H., 1881, ch. 117. 5. Session Laws, N. H., 1883, ch. 161.

progress was made until the cooperation of those interested in this association with others attending an American Forestry Congress held at Cincinnati in 1882 resulted in the formation of an organization that ultimately took the name, "The American Forestry Association." This association, cooperating with the division of forestry in the national department of agriculture that took form contemporaneously with it, secured legislative action by four widely separated states in 1885, and during the remaining fifteen years of the nineteenth century succeeded in creating a public sentiment that found expression not only in more effective laws for the prevention and control of forest fires but in several enactments that aimed at a definite policy of state administration of publicly owned forests.

California. By an act of March 3, 1885 1 California earned the distinction of being the first state of the American Union to establish a permanent Board of Forestry. However, this non-salaried board was clothed with no administrative authority over either public or private forests, and was charged only with responsibility for educational and experimental activities. By an act of March 7, 1887 ² all members of this board, and assistants employed by them, were given the powers of arrest appertaining to peace officers. Appropriations for the work of the board were continued until the board was abolished by an act of March 22, 1893, 3 and the duty of maintaining the experiment station which the board had established was devolved upon the Agricultural Department of the University of California.

Colorado. A Colorado act of April 4, 1885 4 created a state office of forest commissioner, and made county commissioners and road overseers forest officers who should guard against fire and depredations, and encourage timber culture. These officers were given authority to arrest offenders against laws for the protection of forests. As no pro-

Session Laws of Calif., 1885, ch. 11, p. 10.
 Session Laws of Calif., 1887, ch. 35, p. 46.
 Session Laws of Calif., 1893, ch. 187, p. 229.
 Session Laws, Colo., 1885, p. 299; cf. act Apr. 4, 1887, S. L. p. 412, providing for a small state park.

vision was made for the compensation of the forest commissioner for his services, and the annual expenditure in each county for the protection of the forests was limited to one hundred dollars, no effective organization was established.

By an act of April 16, 1897 1 a department of forestry. fish and game was established. This act provided salaries for a commissioner and three tree wardens charged with the duty of administering state forest lands, of guarding against fire, and of encouraging the culture of forests. Sections eleven and twelve of this act contained new legislative provisions regarding the setting of fires, and section thirteen forbade the exportation from the state of the timber of coniferous trees cut from state or public lands.

Ohio. On April 16, 1885 ² the legislature of Ohio established a forestry bureau which was to gather information in regard to forest conditions within the state and recommend legislation that would effect a conservation of the forests. Although this bureau doubtless had an important educational influence, no real forest policy for the state was evolved.

New York. A committee of experts appointed by the comptroller of New York in 1884 to investigate and report upon a system of forest preservation suitable for adoption by the state submitted its report and recommendations on January 23, 1885 and, by an act of May 15, 1885, 3 the legislature attempted to establish permament forest reserves (in the form of parks), to provide a state system of administration of forest fire protection, and to encourage the practice of forestry on private lands. This law provided for a permanent forest commission of three members, a state warden, state inspectors and other necessary agents; created a forest preserve to consist of all lands then owned or thereafter to be acquired by the state in eleven counties in the Adirondack region 4 and three counties in the Catskill Mountains, 5 and declared that the lands comprising the preserve should

Session Laws, Colo., 1897, p. 36.
 Session Laws, Ohio, 1885, Vol. 82, p. 135.
 Session Laws, N. Y., 1885, ch. 283, p. 482.
 Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence, Warren and Washington, except towns of Altona & Dannemora in Clinton County.
 Greene, Ulster, and Sullivan.

beforever kept as wild forest lands in the full control of the state and not be sold, leased or taken by public or private corporations. The commission was not only charged with responsibility for the proper care and administration of lands within the preserve, but was also required to advance the interests of forest preservation and extension throughout the state, and was especially charged with the duty of forest fire prevention and control. The state officials were given the power to arrest without warrant persons violating the provisions of the act. Town supervisors were constituted fire wardens in towns outside the preserve, subject to the instructions of the state commission. resident was subject to a call by the proper town or state official to assist in the extinguishment of forest fires, and subject to a fine for noncompliance. Annual reports to the legislature of all fires covering more than one acre were required. Railroad companies were required to clear rights of way of inflammable material in forest or other lands particularly subject to fire, to equip locomotives with proper appliances for the prevention of fires, and to employ patrolmen in dangerous periods. This act also imposed heavy penalties and civil liability for all damages upon any person who should wilfully or negligently set a fire upon the lands of another or of the state, or allow a fire to escape from his own land to the damage of another or of the state. This act, carrying an appropriation of fifteen thousand dollars for the expenses of the first year, was the first comprehensive forest administration act in America.

An act of May 5, 1886 1 provided for the taxation of all state lands within the forest preserve on the same basis as private lands within the boundaries thereof. The act of May 15, 1885 was amended by an act of May 26, 1887, 2 so as to authorize the sale of outlying tracts or their exchange for tracts contiguous to large blocks held by the state. An act of June 21, 1887, 3 extended the preserve to include lands owned by the state within Oneida County. In 1890 minor amendments were made by two acts. 4

Session Laws N. Y., 1886, ch. 280, p. 459.
 Session Laws N. Y., 1887, ch. 475, p. 600.
 Session Laws N. Y., 1887, ch. 639, p. 849.
 Session Laws N. Y., 1890, ch. 8, p. 18, and ch. 11, p. 20.

On May 20, 1892 ¹ a large area within the Adirondack region was designated by the New York legislature as "Adirondack Park." to be maintained as a health and pleasure resort, as a forest necessary for the preservation of the headwaters of the chief rivers of the state, and for a future timber supply. This act authorized the forest commissioners to purchase land within the area delimited as the park, subject to a reservation for a period of ten years of conifers over ten inches in diameter at three feet from the ground. The commissioners were authorized to sell detached tracts within the preserve, but outside the park, and use the proceeds for the purchase of lands within the boundaries of the park. Leases of not over five acres for not over five years were permitted within the park, and the park was declared a part of the forest preserve for all general purposes.

The following year a new forest act was passed. ² This law reenacted most of the provisions of the previously existing law regarding the forest preserve and the Adirondack Park, but contained one important change in that it authorized the forest commissioners to sell spruce and tamarack not less than twelve inches in diameter at three feet from the ground, and poplar of such size as the commissioners might determine, and devote the proceeds to the purchase of land within the park.

Section seven of article seven of the New York State Constitution adopted in 1894 provided that all lands within the forest preserve should be forever kept as wild lands, and declared that they should not be leased, sold, exchanged or taken by a public or private corporation, nor should the timber thereon be sold, removed or destroyed. 3

Session Laws N. Y., 1892, ch. 707, p. 1459,
 Act April 7, 1893, N. Y., S. L., Ch. 332, p. 633.
 Saranac Land Etc. Co. v. Roberts, 195 N. Y. 303, 88 N. E., 753 (Affm'g 125 N. Y. App. Div. 333, 109 N. Y. Suppl. 547). Preserve does not include lands claimed by state under void tax sale.
 People v. Fisher, 190 N. Y. 468, S3 N. E. 482 (Affm'g 116 N. Y. App. Div. 677, N. Y. Suppl. 1047). State lands within limits of preserve part of it, though not acquired chiefly for preserve purposes.
 People v. Brooklyn Cooperage Co., 187 N. Y. 142, 79 N. E. 866. (Affm'g 114 N. Y. App. Div. 723, 100 N. Y. Suppl. 19). Purchase of lands by Cornell University for demonstration forest not unconstitutional.
 Meigs v. Roberts, 162 N. Y. 371, 56 N. E. 838, 76 Am. St. Rep. 322 (Revs'g 42 N. Y. App. Div. 290, 59 N. Y. Suppl. 215). Forest Commissioners control only state lands.
 People v. Adirondack Ry. Co., 160 N. Y. 225 (Land not to be state).

People v. Adirondack Ry. Co., 160 N. Y. 225 (Land not to be taken by railroad).

(Footnote 3 continued on next page)

In 1895 1 New York again found it necessary to revise its forest legislation. The new act provided for a commission of fisheries, game and forests, consisting of five members, all with a salary of one thousand dollars per annum except the president, who received five thousand dollars, and authorized the employment of a forester at two thousand dollars and two assistants at twelve hundred dollars each. It repealed the fundamental forest act of 1885 and numerous amendments, and authorized the state forest commission to contract with private owners of land within the boundaries of the Adirondack park to make their holdings a part of the park, exempt from taxation for state and county purposes, provided the owners agreed to remove no live timber except spruce, tamarack or poplar over twelve inches at three feet from the ground, and not to clear more than one acre of each one hundred covered by the contract. An effort of the same legislature to secure an amendment of the state constitution so as to authorize the leasing of land within the preserve in areas of not over five acres and the sale of outlying tracts, or the exchanging of them, for lands within the forest preserve at the will of the legislature, was unsuccessful. 2

The acquisition of forest lands by the State of New York did not progress as rapidly as many desired, and an act of April 8, 1897, 3 required the governor to appoint three men from the land commission and fisheries, game and forest commission as a forest preserve board, whose duty it should be to acquire by purchase or condemnation, lands within the Adirondack park boundary which they

⁽Footnote 3 concluded from preceding page)

People v. Gaylord, 139 N. Y. App. Div. 814, 124 N. Y. Suppl. 517. Timber within reserve subject to larceny.

People v. Long Island R. Co., 126 N. Y. App. Div. 477, 110 N. Y. Suppl. 512.

Forest officers may prosecute offenders.

People v. Santa Clara Lbr. Co., 126 N. Y. App. Div. 616, 110 N. Y. Suppl. 280.

Revers'g 55 Misc. (N. Y.) 507, 106 N. Y. Suppl. 624. Forest officials have right of action concurrent with Attorney General.

Pashley v. Bennett, 108 N. Y. App. Div. 102, 95 N. Y. Suppl. 384. Forester may not sell timber seized.

People v. Campbell, 152 N. Y. 51, 46 N. E. 176. (Povelar 89, Hum 208, 21 N. Y.

People v. Campbell, 152 N. Y. 51, 46 N. E. 176. (Revs'g 82 Hun 338, 31 N. Y. Suppl. 499.) Forest commission may bring action to review decision of control-Suppl. 499.) ler

ler.
People v. Francisco, 76 N. Y. App. Div. 262, 78 N. Y. Suppl. 423. Forest officials may act independently of Att'y Gen'l. in protecting forest.
See Laws of 1907, Ch. 578, p. 1296, appropriating \$476 for George Pashley as reimbursement for maintaining action to enforce title to timber purchased from the state.
1. Act April 25, 1895, S. L., ch. 305, p. 237; cf. Laws 1896, ch. 114.
2. See Session Laws N. Y., 1895, Vol. 1, p. 1010.
3. Session Laws of N. Y., 1897, ch. 220, p. 93. Cf. Act Apr. 15, 1897, ch. 259, p. 121. (Authorized the acquisition of certain lands in Ulster County for state preserves.)

deemed essential to the carrying out of the policy of the state as expressed in its constitution and chapter 395 of the laws of 1895. This act permitted an owner of land which was appropriated to reserve the spruce timber that was ten inches or more in diameter at three feet from the ground. and an owner from whom land was purchased to reserve such spruce as should be agreed upon, with a right of removal for a period of fifteen years, under either a condemnation or a purchase. However, no area could be cut over more than once and the spruce could not be reserved for a distance of twenty rods from any lake, pond or river. The act imposed a penalty of treble damages and also a forfeit of twenty-five dollars for each tree that should be cut or removed from the forest preserve without the permission of the forest preserve board. The expenditure of one million dollars by the board in the purchase or condemnation of land within the Adirondack Park boundary was authorized.

In an amendment of March 28, 1898 1 the procedure for the acquisition of land was modified, the making of compromises authorized and the provision as to a forfeiture of twenty-five dollars for each tree cut omitted; and in one of May 17, 1899 2 section eight was amended as to punctuation and section nine by the addition of a clause authorizing a payment for land before all timber was removed, or a part payment, if in the judgment of the board the circumstances made such payment advisable.

Pennsylvania. A joint resolution of April 28, 1887 3 by the legislature of Pennsylvania, authorized the governor to appoint a committee of not over five persons to consider the forestry interests of the state and report at the next legislature. The following legislature made two appropriations for the expenses of this commission, 4 but no legislation providing for state forests was enacted.

An act of May 23, 1893 5 authorized the appointment

Session Laws, New York, 1898, ch. 135.
 Session Laws, New York, 1899, ch. 619, p. 1361, cf Act Feb. 18, 1899, p. 137, sec. 16, requiring the governor to appoint a game and forestry warden for a term of four years at a salary of \$1200, and expenses, per annum.
 Session Laws, Pa., 1887, No. 31, p. 432.
 Session Laws, Pa., 1889, pp. 407 and 414.
 Session Laws, Pa., 1893, No. 68, p. 115.

of a salaried commission of two to inquire into the forest conditions on state lands and upon other lands throughout the state, and the effect which the destruction of forests produced or would probably produce, and to report what measures should be taken by the state to maintain a timber supply, and whether additional lands should be acquired for forest reserve purposes. An act of March 13, 1895, 1 creating a state department of agriculture, provided for the office of commissioner of forestry in this department, with the duty of collecting and disseminating information regarding the forest interests and industries of the state and of protecting the forests from fire.

An act of March 30, 1897. 2 provided for the acquisition by the state, for forest reservation purposes, of any unseated lands within the state sold for non-payment of taxes, the acquirement of which the commissioner of forestry should determine to be for the best interests of the commonwealth. Another act of May 25, 1897 ³ established a commission of five persons and imposed upon them the duty of examining and acquiring for the state three forest reservations of forty thousand acres each, situated on the watersheds of the Ohio, Delaware and Susquehanna Rivers.

An act of April 28, 1899, 4 authorized the purchase of unseated lands that had not been advertised for the nonpayment of taxes upon such terms, not exceeding \$5.00 per acre, as might be agreed between the owners and the commissioner of forestry, subject to the approval of the Governor and three other state officials constituting a Board of Property.

Michigan. On June 27, 1887 5 the Michigan state board of agriculture was constituted an independent commission for inquiry into forestry conditions within the state, and town supervisors were required to report to this commission forest information appertaining to their respective towns. The next legislature, to which this commission submitted a report, instead of adopting construc-

Session Laws, Pa., 1895, No. 8, p. 17.
 Session Laws, Pa., 1897, No. 10, p. 11.
 Session Laws, Pa., 1897, No. 69, p. 86.
 Session Laws, Pa., 1899, No. 81, p. 98.
 Session Laws, Mich. 1887, No. 259, p. 336.

tive legislation, repealed the sections of the act of 1887 that imposed duties upon town supervisors, 1 and the following legislature repealed the remainder of the act. ² The decade following witnessed no legislation in the line of a state forest policy in Michigan. 3

On June 7, 1899 4 the legislature created a permanent forestry commission of three to make a thorough inquiry into the condition of timberlands in the state, the extent of the diminution of forested areas, the effects of the reduction of forest area upon streams and climate, and the amount of the yearly timber growth and consumption. This commission was required to submit to the legislature which was to meet in 1901 a draft of a bill suitable to the needs of the state in the form of forestry law. The act also authorized the withdrawal from sale of two hundred thousand acres of state lands, and allowed the commissioners to receive by deed from private parties lands which they considered suitable for state forest reserves.

Maine. By an act of March 25, 1891 ⁵ the legislature of the State of Maine made the state land agent state forest commissioner, and imposed upon him the duty of collecting information as to the extent of fire loss and other forest waste, the diminution of forest areas in the state, and the effect upon watersheds. The provisions of the act regarding the suppression of fires, the prevention of fires by railroads, and the steps to be taken to create an interest in the protection and extension of forests, were similar to those in the New York Act of 1885. The selectmen were made fire wardens for their respective towns, with authority to call out citizens to suppress fires. The provisions in this act that the commissioners of counties in which there were unorganized places might, if they deemed it necessary, appoint fire wardens to be paid by the counties was amended by Act of March 9, 1893 6 so as to make the appointment of one or more wardens by such county commissioners

Act July 3, 1889, S. L., Mich., No. 260, p. 38.
 Act June 12, 1891, S. L., Mich., No. 127, p. 157.
 Cf. Act May 31, 1895, S. L., No. 222, p. 514, providing for acceptance and management of Mackinac Island State Park.
 Public Acts 1899, Mich., No. 227, p. 355.
 Session Laws, Me., 1891 ch. 100 p. 90.
 Session Laws, Me., 1893, ch. 192, p. 207.

mandatory. Such wardens were to be paid by the county, and persons called by them to render aid were to be paid one-half by the county and one-half by the owner of the lands upon which the fire occurred.

New Hampshire. By a joint resolution of August 16, 1889 the legislature of New Hampshire directed the appointment of a commission of three persons to examine into the feasibility of a purchase by the state of the whole or any portion of the timberlands situated upon the hills and mountains of the state. Four years later 2 a forestry commission of five members was created with duties as to educational work similar to those vested in the forestry commissioners of New York, and with authority to purchase lands for public park purposes whenever private parties should furnish funds for such acquisition and with the duty of prescribing regulations for the protection of such lands. One of the commissioners, who was to act as secretary, was to receive a salary of one thousand dollars per annum, and the others the expenses necessarily incurred in the performance of their duties. The selectmen of towns were made fire wardens, with the duty of summoning assistance for the extinguishment of forest fires.

Minnesota. Aside from laws providing for bounties to those planting forest trees, little interest was manifested by the legislature of Minnesota in the matter of preservation and protection of forests within the state prior to 1895.

In the autumn of 1894 very disastrous forest fires occurred in the northeastern portion of the state resulting in serious loss, both of property and of lives, in the town of Hinckley, Minnesota. Aroused to action by this holocaust, the question of forest fire control received attention in the succeeding session of the state legislature.

By act of April 18, 1895 3 the state auditor was made

Session Laws, N. H., 1889, ch. 152, p. 139.
 Act March 29, 1893, S. L., N. H. ch. 44, p. 36.
 Session Laws of Minn., 1895, ch. 196, p. 472. Chapter 106 Minnesota Laws of 1895 provided for the administration under the name of Itasca State Park of the lands which had been granted to the state for park purposes on August 2. 1892 (27 Stat. L., 347.) See amendments in chapter 304, of 1899; chapter 134, 1901; chapter 218, of 1903, and chapter 258, of 1903; and cf. chapter 169, of 1895, creating an interstate park on St. Croix River.

state forest commissioner with authority to appoint a deputy to be known as chief fire warden. These officials were charged both with the duty of preventing and suppressing forest fires, and that of directing forestry investigation and popular education. This act like the New York act of 1885 made supervisors of towns, mayors of cities, and presidents of villages, fire wardens, and provided for the appointment of other wardens where needed. Wardens were given authority to call out residents, under penalty of a fine, to assist in controlling fires and were authorized to arrest without warrant persons found violating the provisions of the act. This law provided penalties for one who should maliciously, willfully or negligently injure another through firing the woods either upon his own land or that of another, or who should even endanger life or property by the setting of fires near forest lands and leaving it unquenched. It required railroads to clear combustible material from rights of way, use spark arresters, and furnish men for assistance in suppressing fires.

An act of April 13, 1899 ¹ designated as forest reserves all tracts which should be set aside or acquired by the state legislature, donated to the state by private parties, or granted to the state by the federal government for forestry purposes. The act created a forestry board of nine members chosen in such manner as to be very representative of the various interests of the state. The care, management and preservation of the state forest reserves was vested in this board, which was required to ascertain and apply the best methods of forest use, protection and conservation, and to publish forestry information for the benefit of the people of the state. Provision was made for town and county forest boards. The act also contained very detailed provisions for the dedication of private lands to state forest purposes, and the distribution for public purposes of the proceeds derived from the leasing or sale of lands or of timber upon state forest reserves.

Wisconsin. Spurred to action by the disastrous forest fires of 1894, the legislature of Wisconsin also made a be-

^{1.} Session Laws, Minn., 1899, ch. 214.

ginning in a state forest policy by an act of April 17, 1895. 1 This act made the chief clerk of the state land office state warden, and an assistant clerk deputy warden, but allowed them no additional compensation. It was made their duty to supervise town fire wardens, and to formulate and publish regulations for the protection of the forests of the Town supervisors and road superintendents were made town fire wardens. Provision was made for the payment of fire wardens and those employed by them to assist in extinguishing fires, but the amount to be annually expended by a town was limited to one hundred dollars. The act contained new provisions regarding the setting of fires that endangered timber, with special sections as to hunters and railroads. This act was amended on April 27, 1897 ² to authorize the state warden to appoint a fire warden in each organized town of the state who should have the power to summon residents of a town or of the immediate vicinity of a fire under penalty for a failure to respond. The annual expenditure for fire control purposes was limited to one hundred dollars for each thirty-six sections of land. The law was amended again on May 4, 1899 3 to limit the number of wardens to be appointed to the towns within certain designated counties, except when a request for such appointment was presented to the state warden by the board of supervisors of other counties.

An act of April 14, 1897 ⁴ provided for a commission of three to devise plans for the organization of a forestry department to manage the state lands suitable for timber culture and the practice of forestry. The terms of this act as to the scope of the inquiry indicated a purpose to establish state forests upon a substantial and profitable basis, but no definite legislative policy was formulated prior to 1900.

Montana. A Montana act of March 7, 1893, 5 as amended by an act of March 6, 1897, 6 authorizing the sale

Session Laws, Wis., 1895, ch. 266, p. 522.
 Session Laws, Wis., 1897, ch. 362, p. 932.
 Session Laws, Wis., 1899, ch. 353, p. 662.
 Session Laws, Wis., 1897, p. 438. Amended Laws of 1899, p. 88.
 Session Laws, Mont., 1893, p. 46.
 Session Laws, Mont., 1897, p. 193.

of timber from state public lands, provided that no live timber less than eight inches in diameter twenty feet from the ground, except lodgepole pine and bull pine, should be sold, and required that all timber should be cut under regulations for the preservation of timber and the prevention of fires.

Utah. Section one of article eighteen of the first state constitution of Utah was identical with the provisions of the Colorado constitution of 1876 regarding the care of forests within the state. A Utah act of April 2, 1896. 1 authorizing the state board of land commissioners to sell timber from unsold, unleased or unreserved lands, provided that no contract of sale should entitle the purchaser to cut, use, injure or destroy trees under eight inches in diameter at the butt, except of certain named species, and required such disposal of the brush as was necessary to protect young timber from fire. The same act ² directed the commissioners to reserve from sale such timberlands as they deemed necessary to preserve the forests of the state, prevent a diminution of the flow of rivers, and aid in the irrigation of arid lands.

North Dakota. In 1891 3 the newly formed state of North Dakota created the office of "State Superintendent of Irrigation and Forestry," at an annual salary of one thousand dollars and an allowance of five hundred dollars for expenses. This official was required to explain to the people the economic advantages of forestry practice and to aid in the promotion of tree culture, and in 1897, 4 a state school with the special duty of giving instruction regarding forestry science, called the North Dakota School of Forestry, was established by the legislature.

Oregon. An Oregon act of February 20, 1893 ⁵ contained very full provisions regarding the unlawful setting of fires; and an act of February 18, 1899, 6 providing for

Session Laws, Utah, 1896, (1st Leg.) p. 243, sec. 20 and 21.
 Session Laws, Utah, 1896, p. 250, sec. 43. Amended, Laws 1899, p. 93.
 Session Laws, N. Dak., 1891, ch. 76, p. 216.
 Session Laws, N. Dak., 1897, ch. 129, p. 300; cf. S. L. 1907, ch. 100
 Session Laws, Ore., 1893, p. 45.
 Session Laws, Ore., 1899, p. 132 (Fires, secs. 15, 16, 21, 22.)

the appointment of a forest, fish and game warden at a salary of twelve hundred dollars and expenses and other game officials, required these officers to extinguish forest fires.

General Educational Provisions. In North Carolina on March 7, 1891; 1 in New Jersey on May 1, 1894; 2 in West Virginia on Feb. 26, 1897, ³ and in Wisconsin on April 22, 1897, 4 laws were enacted requiring the study of the forests of the respective states by those engaged in making geological surveys of the state.

Subsequent to 1875 courses of lectures in forestry science were given in a number of American colleges, and the close of the century was marked by the establishment at Cornell University, in the State of New York, of the first American forest school of collegiate rank. 5

Session Laws, N. C., 1891, ch. 417, p. 483.
 Session Laws, N. J., 1894, ch. 120, p. 178.
 Session Laws, W. Va., 1897, ch. 6, p. 38. See Laws 1903 ch. 50.
 Session Laws, Wis., 1897, ch. 297, cf. Ala. Code, 1896, sec. 2242; Iowa Code, 1897, sec. 2499; Minn. Stat. 1894, sec. 3928; Mo. Rev. Stat., 1899, sec. 7503 (all requiring investigation of forest resources by State geological survey).
 Act March 26, 1898, S. L. ch. 122, p. 230.

CHAPTER II

Legislation for the Prevention and Control of Forest Fires Enacted in American Colonies, Territories and States Prior to the Year Nineteen Hundred

THE DEVELOPMENT OF FOREST FIRE LEGISLA-TION PRIOR TO THE YEAR 1885

As early as July 26, 1631 ¹ the setting out of fires, except within a certain portion of the year, was forbidden in the Massachusetts Bay Colony under pain of the payment of damages and of such penalty as the court should see fit to inflict. The need of statutory regulation of the manner in which fires should be set in field and forest was felt even more keenly as settlement increased, and during the colonial period several laws regarding the firing of woods were enacted in Massachusetts. Laws of the same character were passed prior to the American Revolution in New Hampshire, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, and North Carolina. 2

The earlier statutes were directed largely toward the prevention of the destruction of life and of property that had been accumulated by human effort, but as years passed the protection of growing timber from fire received an increasing attention in the framing of such laws. A Massachusetts Act of January 15, 1743 specifically mentioned the damage caused by fire to young tree growth and to the soil as a justification for the restrictions against the setting of fires.

Many of the early laws permitted the setting of fires

Records of Mass. Bay Colony, Vol. 1, (1628-1641), p. 90.
 Forest Legislation in America prior to March 4, 1789, Kinney, Cornell University Agr. Exp. Sta. Bulletin No. 370 pp. 363-370.
 Acts and Resolves, Province Mass. Bay, Vol. 3, p. 40.

during the open season only on condition that a due warning was given to adjoining land owners. Laws making one liable for all damages or for one and one-half times the damage caused by the escape of fire from his own land to the damage of another were enacted early in several colonies, 1 and several of these placed upon the defendent the burden of proving his innocence after the submission of evidence making it highly probable that he was at fault.

The provisions in the earlier laws excepting one from liability for damage caused another through the escape of a fire set in the open season and after due notice were ultimately found to be unsatisfactory, and full satisfaction for all damages caused another was insisted upon where the loss could be traced to a deliberate act in the setting of the fire. 2

The early statutes in several colonies made the setting of fires upon the land of another, or on common land, a criminal offense. 3 The legislation regarding the unlawful firing of the woods enacted subsequent to the close of the Revolution was marked by more severe penalties. 4

new feature in forest fire legislation appeared in a New York act of December 17, 1743. 5 This act, which applied to four counties only, empowered any person who should discover a fire in the woods to summon all of the neighboring and adjacent inhabitants to assist in the extinguishment of the fire, and imposed a forfeit of six shillings upon any person so commanded who should refuse, neglect or delay to render assistance. In 1658 6 the provisions of this act were extended to the whole state. ther advance was made in a New York act of November S, 1760, providing for the election of firemen in each town or manor of Albany and Ulster Counties who were charged with the duty of extinguishing forest fires and empowered to summon residents to assist them. After the institution of a state government a new act of March 12, 1788 8 im-

In Mass., 1633; N. Y., 1665; N. J., 1717; Conn., 1733; Penn., 1735; Del., 1741; R. I., 1750.
 Conn., 1733; Penn., 1735; N. J., 1740; Del., 1741; N. Y., 1743; R. I., 1750.
 Mass., 1638; Conn., 1656; N. Y., 1665, N. H., 1680; N. J., 1683; R. I., 1704; Del. 1739; N. C., 1777.
 Laws of N. C., 1782, ch. 29; Mass Act Mar. 11, 1785; N. Y. Act Mar. 12, 1788.
 Colonial Laws of New York, Albany, 1894, Vol. 3, p. 318 (chap. 750).
 Colonial Laws of New York, Vol. 4, p. 304 (ch. 1075.).
 Colonial Laws of New York, Vol. 4, p. 508, ch. 1142.
 Laws of New York, Greeleaf, 2d Ed., N. Y., 1798, Vol. 2, p. 187, ch. 71.

posed the duty of extinguishing forest fires upon justices of the peace, town supervisors, highway commissioners, and officers of the militia, and authorized such officials to summon inhabitants under a penalty of four shillings for each day of failure to report.

Soon after the institution of a national government new legislation regarding forest fires was enacted in nearly all of the original states, and as new territories and states were formed, laws against the willful or careless setting of fires were passed. ¹

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12. Ala.	Laws of 1852, ch. 23, p. 52; Laws of 1856, ch. 30, p. 19; Laws of 1868, ch. 38, p. 403, Act Mar. 28, 1873; Laws of 1875, ch. 343, p. 507; Act Feb. 13, 1879, S. L. p. 167; Act Feb. 17, 1885, S. L. p. 125.
Ariz.	Compiled Laws 1864-71, Albany, p. 95, sec. 144; same Comp. Laws
Ark.	Detroit 1877, p. 96, sec. 380. Act Nov. 2, 1808. Comp. Laws, Steele & Campbell, Little Rock, 1835, p. 561; Act Feb. 3, 1875, S. L., p. 128.
Calif.	Act Apr. 16, 1850, Statutes 1st Legis, p. 246, sec. 142. Act Feb. 13,
Colo.	18/2, S. L., p. 90, Cotes & St., 1870, Hittell, par. 13534; G. 5344. Laws of 1861, p. 317, sec. 129 (Same Rev. St. 1868, p. 235, sec. 178; Gen. Laws 1877, p. 313, sec. 784.
Conn. Del.	Acts & Laws, Conn., Hartford, 1796, p. 422; Gen. St. 1835, p. 557, sec. 5, Laws, Del., Newcastle, 1797, Vol. 1, p. 217; Act Jan. 23, 1827, ch. 11, p. 28. See Rev. Laws Del. 1829, p. 273, and Rev. St. 1852, p. 142.
Dak.	Gen. Laws 1st Terr. Ass., Yankton, 1862, p. 196; ct. Laws Dak. 1862-63, p. 59, secs. 49 and 50; Act Jan. 5, 1869, S. L. ch. 18, p. 231.; Act Feb.
Fla.	11, 1881, S. L. ch. 106, p. 174. Act Feb. 10, 1832, Acts of Fla. to 1840, Duvall, Tallahassee, 1839, p. 123.
Ga,	See Laws of Fla., 1868, ch. 4, p. 70, sec. 5. Penal Code of 1817, Div. 11, Sec. 2. See Digest by Prince, 1822, p. 369;
	Laws of Ga. p. 194, sec. 5; Act Dec. 29, 1847; S. L., p. 296, Digest by Cobb, 1851, p. 64.
Ida.	Act Feb. 4, 1864. Laws 1st Terr. Ass., p. 471, sec. 148; Act Feb. 10, 1887, Rev. St. 1887, sec. 6921.
Ill.	Act Feb. 20, 1819, S. L., p. 384; act Feb. 14, 1823, S. L., p. 140. See Rev. Code 1827, p. 155; Rev. St. 1874, p. 354.
Ind.	Act Jan. 21, 1818, S. L., p. 361, ch. 75 (indictable). Act Jan. 10, 1823. S. L., ch. 86, p. 439; Act Feb. 10, 1831, Rev. Laws 1831, ch. 26, sec. 97, p. 198; Act June 14, 1852, Rev. St. 1852, p. 437, sec. 34.
Iowa	Act Feb. 16, 1843, Rev. St. 1843, ch. 121, p. 501; Code 1851, p. 355, sec. 2607; Act Mar. 21, 1862; S. L., ch. 53, p. 57; Act Mar. 16, 1878,
Kan.	S. L., ch. 55, p. 48. Statutes of Terr. Kan., 1855, p. 765; Act Feb. 9, 1859, S. L., p. 421; Act Feb. 16, 1860, S. L. p. 124, Comp. L. 1862, p. 567; Act Feb. 26, 1863, S. L., p. 53; Act Feb. 25, 1868, Comp. L. 1868, ch. 118, p. 1121; Act Feb. 17, 1872, S. L., ch. 129, p. 274.
Ку.	Act Dec. 21, 1831, S. L. ch. 659, p. 97; Act Feb. 22, 1835, S. L., ch. 480, p. 679; Act Feb. 7, 1840, S. L., ch. 246, p. 150; Act Jan. 29, 1846, S. L., ch. 107, p. 5; Rev. St. 1852, p. 275, sec. 5 and 6.
La.	Act Nov. 2, 1808, Laws Terr. La., Jenerson City, 1842, ch. 64; Act Mar.
Me.	17, 1859, No. 234, p. 184. Act Feb. 24, 1821, sec. 4 and 6, Laws Me., Brunswick, 1821, p. 59 and 60,
Md.	Portland, 1834, p. 58; Act Feb. 28, 1855, S. L., ch. 132, p. 134. Laws 1792, ch. 49; Act Jan. 15, 1799, Macey's Laws of Md., Baltimore,
Mass.	1811, Vol. 2, ch. 39, p. 443, Laws 1878, ch. 39. Act Mar. 10, 1797, sec. 7; Act Mar. 16, 1805, Laws of Com. Mass., 1823, Vol. 2, p. 128; Laws 1839, ch. 48, see Gen. St. 1860, p. 807, sec. 89 and
2 (1.)	90: Apr. 19, 1882, S. L., ch. 163, p. 121.
Mich.	Act Nov. 25, 1817, Laws Terr. Mich., Detroit, 1820, p. 143; Laws Terr. Mich., Lansing, 1871, Vol. 1, p. 500; Act Mar. 12, 1827, Laws T. Mich., 1874, Vol. 2, p. 310. See Rev. Laws State Mich., 1838, p. 215, ch. 9; Rev. St. Mich., 1846, ch. 45.
Minn.	Act June 23, 1858, Pub. St. 1849-58, p. 715, sec. 49; Act Mar. 10, 1860.
Miss.	Acts Feb. 16, 1828, Laws Miss. to 1838, p. 159; Dec. 24, 1833, and Feb. 24, 1848, Code Miss., Hutchinson, pp. 287, 294; Rev. Code 1857, ch.
Mo.	28, p. 225. Act Nov. 2, 1808, Laws Terr. La., p. 208; Act Dec. 30, 1824, Rev. Laws 1825, p. 798; Act Jan. 26, 1835, Rev. St. 1835, p. 624; Act Nov. 17, 1855, p. 1584; Act Mar. 3, 1857, S. L., p. 180; Act Apr. 13, 1877, Rev.
Mont.	St. 1879, p. 329, sec. 1372. Acts 4st Terr. Ass., 1864, p. 215, sec. 149; Act Jan. 12, 1872, Codified Laws Terr. Mont., 1872, p. 310, sec. 178, 179; Act Feb. 15, 1881, Rev. St. 1881, Appendix, p. 48.
	(Footnote 1 concluded on next page)

The acts in the states and territories of the Mississippi valley and the western plains region aimed especially to prevent prairie fires which were very destructive of crops and buildings, ¹ while those of the southern states were directed especially to the protection of stock ² and of turpentine orchards. ³ Many of the laws provided for an open season for necessary burning, ⁴ and others allowed necessary burning at any time if the fire were confined to one's own land. ⁵ In several states a notice to neighbors in advance of the setting of a fire was required, ⁶ and in a few the careless leaving of a fire unextinguished was made a

(Footnote 1 continued from preceding page) (Footnote 1 continued from preceding page)
Act Feb. 28, 1855, S. L., p. 196; Rev. St. Neb. Terr., 1866, p. 628, ch. 14, sec. 162; Act Feb. 19, 1877, S. L., p. 3.
Act Nov. 26, 1861, S. L., p. 56; Act Feb. 19, 1879, S. L., p. 41 (Camp fires.)
Act June 19, 1812, Laws of N. H., 1815, p. 319; Act July 8, 1862, S. L., ch. 2609, p. 260.
Act Nov. 24, 1794, Revised Laws 1800, p. 132; Amended Acts Mar. 3, and 24, 1875, Rev. St. 1877, p. 422; Act Apr. 6, 1876, S. L., p. 83 (charcoal pit or brush.)
Act Jan. 31, 1861, Rev. St. 1865, p. 712; Act Feb. 18, 1882, ch. 61, sec. 6 Neb. Nev. N. H. N. J. N. M. Act Mar. 12, 1788, S. L., ch. 71; Rev. Laws, Albany, 1813, Vol. 1, p. 123; Act Mar. 12, 1788, S. L., ch. 181; Rev. St. 1829, Vol. 1, p. 694; R. S. 1836, Vol. 1, p. 694; R. S. 1836, Vol. 1, p. 694; R. S. 1846, Vol. 1, p. 876.

Act 1777, ch. 25, Pub. St., Iredell, Vol. 1, p. 246; ch. 29 of 1782, ch. 38 of 1865-66. (Wagoner.) N. Y. N. C. ch. 38 or ee Dakota. N. D. Ohio See Dakota.

Act Dec. 6, 1799, Laws 1st Ass. N. W. Terr, Cincinnati, 1833, ch. 104, p. 245; Act Feb. 11, 1805, S. L., ch. 38, p. 210, (indictable), Laws of Ohio, Vol. 14, ch. 49, p. 238; Act Mar. 8, 1831, Ohio Laws. Vol. 29, p. 144; Act Mar. 30, 1875, Ohio Laws. Vol. 72, p. 149; Rev. St. 1880, sec. 6834, "willfully" omitted from sec. 1, Act Mar. 30, 1875.

Statutes Okla. Terr., 1893, sec. 2490.

Act Feb. 6, 1851, Stats. 2d Terr. Ass., p. 94, sec. 70; Stats. 1853-4, p. 196, sec. 36; Act Oct. 19, 1864, Codes & Gen. Laws, 1887, sec. 1787.

Act Apr. 18, 1794, Laws Pa. 1810, Vol. 3, p. 139; Act Mar. 29, 1824, P. L., ch. 91, p. 152; Act Mar. 26, 1867; Act Apr. 9, 1869, P. L., p. 786, No. 766; Act June 2, 1870, P. L., p. 1316, No. 1206; Act June 11, 1879, P. L. p. 162, No. 76, Cf. Act May 19, 1871, S. L. p. 950 (Lycoming Co.) Pub. Laws 1798, p. 569; Pub. Laws 1844, p. 382; ch. 279, Laws of 1872., Act Mar. 13, 1789, Stat at Large, Vol. 5, p. 124, sec. 5; Act Dec. 21, 1857, Vol. 12, p. 617; Laws 1876, Vol. 16, p. 61. Cf. Act Dec. 18, 1891, Vol. 20, p. 1125; Act Dec. 16, 1891, Vol. 20, p. 1045 (carrying torch.) See Dakota. Okla. Ore. Pa. R. I. 1857, Vol. 12, p. 112; Act Dec. 16, 1891, Vol. 20, p. 1045 (carrying torch.). See Dakota.
Ch. 25 of 1777 and ch. 29 of 1782, Pub. Laws N. C. and Tenn., Nashville, 1815, p. 134, 156; Laws 1887, ch. 234.
Act Mar. 18, 1848, S. L., ch. 109, p. 138; Act Aug. 28, 1856, Paschal's Digest. 1878, Art. 2333; Act. Apr. 14, 1883, S. L., p. 102; Act Feb. 7, 1884, S. L., p. 66.
Compiled Laws 1876, p. 612, sec. 211.
Act Mar. 4, 1797, S. L., p. 190; Rev. St. 1840, p. 432, sec. 22; Gen. St. 1862, p. 673, sec. 38, Gen. St. 1870, p. 673.
Jan. 16, 1802, Rev. Code Richmond, 1819, Vol. 2, ch. 253, p. 313; Act Mar. 6, 1835, S. L., ch. 65, p. 46; Act Mar. 14, 1848, ch. 4, p. 100, sec. 9 and 10 (Criminal Code); Act Mar. 14, 1848, ch. 4, p. 100, ch. 3, sec. 7 and 8, p. 287; Act Apr. 21, 1882, S. L., ch. 66, p. 402.
Act Nov. 6, 1877, S. L., p. 300; Act Mar. 15, 1890, Laws 1st St. Leg., p. 127, sec. 9; Act Mar. 7, 1891, S. L., p. 226, (State & U. S. Lands).
Code of 1868, p. 682, sec. 7 and 8; from Va. Acts of 1835 and 1848. Act Mar. 29, 1882, S. L., p. 475, sec. 5, 8 and 9, ch. 148.
Stats. Terr. Wis. Albany 1839 p. 356 sec. 40; Rev. Stat. 1849 p. 697 sec. 52; Act Mar. 19, 1873 S. L. p. 643; Rev. St. 1878, p. 1045 sec. 4406. S. D. Tenn. Tex Utah Ver. Va. Wash. W. Va. Wis. 4406. Wyo. Act. Nov. 23, 1869 Gen. Laws Wyo. Terr. 1st Sess., p. 424; Acts 1879, ch. 87 p. 154.

1. Dak., 1862; Ill., 1819; Ind., 1818; Minn., 1858; Wis. Rev. St. 1839.

N. C., 1777.
 Ala., 1852; Ill., 1819; Ill., 1815; Mill., 1858; Wis. Rev. St. 1839.
 N. C., 1777.
 Ala., 1856 1879; Ga., 1847; S. C. 1876.
 Ala., 1852; Colo., 1861; Dak., 1862; Del., 1827; Miss. 1828; Ohio 1799; Tex., 1848; Wyo., 1869.
 Miss. 1828; Mo., 1808; N. M. 1861; S. C. 1789; Wash. 1877.
 Ariz., 1871; Ark., 1835; Dak., 1861; Fla. 1840; Ill. 1819; Ind., 1818; Ida., 1864; N. C., 1777.

misdemeanor. 1 Several acts excepted from the penalties persons who set a back fire to protect their own property. 2 The statutes generally provided either for compensatory ³ or multiple 4 civil damages for any loss caused another through the unlawful setting of a fire. In many states separate penalties were imposed for the negligent permitting of a fire to escape and for the willful and malicious setting of a fire, 5 while others classed both offenses together but gave a latitude as to minimum and maximum penalties to be imposed. 6 A few state statutes imposed penalties only where the fire was deliberately set with an unlawful motive, 7 while others made a distinction in penalties between cases of willful firing in which damage was actually done and cases in which no damage resulted. 8 Although there were groups of states with similar laws, there were essential differences in the laws of the different groups. 9 In the various state laws the expressions "wilfully," 10 "negligently," 11 "wilfully and negligently," 12 "wilfully and deliberately," 13 "wilfully and maliciously"; 14 "unlawfully and maliciously"; 15 "wantonly and designedly"; 16 "wilfully, maliciously and negligently"; 17 "wilfully, maliciously or wantonly," 18 and "willingly and intentionally or negligently and carelessly" 19 were used to designate the manner in which a fire must be set to render the one setting it subject to the penalties of the law.

The majority of the thirteen original states had, through experience in the colonial period, learned the difficulty of proving the motive with which a fire was set, and had pro-

Mont. 1872; Nev. 1879.
 Calif., 1872; Kan., 1855; Me., 1821; Nev. 1861
 Ark. 1835; Colo. 1861; Dak. 1861; Ind. 1818; Iowa 1843; Kan. 1855; Me. 1821; Mich. 1817; Miss. 1828; Mo. 1808; Mont. 1872; N. M. 1882; N. C. 1782; Ore. 1851; Pa. 1794; S. C. 1789; Va. 1835; Wyo. 1869.
 Ark. 1875; Calif. Code 1876; Mich. Rev. St. 1838; Mo. 1855; N. J. 1794; Ohio,

^{4.} Ark. 1799.

Ark. 1875; Calli. Code 1876; Mich. Rev. St. 1838, Mo. 1833, N. J. 1734; Onloy, 1799.
 Colb., 1861; Kan., 1855; Me., 1821; Code Mont., 1872; Va., 1878.
 Dak., 1861; Ida., 1864; Ill., 1819; Ind., 1818; Iowa, 1843; Ky. Rev. St., 1852; Mich., 1817; Minn., 1858; N. M., 1861; Wis. Rev. St. 1849.
 Ga., Prince's Digest, 1822, p. 369; Fla., 1832; Kan., 1855; Mass., 1804; Md., 1799.
 Laws Ark., Terr., 1835; Miss., 1828; Mo., 1808; Neb., 1855; N. J., 1794; Pa., 1794; Wash., 1877.
 Cf. Laws of northeastern, middle western and southern states.
 Ark., 1875; Colo., 1861; Dak., 1869; Miss., 1828; Mo., Tex., 1848; Wyo., 1869.
 N. Y. Rev. Stat., 1829, Vol. 1, p. 696.Rev. Stat. 1836, Vol. 1, p. 994; Rev. St. 1846, Vol. 1, p. 876.
 Ill., 1819; Ind., 1818; Ohio, 1805.
 Calif., 1872.
 Fla., 1868; Ga., 1833; Ore. 1851; S. C., 1857.
 W. Va. Code, 1868.
 Mont. Code, 1872; cf. "wanton and wilful" in Pa. Act June 11, 1879, P. L., 162.
 Ohio, 1875.
 Wis. Rev. St., 1878.
 Ariz. Comp. L., 1871; Dak. 1862; Minn., 1858; Neb. 1861; Nev., 1861.

vided penalties for the setting of a fire except under certain conditions, the law assuming an improper motive unless justification could be shown by the offender. While the earlier laws in western and southern states allowed much freedom, the later laws in nearly all states made it unlawful to set a fire on the land of another, on public land, or on one's own land, except where a proper motive and an apparent freedom from danger obtained, and there was a tendency in most states to increase the penalties for the unlawful firing of the woods, or to change the offense from a misdemeanor to a felony. 1

Several states adopted provisions similar to those contained in the New York act of March 12, 1788, and subsequent laws, imposing upon certain public officials the duty of summoning citizens to assist in the extinguishment of forest fires. ² One of the most comprehensive and restrictive laws of this character enacted prior to 1885 was the Iowa act of February 16, 1843. This act authorized the boards of county commissioners to lay off counties into fire districts and to appoint a fire warden in each district. Every person before setting a fire was required to obtain a written license from a fire warden. This license must e pressly state where the fire was to be set, and the restrictions which the warden considered necessary for the security and preservation of crops. The wardens were required to superintend all such burnings, and to prevent the spread of fire beyond safe bounds. The supervisors of roads were to perform fire duties under the direction of the wardens. The wardens were authorized to summon all able-bodied male citizens to assist in the control of fire under pain of a fine for refusal or neglect to respond. Boards of county commissioners were to fix the pay of the wardens who, as in several other states, were subject to a fine for a refusal to serve. The escape of a fire set within an inclosure, without a license, would subject one to the penalties of the

Me., 1855; Mo., 1857; Neb., 1877; N. H., 1862; Ohio. 1875; Pa., 1824, 1869, 1879;
 W. Va., 1882.
 Ky., Act Feb. 7, 1840; N. J., Act Nov. 24, 1794; Rev. Laws 1800, p. 132, sec. 2;
 Rev. St. Mich., 1838, p. 215, sec. 2 and 3; Iowa Act, Feb. 16, 1843, Rev. St. 1843, ch. 121, p. 501; Pa. Act June 2, 1870, P. L. No. 1206, p. 1316; Mass. Act May 11, 1874, S. L. ch. 228, p. 153; Ohio Act Mar. 30, 1875, S. L., Vol. 72, p. 149;
 Calif. Codes & Stat., 1876, Hittell, sec. 3345.

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act in the form of a fine of five dollars to one hundred dollars and liability for all damage caused.

The fire damage caused by hunters was early noted. Some of the early laws restricting the use of fire by hunters in southern states were evidently not directed to a conservation of timber, 1 but as early as 1843 in Iowa, 2 1855 in Maine, ³ 1862 in New Hampshire, ⁴ 1875 in New Jersey, ⁵ and 1877 in Washington, 6 specific restrictions against the setting of fires by hunters were enacted.

The preamble to a Pennsylvania act of April 9, 1869⁷ recited the public loss involved in the burning of timber and by an act of June 2, 1870 8 the legislature of Pennsylvania made it the duty of county commissioners to appoint persons to be paid from county funds to ferret out and bring to punishment persons who set fire to the woods and to extinguish fires.

Subsequent to the advent of the steam railroad in America laws imposing a special liability for damages resulting from a fire set by a locomotive or by the employees of a railroad were enacted in many American states as railroad construction extended from the Atlantic to the southern, middlewestern and far-western states. 9 Almost universally such

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Act Feb. 10, 1803, and Act Dec. 12, 1822.
Act Dec. 10, 1790, Prince's Digest, 1822, p. 341.
S. L. 1773, ch. 18 in Rev. Acts N. C. 1773 p. 552; S. L. 1784, ch. 33,
Act Mar. 28, 1778, No. 1075, and Act Oct. 12, 1785, No. 1299, Stat. at
Large, Vol. 4, pp. 411 and 719; Act March 13, 1789, No. 1463, sec. 1-5,
Stat. at Large, Vol. 5, p. 124.
    1. Ala.
                     Ga.
N. C.
S. C.
Stat. at Large, Vol. 5, p. 124.

2. Act Feb. 16, 1843.

3. Act Feb. 1855. S. L., ch. 132, p. 134.

4. Act July 8, 1862, S. L., ch. 2609, p. 260. Gen. St. 1867, p. 525, sec. 4.

5. Act Mar. 24, 1875, S. L., ch. 210, p. 39.

6. Act Nov. 6, 1877, sec. 4.

7. Pamphlet Laws 1869, No. 766, p. 786.

8. Pamphlet Laws 1870, No. 1206, p. 1316.

9. Ark. Act Feb. 3, 1875, S. L., p. 133 (Covers all property, fire not mentioned.)

Colo. Act Jan. 13, 1874, S. L., p. 224; Act Feb. 11, 1879, S. L., p. 73; Act Feb. 27, 1883, p. 198 (plowing of strip required.)

Conn. Rev. Stat., 1849, p. 84; Act Apr. 12, 1881, S. L., ch. 92, p. 48 (Insurable Interest.)

Del. Act Apr. 5, 1881, S. L., ch. 380, sec. 2.
                                                                                     Act Apr. 5, 1881, S. L., ch. 380, sec. 2.
Act Mar. 5, 1856, S. L., 1855-56, p. 155.
Act Mar. 29, 1869, S. L., p. 312.
                     Ga.
                                                                                  Act Mar. 29, 1869, S. L., p. 312.
Code 1873, sec. 1289.
Act Mar. 24, 1870, S. L. ch. 93; Act Mar. 4, 1885, S. L. ch. 155, p. 258.
Act Mar. 24, 1870, S. L. ch. 9, sec. 5 (Insurable interest); Act Feb. 29, 1868, p. 126; Act Mar. 21, 1870, ch. 155 (repealed ch. 186 of 1868); Rev. Stat. 1871, p. 455, sec. 32.
Act Mar. 29, 1838, S. L. ch. 309; Act Mar. 30, 1839, S. L. ch. 244; cf. S. L. 1841, ch. 266; S. L. 1846, ch. 346.
Act Apr. 19, 1837, S. L., ch. 226, secs. 9 and 10 (insurable interest); Act Mar. 23, 1840, S. L. ch. 85, sec. 1; S. L. 1864, ch. 229, sec. 34; Act May. 26, 1871, S. L. ch. 381, sec. 45; Act June 27, 1874; S. L., ch. 372, sec. 106.
Act May 1, 1873, S. L. No. 198, p. 539.
Act Mar. 9, 1874, S. L., ch. 30, p. 155 (No insurable interest.).
Act Feb. 23, 1881 (to clear right of way, or liable); Comp. Laws 1887, sec. 719, p. 830. Same code 1895, sec. 952.
Cf. Laws 1879, p. 137; Laws 1883, p. 284, requiring plowing and burning along public roads.
(Footnote 9 concluded on next page)
                      Iowa
                        Kan.
                      Me.
                     Md.
                     Mass.
                        Mich.
                        Minn.
                        Mont.
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(Footnote 9 concluded on next page)

laws made the fact that a fire had been set by a locomotive prima facie evidence of negligence, and placed upon railroad operators the burden of proving due care on the part of the corporation and its employees if it were to avoid responsibility for the damages suffered. In a few states the liability was made absolute, irrespective of the question of due care. Because of the unusual responsibility imposed, either the original law or subsequent enactments in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, South Carolina and Vermont afforded those operating railroads an insurable interest in the property along the right of way as to which liability for fire damage existed. Later statutes in several of the states in which liability was made absolute gave the railroad operators the benefit of insurance that had been effected by the owners. 1 A few states like Michigan and New Jersey in the acts of 1873 specifically provided that a railroad might offer as evidence of due care that the smoke stacks of its locomotives were properly screened and its fire-boxes carefully managed. These laws were especially intended as a protection for buildings, fences and similar improvements, but were broad enough to include hav, grain and growing timber. Because of the frequency of prairie fires set by locomotives, the laws in Colorado, Montana and New Mexico were of exceptional character. Thus the Colorado act of 1874 required that each year between July fifteenth and October first every railroad operating within the state must "plough as a fire guard a continuous strip of not less than six feet in width" on each side of each road and adjacent to the boundary lines of its right of way, or one hundred feet distant from the center of the track, if the railroad owned that far. Lands

⁽Footnote 9 concluded from preceding page)
Rev. Laws 1842, ch. 142, sec. 8 and 9 (insurable interest); From Act Dec. 10, 1840, 8. L. ch. 561. Same in Comp. Laws 1853, ch. 150, sec. 59 and 60; Act June 25, 1861, S. L. ch. 2489 (gave railroad benefit of insurance transformers). N. H.

N. J.

N. M. S. C.

^{60;} Act June 25, 1861, S. L. ch. 2489 (gave railroad benefit of insurance by owner.).
Act Apr. 6, 1865, S. L., ch. 481, p. 901; Act Apr. 4, 1873, S. L. p. 155; Act Mar. 27, 1874, S. L. p. 112.
Act Apr. 1, 1884, S. L. ch. 34.
Act Feb. 9, 1882, S. L. No. 595, Stat. at L., Vol. 17, p. 830, sec. 100 (insurable interest.). See Code S. C. 1912, sec. 3226.
Act Nov. 13, 1849, S. L. No. 41, secs. 61 and 62 (insurable interest); same comp. Laws 1850, p. 204; Gen. Stat. 1870, 2nd Ed. p. 233.
Act Mar. 13, 1884, S. L. p. 519, (cf. p. 704) steam engine on highway to have spark arrester.
Act June 25, 1861, S. L. ch. 2489.
Act Mar. 12, 1895, S. L. ch. 79.
Act Apr. 18, 1895, S. L. ch. 293. X't

Va.

^{1.} N. H. Me. Mass.

within incorporated towns and in the mountains were excepted. A failure to comply made a railroad liable for all damages caused by fire, and to a fine of two hundred dollars for each mile or fraction thereof not ploughed, for the benefit of the school fund. The act of 1879 amended the earlier act so as to authorize the board of commissioners of any county to relieve a railroad from the obligation within the county so far as they considered the ploughing unnecessary. The act of 1883 extended the last limit of the time for plowing to November first.

The Montana act of 1881 required railroads to keep their right of way clear of all combustible material on each side of the track for the whole width of land owned by the railroad up to a distance of one hundred feet. A failure to plow was to constitute *prima facie* evidence of negligence. The New Mexico act of 1884 vested in the officials of each county the authority to require the plowing of a strip along each side of a railroad right of way.

A Michigan act of May 31, 1881 (S. L. No. 183) required that all vessels using wood for fuel and navigating waters of the state must be provided with suitable screens on the smoke stacks to prevent the escape of fire. Failure of any one operating such a boat to comply with the law was made a misdemeanor punishable by a fine of one hundred dollars and thirty days imprisonment for each day of such failure (See Comp. Laws of Mich. 1897, Vol. 2, ch. 145).

LEGISLATION ENACTED BETWEEN 1885 AND 1890

The year 1885 marks the beginning of a period of legislative activity in American states regarding forest and prairie fires. Although the laws in the western states were directed chiefly to the prevention of injury to buildings or crops through the setting of fires by railroads or the leaving of camp fires, they should be considered as reflecting the new viewpoint as to the losses caused by the careless setting of fires.

In 1885. An Alabama act of February 17, 1885 ¹ amended

^{1.} Session Laws, Ala., 1885, p. 125.

section 4428 of the Code of 1876 so as to make it a misdemeanor to burn any forest of another negligently, the previous law having been limited to the negligent firing of a pine forest used for the procuring of turpentine.

Two laws were enacted in Colorado in 1885, one providing new penalties for the willful or negligent firing of the woods and severe penalties for the leaving of a camp fire unextinguished, 1 the other authorizing county commissioners and road overseers to arrest offenders against the laws for the protection of the forests of the state. 2

A Kansas act of March 6, 1885 ³ provided that in all actions against railroad companies for damages caused by fires, the proof that the fire had been set by a locomotive and that damage had resulted was to constitute prima facie evidence of negligence on the part of the railroad company.

An Ohio act of April 9, 1885 ⁴ required that all companies operating railroads within that state should equip every locomotive with some device to guard against the emission of fire and sparks, which device must be kept in good repair and used during all months of the year except December, January and February. A penalty of one hundred dollars was provided for a violation of the act, and the court of common pleas of each county was specifically empowered to enjoin the use of any locomotives not properly equipped.

On May 15, 1885 5 the first comprehensive act for the establishment, maintenance and protection of state forests was enacted in the State of New York. For the care and protection of the extensive forest preserve created by this act provision was made for a warden, forest inspectors, foresters and others, under the general direction of the state forest commission, and all of these officers were empowered to arrest without warrant anyone found violating the provisions of the act. Outside of the preserve as defined by the act, town supervisors were made protectors of state land, subject to the instructions of the commission,

Act Mar, 27, 1885, S. L., Colo., p. 164.
 Act Apr. 4, 1885, S. L., Colo., p. 299.
 Session Laws, Kansas, 1885, ch. 155, p. 258.
 Session Laws, Ohio, 1885, p. 118. Same in Gen. Code, Ohio, 1910, secs. 8966 and

^{5.} Session Laws, N. Y., 1885 ch. 283, p. 482.

with the duty of reporting all violations of law or regulations to the district attorney. In towns in which the commission deemed it necessary, they might require the supervisor to appoint one or more forest guards who should perform such duties and have such pay as the commission might determine.

Every supervisor of a town in the state, not within the preserve counties, was to be ex-officio fire warden, with authority to divide towns into districts and appoint a warden in each, and to prepare a town fire map at an expense of five dollars. Town fire wardens were to receive not over two dollars a day for actual services as a town charge, and a fine of from five to twenty dollars might be imposed for a refusal of anyone to obey a summons to assist in fire control.

Within the forest preserve counties all state forest officials were to have the powers and duties of justices of the peace, supervisors and commissioners of highways, under the existing law, as to the control of forest fires. Wardens and supervisors were authorized to destroy fences, plow land, or in case of great danger, set backfires, without liability for trespass. They were required to report all fires of over one acre in extent to the commission, with a statement of the damage, and the commission was required to make a consolidated fire report to the legislature annually. A fine of five dollars was prescribed for the destruction of notices regarding fires.

Railroad companies operating through waste or forest land, or lands liable to be overrun by fires, were required to burn off with proper care, or otherwise remove from the right of way, all grass, brush or other inflammable material twice each year. Within one year from the passage of the act, every locomotive on such railroads was required to be provided with a screen for the stack and a protective device for the ash pan. Employees of railroads were forbidden to dump live coals in or near forest areas, and required to report at the next stop any fire discovered on or near the right of way. Railroad companies were required to employ extra trackmen in dangerous periods, and they and their employees were made liable to a fine of one hundred dollars for any violation of the act.

The willful or negligent setting of a fire on waste or forest land belonging to the state or to another person, whereby the said forest was injured or endangered, or the suffering of a fire to spread from one's own land to the injury of the woodlands of another or of the state might be punished by a fine of not less than fifty nor more than five hundred dollars, or by imprisonment not less than thirty days nor more than six months. The offender was also liable in a civil action for all damages caused by the fire.

In 1886. A Wyoming act of March 8, 1886 1 required every railroad company operating trains within that state to plow a six-foot strip along each border of its right of way each year between July first and September first, except within towns and cities and in mountainous districts where the plowing was impracticable or unnecessary. Any company that should fail to plow strips as required was made liable for all damage that should be caused by its locomotives, and for a fine of one hundred dollars for each mile or fraction thereof not plowed.

A Connecticut act of March 30, 1886 2 imposed a fine or imprisonment for the setting of a fire on public land or on the land of another without permission, the kindling of a fire on one's own land without first clearing away all combustible material for a distance of six feet from where the fire was to be set, or the leaving of a fire unextinguished or uncovered. Fires kindled by the throwing down of a lighted match, cigar or other burning material were declared within the provisions of the law.

A Massachusetts act of June 16, 1886 ³ required the selectmen of all towns to appoint fire wards annually in March or April, or to act themselves as such, for the control of forest fires, and authorized them to hire others to assist in suppressing fires.

In 1887. The year 1887 witnessed the enactment of a new law in Idaho Territory 4 making the leaving of a camp fire unextinguished or the setting of a fire by a railroad un-

Session Laws, Wyo., 1886, ch. 50, p. 106.
 Session Laws, Conn., 1886, ch. 88.
 Session Laws, Mass., 1886, ch. 296, p. 256.
 Act Feb. 10, 1887, see Rev. Stat. Ida., 1887, sec. 6921.

lawful; one in Dakota Territory 1 extending to the entire territory the act of February 11, 1881 ² making it unlawful to set a fire in the open and not control it, or to leave a camp fire unextinguished; and one in Missouri 3 giving railroad companies an insurable interest in property along their right of way for which they were held responsible under the railroad fire law. In 1887 Colorado 4 amended its existing law regarding fire damage caused by railroads, by providing for the appointment of appraisers by the party injured and by the railroad to ascertain the damage caused by fire. Although the law provided that the finding of these appraisers might be accepted as evidence of the damage, the appointment of an appraiser by a railroad company was not to be construed as an admission of liability.

A California act of 1887 ⁵ gave forest officers the authority of peace officers in making arrests for offenses against forest laws. The same year the legislature of Delaware 6 passed a new and more stringent act regarding the unlawful firing of the woods.

A Pennsylvania act of 1887 providing for the exemption from taxation of private forest plantations, imposed a fine of not over one hundred dollars for the "kindling of a fire on forest land, or the carrying of a naked torch, candle, lamp, or other fire, or discharging fireworks" upon the land of another without his consent.

A Tennessee act, approved March 29, 1887 8 made it a misdemeanor to violate any of the provisions of chapter 25 of the North Carolina laws of 1777, which was still in force in Tennessee, and imposed a fine of not less than five nor more than fifty dollars in addition to the forfeit of one hundred dollars and the payment of actual damages as provided by section 1704 of the Code of 1858 and section 2278 of the Code of 1884.

In 1888. A New Jersey act of March 23, 1888 9 was sub-

Act Mar. 11, 1887, S. L., Dak. Terr., ch. 123, p. 305.
 Session Laws, 1881, Dak. Terr., ch. 106, p. 174.
 Act Mar. 31, 1887, S. L., Mo., p. 101.
 Act Mar. 31, 1887, S. L., Colo., p. 368.
 Session Laws, Calif., 1887, ch. 35, p. 46.
 Act April 18, 1887, S. L., Del. Vol. 18, ch. 93.
 Act June 1, 1887, S. L., Penn. p. 287.
 Session Laws, Tenn. 1887, ch. 234, p. 395.
 Session Laws, N. J., 1888, p. 245.

stantially the same as the Pennsylvania act of June 2, 1870, for the suppression of forest fires, but was limited to towns whose woodland was equal to forty per cent of the total area of the town.

LEGISLATION ENACTED BETWEEN 1890 AND 1900

In New York. On February 25, 1890 1 chapter 283 of 1885 was amended. In towns outside of the preserve the supervisor, who was ex-officio fire warden, might create two or more districts and appoint a warden in each. description of the boundaries of each district must be recorded in the town clerk's office, and the supervisor might have a fire map prepared at a maximum cost of five dollars. Wardens were to receive not exceeding two dollars per day and those assisting them one dollar for fire control. Within the forest preserve counties the forest commission was to appoint wardens who should be subject to all the provisions applicable to supervisors and district wardens. A fine of from five dollars to twenty dollars might be imposed for any failure of a citizen to respond to fire summons.

In a general act of the same year 2 regarding towns, it was made the duty of justices of the peace, supervisors and commissioners of the highway in each town to order out the inhabitants liable to work on the highway and residing in the vicinity of any forest fire to assist in extinguishing it.

The new forest administration act of April 7, 1893 gave to all state forest officers and employees the same authority within any town in the forest preserve as justices of the peace, supervisors and commissioners of highways had in other towns of the state as to ordering out persons to assist; and it was declared that all fire wardens should be exempt from an action in trespass for destroying fences, plowing furrows, and setting back fires as necessary to control a forest fire. The compensation of those assisting at a fire was raised to not over two dollars per day. The supervisors of towns not within the preserve in which the state owned wild or forest land were made the protectors

Session Laws, N. Y., 1890, ch. 11, p. 20.
 Session Laws, N. Y., 1890, ch. 569, sec. 82, p. 1223.
 Session Laws, N. Y., 1893, ch. 332, p. 633, sec. 107-120.

thereof, subject to the instruction of the forest commission, and were required to report all acts of spoliation to the county district attorney, and to advise the commission of the action taken. The commission might require the appointment of one or more forest guards in such towns and prescribe their duties, and also appoint wardens in towns of forest preserve counties with the same powers as supervisors. All fires covering over one acre were to be reported with a statement of the damage done.

Section 107 required that from the right of way of all railroads passing through waste or forest land all inflammable material must be removed twice each year; that all locomotives be equipped with efficient devices to prevent the escape of fire from furnaces or ash pans and with a netting of steel or iron over the stack; that no live coals be deposited along the track; that engineers and trainmen report all fires at the next telegraph station, and that the one in charge of such station immediately report the information to the nearest warden or forester. In seasons of drought, railroad companies were required to employ sufficient trackmen to extinguish fires and to concentrate their employees for assistance in the control of any fire along the road. A forfeit of one hundred dollars was fixed for any violation of the provisions of this section. Section 113 contained the same provisions as the act of 1885 as to the willful or negligent burning of waste or forest land except that the provisions for imprisonment were omitted.

An act of May 11, 1893, ¹ amending the penal code of the state, declared every one guilty of a misdemeanor who should (1) wilfully or negligently set a fire on the land of another or of the state whereby damage was suffered, (2) negligently fire his own lands in such manner as to endanger another, (3) negligently suffer a fire lawfully set upon his own land to spread so as to injure another, (4) or fail, without lawful excuse, to assist in controlling a fire in the woods to which he had been lawfully summoned.

The new forest, fish and game law of April 25, 1895 ² contained, in sections 275 to 282 inclusive, the identical provisions of sections 107 to 114, inclusive, of chapter 332 of

Session Laws, N. Y., 1893, ch. 692, p. 1721, sec. 413.
 Session Laws, N. Y., 1895, ch. 395, p. 237.

1893, except that the words "the board of fisheries, game and forests" were substituted wherever the words "the forest commission" occurred in the earlier law.

On May 14, 1896 ¹ sections 276 to 281, inclusive, of chapter 395 of 1895 were revised and amended to require the board of fisheries, game and forests to appoint a fire warden in each town of the forest preserve counties and in towns where there was much exposure, or when directed by the state board, such warden must divide the town into districts and appoint a warden in each, whose names and addresses, with a description of their districts, must be recorded with the town clerk. A fire map of each town costing not over ten dollars was authorized, the failure of anyone to answer a summons to forest fire duty was fixed at ten dollars, and full authority to enter any land and take the action necessary to stop a fire was reiterated. Wardens were to receive two dollars and fifty cents per day, and those summoned two dollars, of which the state and town were each to pay one-half. The maximum penalty for a willful or negligent firing of the lands of the state or of another person, or of negligently allowing fire to spread, was fixed at a fine of two hundred and fifty dollars or imprisonment for one year, and the offender was liable civilly for all damages. 2

Section two hundred eighty-one in the law as amended made it unlawful to light a fire for clearing land, burning fallows, stumps, logs, or fallen timbers, in certain designated towns of the Adirondack and Catskill region from April first to June tenth, or from September first to November tenth, and required a notice of three days to a fire warden and his written permission for any such fire set between June tenth and September first. If such fire was to be set near woodland it was the duty of the warden to be present and to prevent the firing if the wind would make it dangerous, or until the person desiring to set the fire had sufficient help there to control the fire. The towns were made liable for such services of a warden, but the state was to reimburse them for one-half of the cost. A maximum

Session Laws, N. Y., 1896, ch. 655, p. 690.
 The penalty under sec. 281 of ch. 395 of 1895 had been \$50 to \$500 to the state, and civil liability for all damages, but with no provision for imprisonment.

penalty of three hundred dollars was provided for a violation of this section.

Ohio. An Ohio act of March 24, 1890 1 required all companies operating railroads within that state to keep the right of way clear of combustible material and, upon failure of a company, after twenty days' written notice, to remove such material, an abutting owner might remove it and collect a reasonable amount for such service. An act of April 26, 1894, ² declared that the setting of a fire by a locomotive was to constitute prima facie evidence of negligence.

Oklahoma. A general act of December 11, 1890 3 in Oklahoma was sufficiently broad to include the firing of the woods within its provisions for penalties.

Washington. A Washington act of March 15, 1890 4 imposed a fine of from fifty to five hundred dollars and imprisonment for a period of from three months to one year for the offense of maliciously and wantonly firing the lands of another or of wilfully or negligently permitting a fire to escape to the lands of another; and an act of March 7, 1891 ⁵ declared that anyone who should wilfully and deliberately set fire to wooded land or forest belonging to the state or to the United States, or fail to extinguish a fire accidentally set upon, or so as to endanger, such land, or should neglect a fire, set for a lawful purpose, so as to burn such lands should be held guilty of a misdemeanor and be subject to a fine of not over one thousand dollars or imprisonment for one year, or both. All fines under this act were to be used for the benefit of the public school.

South Carolina. A South Carolina act of December 16. 1891 6 made it unlawful to carry a lighted torch, chunk, or coals of fire over or across any enclosed or unenclosed lands of another without a special permit from the owner under a penalty of thirty days or one hundred dollars.

Session Laws, Ohio, 1890, p. 99. Same in Gen. Code, Ohio, 1910, secs. 8968 and 8969.
 Session Laws, Ohio, 1894, p. 187.
 Session Laws, Oklahoma. 1890. See Stats. Okla., 1890, sec. 2518.
 Session Laws, Wash., 1890, p. 127, sec. 9.
 Session Laws, Wash., 1891, ch. 122, p. 226.
 Session Laws, S. C., 1891, No. 676, p. 1045.

Wyoming. A Wyoming act of January 8, 1891 1 required every railroad company to burn all inflammable material along its right of way between September first and November first of each year, with liability for all damages and for a penalty of one hundred dollars for each mile not burned. The act provided that the burned strip need not extend more than two hundred feet from the track on either side.

North Dakota. A North Dakota act of March 9, 1891 ² aimed to reduce the loss from prairie and brush fires by authorizing each board of county commissioners to appropriate county funds for the purchase of equipment for fire breaks, and to divide the county into districts and appoint a fire warden in each. Road commissioners and fire wardens might call out all persons subject to a road tax to assist in making fire breaks, and those failing to respond might be fined from ten to twenty-five dollars. Railroads were required to burn or otherwise destroy all combustible material in their right of way. The wilful, negligent or careless firing of the woods, grain, or other combustible material was declared a misdemeanor, for which a fine of five hundred dollars, or one year's imprisonment, might be imposed.

On March 6, 1893 3 the legislature of North Dakota enacted a law which declared that the fact that a fire had been set by a railroad locomotive was to constitute prima facie evidence of a defect in equipment or, of negligence in its use, and made railroads liable for all fire damage unless the same had resulted through the negligence of the one injured.

Maine. On March 25, 1891 ⁴ Maine established a system of forest fire protection. The selectmen of organized towns, or special wardens in unorganized towns, were each to have charge of a fire district, and were authorized to call out residents under penalty of a fine for refusal, but

^{1.} Session Laws, Wyoming, 1891, ch. 34, p. 136. See Comp. Laws 1910, sec. 4203-

Session Laws, North Dakota, 1891, ch. 93. See also Act Mar. 9, 1897, S. L., ch. 80; Act Feb. 24, 1899, S. L., ch. 122, and Compiled Laws, 1913, sec 2801-2808.
 Session Laws, N. D., 1893, ch. 102, p. 227. See Smith v. N. P. Ry. Co., 3 N. D., 17, 53 N. W. 173, holding the presumption of negligence under this act one of law and not for jury to determine.
 Session Laws, Me., 1891, ch. 100, p. 90.

no town was required to expend more than two per centum of its valuation for taxation purposes. Hunters were required to use non-combustible wads, and all camp fires must be extinguished. Forest officers were required to report all fires covering over one acre in incorporated towns, or two acres in unorganized districts.

The right of way of every railroad operated through waste or forest land must be cleared of all combustible material annually; locomotives must be provided with spark arresters; railroad employees were forbidden to deposit live coals in forest areas, and required to report every fire at the next telegraph station. Railroad companies were made primarily liable for all damages to forests caused by employees engaged in construction or maintenance work or in the operation of trains. A fine of five hundred dollars and sixty days' imprisonment might be imposed on an employee for violation of the act, and the railroad company was liable to a fine of one hundred dollars for each violation.

This act was amended on March 9, 1893 ¹ so as to make the appointment of wardens in unorganized districts mandatory. A Maine act of 1891 2 made fish and game wardens fire wardens, and one of 1899 3 forbade non-residents of the state to camp and kindle fires, except under the direction of a registered guide, during certain months.

New Hampshire. The frequency of forest fires in New Hampshire led to the enactment of a law on April 11, 1891 authorizing the payment by the state of a reward of one hundred dollars to anyone who should furnish evidence leading to the conviction of any person who had wilfully, maliciously, or through criminal carelessness, caused any damage by fire in any forest, woodlot, pasture or field. Section three of the New Hampshire act of March 29, 1893, ⁵ establishing a forestry commission, contained substantially the same provisions as the Maine act of 1891 regarding fire wardens and their duties.

New Jersey. By act of March 23, 1892 6 township com-

Session Laws, Me., ch. 192, p. 207.
 Session Laws, Me., ch. 108.
 Session Laws, Me., ch. 42.
 Session Laws, N. H., ch. 55, p. 365. (1891).
 Session Laws, N. H., 1893, ch. 44, p. 36.
 Session Laws, N. J., 1892, ch. 119, p. 205.

mittees of towns in New Jersey having a population of less than fifty thousand were authorized to employ persons as should be necessary to extinguish forest fires, and the electors of such towns were enabled to vote such sum as should be needed for this employment. An amendment of May 14,1894 ¹ provided that where a town had voted money for fire protection, the town committee should appoint a fire marshal at a fixed per diem, who might appoint a deputy. It was made the duty of the marshal to assume the direction of the work of extinguishing any forest fire in his town.

A general act regarding the powers of townships in New Jersey, approved March 24, 1899, 2 repealed the acts of March 23, 1892 and May 14, 1894 regarding forest fires in counties of the third and fourth classes. This act provided that in any town that had raised money for the extinguishment of forest fires, it was the duty of the township committee to appoint a suitable person as fire marshal and determine his per diem. The marshal might appoint a deputy to act in his absence. Whenever advised of a fire in his town, or in an adjoining one imperiling his own, it became the duty of the marshal to assume absolute direction of all efforts to control the fire and to appoint aides who should receive such compensation as the township committee should determine for services in their own town or in an adjoining one. Each township committee was authorized to have a fire map of the town made at town expense.

Oregon. On February 20, 1893 ³ a comprehensive act regarding forest fires was enacted in Oregon. This act established a fine of from twenty dollars to one thousand dollars, or imprisonment from three months to a year, for the malicious setting of a fire; ten dollars to one hundred dollars for the setting of a fire on the land of another, without his consent, if any damage were caused.

Hunters and fishermen who built fires on the land of another without his consent (no mention of damage in section) could be fined from ten to one hundred dollars,

Session Laws, N. J., 1894, ch. 194, p. 298.
 Session Laws, N. J., 1899, ch. 169, p. 372, sec. 54, 55 and 56; for repeal see p. 421.
 Session Laws, Ore., 1893, p. 45.

and if any such fire were set with the purpose of injuring another, a fine of not less than twenty dollars, or not over two hundred and fifty dollars, and imprisonment from three to twelve months, might be imposed. The willful firing of the land of the state, of the United States, or of another person, was declared a misdemeanor, subject to a maximum penalty of one thousand dollars and imprisonment for one year. The net collections in fines were to be divided equally between the informer and the county where the action was brought.

This act was amended on February 18, 1899 ¹ to make the fines payable to the state, and to give state forest and game officials the power to arrest without warrant offenders against the forest laws of the state. The latter act required the governor to appoint a state game and forestry warden for a term of four years, at a yearly salary of twelve hundred dollars and expenses not exceeding five hundred dollars, and provided for other officials at state expense.

South Dakota. A South Dakota act of March 4, 1893 ² authorized railroad companies to go outside of their right of way to plow a fire guard upon adjoining lands by giving due notice to the owners thereof, and provided for an assessment of damages by three jurors drawn by the sheriff for such duty. Railroads were given authority to burn fire guards not exceeding two hundred feet on either side of the right of way through state land.

Wisconsin. A Wisconsin act of April 17, 1895, ³ making the chief clerk of the state land office and his assistant ex officio state forest warden and deputy state forest warden, respectively, without additional compensation, placed upon town supervisors and road superintendents the duty of acting as town fire wardens, with extra compensation at one dollar and fifty cents per day. They were to report all fires to the state warden, and were authorized to employ persons at town expense to assist in preventing or extinguishing fires, but no warden was to be allowed over fifteen

Session Laws, Oregon, 1899, p. 136, sec. 15, 16, 21 and 22.
 Session Laws, S. D., 1893, ch. 90. See Civil Code 1903, sec. 516. (Railroads must make a fire guard outside their right of way.) Cf. Kentucky Act, 1893.
 Session Laws, Wis., 1895, ch. 266, p. 522.

days, nor assistant over five days in one year, and the total annual expense in any one town was not to exceed one hundred dollars. Penalties of not over one hundred dollars, or one month's imprisonment, or both, might be imposed, with liability for damages, for the wilful or negligent setting of a fire or the leaving of one burning, and except as should be necessary for camp purposes, no one should build a fire in the forest during the months of July, August, September and October in any town where notices were posted without the written permission of a fire warden. All persons building necessary camp fires were required to exercise due care, and to extinguish the fire before leaving, under penalty of not less than thirty dollars or imprisonment for not over six months.

Railroad companies were required, under liability for a fine of one hundred dollars, to clear all inflammable material from their rights of way at least once each year, and to use spark arresters sufficient to prevent the setting of fire "so far as could reasonably be done." Railroad employees were required to avoid dropping live coals near forest land, and to report at the next telegraph station any fires discovered on or near the right of way. The companies were required to instruct trackmen to extinguish fires, and to concentrate them for control of fires of considerable size.

On April 27, 1897 ¹ chapter two hundred and sixty-six of 1895 was amended to require the state forest warden to report all offenses to the county district attorney, to appoint at least one forest warden in each organized town who should attempt to suppress all fires in his own town or within eighty rods of its borders when threatening his town. He might summon residents at the expense of the town at not over twenty cents per hour, but the total annual cost for thirty-six sections must not exceed one hundred dollars. A fine of ten dollars was fixed for the failure of a warden to perform his duty, or of anyone lawfully summoned to fail to report at a fire. Wardens were required to report fires yearly, or oftener if requested by the state warden.

^{1.} Session Laws, Wis., 1897, ch. 362, p. 932. Cf. Wisconsin St. 1898, sec. 1636a. (Supervisors to declare closed period.)

The provision in the act of 1895 forbidding the building of fires during July, August, September and October, without a permit, was omitted. In lieu of this it was provided that at any time that the wardens of a town believed it dangerous to build fires, they should post notices forbidding fires. The building of fires thereafter in such town, without a permit, except to warm food, was unlawful. The penalty for the leaving of a necessary camp fire was increased to fifty dollars, or six months in jail. Railroad operators were required to clear their right of way twice yearly, and to transport wardens free of charge for purposes of inspection as to their compliance with the law. The expenses of the state warden and his assistant were to be allowed, and an additional compensation of three hundred dollars might be allowed the chief clerk.

An act of April 26, 1899 ¹ required the secretary of state to designate one of the clerks of the land commissioners as state forest warden, and one of May 4, 1899 2 limited the apportionment of fire wardens by the state forest warden to one or more in certain named counties, except that wardens might be appointed in any town of other counties upon the request of the town board of supervisors.

Minnesota. The first progressive forest fire legislation in Minnesota was the act of April 18, 1895. 3 This act authorized the state auditor, who was to be ex-officio forest commissioner, to appoint a deputy at an annual salary of twelve hundred dollars as chief fire warden. The state fire warden was to have general authority over all fire wardens of the state. Supervisors of towns, mayors of cities, and presidents of villages, were authorized as fire wardens to summon persons over eighteen years of age to assist in the extinguishment of forest fires, with a maximum penalty of one hundred dollars, or three months in jail, for a refusal to respond. These wardens, and those appointed by the chief warden, especially for forest duties, were paid at the rate of two dollars per day for not over fifteen days annually two-thirds by the county and one-third by the state. They

Session Laws, Wis., 1899, ch. 258, p. 425.
 Session Laws, Wis., 1899, ch. 353, p. 662.
 Session Laws, Minn., 1895, ch. 196, p. 472.

were required to report all fires, and authorized to arrest without warrant, persons detected violating the forest law. The wages of those called out specially at the rate of one dollar and fifty cents per day for not over five days annually was to be paid by the counties, but the annual expenditure of public funds by a county for fire protection purposes was limited to five hundred dollars. Fines and imprisonment were provided for the offenses of wilfully or negligently firing the woods, and also for the use of combustible wads in hunting, or the building of a fire or carrying of a naked torch so as to cause risk of fire.

The act made it the duty of all railroad operators to use efficient spark arresters and keep their right of way clear of combustible material for fifty feet on each side of the center of their track between April fifteenth and December first of each year. Employees of railroads were forbidden to dump live coals or ashes along the tracks, and were required to report all fires at the next telegraph station. In times of drought railroad companies must use especial care, post placards, and concentrate help in case of fire. Cross ties might be kept along the track. For any violation of the act a railroad company was liable to a fine not exceeding one hundred dollars, and an employee from five to fifty dollars. Threshing engines were also required to have spark arresters under penalty of a fine of from five to All fines collected became a part of the fire fifty dollars. fund of the county in which they were collected.

Pennsylvania. On March 30, 1897 ¹ the legislature of Pennsylvania imposed upon all town constables the duty of acting as fire wardens, with authority to summon residents of the township to assist them, under a fine of ten dollars or imprisonment for thirty days, or both, for a refusal to aid. The constables were to be paid fifteen cents per hour, and those assisting twelve cents per hour, one-half by the county and one-half by the state, but no county was required to pay over five hundred dollars annually. Constables were liable to a fine and imprisonment for failure to perform duties. An act of April 29, 1897 ² authorized

Session Laws, Pa., 1897, No. 7, p. 9.
 Session Laws, Pa., 1897, No., 25, p. 29.

constables and other peace officers to arrest without warrant persons reasonably suspected of offending against the laws for the protection of timberland. An act of July 15, 1897 ¹ amended the act of June 2, 1870 so as to require the punishment of corporations, as well as persons: declared the commissioners of a county liable to fine and imprisonment for a failure to perform their duty, and provided that the state should pay one-half of the expenses incurred. A game law of March 22, 1899 ² gave to constables the same power to arrest those setting forest fires as was conferred by the act of April 29, 1897, but did not mention the earlier act.

Massachusetts. A Massachusetts act of April 9, 1897 3 provided that in any town that should have accepted the provisions of the act at a meeting duly called for such purpose, the selectmen should annually appoint a forester for a term not exceeding one year to have the care of all public shade, ornamental and forest trees. forester thus appointed in any town was to be the chief forest fire ward for the town and might appoint such deputies as he should deem expedient. The powers and duties imposed upon forest fire-wards by chapter two hundred and ninety-six of the laws of eighteen hundred and eighty-six were vested in these foresters. They were given authority to summon all males between eighteen and fifty years and to require the use of wagons, horses and other property in the suppression of forest fires under penalty of a fine or imprisonment for a refusal or neglect to comply. It was made their duty to post notices, the defacement of which was punishable by a fine of ten dollars, and to otherwise attempt to prevent forest fires. Foresters, their deputies, and those working under their direction were to receive such compensation as the voters of the town, or the select, men should determine. The law made it a misdemeanor, punishable by a fine of one hundred dollars and imprisonment for not over one month to leave an unextinguished fire upon the land of another and the willful setting of a

Session Laws, Pa., 1897, No. 228, p. 295.
 Session Laws, Pa., 1899, No. 14, p. 17.
 Session Laws, Mass. 1897, ch. 254 p 225; Same in Rev. L. 1902 ch. 32, secs. 16-25.

fire or the negligent permitting of it to escape to the land of another to his injury made the offender liable for all damages in addition to the penalties above named. It was made unlawful to set a fire in the open air between April 1 and October 1 of each year, except with the written permission of a forester or one of his deputies, under pain of the penalties named above. One-half of each penalty was to be paid to the complainant and one-half to the town. Any forester failing to perform his duty under the act was made liable to the same penalties.

Any town accepting the provisions of the act was authorized to appropriate annually, for the prevention of forest fires, any sum not exceeding one-tenth of one percent of the assessed valuation of the town, such sum and the fines collected to be expended by the forester, under the supervision of the selectmen, in the preparation of fire lines or in other ways of preventing the spread of forest fires. Towns might even use such funds for the taking of woodland in furtherance of the purposes of the act.

Michigan. A Michigan act of May 29, 1897 ¹ authorized any town board to prohibit the setting of fires during periods when they considered the fire danger unusual and to prescribe rules regarding the setting of fires. The setting of a fire during the prohibited period, except under a permit from the board, was made a misdemeanor. This act also declared that subsequent to its passage the setting of any fire in the open in that state north of the forty-fourth parallel of latitude without at least one day's notice to all adjoining owners should constitute *prima facie* evidence of negligence.

Florida. A Florida act of May 31, 1897 ² made it a misdemeanor to set a fire in wild forests or woods of Santa Rosa county at any time of the year, except on one's own land with due diligence to confine the fire and with advance notice to all persons living within one mile of the place to be fired; and an act of May 11, 1899 ³ imposed a maximum fine of five hundred dollars, or imprisonment for

Session Laws, Mich., 1897, No. 189.
 Session Laws, Fla., 1897, ch. 4598, cf. R. R. fire Act, S. L. Fla., 1891, ch. 4071.
 Session Laws, Fla., 1899, ch. 4812.

ninety days, for the firing of wild lands in Osceola County at any time except in February and March of each year, provided that one might fire his own land under proper precautions and after due notice to all persons living within one mile.

A Nebraska act, effective July 10, 1897, 1 required railroads to mow their rights of way each year between July fifteenth and August fifteenth, failing which the adjoining owner might mow subsequent to August fifteenth and collect therefor from the railroad; and one of March 28, 1899, ² amended the law regarding the setting of fires in the woods or prairies as it had existed for more than two decades, by substituting the words "in any part of this state" for the words "in the inhabited parts of this state," and by declaring the willful or negligent setting of fires a misdemeanor.

Colorado. A Colorado game law of April 27, 1899 ³ made it unlawful for anyone to set fire to timber or grass on lands of the state or the United States, or where it was liable to spread thereto, or to leave a camp fire unextinguished, and every officer having duties in connection with the Federal timber reserves was given the authority of the deputy wardens provided for in the act as to arresting without warrant offenders against the provisions of the act.

A Kansas act of April 4, 1899 4 authorized the construction of fire guards along roads in counties having a population of less than five thousand, upon petition of a majority of the electors of any town. Those guards, consisting of two plowed strips six feet wide, were to be within the highway unless the adjacent owner consented to a location upon his land without compensation, were to be plowed yearly and cultivated or burned over in the autumn if the county commissioners so directed. Persons liable to a poll tax were required to assist in construction thereof.

Session Laws, Neb., 1897, ch. 17. Comp. Stat. 1911, soc. 4690z1.
 Session Laws, Neb., 1899, ch. 97, p. 351.
 Session Laws, Colo., 1899, ch. 98, sec. 14, p. 188.
 Session Laws, Kan. 1899, Ch. 99, p. 196 (Same in Gen. St. 1915, McIntosh Secs. 4877-83).

CHAPTER III

Forest Administration Legislation Enacted in American States During the First Sixteen Years of the Twentieth Century

INTRODUCTION

The ten year period beginning with the year 1900 was marked by a rapid development of public interest in forestry. Early in this decade full courses in the science and practice of forestry were established in a number of universities. Other universities and colleges offered instruction in forestry subjects in connection with their courses in liberal arts, engineering, or agriculture, and a private school in forestry at Biltmore, North Carolina, drew students from many states. The forestry movement found an enthusiastic champion in the vigorous exponent of outdoor life and of civic control of national resources who became the chief executive in September, 1901; and the two terms of President Roosevelt marked the crystallization of public sentiment regarding a national forest policy, and witnessed an astonishing expansion in the activities of the national forest service. An organized propaganda, liberally financed by the national government, aroused the public to the possibilities of timber exhaustion and the enormous annual loss caused by forest fires.

Between 1900 and 1910 the states that had previously adopted laws for the protection or administration of forests found it necessary to amend their laws or to enact new and more comprehensive ones, and many states took their first real step in the establishment of state forests or the organization of an effective system of forest fire protection. During this decade and the first half of the following one, not only did laws requiring the clearing of combustible material

from railroad rights of way become common, but in many states laws were enacted to require those engaged in lumbering operations to so care for the debris left by their operations as to reduce the danger from fire. As the close of the nineteenth century marks the end of the period of general public indifference to the vital importance of forest conservation, the legislation of the twentieth century has been arranged according to the alphabetical order of the states instead of in the chronological order of the acts.

Alabama. The first general forest administration law in Alabama was approved by the governor on November 30, 1907. This act established a commission of forestry of seven members, comprising the governor, three other state officials, a member of the federal forest service, a resident professor of forestry, and a practical lumberman. The commissioners were required to serve without compensation other than necessary expenses, to gather and publish information as to the forest interests of the state, and to recommend legislation.

The governor was authorized, upon the recommendation of the commission, to accept gifts of land for demonstration and forest reserve purposes. County game and fish wardens were designated forest wardens with the authority of constables in arresting and prosecuting offenders against the laws and regulations regarding forest protection. Sheriffs and other executive and judicial officers of the state were made deputy wardens with the same power as wardens, and the governor was authorized to appoint as deputy wardens other persons desiring to serve without compensation. Each county was authorized to appropriate two hundred and fifty dollars annually for the compensation of a forest warden, whose duty it should be to enforce all forest laws and extinguish fires.

Arizona. No real administrative forest legislation had been enacted in Arizona prior to the close of the year 1916².

Session Laws, Alabama, 1907, No. 90.
 See Act Mar, 18, 1907, S. L. Ariz, 1907, ch. 51, p. 66 regarding distribution of funds from national forests, for amendment see Rev. Stat., Ariz., 1913, secs. 4554-55.

Arkansas. Although it has a rather comprehensive law regarding the logging industry, and has long had strict statutes regarding timber trespasses and the setting of fires, Arkansas had not, prior to January 1, 1917, adopted any administrative policy regarding its forests.1

California. By act of March 16, 1903 the California legislature authorized the expenditure of not over fifteen thousand dollars under a contract which should be made with the Bureau of Forestry of the national government for a study of the forest resources of the state and the formulation of a state forest policy, provided an amount equal to that expended by the state be also expended by the Federal Bureau in the co-operative study.

As a result of the information obtained in this study a state board of forestry consisting of the governor, secretary of state, attorney general and state forester was created by an act of March 18, 1905. The forester was to be appointed by the governor and hold office at his pleasure, but should be certified to the governor as a technically trained The forester, at a salary of twenty-four hundred dollars per annum, was made the executive officer of the board, and was charged with the administration of the state parks, the fire protective work throughout the state, and general forest publicity work. He was authorized to appoint two assistants at twelve hundred dollars each. The act contained very comprehensive legislation regarding the setting and control of forest fires, and required those operating railroads or cutting timber to take the steps necessary to reduce fire danger. 4

Colorado. In a law, passed April 10, 1901, 5 the state of

Act May 31, 1901. S. L. No. 423 and Act May 18, 1911. S. L. No. 423, p. 366 provide for distribution of funds from National Forests.
 Session Laws, Cal., 1903, ch. 155, p. 171; see additional appropriation of \$10,000 by Act Mar. 18, 1905, ch. 157, p. 152.
 Session Laws, Cal. 1905, ch. 264, p. 235. See Act Mar. 18, 1907, S. L. ch. 277, p. 346; amended Mar. 20, 1909, S.L. ch. 334, p. 550 regarding national forest revenue.
 Session Laws, Cal., 1909. Ch. 393, changing forester's salary to \$3,000, and providing for deputy forester at \$1,800, and assistant forester at \$1,200.
 Cf. Act Mar. 18, 1905, S. L., ch. 187, p. 183, appropriating as a forestry fund \$100,000 of such money as should be collected from the United States as Indian and Civil War claims Civil War claims.

See also chapter 162 of 1901 and chapter 300 of 1903, providing for the purchase and management of a grove of redwood trees as a state park, and S. J. R. No. 15, and A. J. R. No. 14 of 1901 regarding the Calaveras Grove; and the Act of Feb. 6, 1911, S. L., ch. 12, providing for the management of Redwood Park.

5. Session Laws Colo, 1901, ch. 83, p. 185. Cf. Act of April 4, 1887, S. L., p. 412, authorizing state land board to locate a state park of 640 acres at Royal Arch and Febra Mourtin.

Echo Mountain.

· Colorado imposed upon the State Board of Land Commissioners the duty and authority to administer all timber lands held by the state. The act provided that no trees needed to conserve the snows, ice or water of any irrigation district were to be cut from any part of the public domain, except in accordance with the permission of and under the restrictions prescribed by the said commissioners, who were required to maintain a record of all applications and obtain a full report as to the timber covered by each application. Trees less than ten inches in diameter at two feet from the ground could not be cut, except that trees five inches in diameter might be used for mining or fencing purposes within the county where cut. Camping by residents of the state, outside the county of their residence, in any forest district must be done under a permit, and non-residents of the state could lawfully camp in a forest district only by employing a game or forest warden.

A Colorado act of May 27, 1911 ¹ authorized the state board of agriculture, which also acted as a state board of forestry, to appoint a state forester at a salary of not over twenty-five hundred dollars per annum, who should have charge of any state forest reserves later established or acquired; should collect and publish information on forestry subjects, act as instructor in forestry at the state agricultural college, and cooperate with the state board of land commissioners and the federal forest officials in forestry work. He was given the special duty of assisting individuals and associations or corporations in the planting and care of trees, and required to assist sheriffs in the prevention and extinguishment of forest fires.

Connecticut. A Connecticut act of June 17, 1901 ² provided for the appointment of a state forester as a member of the force at the state agricultural experiment station. The forester was authorized to purchase land suitable for the growth of forest trees at not over four dollars per acre, sow or plant trees thereon at a cost of not over two dollars and fifty cents per acre, and manage such areas for ferest pro-

Session Laws, Colorado, 1911, p. 419. Ch. 138. Same in Mills Ann. St. Rev., 1912 by Gabrie!, secs. 2986-3019 and in Colo, Stat. Ann. Mor. and DeSoto, secs. 2626-2654N.
 Session Laws, Connecticut, ch. 175, p. 1374. (1901.)

duction and the preservation of game. These lands, called state parks, were to be assessed for town taxation the same as adjoining private lands. By an amendment of June 3, 1903 the state forester was authorized to make thinnings, sell timber, and adopt such other measures regarding forests held by the state as should be necessary to insure a profitable management. This amendment designated the state holdings as "forests," and struck out the limitation as to the amount that might be expended per acre for seeding or planting.

The Connecticut act of July 13, 1905, reorganizing the forest fire protection system of the state made the state forester ex-officio state forest fire warden, and vested in him the authority, with the cooperation of town selectmen, to select district fire wardens.

By act of June 28, 1911 3 the price per acre that might be paid for land suitable for state forests was increased to eight dollars, and the state forester was authorized to exchange land thus purchased with adjoining owners and, with the approval of the governor and attorney general, to sell land at a price greater than the cost and interest thereon. On August 30, 1911, 4 the board of control of the Connecticut Agricultural Experiment Station was authorized to designate one of the members of the station staff as assistant state forester who should act as forester and fire warden in the absence of the state forester. Responsibility for the administration of the forest plantation tax exemption law of August 23, 1911 5 was vested in the state forester.

Delaware. The first forest administration act in the State of Delaware was approved by the governor on April 19, 1909. 6 This act created a state board of forestry to consist of the governor and four other members, who should serve without compensation other than expenses.

Session Laws, Connecticut, 1903, ch. 132, cf. S. L. 1903, ch. 133, requiring state geographical survey to investigate state forest resources.
 Session Laws, Conn., 1905, ch. 238. See also Act July 8, 1909, S. L., ch. 128, requiring him to determine whether a town should be exempt from fire restrictions.
 Session Laws, Conn., 1911, ch. 115, p. 1369. Cf. appropriation in Sp. L. Conn., 1909, Vol. 15, p. 1048.
 Session Laws, Conn., 1911, ch. 227, p. 1516.
 Session Laws, Conn., 1911, ch. 205. See also new exemption law of May 7, 1913, S. L., ch. 58, and Act May 26, 1913, S. L., ch. 108, prohibiting further exemptions under ch. 205 of 1911.
 Session Laws, Delaware, 1909, ch. 71. Same in Rev. Code, 1915, secs. 714 to 727.

forester of Delaware College, who was made ex-officio a member of the board and also state forester, was given general supervision of all forest interests of the state. He was required to direct the activities of all forest wardens and authorized to prevent and extinguish fires.

The governor was authorized to accept gifts of land to be protected and administered by the board of forestry as state forest reserves, and the forester was authorized to cooperate with political subdivisions of the state and private owners in forest practice. Provision was made for the appointment of forest wardens for the administration of forest laws. Counties were authorized to raise money for forest protection, improvement and management, and were required to pay the full cost of fire control. Penalties were prescribed for the willful or malicious firing of the the negligent permitting of one to escape, and the operation of locomotives and portable or stationary boilers without proper appliances for the prevention of fire was made a misdemeanor. All fines and penalties were available for general forestry purposes.

Florida. Even at the end of the year 1916, Florida had made no provision for state forests or for a systematic protection of forests from fire. 1

Georgia. Although Georgia has extensive forest interests and provision had been made for the dissemination of knowledge regarding forest resources. 2 no administrative legislation had been enacted prior to January 1, 1917.

Idaho. An Idaho act of March 8, 1905 regarding the sale of timber from state lands and the prevention of forest fires declared that "no trees standing on lands of the state, which lands when cleared of trees will not be suitable for cultivation and raising of crops, and no trees needed to conserve the snows, ice or waters of any irrigation district, shall be cut from any part of the public lands belonging

Cf. Act June 3, 1907. S. L. Fla., ch. 5681, p. 188, authorizing a report upon forest resources by geological survey established by this act.
 See Act Dec. 18, 1901. S. L., p. 84, consenting to national forests and Res. No. 60 Aug. 16, 1910 favoring establishment of Appalachin National Forests; Annot Code, 1914. Parks, contains no state law.
 Session Laws, Idaho, 1905, p. 145.

to the state." The state board of land commissioners were charged with the duty of seeing that these restrictions were complied with, and that brush was properly cared for when timber was sold and cut. If protest were made as to cutting in any particular area the state board could not allow trees less than one foot in diameter at two feet from the ground to be cut, except that trees five inches and over in diameter might be used for mining or fencing in the county where cut.

This act was superseded by one of February 15, 1907 ¹ which required the state board of land commissioners to divide the state into fire districts and appoint wardens upon the request of timber owners; and on March 15, 1909² amendments were made to the law imposing additional duties as to informing the public regarding the fire laws, as to requiring a proper disposal of slash upon cutting areas, and as to cooperating with private owners in fire protection.

Illinois. A joint resolution by the Illinois legislature, adopted March 5, 1903, 3 requested the national department of agriculture to make an investigation of forest conditions within the state, and to submit to the state recommendations as to the means necessary for the preservation of existing forest and for the extension of forest areas. No provision for a state administration of forest interests has been made. An Illinois act of May 18, 1905 4 authorized the organization of forest preserve districts, each comprising a portion or all of one or more counties, and gave the board of commissioners of such incorporated district very extensive powers of taxation and general administration. This act was displaced by an act of June 16, 1909 5 that required a public hearing upon the petition for the creation of such a district before the submission of the matter to a vote by the people of the proposed district, authorized the creation of only one forestry district in a county, reduced the governing board to five members, for all of whom salaries were provided, and limited the power of taxation

Session Laws, Idaho, 1907, p. 18. See Rev. Code, 1908, sec. 122, regarding national

Session Laws, Idano, 1907, p. 18. See Rev. Code, 1908, sec. 122, regarding hatomators revenue.
 Session Laws, Idaho, 1909, p. 227. See Act Mar. 15, 1915, S. L. Ida., ch. 128, p. 273, regarding the establishment of land clearing districts.
 Session Laws, Illinois, 1903, p. 359.
 Session Laws, Illinois, 1905, p. 279.
 Session Laws, Illinois, 1909, p. 245.

more closely. The latter act was declared unconstitutional on December 21, 1911, 1 mainly, upon the ground that the limitation to a single district in a county granted a special privilege to the citizens of that part of a county that should first be organized into a district. Both of these laws required that a forestry district contain one or more cities, towns or villages, and although the titles of both acts indicated that they were measures for the promotion of forestry. they were in fact laws providing for the improvement of pleasure drives, boulevards and parks, and the preservation of scenic and other outdoor attractions.

A new act for the incorporation and administration of districts was approved by the governor of Illinois on June 27, 1913. ² This act confined each district to a single county, authorized a joint hearing upon all applications pending at one time and the inclusion of several areas for which application had been received in one district under the name first proposed. Areas could also be subsequently added. The method of administration remained substantially as in the act of 1909 and the purpose of such districts practically the same, there being little indication in the language or provisions of the act to indicate that the practice of commercial forestry was contemplated.

Indiana. By an act of March 1, 1901 3 a state board of forestry was established in Indiana. One member of this board of five was to be a person having special knowledge of forestry, two were to represent the lumber interests of the state, one the farming interests, and the fifth was to be chosen from the faculty of Purdue University. The board was directed to collect and publish information regarding forest preservation and extension, and recommend plans for the improvement of forest conditions within the state and the establishment of state forest reserves. No salaries were allowed, except to the forest expert, who was to be secretary of the board and receive twelve hundred dollars and a six hundred dollar allowance for expenses annually. An amendment of February 28, 1903 4 increased the salary

People v. Rinaker, 252 Ill. 266.
 Session Laws, Illinois, 1913, p. 385.
 Session Laws, Indiana, 1901, ch. 49, p. 62.
 Session Laws, Indiana, 1903, ch. 44, p. 111.

and expense allowance of the secretary to eighteen hundred, and one thousand dollars, respectively, provided for a clerk at six hundred dollars, and allowed each of the other members of the board one hundred dollars annually and three cents mileage for attendance at meetings. An act of March 3. 1903 ¹ authorized the purchase of two thousand acres by the state board of forestry for forest nursery and demonstration purposes.

Iowa. No forest law other than trespass and fire laws and the law of April 10th, 1906, 2 providing for an exemption of forest areas from taxation, had been enacted in Iowa prior to January 1, 1917.

The act of 1906 required (in section fourteen) that the secretary of the state horticultural society act as state forestry commissioner, without additional salary, in promoting the objects of this law and in obtaining general reports upon forestry from the non-salaried county deputies which he was authorized to appoint.

Kansas. As early as March 10, 1887 3 legislative provision had been made in Kansas for a commissioner of forestry, at an annual salary of twelve hundred dollars, who should establish and conduct two forest experiment stations and seek to develop public interest in forestry practice.

A Kansas act of March 19, 1907, 4 repealing the act of 1887, provided for the appointment of two forestry commissioners to reside at and have exclusive charge of the two state forestry experiment stations at Dodge City and Ogallah. Each was charged with the duty of disseminating knowledge about trees.

On March 18, 1909 6 the act of 1907 was repealed and a division of forestry established at the Kansas state agricultural college. The board of regents of this college were authorized to appoint a state forester to have direction of

Session Laws, Indiana, 1903, ch. 60; See Act Feb. 26, 1907, S. L., ch. 57 authorizing right of way across reserves.
 Session Laws, Iowa, 1906, Vol. 31, p. 52; same in code 1897, suppl. 1913, sec. 1400c-1400p. Cf. Mar. 21, 1900, ch. 58 Com'r. Agr. (forestry).
 Session Laws, Kansas, 1887, ch. 160, p. 226.
 Session Laws, Kansas, 1907, ch. 405, p. 586.
 Ogallah station abolished by act of Apr. 30, 1913, S. L. ch. 309.
 Session Laws, Kansas, 1909, ch. 49, p. 79. See Kan. Code, 1909, secs. 7993-8000, and Gen. St. 1915, McIntosh, secs. 9911-9915.

all forest experimental and educational work with the duty of assisting towns, counties, corporations, and individuals, in the planting, protection and management of timber tracts.

Kentucky. A Kentucky act of March 21, 1906 ¹ created a state board of agriculture, forestry and immigration, to consist of nine members. Section nine of this act provided that this board should act as a forestry commission for the state, and authorized it to expend not exceeding two thousand dollars annually, either directly or through the United States forest service, in advancing the forest interests of the state. The compensation of the members was made five dollars per day for not over thirty days annually.

A Kentucky act of March 19, 1912 ² repealed section nine of chapter ninety of the act of 1906, created a non-salaried board of forestry of five members besides the governor, and authorized the appointment of a technically trained forester for a term of four years at an annual salary of not over twenty-five hundred dollars. The management of the forest preserves subsequently to be acquired and established was vested in the board of forestry, and the board was empowered to purchase lands suitable for forest reserves at not exceeding ten dollars per acre, using any unappropriated moneys in the forest reserve fund. The board was given broad duties of investigation of forestry and kindred subjects. They were authorized to sell such dead, mature or large trees on forest reservations as should be compatible with a proper management.

Subject to the direction of the board the forester might cooperate with counties, municipalities, corporations and individuals, in preparing plans for the protection, management and replacement of forests, provided such parties pay the field expenses. The establishment of nurseries

Session Laws, Kentucky, 1906, ch. 90, sec. 9.
 Session Laws, Kentucky, 1912, ch. 133, p. 529. Same in Ky. St., Carroll, 1915, sec. 1905c. Cf. Session Laws, Kentucky, 1912, ch. 82, general law regarding fire marshals. And Act Mar. 13, 1912, S. L. ch. 61, p. 214, ceding to the United States jurisdiction over not to exceed 45,000 acres in Edmonson county when the same should be selected for Mammoth Cave, National Park. In Thum's Suppl. of 1915 to Ky. Stats. of 1909, ch. 133 of 1912 is given in secs. 1905b to to 1905gg; ch. 61 of 1912 in sec. 2376e; and ch. 24 of 1914 regarding the acquisition of Nat'l. Forests in Appalachin Mts. in secs. 2376f to 2376i. See also Ky. Stat. 1915, Carroll, sec. 1905b re Nat'l. Forests.

and the distribution of young trees to residents of the state was authorized.

Louisiana. By act of July 4, 1904 1 a Department of Forestry was created in Louisiana. A Forestry Commission was to consist of the Register of the State Land Office as ex-officio Commissioner of Forestry, with an additional salary of five hundred dollars, and four other non-salaried citizens to be appointed by the governor. It was made their duty to inquire into and report regarding the preservation of forests, the reforesting of denuded lands, and other forestry subjects, and to report as to the forestry legislation which should be enacted by the state. The Commissioner of Forestry was given control of all activities of the state directed to the preservation and protection of forests of the state, and the appointment of a state officer to be known as chief fire warden was authorized. The act required an officer in each jury ward of the state to act as a fire warden. The local fire wardens under the direction of the chief warden were required to take the necessary steps to prevent and suppress forest fires, and sections twelve and thirteen imposed penalties for the willful or negligent firing of the woods or the endangering of forests by fire.

On July 2. 1908 ² a "Commission for the Conservation of Natural Resources" was created in Louisiana. The seven members of this commission who were to serve without compensation, except the secretary, were required to inquire into forest conditions within the state, and the relation of such forests to the climate and the waterways of the state. The membership was increased to eight, and the name changed to the "Conservation Commission" of Louisiana on July 6, 1910. 3

On July 7, 1910 4 the Louisiana law regarding a department of forestry was amended so as to designate the Register of the State Land Office as Forester, and to provide for a Deputy Forester who should have had technical training in silviculture. Section three of the new act imposed upon the forester and his assistant general duties as to fire pro-

Session Laws, Louisiana, 1994, No. 113, p. 244.
 Session Laws, Louisiana, 1908, No. 144, p. 200.
 Session Laws, Louisiana, 1910, No. 172, p. 255,
 Session Laws, Louisiana, 1910, No. 261, p. 446.

tection, forest education and cooperation with private parties, and section four authorized the acceptance of gifts of land to the state for administration as forests by the State Conservation Commission. The penalties for the firing of the woods or the endangering of the same were modified, and specific provision for the collection of the value of young growth destroyed by fire was contained in a clause which said the value "shall be calculated as the expense of artificially planting and cultivating such small growth to the point of development at the time when the fire occurred." Railroads were required to clear inflammable material from rights of way, arbor day was established, and the Conservation Commission was authorized to purchase forest land for the state.

An act of July 9, 1912 ¹ reduced the membership of the Louisiana conservation commission to three members, two of whom should receive not to exceed twenty-four hundred dollars and the other not over three thousand dollars. These commissioners were to be appointed for a term of four years each, required to devote their entire time to the service, and given the direction of all forestry work in the state. Appointed by the governor and confirmed by the senate, they were subject to removal only after trial before a court on charges of malfeasance, nonfeasance or incompetency. In this commission of three members were vested all the powers and duties previously exercised by the conservation commissioners, the forester and the deputy forester under the acts of July 6 and July 7, 1910.

On June 30, 1916 ² the act of July 9, 1912 was amended by the substitution of a single commissioner of conservation for the three commissioners. The single commissioner upon whom were devolved all the powers and duties formerly appertaining to the three commissioners was to be appointed by the governor with the advice of the senate for a term of four years. He was allowed a salary of thirty-six hundred dollars per annum, was required to be informed "in whole or in part" regarding wild life, game, fish and forestry and was required to devote his whole time to the duties of the office.

Session Laws, Louisiana, 1912, No. 127.
 Session Laws, La., 1916, No. 66, p. 171.

An act of July 5, 1916 provided that one-fifth of all sums collected by the state as licenses for the severance of timber and turpentine, under existing law, should be accredited to the forestry department of the state department of conservation and be expended solely in the execution of the forestry laws of the state and required that under the general direction of the conservation commissioner, the forestry department be superintended by a technically trained forester of not less than two years' experience in professional forestry work. No expenditure for such forestry work was to be made without the approval of a general forestry advisory board which was to consist of the commissioner of conservation and four other members to be appointed by the governor, one of whom should be the professor of forestry in the state university, one a farmland owner interested in farmland reforestation, and two of whom should be selected from well-known timber owners. The members of the advisory board were allowed no compensation other than traveling expenses.

Maine. On March 26, 1903 the Maine law for the protection of forests from fire was amended so as to transfer the authority to appoint fire wardens within unorganized places from the county to the state forest commissioner, and to provide for the payment from state funds of the cost of fighting fire in such districts; and April 1, 1909 3 a large proportion of such unorganized territory was included in a tax division called the "Maine Forestry District." A special tax was levied on all land within the district for forest protection purposes and the forest commissioner was charged with special responsibility as to fire control therein. act provided that lands as to which the special tax provided therein was not paid within one year from the time the lands were listed and advertised would be forfeited to the state. Under these provisions the state may ultimately acquire extensive public forests. Although the laws of Maine for the protection of forests from fire enacted prior

Session Laws, La., 1916, No. 145, p. 363, sec. 7.
 Session Laws, Maine, 1903, ch. 168.
 Session Laws, Maine, 1909, ch. 193, cf. act Apr. 2, 1909 S. L., ch. 230, p. 304 making \$25,000 immediately available for fire protection. See amendment in ch. 33, of 1911. Ch. 193 of 1909 was held constitutional by the state Supreme Court, Nov. 13, 1912 in Sandy River Pl. v. Lewis, 109 Me. 472. Cf. opinion of Mar. 10, 1908, regarding legislative restrictions on private logging operations.

to January 1, 1917 were exceptionally satisfactory 1 no policy of state administration of public forests had vet been evolved.

Maryland. A Maryland act approved April 5, 1906. 2 established a state board of forestry of seven members. consisting of the governor, two other state officials, two educators, a practical lumberman and a citizen interested in forestry. The employment of a state forester at an annual salary of two thousand dollars, to have charge of all forestry interests in the state, was authorized. board was empowered to accept gifts of land to the state for forestry purposes and to purchase lands at not over five dollars per acre. The state forester was authorized to cooperate with counties, towns, corporations or individuals in plans for forestry work. The state forester was made the head of a state system of forest fire protection, and the act contained comprehensive provisions regarding the setting of fires, the use of safety appliances on engines and the authority of fire wardens. The law created a forest reserve fund and provided that the net collections under the act as penalties, together with all funds obtained from the state forest reserves, might be used for forest protection, management, replacement and extension. County boards were authorized to levy money for forest protection, improvement, and management.

A Maryland act of April 7, 1910 3 authorized the appointment by the governor, upon the recommendation of the state forester, of forest wardens who should receive a nominal annual salary, and one-half of their wages for special services, from the state treasury and be responsible for forest protection in their respective counties. On April 15, 1912 the law was again amended to make the state's half of the cost of fire fighting payable from the forest reserve fund, to authorize the purchase of land for a forest nursery at not over five dollars per acre and the distribution of trees to private parties, and to appropriate six thousand

See Session Laws, 1909, ch. 52 and ch. 164; Session Laws 1911, ch. 35; Session Laws 1913, ch. 86 and ch. 177; Session Laws, 1915, ch. 68 and ch. 196.
 Session Laws, Maryland, 1906, ch. 294, p. 532. See increased appropriations Act April 13, 1908 S. L. ch. 215; April 13, 1910 S. L. ch. 429. See establishment state conservation commission session laws 1910 ch. 238.
 Session Laws Md. 1910 ch. 161 p. 395.
 Session Laws Md. 1912 ch. 348 p. 509.

dollars for the publication of forest maps and reports. This act made an annual appropriation of ten thousand dollars for the work of the forestry board.

On April 16, 1914 the law was amended to allow the board of forestry to fix the salary of the state forester and the salaries of such assistants as he should need. duties remained substantially the same as in the act of 1906. The previous law as to the direction of forestry work by the board and the forester received several modifications and the board was given the power of eminent domain when necessary to carry out its work. County commissioners were authorized to appropriate money for "purposes of tree planting and care of trees."

Two acts of 1912 and one of 1914 provided for the acquirement by the state board of forestry of specified tracts of land as state forests; and an act of April 16, 1914, 4 clothing the state forester with comprehensive duties regarding the planting and care of shade trees along public roads, provided that trees grown in state nurseries and not required for roadside planting might be used for planting on state forest reserves, or be furnished any land owner of the state at not less than cost, if planted according to plans approved by the state forester.

Massachusetts. In 1898 provision was made in Massachusetts for the purchase by the state of ten thousand acres in the County of Berkshire to be known as the Greylock State Reservation which was to be maintained by said county. In 1902 and again in 1904 appropriations were made for the acquisition of additional land for such reserve. An act of 1903 provided for the acquisition of a similar reserve in the County of Hampshire.

On June, 1904 9 the office of state forester was created in Massachusetts with a salary of two thousand dollars. The law required that the appointee have a technical edu-

Session Laws Md. 1914 ch. 823 p. 1551.
 Act April 15, 1912 S. L. ch. 749 p. 1250; Act April 15-1912 S. L. ch. 794 p. 1562.
 Act Mar. 30 1914 S. L. ch. 209 p. 297. See Annot. Code, Md., Bagby, Vol. 3, 1914, pp. 617-623.
 Session Laws Md. 1914 ch. 824 p. 1554. See amendment Apr. 18, 1916 S. L. p. 548 p. 1124 re cutting without permit.
 Act June 20, 1898 S. L. ch. 543
 Act June 26, 1902 S. L. ch. 514.
 Act June 3, 1904 S. L. ch. 411 p. 391.
 Act Apr. 25, 1903 S. L. ch. 222.
 Session Laws, Mass. 1904 ch. 409 p. 389; S. L. 1905, ch. 211 changed date of submission of annual report.

cation, and it was made his duty to promote the perpetuation, extension and proper management of the forest lands of the commonwealth, both public and private. Aside from expenses connected with his educational duties, private parties who availed themselves of his aid were made liable for his necessary travel and subsistence expenses. He was authorized to establish and maintain a forest nursery at the Massachusetts Agricultural College, from which trees for forest planting must be furnished free to the state and might be distributed to landowners as he and governor and council thought advisable. On June 4, 1907 ¹ the salary of the forester was increased to three thousand dollars, and the limitation of annual expenditures for forestry work to five thousand dollars was removed, and on April 7, 1909 2 the state forester was charged with the duties previously performed by the superintendent for the suppression of the gypsy and brown tail moths and the governor authorized to determine his salary. A forest protection act of June 5, 1907 required that the persons appointed as town and city forest wardens be approved by and make reports to the state forester and authorized the payment from state funds for the services rendered by such wardens under the direction of the forester

An act of May 1, 1908 4 authorized the state forester, with the consent of the governor and council, to expend five thousand dollars that year and ten thousand dollars annually thereafter in the acquisition of lands at not over five dollars per acre for purposes of demonstration in forest management. The limitation of the amount to be acquired in one tract in any one year to forty acres was increased to eighty acres on March 25, 1909, 5 The owners of land thus purchased, or their heirs and assigns, might repurchase the land any time within ten years by paying the amount paid by the state for the land and for improvements and maintenance, with interest at four per cent on the purchase price, but the deed of reconveyance should contain a restriction that trees cut from such property should not

^{1.} Session Laws, 1907 ch. 473 p. 422. 2. Session Laws, 1909 ch. 263 p. 207. 3. Session Laws, 1907 ch. 475 p. 427. 4. Session Laws, 1908 ch. 478 p. 432. 5. Session Laws, 1909 ch. 214,

be less than eight inches in diameter at the butt. of land for the same purpose might be accepted by the forester with the right of repurchase if so stipulated in the deed. From any lands acquired under this act the state forester, with the approval of the governor and council, might cut and sell trees and other produce. The forester was required to replant or otherwise manage such land productively. Planted land reconveyed to an owner was not to be exempted Twenty per cent of the annual appropriafrom taxation. tions of the act might be used for the distribution of seeds and seedlings to citizens of the commonwealth at not less than cost. An act of March 3, 1910 1 authorized the acceptance of bequests and gifts for the advancement of the forestry interests of the state in the manner designated by the donor; and one of May 11, 1912 amended chapter four hundred nine of nineteen hundred four so as to authorize the establishment of forest nurseries at state institutions, other than the Massachusetts Agricultural College at Amherst, and the use of the labor of the inmates of such institutions free of cost for nursery work, with the limitation that all stock grown in such nurseries should be used within the state and should be furnished free to state institutions.

On July 18, 1911 ³ the appointment of a state fire warden by the state forester was authorized, and all forest fire protection was placed under this warden.

An act of June 29, 1914, 4 established a state forest commission to consist of the state forester and two others appointed by the governor, with the approval of the senate, for terms of six years, without compensation. This commission was authorized to acquire by purchase, or otherwise, at a cost of not over five dollars per acre, and hold for the state, woodland or land suitable for timber cultivation, and, after public hearing, to sell or exchange lands thus acquired. Lands thus acquired were to be known as state forests, and it was made the duty of the state forester to reforest and develop the same for public enjoyment and the conservation of water supplies of the state. These lands were exemp-

Session Laws, 1910 ch. 153.
 Session Laws, Mass., 1912, ch. 577, p. 587.
 Session Laws, 1911 ch. 722 p. 879.
 Session Laws Mass. 1914 ch. 720 p. 751. See Act May 19, 1916 ch. 234 p. 163
 Mass. Agr. College authorized to acquire a demonstration forest about Mt.

ted from taxation, but the towns and cities in which they were situated were to be reimbursed by the state for the annual loss in taxation thereon. The act carried an appropriation of ten thousand dollars for the first year, and twenty thousand dollars for each of four succeeding years.

Michigan. By a joint resolution approved June 6, 1901 ¹ the lands in Roscommon and Crawford Counties that had been withdrawn from homestead entry under authority of the act of June 7, 1899, creating a forestry commission. were declared withdrawn from sale and made into a forestry reserve.

However, this provision was repealed by an act of June 4, 1903 ² which withdrew from sale and entry only the lands then owned or thereafter to be acquired by the state in township twenty-one north, ranges three and four west, the north half of township twenty-four north, range four west, and the south half of township twenty-five north, range four west, and provided for the management according to silvicultural principles of the state lands within the reserved area that should upon examination by the forestry commission, created by the act of June 2, 1899, be found suitable for forestry purposes. The forestry commission was authorized to appoint a forestry warden at a salary of one thousand dollars per annum who should appoint the necessary deputies to be paid by the day for actual services. The commission was authorized to cut. remove or sell from the forest reserve such land as they considered it advisable to remove, and to purchase lands within the boundaries of the reserve so as to make the state holdings contiguous. Forest reserve lands were to be assessed in the same manner as adjoining private lands and be taxed for school and road purposes only. All lands previously reserved from sale and entry in Roscommon and Crawford counties, except those within the townships named in this act, were restored to sale and entry.

A Michigan act of June 27, 1907 ³ set apart all lands belonging to the state agricultural college in the counties of

Concurrent Resolution No. 17, Session Laws, Mich. 1901 p. 403.
 Session Laws, Michigan, 1903, No. 175, p. 234.
 Session Laws, Michigan, 1907, No. 299; cf. Act Mar. 14 1907 S. L. No. 22 and Act April 30, 1909 S. L. No. 54, regarding Michilimackinac State Park.

Iosco and Alcona as a forest reserve, provided for the scientific management of such lands and devoted the income perpetually to the use of the college. This act received minor amendments on June 1, 1909. 1

An act of June 18, 1907 ² provided for a commission of nine members to inquire into the condition and extent of the forest, denuded and waste land held by the state, and to submit recommendations as to the policy that should be adopted regarding the disposal of such lands or the creation of forest reserves.

The new constitution adopted in 1909 3 amended the language of the section of the constitution of 1850 that forbade the state to engage in internal improvements so as to authorize the expenditure of state funds by the legislature "in the reforestation and protection of lands owned by the state."

On June 2, 1909 ⁴ a new forest administration law was enacted in Michigan. This act created a Public Domain Commission of six members without compensation other than expenses, but with provision for a secretary at a salary of six hundred dollars and a supervisor of trespass at a salary of twelve hundred and fifty dollars per annum. All jurisdiction over state forest affairs formerly vested in the state forestry commission and the state land commissioner was transferred to the new commission. The state game. fish and forest warden was made subject to the direction of the commission. The powers as to the management of forest reserve lands remained substantially the same as those of the forestry commission. The new commission might appraise and sell lands of the state suitable for agricultural purposes, but the extent of the forest reserve lands must not be reduced below two hundred thousand acres.

On May 1, 1911 ⁵ the law relative to the powers and duties of the Public Domain Commission was amended so as to specifically authorize the appointment of a forestry warden, and to authorize the commission to fix the salaries of its secretary, the supervisor of trespass and the forestry

Session Laws, Michigan, 1909, No. 202.
 Session Laws, Mich., 1907, No. 188 p. 256.
 Session Laws, Mich., 1909, Art. X sec. 14 of constitution.
 Session Laws, Mich., 1909, No. 280.
 Session Laws, Michigan, 1911, No. 294.

warden, all of whom should hold office at the pleasure of the commission. The forestry warden was given supervision of all forest protection work.

The law was amended on May 13, 1913 1 to authorize the appointment of an assistant secretary and to change the designation of the supervisor of trespass to supervisor of field division and that of forestry warden to forester. The commission was also given authority to prescribe and enforce such regulations, not inconsistent with the act, as it should consider necessary, and was authorized to delegate some of its duties to its secretary.

By act of March 25, 1915 ² all powers and duties of the State Game, Fish and Forestry Warden were transferred to the Public Domain Commission, which was authorized to appoint a State Game, Fish and Forest Fire Commissioner at a salary of not over thirty-five hundred dollars per annum and expenses, to serve at the will of the commission as executive officer for the administration of the forest laws of the state.

Minnesota. A Minnesota act of April 13, 1901 ³ added to the state "Forest Reserves" all lands totally unfit for agricultural uses that had been acquired by the state under acts of 1881, 1893 and 1899, providing for the sale of land to meet delinguent taxes. Provision was made that onehalf the income of such lands should go to the state and one-fourth each to the town and county in which the land was situated.

An act of April 8, 1903 4 authorized the state forestry board to purchase for the state, at not over two dollars and fifty cents per acre, and preferably at the sources of the main rivers of the state, any land adapted for forestry purposes, not exceeding one-eighth of the area in any congressional township, and to take the steps necessary to main-

Session Laws Michigan 1913 No. 333. Cf. Act Mar. 8, 1913 S. L. No. 270 p. 524 transferring duties of Com'r. State Land Office to the commission and Act May 13, 1913 S. L. No. 326 p. 610 giving commission control of state swamp lands (U. S. Act Sept. 28 1850) and Act March 3, 1915 S. L. No. 1 (swamp)

 ⁽swamp).
 Session Laws 1915 No. 28 p. 36. Cf. Act May 13, 1915 S. L. No. 221 p. 371 requiring division of state into fire districts. For previous forest law in general see Howell's Annot. Stat. 1913 secs. 10348 to 10399.
 Session Laws, Minn., 1901, ch. 335, p. 551.
 Session Laws, Minn., 1903, ch. 134, p. 192.

tain forests thereon. One fourth of the net revenue was to go to the town.

On April 21, 1903 1 provision was made for the appointment by the state auditor of a forestry commissioner, at an annual salary of twelve hundred dollars, who should be a member of the state forestry board and have charge of fire protective activities, but the title of chief fire warden was restored in an act of April 19, 1905. 2

On April 4, 1907 ³ Itasca State Park was made a state forest reserve, and provision made for its management by the state forestry board and its use by the state regents for educational demonstration purposes, and on April 17, 1909 4 the forestry board was authorized to accept donations of land within the park with a reservation of all timber over eight inches in diameter at four and one-half feet from the ground, with the right to remove such timber within ten years, on condition that the board be permitted to select and purchase for the state such groves as they should think desirable for park purposes.

A Minnesota act of March 30, 1905 ⁵ accepted the grant of twenty thousand acres of vacant public land for forestry purposes offered in a Federal act of April 28, 1904 (33 Stat. L., 536) and one of March 31, 1909 6 authorized the acceptance by the state for forest demonstration purposes of not less than two thousand two hundred acres of land from lands within the Fond du Lac Indian Reservation in northeastern Minnesota that had been ceded to the United States.

On April 12, 1911, a new forestry law became effective in Minnesota. This act repealed nearly all existing laws for the administration of state forest lands and for the prevention and control of forest fires. The new act provided for a forestry board of nine members, representative of the various educational and economic interests of the state.

Session Laws, Minn., 1903, ch. 363.
 Session Laws, Minn., 1905, ch. 310. See amendments as to organization of forestry board in ch. 171 of 1907, and ch. SS6 of 1909. Governor made member and expiration of terms of others varied.
 Session Laws, Minn., 1907. ch. 90.
 Session Laws, Minn., 1909, ch. 220. See Session Laws, Minn., 1905, ch. 277, in which provision had been made for additions to the park.
 Session Laws, Minn., 1905, ch. S3, p. 99. Cf. Grant of Cooper Island (Starr Island) in Cass Lake, made by Federal Act of June 21, 1906, (34 Stat. L. 325, 352) indirectly repealed by Act of May 23, 1908, (35 Stat. L., 268.)
 Session Laws, Minn., 1909, ch. 131; Same Gen. St. Minn., 1913, Tifflany, Sec. 3040-42; See Act Mar. 19, 1909, ch. 87, addition to state forestry fund.
 Session Laws, Minn., 1911, ch. 125. See Gen. Stat. Minn., 1913, Tifflany secs. 3783 to 3811. 1. Session Laws, Minn., 1903, ch. 363.

with a secretary at a salary of eighteen hundred dollars per annum. The board was vested with general control and supervision of all forest interests of the state, and was required to appoint a trained forester at a salary of not over four thousand dollars per annum who might appoint an assistant forester and other employees necessary for the carrying out of the purposes of the act and fix their compensation with the approval of the board. It was made the duty of the forester to acquire full information regarding forest lands of the state, and to adopt such measures as were necessary to protect the forests from fire. Provision was made for district rangers and for additional patrolmen as needed, constituting a fire protective force distinct from the warden system composed of county and town officials previously obtaining. The manner in which the members of the board were to be selected was made definite, and the provisions as to railroad operation, the disposal of slash and the enforcement of penalties were modified by an act of April 2, 1913. Another act of 1913 fixed the salary of the assistant forester at twenty-seven hundred dollars.

On March 19, 1913 ³ the name "state forests" was given by legislative act to the forest reserves of Minnesota. An act of March 26, 1913 4 required that notice be given the state forester of all contemplated logging operations, under penalty of fine and imprisonment. Another act of 1913 5 made the state forester a member of the state board of timber commissioners, charged with the sale of timber owned by the state. An act of April 25, 1913 6 authorized the purchase by the state forestry board of all remaining lands held privately within the boundaries of Itasca State Park.

In the session of 1913 the Minnesota legislature also proyided for the submission to the people of two proposed amendments to the constitution; one 7 of these was directed to the encouragement of forest planting by authorizing the payment of bounties by the state, the other 8 authorizing

Session Laws, Minn., 1913, ch. 159.
 Session Laws, Minn., 1913, ch. 400.
 Session Laws, Minn., 1913, ch. 86.
 Session Laws, Minn., 1913, ch. 114.
 Session Laws, Minn., 1913, ch. 383.
 Session Laws, Minn., 1913, ch. 531, cf. S. L., 1911, ch. 275, allowing reservation of minerals. Act April 28, 1913, S. L. ch. 559, re administration of park. Act April 15, 1913, S. L., ch. 591.
 Act Mar. 14, 1913, S. L., ch. 591.
 Act Apr. 3, 1913, S. L., ch. 592.

the legislature to set aside as state forests such of the school and other public lands as should be found better adapted for the production of timber than for agriculture. latter amendment was adopted by the people at the general election of November, 1914.

Mississippi. An act of February 9, 1906 establishing a geological survey in Mississippi, required such survey to map all wooded areas of the state, and one of April 14, 1906 ² required the state commissioner of agriculture and commerce to gather and publish information regarding the forest interests of the state.

Missouri. To the existing Missouri law making it the duty of railroads to remove all combustible material from their rights of way, an act of May 7, 1909 3 added a provision that in case of neglect by a railroad company to comply with the requirements of the law, any person owning land adjoining the right of way, after three days' written notice, might remove such material himself and recover from the railroad owner double the amount of all expenses and damages, with costs. The railroad operator was also subject to a penalty of not over two hundred dollars and liable for all damages resulting from such neglect of duty.

In a Missouri game and fish law of May 14, 1909 4 it was made a misdemeanor to set fire to any timber or grass on state or Federal land, or in any place where it might spread to such land, or to abandon any camp fire unextinguished.

Montana. Under a general land administration act of March 19, 1909 5 the register of state lands, the state land agent and the state forester were constituted a forestry board with the duty of managing the forests of the state of Montana on forestry principles, of encouraging private owners in preserving and growing timber and of conserving forest tracts on the watersheds of the streams of the state. This board was authorized to expend upon reforesta-

Session Laws, Miss., 1906, ch. 111.
 Session Laws, Miss., 1906, ch. 102.
 Session Laws, Missouri, 1909, p. 359. Cf. Annot. Stat. 1906, sec. 7503, from act May 13, 1889, p. 120, requiring the geological survey to report regarding forests

of the state.

4. Session Laws, Missouri, 1909, p. 525, sec. 24.

5. Session Laws, Montana, 1909, ch. 147, sec. 20 and 21. See Act Apr. 8, 1909, S. L. ch. 118, regarding national forest revenue.

tion such sums as the legislature should appropriate. Section 53 of this act, which provided for the sale of timber from state lands, forbade the sale of trees of any species which were less than eight inches in diameter at twenty feet from the ground, and such regulations as the state board of land commissioners should prescribe for the preservation of standing timber and protection from fire must be observed in logging operations. County commissioners were authorized to provide money for forest protection, improvement and management.

The act required that the forester be a man with scientific forestry training and section ten vested in him a general direction of all forest activities of the state. His salary was fixed at two thousand five hundred dollars per annum, and the employment of a trained man as assistant forester at one hundred fifty dollars per month by the board of land commissioners was authorized.

Section ten of the act of March 19, 1909 was amended by an act of March 7, 1911 1 so as to require that all field work in connection with the examination, appraisement and reappraisement of timber lands then belonging to, or thereafter acquired, by the state of Montana should be done by the state forester. This act also made the forester secretary of the board and placed the protection and improvement of the state parks and forests under his direction.

Two Montana acts of March 3, 1911 2 and March 5, 1915 contemplated the maintenance as state forest reserves of such timber lands as the state should acquire from the federal government in lieu of the sections sixteen and thirty-six that the state would have received for school purposes if national forests had not been created.

A Nebraska act of April 8, 1903 4 authorized the establishment of an experimental sub-station west of the one hundredth meridian for the promotion of the agricultural, horticultural and forestry interests of the state, but no state forests have been established nor has provision been made for any special administration of forest interests.

Session Laws, Mont., 1911, ch. 118; See S. L., 1913, ch. 131 (Forest School.).
 Session Laws, Mont., 1911, ch. 78, p. 145.
 Session Laws, Mont., 1915, ch. 81, p. 107.
 Session Laws, Nobraska, 1903, ch. 114, p. 591. Same Comp. St. 1909, Brown & Wheeler, par. 6163, sec. 32a.

A Nevada act of March 16, 1903 that aimed at the conservation of the water resources of the state, made it "a misdemeanor to sell or offer for sale any live or growing wood obtained from any common white, yellow, or sugarpine tree, or any fir, tamarack, spruce, or flat-leaved cedar trees less than one foot in diameter two feet from the ground." and imposed a maximum penalty of five hundred dollars and six months' imprisonment.

New Hampshire. On February 24, 1903 ² two sections were added to the New Hampshire forestry law of 1893. One of these made it the duty of the forestry commissioner to make regulations to protect and preserve the land acquired by the state for forest reserves, and the other imposed penalties for the violation of such regulations. the same day 3 the legislature authorized the expenditure of five thousand dollars by the state in obtaining an examination and report by the bureau of forestry in the national department of agriculture regarding the forests of the White Mountain region.

An act of March 10, 1905 4 vested in the state forestry commission general supervision of all forest fire activities of the state. They might require a forest patrol in all organized towns, and were required to designate a selectman as forest warden in towns not having an organized fire department, and to appoint special wardens in unorganized districts.

An act of April 9, 1909 5 established a non-salaried forestry commission of three persons, who were required to appoint a forester at an annual salary of eighteen hundred dollars. The forester was charged with the execution of all forest work of the state, including the direction of all activities having in view the prevention and control of forest He was required to perform educational work along forest lines and authorized to cooperate with counties, towns, corporations and individuals regarding the protection, management and reforestation of forest lands. was required to appoint, from persons nominated by the

Session Laws, Nev., 1903, No. 176. See Rev. Laws, Nev., 1912, secs. 2118-20.
 Session Laws, N. H, 1903, ch. 25.
 Joint Resolution, N. H., Feb. 24, 1903, S. L., ch. 139, p. 149.
 Session Laws, N. H., 1905, ch. 97.
 Session Laws, N. H., 1909, ch. 128.

selectmen of towns, mayors of cities or citizens of towns, a suitable person as forest fire warden and such deputy wardens in each town or city as he deemed necessary. The state forester might remove wardens and deputies, and he might require them to patrol their respective districts. Wardens might arrest without warrant persons who violated the law after warning, or who were caught in act of violation. The state might appoint and remove fire wardens as deemed necessary in unincorporated places, or require one warden to act for a group of towns or unincorporated places. The state was required to pay one-half of all fire-fighting costs, as audited by the selectmen in towns or the state forester for unincorporated places.

The forestry commission was authorized to buy land for forestry purposes whenever any person or persons should furnish the funds therefor. They were given power to condemn lands for this purpose, and tracts thus purchased must be held forever as reservations open to the public.

On April 15, 1911 ¹ the maximum salary of the state forester was increased to twenty-five hundred dollars and he was required, as directed by the forestry commission, to divide the state into not more than four districts according to watersheds and authorized to appoint a district chief in each, subject to serve as the forester desired not over eight months annually at not over three dollars per day and expenses. These district chiefs were to have general direction of fire protection in their respective districts.

This act authorized the planting and removal of trees from forest reservations, procured through gift, so far as compatible with the wishes of the donor. The forestry commission was authorized to receive gifts of land for forestry purposes and might, with the consent of the governor and council, purchase land for forest demonstration purposes, and manage lands accepted or bought under forestry principles. The state forester was authorized to acquire land for a state nursery, to sell seedlings to persons desiring to plant them within the state, or to arrange for private parties to furnish seedlings.

^{1.} Session Laws, N. H., 1911, ch. 166, p. 213.

An act of April 12, 1911 authorized the governor, with the advise of the council and of the forestry commission, to acquire for the state by purchase, at a fair valuation, such lands and timber thereon in what was known as Crawford Notch as they should think advisable. The act appropriated one hundred thousand dollars for this purpose, and provided for a condemnation of the land under an appraisal by a special commission whose findings were subject to review in the courts. The lands acquired were to be held as a forest reservation and state park under the management of the forestry commission, who might authorize the removal of timber for the improvement of the growth thereon, and, with the approval of the governor and council, could sell live timber not needed for forest conservation or the preservation of the scenic beauty of the notch. The proceeds of all sales were to be applied so far as necessary to pay the principal and interest on the indebtedness authorized by the act for the purchase of the land and timber.

An act of May 21, 1913 ² authorized the state forester. with the approval of the forestry commission, to hire such assistants as were necessary and to cooperate with the Federal government for the promotion of forestry work in the state.

By an act of April 21, 1915 3 the state forestry commission was authorized to accept, reforest, protect and manage any tract of land adapted to forest growth that should be deeded free of cost to the state. The donors of such tracts, their heirs or assigns, might repurchase such lands within ten years by a payment of the cost of all improvements and interest thereon at four per cent per annum. After ten years the land, or the timber thereon, might, with the approval of the governor and council, be sold by the commission to the highest bidder after due advertisement. Not more than twenty-five acres were to be thus reforested for any one person, firm or coporation. act also authorized the state forester to furnish planting plans and trees free of charge to counties, municipalities,

Session Laws, N. H., 1911, ch. 130. p. 133. Cf. Act April 7, 1915, S. L. ch. 207, authorizing acquisition of 6,900 acres in Conway.
 Session Laws, N. H., 1913, ch. 159, p. 696.
 Session Laws, N. H., 1915, ch. 163, p. 221.

and public institutions, provided the recipients paid the expenses of planting the trees.

New Jersey. A New Jersey act of March 22, 1905 1 established a state board of forest park reservation commissioners consisting of five members. This board was authorized to acquire the fee simple title or any easement or profit a prendre that it might deem desirable for the state, by deed, gift, devise or condemnation proceedings. thus acquired could not be sold, aliened or encumbered except by act of the legislature. The board was given control of state forest reserves with authority to forest or reforest lands, cut and sell timber from reserves, and adopt measures of encouragement to the practice of forestry by private owners. It was made a misdemeanor to fire or otherwise injure the timber on the reserves. The provision in this act that reserve lands should be exempt from taxation was repealed by an act of April 13, 1908, 2 providing for the payment of two cents per acre by the state for local An amendment of March 27, 1906 3 required a certification by the state attorney general that the title was good before land was acquired for reserves, and a supplementary act of March 24, 1906 4 authorized the commissioners to make contracts with municipalities or persons for the management of their lands for forestry purposes.

A New Jersey act of April 18, 1906, ⁵ for the protection of forests from fire, empowered the state forest park reservation commissioners to appoint a state forest fire warden, to require the appointment of a fire warden in every town and to remove such wardens. The state warden was given authority to direct the work of town wardens and to require a patrol in dangerous periods. The entire cost of fire control on state reservations and one-half of that on other lands of any town, was made payable by the state. This act was amended on April 13, 1908 6 to authorize

Session Laws, New Jersey, 1905, ch. 47.
 Session Laws, New Jersey, 1908, ch. 214, p. 427.
 Session Laws, New Jersey, 1906, ch. 46, p. 70. See Act May 8, 1907, ch. 143, authorizing acquisition of lands under water.
 Session Laws, New Jersey, 1906, ch. 25. See am'd't S. L., 1911, ch. 19. Cf. Act April 20, 1906. S. L. ch. 136, p. 261. (State to aid in the management of municipal femotics). pal forests.)

Session Laws, N. J., 1906, ch. 123, p. 221.
 Session Laws, N. J., 1908, ch. 213.

the commissioners to determine the size of the districts to be protected by one warden and to require a report to the state officials of all fires.

The act of March 22, 1905 was amended on March 14, 1911 to authorize the appointment of one or more wardens for each forest reserve who should have the same power as township wardens to summon male residents for fire control and require use of equipment, payment to be made by the state: and an act of April 1, 1913² amended section two of the act of March 22, 1905 by giving the state board power to lease, sell or exchange forest reserve lands in furtherance of the purposes of the original and supplementary acts, but the approval of the governor to sales and exchanges must be obtained. All moneys derived from such sales, leases or exchanges were to be paid into the state treasury as a special fund, subject to expenditure by the board for any of the purposes expressed in the act. February 25, 1913 the chief forester employed by the board was designated state forester and required to act as secretary and administrative agent of the commission.

On April 8, 1915 ⁴ a non-salaried, non-partisan Board of Conservation and Development, to consist of eight men appointed by the Governor and Senate, was established in New Jersey. In this board was vested all authority formerly appertaining to several boards and commissions. including the Board of Forest Park Reservation Commis-The new board was required to appoint a qualified engineer, forester or geologist, as Director of Conservation and Development, at a salary of not over five thousand dollars per annum, for a term of four years. board was authorized to create divisions in the Department of Conservation and Development and appoint an expert at the head of each division, the Director to be the chief of one such division. The Director might be removed by the Governor, in his discretion, after a hearing upon charges filed by a majority of the members of the board. Officers

Session Laws, N. J., 1911, ch. 20, p. 31,
 Session Laws, N. J., 1913, ch. 187, p. 339. Cf. Act Apr. 1, 1912. S. L. ch. 329, p. 576, authorizing the Board to make agreements by which the public might enjoy the use of lakes and ponds privately owned.
 Session Laws, N. J., 1913, ch. 23, p. 37.
 Act April S, 1915 S. L. ch. 241.

and employees of the board were to be appointed and to hold office under the terms of a state civil service act. The transfer of the powers and duties of the several preexisting boards and commissions to the new board became effective June 30, 1915, except as to the State Water Supply Commission, which became effective June 30, 1916.

Under authority of an act of April 6, 1915 the Board of Conservation and Development received general authority to cut and sell timber from state lands or to devote any portion of such lands to agricultural uses, subject to the requirement that the welfare of the people of the state and the general purpose of maintaining, improving and extending the forest area owned by the state must be observed. By act of April 21, 1915² the board was authorized to contract with counties or municipalities for the use of forest reserves as public parks on condition that the municipalities pay the additional costs resulting from such use.

New Mexico. No state forest administration legislation had been enacted in New Mexico prior to the end of the year 1916. 3

New York. On February 19, 1900 4 a new law for the protecton of forests, fish and game was enacted in New York. Section two hundred sixteen of this act included within the forest preserve the county of Delaware, thus making the preserve include all lands then owned or thereafter to be acquired by the state in the counties of Clinton, Delaware, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Oneida, Saratoga, Saint Lawrence, Warren, Washington, Greene, Ulster and Sullivan, except lands within Altona and Dannemora townships in Clinton County, lands within the limit of any village or city, and lands not wild acquired by the state on foreclosure of mortgages to loan commissioners. Section two hundred seventeen defined the limits of the Adirondack park which was to be forever "reserved and maintained for the free use of all

Session Laws, N. J., 1915, ch. 165, p. 324.
 Session Laws, New Jersey, 1915, ch. 382 p. 714.
 Annot. Stat. N. M., 1915. Nothing other than Sec. 1350-53 from Act Mar. 18, 1909, ch. 119 and Mar. 10, 1915, ch. 38 regarding Nat'l. For. revenue.
 Session Laws, N. Y., 1900, ch. 20, p. 22, p. 61.

the people." Section two hundred eighteen constituted all of the St. Lawrence River within the state, and all islands therein and lands held by the state along the shore, an international park under the name "Saint Lawrence Reservation."

This act abolished the commission of fisheries, game and forests created in 1895, and substituted a forest, fish and game commission of five, appointed by the governor and senate for terms of five years, with a salary of three thoussand dollars to the president, twenty-five dollars to each of the others, and eight hundred dollars traveling expenses to each. This commission was charged with the control of the forest preserve and all public parks, including protection. Subject to the approval commissioners of the state land office they were authorized to purchase lands within the Adirondack park with a reservation of all timber twelve inches or over in diameter at three feet from the ground and to contract with private parties for exemption of their wild lands from taxation for state or county purposes, provided no timber, except spruce, tamarack and poplar over twelve inches in diameter, were cut, nor a clearing made in excess of one acre in each one hundred. Moneys derived from the sale or lease of lands within the preserve were made available only for the purchase of lands to extend the preserve. An act of April 23, 1900 2 amended the above by the addition of three sections providing that the engineer of the forest, fish and game commission should act as superintendent of forests, and authorizing the commission to appoint a chief fire warden at an annual salary of fifteen hundred dollars and expenses, and three expert foresters at salaries of not over one thousand dollars each to act as deputy wardens and be employed in "reforesting the burned, barren or denuded lands in the forest preserve, and in such work as may tend to the improvement and increased value of the state forest." The superintendent was given general custody of the forest preserve and required to report annually to the commission as to the timber products of the forests and the extent of forest fires and consequent losses.

S. L. 1909, ch. 20, sec. 150 and 152.
 Session Laws, N. Y., 1900, ch. 607, p. 1337.

chief fire warden was given general supervision of all town and district wardens.

On March 12, 1901 a single forest, fish and game commissioner appointed by the governor and senate for a term of four years at an annual salary of five thousand dollars and expenses was substituted for the commission of five provided in the act of the previous year. This commissioner was authorized to appoint a deputy at a salary of twentyfive hundred dollars, to hold office during the pleasure of the commissioner. Provision was made for two non-salaried associate commissioners, to serve only until January 1, 1903. The forest preserve board was also abolished and its duties vested in the forest commissioner. In his discretion the governor might after January 1, 1903, from time to time, appoint two commissioners of the land office to act with the forest, fish and game commissioner in acquiring lands under the provisions of chapter two hundred twenty of 1897, and these three were to constitute a board with the same powers as the former forest preserve board. but no lands could be acquired without the consent of the governor.

On May 3, 1901 ² chapter two hundred twenty of 1897 was amended so as to permit the owner of forest land acquired by the state by purchase to reserve the "soft timber" down to eight inches in diameter at the stump with the right to remove it; and so as to authorize the taking of land subject to any lease, mortgage, or other encumbrance, not extending more than ten years beyond the date of purchase, the amount or value of such lien, encumbrance or timber right to be deducted from the total value of the land and timber.

On April 2, 1902 3 the section of chapter 20 of the laws of 1900 dealing with prosecutions for trespass within the forest preserve was amended. The penalty was made ten dollars for each tree cut, and in lieu of a moiety to the informer of twenty-five dollars, or one-half if the net collection were under fifty dollars; the new act gave the informer

Session Laws, N. Y., 1901, ch. 94, p. 230.
 Session Laws, N. Y., 1901, ch. 652, p. 1663.
 Session Laws, N. Y., 1902, ch. 334, p. 896. Cf. amendment in Act April 22, 1905, S. L. ch. 285, p. 540 sec. 222; Act April 12, 1906, S. L., ch. 206, p. 433, sec. 224a.

fifty dollars, or one-half if the net collection were less than one hundred dollars.

An act of April 5, 1904 1 established the boundaries of a state park in the Catskill region, and one of April 13, 1904 modified the boundaries of the Adirondack park, as defined in section 217 of chapter twenty of 1900. On May 3. 1904 ³ the limit of three thousand dollars per annum as the amount to be paid for foresters was removed, and the appointment of five assistant state fire wardens was author-

On April 4, 1908, 4 the New York forest law as contained in chapter twenty of 1900 and its amendments was revised and reenacted as a whole. This revision provided for a single forest, fish and game commissioner, appointed by the governor with the advice of the senate for a term of four years at a salary of five thousand dollars per annum and expenses, who was empowered to appoint a deputy at three thousand dollars per annum, and was given full control in the administration of state forest lands and public parks.

The forest preserve as defined by this act comprised the same sixteen counties with the same exceptions as the previous law. The boundaries of the Adirondack and Catskill parks and of the Saint Lawrence Reservation were defined in full. All powers regarding the preserve and park vested in the commissioners of the state land office and in the comptroller by the act of May 15, 1885, were transferred to the forest commissioner, and he was given exclusive authority to institute suits regarding the title to land within the state preserves or parks, and to secure injunctions against trespass upon the state lands. He might build roads within state lands, and was required to make rules for the prevention of fire and prepare and distribute literature for the furtherance of the forest interests of the state.

The unauthorized removal from state lands of timber having a value less than twenty-five dollars was made a misdemeanor, and the taking of timber of a value in excess of twenty-five dollars was declared a felony. The former

Session Laws, N. Y., 1904, ch. 233, p. 427.
 Session Laws, N. Y., 1904, ch. 304, p. 818.
 Session Laws, N. Y., 1904, ch. 590.
 Session Laws, N. Y., 1908, ch. 130, p. 299.

penalty of ten dollars for each tree to be recovered in an action for damages or in a separate action was retained.

The provision of the previous law regarding the designation of two commissioners of the state land office to act with the forest commissioner in the purchasing of land within the forest preserve was retained. The owner of lands taken by condemnation proceedings was allowed an appeal to the court of claims. No payments for land purchased were to be made until (1) the reserved timber was cut, (2) or the time limit for cutting had expired or a formal release had been executed, (3) the purchasing board was satisfied that no trespass on state lands had been committed, and (4) all rules had been complied with.

The provisions as to the appointment of a chief fire warden, foresters, inspectors and other employees remained the same as established by chapter two hundred six of 1906, but section 4 authorized the commissioner to appoint a superintendent of forests and assistant superintendent.

The law regarding the operation of railroads remained substantially unchanged, but the net collections for all fines were made available for use in the enforcement of the law.

By an act effective May 25, 1909 the salary of the commissioner of forestry in New York was increased to six thousand dollars, and the scope of the duties of the superintendent of forests was extended. This act modified the procedure in enforcing the rights of the state within the forest preserve, and to section fifty-six of the forest law authorizing the use of streams by persons logging lands within the preserve were added provisions requiring the lopping of limbs and branches from all trees cut within the forest preserve. The greater part of this act related to the organization of fire districts and the construction of means for controlling forest fires in the Adirondack region, but it also required the superintendent of forests to annually report to the commissioner the amount of lumber and wood used for commercial purposes that was grown within the state, and imposed a penalty of one hundred dollars for a refusal of any manufacturer or consumer to furnish him information of this character.

^{1.} Session Laws, N. Y., 1909, chap. 474, p. 1136.

An act of April 5, 1910 1 authorized the reforestation of land within the state forest reserves, the propagation or purchase of forest trees for such purpose, and the selling of young trees at cost to citizens for the reforesting of lands within the state; and one of June 24, 1910 2 gave the forest commissioner power to bring any action in the name of the people regarding lands in the preserve that any private owner could bring.

By an act approved July 12, 1911 a conservation department, with three distinct divisions, namely, lands and forests, inland waters, and fish and game, was created in New York. The Conservation Commission which, with a few exceptions, was to succeed to all the powers of the forest purchasing board, the forest, fish and game commission or commissioner, the commissioner of water power on Black River and the state water supply commission, was to consist of three members appointed by the governor, with the advice of the senate, for terms of six years at a salary of ten thousand dollars per annum and expenses, each. No one interested in lumbering or hydraulic power within the forest preserve counties was to be eligible to appointment as a commissioner or as other high officer, of which there were several with very large salaries provided.

This commission was authorized to purchase or condemn forest lands, with the consent of the governor: to administer all laws regarding tree culture, reforestation and management of parks or other state lands, and to establish and maintain forest nurseries upon any unused lands of the state for reforestation purposes.

On April 16, 1912 4 the whole New York law directed especially to the conservation of forests within the state preserve and parks and to other so-called waste or forest land was revised and reenacted. In the enumeration of the general powers of the conservation commission given in section fifty-three of this new conservation act, it was provided that the commission should cause investigations

Session Laws, N. Y., 1910, chap. 72, p. 115. See Act May 26, 1910, S. L. ch. 260, p. 642, repealing ch. 463 of 1909, which was entitled "An Act to create a forest reservation in the highlands of the Hudson, west of Hudson, etc."
 Session Laws, N. Y., 1910, ch. 657, p. 1753.
 Session Laws, N. Y., 1911, ch. 647, p. 1496; See also Act July 28, 1911; S. L. ch. 835, p. 2343 (regarding penalties and appropriation); Act July 28, 1911, S. L., ch. 851, p. 2382 (Syracuse forest school.)
 Session Laws, N. Y., 1912, ch. 444, p. 883.

to be made as to reforestation, prevention of fires, rate of growth, periodic yield, and other subjects necessarily incident to the practice of forestry. Not only was the commission given all powers relating to the forest preserve and the Adirondack and Catskill parks formerly vested in the forest purchasing board and the forest, fish and game commission, but they were authorized to accept gifts or devises to the state of the fee or any other estate in lands to be used for forestry purposes, or to accept money for the acquiring or improving of realty for forest purposes. They were given the right to inspect all public parks and reservations, and authorized to cooperate with the commissioners of the Palisades Interstate Park and other state commissions and officers regarding the lands under their charge and the care and preservation and improvement of the forests thereon.

This act authorized the employment of such foresters, in addition to the superintendent and assistant superintendent of forests, as should be necessary, and the employment of a forest pathologist. The commission was given full power to establish nurseries or purchase forest trees for the reforestation of any forest, park or other lands of the state, including the lands held by state institutions, and, with the consent of the tribes, to reforest lands within Indian reservations. Stock grown in state nurseries might also be planted on private lands under such contracts, terms and conditions as the commission should consider in the public interest, or be sold to municipalities or private owners at not more than the cost of production for the reforesting of lands within the state. The use of convict labor in state forestry work and the transportation of nursery stock by common carriers free, or at special rates, was authorized. Trees and shrubs, other than forest trees, might also be propagated for use in highways or at state institutions.

The sections of the previous law regarding trespass upon lands, determination of title to lands, and partition of lands in which the state claimed an interest, and those regarding the acquisition of lands, were revised. Owners of land purchased or appropriated by the state were authorized to "reserve the trees thereon eight inches or more in diameter

breast high." at the time of purchase or service of notice. if made within six months from the notice of appropriation. The restriction of the former law as to the reservation of timber within twenty rods of a lake, pond or river, and as to the time and manner of removal, were retained, and the language of section seventy-six indicated that the right to reserve timber was to apply only to soft woods. The provisions of the previously existing law as to appraisement of land and timber, perfecting and transfer of title, manner of removal of timber and time of payment were reenacted.

The commission was given authority to enter upon private forest or woodland for inspection relative to the practice of forestry and to advise the owner or occupant as to proper management thereof; and was empowered to classify separately for purposes of taxation private lands of five acres or more considered by the commission unsuitable for agriculture upon the execution of an agreement by the owner to reforest and manage such waste, denuded or wild lands for purposes of forest production according to regulations prescribed by the commission. The provisions of existing law regarding the patrol of the woods, the control of fires, the payment of the expenses of fire fighting, the building of the fires in the open, the precautions required by railroad operators, the closing of the hunting season in times of drought, and the gathering of forest statistics, were substantially reenacted. The salary of the secretary of the commission was raised from thirty-five hundred dollars to five thousand dollars per annum.

An act of May 15, 1913 amended the section of the conservation act defining the powers of the commission as to the determination of the title to land by specifying that legal steps might be taken "in trespass, ejectment or other suitable action," and several amendments mostly dealing with problems of fire protection were contained in the act of May 24, 1913. 2

An act of April 6, 1914 3 provided for the borrowing of not to exceed one hundred thousand dollars in the name

Session Laws, N. Y., 1913, ch. 527, p. 1394; an amendment identical with this was made by ch. 719 of Laws of 1913.
 See discussion under chapter regarding forest fire legislation. In section 63, dealing with trespass upon state lands, an erroneous reference to section 110 instead of section 190 was corrected.
 Session Laws, N. Y., 1914, ch. 139, p. 417.

of the state whenever the conservation commission should certify to the governor that an emergency exists whereby, through an insufficiency of appropriations, it is impossible to protect the forests of the state from fire; and one of April 23, 1914 inserted a new section in the conservation law directing a public hearing and a certain form of procedure when land within the preserve was to be segregated by the state for reservoir purposes to meet the needs of municipal water supply, to supply state canals, and to regulate the flow of streams as authorized by an amendment to section seven of article seven of the state constitution, which was adopted by the people of the state at the general election of November 4, 1913 2 and which limited the area to be thus used to three per cent of the area of the forest preserve.

On April 16, 1915 3 chapter six hundred forty-seven of 1911 was amended by the substitution of one conservation commissioner at a salary of eight thousand dollars per annum for the existing three members. This single commissioner, who was to exercise all the powers and duties formerly vested in the three, was to be appointed by the governor with the approval of the senate for a term of six years, subject to removal by the governor after public hearing. The appointment of a deputy commissioner at six thousand dollars, a secretary at three thousand dollars, a superintendent of forests at four thousand dollars, an assistant superintendent of forests at two thousand five hundred dollars, an engineer at four thousand dollars, and two assistants at three thousand dollars each was, authorized.

By a concurrent resolution passed at the session of 1913, the New York legislature proposed an amendment to article seven of the state constitution by the addition of a new section which should authorize the removal of mature, dead and fallen timber from the lands within the state forest preserve, the leasing of camp sites, and the sale, under such provisions as should be made by the legislature, of lands outside the limits of the Adirondack and Catskill parks, the proceeds of which sales should be used for the purchase of other land or for reforestation of lands held by the state.

Session Laws, N. Y., 1914, ch. 493, p. 1995.
 Session Laws, N. Y., 1914, p. 2373.
 Session Laws, N. Y., 1915, ch. 318, p. 997.

An identical resolution was adopted by the legislature of 1915, but on account of the inclusion in the 1915 resolution of the provision of the 1913 resolution as to a reference of the subject to the following legislature, the attorney general held that the question could not be submitted to the people as required by the state constitution. ¹

The proposition of submitting such an amendment to the electorate was urged before the constitutional convention of 1915, but although this convention adopted for submission a constitutional amendment providing for a department of conservation to consist of nine non-salaried commissioners, one authorizing the removal of dead trees and timber from the state lands for the purposes of reforestation and fire protection, and one requiring annual appropriations of the legislature for forest improvement, the sale of timber was forbidden. The proposed amendment was defeated by a very large majority in the election of November. 1915.

By an act approved May 9, 1916 ² article four of the conservation law was entirely revised and reenacted. The new law defined with minor changes the powers and duties of the commission as fixed in chapter 444 of 1912 and its amendments. It authorized the employment of a superintendent of forests at four thousand dollars per annum, an assistant superintendent at twenty-five hundred, a chief land surveyor at twenty-four hundred, five foresters and such assistant foresters as should be required for general purposes, a technically trained pathologist, two expert chief railroad inspectors, a land clerk at one thousand dollars, an auditor of fire accounts at eighteen hundred dollars, five district forest rangers at fifteen hundred dollars each, such forest rangers and fire observers as should be needed in the fire towns at not over seventy-five dollars per month, and the necessary fire wardens at not exceeding twenty-five cents per hour for the time actually emploved.

The superintendent and assistant superintendent of forests, the five foresters and all assistant foresters employed were required to be trained foresters and vacancies in the

Session Laws, N. Y., 1913, p. 2230, and Session Laws, N. Y., 1915, p. 2698.
 Session Laws, N. Y., 1916, ch. 451, p. 1189.

positions of superintendent and assistant superintendent must be filled by promotion examination. All officials named above prior to the Auditor of fire accounts were placed under the competitive civil service classification. The rangers and observers employed by the month and the temporary fire wardens were excepted from competitive civil service classification. All of the officers named above except the assistant foresters, the pathologist, the land clerk, the auditor of fire accounts and the fire wardens employed temporarily were given the power to arrest without warrant any one committing a misdemeanor under the provisions of the act, but all were forbidden to compromise or settle any violation without the order of the commission.

This act contained very detailed provision as to the methods of fire control to be used, as to the operation of railroad trains through forest lands, and as to the damages collectible because of injury to property from fires set in the open.

The previous provisions of the conservation law (Secs. 66 to 87, Art. 4, Ch. 444 of 1912) as to the acquisition of private lands for State reserve purposes and the reservation by the owners of the timber thereon were incorporated in the new law in substantially the same form in a single section numbered 59. A new section (No. 61) defined under separate headings the restrictions which were imposed as to private use of land, timber and buildings within the forest preserve area. This act defined explicitly the forest preserve, the Adirondack Park, Catskill Park, (with a change of boundary), St. Lawrence reservation, John Brown farm and the reservation at Cuba lake in Allegany and Cattaraugus Counties. The words "forest land" were declared to include not only lands covered with tree growth, but also lands which were best adapted to forests, and the expression "forest fire" was declared to include a fire which if permitted to extend, would burn a forest or upon forest land. The towns to be considered "fire towns" under the provisions of the act were enumerated, and "person" "right of way," "fire patrolman," and "railroad company" were defined.

The act provided penalties for the cutting of trees, setting of fires, or other offenses and reenacted in section 57 the existing law (L. 1912, Ch. 444, Art. 4, Sec. 89) as to tax exemption for wild lands maintained for forest growth purposes. The existing provision requiring private manufacturers and consumers of forest products to make a report of the same was retained in section 58.

Section 60 (Cf. Act March 26, 1912, S. L. Ch. 74) authorized any county, city, town or school district to acquire lands by purchase, gift or condemnation for use for forestry purposes, and authorized the conservation commission to assist the local governing boards and furnish free stock for planting on such publicly owned lands. The net revenue of such lands was to be used by the municipal divisions owning the lands.

Mav 15. $1916.^{1}$ act. approved for the issuance of State bonds in the sum of ten dollars for the purchase of private lands, million seven and one-half millions to be expended in consolidating the State holdings within the forest preserve counties and two and one-half millions for additions to the Palisade Interstate park. In the election of November 7, 1916, the electors of the State approved the bond issue contemplated by this act.

North Carolina. On March 6, 1905, ² a new and more comprehensive law regarding the state geological survey was enacted in North Carolina. Under the provisions of this act, authorizing the state geologist to employ such experts and assistants as should be deemed necessary by himself and a geological board, a forester was promptly employed.

An act of February 6, 1909. 3 provided that upon the written application of any owner of land lying at an elevation of two thousand feet or more above sea level, the governor might in his discretion declare the land or any part of it "a state forest of North Carolina." Lands thus

Session Laws, N. Y., 1916, ch. 569, p. 1865.
 Session Laws, N. C., 1905, ch. 542, p. 548. See S. L. 1911, ch. 211, providing further means of disseminating information obtained. Cf S. L. 1901 ch. 17, authorizing the acquisition of national forests (Same in Pell's Revisal, 1908, Sec. 5430); and S. L., 1903, p. 1183, providing for examination by geological survey of need for S. L., 1903, p. 1183, providing for examination by geological survey of need for such forests.

3. Session Laws, N. C., 1909, ch. 89, p. 107. Same in Suppl. 1911, to Pell's Revisal, 1908, Secs. 4434a-4434f.

classified by the governor were to remain state forest for a period of thirty years. The owners of tracts thus classified were required to manage the forest in a conservative manner according to a working plan to be approved by the state geological and economic survey, and to pay an annual county school tax of one-half cent per acre. The governor, with the approval of the county commissioners, might appoint as state forest wardens men designated by the owners, but these wardens were to receive no compensation except from such owners. These wardens might arrest, without warrant, for offenses against the state laws for the protection of forests, were required to protect the forest particularly against fire, and were given the same privileges and protection as sheriffs.

By an act of March 9, 1915 the governor of North Carolina was authorized, upon the recommendation of the geological board, to accept gifts of land to the state for the demonstration of the practical utility of timber culture, water conservation, and as refuges for game. The state geological board were authorized to purchase lands for state forest purposes, as funds should become available, upon which county taxes should be paid by the state upon the same basis of assessment as private lands were taxed. All moneys received from the sale of wood, timber, minerals or other products from state forests were made available for general forestry purposes. An act of March 9, 1915, 2 vesting general authority for the control of forest fires in the state geological board, made the forester of such board the state forester and ex-officio state forest warden with the authority to appoint township and district forest wardens, subject to the approval of the board.

North Dakota. On March 11, 1913 the state of North Dakota created the office of state forester, which should be filled by the president of the state school of forestry; established a forest tree nursery at such school, and required the state forester to grow and distribute tree seeds and seed-

Session Laws, N. C., 1915, ch. 253, p. 329.
 Session Laws, N. C., 1915, ch. 243, p. 319.
 Session Laws, N. Dak., 1913, ch. 170, p. 233 (Comp. L. 1913, sec. 1679a to 1679d.)
 Cf. Act March 19, 1907, ch. 100, defining scope of instruction at state school of forestry. (Comp. L. 1913, sec. 1674-1679.) and Act March 11, 1909, S. L. ch. 125, p. 135, providing for forest fire wardens. See S. L., 1911, ch. 193; same in Comp. L., 1913, sec. 1950a regarding national forest revenue.

lings to citizens and land owners of the state upon payment of cost of transportation from the nursery to the place of planting and an agreement to plant according to the instruction of the forester. The applicant was also required to pay for the services of skilled assistants for which application was made. The forester was also required to do extensive educational work.

On March 17, 1906 the act of April 16, 1885, establishing a state forestry bureau at the state university at Columbus, was repealed and a department of forestry was established at the state agricultural experiment station at Wooster. In addition to the investigation of the character and extent of the waste and decay of forests, the suggestion of legislation and the maintenance of an experimental station authorized in the earlier act, the act of 1906 specifically required investigations as to the species suitable for planting, the cost and best methods of managing woods, the rate of growth and relative value of different species, and the methods of treatment to prevent decay. Cooperation with the United States was authorized on condition that the amount expended by the state should not exceed the amount extended by the Federal government. extra compensation for the forestry work was allowed by the board of control.

An act of May 3, 1913 ² creating an agricultural commission for the state of Ohio repealed the provisions of the act of March 17, 1906 (as contained in sections 1166 to 1170 of the Page and Adams General Code of 1910), but section 110 of the new law vested in the agricultural commission the former duties of the board of control and section 111 authorized cooperation with the federal government in forestry work without the restriction that the state expenditure should not exceed that of the federal government. Section 93 of the new act required scientific forestry research at the state agricultural experiment station and section 98 required that county experimental farms be used for forest demonstration purposes. Authority for the con-

Session Laws, Ohio, 1906, vol. 98, p. 54.
 Session Laws, Ohio, 1913, Vol. 103, p. 304, secs. 93, 98, 110, 111. Same in Suppl. to Gen. Code. pub. 1916, secs. 1170, 1171-4, 1175, 1177-10, 1177-11.

tinuance of the forestry department at the experiment station was implied in the language of section 95, providing that the director of the agricultural experiment station should have authority to select the necessary chiefs of departments.

An act of April 8, 1915, 1 reestablishing a board of control for the state agricultural experiment station, reenacted, in sections 1171-4, 1175, 1177-10 and 1177-11, the provisions of the act of May 3, 1913 as to forestry work with the exception that general supervision over such work was vested in the board of control.

An act of June 4, 1915, ² authorized the board of control of the experiment station to buy forested land or other land suitable for the growth of forest trees, at a price of not over ten dollars per acre to the amount that should be appropriated. These lands were to be known as state The board was given full custody of such lands with authority to plant, protect and manage forests thereon. With the consent of the attorney general, this board might sell such portions of such forests at not less than the cost with interest thereon. The act carried an appropriation of ten thousand dollars for purchases.

Oklahoma. Although there are large areas of pine and oak in the eastern part of the state owned privately, no forest legislation of an administrative character had been enacted in Oklahoma prior to January 1, 1917.3

Oregon. On February 22, 1905 4 provision was made in Oregon for the appointment of a forest fire ranger in each county of the state, to be paid by the property owners requesting such appointment. No appropriation was made by the state. An Oregon act, filed February 23, 1907, 5 repealed the act of 1905 and created a state board of forestry of seven members without compensation. This board. with the governor as chairman, was authorized to appoint

Session Laws, Ohio, vol. 105, p. 122. Same in Suppl. 1916 to Code 1910, secs. 1171-4
1175, 1177-10, 1177-11.
 Session Laws, Ohio, vol. 106, p. 540. Same in Suppl. 1916 to Code of 1910, secs.
1177-10a, 1177-10d.
 Rev. Laws, 1910, sec. 432 (street), sec. 6642-43 (boundary line), all refer to ownership of trees; Annot. Code, 1915, Burns. contains no new law.
 Session Laws, Oregon, 1905, ch. 227, p. 397.
 Session Laws, Oregon, 1907, ch. 131, p. 241.

fire wardens where they deemed the services of wardens necessary and to appoint others, at the request of county officials or private owners, who should be paid by the counties or the owners making the request. The board was given no administrative duties other than those connected with forest fire protection, and with very limited annual appropriations little more than an education of the public as to the need of forest protection could be accomplished.

By an act that became effective February 24, 1911, ¹ Oregon repealed chapter one hundred thirty-one of 1907 and substituted a much more comprehensive act. The new law created a state board of forestry of which the five members, beside the governor and the head of the forest school of the state agricultural college, should be appointed upon the recommendation of associations representing various interests. This board was required to appoint a practical forester at a salary not exceeding three thousand dollars per annum, who might select a deputy at not over eighteen hundred dollars per annum.

The forester, under the direction of the Board, was to have executive control of all forestry work in the state, including forest fire protection. The act contained provisions as to camp fires, the operation of railroads and the disposal of slashings, and appropriated sixty thousand dollars for general forestry purposes, including salaries. County boards were authorized to appropriate money for forest protection. ²

An act of February 25, 1913 ³ provided that such lands as should be acquired by the State of Oregon from the United States in lieu of school sections included within the Santiam national forest should be withdrawn from sale for fifty years and administered by the board of forestry as a state forest, the revenue from which should be devoted to the common schools of the state, and such forest was made

Session Laws, Oregon, 1911, ch. 278, p. 475.
 See Act of February 21, 1913, S. L. ch. 90, p. 154, authorizing county judges to issue permits for burning, and Act of February 26, 1913, S. L. ch. 247, p. 483, requiring residents to protect own lands, failing which the state should protect at cost not over five cents per acre per annum with lien on land therefor. See S. J. R. No. 26 S. L. 1911, p. 613 requiring inquiry as to faults of this law.
 Session Laws, Oregon, 1913, ch. 124, p. 221.

available to the state school of forestry for demonstration purposes.

Pennsylvania. On February 25, 1901 a Department of Forestry was established in Pennsylvania. The Commissioner of Forestry, who was to receive a salary of three thousand dollars per annum and expenses, together with four other citizens to be appointed by the governor and senate were to constitute the State Forestry Reservation Com-This commission, the members of which were to be appointed for terms of four years each, was authorized to purchase at a rate not exceeding five dollars per acre, any lands that it considered necessary for state forest preservation purposes. It was given power to prescribe rules of management, to sell timber and to lease forest lands for mining purposes. One-half of the revenue derived from forest reserves was to be paid to the township within which the land was situated. Forest reserves were exempt from taxation, but the expenditure of twenty-five dollars per annum on roads within the forest, and one-half that amount upon roads bordering the reserves, was authorized. Heavy penalties for trespass or the setting of fires upon the reserves were provided. An act of March 25, 1903² provided for a deputy commissioner of forests at a salary of two thousand five hundred dollars and additional clerical assistance was given.

On March 11, 1903 3 forest officers were given the power to arrest without warrant any person detected violating the forest laws within or adjacent to the reserves, and one of April 15, 1903 ⁴ limited further expenditures in the purchase of forest reserves to three hundred thousand dollars in each fiscal year, but made future proceeds from the reserves available for administrative expenses and the purchase of other lands.

A school for the training of forest wardens for state service was provided for in an act of May 13, 1903 5 directing

Session Laws, 1901, No. 9, p. 11.
 Session Laws, 1903, No. 59, p. 60.
 Session Laws, 1903, No. 29, p. 24.
 Session Laws, 1903, No. 146, p. 201; cf. Laws 1903, p. 200, authorizing rights of way for street railways through state forest reserves, and 1903, p. 454, directing the establishment of a sanatorium within a state forest reserve.
 Session Laws, Pa., 1903, No. 295, p. 373.

the acquisition of land and buildings suitable for such purpose near the Mount Alto State Forestry Reservation.

The exemption of large areas of state forest lands from taxation aroused the opposition of local communities, and on April 5, 1905, 1 the legislature authorized an annual payment of three cents per acre for schools and two cents per acre for general township purposes for the benefit of the political subdivisions within which the reserves were On May 13, 1909 2 the amount to be paid for school purposes was reduced to two cents per acre and such payment was made conditional upon the collection of a school tax of four mills on each dollar of the assessed valuation of property in each district entitled thereto.

A Pennsylvania act of June 13, 1907, 3 as approved by the governor, appropriated five hundred thousand dollars for the purchase of state forest reserves.

An act of March 28, 1905, 4 regulating the disposal of vacant or unappropriated state lands provided that whenever the application for the purchase of such lands was received by the secretary of internal affairs, said secretary was to furnish the state forestry reservation commission a copy of the application and a description of the land. It was made the duty of such commission to then ascertain whether it was desirable or practicable to acquire such land for forest culture or forest reservation purposes. Upon request of the commission the secretary of internal affairs for the state was required to convey such lands to the state.

An act of April 22, 1909 5 authorized the department of forestry to grow and distribute, to all persons who would plant and care for them, young trees in such quantities and under such conditions and regulations as the department should prescribe, at a charge not exceeding the cost of production and the cost of transportation to the place where they were to be planted under the direction of the

Session Laws, Pa., 1905, No. 81, p. 111.
 Session Laws, Pa., 1909, No. 556, p. 744.
 Session Laws, Pa., 1907, p. 742.
 Session Laws, Pa., 1905, No. 50, p. 67. Amended in minor particulars on May 3, 1909, P. L. No. 231, p. 413.
 Session Laws, Pa., 1909, No. 69, p. 115. See new act of April 21, 1915, S. L. No. 76, p. 155, authorizing a distribution free of cost except for the boxing and transportation.

department; and another act approved the same day authorized cities and other municipalities of the state to establish and maintain forests for commercial gain. 1

An act of July 31, 1913 ² authorized the department of forestry to designate certain foresters of the state service as district foresters who should give special attention to educational work, the encouragement of farmers in the maintenance of farm woodlots and to other phases of private forestry; and three other acts of the year 1913 3 provided for the encouragement of the establishment and maintenance of private forests which should be considered as auxiliary state forests and be entitled to exemption from taxation because of the public benefit to be derived there-These laws were enacted to accomplish a purpose that had been defeated through the action of the courts in declaring unconstitutional in 1906 and in 1908, respectively, the acts of April 8, 1905 (No. 88) and April 20, 1905 (No. 179) providing tax exemptions on private forests.

An act of April 21, 1915 4 required counties to offer to the state for forest purposes lands taken by them for non-payment of taxes; an act of May 14, 1915 ⁵ authorized the department of forestry to pay as high as ten dollars an acre for forest land; and one of June 3, 1915 6 established a bureau of forest protection in the state department of forestry.

Rhode Island. A Rhode Island act of April 6, 1906 ⁷ authorized the appointment of a commissioner of forestry who should gather and publish information regarding forests within the state. Amendments of April 30, 1907 and May 5, 1909 respectively provided for an increase in the expense allowance to five hundred dollars annually and for an increase in the annual salary of the commissioner to one

Act of April 22, 1909, S. L. No. 79, p. 124.
 Cf. Acts of Jan. 8, 1911, p. 705 and June 4, 1915, No. 362, p. 816, both authorizing the granting of rights of way through state forests; acts of June 15, 1911, p. 961 and Apr. 16, 1915, No. 65, p. 135, regarding game-preserves within forests; and Act of Mar. 27, 1913, No. 16, p. 12 authorizing leases of portions of forest for church, school health or recreation purposes.
 Session Laws, Pa., 1913, No. 414, p. 864.
 Acts of June 5, 1913, S. L. Chapters 269, 270 and 284 on pages 405, 408 and 426 (all three acts approved June 5, 1913).
 Session Laws, Pa., 1915, No. 68, p. 140.
 Session Laws, Pa., 1915, No. 198, p. 481.
 Session Laws, Pa., 1915, No. 353, p. 797; Cf. Act Apr. 21, 1915, No. 77, p. 156, forest officers to enforce forest, fish and game law.
 Session Laws, Rapde Island, 1903, ch. 1332.

thousand dollars. 1 Very complete provision for a system of town fire patrol and control under the supervision of the state commissioner had been made in five successive acts passed prior to January 1, 1917. 2

South Carolina. No legislation for a state administration of forest protection or extension had been enacted in South Carolina before the close of the year 1916, ³

South Dakota. The only forest legislation of an administrative character enacted in South Dakota between 1900 and 1916 was contained in an act of February 23. 1911 which authorized the commissioner of school and public lands to employ a forest supervisor and to delegate to him the administration of the forest land then or thereafter owned by the state. The forest supervisor was to be exofficio game warden and to have authority to employ such assistance as he should deem necessary in case of a forest fire upon or near lands owned by the state.

Tennessee. A Tennessee act of April 15, 1905, ⁵ created a Department of Game, Fish and Forestry. The governor was required to appoint, octennially, a non-salaried state warden who might employ a secretary, without expense to the state, and who might also appoint a citizen of each county as a county warden and such special wardens at large as he The county wardens were aushould think necessary. thorized to appoint deputies. All wardens and deputies were required to give bonds, were removable for cause by the state warden, and were given the rights, powers and authority of county sheriffs as to the enforcement of the state laws for the protection of the game, birds, fish and forests of the state.

An act of March 26, 1907 6 modified the procedure as to the arrest and trial of persons accused of violating the

Session Laws, R. I., 1907, ch. 1465; S. L. R. I. 1909, ch. 422.
 Acts of Apr. 23, 1909, S. L. ch. 395; Act May 7, 1909, S. L. ch. 451; Act May 2' 1910, S. L., ch. 587; Act Mar. 31, 1911, S. L., ch. 664; Act Apr. 14, 1916, S. L. ch. 1396, p. 173 (For provisions see following chapter.).
 See Sess. L. S. C. 1901 ch. 23 p. 609 (Same in Civil Code 1912 Sec. 12); and S.L. 1915, No 52, p. 63 re acquisition of National Forests.
 Sess. L. S. Dak., 1911, ch. 224, Sec. 78 on p. 374; cf. act Mar. 9, 1909 S. L. ch. 268, p. 414 and act Mar. 14, 1913 S. L. ch. 216 p. 299 re bounties, discussed in chapter V of this book. See also acts Mar. 2, 1907, S. L. ch. 154, p. 234, and Mar. 7, 1911 S. L. ch. 160, p. 195 re funds derived from National Forests.
 Session Laws, Tenn., 1905, ch. 455, p. 954
 Session Laws, Tenn., 1907, ch. 185, p. 639.

state game, fish and forest laws and made the terms of all county, special and deputy wardens expire on July 1 of each year and required new bonds from all persons reappointed, as well as from new appointees.

A Tennessee act of April 13, 1907 comprised new provisions as to the protection of public and private lands from timber trespass and from forest fires. This act made it the duty of the state Department of Game, Fish and Forestry to gather statistics and other information relative to the forest interests of the state, the destruction by fire and by wasteful cutting and the effect upon water powers and climate of the diminution of the wooded surface of the state; and to determine the means expedient to the safeguarding of the future forest interests of the state. The act required that the said department investigate and determine what public lands the state should retain and devote to forestry purposes and vested in it the "care, custody control and superintendence of the lands herein or hereafter set apart for or becoming a part of the forestry reserve" and required it to "provide for the reforestation of the denuded lands so set apart and belonging to the state by planting and preserving forest trees, establishing and maintaining fire lines, and a system of fire patrol in the forestry reserve thus created." The department was required to ascertain the best methods of preventing forest fires, of reforesting waste and cut over lands, of encouraging private forestry and of the conservation of forest tracts upon watersheds. The duty of controlling forest fires was vested in this department. The purpose of creating public forests on lands primarily adapted to forest growth was announced and the acceptance of such land when presented by private parties was authorized. The department was authorized to cooperate with the federal bureau of forestry in gathering information and directed to report to the next legislature upon the needs and possibilities as to state forest reserves.

The act of April 13, 1907 was probably repealed by a fish and game law of May 17, 1915. ²

Session Laws, Tenn. 1907, ch. 397, p. 1336; cf. Act Apr. 7, 1903, S. L., ch. 444 (felony to cut timber on state land); and see S. L. 1901, ch. 47, consent to acquisition of national forests.

of national forests.

2. Session Laws, Tenn., 1915, ch. 152, p. 423, for which see Tennessee in following chapter.

Texas. By act of March 31, 1915, 1 the legislature of Texas required that the Board of Directors of the State Agricultural and Mechanical College appoint a technically trained forester, at a salary not exceeding three thousand dollars per annum, who should, under the supervision of the said board, have full charge of the administration of the laws for the protection, management and replacement Cooperation with counties. of forests within the state. towns, corporations and individuals in the preparation of plans for forestry practice was authorized, the parties receiving such assistance being required to pay the field ex-Cooperation with the federal government was also specifically authorized.

The same act authorized the governor, upon the recommendation of the said board of directors, to accept gifts of land to be held, administered and protected as state forests and empowered the said board to purchase lands, suitable chiefly for the production of timber, for state forest purposes, from special appropriations or from any unappropriated surplus in the state forestry fund which was to be derived from sales of wood, timber, minerals or other products from state forests and from penalties for trespass thereon.

Prior to January 1, 1917 no forest administrative legislation had been enacted in Utah other than the act of April 2, 1896, requiring the state board of land commissioners to set aside timber land for the protection of the forest and irrigation interests of the state, and forbidding the sale of trees under eight inches in diameter from such lands, except that the provision permitting settlers to use dead timber and trees under eight inches of certain named species was amended in 1899 2 so as to permit them to use for their own domestic purposes living timber or trees under eight inches of all species.

Vermont. A Vermont act of December 9, 1904 ³ required that the governor designate one member of the board of agriculture as forestry commissioner. This commissioner

Session Laws, Texas, 1915, ch. 141, p. 220.
 Compiled Laws, Utah, 1907, sec. 2340. See S. L., 1907, p. 221, same in Comp. L., 1907, secs. 1068x-1068x3 regarding national forest reserve.
 Session Laws, Vt., 1904, No. 16, p. 19.

was charged with special duties in the administration of the provisions of the act and regarding the protection of forests from fire, town selectmen being required to report to him and he having power to appoint fire wardens in unorganized towns.

A Vermont act of December 16, 1906¹ appropriated five hundred dollars annually for five years for the establishment and maintenance of a forest nursery at the Vermont Agricultural Experiment Station, which was required to furnish all applicants who were residents or land owners of the state with material for planting at actual cost. The forestry commissioner was required to furnish suitable instructions for planting, and, so far as he was able, skilled assistance and supervision, to be paid for by the applicant.

On December 18, 1908 ² the Vermont State Board of Agriculture was abolished and a board of agriculture and forestry, to consist of the governor, the director of the state agricultural experiment station and two appointive members, was created. The members of this board were to receive only their expenses. They were required to appoint a professionally trained forester at a salary not exceeding twenty-five hundred dollars per annum and necessary expenses, who was to act as state fire warden, was given charge of the state reserves and forest nurseries, and required to conduct experimental and educational work. All the duties prescribed for the state forestry commissioner in chapters sixteen and seventeen of the laws of 1904, regarding fire protection and supervision of forest plantations, and chapter fifteen of 1906 as to assistance to private planters were devolved upon the state forester.

The act authorized the governor, upon the recommendation of the board, to accept gifts of land to the state as forest reserves. The proceeds of such reserves might be used by the board at its discretion in the furtherance of the forestry interests of the state. The state was required to pay taxes on the forest reserves, and futher authority for

Session Laws, Vt., 1906, No. 15, Pub. St. 1906, ch. 24, sec. 364-367.
 Cf. Act Nov. 15, 1910, S. L., 170 Regulating the cutting of Christmas trees.
 Session Laws, Vt., 1908, No. 11. See Joint Resolution of Jan. 14, 1911, No. 479, providing a non-salaried commission of conservation for a period of two years to investigate regarding natural resources of the state.

nursery work and distribution of trees was given state officials.

The powers and duties of the state forester in relation to forest fire control were modified by an act of January 27, 1911, 1 giving him authority to appoint wardens in unorganized towns, to establish patrol and fire districts within towns, and to cooperate with private parties in fire control.

An act of February 13, 1913 ² authorized the state forester, with the consent of the governor, to purchase lands to be held, protected and administered as state forests under the provisions of section three of the act of December 18. 1908. An annual expenditure of twenty-five hundred dollars for the purchase, survey and reforestation of such lands was authorized.

Under an act of January 28, 1911, 3 regulating mining operations on state lands, the state forester was required to determine the value of the trees cut by miners. February 26, 1915 4 a new section was added to this act making it inapplicable to state forests and authorizing the state board of agriculture, with the approval of the auditor of accounts, to lease or sell mine or quarry sites within the state forests and use the proceeds in furtherance of the forest interests of the state.

Under an act of April 1, 1915, 5 providing for town or city school endowment forests, the state forester was given important responsibilities.

Virginia. A Virginia act of March 21, 1914 6 created a state geological commission of five members, consisting of the governor, the heads of three leading educational institutions, and one other citizen. The members of the commission, who were to serve for terms of four years, were required to appoint a technically trained man as state forester. The geological commission was directed to ascertain the best methods of reforesting cut over and denuded lands, foresting waste lands, preventing the destruction

Session Laws, Vt., 1911, No. 20; See also amendments in Act of Jan. 11, 1913, S. L. 1911, No. 27; and forest taxation acts of 1912, Nos. 40 and 41, and census of forest products, Act of Dec. 12, 1912, No. 46.
 Session Laws, Vt., 1912, No. 28. Cf. Act Dec. 14, 1912, No. 29, authorizing erection of lookout and buildings on state forests.

^{3.} Session Laws, Vt. 1911, No. 171. 4. Session Laws, Vt., 1915, No. 22, p. 83. 5. Session Laws, Vt., 1915, No. 24, p. 84. 6. Session Laws of Virginia, 1914, ch. 195, p. 305.

of forests by fire, administering forests, encouraging private forest practice, and the conservation of forest tracts on watersheds of the state.

The state forester, at a salary not exceeding two thousand dollars per annum and expenses, was given the direction of all forestry work within the state, required to prevent forest fires, enforce the laws, collect information, direct improvement work on forest areas, investigate the relationship of forests to stream flow, conduct educational work at the Universty of Virginia, and cooperate with counties, municipalities, corporations and individuals in preparing plans for the practice of forestry, the parties assisted being required to pay the field expenses of the men employed.

The geological commission was empowered to purchase lands suitable for state forest reserves, at not exceeding ten dollars per acre, and to accept gifts of land and money to the state for forestry purposes. Gifts of land to the state must be absolute, except that the minerals therein and the right to mine the same might be reserved. All lands purchased or accepted were to be held, protected and administered as forest reserves. The commission was authorized, upon the recommendation of the state forester, to sell so much dead, matured or large growth of trees as should be compatible with the purpose for which the reserves were created. The act also authorized the sale of gas, oil or other valuable minerals from reserve lands. The net receipts from the sale of timber products or minerals and from penalties collected for violation of the act were declared to constitute a forest reserve fund, applicable by the commission to purposes of protection, management, replacement and extension of the state forest reserves. The cutting of trees or building of fires upon reserves otherwise than in accordance with regulations to be made by the commission were declared misdemeanors.

The act also authorized the establishment of forest nurseries to furnish seedlings without cost to the state for use upon forest reservations or other public grounds, and to private land owners and citizens of the state under rules to be prescribed by the commission. Cooperation with the United States in forestry work was permitted on condition that the Federal Government spend an amount equal to that expended by the state.

An act of March 20, 1916 amended and reenacted the Virginia forest act of March 21, 1914 (ch. 195). The only amendments of importance consisted in the stipulation in section one that the members of the state geological commission should serve without compensation but should receive actual expenses: the omission of section three of the original act requiring the state forester to file a bond, with sureties aggregating twenty thousand dollars, for the faithful performance of his duties: the renumbering of the following sections: the addition of clauses to section twenty-three (new act, twentytwo) making those who should set fires contrary to the provisions of the law punishable, in the discretion of the justice or jury, by a fine of not less than ten nor more than one hundred dollars, or an imprisonment of not less than ten nor more than thirty days, in addition to a liability for all damages caused by the fire or the cost of controlling it; and the omission of the obsolete and unnecessary provisions of the last three sections of the original law.

Washington. A Washington act of March 16, 1903 ² marked the beginning of efforts by the legislature to provide for the systematic protection of the immensely valuable forests of that state.

This act made the state land commissioner ex-officio state forest fire warden, and constituted the commissioners of each county a county board of deputy forest fire wardens who might appoint deputy wardens as they should think necessary, provided for various other wardens and patrolmen, prescribed the duties of such officials, and regulated the burning of slashings and the operation of locomotives and logging engines.

A new act of March 11, 1905 ¹ created a state board of forest commissioners consisting of the state land commis-

2. Session Laws, Washington, 1903, ch. 114, p. 205.

Virginia Code, 1916, Pollard, p. 952. An Act, which went into effect on June 17, 1916 (S. L. ch. 257, p. 482; Code 1916, p. 1160) provided for the apportionment of the funds derived from national forests.

sioner and four electors who were to be appointed by the governor for terms of four years each, but were to receive no compensation. This board was authorized to appoint and prescribe the duties of a state fire warden and forester, deputy wardens and rangers, and to gather information regarding the timber resources of the state. The state fire warden and forester, with a salary of two thousand dollars per annum and expenses, was made secretary of the board and clothed with extensive authority, under the direction of such board, in the administration of all forest laws and regulations. The law contained very specific provisions regarding the burning of slashings and the use of spark emitting engines.

An additional forest act of March 18, 1911 ² authorized the board of forest commissioners to accept grants of land to the state for forest purposes, and to fix the salary of the state forester. The forester, subject to the approval of the board, was empowered to appoint technically trained assistants, employ the necessary clerical assistance and fix the salaries of all such employees. He was authorized to cooperate with private parties, towns, counties, the governments of other states, the federal government and the Dominion of Canada or any province thereof in the protection, management and replacement of forest areas. He was charged with the duty of gathering complete information regarding the forest resources of the state and the dissemination of knowledge thereof.

An act of March 18, 1915 ³ provided that, whenever merchantable timber had been sold and removed from state land, the board of land commissioners might classify the land and land found by them to be most suitable for reforestation and reserved by their order for such purpose should not thereafter be subject to sale or other disposition. It was made the duty of the state forester to protect and reforest lands thus reserved.

Session Laws, Washington, 1905, ch. 164.
 Session Laws, Wash., 1911, ch. 125, p. 623.
 Session Laws, Wash., 1915, ch. 147, sec. 2, p. 408, Same in Codes & St., 1915, Rem. secs. 5276, and 5277-1 to 5277-21.

West Virginia. A West Virginia act of March 1, 1909 ¹ provided for the appointment of a forest, fish and game warden, appointed for a term of four years at an annual salary of eighteen hundred dollars and expenses. Section fifty-one of this act declared the said warden to be ex-officio fire warden for the state, and made all deputy wardens fire wardens for their respective counties. These wardens were clothed with ample authority for the prevention and extinguishment of fires.

An act approved March 4, 1915 ² amended section fiftyone of the act of 1909 by authorizing the forest, fish and game commissioner to appoint a trained and experienced man as state forester to assist him in formulating methods of reforesting cut over and denuded lands, preventing destruction by fire, administering the forests on forestry principles, instructing and encouraging private owners in growing timber, maintaining patrols and lookouts and securing the cooperation of individuals, corporations and the federal government in forestry work. Several important changes regarding the prevention and control of fires were made and a new section added authorizing the forest, fish and game warden, with the consent of the governor, to purchase lands suitable for forest culture and reserves at not over five dollars per acre, using any surplus money standing to the credit of the forest, fish and game protective fund, or to accept gifts of land for state reserves and to demonstrate the practical utility of timber culture. The warden was empowered to make all rules necessary for the management of the reserves.

Wisconsin. A Wisconsin act of May 22, 1903 ³ established a department of forestry. A board of five forest commissioners who were to serve without compensation, except the salaries drawn by three who held other state offices, was authorized to appoint a superintendent of state forests at a salary of two thousand five hundred dollars and actual expenses who should act as secretary for the

Session Laws, W. Va., 1909, ch. 60.
 Session Laws, W. Va., 1915, ch. 15, p. 162. SeeW. Va. Code 1916 Barnes pp. 891-893
 Session Laws, Wisconsin, 1903, ch. 450, p. 745.

board. The act forbade further sales of state lands except certain specified classes which were not considered adapted to forestry purposes, and declared that all unsold lands and such lands as the state should thereafter acquire for such purposes should constitute the state forest reserve. The forest commissioners were authorized to accept lands granted to the state for forest purposes. The superintendent of state forests was directed to sell, with the approval of the forest commissioners, dead and down timber from all lands in the reserve, and was required to establish one or more forest experiment stations and otherwise cooperate in educational work. The superintendent of forests was also made state forest warden, with the duty of enforcing the fire and trespass laws, prescribing regulations, and appointing the town fire wardens authorized under the act of 1897.

By act of May 25, 1905 the act of 1903 and portions of the previous law of Wisconsin as to forests and fires were repealed and a much improved law enacted. The new law created a board of forestry, consisting of the president of the state university, the director of the geological survey, the dean of the agricultural department, the attorney general and one other member to be appointed by the governor. The members were to receive only actual expenses. were authorized to appoint a technically trained man as state forester, at an annual salary of twenty-five hundred dollars and expenses, who under their supervision was to have charge of all forest reserves, direct all forest activities of the state, and advance by such means as he considered advisable an interest in forestry among the people of the state. The sale of all state lands north of township thirtythree was forbidden, and all of such lands made a part of the state forest reserve, except that state lands north of this township which upon examination by the state forester were found to be more suitable for other purposes than for forestry might be sold. Conservative lumbering upon the forest reserve under the direction of the state forester was authorized, the funds derived to be devoted to the purchase of lands or the protection and improvement of forest lands

Session Laws, Wisconsin, 1905, ch. 264. Cf. Laws 1905, ch. 460, declaring policy
of state to make a forest reserve along Brule River, Douglas County.

already held. The board was empowered to accept gifts of land for forest reserve purposes, and directed to inquire into the desirability of acquiring parks in different parts of the state and report thereon to the legislature. An assistant state forester at a salary of fifteen hundred dollars was to be appointed by the forester with the approval of the board. Cooperation in forestry work with the federal government. other states, other departments in Wisconsin, and with counties, towns, corporations and individuals was provided for.

The state forester was made state fire warden, with authority to appoint and remove one or more fire wardens in every town where he considered such appointment necessary. Reports upon all fires were required. He was also made state trespass agent with authority to appoint subordinates for the suppression of trespass upon state lands, who should have the power to arrest without warrant. A failure by a district attorney, or other magistrate, to act promptly upon any case of violation of the law properly presented to him was made a misdemeanor, with a fine of one hundred dollars to one thousand dollars and imprisonment from thirty days to one year as a penalty. The act contained provisions as to civil and criminal liability for trespass and for the setting of fires by locomotives and other engines.

An act of July 9, 1907 appropriated ten thousand dollars per annum for the acquisition of additional forest lands at tax sales and from counties that had acquired land under tax deeds, and two years later 2 the purchase of lands other than tax title lands and the subsequent expenditure of annual unexpended balances was authorized. In 1907 ³ also the Wisconsin legislature authorized the sale to the United States of all lands and timber within Indian reservations, which the state claimed under the school or swamp-

3. Act May 10, 1907, S. L., ch. 96.

Session Laws, Wisconsin, 1907, ch. 491. Cf. Federal Act of June 27, 1906 (34 Stat. 517) granting to Wisconsin for state forestry purposes 20,000 acres of public land. to be selected by the state north of township 33, 4th Prin. Mer., and the Act of Aug. 22, 1912, (37 Stat. L. 324) granting all undisposed of islands in inland lakes within Wisconsin and north of township 33 for forestry purposes.
 Act May 18, 1909, S. L. ch. 137. See Act of June 22, 1907, S. L. ch. 335, authorizing Wisconsin Valley Improvement Company to create reservoirs to effect an equalization of steam flow, and act of July 11, 1911, ch. 640, re Chippewa and Flambeau Improvement Company.
 Act May 10, 1907, S. L. ch. 96.

land grants from the federal government and the use of the proceeds for the purchase of forest reserve lands. In an act approved July 12, 1907 ¹ authorizing an exemption from taxation of lands planted with forest trees, the state forester was charged with important administrative duties.

An act of July 7, 1911 2 substituted for the existing plan permitting the state forester to appoint a fire warden for each town where he considered a warden necessary, a system under which every town chairman was made exofficio town fire warden, and all superintendents of highways assistant town wardens. This marked a reversion to a method of fire control that had been adopted in Wisconsin and several other states at an earlier period, but had been generally abandoned as to areas in which there was an acute problem as to forest fire control. This plan proves satisfactory only in towns having no extensive uninhabited forest areas as in New York outside of the forest preserve The Wisconsin act of 1911 authorized the appointment of temporary fire wardens upon the recommendation of the chairman of a town board, one-half of the expense of such temporary warden service to be paid by the state.

On July 11, 1911 ³ the main body of Wisconsin forest administration law was reenacted with several important changes. The new law included in the state forest reserve all lands of the state within the Menominee, Stockbridge and Munsee Indian reservations, as well as all lands thenowned or subsequently reverting to the state north of townships thirty-three, and authorized the state board of forestry to exchange reserved lands for other lands on a basis of equal value in order to consolidate the forest holdings. The salary of the forester was fixed at three thousand six hundred dollars per annum; and he was authorized to cooperate with the university in the instruction and training of forest rangers.

Session Laws, Wisconsin, 1907, ch. 592. Cf. July 1, 1909, S. L. ch. 322 (Parks.)
 Session Laws, Wisconsin, 1911, ch. 601. Cf. Laws 1909, ch. 119, requiring railroads to maintain a patrol in dangerous seasons and authorizing inspection of locomotives by state officials. Laws 1911, ch. 494, giving greater authority to state officers as to inspection, and Laws 1911, ch. 245, regarding civil liability of railroads for fire damage.
 Session Laws, Wisconsin, 1911, ch. 638.

An act of July 11, 1911, 1 made an appropriation of fifty thousand dollars annually for a term of five years for the purchase of forest lands, authorized the state forester to enter into contracts for the purchase of such lands, and provided for the condemnation of forest lands. It also provided for the annual appointment of a legislative committee to report upon such acquisition of land.

However, there were in Wisconsin bitter opponents of the policy of acquiring large areas for state forest purposes, and a strong sentiment developed in the towns within the forest reserve area against the exemption of state lands from local taxation. On July 28, 1913 ² the governor approved an act creating a special legislative committee of eight members to report upon the forest reserves in Forest, Iron, Oneida Price and Vilas counties, and as to whether lands included therein were in fact adapted to use for agricultural purposes. This act provided that no further purchases for state reserves should be made until such report was submitted, nor prior to July 1, 1915. 3

An act of August 2, 1913 4 provided for the taxation at not to exceed one and one-fourth per cent of the assessed value, for all except state purposes, of all state lands within certain towns in the counties comprised within the proposed state forest reserve.

A Wisconsin act of July 15, 1915 5 created a state conservation commission to be composed of three members at an annual salary of thirty-five hundred dollars each for terms of six years each. These men were to be appointed by the governor with the advice of the senate, but the law required that one be a man having special knowledge o the propagation, protection and care of fish and game, that one be a technically trained forester and that the third be a competent man with practical experience in commercial and business affairs. The commission was authorized to

Session Laws, Wisconsin, 1911, ch. 639.
 Cf. Laws of 1911, ch. 143, making it a misdemeanor for any person, firm or corporation to unreasonably waste or maliciously impair any natural resource of the state and Laws of 1911, ch. 644, creating an unsalaried conservation commission of seven members, for terms of six years each.
 Session Laws, Wisconsin, 1913, ch. 670, p. 928.
 See the decision of the state supreme court in the test case of Ex. rel. Owen, Atty. Gerl. v. Donald Sec'y of State, 160 Wis. 21, (Feb. 12, 1915) interpreting Wisconsin forest acts as to constitutionality.
 Session Laws, Wisconsin, 1913, ch. 740, p. 1063.
 Session Laws, Wisconsin, 1915, ch. 406, p. 505. See Wis. Stats. 1915, Sec. 1494-40 to 1494-61, for main body of existing forest law of state.

employ and fix the salaries of foresters, wardens, experts, agents, clerks and others as should be necessary. Upon this commission was conferred all the powers and duties previously vested in the various boards and officials having charge of state interests in regard to forestry, fish and game, and state parks. Provision was made for a formal summoning of any member of the conservation commission before the senate and house for written and oral interrogation as to the work under his charge upon the presentation of a request by a certain number of members of different political parties.

Wyoming. No legislation for the state administration of forests or the protection of forests at the expense of the state had been enacted in Wyoming during the period covered by this chapter. ¹

See Compiled Statutes, 1910, Mullen, sec. 128 and 129 (Laws 1907, ch. 7 and 1909, ch. 23) apportionment of funds from National Forests.

CHAPTER IV

Legislation For the Prevention and Control of Forest Fires Enacted in American States during the First Sixteen Years of the Twentieth Century

Alabama. The first general forestry act of Alabama, approved November 30, 1907, provided an optional system of county forest wardens to control forest fires. These wardens were to be paid by the county and were empowered to summon assistance for the extinguishment of a fire and to arrest offenders against the forest law. The act imposed severe penalties for the willful or malicious firing of the lands of another and made it unlawful for a person, firm or corporation to fire his own land without five days' notice to his neighbors unless all possible precautions against the spreading of the fire had been taken. Clearing of new ground for cultivation was excepted. Logging and railroad locomotives, and all portable or stationary boilers, not burning oil, must be supplied with proper appliances on both stack and fire boxes to prevent fires, under penalty of a fine.

Arizona. Although Arizona has laws making it a misdemeanor to wilfully or negligently fire the woods of another, of the state, or of the United States, or to fail to use every effort to extinguish a fire accidentally set or set for a lawful purpose, with a maximum fine of one thousand dollars and imprisonment for not over one year, no proviso had been made prior to 1917 for a systematic protection of forests from fire. ²

Session Laws, Alabama, 1907, No. 90. Cf. Fire Acts as to certain counties; Act Dec. 9, 1896, S. L., p. 153; Act Feb. 6, 1897, No. 216, and Act Feb. 19, 1907, S. L. No. 18, sec. 47, p. 81, requiring game and fish wardens to extinguish fires.
 Rev. Statutes, 1913, Penal Code, sec. 609; See Rev. St. Terr. Ariz. 1901, sec. 339 and 340.

Arkansas. The early laws of Arkansas made it a misdemeanor to fire the woods of another, with a liability for double damages, but under the act of February 3, 1875 one who should set a fire on his own lands for a lawful purpose was liable for single damages only if another were injured and, if he gave due notice to his neighbors of his purpose and used all due caution to prevent the escape of the fire, he was not liable for damages. The law was not changed between 1900 and 1917. 1

An Arkansas act of April 2, 1907, made those operating railroads within the state liable for all damages due to fires set by their equipment or employees, whether resulting from negligence or not.

California. The California act of March 18, 1905, 3 providing for a general administration of the forest interests of the state, required the state forester to establish districts, and appoint citizens as voluntary fire wardens, who might be paid by counties or private persons or corpora-The appointment of federal forest officers as wardens was authorized. The state forester and all fire wardens were empowered to arrest without warrant offenders against the forest law, and were subject to a fine for failure to arrest or prosecute. They were authorized to summon all citizens between sixteen and fifty years for not over five days' service annually. At dangerous periods the forester might maintain a patrol at the expense of a county. A district attorney who failed in the duty of prosecuting offenders was subject to a fine of one hundred to one thousand dol-The willful, malicious or negligent firing of the land of another, or negligently permitting a fire to escape, the leaving of a camp fire burning, and the setting of a fire, or blasting, without a permit, between May fifteenth and the first soaking rain of autumn, except for logging or a back fire, subjected the offender to heavy penalties.

Logging locomotives, donkey engines and threshing en-

See Digest Ark, Laws, Kirby, 1904, sec. 1696-1700 and 7978.
 Session Laws, Ark., 1907, No. 141; p. 336, cf. Digest Laws Kirby, 1904, sec. 6773 p. (Held constitutional in St. Louis & San Francisco Rd, Co. v. Shore., 89 Ark, 448, 117 S. W. 515.).
 Session Laws, Calif., 1905, ch. 264, p. 235. Cf. Act Mar 20, 1905, S. L., ch. 337, p. 394, authorizing board of supervisors to appropriate for forest protection, counties 1st & 2nd class \$20,000, others \$40,000 annually.

gines, operated in or near forest, brush or grass land, and not burning oil, were required to have spark arresters and proper ash pans. In addition to the penalties prescribed for a failure to comply with the various provisions of the act as to fire, one whose act resulted in loss to the United States, the state, a county, or a private owner, was made liable for double value of property destroyed and to the state or county for all expenses incurred in fighting the fire. Counties were required to clear inflammable material from roads at the request of the state forester, and lumber companies must burn slashings if instructed by the state board of forestry to do so. All fines, less the cost of collection, were to be devoted to general forestry purposes. County boards of supervisors were authorized to appropriate for forest protection, improvement and management.

An amendment of April 7, 1911¹ provided: if areas situated in or adjacent to forests and covered with inflammable debris were examined by the state board of forestry and found to constitute a fire menace to adjacent property, and the owners did not, after due notice, properly care for the debris or otherwise remove the danger, the state board of forestry might treat the existing condition as constituting a public nuisance by abating it at the expense of the owner of the tract.

The penal provisions of the California law as to the setting or leaving of fires were again modified by an act of May 1, 1911,² so as to prescribe a uniform penalty of not less than fifty nor more than five hundred dollars, or imprisonment for not less than fifteen days nor more than six months, or both, for the several offenses regarding the setting and leaving of fires, the use of engines without adequate devices for preventing the setting of fires, and failure to respond to a summons for fire fighting duty.

Colorado. A Colorado act of April 10, 1901 3 forbade the building of unguarded fires or the depositing or leaving of live coals in any forest area of the state, required a permit for camping outside his own county by a resident and the employment of a game or forest warden by any non-resi-

Session Laws, Calif., 1911, ch. 264.
 Session Laws, Calif., 1911, ch. 699.
 Session Laws, Colorado, 1901, ch. 83, p. 185 sec. 10-14.

dent camping within forest districts of the state. It required that every railroad right of way within forest areas be kept clear of inflammable material and that locomotives be so equipped and operated as to prevent the setting of fire to any tree growth. The measure of damages enforceable against a railroad for the setting of a fire was declared to include both the commercial value of the trees destroyed and their value as conservators of water and promoters of adjacent tree growth, and each day's failure to properly operate a locomotive was declared to constitute a separate misdemeanor. Game wardens, land appraisers and all peace officers of the state were charged with the duty of enforcing the act and given the power to arrest offenders without warrant.

An act of April 11, 1903 declared it the duty of sheriffs, undersheriffs and deputies to control and extinguish forest fires, gave them power to summon all persons of a county whose assistance they deemed necessary, and authorized county commissioners to pay sheriffs five dollars and deputies not over three dollars a day for such services.

Connecticut. On July 13, 1905 ² a general act for the protection of forests from fire was enacted in Connecticut. This provided that the state forester should be ex-officion state forest fire wardens. Selectmen of towns were required to cooperate with the forester in the selection of district fire wardens. Both town and district wardens were authorized to arrest without warrant detected offenders against the forest laws and were given authority to enter private lands for fire fighting purposes, to summon male residents between eighteen and fifty years of age, and to require the use of horses and other property under penalty of a fine. Town and district wardens were to receive two dollars and fifty cents per day for time actually employed, and selectmen might fix the pay of others at not exceeding twenty cents per hour. Each town was required to pay onehalf the cost of fire fighting within its boundaries, and the county and state one-fourth each.

Session Laws, Colorado, 1903, ch. 83.
 Session Laws, Connecticut, 1905, ch. 238.

The act of 1905 was amended on June 14. 1907 by providing that in towns, the boundaries of which were coterminous with those of a city, the chief of the fire department of the city should be town fire warden, but that he should receive no additional compensation provided he received a regular salary.

On April 17, 1907 ² the existing law requiring the removal of all combustible material for a distance of six feet about the point where a fire was to be built in woodland was amended so as to require the clearing of a space of twenty feet.

On July 8, 1909 3 chapter 136 of 1907 was amended by changing the compensation of town and district fire wardens to thirty-five cents per hour of actual service, and modifying the manner of payment. A new section provided that every person who should kindle a fire in the open air at any time, and thereby cause injury to another, should be fined not more than two hundred dollars, or be imprisoned not over six months, or both; and another section made it a misdemeanor to kindle a fire in the open air, outside the limits of a city, borough, or railroad lands, between March fifteenth and June first, and between September fifteenth and November fifteenth in any year without a written permit from the district fire warden. Any town upon a vote of its citizens might, with the approval of the state fire warden be exempted from the restrictions of the section requiring permits yearly. The act of 1909 also authorized backfiring by any person to protect property from fire in the absence of a fire warden. An amendment of June 29, 1911 4 authorized the building of fires two hundred feet from inflammable material without a permit, and made several changes as to payment for fire control.

A Connecticut act of June 28, 1911 5 made every railroad company liable for the expenses incurred by a city or town in extinguishing a fire set in trees, brush or grass outside

Session Laws, Conn. (1907), ch. 136, p. 684. Cf. minor amendment as to procedure in Act of May 5, 1909, S. L., ch. 19, p. 945.
 Session Laws, Conn., 1907, ch. 43.
 Session Laws, Conn., 1909, ch. 128.
 Session Laws, Conn., 1911, ch. 124. Cf. correctional amendment in Act of April 8, 1913, S. L. ch. 7.
 Session Laws, Conn., 1911, ch. 114, p. 1368. Cf. S. L., 1911, ch. 212 regarding actions for fire damage by railroads.

its right of way by sparks, or otherwise through any of its employees, and section foremen were required both to extinguish fires and render assistance to district wardens. On September 26, 1911 ¹ the state fire warden was authorized to take the steps that he deemed necessary for the control of forest fires in groups of towns and to agree with the national department of agriculture for fire protective cooperation on watersheds of navigable streams under the Federal act of March 1, 1911 (36 Stat. L. 961).

An act of May 10, 1915² authorized the governor to suspend the hunting season whenever he considered the conditions of drought to be such as to make extraordinary precautions necessary for the protection of woodlands from An act of May 17, 1915³ provided that whenever brush or tree growth should be cut and permitted to remain within fifteen feet of the traveled portion of any highway, the first selectman or firewarden of the town might, by written order, require the owner of the adjoining land, or other person by whom or by whose authority the cutting was done, to remove the same within sixty days under penalty of a fine or imprisonment for failure to obey. An act of May 20, 1915 4 made it a misdemeanor to operate a locomotive through forest land without an efficient spark arrester and other appliances necessary for the prevention of fire, and authorized an inspection of locomotives by state forest officials.

Delaware. The Delaware act of April 19, 1909, ⁵ creating a state board of forestry, provided for the appointment by the governor of forest wardens who should receive compensation for special services performed under the direction of the state forester. These wardens were given the authority of constables to arrest and prosecute for violation of forest laws, and it was made their duty to extinguish fires

Session Laws, Conn., 1911, ch. 292.
 Session Laws, Conn., 1915, ch. 218 p. 2034.
 Session Laws, Conn., 1915, ch. 260, p. 2055.
 Section 2029 of the Conn. Code of 1902, requiring the selectmen of any town, upon notice from a town meeting, to cut, at least once a year, the bushes and branches of trees within twelve feet of the traveled way of any highway, had been replaced by an act of July 1, 1905, S. L. ch. 277, p. 483, requiring such cutting within ten feet of the center of the traveled way upon notice from five citizen taxpayers on all main highways from town to town; and an Act of March 23, 1911, S. L. ch. 2, p. 1266 had required that all material thus cut be piled and burned within thirty days after the cutting.
 Session Laws, Coun., 1915, ch. 322.
 Session Laws, Delaware, 1909, ch. 71. See Rev. Laws Del. 1915, sec. 3449.

and prevent depredations. The wages of wardens and others employed to extinguish fires were to be paid by the county where employed. A fine of twenty-five dollars to one thousand dollars, or imprisonment from thirty days to one year, was provided for the willful or malicious setting of a fire on the lands of another. It was also made unlawful to set a fire on one's own land, except in March, without the taking of due precautions to prevent its spreading, and the escape of such a fire was declared prima facie proof of negligence and the offender was made liable both for damages and for the cost of extinguishing the fire. The operation of a locomotive or other engine or boiler, not burning oil or naphtha, in or through forest or brush, without a spark arrester and protected ash pans, was made a misdemeanor. All persons or corporations causing fires in violation of the act were liable to the county and state for all expenses incurred in the control thereof.

Florida. No legislation directed to the control of forest fires other than penalty provisions established prior to 1900 had been enacted in Florida before the close of the year 1916. ¹

Georgia. No law for the patrol of forests and a systematic control of fires had been enacted in Georgia prior to January 1, 1917. ²

Idaho. In an Idaho act of March 8, 1905³, regulating the sale of timber from public lands, it was provided that no fire should be set, nor live coals deposited, near forest areas without properly guarding or extinguishing the same. The land commissioner and his assistant land appraisers, game wardens, and all peace officers of the state, were required to enforce the act and authorized to arrest offenders. Railroad operators were required to keep their right of way clear of inflammable material and to provide locomotives with efficient spark arresters. The board of land commissioners

See Compiled Laws, 1914, sec. 3426.
 See Annotated Penal Code, 1914, Park, secs. 227-230. Cf. Sec. 579 making it a misdemeanor for a resident of an adjoining state to graze horses, mules, hogs or cattle within forests of Georgia. (From Act Sept. 26, 1883, S. L. No. 334, p. 129.)
 Session Laws, Idaho, 1905, p. 145.

was authorized to employ not exceeding six persons at not over five dollars per day each to enforce the law. Anyone convicted of violating the act might be fined one hundred dollars and imprisoned sixty days.

By an act of February 15, 1907,¹ the legislature of Idaho required the state board of land commissioners to divide the state into fire districts and, upon the application of one or more owners of property in any district, to annually appoint a fire warden therein, to be paid by the owners making the application. If desired by such owners, the warden in any district might appoint deputies, subject to discharge at the will of the property owners. Wardens and deputies were required to patrol their districts in dry periods and were given the authority to arrest without warrant persons found violating any provision of the act. They might compel assistance at a daily wage not exceeding two dollars and fifty cents, exclusive of subsistence and reasonable traveling expenses, payable in advance on demand.

Between June first and October first of each year, no one might fire a slashing without a written or printed permit. The permit must be restricted to three consecutive days not less than ten days from the date of the permit. Though a permit was received, it was unlawful to set a fire when the wind made the setting dangerous, or without sufficient help present to control the fire, which should be watched until it was out. When a permit for burning slashings was issued, a warden or deputy was required to be present at the time of setting, and might revoke or postpone the permit.

It was made unlawful to use any spark-emitting locomotive, or other engine, in a timber district between May first and October first without an efficient spark arrester; and during the same period it was made unlawful for any camper, farmer, logger, or other person or corporation, to set out any fire without a permit, under pain of fine or imprisonment.

Those operating railroads were required to keep the ground clear of combustibles fifty feet on each side of their tracks from May first to October first, except ties and other main-

^{1.} Session Laws, Idaho, 1907, p. 18.

tenance materials. It was also declared a misdemeanor to drop live coals or ashes from a locomotive, and employees were required to report fires.

The Idaho forest fire law was again amended on March 15, 1909 to require more thorough public notice as to fire laws, to omit the provision for advance payment of fire fighters, to make the closed season for the setting of fires or operating engines without spark arresters uniformly from June first to October first, and to make several other minor changes. This act contained a new section requiring the piling and burning of all brush, limbs or other forest waste four inches or less in diameter left from logging operations of any character, and it was made a misdemeanor to fail to dispose of such refuse at the time and in the manner prescribed by the warden of the fire district in which the cutting was done. It also provided that the state should pay its proportion of the cost of protecting timber in any district according to the extent of the timberland owned by the state in such district in the same manner as other owners. The fines collected under the act were made payable onehalf to the county and one-half to the informer.

On February 14, 1911 the Idaho law was amended to make the operation of a spark-emitting locomotive or other engine without an efficient arrester unlawful at any time of vear.

Illinois. No legislation regarding forest fires was enacted in Illinois between 1900 and 1917. 3

Indiana. On February 27, 1905 4 a new law regarding the burning of the woods was enacted in Indiana. act not only prescribed penalties, and liability for all damages, for the firing of the lands of another, or the permitting of fire to spread, but required each township road supervisor to employ the assistance necessary to extinguish any fire within his district, the wages of the persons thus employed at one dollar fifty cents per day to be paid from the

Session Laws, Idaho, 1909, ch. 227, p. 151.
 Session laws, Idaho, 1911, ch. 98.
 Rev. St. Hurd, 1913, ch. 114, sec. 63; Annot. St., 1913, Par. 3500, Par. 8812 (R. R. to clear), Par. 8891 (Setting evidence of negligence), Sec. C. C. C. & St. L. R. R. v. Hamilton, 200 Ill. 633 (liability R. R.) Checkley v. Ill. Cent. R. R. 257 Ill, 491 (Requirement to clear constitutional).
 Session Laws, Indiana, 1905, ch. 49, p. 64.

regular township funds. Another act of the same year provided a maximum penalty of one hundred dollars and imprisonment for thirty days for the malicious or wanton firing of the land of another, directly or indirectly. 1 On March 3, 1911 ² railroad companies operating in Indiana were made liable for all damage caused by fires set by locomotives, and were given an insurable interest in the property for which they were thus made liable. The burden of proving contributory negligence was placed upon railroad operators against whom actions were brought for fire damage.

Iowa. No forest fire legislation was enacted in Iowa during the first sixteen years of the twentieth century. 3

Kansas. Prior to January 1, 1917 no legislative provision for forest fire control had been made in Kansas other than the legislation existing prior to the year 1900. 4

Kentucky. Since the beginning of the twentieth century the laws of Kentucky have required that railway companies use a screen or other device upon the smoke stack of every locomotive to prevent the escape of sparks, and that they keep their right of way clear of combustible material under penalty of paying all damages and a fine of from one hundred to five hundred dollars for the misdemeanor of violating the law. 5

A Kentucky act of March 19, 1912, 6 creating a state board of forestry, provided that, upon the recommendation of such board, the governor might appoint forest wardens, to hold office during the pleasure of the said board, who should receive payment for special services at not over two dollars per day and have the authority of constables as to arrest.

It was made a misdemeanor to build a fire or cut timber

Session Laws, Indiana, 1905, ch. 169, sec. 372.
 Session Laws, Indiana, 1911, ch. 107, p. 186.
 See Criminal Code, 1897, secs. 4785-86; Nothing new in Suppl. 1913.
 See General Stats. 1909, secs. 3822-23. Gen. St. 1915, Secs. 4873-83.
 See Kentucky Stat. 1903, sec. 782, 790 and 793, and Ky. Stat. 1915, Carroll, sec. 782, 790 and 793. See Commonwealth v. Rwy. Co., 18 Ky. L. Rep. 610. Penatics can be recovered only by indictment.
 S. L., Ky., 1912, ch. 133, p. 529.

from a forest reservation except in accordance with regulations prescribed by the board of forestry, and made unlawful to set a fire on one's own land unless all possible precaution had been taken to prevent its spread. The setting of a fire contrary to the provisions of the act was made prima facie proof of willfulness or neglect, and the offender made liable for all damages and for the cost of extinguishing the fire. Locomotives and portable or stationary engines operated in or near forests or brush must have appliances to prevent the escape of fire from stack, ash pan or fire box, under penalty of a ten-dollar to one-hundred-dollar fine. All offenders were made liable to the state and county for all damages or expenses caused. The net amount of all penalties was to be placed to the credit of the forest reserve fund for general forestry purposes. Cooperative work with the United States Government was authorized.

Louisiana. The act of July 4, 1904, ¹ creating a depart ment of forestry in Louisiana, vested in the commissioner of forestry the general direction of all forest fire protection in the state, authorized the appointment of a chief fire warden, and required the designation of an official in each jury ward of the state as fire warden. The local wardens were required to prevent and suppress forest fires, and penalties were provided for the willful or negligent firing of the forests. Railroad companies were required to clear combustible material from their rights of way, and to require employees to exercise care and report fires under penalty of a fine.

The act of July 7, 1910 ² that superseded the act of 1904 carried a maximum penalty of three hundred dollars and six months' imprisonment for the willful or negligent firing of the lands of another or for the willful permitting of a fire to escape from one's own land, and a maximum fine of one thousand dollars and five years' imprisonment for the malicious burning of the forest property of another. It declared the setting of a fire by the dropping of a lighted match, or burning tobacco, by using a combustible gun-wad

Session Laws, La., 1904, No. 113, p. 244.
 Session Laws, La., 1910, No. 261, p. 446. Cf. Session Laws, La., 1910, No. 259, sec. 20, forbidding fires that might injure game.

or by leaving a camp fire burning, should render one liable to the penalties of the act. In addition to such penalties an offender might be held liable in a civil action for all damages, including the value of young growth, as determined by the cost of producing it artificially, and for the costs of fighting the fire.

The act of 1910 also made it the duty of all railroad companies operating locomotives through forest lands to keep their rights of way cleared of combustible material, to prevent their employees from dropping fire or live coals other than between rails, to require employees to report fires promptly, and to post warning placards furnished by the state.

The duties imposed upon the forester and deputy forester by the act of 1910 as to forest fire protection were vested in the reorganized conservation commission established by the act of July 9, 1912. 1

Maine. By act of March 26, 1903, 2 the Maine act of March 25, 1891, was amended to allow the state land agent four hundred dollars additional annual salary as compensation for performance of duty as forest commissioner, and he was given the authority formerly vested in county commissioners to appoint fire wardens and assign them districts within unorganized places. These wardens might summon citizens of the county to fight fire, to whom fifteen cents per hour would be paid from state funds.

On April 1, 1909 3 the "Maine Forestry District" was created as an administrative district for forest protection The board of state assessors were required to list and value all lands within this district. All lands within the district were to be taxed at a uniform rate of one and one-half mills on the dollar on this valuation, and this tax with interest thereon at twenty per cent per annum from

Session Laws, La., 1912, No. 127. Cf. Session Laws, La., 1912, No. 204, as amended by S. L. 1914, No. 47, regarding the firing of the woods during the game-breeding season, and the act of July, 1916 providing that one-fifth of the collections by the state on timber and turpentine licenses might be expended in the execution of the state forestry laws.
 Session Laws, Maine, 1903, ch. 168.
 Session Laws, Maine, 1909, ch. 193. Cf. Act Apr. 2, 1909 S. L. ch. 230, p. 304 making \$25,000 immediately available, for fire protection. See amendment of March 15, 1911, S. L., ch. 33, as to method of collection of tax., ch. 193 of 1909 held constitutional in Sandy River Pl. v. Lewis, 109 Me., 472, Dec. 13, Nov. 1912.

six months after it was due constituted to a lien against any tract described with reasonable accuracy, whether the ownership were correctly stated or not. Lands on which the tax was not paid within one year from the time when they were advertised for non-payment of the tax were to be forfeited to the state. The tax assessed under the provisions of this act was to be used solely for the payment of expenses connected with the protection from fire of the forests within the administrative unit created.

The state forest commissioner was charged with responsibility for the prevention, control and extinguishment of forest fires within this district and authorized to establish sub-districts and appoint in each a chief fire warden and such deputies as he considered necessary to hold office during his pleasure. He might require wardens and deputies to patrol their districts, and they were given the authority of sheriffs as to arrest, prosecution, and requiring assistance. Chief fire wardens were to be paid three dollars for each day of actual service and an allowance of not over two dollars per day for travel and subsistence. Deputy wardens were allowed two dollars per day and subsistence. Those employed temporarily for patrol purposes might be paid twenty cents per hour and subsistence, while persons summoned for fire fighting were to receive fifteen cents per hour and subsistence. The chief clerk to the state land agent was made deputy warden. Written reports upon all fires were required of wardens. The additional tax imposed by this law for forest-protection purposes was held constitutional by the Maine courts.

The general law regarding fire protection throughout the state was also amended by act of March 29, 1909. ¹ Any person who suffered damage from fire in consequence of the negligence of the selectmen of any town to perform their duty might maintain an action against the town for the damage sustained not to exceed two per cent of the valuation of such town; the chief engineer of cities was made a forest fire warden, and the duties of county commissioners as to unorganized territory were abolished.

Another act of 1909 provided that whenever during

^{1.} Session Laws, Maine, 1909, ch. 164, p. 166.

the open season for hunting, it should appear to the governor that, because of drought, the use of firearms in the forests of the state might be liable to cause forest fires, he might issue a proclamation suspending the open season for such time as he might designate. A fine of one hundred dollars and costs must be imposed upon anyone who killed game or entered forest land with a gun in his possession during If meteorological conditions changed such closed season. the governor might open the season by proclamation.

A Maine act of March 15, 1911 ² provided that, during such dry periods as he considered such action necessary, the forester commissioner should maintain a patrol along railroad lines passing through wild lands of the state and required that the railroad companies pay the cost of such patrol. The commissioner could, by regulation, forbid the burning of rubbish along the railroad right of way. An act of March 25, 1913 ³ required railroad companies to have screens upon the windows of passenger cars operated through forest districts during the fire season, and one of April 4, 1913 4 authorized the forest commissioner to require spark arresters on all locomotives during periods of fire danger.

On March 11, 1915 the railroad patrol act of 1911 was amended by the elimination of the word "wild" so as to authorize a patrol of any "forest land" of the state through which a railroad was operated; and an act of March 24, 1915 ⁶ required the proper disposal of all inflammable material resulting from forest cutting operations within fifty feet of a railroad right of way or the wrought portion of a highway, or in construction work on a road, railroad, telephone or telegraph line; and made it the duty of the forest commissioner to remove debris improperly left and to enforce double the cost as a lien against the property of the one responsible.

Maryland. A general forestry act of April 5, 1906 7 contained important legislation regarding the protection of forests from fire in the state of Maryland. The state for-

Act Mar. 11, 1909, S. L., ch. 52, p. 54,
 Session Laws, Maine, 1911, ch. 35, p. 30,
 Session Laws, Maine, 1913, ch. 86, p. 87,
 Session Laws, Maine, 1913, ch. 177, p. 225,
 Session Laws, Maine, 1915, ch. 68, p. 46,
 Session Laws, Maine, 1915, ch. 196, p. 165,
 Session Laws, Maine, 1915, ch. 294, p. 532,

ester was required to direct fire protection and assist the county authorities in suppressing fires, but the counties were required to pay the cost of fire fighting. Wardens might be appointed by the governor upon the request of the forester, with irregular pay. The willful or negligent firing of the lands of another by an individual or a corporation was made a misdemeanor, and the escape of a fire from the land of one setting a fire to that of another was declared prima facie proof of willfulness or negligence, and the offender was made liable not only for all damages suffered by others, but also for the cost of extinguishing the fire, unless he could prove that his action was neither willful nor negligent. All locomotives and stationary engines used near timber must be equipped with proper appliances.

The sections of this law regarding the appointment and duties of forest wardens were amended by an act of April 7. 1910. 1 At the request of the state forester, the governor might appoint one warden for each 15,000 acres of woodland in any county. Wardens were to have powers of constables as to arrest and prosecution, to have authority to summon all male inhabitants between eighteen and fifty years of age, and to require assistance of horses, wagons and other material, and to have authority to enter private property, plow, tear down fences and set back fires to check fire. Wardens were allowed an annual salary of twenty dollars in addition to per diem of one dollar and fifty cents for each five hours or less of actual fire fighting and twenty-five cents per hour thereafter. Irregular employees were allowed one dollar for each five hours, and twenty cents per hour thereafter. By the amended law the state assumed responsibility for one-half the cost of fire-fighting in any county, and the tearing down of notices posted by the forester was made a misdemeanor, and a failure by any person to report a forest or brush fire to the local warden was punishable by a fine of ten dollars. On April 15, 1912, 2 the law was again amended to make the state's half of the cost of fire fighting payable out of the state forestry fund instead of from the general funds of the state as in the act of 1910.

Session Laws, Maryland, 1910, ch. 161, p. 395.
 Session Laws, Maryland, 1912, ch. 348, p. 509.

Massachusetts. A Massachusetts act of June 5, 1907 ¹ amended the existing law 2 as to the appointment of forest firewards so as to require the mayors and aldermen of cities as well as the selectmen of towns, to appoint annually in March or April a "forest warden"; to require the approval of the state forester before such appointment should become effective; and to subject the appointee to a forfeit of ten dollars for a failure to file with the city or town clerk his acceptance or refusal within seven days of the receipt of the notice of appointment. Forest wardens were charged with the duty of taking active measures to prevent and suppress forest fires. In addition to posting notices, they were required to investigate and report to the state forester regarding the causes, extent and damage of forest fires, the value of forest lands, the extent of cutting operations and the prevalence of insect pests injurious to forest growth. The wardens were given the powers formerly vested in forest firewards as to compelling assistance in the fighting of forest fires and were exempted from actions for trespass while engaged in the reasonable performance of their duties. The state forester was authorized to pay from state appropriations for the services and expenses of forest wardens while engaged in work under his direction, in an amount not greater than thirty-five cents per hour nor in excess of the annual appropriation available for the work of the state The state forester was also authorized forester's office. to expend not exceeding two thousand dollars annually in effecting arrangements for conventions within the state for forest wardens and in paying a part or all of the expenses of those attending not more than one such meeting annually. Portions of the act of June 16, 1886 (Ch. 296) and of the act of April 9, 1897 (ch. 254) inconsistent with this act were specifically repealed.

By an act of May 17, 1907 ³ every corporation operating a steam railroad in Massachusetts was required to main-

Sess. L. Mass., 1907, ch. 475, p. 427. Cf. S. L. 1907, ch. 299, regarding duties of game officers as to fires.
 An Act of May 2, 1913, S. L. Mass. ch. 600, p. 510, amended the act of June, 1907 to require appointment of wardens in January.
 See Rev. L. 1902, ch. 25, sec. 17; ch. 32, secs. 16 to 25; ch. 208, secs. 5, 7, 8, 9, and 124 from S. L. 1874, ch. 228; S. L. 1886, ch. 296 and S. L. 1897, ch. 254.
 Sess. L. Mass., 1907, ch. 431, p. 376. Cf. S. L. 1906, ch. 463, Part II, sec. 247 a recnaetment giving a railroad an insurable interest in property adjacent to its line for which it was responsible.

line for which it was responsible.

tain an approved spark arrester on each locomotive in which wood, coal or coke was used as fuel; to keep all inflammable material cleared from its lands for a distance of two hundred feet on each side of the center of its right of way from April first to December first and to prevent the dropping of hot ashes or coals near woodland or grassland. Every such corporation was authorized upon due notice and under the direction of the local forest warden, to enter unimproved lands adjoining its location and clear away all debris to a distance of one hundred feet from its tracks without being liable for trespass. Railroad employees were required to give notice of all fires, to blow warning signals from engines, and to assist in extinguishing fires so far as was consistent with their duty as employees of a corporation serving the public.

An act of May 14, 1909 ¹ made railroad corporations liable to cities and towns for the reasonable and lawful expenses incurred in the extinguishment of fires negligently or unlawfully set by their employees or agents.

A Massachusetts act of March 14, 1908 ² provided that in towns that should accept its provisions at the next annual town meeting, or that had accepted corresponding provisions of earlier laws, no fires should be set in the open air between April first and December first of each year, except by the written permission of the local forest warden, provided that domestic and agricultural refuse might be burned at a distance of two hundred feet from forest or sprout land if properly attended until extinguished. setting of fires in an approved manner for the suppression of the gypsy and brown-tail moths was excepted. Violation of the act might be punished by a fine of one hundred dollars and imprisonment for one month. If the act were accepted by a majority vote of any town, section twenty-four of chapter thirty-two of the Revised Laws of Nineteen-hundred two (derived from chapter 254 of 1897) was no longer applicable to the town.

On April 6, 1911 ³ the closed season was extended to include the month of March; cities were authorized to accept

Sess. L. Mass., 1909, ch. 394, p. 361.
 Sess. L. Mass., 1908, ch. 209, p. 155.
 Sess. L. Mass., 1911, ch. 244.

the act with provision for the issuance of permits by chiefs of fire departments and city fire commissioners; and persons over eighteen years of age were authorized to maintain a fire for reasonable purposes upon sandy or barren land under proper precautions to prevent its spreading. The amendment also required that any fire in the open be at least fifty feet from any building, gave assistants of the state forester and deputy wardens the power of arrest without a warrant that had been conferred upon the forester and wardens by the act of 1908, and authorized the submission of the question of acceptance of the terms of the act at any annual or special town meeting.

By an act of April 6, 1912 the law regarding the setting of fires in the open was amended so as to make one subject to arrest without warrant and liable to the penalties of the act of 1908 for the offence of "increasing" a fire already set. A revised enactment of the law approved March 21, 1916² made all cities and towns in the state subject to its provisions; and excepted from its penalties fires set within the metropolitan district by direction of a fire prevention commissioner and fires set in a highway by those engaged on public works.

An act of May 21, 1909 3 provided that whenever, during an open season for hunting, the conditions should be such on account of excessive drought, that the governor deemed the use of firearms liable to cause forest fires, he might by proclamation suspend the open season and prohibit the discharge of firearms in or near forest land for such time as he should designate. The discharging of any firearm in or near forest land or the shooting of any wild animal or bird, as to which there was no close season otherwise provided by law, during the period proclaimed was made punishable by a fine of not over one hundred dollars.

An act of March 2, 1910 4 imposed a maximum fine of one hundred dollars or one month's imprisonment for the offense of liberating or flying a fire balloon in any city or town.

Sess, L., Mass., 1912, ch. 419, p. 355, secs. 3 and 4. Act made similar amendments to Chap. 163 of 1882 and ch. 296 of 1886; R. L. 1902, ch. 208, secs. 7 and 8.
 Sess, L. Mass., 1916, ch. 51, p. 36. Laws 1908, 1911 and 1912 repealed.
 Sess, L., Mass., 1909, ch. 422, p. 401.
 Sess, L. Mass., 1910, ch. 141.

An act of April 13, 1910 provided that any town having a valuation of not over one and one-half million dollars. that should, with the approval of the state forester, expend money for apparatus or in the making of protective belts to control forest fires, should receive from the state an amount equal to one-half of such expense, but not to exceed two hundred and fifty dollars. Another act of 1910 ² made it unlawful for any unnaturalized foreign-born person to pick wild berries or flowers, or to camp or picnic upon the land of another in Barnstable or Plymouth counties between April first and December first of any year without a written permit from the owner of the land. Any such person failing or refusing to show a permit might be arrested by a forest officer without a warrant.

On July 18, 1911 3 provision was made for the appointment by the state forester of an assistant, to be known as state fire warden, who should take charge of all forest fire protection work in the state. This warden was required to make an annual report, and deputies of the fish and game commissioners were required to report to him the conditions as to forest fires in their districts and as to their activities in regard to fire control. 4 The state forester was also authorized to designate not over fifteen deputies to assist the state fire warden.

An act of February 25, 1914 ⁵ required that every owner, tenant or occupant of land, or owner of stumpage, who cut or permitted the cutting of timber adjacent to the woodland of another, or a highway or railroad location, must dispose of the slash for a distance of not over forty feet from the border line, as should be required by the local forest Anyone cutting trees or undergrowth within a highway must dispose of the slash in the manner determined by the local warden.

Michigan. A Michigan act of June 18, 1903 6 made the state land commissioner the forest commissioner of the

Session Laws, Mass., 1910, ch. 398, p. 329. See Act Mar. 31, 1914, ch. 262, p. 229, increasing valuation limit to \$1,750,000.
 Act May 3, 1910, S. L., ch. 478.
 Session Laws, Mass., 1911, ch. 722, p. 879.
 See Session Laws, Mass., 1907, ch. 299.
 Session Laws, Mass., 1914, ch. 101, p. 72.
 Session Laws, Mass., 1903, No. 249.

state with supreme authority in all matters relating to the preservation of the forests and the suppression of forest fires. The supervisors of towns, mayors of cities, and presidents of villages were constituted fire wardens for their respective jurisdictions, and a supervisor of a town containing two or more surveyed townships might appoint one or more deputies.

The forest commissioner was required to appoint a deputy, to be known as chief fire warden, at a salary of five hundred dollars per annum. The chief fire warden was given general charge of all forest fire activities in the state. and authorized to select temporary wardens. He was required to investigate the extent and causes of forest fires, and to promote the practice of forestry. It was made a misdemeanor for any male over eighteen years of age to refuse to assist in the suppression of a fire. All wardens were authorized to arrest without warrant any person detected violating the provisions of the act. Wardens and others were to be paid at the rate of two dollars per day, one-third by the state and two-thirds by the local subdivision, but the annual expenditure in a city, village, or surveved township was limited to fifty dollars. Sections nine and ten imposed penalties for the negligent, willful or malicious firing of the woods. Sections twelve and thirteen required locomotives and threshing engines to have proper appliances for the prevention of fires, and required those operating railroads to clear the right of way of inflammable material.

An act of May 22, 1907 ¹ abolished the office of chief fire warden and devolved the duties formerly appertaining to that office upon an official designated as the state game, fish and forestry warden, who should receive an annual salary of three thousand dollars and expenses.

On June 28, 1907 ² the fire protection act of June 18, 1903 was amended so as to require the game, fish and forestry warden to perform the duties of fire warden. This act required the state warden to divide the counties affected by the act into districts and appoint a deputy game, fish and

Session Laws, Mich., 1907, No. 106.
 Session Laws, Mich., 1907, No. 317.

forest warden in each. These deputy wardens, not to exceed ten in number, were to receive an annual salary of one thousand dollars each. They were given the powers of the township wardens authorized by the act of 1903, and were also empowered to direct the efforts of the town wardens and mass them at such points as should be considered necessary for the suppression of fires. An expenditure of ten thousand dollars per annum in special measures for the control of forest fires was authorized. The fifty-dollar limit was abolished, but the provisions in the act of 1903 that no town warden should receive over thirty dollars nor any person employed by a warden over ten dollars per annum were retained.

The Michigan act of June 2, 1909 1 creating the public domain commission directed that the game, fish and forestry warden perform his duties under the direction of such commission, and the amendment of this act on May 1, 1911² provided for the appointment of a forestry warden by the commission who should have charge of all fire control work.

An act of May 13, 1915 3 amending the act of 1903, as modified by act of 1907, required the state game, fish and forestry warden to divide certain forest counties into not over ten districts and appoint a warden in each at a per diem of from two dollars and fifty cents to four dollars. wardens might summon assistance the same as the township fire wardens. They could not be paid for over twentyfive days annually; two-thirds by the municipality and one-third by the state. The act authorized the employment of extra men at state expense during times of unusual drought. Section twelve made it a misdemeanor for any railroad company to fail, to use efficient spark arresters, to keep combustible material cleared for a distance of fifty feet each side of the center of its track, to require employees to report fires, or to concentrate help to extinguish fires.

Minnesota. On April 21, 1903 4 the fire law of Minne-

Session Laws, Michigan, 1909, No. 280.
 Session Laws, Michigan, 1911, No. 294.
 Session Laws, Michigan, 1915, No. 221, p. 371.
 Session Laws, Minn., 1903, ch. 363, p. 652.

sota was changed in several minor particulars 1 and the operation of a portable engine without an effective spark arrester or the depositing of coals or ashes therefrom and leaving the same unextinguished was made a misdemeanor.

The fire warden law was again amended on March 30, 1905 ² to provide that each fire warden be paid two dollars for each day of actual service, and each non-official employee one dollar and fifty cents per day, but, except as directed by the chief fire warden, no warden was to be paid for over fifteen days, no other employee for over ten days in one year, the expenses to be equally borne by the state and the county in which the expense was incurred.

On April 13, 1909 3 the forest fire law of Minnesota was again revised. Under the law as then amended the state auditor was to appoint a forestry commissioner at an annual salary of fifteen hundred dollars who should be a member of the forestry board and have supervision of all fire wardens. Supervisors and clerks of towns, mayors of cities, and presidents of villages were made fire wardens. The commissioner might appoint wardens in unorganized territory and direct any warden to perform duties outside of his district. Wardens must guard against fires, patrol their districts in dry seasons, fix responsibility for fires, and report each fire to the commissioner within three days after its occurrence. They might arrest without warrant and prosecute offenders without giving security for costs. Highway officials were required to assist in the prevention of forest fires.

The commissioner was required to divide exposed districts and employ rangers in dangerous seasons, giving preference to cruisers, woodsmen, game wardens and forestry students, who should receive not over five dollars per day for services, from an emergency appropriation carried in the act. For services in ordinary seasons wardens were to receive twenty-five cents, and other employees twenty cents per hour. The refusal or neglect of a warden, patrol, or summoned person, to assist in the extinguishment of a fire, the leaving of a fire on forest or prairie, the

The provision in this law changing the title of fire warden to forestry commissioner was repealed by an Act of Apr. 19, 1905, S. L., ch. 310, restoring the title of fire warden and increasing the salary of the position to \$1500.
 Session Laws, Minn., 1905, ch. 82, p. 98.
 Session Laws, Minn., 1909, ch. 182.

setting of a fire so as to endanger the property of another. the using of combustible gun wads, the carrying of a naked torch, or the dropping of a lighted match, ashes, or a cigar, would subject the offender to a fine of fifty to one hundred dollars, or imprisonment from thirty to ninety days, or both fine and imprisonment. The malicious firing of the woods might be punished by a fine of five hundred dollars or ten years in prison, or both. The clearing of the ground for a radius of ten feet was required before a camp fire was built near a forest. The law provided that if a fire which had done damage could be traced to land on which the owner had set a fire within three weeks previous to the damage, a presumption of negligence in the setting of the fire would be sustained. The law as amended also required that locomotives have proper appliances, that rights of way be cleared, and that portable engines have effective spark arresters, and that persons or corporations cutting timber for commercial purposes must pile and burn the slashings. 1 The failure of any county attorney or magistrate to act promptly and efficiently upon all violations of the law brought to his attention was made malfeasance in office with a penalty of not less than one hundred nor over five hundred dollars.

In the act of April 12, 1911 ² providing for a reorganization of forest administration in the state of Minnesota, provision was made for district rangers and for additional patrolmen as needed in lieu of the system of town, county, city and village officials as ex-officio wardens. The provision of previous laws that wardens might summon all male persons over eighteen years of age to assist in fire control was retained. The forester was authorized to require railroad companies to maintain a patrol after the passing of all trains in times of particular danger, and upon their failure to comply with his request he might employ such patrol at their expense. The act also made it a misdemeanor for any railroad company to fail to patrol its right of way after trains when necessary to prevent fire, and required them to exercise the highest degree of diligence in guarding

Cf. Session Laws, Minn., 1909, ch. 378, affording railroad companies an insurable interest in property for which they were liable in case of fire caused by railroad.
 Session Laws, Minn., 1911, ch. 125.

against fires. They must use efficient spark arresters, prevent the dropping of live coals, and keep the right of way clear of combustible materials.

It was made a misdemeanor to fail to dispose of slashings in such manner as the forester should require to guard against endangering the property of others, and the forester could dispose of the debris at the expense of the owner. The provisions of the previous law against the careless burning of agricultural or other clearings were retained, as were also the penalties for the unlawful setting of fires. All villages and cities were required to make fire lines about the town and to prevent the starting and spreading of fires. The spreading of a fire from the property of the person or corporation setting it was declared *prima facie* evidence of negligence.

On April 2, 1913 1 several important amendments to the act of 1911 were made regarding fire control. The state forester was authorized to prescribe other measures than a patrol for the immediate control of fires originating from railroads, and railroad operators were made liable for expenses as well as damages caused by fires set by them in violation of the law. Locomotives and other engines were required to have efficient ash pans in addition to spark arresters, and railroad companies were required to keep a complete record of the inspections of all fire protective appliances, which record should be open to inspection by the state forester or his representatives. The act also authorized the inspection by state officials of all engines and boilers operated for any purpose in the vicinity of forest, brush or grass land. During particularly dry periods the state forester might prohibit all burning along a railroad right of way. Railroads were required to maintain suitable fire-breaks along the right of way, and to make such reports as the state forester should request. The setting of fires or leaving of combustible material upon a railroad right of way by third parties was also forbidden.

The act of 1913 gave district rangers discretion as to re-

Session Laws, Minn., 1913, ch. 159.

quiring the disposal of slash, and the provision of the act of 1911 that the cost of disposal of brush should constitute a lien against the land was amended so as to make such cost a lien against the logs or other timber products upon the land, and was otherwise strengthened. Additional provisions were inserted for the burning of slash along public roads; county attorneys were required to act energetically as to all violations of the act, and the fines collected in prosecutions instituted by town, city and village officials appointed by the state forester as an auxiliary patrol force were made available as local fire control funds.

Mississippi. No legislation for the prevention of forest fires was enacted in Mississippi between the year 1900 and to the year 1917. ¹

Missouri. Prior to January 1, 1917 no legislation for the prevention of forest fires had been enacted in Missouri other than laws imposing severe penalties for the willful or negligent setting of fires, except that the law making railroads liable for all damages from fires set and affording them an insurable interest in property along their right of way was supplemented by an act of May 7, 1909 ² providing that if any railroad should fail to remove all grass, weeds, and other inflammable material, from its right of way each year, the material might be removed by the party endangered and double the cost of the removal recovered from those owning or operating the railroad.

Montana. A Montana act of March 18, 1901 ³ required railroads within that state to plow a fire guard on each side of their track between April first and July first of each year and to burn the grass inside of each plowed strip before September fifteenth of each year. A failure by a company to make such guard would render the company liable for all damages and for double the cost of performance of the required work by direction of the county commissioners.

See Code 1906, sec. 4988 (firing the woods.)
 Session Laws. Missouri, 1909, p. 359 Cf. Rev. Stat. Mo. 1909, sec. 4621 (firing the woods.)
 Session Laws, Montana, 1901, p. 163; See minor amendment in act of March 5, 1903, S. L. Ch. 63.

In a general act for the administration of lands owned by the state, approved on March 19, 1909 the state of Montana provided for the appointment of a trained forester who should have general control of the timber lands of the state including fire protection, under the direction of the state board of land commissioners. He was authorized to appoint volunteer fire wardens, and all sheriffs and game wardens and deputies were made ex-officio fire wardens. The appointment of federal forest supervisors and rangers as state fire wardens was authorized. The state forester and all wardens were given the power of peace officers as to arresting offenders against either the state or federal forest laws. They were authorized to summon all males between eighteen and fifty years of age to assist in the control of forest fires under penalty of a fine, but no citizen could be required to assist more than five days in one year. Section fifty-three of this act as amended by an act of March 7, 1911 2 required the piling of brush when timber was cut on state land, and the disposal of all slashing in such manner as to prevent fire.

Nebraska. No legislation for the control of forest and prairie fires was enacted in Nebraska during the first sixteen years of the twentieth century. 3

Nevada. A Nevada general act regarding crimes and punishments approved January 1, 1912 4 contained in section 368 a provision that anyone who should light a fire for any purpose along the road through woodland, upon woodland, or anywhere else in the open, and thereby set fire to any growing timber, forest, or other vegetation, and cause destruction of property not his own to the value of fifty dollars or over, should be guilty of a felony and be imprisoned in the state prison for not less than one year and not more than five years, and in addition might be fined not over ten thousand dollars and not exceeding twice

^{1.} Session Laws, Montana, 1909, ch. 147

session Laws, Montana, 1909, ch. 147.
 Session Laws, Montana, 1911, ch. 118.
 See Rev. Stat. 1913, sec. 8626 (penalties for setting fires). Cf. sec. 2945 requiring the plowing of fire guards along roads.
 See Rev. Laws, Nevada, 1912, sec. 6633. Cf. sec. 6632, which is substantially the same as sec. 4912 of Comp. Laws of 1900 making it a misdemeanor to leave a count fire lugring. a camp fire burning.

the value of the property destroyed, and besides he should be liable to the owner in civil damages for the full value.

New Hampshire. A New Hampshire act of March 10, 1905 ¹ required the chiefs of organized fire departments in cities and towns to act as forest fire wardens, and, when directed by the forestry commission, to maintain a patrol and issue warnings regarding the danger of forest fires. They were authorized to summon persons and require the services of horses and equipment for forest fire suppression. Cities and towns were required to bear the cost of fire control. In towns that had no organized fire department the state forestry commission were required to designate annually a member of the board of selectmen as forest fire warden. Chiefs of fire departments and selectmen were to receive the same rate of pay for warden duty as for other public services.

In unorganized towns the commission might, upon the application of owners of forested land, appoint special fire wardens, define their duties and fix their compensation, one-half of the cost of fire protection to be paid by such owners and one-half by the county. Wardens were made liable to a fine of one hundred dollars to five hundred dollars for failure in duty, and any person failing to report an unextinguished forest fire, not under control or supervision, was made subject to a fine of ten dollars.

A general forestry act of April 9, 1909 ² repealing chapter forty-four of 1893 and chapter ninety-seven of 1905, made the state forester chief fire warden, with the duty of appointing as local fire wardens, men nominated by selectmen, mayors of cities, or private citizens, and such deputy wardens as he should consider necessary. The forester might require wardens and deputies to patrol their districts and remove them for cause.

In unincorporated places the state forester might appoint and remove wardens and deputy wardens, or he might appoint wardens for duty in groups of towns or unincorporated places, or of both.

Session Laws, N. H., 1905, ch. 97, p. 513.
 Session Laws, N. H., 1909, ch. 128.

All wardens might require the assistance of persons, horses, wagons, and other equipment, under penalty of a The compensation of wardens, deputies and those summoned was to be determined by the forestry commission and the forester, with the right of review by the commissioners of the county in case of dispute. The cost of fighting forest fires was to be borne in equal parts by the town, city, or unincorporated place and the state.

Section twelve forbade the building of a fire upon public land without the permission of a state forest officer, or the official in charge of such land, or upon private lands without the consent of the owner or his agent; and section thirteen forbade the kindling of a fire or the burning of brush, during time of drought, in or near woodland without the written permission or the presence of a fire warden. The setting of a fire by throwing down a lighted match, cigar, or other burning substance, was declared a misdemeanor, and anyone setting a fire was made liable for all damage caused another by its spreading. A forfeiture of ten dollars was declared against any person who should fail to extinguish a fire or report it.

By act of March 10, 1909 the governor and council of New Hampshire were authorized to close the game season by proclamation in periods of excessive drought, and the shooting, during the time designated in the proclamation, of any animal or bird not otherwise protected by law could be punished by a fine of fifty dollars.

On April 15, 1911 ² section six of the act of April 9, 1909 was amended to authorize the division of the state into four districts, and the appointment of a district chief in each during eight months 3 of each year to assist the state forester and local wardens in fire protection. Section thirteen, prohibiting the kindling of fire in a forested area during times of drought, was changed to forbid the building of fires between April first and November first. 4 The purchase or condemnation of sites for fire lookout stations.

Session Laws, N. H., 1909, ch. 59.
 Session Laws, N. H., 1911, ch. 166, p. 213.
 See Act May 21, 1913, S. L., ch. 159, removing the restriction of eight months' employment of district chiefs.
 See Act of April 21, 1915, S. L., ch. 142, again amending section thirteen so as to forbid the building of fires in or near woodland without the permission or presence of a forest warden, except when the ground was covered with snow.

the establishment of supply stations for fire protection purposes, the building of trails and fire lines, the employment of paid patrols, the holding of conferences of forest officials, and the use of other means of promoting efficiency in forest work were authorized by this act. ¹

A New Hampshire act of March 31, 1911 ² imposed a fine of from fifty to one hundred dollars for the offense of operating a portable steam mill at any time except when there was snow upon the ground without a spark arrester approved by the state forester, and made it the duty of the state forester to examine such engines and require a compliance with the law.

On April 14, 1911 ³ it was made a misdemeanor, punishable by a fine of fifty dollars, to leave a camp fire burning except upon the sea beach where confined by stone or appliances which would prevent its spreading into forests or fields.

On May 7, 1913 4 railroad operators were permitted to acquire such rights and easements as were necessary to clear combustible material from lands adjoining their right of way for purposes of fire protection under the direction of the public service commission. An act of May 21, 1913 ⁵ required railroad operators to maintain suitable spark arresters and ash pans on all locomotives not operated by oil or electricity, and to require due care by all employees as to fire. The public service commission was given authority to determine whether the appliances used were sufficient, to prescribe regulations as to fire signals and the reporting of fires by railroad employees, and to enforce the provisions of the law as to railroads. This act authorized the state forester to appoint section foremen and other railroad employees as deputy wardens when recommended by authorized officials of a railroad. Such deputies were required to extinguish fires along the right of way and adjacent

See Act of February 25, 1915, S. L., ch. 12, authorizing the state forester to cooperate with the forestry departments of Maine, Massachusetts and Vermont in the building of lookout stations; Act of April 15, 1915, S. L., ch. 127, giving him broader authority in calling conferences of forest employes and authorizing payment of expenses of non-resident experts for conferences, and Act April 21, 1915, S. L., ch. 133, sec. 69, requiring fish and game wardens to assist in fire protection.

protection.
 Session Laws, N. H., 1911, ch. 95, p. 99.
 Session Laws, N. H., 1911, ch. 151, p. 165.
 Session Laws, N. H., 1913, ch. 125, p. 632.
 Session Laws, N. H., 1913, ch. 155, p. 688.

thereto. Railroads were required to pay all just expenses for the control of fires along their lines and to maintain a patrol during dangerous seasons. The act authorized railroad companies to enter upon forest or brush lands adjacent to the right of way for the purpose of clearing inflammable material from such lands for a distance of twenty-five feet from the right of way, after due notice, without incurring liability for trespass. If objection were made by the owner, the clearing could be done only in such manner as the public service commission prescribed. The forestry commission was authorized to enter the right of way at any time to ascertain if the law were being carried out. The requirement in this act that any person, firm or corporation cutting timber or wood adjacent to a railroad right of way must dispose of all inflammable material within twenty-five feet of the right of way within sixty days, except that where operations were conducted after November first the slash could remain until May first following in three counties, and until April first in other counties, was amended by an act of April 7, 1915 1 so as to require a clearing for twenty feet along electric railways and public highways and forty feet along steam railroads.

New Jersey. On April 3, 1902 a new law regarding the control of forest fires was enacted in New Jersey. This act, like the previous ones of 1892, 1894 and 1899 authorized townships to appropriate money and appoint a fire marshal to take charge of fires, but extended this authority to cities and other municipalities. A marshal might be removed, after hearing, by those appointing him, for malfeasance or neglect of duties. Marshals were given all the powers of a constable in a criminal case. Their duties as to a fire were the same as previously, except that they were required to make annual reports as to area burned, damage done, cause of fire and methods of control used.

Section seven of this act forbade anyone to burn a pit of charcoal, or fire brush, leaves, grass, etc., endangering the property of another, without watching, under penalty

Session Laws, N. H., 1915, ch. 100, p. 106.
 Session Laws, N. J., 1902, ch. 139, p. 451; cf. Session Laws 1902, ch. 83, making it a misdemeanor to burn woods, marshes, cramberry bogs or meadows of another.
 Laws of 1892, ch. 119; Laws 1894, ch. 194; Laws 1899, ch. 169.

of a fine of one thousand dollars and imprisonment for three years. Section nine provided that if ten or more freeholders asked an investigation of a forest fire, the fire marshal or constable must apply to a justice of the peace, who must investigate and make a written finding. If he found anyone at fault he must cause his or their arrest and commit or hold to bail for action of the grand jury, and he might bind over witnesses.

Section fourteen of this act provided for the payment by the state to any city, town or municipality of double the amount that such local political division should raise for forest fire protection, provided that the amount to be paid by the state to any one city or town should not exceed two hundred dollars, nor the total for the state exceed ten thousand dollars annually.

A new railroad act of April 14, 1903 ¹ required every railroad to use all practicable means to prevent the communication of fire from its engines to property adjacent to its line under penalty of a fine; made the setting of a fire prima facie evidence of negligence, and afforded the railroad an insurable interest in all property for the burning of which it was liable under the act.

On April 18, 1906 ² the existing laws of New Jersey regarding forest fires were repealed and a new law made effective. The new act authorized the state forest park reservation commission to appoint a state fire warden and fix his salary. The township committee or governing body in every township in the state was required, upon thirty days' notice by the said commissioners, to appoint a suitable person as township fire warden for a term of one year, and upon failure of the town to act, the commissioners were to appoint. Any fire warden might be summarily removed by the commissioners. If required by the state warden, a township warden must divide the town into districts and appoint a warden in each district except the one in which he himself lived, and he might appoint deputies. The state fire warden was given general supervision of all for-

Session Laws, N. J., 1903, ch. 257, p. 645, sec. 56 and 57, p. 673.
 Session Laws, N. J., 1906, ch. 123, p. 221. This act repealed Acts of Nov. 24, 1794; March 3, 1875; March 24, 1875; March 23, 1888; March 23, 1892; May 14, 1894; April 3, 1902; and sec. 130 of the Act of June 14, 1898, regarding crimes.

est fire protection in the state. Town and district wardens were required to establish a patrol as prescribed by the state commissioners, and were given authority to enter upon private lands, summon males between eighteen and fifty years of age, and require the use of horses, wagons, etc., under penalty for refusal. If a fire was burning in any town, the state warden might summon wardens from adjacent towns, but the state must pay for the services of anyone summoned from a town which the fire did not enter.

If the authorities of a town failed to fix the compensation of wardens and others employed, the fire wardens were to receive three dollars per day when fighting fires, and two dollars per day when otherwise engaged; helpers were to be paid one dollar for five hours or less, and twenty cents for each hour over five, and one dollar and fifty cents per day for patrol and other employment. The state was required to pay one-half of all fire fighting costs, and the whole cost if the fire occurred on a state forest reservation. Reports of all fires covering over one acre must be made in ten days. In townships having a warden, open fires could not be set without a written permit from the warden. The act contained provisions similar to earlier laws forbidding the firing of waste or forest land and requiring the watching of charcoal pits. Wardens might arrest without warrant persons taken in the act of violating the law.

A supplementary act of April 14, 1907 ¹ authorized the commission to include parts of several townships in a single fire district and appoint a warden who should be paid jointly by the state and town, and arrangements might be made with railroads as to fire protection in such a district.

On April 13, 1908 ² the act of 1906 was amended to empower the state commissioners to determine whether a warden should be appointed for a whole township or only for a part, to increase the pay allowed fire wardens and others, to require a report of all fires, to except from the section requiring permits the burning of domestic or agricultural refuse at a distance of two hundred feet from woodland or inflammable material, to authorize the setting of

Session Laws, N. J., 1907, ch. 9, p. 21.
 Session Laws, N. J., 1908, ch. 213, p. 422.

back fires, and to lighten the penalties for the unlawful setting of a fire if no damage was done another.

An act of April 20, 1909 provided that whenever a forest fire occurred because of conduct contrary to the provisions of the act of April 18, 1906, the offender might, in the discretion of the forest park reservation commission, be relieved from the prescribed penalties by paying the cost of extinguishing the fire or such part thereof as the commission might determine to be properly chargeable to such party.

On April 12, 1909 ² a new departure was made in New Jersey legislation regarding the prevention of forest fires by railroad locomotives. This law provided that wherever woodland was less than one hundred and ten feet from the roadbed of a railroad using coal or wood for fuel, a fire line, not less than one hundred nor over two hundred feet from the outer rail on each side of the track or tracks and parallel therewith must be prepared by the railroad operator under penalty of a fine. This line was to consist of a strip of land not less than ten feet wide entirely cleared of combustible material and with the bare earth exposed. In swampy land a ditch three feet or more wide, dug to the depth of permanent water, might replace the bared strip. bustible material between the strip and the track must be removed before March first of each year. Trees over three inches in diameter and over six feet apart, pruned of branches to six feet, might be left inside of the strip. The forest park reservation commission might relieve a railroad from the construction of such lines in particular localities, or from a reclearing during subsequent years. Railroads were relieved from an action in trespass for entry on private lands to construct fire lines and remove material, and the decision of the state commission that a line was necessary was declared subject to no appeal by an adjacent owner. marketable wood not belonging to a railroad was to be piled beyond the fire line, subject to removal by the owner. This act was declared unconstitutional in 1913. 3

Session Laws, N. J., 1909, ch. 225, p. 322.
 Session Laws, N. J., 1909, ch. 74, p. 102.
 Vreeland v. Forest Commission, 12 Buchanan 349.

On March 15, 1911 the New Jersey fire law was amended to authorize the state commission to appoint and fix the salaries of six division fire wardens, each of whom should devote his whole time to the forest fire service and who should take precedence over all town and district wardens in the direction of efforts to control forest fires. The forest commission was also authorized, in its discretion, to accept the cost of extinguishment and other expenses caused by the fire, or such part thereof as they should consider advisable, in lieu of the penalty prescribed for a violation of the act, and it was stipulated that if a penalty were paid, the excess of such penalty over the expenses incurred should be paid to the township in which the fire occurred. This act also modified in several particulars the method of paying the costs of fire control and the procedure in prosecutions. The administration of the forest fire laws, especially as to the procedure in fire suppression and in prosecutions, was modified by several amendments embraced in the act of April 17, 1914. 2

A New Jersey act of March 17, 1915 3 declared that any owner or lessee of woodland, or any contractor or other person having authority to enter upon such land, who should suffer the accumulation of brush, tree tops or other litter from felled trees to lie upon the ground in such manner as to facilitate the origin or spread of fires, should be deemed to have made and maintained a public nuisance. by the party responsible for the condition to remove the fire menace promptly, after a notice from the state forest officials that the existing condition came within the act and must be remedied, could be punished by a heavy penalty.

Another act of 1915 4 authorized the maintenance of a forest fire patrol in any locality where the state forest officials considered a patrol essential. The state was required to determine whether any person or corporation was responsible partially or entirely for the existing danger, and each person or corporation found responsible was required to pay a part or all of the cost of such patrol in pro-

Session Laws, N. J., 1911, ch. 36, p. 52. See also Act Mar. 14, 1911, ch. 20.
 Session Laws, N. J., 1914, ch. 247, p. 510.
 Session Laws, New Jersey, 1915, ch. 61, p. 103.
 Act March 30, 1915, S. L., ch. 109, p. 168.

portion to his or its responsibility. Patrolmen might be appointed by the interested persons or corporations, but the appointee must report as required to the state fire warden.

An act of March 15, 1916 authorized the governing body of each township in New Jersey to appoint forest fire wardens for a term of three years each, and contained detailed provisions regarding the imposition, collection and disbursement of fines for forest offenses.

New Mexico. No legislation for the prevention of forest fires, other than the early law imposing penalties for the setting of fires, had been enacted in New Mexico at the close of the year 1916. ²

New York. The New York act of February 19, 1900³ revising the forest, fish and game law, provided that the commission must appoint fire wardens in every town having lands which were a part of the forest preserve and might, in their discretion, appoint a warden in any town in which preserve lands might lawfully be acquired.

Towns might be divided into districts and a warden appointed in each. Where no warden was appointed, the supervisor was required to act. As in the act of 1885, wardens were given authority to destroy fences, plow land, and set back fires, and no action for trespass could be maintained. Any one refusing to assist a warden when summoned was liable to a fine of ten dollars. Wardens must report fires covering more than one acre. Fire wardens and district fire wardens were to receive from the town two dollars and fifty cents, and those summoned two dollars, for each day actually engaged in fire protection. If special fire wardens were appointed by the commission, the state was required to pay one-half of the expenses.

Railroad companies were required to cut and remove all inflammable material along the right of way twice yearly, employ a patrol in dry seasons and early spring, provide "steel netting or iron wire on smoke stacks" of locomotives "and adequate devices to prevent the escape of fire from ash-

Session Laws, New Jersey, 1916, ch. 44, p. 81.
 Statutes 1915, sec. 1516-1518 (firing the woods).
 Session Laws 1900, ch. 20, p. 22, sec. 225.

pans and furnaces." Railroad employees must not deposit coals or ashes along the track, and must report fires, and assist in extinguishing them.

Within an area defined by the act, in the Adirondack and Catskill region, no agricultural or lumbering debris was to be burned between April first and June tenth, inclusive, or September first to November tenth, inclusive. From June eleventh to August thirty-first, fires might be set within the district described with the written permission of a fire warden or district fire warden. If the material to be burned was near forest or woodland, the warden or district warden must be present when the fire was started. and fires were not to be set when there was a heavy wind or insufficient help present to control them. Violation of these provisions was a misdemeanor punishable by a fine of three hundred dollars.

The willful or negligent firing of waste or forest lands of the state, or the suffering of fire to enter such lands, rendered one liable for all damages and subject to a maximum penalty of two hundred and fifty dollars and one year's imprisonment.

The supplemental act of April 23, 1900 1 provided for the appointment of a chief fire warden to supervise and direct the work of town and district wardens, investigate the causes of fires and prosecute offenders. The three expert foresters whose employment was authorized by the latter act were designated as deputy wardens.

On April 11, 1901 ² the forest, fish and game law was amended to authorize the appointment of a chief fire warden at fifteen hundred dollars and expenses, and the employment of expert foresters at an annual expense not exceeding three thousand dollars, and at a rate not exceeding fifteen hundred dollars annually for any forester, the warden or forester to hold office at the pleasure of the commissioner.

An act of April 23, 1901 provided that one-half of the net collection for certain violations of sections 204, 228 and 229 of the forest law not exceeding fifty dollars should be

Session Laws, N. Y., 1900, ch. 607, p. 1337.
 Session Laws, N. Y., 1901, ch. 326, p. 869.
 Session Laws, New York, 1901, ch. 491, p. 1223.

paid to the fire warden or district fire warden on whose information the prosecution was made; and an act of April 24, 1901 authorized town boards to fix the daily wages, not exceeding two dollars, to be paid those assisting in the control of forest fires, and made binding upon towns within the preserve a direction of the forest commission that laborers be employed for the control of fires at not over two dollars per day. This act amended section two hundred and thirty of the forest, fish and game laws so as to make its penalties applicable to the setting of a fire on private lands as well as state lands.

An act of May 3, 1904 ² authorizing the appointment of five assistant state fire wardens at a salary of six hundred dollars and an expense allowance of not over four hundred and fifty dollars per annum each, required that four of them should be assigned to service along railroads within the state forest preserves. It was made the duty of the forest commissioner to establish and maintain a patrol along these railroads during times of unusual danger from forest fires, and with the approval of the governor he might employ additional assistants for such patrol.

Railroad operators were required to transport the fire warden and his assistants without charge, and to pay one-half of the cost of maintenance of a patrol, the other half being charged to the towns in which the patrol was maintained. If no suitable warden was available in a town, the supervisor was required to act as warden and report to the chief warden.

Failure of a railroad company running trains through the preserve to clear its right of way of combustible material or to use proper appliances on smoke stacks and ashpans for the prevention of fire was made punishable by a fine of one hundred dollars for each day of violation.

The act amended section two hundred and thirty of chapter twenty of 1900 so as to make the fact that a fire had crossed intervening tracts no bar to recovery of damages, provided the injury was done within five miles of where the fire was unlawfully set.

Session Laws, New York, 1901, ch. 519, p. 1277.
 Session Laws, New York, 1904, ch. 590, p. 1415; see Laws 1903, ch. 442, p. 1030.

On April 22, 1905 the new sections 224a and 224b added to the forest law by chapter three hundred twenty-six of 1901, and amended by chapter five hundred ninety of 1904. were again amended. The five assistant fire wardens, now called inspectors, who were to serve also as game wardens. were required to inspect and report upon the condition of the fire prevention appliances on all locomotives and The provision that each town pay one-half the engines. charge of an organized patrol was modified to authorize the payment of a proportion of the expense corresponding to its relative holdings in towns in which the state owned more than half of the property.

An act of April 12, 1906 again amended section 224a raising the salary of the chief fire warden to eighteen hundred dollars, giving him authority to commence actions for trespass as well as for forest fire offenses, and authorizing the employment of a foreman of forest laborers.

The existing law regarding fire control, railroad patrol and the prosecution of offenders was reenacted without material change in the revised forest law approved April 14. 1908.3

The amendment of the New York forest act that became effective May 25, 1909 4 imposed a penalty of two dollars for each tree and a fine of twenty-five dollars or thirty days' imprisonment, or both, for the misdemeanor of failing to cut off or lop all limbs and branches of any coniferous tree cut within the Adirondack preserve, unless the tree were for sale or use with the branches on.

This act also changed the title of chief fire warden to auditor of fire bills and accounts, and omitted the provision in section sixty-seven of chapter one hundred thirty of 1908 for the employment of foresters, the duties of these officials having devolved upon the superintendent of forests and the assistant superintendent authorized by section four of the act of 1908.

The act required the commissioner to divide the Adirondacks into four fire districts and appoint a superintendent

Session Laws, New York, 1905, ch. 285, p. 540.
 Session Laws, New York, 1906, ch. 206, p. 433.
 See Laws 1906, ch. 519.
 Session Laws, New York, 1908, ch. 130, p. 299; See Laws 1907, ch. 667, p. 1531.
 Session Laws, New York, 1909, ch. 474, p. 1136.
 Birdseye, Cum. & Gil., ch. 19, pp. 1705-1725.

of fires in each at a salary of fifteen hundred dollars and expenses. It authorized the commissioner to organize companies for the fighting of forest fires, employ men, establish observation stations, adopt fire signal code, prepare trails, and construct ditches and other barriers to the spreading of forest fires.

Section seventy-three imposed a penalty of fifty to three hundred dollars for the setting of a fire, for the burning of fallows, stumps, logs, brush, etc., in any town within the preserve during the two closed seasons of April first to May thirty-first, inclusive, or September sixteenth to November tenth, inclusive, or between June first and September fifteenth, without a written permit from a forest officer and the exercise of the greatest care.

Section seventy-four increased the penalty for the willful or negligent firing of waste or forest lands of the state or of a private person, or the negligent suffering of a fire to escape, from a maximum fine of two hundred and fifty dollars and one year's imprisonment to one thousand dollars and one year's imprisonment, and afforded anyone injured an election to sue for one dollar for each tree killed in lieu of actual damages. It was provided that any money necessarily expended by the state, a municipality or an individual in controling fires set upon waste or forest lands within the preserve counties might be recovered as single damages from the one causing the fire, in addition to damages of one dollar for each tree killed.

Railroad companies operating within the preserve were required to maintain an efficient patrol at their own expense from April first to November first of each year unless otherwise directed by the commissioner of forests. If a company failed to maintain such patrol the commissioner might employ men and charge the expense to the railroads. If a fire started on or extended over from the lands or right of way of a railroad company or any person or company using, manufacturing or producing coal, wood, oil, fuel, or other inflammable material thereon, for other than domestic purposes, the escape of fire was to constitute prima facie evidence that the fire started or extended through negligence.

A new section, 75a, was added to the law authorizing the

governor to proclaim camping or the taking of fish, fowl. birds or quadrupeds in the forests of the state dangerous in periods of drought, and to forbid all activities of this character for a certain period under penalty of one hundred dollars or thirty days' imprisonment. He might extend the open season for a time equal to that of the closing.

On June 11, 1910 the provision in the section of the Consolidated Laws of 1909 2 declaring it a felony to willfully set fire to the property of another was amended by adding "or willfully set fire to, or assist another to set fire to any wild, waste or forest land, belonging to the state or to another person whereby such forests are injured or endangered," and by increasing the penalty to a maximum fine of two thousand dollars or imprisonment for not over ten years, or both.

On June 14, 1910 3 the law requiring railroad companies to clear combustible material from their rights of way was amended so as to specifically cover persons and companies, other than railroad companies, operating a railroad.

An act of June 23, 1910 4 amended the town law regarding the prevention and control of forest fires, vesting supervisors in towns outside the preserve with the same powers and duties as were vested in wardens by the forest, fish and game law, and requiring each town board to authorize one of its members to act in the absence of the supervisor and to fix the compensation of patrolmen and others.

On June 24, 1910 5 the number of fire districts in the Adirondack preserve was increased from four to five, the towns enumerated in which permits for the burning of brush were to be required, and the penal provisions regarding the setting of fires amended in minor particulars.

By an act of April 16, 1912, 6 revising and reenacting practically the whole forest law of the state, the provisions of the previous law regarding the prevention, setting and

Session Laws, New York, 1910, ch. 474, p. 914.
 Consolidated Laws, 1909, ch. 40 (from Laws 1909, ch. 88, sec. 1421.).
 Session Laws, N. Y., 1910, ch. 476, p. 916 (Am'd sec. 72, ch. 24, C. L. 1909).
 Session Laws, N. Y., 1910, ch. 630, p. 1626 (Am'd sec. 89, ch. 62, C. L. 1909).
 Act Apr. 15, 1912, ch. 371, p. 722.
 Session Laws, N. Y., 1910, ch. 657, p. 1753.
 Session Laws, N. Y., 1912, ch. 444, p. 883. This act with chap. 318 of 1912 revised throughout chapter 24 of the consolidated laws of 1909 which comprised the forest, fish and game law of the State of New York.

extinguishment of forest fires received no important amendment.

Several amendments to the fire provisions of the conservation law were made by an act of May 24, 1913. 1 section ninety-four the clerk of the board of supervisors of each county was substituted for the county clerk as the official to whom the commission should transmit statements as to the amount of fire expense to be paid to the state by each town as its half of the cost of fire-fighting for the previous year in the said town, and in section one hundred three a provision was inserted relieving railroad operators from clearing away inflammable material from more than fifty feet on each side of the center line of the right of way, substituting "corporation" for "railroad company" and making two other minor changes. Section ninety regarding the disposition of logging debris in certain counties received important amendment. The words "fell" and "felled" were substituted for "cut," and the expression "lop-off" as describing an alternative method of disposing of brush was omitted.

The leaving of limbs upon tree tops above the point where the trunk or main branch had a diameter of not over three inches was authorized, and it was provided that the conservation commission might by resolution authorize the cutting off of limbs at another time than at the time of felling the tree, or even the abrogation of this requirement at such times and places as they should determine that no danger to neighboring or other forests would arise through the temporary or permanent omission of the requirement. The violation of the provisions of the section was made a misdemeanor punishable by a fine of twenty-five dollars and thirty days' imprisonment, in addition to a penalty of two dollars for each tree felled and not limbed as required.

Section ninety-eight dealing with the setting of fires on waste or forest land was amended by the omission of the provision declaring such a firing a misdemeanor where the damage done was under twenty-five dollars, and a felony where it was over this amount; by the limitation of the

^{1.} Session Laws, N. Y., 1913, ch. 723, p. 1839.

penalty of ten dollars for each tree destroyed to trees three inches or upwards in diameter at breast high, and by other minor amendments.

On May 16, 1913 ¹ the town law was amended so as to authorize town boards to borrow money to meet an existing or prospective indebtedness for the patrol of forests or the control of fires.

In the general forestry Act of May 9, 1916 2 the New York law regarding the prevention and control of forest fires was again revised and reenacted. The new law provided that in fire towns, which were comprised within the forest preserve areas and were specifically named in the act, the forest commission must maintain a force of forest rangers, observers and firewardens, and the equipment necessary to prevent and extinguish forest fires. These towns were to be grouped into fire districts each in charge of one of the fire district forest rangers. The Commission was authorized to establish a district forest fire protective system in such other parts of the State as it should deem necessary wherever there was a contiguous forest area of seventy-five thousand acres or upward. Upon failure of the town supervisor to certify a list of wardens before February 15 of any year the Commission was authorized to appoint the necessary wardens. In all towns other than the fire towns the town supervisor was charged with the duty of preventing and extinguishing fires and was required to report in writing on or before February 15 of each year the names of the fire wardens appointed by him for that year. Every State official having a duty to fight forest fires might temporarily employ men at fifteen cents per hour and foremen at twenty-five cents per hour for fire fighting and might summon any male person of eighteen years or over to assist in fire control.

Section 53 contained the existing provision of law authorizing a loan of one hundred thousand dollars in any year at the discretion of the Governor to enable the Commission to control forest fires; required the payment of all salaries and expenses for fire fighting in the fire towns by the State, but provided for a rebate to the State by the

Session Laws, N. Y., of 1913, ch. 571, p. 1551.
 Session Laws, N. Y., 1916, ch. 451, p. 1189.

respective fire towns of one-half of the expense, other than for the salaries and expenses of regular employees incurred within each town for fire protection; authorized the payment of expenses incurred by anyone in fire fighting; provided for the recovery in a civil action against the person at fault, of the expenses incurred in fighting fire, unlawfully caused; and authorized towns other than fire towns to raise funds for the control of forest fires.

Section 54 authorized the governor, during dangerous fire seasons, to proclaim the pursuits of hunters, fishermen, trappers and campers, contrary to the public interest and, therefore, unlawful within such portions of the fire towns as he should designate, and reenacted in modified form the existing requirements as to the lopping of the branches from evergreen trees within the fire towns. The provision of sections 97 to 100 of chapter 444 of 1912 were greatly simplified and incorporated in Section 54. This section also forbade the sending up of unpiloted hot air balloons or the depositing of inflammable material within a highway within the fire towns, and authorized the Commission to require the removal of inflammable material within twenty-five feet of the right of way of a railroad or within twenty feet of a public highway within the fire towns.

Section 55 stated in much simplified form the essential features of the existing law as to the precautions to be taken and liabilities to be incurred by railroad companies operating through forest land.

The five day notice from the conservation commission for the enforced removal of a defective engine contained in Section 105 of chapter 444 of 1912 was reduced to fortyeight hours in paragraph 22 of section 50 of ch. 451 of 1916.

Paragraph 6 of section 54 took the place of section 106 of ch. 444 of 1912 as to the screening of portable steam engines and boilers in forest land.

Section 56 declared that one burning timber owned by the state should be liable for treble value in addition to a penalty of ten dollars for each tree killed; that one burning private or municipal lands should be liable for actual value for negligent burning and for one dollar per tree in case of willful burning. The previous rule that the fact that a fire had crossed intervening lands, would not bar recovery, and the presumption of negligence as the cause of a fire starting on a railroad right of way, and that a fire was set by the owner if originating on land as to which a permit for burning was required, were retained.

Section 54 made the violation of any provision of the article a misdemeanor punishable by a fine of not less than ten nor more than one hundred dollars, or imprisonment for not less than ten nor more than one hundred days, imposed a penalty of two dollars for each tree as to which the tops were not lopped, one of twenty-five dollars for each day that any town failed to provide the necessary funds for prevention and extinguishment of forest fires, one of ten dollars per day for each mile that a railroad failed to patrol or clear right of way, one hundred dollars per day for each engine operated without proper fire protective devices, \$25.00 per day per place for each failure of railroad to examine each locomotive daily and record result, and \$100 for failure to show record to inspector, and for depositing live coals or ashes, one hundred dollars for each offense. was made a misdemeanor to interfere with supplies maintained for fire protection purposes. The willful setting of a fire or leaving of one so as to endanger the property of another was declared a felouv.

North Carolina. On March 9, 1915 a comprehensive forest fire law was enacted in North Carolina. This act authorized the state geological board to take such action as it might deem necessary to provide for the prevention and control of forest fires in any and all parts of the state and to arrange with the national forest service for the protection of the forested watersheds of streams within the state. The forester of this board, as ex-officio state forest warden, might appoint one township warden and one or more district forest wardens in each township of the state in which the amount of forest land and the risks from forest fires made such appointment advisable. Wardens were required to take active measures to protect the forests, and

Session Laws, N. C., 1915, ch. 243, p. 319. Cf. Session Laws, N. C., 1913, ch. 56, requiring disposal of slash on watersheds of municipal corporations.

might arrest without warrant a person found in the act of violating the forest laws. In seasons of drought the forester might establish a patrol, and wardens might require, under penalty of a fine, the assistance of male persons between eighteen and fifty-five and the use of horses and other property. Wardens were to receive from the state twenty cents per hour for actual service, and reasonable expenses, and temporary assistants might also be paid from state funds. The existing laws of the state regarding the setting and leaving of fires were reenacted with minor modifications as sections eight to eleven of this act. Under a general provision in section ten, railroads were required to use care in burning over their rights of way.

North Dakota. A North Dakota act of March 11, 1909 ¹ created the office of forest fire warden. It was made the duty of the supervisor in each civil township in the state having at least twenty-five per cent of its total area in woodland to act as forest fire warden. Annually in March the supervisors were required to divide the township into three fire warden districts with a warden for each. For unorganized townships having at least twenty-five per cent of woodland, the board of county commissioners were required to appoint two or more wardens for each township and to designate the district of each. Wardens were required to take active steps to control fires, might summon any number of able-bodied men to assist in fire control, and were required to investigate the causes of fires and make a complaint against any person unlawfully setting fires. Wardens were to receive three dollars, and employees two dollars and fifty cents, per day, for actual services, payable by the towns except where unorganized, and there by the county.

Ohio. Aside from the act of May 22, 1911 (S. L. vol. 102, p. 108) amending section 8920 of the General Code of 1910 so as to make railroad operators liable for all fire damage caused by the railroads irrespective of due care in the equipping or operating of engines, no specific legislation

^{1.} Session Laws, North Dakota, 1909, ch. 125, p. 135.

for the prevention and control of forest fires was enacted in Ohio during the first sixteen years of the twentieth century.¹

Oklahoma. No special forest fire legislation had been enacted in Oklahoma prior to January 1, 1917. ²

Oregon. An Oregon act filed in the office of the secretary of state, February 22, 1905 3 required each county court in the state to appoint as fire rangers the persons named in the application of any owner or owners of property, which rangers should be paid by such owners. These rangers must take an oath of office and might be removed for cause by the county court before the expiration of their vear of office.

During the closed season from June first to October first of each year no one was to set out a fire without a written permit issued by the county clerk. The permit must be limited to three consecutive days, not less than ten days from its date, and a fire must not be set if the wind was unfavorable nor without sufficient help to control the fire. Fire rangers might arrest without warrant violators of the act.

During the closed season it was a misdemeanor to operate any spark emitting engine without a spark arrester, or for a camper, farmer or other person or corporation to set an open fire for any purpose except as prescribed above. Heavy penalties were imposed for the setting of a fire on another's land or permitting one to escape, or for the using of combustible gun wads.

The Oregon act filed February 23, 1907 4 creating a state board of forestry, contained very detailed provisions regarding forest fires, and repealed chapter 227 of 1905. The board was authorized to appoint wardens, who were to have the powers of peace officers as to arrests. Not only was the board required to appoint as wardens persons recom-

See Annot. Code 1910. Page & Adams, sec. 7496-98, 8966-8972, railroad fires; 12436, fires maliciously or negligently set. Cf. Act Mar. 17, 1906, S. L., vol. 98, p. 54, which in general terms would authorize an investigation of the causes of fires by the state department of forestry.
 See General Statutes, 1908, Elder. Sec. 1406 and 1407, misdemeanor to wilfully or negligently fire woods or prairies; Comp. L. 1909, Snyder, p. 184, sec. 59 and 66. Rev. Laws, 1910, sec. 2769.
 Session Laws of Oregon, 1905, ch. 227, p. 397.
 Session Laws, Oregon, 1907, ch. 131, p. 241.

mended by private parties or counties who should pay their salaries, but they might appoint others when they deemed such appointments necessary, including resident officers of the national forest service. State and county officials whose duties made their services as wardens particularly desirable were required to accept appointment as wardens when requested.

The act made it unlawful to fire timber slashings between June first and October first of each year without a permit from the state warden. Although the burning of small quantities of slashing under adequate precaution was excepted, the escape of fire was to be prima facie evidence of a violation of the act which carried a maximum fine of five hundred dollars or imprisonment for three months. Heavy penalties were prescribed for the firing of the woods of another, or for willfully or negligently permitting fire to The building of camp fires in dangerous places or the leaving of them burning, the using of combustible gun wads, the operation of an engine without proper spark arresters, or the operation of a locomotive over a right of way that had not been cleared of combustible material, was forbidden under severe penalties. Clatsop and Tillamook counties were excepted from the requirement that slashings be burned annually under permit.

By an act filed February 24, 1911 the duties prescribed in the act of 1907 for the forest, fish and game warden were imposed upon the state forester authorized by the later act, and the appointment of local wardens was also vested in the forester. The powers and duties of wardens specified in the act of 1907 were enlarged. Local wardens were authorized, under the direction of the state forester, to issue and revoke permits for the setting of fires, and the state forester was authorized to require the owners to properly safeguard dangerous slashings which were declared public nuisances. The requirements of the act of 1907 as to the building and leaving of camp fires, the operation of locomotives and other engines 2 and the burning of slash-

Session Laws, Oregon, 1911, ch. 278, p. 475. See Am'd S. L. 1915, ch. 69, regarding destruction of fire notices.
 See Act February 23, 1909, ch. 150, requiring railroad operators of lines east of the Cascade Mountains to mow right of way yearly.

ings, were modified in several particulars. In times of especial danger the governor might prohibit absolutely the use of fire as mentioned in the act, and suspend the open season for hunting during a designated period. Offenders against the provisions of the act were made liable not only for double damages, but also for expenses incurred in control of fire caused, and a district attorney failing in his duty under the act might be fined one thousand dollars.

An act filed February 21, 1913 made every county judge in Oregon ex-officio a fire warden for his county, and authorized him to issue and revoke permits for the burning of slashings and brush lands between June first and October first. A permittee must give a twenty-four hour notice to neighbors of the time when he intended to set the fire. An act filed February 26, 1913 ² required every owner of timber land in the state to provide during the fire season a patrol satisfactory to the state board of forestry. Upon neglect of an owner to furnish such patrol the state forester might provide a patrol at an annual cost of not over five cents per acre, which should constitute a lien upon the property and be collected by county officials in the succeeding tax levy. Residence by an owner upon or within one and one-half miles of a tract was to be considered a sufficient patrol. Timber land was defined as land having upon it sufficient timber to constitute a fire menace, and an "adequate control" was defined as one equal to that maintained by one-half of the timber owners patroling similar lands in the same locality.

Pennsylvania. A Pennsylvania act of May 2, 1901³ provided for the enforcement of the act of July 15, 1897, whenever the county authorities failed to appoint efficient persons to detect and punish those responsible for forest fires.

An act of March 31, 1905 4 amended the act of March 30, 1897, so as to require constables acting as fire wardens

Session Laws, Oregon, 1913, ch. 90.
 Session Laws, Oregon, 1913, ch. 247. See S. J. R. No. 26, S. L. 1915, p. 613 re this

Session Laws, Penn., 1901, No. 86, p. 119.
 Session Laws, Penn., 1905, No. 65, p. 89. This act was repealed by an Act of April 29, 1909, S. L., p. 290.

to resort to fires approaching the forests of their own town. increased the pay of wardens and those assisting, increased the penalty for a refusal to assist a constable, and increased the limit of expenditure to be incurred in one year by a county.

On April 25, 1907 provision was made for the payment by the state of two-thirds of the expense incurred in the extinguishment of forest fires, and the duties of fire wardens were more explicitly defined, all constables and employees of the department of forestry being declared ex-officio fire wardens. An act of June 12, 1907 2 contained very strict provisions against the setting of fires in forest land in which there were producing oil or gas wells. The act also required the annual removal of all inflammable material for a distance of one hundred feet from each oil or gas well or rig set for drilling purposes, or within one hundred feet of the right of way of any railroad crossing such forest land. also required that the right of way of railroads passing through forest land on which there were producing oil and gas wells be cleared at least once annually of all inflammable materials, and provided a penalty for a failure to remove materials as required, to use efficient appliances to prevent the setting of fires or to provide sufficient trackmen for the prompt suppression of fires which might be set by a locomotive.

On April 29, 1909 3 the act of March 31, 1905, requiring constables to act as fire wardens was repealed, and on May, 13, 1909 provision was made for a force of forest fire wardens distinct from the force of peace officers. The commissioner and deputy commissioner of forestry were made solely responsible for the forest fire protection work of the state, and were authorized to appoint a district fire warden in each borough and township. Fire wardens were authorized to employ men to suppress forest fires and to compel assistance when necessary. Wardens were allowed twentyfive cents, and others fifteen cents, per hour while engaged in forest protection work. Employees of the department of

Session Laws, Penn., 1907, No. 86, p. 101.
 Session Laws, Penn., 1907, No. 334, p. 527.
 Session Laws, Penn., 1909, p. 290.
 Session Laws, Penn., 1909, No. 601, p. 781.

forestry were made ex-officio wardens, but were required to perform such service without additional compensation. District wardens were authorized to employ assistant fire wardens at twenty cents per hour who were to have the powers and duties of district wardens. All expenses of fire control were to be paid by the state, which was to collect at the end of each calendar year from each county one-fifth of the cost of fire extinguishment in that county for the year.

The act authorized the employment of a forest patrol during the months of April and May and from September fifteenth to November fifteenth each year if the commissioner of forestry considered the conditions such as to make a patrol advisable, the expense of such patrol to be borne in the same manner as that for actual fire extinguishment. Wardens were empowered to arrest without warrant, persons detected violating the law.

An act of May 5, 1911 provided penalties of not over one thousand dollars' fine or not over six months' imprisonment, or both, for the willful, negligent or malicious firing of state forest reserves, and repealed all inconsistent acts or parts of acts; and an act of June 9, 1911 2 prescribed the same penalties for the building of a fire in the woodlands of another, or for negligently or willfully permitting a fire to be communicated to such woodland.

An act of July 22, 1913 authorized the cooperation of the state forestry force with local fire protective associations in the prevention and control of fires; and an act of April 21, 1915 4 extended the powers and duties of foresters. rangers and other forest employees.

To provide for more efficient protection of forests from fire, a Pennsylvania act of June 3, 1915 ⁵ created a bureau of forest protection in the state department of forestry, provided for wardens, for a penalty for failure to assist a warden when summoned, for severe penalties for firing the woods, and required railroad operators to adopt such

Session Laws, Penn., 1911, p. 163.
 Session Laws, Penn., 1911, p. 861.
 Session Laws, Penn., 1913, No. 432, p. 906.
 Session Laws, Penn., 1915, No. 77, p. 156.
 Session Laws, Penn., 1915, No. 353, p. 797, (Sec. 8, railroads). Cf. Act Mar. 6, 1915, S. L. p. 260 prohibiting the sale of fire balloons.

precautionary measures as the chief fire warden and the public service commission should require. An act of June 4, 1915 authorized the state officials to cooperate with counties, towns, municipalities and private parties in forest fire protection, and one of June 15, 1915 2 authorized the incorporation of non-profiting companies for the preservation of forests.

Rhode Island. The Rhode Island act of April 6, 1906³ providing for a commissioner of forestry, required him to obtain and publish information regarding "the means of protecting the forests from fire."

By an act approved April 23, 1909 4 the legislature of Rhode Island provided that no fire should be set in the open air within that state between April first and December first without the written permission of a town forest warden. except that domestic, agricultural and other waste, or debris from railroad rights of way, might be burned on plowed fields, or on lands devoid of inflammable material, if not within one hundred feet of forest land, nor within fifteen feet of a building. Town wardens were authorized to arrest without warrant persons detected violating this act.

An act of May 7, 1909 5 required the annual appointment of a forest fire warden by each town council, and the appointment of two or more district wardens if the town contained over four thousand acres of woodland. wardens were required to take active measures to prevent and suppress forest fires, and given authority to summon all able-bodied men between eighteen and fifty years of age, and to require the use of horses, wagons and other property under penalty of a fine. A patrol by districts might be required in time of drought. Fines and imprisonment were to be imposed for the willful or negligent firing of the woods. Town wardens were allowed twenty-five cents, district wardens twenty cents and temporary employees seventeen

Session Laws, Penn., 1915, No. 361, p. 815.
 Session Laws, Penn., 1915, No. 427, p. 986.
 Session Laws, R. I., 1906, ch. 1332.
 Session Laws, R. I., 1909, ch. 395. This Act was amended by Laws 1910, ch. 580, to make the closed period begin March 1st and to authorize district forest war-

dens also to issue the required permits.

5. Session Laws, R. I., 1909, ch. 451. See Act Apr. 14, 1916, S. L., ch. 1396, p. 173, increasing the annual appropriation for the purposes of the Act from \$1500 to

cents per hour for fire fighting, and all persons seventeen cents per hour on patrol work; the cost of patrol and fire fighting to be paid in equal parts by the state and the town. No warden was to receive pay for over three hundred hours in one year, nor employee for over one hundred, except as a town charge under a special authorization by its council, and the amount to be expended in any one town annually by the state was limited to one hundred and fifty dollars. The act specified that no action of trespass should lie against wardens for acts done in the performance of their duty, and they might arrest without warrant those detected violating the law. They were required to report upon fires, and authorized to subpoena witnesses for an investigation as to the causes of fires. Fines were to be divided between the complainant and the town.

The act authorized any railroad company, upon due notice, to enter unimproved land adjoining its right of way and, at its own expense, subject to supervision of the town warden, clear away inflammable material for a distance of one hundred feet each side of its track without liability for trespass.

The act of May 7, 1909, was amended on May 2, 1910 1 to require the town council to notify the commissioner of forestry as to appointment of a warden, to provide that towns having less than four thousand acres might have two or more districts in the discretion of the council, and to substitute "April or May" for "March or April" as the time for appointment.

On March 31, 1911 2 the law was again amended to provide that whenever two or more adjoining towns having eight thousand or more acres of woodland, or forest owners in two or more towns having four thousand or more acres, should establish a lookout station connected with the local telephone system for fire protection purposes, as approved by the forest commissioner, a watchman should be appointed for not exceeding three hundred hours annually, to be paid in equal shares by the state and the town protected. However, only two lookouts in one county were entitled to

Session Laws, R. I., 1910, ch. 587.
 Session Laws, R. I., 1911, ch. 664, p. 21.

public money. The compensation of town and district wardens was increased to thirty cents per hour, employees to eighteen cents, and wardens and others on patrol to twenty cents. Wardens were also allowed ten dollars and district wardens five dollars annually, in lieu of incidentals. The amount of state expense allowable in a town was increased to three hundred dollars, and a minimum of five hours and a maximum of one hundred hours established for Three-fourths of the expense incurred by a warden for a telephone might be paid in towns having over one thousand acres of woodland.

South Carolina. A South Carolina act of February 9, 1900 provided that when a forest fire occurred it should be the duty of every member of the board of assessors of the township in which the fire occurred to immediately call out as many, subject to road duty, as they considered necessary, for the purpose of extinguishing the fire. For refusal to obey the call, the same penalty as for refusal to work upon the public roads might be imposed, and for all time given in response to such a call corresponding deduction was authorized from the time required of such person on public road work.

South Dakota. An act of February 23, 1911 2 providing for the administration of school and other public lands of the state of South Dakota, authorized the forest supervisor, who might be appointed by the commissioner of school and public lands, to employ such assistance as he should deem necessary for the control of forest fires on or near state public lands.

April 13. Tennessee. A Tennessee act approved 1907³ imposed a fine of from one hundred to two hundred and fifty dollars for the willful or negligent setting or leaving of a fire upon wooded country or forest belonging

^{1.} Session Laws, S. C., 1900, No. 248. See Crim. Code S. C., 1912, sec. 215-216 (pen-

Session Laws, S. C., 1995, August 24.
 Session Laws, S. C., 1995, August 24.
 Sess. L., S. Dak., 1911, ch. 224, sec. 78 on p. 374. See also Penal code, S. Dak., 1903, secs. 472-473; and the provisions for town fire guards for the prevention of prairie fires in art. 24, ch. 13, polit. code of 1903, as amended by act Feb. 28, 1905, S. L., ch. 111, p. 157, and act March 8, 1915, S. L., ch. 193, p. 381.
 Session Laws, Tenn. 1907, ch. 397, p. 1336. See Code of 1896, Shannon, secs. 3017-3018, cf. sec. 6496, par. 11.

to the state or the United States, or for the deliberate or careless setting or leaving of a fire upon other land which should be communicated to such state or federal land. Back fires set in good faith were excepted. The act also made it a misdemeanor for any one to willfully, negligently or carelessly set a fire, either on his own land or that of another, which should injure or endanger the property of another; or to leave an unextinguished fire or carry a naked torch on or dangerously near to forest land.

It was the duty of railroads to prevent fires spreading from their rights of way to adjacent woodlands; to prevent the dumping of fire or live coals in the vicinity of woodlands or other lands liable to be overrun by fires and to require employees to report fires along the right of way or extinguish them. Violation by a railroad company of the provisions of the act was made a misdemeanor. Those engaged in the construction of railroads were made liable for damages caused to timber and liable to a fine for failure to extinguish fires.

Operators of logging locomotives were required to have them equipped with suitable spark arresting devices under penalty of conviction of a misdemeanor if damage was suffered by any one because of their failure to use the device.

The firing of a charcoal pit, brush, grass, leaves, or other material whereby the property of other persons was endangered or destroyed without the maintenance of a competent watchman from the setting to the extinguishment of the fire was also declared a misdemeanor.

The act required that during dry and dangerous seasons, the Department of Game, Fish and Forestry use such means as it should deem necessary for the prevention or suppression of forest fires, and each warden was authorized to call to his assistance in emergencies any able-bodied male person over eighteen years of age, to be paid at the rate of three dollars per day. Failure of a warden to perform his duty or of one summoned to assist at a fire were both made misdemeanors subject to a fine of not over one hundred dollars or imprisonment for not over three months. The state warden and his special deputy might visit portions

of the state where there was particular fire danger and might receive free transportation over railroads for inspection of their rights of way. Non-residents of the state were permitted to camp for pleasure within the state forest reserve only on condition that they employ a state warden who was to be held responsible as to the prevention of the escape of camp fires.

A new act of May 17, 1915 ¹ provided for the preservation, propagation and protection of game animals, wild birds and fishes, by the establishment of a Department of Game and Fish. The act directed the governor to appoint a state game and fish warden for a term of two years at a salary of twenty-five hundred dollars per annum and authorized the employment of a clerk at twelve hundred dollars per annum. The state warden was authorized to appoint deputy game and fish wardens in each county who should hold office at his pleasure. All sheriffs, deputy sheriffs, constables, city marshals and policemen were made ex-officio deputy game and fish wardens for their official territory.

Section twenty-four of this act declared that whereas the destruction of the forests was detrimental to the increase of the animals, birds and fishes protected by the act, it should be the duty of all wardens to caution sportsmen as to the danger from fire, to extinguish fires and to give notice of fires to all interested parties.

Since section fifty-four of this act repealed all existing laws as to fish and game, with certain exceptions among which the act of April 13, 1907 was not given, it is probable that the said act of 1907 is no longer in force and that Tennessee had no adequate forest protection law at the close of the year 1916.

Texas. A Texas act of 1907 ² providing for a game, fish and oyster commissioner, required such commissioner and his deputies to act as fire commissioners and to prevent and extinguish forest, marsh and prairie fires and to report to all interested parties when fires were beyond their con-

¹ Session Laws, Tenn., ch. 152, p. 423. 2. Session Laws, Texas, 1907, p. 257, sec. 12.

trol. The protection from fire of lands held by the state for forestry purposes, and the study of forest fire problems. was authorized in general terms by the act of March 31, 1915 providing for a state forester.

Utah. Prior to January 1, 1917, no provision for the prevention and control of forest fires has been made in Utah other than the early acts providing penalties for the unlawful firing of the woods. 2

Vermont. A Vermont act of December 9, 1904 ³ making general provision for forest administration within the State, made the first selectman of each town forest fire warden therein, and provided for payment for such services at the same rate as for other town duties. Persons called out by him were to be paid fifteen cents per hour, but no town was to be liable in any one year for over five per cent of the grand list. If greater expenditures were authorized by the state forestry commissioner, the additional expense was to be paid by the state. A penalty of ten dollars was fixed for failure to respond to a fire call. The forestry commissioner might appoint a warden annually in any unorganized town or gore who should have the same powers and duties as town selectmen, but all expenses in such localities were to be paid by the state and were not to exceed one hundred dollars for one year in one such town or gore.

A fine of fifty dollars, or thirty days' imprisonment, was provided for the leaving of a fire in or adjoining woods. Wardens were required to report all fires at the end of each year. Anyone neglecting his duties under the act, tearing down notices, or disobeying any provision for which no special penalty was provided, could be fined ten dollars.

An act of December 18, 1908 declared that anyone who should set a fire upon the land of another and thereby cause damage might be fined from ten dollars to one hundred dollars, or be imprisoned from thirty to sixty days.

Session Laws, Texas, 1915. ch. 141, p. 220.
 See Compiled Laws, 1907, sec. 4429 and 4478 (public land).
 Session Laws, Vermont, 1904, No. 16. See Act Dec. 18, 1908, S. L., ch. 11, state foreser to be fire warden. The language of section 3 regarding the powers and duties of the first selectmen was modified in sec. 356 of the Public Stat. of 1906, and amende 1 in minor particulars by an Act of January 6, 1909, S. L. No. 14: and again by Act of January 27, 1911, S. L., No. 20.
 Session Laws, Vt., 1908, No. 166.

A Vermont act approved October 21, 1908 declared that whenever, during the open season for hunting, it should appear to the governor that by reason of drought the use of fire arms in the forest was liable to cause fires, he might, by proclamation, close the season for a designated time, during which all provisions of the regular closed season as fixed by the legislature should be effective; and the shooting. during the time covered by such proclamation, of any animal or bird for the hunting of which no regular closed season had been provided, was made punishable by a fine of one hundred dollars and costs. It was provided that if the period closed by proclamation included the regular open season for deer hunting, the governor should provide for an open season of six consecutive days at some other time in the same year as an open season for the hunting of deer. On October 26, 1910 2 there was added to section one of the act of 1908 a provision authorizing the reopening by the governor of the period closed by proclamation, except that the reopening as to deer must be effected in the manner fixed by the act of 1908. An act of January 13, 1911 made all fish and game wardens ex-officio forest fire wardens, with all the powers and duties of the regular fire warden.

On January 27, 1911 4 the compensation of selectmen and wardens in unorganized towns for forest fire duties was fixed at two dollars per day, and they were required to report all fires fully within two weeks after discovery. This act authorized any fire warden, with the permission of the state forester, to establish a patrol in dangerous localities, the expense of which was to be paid the same as that of fire fighting. Two dollars a day was allowed a warden for the posting of notices, and the penalty for a failure in his duty was made twenty-five dollars. The payment by the state of the expenses of wardens in attendance at local meetings for the discussion of fire problems was authorized; as also the maintenance at state expense of a watchman at two

Session Laws, Vermont, 1908. No. 13.
 Session Laws, Vermont, 1910. No. 194. (See Laws 1912, No. 201, sec. 10, authorizing exception of shores of Lake Champlain and other localities not affected by drought.
 Session Laws, Vermont, 1910. No. 183, p. 201. Cf. Laws of 1912, No. 201, sec. 73,

^{4.} Session Laws, Vermont, 1910, No. 20, p. 14.

dollars per day at lookout stations established by private owners and connected with telephone systems. The state forester was authorized to divide any town into districts and appoint a warden for each. The chief of the fire department of any city was required to perform fire warden duty without additional compensation at forest fires within the city limits.

On January 11, 1913 the forest fire law was amended to require the board of selectmen of each town to appoint annually a forest warden, and upon their failure to make a selection before March first, the state forester might appoint a warden. Persons summoned by a warden to assist in fire control were to receive the same pay as for highway work, with a minimum time allowance of five hours. Expenses incurred by one town in fire extinguishment in an adjoining town were to be paid by the latter town, and if any town failed to pay fire control expenses, the state forester was authorized to pay and the amount later required from the town by the state.

Virginia. A Virginia act of January 18, 1904 2 regulating the construction and operation of railroads, retained the penalty of ten dollars for each day that a railroad company should operate within the state a locomotive not having an approved spark arrester that had been prescribed in an act of 1884³ and required railroad companies to keep their rights of way cleared of combustible material. This act omitted the provision in the act of 1884 releasing the railroad company where the one injured had also been negligent. An act effective June 26, 1908 made railroad companies liable for damage caused by fires set by their equipment or employees, irrespective of whether the locomotive were equipped with a proper spark arresting appliance and regardless of the condition in which such appliance should be; and another act 5 effective the same day, afforded every railroad an insurable interest in any property

Session Laws, Vermont, 1912, No. 27, p. 25.
 Session Laws, Virginia, 1902-03-04, p. 985, sec. 18 (spark arrester) sec. 55, (clear right of way); sec. 70 (general penalty.)
 Act March 18, 1884, S. L., ch. 524, p. 706.
 Act approved March 13, 1908, S. L., ch. 269, p. 388.
 Act approved March 14, 1908, S. L., ch. 392, p. 679.

along its line for the injury of which by fire it might be held liable.

On June 26, 1908 ¹ a new act regarding the unlawful and malicious firing of the lands of another became effective in Virginia, with a maximum penalty of five hundred dollars and three years in the penitentiary.

The general forestry act of March 21, 1914 ² authorized the governor to commission, from time to time, the persons whom the state geological commission should designate as forest wardens to aid in the administration of the act. These wardens were to possess and exercise the authority and power of constables as to arresting and prosecuting persons violating the state forest, fish and game laws. The board of supervisors of each county were authorized to levy and appropriate money for purposes of forest protection, improvement, and management, and to recover in an action at law from any individual or corporation on whose account they should expend money for fire fighting.

The act of March 21, 1914, also made it a misdemeanor, punishable by a fine of from ten to one hundred dollars, for anyone to operate a locomotive, or other engine or boiler, not burning oil, in or near forest or brush, without proper appliances to prevent the escape of fire from the smoke stack, firebox or ashpan, and made land owners liable for all damages to others and for the cost of extinguishing fires set upon their own lands, unless all possible care had been taken, before the setting of the fire, to prevent its spreading. Individuals and corporations were made liable to the state and county for all damages and for the cost of fighting fires unlawfully set.

Washington. The Washington act of March 16, 1903 making the state land commissioner ex-officio state fire warden, and the commissioners of counties deputy fire wardens, also made all state land cruisers forest patrolmen at large. At the discretion of the state warden timber cruisers and others in the employ of private parties might

Session Laws, Virginia, 1908, ch. 40, p. 42; cf. Laws 1877-8, p. 288.
 Session Laws, Virginia, 1914, ch. 195, p. 305. See Act Mar. 20, 1916 in Code 1916, Pollard, p. 952, authorizing a fine or imprisonment in addition to liability for damages and cost of control of fires set in the woods.
 Session Laws, Wash., 1903, ch. 114, p. 205.

be made special forest patrolmen at large without compensation. Cruisers and others might be made patrolmen or deputy wardens by county commissioners. All patrolmen, wardens and deputy wardens were authorized to arrest without warrant persons detected violating the forest law.

It was made the duty of the boards of deputy wardens in timber counties to establish each year a closed season during which no slashing should be burned without a permit from the board and due notice to neighbors. Men might be detailed to assist in the control of fires set for the burning of slashing. Deputy wardens were required to patrol districts, post warnings and enforce the law. Penalties were imposed for the malicious or careless setting of a fire and for a refusal by a resident to assist in forest fire control when summoned. The setting of fires by the leaving of camp fires, by the dropping of matches or cigars, or by the use of firearms, might also be punished. A penalty of ten to fifty dollars might be imposed for each day that a spark emitting locomotive or other engine or boiler was operated without an arrester, during June to October, inclusive, or in or near a slashing or brushland during a closed season. The expense of forest patrol and fire-fighting was to be borne by counties, and all fines collected under the provisions of the act were to be placed in the treasury of the county in which collected.

The act of March 11, 1905 creating a board of forest commissioners in Washington, and providing for the appointment of a forester who should have charge of all fire protection work in the state, contained exceptionally detailed regulations as to fire patrol and control. The commissioners were authorized to appoint a deputy warden for all or any portion of the period from June first to October first of each year within any county of the state having timber requiring protection. Such wardens were to receive four dollars a day and certain expenses, payable two-thirds by the state and one-third by the county. Special expenses for assistance were to be paid by the state and county in the same proportion. The detailing of deputy wardens to work in other counties by the forester was authorized, and the

Session Laws, Wash., 1905, ch. 164.

penalty provision for refusing to obey a summons, by a warden was retained. State land cruisers were made forest rangers, and persons employed by private parties might be appointed rangers by the state forester, but without compensation. All such officials were vested with police powers.

Between June first and October first no slashing, woodland or brushland could be legally burned in a county where there was a deputy fire warden without a permit from such county warden under regulations prescribed by the forest commissioners. Provision was made for the employment by a deputy warden of men to assist at the burning of slashings or in the suppression of fires, at twenty-five cents per hour of actual service. The fine of from ten dollars to five hundred dollars for the setting or leaving of a fire that caused damage to another, and the penalty of a fine of from twenty to one thousand dollars, and imprisonment of from one month to one year prescribed in the act of 1903, were retained, as also the penalty of a fine of from ten to one hundred dollars and two months' imprisonment for the starting of a fire in any negligent manner. The provisions of the previous act as to the use of spark emitting engines during June to October, inclusive, or in or near forest land during a closed season without an arrester were reenacted. A new section was added declaring that any prosecuting attorney or other magistrate who should fail to act with diligence and energy in any case of violation of the forest law properly brought to his attention, should be guilty of a misdemeanor, and subject to a maximum penalty of five hundred dollars and one year's imprisonment. The burning of small quantities of material under proper precautions was excepted from the provisions of the act.

In a general criminal act of March 22, 1909 ¹ the firing of wood or brush between June first and October first in a county having a warden, without a permit, or a failure to observe the prescribed precautions as to such a fire, was declared a misdemeanor. The willful or negligent setting of a fire or a failure to extinguish one, either upon one's own

Session Laws, Wash., 1903, ch. 24), sec. 270, 271 and 272. Same in Codes & St., 1915, Rem., secs. 2522 to 2524.

land or that of another, whereby the property of another was endangered, and failure to respond to a lawful summons to aid in fire control, were declared misdemeanors. The operation of an engine without an efficient spark arrester near brush or other inflammable material was made a misdemeanor.

The Washington law regarding the prevention and control of forest fires was revised and amended materially in an act of March 18, 1911. 1 The forester was authorized, with the approval of the state board of forest commissioners. to appoint wardens in any county for all or any portion of the period during which he deemed fire danger to exist. Subject to the approval of the said board, the forester might employ special wardens for the purpose of examining deforested lands of the state, with a view to ascertaining whether they were better fitted for agriculture or for the growing of timber. These wardens were required to assist in the burning of inflammable material thus discovered, with a view to protecting the forest resources of the state. The forester might temporarily discharge inefficient wardens and rangers and employ others temporarily in their places. The compensation, jurisdiction, and manner of payment of wardens remained as in the act of 1905. Wardens were required to perform such services and to submit such reports as the forester should direct. They must patrol districts, inspect locomotives, extinguish fires, and enforce all laws against trespass and the setting of fires. land cruisers, game wardens, and federal forest service officials and other citizens commissioned as by the state forester were to receive no compensation except twenty-five cents per hour for actual fire suppression upon accounts approved by the state forester.

The closed season during which no slashing was to be burned without a permit, under penalty of a fine of from twenty-five to five hundred dollars and imprisonment for thirty days, was changed to comprise June to September,

Session Laws, Wash., 1911, ch. 125, p. 623; Same in Rem. & Bal. Code, Vol. 3 (Suppl. 1913), sees, 5277-1 to 5277-21. See State v. Hendricks, 68 Wash 670, 123 Pac. 1077 holding that under section 8 of ch. 125 one may be convicted for burning logs and stumps in own yard without a permit.

inclusive, and any assistant of the forester, warden or ranger might refuse, revoke or postpone the use of permits when considered necessary. Dry snags, stubs and trees over twentyfive feet high must be cut down, and other precautions taken before slashings were burned, and a warden might furnish a special employee to assist at such burnings. The employment of men for fire control, and the furnishing of tools, supplies and transportation for those employed, was authorized. The compensation of special employees was fixed at twenty-five cents per hour, and a fine of from ten to one hundred dollars might be imposed for a refusal to assist. All inadequately protected forests, or deforested land covered with inflammable material, which because of location near forest land, or lack of protection, constituted a source of danger to life or property, was declared a public nuisance, and the forester, upon learning of such a situation, was required to request the owner or the one in control to remedy the condition. Slashing caused by the building of a road or railroad must be properly disposed of, and the felling of trees into green timber owned by another, without permission, was forbidden. In times of unusual danger the governor was authorized to suspend all permits and suspend the open season for hunting. Severe penalties for the willful or negligent setting of fires were prescribed, and a maximum fine of five hundred dollars and imprisonmen t for thirty days might be imposed for the burning of wood waste at a manufacturing or power plant within one-quarter of a mile of forest land without such devices as should be necessary to prevent the escape of fire.

The operation of any spark-emitting engine or boiler in forest land or within one-quarter of a mile of any forest material during the closed season, without suitable safety appliances upon the stack and fire boxes, was made unlawful, with the same penalties as in the act 1903. A fine of from twenty-five to one hundred dollars might be imposed for the depositing of fire or live coals outside of yard limits and within one-quarter of a mile of any forest material. Wardens and rangers were required to report violations of the law as to fire prevention appliances to the forester and to the district attorney. Every one operating, during the

closed season, a stationary or portable engine for logging or clearing land was required to maintain a watchman on duty for at least two hours following every time that operations ceased, and to cut down all snags, stubs and dead trees over twenty-five feet in height within a radius of fifty feet of each setting. Every one operating a logging locomotive not burning oil, during the closed season, must maintain a patrol following all movements of the engine after the elapse of approximately thirty minutes. A fine of one hundred dollars, or imprisonment for thirty days might be imposed for a violation of the provisions as to clearing land and operating logging locomotives or stationary engines.

West Virginia. An act for the protection of forests, fish and game enacted in West Virginia, March 1, 1909 1 declared it a misdemeanor to build a fire upon the land of another in connection with hunting or fishing without the written permission of the owner of the land, and authorized the owner or lessee of the land to arrest offenders. It made all deputy game wardens ex-officio forest fire wardens, and required them to take active measures to suppress all fires of which they should learn. They were authorized to destroy fences, plough land, set back fires, hire assistants, and summon residents to assist them under penalty of a ten-dollar fine for refusal. They were required to report all fires covering over one acre, with an estimate of the loss and the cause and means used for extinguishment. Wardens were to receive two dollars per day for the time actually given to fire fighting, and county courts were required to fix the rate, not exceeding two dollars a day, to be paid assistants. All expense for fire fighting was to be paid by the county in which the fire occurred.

It was made a misdemeanor to leave a fire burning in a field, road, or near forest land, with a maximum penalty of a fine of one hundred dollars or imprisonment for ninety days. The negligent firing of lands to the damage of another was punishable by a fine of five hundred dollars and one

Session Laws, W. Va., 1909, ch. 60, p. 470, secs. 49 to 55, incl. See Code W. Va. 1913, Hogg, secs. 3515-3519.

year's imprisonment, and the willful firing of land was declared a felony, with a penalty of not less than one nor more than two years in the penitentiary.

Railroad companies operating trains through forest lands were required to clear all inflammable material from their rights of way twice each year, employ sufficient trackmen to extinguish fires, provide locomotives with fire-prevention devices, prevent their employees from depositing coals and ashes near forest lands, and require them to extinguish fires or report them to forest fire wardens, under penalty of from twenty dollars to two hundred dollars on a charge of committing a misdemeanor.

The cost of extinguishing any fire was made recoverable by the warden, in the name of the county, from the person or corporation responsible for it and such recovery was not to act as a bar to the recovery of civil damages by anyone injured.

On March 4, 1915 ¹ the act of 1909 was amended to authorize the state forest, fish and game warden to appoint special fire wardens for cooperating with the federal government under the Weeks Law of March 1, 1911 (36 Stat. L., 961), and also special county wardens. The imposition of a fine of from ten dollars to fifty dollars, or sixty days' imprisonment, and imprisonment from twenty to sixty days for failure to pay the fine, was provided for the refusal of a person, physically able, to respond to a forest fire call. The payment of not over one dollar and fifty cents per day by a warden to assistants was authorized. An amendment made the leaving of a fire a misdemeanor only if damage to any property should result therefrom.

The section of the 1909 act making it a felony to will-fully set a fire on the land of another so as to occasion damage was amended to cover only cases of unlawful or malicious firing, with a provision for double damages to the one injured. An entirely new provision made it unlawful for one to set a fire on his own lands without a previous notice to his neighbors and the taking of all possible care and precaution to prevent the spread of fire by having previously cut, piled, or carefully cleared away inflammable material

^{1.} Session Laws, W. Va., 1915, ch. 15, p. 162.

around the land to be burned. 1 Setting a fire contrary to the provisions of the act and allowing it to escape to the damage of another was declared prima facie proof of willfulness or neglect, and a civil action was given both for damages and for the cost of extinguishment. Section fifty-four regarding the duty of railroads as to fire prevention was perfected by minor amendments.

Wisconsin. On May 14, 19 ² the state fish and game warden, all special deputy wardens, and all county wardens, were made ex-officio fire wardens, without extra compensation, and deputy wardens were required to report all fires and trespasses upon public land that should come to their attention.

The act of May 22, 1903 ³ providing for a board of forest commissioners and a state superintendent of forests made the latter ex-officio forest warden, with the duty of enforcing the state law regarding the prevention and extinguishment of forest and marsh fires. He was given authority to appoint one or more fire wardens in each town of twentynine counties named in the act and covering substantially the northern half of the state, and power to appoint fire wardens in any town in any other county upon being requested to do so by the board of supervisors of such town. Each warden was required to take the necessary steps to prevent the improper setting or progress of fires in his own or adjoining towns within eighty rods of the line of his own town when the warden of such adjoining town was unable or unwilling to do so. A ten-dollar fine and ten days' imprisonment might be imposed upon any warden who failed to perform his duty, or upon anyone who refused to respond to a summons by a warden to render reasonable assistance in the extinguishment of a fire. The warden and those summoned were to receive not to exceed twenty-five cents per hour for fire fighting, but the total of such amounts must not exceed one hundred dollars for each thirty-six sections in any one year in any one town. Wardens were also to receive compensation for posting notices furnished

Substantially the same as in the Virginia Act of Mar. 21, 1914. S. L. ch. 195, p. 305.
 Session Laws, Wis., 1901, ch. 408. See also laws 1909, ch. 525.
 Session Laws, Wis., 1903, ch. 459.

by the superintendent of forests, and must report annually, and at other times if requested by the superintendent, all fires occurring in their districts. All forest officers were given the power to arrest any person reasonably suspected of violating the forest law, and it was made the duty of the district attorney to prosecute upon being informed of the offense by the warden.

The new forest act of May 25, 1905, ¹ making the state forester state fire warden and the assistant state forester the assistant fire warden, gave the former authority to appoint and remove one or more town fire wardens for any organized town or portion of a town within the state and to supervise the execution of their work. The cost of the services of wardens and others employed in fire extinguishment, at not to exceed twenty-five cents per hour, and in an annual amount not exceeding one hundred dollars for each thirty-six sections, was to be paid by the towns upon approval by the forester of the accounts as submitted by the town warden. With the approval of the forester fifty per cent of the net collections under a prosecution might be paid to the informer.

Wardens were given the powers of sheriffs as to arrest without warrant for violations of the act, and the penalty for a failure by a warden to perform his duty, or of an able-bodied citizen to respond to a summons for fire control, was increased to not less than ten nor more than fifty dollars, or imprisonment for not less than ten nor more than thirty days, or by both. In addition to the annual report, wardens were required to report each separate fire immediately after its occurrence. A maximum penalty of one thousand dollars and one year's imprisonment might be imposed for a failure of a district attorney to take proper action on cases properly presented to him. A penalty of from fifteen dollars to one hundred dollars, or imprisonment from ten days to three months, or both, was prescribed for the offense of destroying notices posted in accordance with the act.

The operation of locomotives, boilers or engines of any character, not burning oil, within or near forest, brush or

Session Laws, Wisconsin, 1905, ch. 264. See S. L., Wis., 1907, ch. 118, and S. L. 1911, ch. 308, adopting the numbering of sections subsequent to the statutes of 1898 as given in Sanborn's Supplement.

grass land, without efficient devices on the stack and firebox to prevent the setting of fires was made unlawful, and the clearing of all inflammable material from the right of way at least once each year was required. Live coals or ashes dumped anywhere outside of a railroad yard must be immediately extinguished. Railroad employees must report fires at the next telegraph station, and track employees must be concentrated to assist in the extinguishment of fires. Willful violation of the act might be punished by a fine of five hundred dollars and one year's imprisonment. Double civil damages might also be collected, and the state could recover expense incurred in the extinguishment of the fire. Inspection of the right of way by the state forester was required.

By an act effective May 13, 1909 ¹ the Wisconsin law regarding the prevention of the setting of fires by railway locomotives, donkey, threshing and other engines was amended in several particulars. This law required that during dangerously dry seasons, and when directed by the state board of forestry, railway corporations must provide for a patrol along each section of their tracks at least once each day, with a report to the section foreman of all fires discovered. The state board of forestry was also authorized to inspect any locomotives, donkey or other engines, operated in or near forest, brush, or grass land, and to enter upon any property for such inspection.

The Wisconsin law regarding precautions against the setting of fires by railroads as amended by an act of June 30, 1911 ² limited the time within which it should be unlawful to operate a logging locomotive, donkey, traction, portable or other engine, except a railway locomotive, without screens and firebox protection, to the period from March first to December first, and defined a logging locomotive as one used on a branch, line or division, the main business of which was the transportation of forest products. Railway locomotives were required to maintain in good repair and use screens and firebox appliances only from March first to December first, but were required to designate an

Session Laws, Wisconsin, 1909, ch. 119.
 Session Laws, Wisconsin, 1911, ch. 494. See S. L., Wis., 1911, ch. 664; secs, 100 and 107 of which corrected errors in language of ch. 494.

employee at each division point who, during the said period, should examine each locomotive each time it left a roundhouse, and both this employee and the company were held responsible for compliance with the law. Locomotive inspectors to be designated by the state board of forestry were given the power to reject from service immediately any locomotive, donkey, traction or portable engine which they deemed deficient in design, construction or maintenance as to protective devices. The owner of any engine thus rejected might appeal to the state railroad commission, but pending the decision of the commission the engine must not be returned to service. Should a railroad company fail. after due notice from the state board of forestry, to maintain a patrol in a dangerous season, such patrol might be established by the board and the expense thereof recovered in a civil action and the company held guilty of a misdemeanor, and it was declared a misdemeanor for a company to fail to maintain an efficient patrol and extinguish fires independently of instructions from the board of forestry. The state board of forestry was authorized to exempt operators of engines from the specified precautions when they considered the devices unnecessary.

Another act of 1911 ¹ made every corporation owning or operating a railroad within the state liable for all damages sustained by any person or corporation in the destruction of property by fire, communicated directly or indirectly by their locomotives, or by fires set by employees in the burning of grass, weeds or rubbish along the right of way, and gave such corporations an insurable interest in property for the destruction of which it was thus held liable. The one suffering loss need prove only the loss or injury and that the fire originated in the manner stated. If the corporation failed to pay the damage within sixty days after the service of a written notice of the loss, with an accompanying affidavit, upon any officer or station agent or ticket agent of the company in the county where the loss occurred, the owner might recover double damages in a court of com-

Session Laws, Wis., 1911, ch. 245. Cf. Laws 1893, ch. 202, requiring notice of fire loss from railroad to be filed within one year from the time of fire, and Laws of 1899, ch. 307, providing that the beginning of an action, or service of a complaint, made the required notice unnecessary.

petent jurisdiction; provided that if within the sixty days the company should offer in writing to pay a fixed sum equal to the full amount of the damages sustained and the owner refuse it, in a subsequent action in which the owner recovered less than the amount offered, he could recover only his damages and the railroad company its costs.

By an act approved July 7, 1911 Wisconsin took away from the state forester the authority to appoint forest fire wardens for towns, and made the chairman of the town board of each town its fire warden, and the superintendents of the highways for the different road districts the assistant town fire wardens. The state forester, as state fire warden, was to have supervision of the town wardens, and was authorized to mass the fire warden force in case of emergencies, and upon the recommendation of a town chairman might appoint temporary fire wardens. Wardens retained the power of arrest for offenses, and of summoning assistance, but those summoned were to receive only twenty cents per hour, upon itemized accounts audited by the town board. The expense of preventing or extinguishing fires was to be borne by the road district or districts within which the expense was incurred. Any emergency expenses incurred by direction of the state forester in the employment of wardens at two dollars per day, or assistants at twenty cents per hour, were to be paid in equal parts by the state and county, under an audit, by the county clerk and secretary of state, but no county was authorized to expend over five thousand dollars in any one year for emergency work Each assistant warden was required to make prompt reports upon all fires to the town warden, who must make an annual report to the state fire warden.

Wyoming. A Wyoming act of February 13, 1907 ² provided that any person who, having lighted a fire for any purpose in the woods or on a prairie within the state, should leave the vicinity of the fire without extinguishing it, should be fined not less than ten nor more than one hundred dollars, or be imprisoned from ten to thirty days, or be both fined and imprisoned.

Session Laws, Wis., 1911, ch. 601. See Statutes of Wisconsin, 1915, sec. 1494-47 for all existing law, and see Act May 20, 1915, S. L. ch. 118 appropriation for fire protection. Session Laws, Wyoming, 1907, ch. 22.

CHAPTER V

State and Federal Legislative Encouragement to the Preservation or Extension of Private and Municipal Forests Prior to January First Nineteen Hundred Seventeen

INTRODUCTION.

The first encouragement to the planting of trees in America appears to have been an act of the Colonial Assembly of Virginia, which ended its session on March 5, 1624. This act directed the planting of mulberry trees by every freeholder in the colony, and was intended as an encouragement to the silk industry. A Virginia act of December 8, 1656 provided a penalty for the failure of any land holder to plant a certain number of mulberry trees in proportion to the number of acres held; but an act of March 7, 1659, recited that the acts of 1624 and 1656 had failed in their purpose and repealed them.³ In a letter of June 22, 1700,⁴ to the Lords of Trade in England, the Earl of Bellomont, Governor General of the Provinces of Massachusetts, New Hampshire and New York, urged legislation which would require the planting of four or five young trees in place of each tree that was cut for a mast. However, no legislation of this character appears to have been enacted either by the British Parliament or by the provincial legislatures.

In a shade tree act of March 8, 1802,5 the legislature of the State of New York provided that along the border

Laws of Virginia, Hening, Vol. 1, p. 126.
 Ibid. p. 420.
 Ibid. p. 481 °Cf. Calif. Acts. Sess. Laws 1866, p. 660; S. L. 1868, p. 699; Interpreted in Att y. Gen'l. v. Judges, 38 Calif. 291.
 Colonial History of New York, Vol. 4, p. 675.
 Laws of N. Y., Webster & Skinner, Albany, 1804, Vol. 3, p. 143. See Rev. Laws. 1813; cf. Act April 7, 1863, S. L., p. 151; Act May 23, 1874, Edmond's Laws of N. Y., Vol. 9, p. 969; Act April 29, 1875, S. L., 191; Act May 11, 1881, S. L., p. 339; Act May 25, 1881, S. L., p. 469. See Consolidated Laws, 1909, Bird. Cum. & Gil. p. 2203 and 2205, secs. 61, 63, and 64.

of any highway, not less than three rods wide, the private owner of the adjoining land might plant a row of trees, provided they were placed at least six feet apart in the row. This law gave an action in trespass against anyone who should injure or destroy trees so planted. Similar laws were subsequently enacted in many states.¹

The response to such laws was not as general as the legislators had expected, and subsequent to 1860 a number of states enacted laws which afforded a rebate in highway taxes as a bounty for the planting of trees along highways.²

In several states laws were early enacted giving cities or other municipalities the control of shade trees within their limits or making the planting of shade trees along the streets by abutting owners compulsory.³

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    Act April 12, 1827, Laws Terr. Mich. Detroit, 1827, p. 397, sec. 28; Sec Mich, Act April 17, 1833; Laws Mich. Terr. (1871) Vol. 3, p. 1057, sec. 28. Rev. St. 1846. Ch. 28, p. 140; Comp. L. 1857, ch. 25, p. 373.
    Ohio Act March 5, 1835; Laws 1834-5, p. 23.
    Mass. S. L. 1856 ch. 256, S. L. 1857, ch. 115. Gen. Stat. Boston, 1860, p. 251.

               Mass. S. L. 1856 ch. 256, S. L. 1857, ch. 115. Gen. Stat. boston, 1800, p. 251, ch. 46, sec. 6-9.

Vermont Act November 12, 1858, S. L., p. 14 (Gen. St. Vt., 1862, p. 674, sec. 45-47.)

Minn, Act Mar. 7, 1867, ch. 32, p. 60. Cf. p. 63 (fence to protect hedge).

Hilinois, Rev. Stat., 1874, p. 922, from Act Feb. 9, 1874.

Act Mar. 30, 1868; Code Act Mar. 12, 1872; Act Mar. 18, 1905; ch. 118.
                                                             p. 114.
Gen. Stat., 1875, p. 233.
Rev. Code, 1877, ch. 29, sec. 46, p. 131; cf. p. 148 (Hedge).
Act Feb. 20, 1880, sec. 8; Act Mar. 11, 1886, S. L. 30.
Act Feb. 20, 1880, ch. 29, sec. 8, p. 51, Comp. L. 1907, sec. 1126, 1142,
               Conn.
               Dak.
               Ida.
               Utah
                                                         Act Peb. 20, 1880, ch. 29, sec. 8, p. 31, Comp. L. 1144, Laws Va., 1883-4, p. 660, Rev. 8t., 1849, p. 183, ch. 106; ¡Laws 1869, ch. 152, sec. 127 (Hedges) 132 (shade trees).

Act Feb. 20, 1867, S. L., p. 99; Act Mar, 2, 1871, S. L. p. 211, (Hedges); Jefferson Co. v. Hudson, 20 Kan. 71; Marion Co. v. Hoch, 24, Kan. 778 (1881).

Act March 27, 1867, S. L. 188 (See Comp. L. 1897, sec. 4164).

Act Mar, 4, 1868, S. L., ch. 87 p. 86, Act Mar, 20, 1907, S. L. ch. 18, Act Mar, 30, 1868, S. L. p. 670; S. L. 1911, ch. 746; S. L. 1913, ch. 329, Acts Apr. 6, 1868, sec. 6; Feb. 21, 1872, ch. 3, p. 4, and March 15, 1878, Act April 26, 1869, S. L., ch. 322, p. 701; May 3, 1870, S. L., ch. 595, p. 1363; May 10, 1883, S. L. ch. 371, p. 554; highway law, 1892, ch. 568, p. 2193.

Laws 1871, ch. 30; 1873, ch. 19; Smith v. Nobles Co., 37 Minn. 535. Rev. 81, 1874, p. 1072, sec. 40, par, 6.

Act May 2, 1879, S. L. 44, p. 47; New Act July 2, 1901, S. L. 610, No. 306, See Op. Dep. Atty, Gen. 30 Pa. Co. Ct. 590 (Mandamus to compel supervisors to allow).
               Virginia
               Wis.
2. Kan.
               Mich.
              Calif.
               lowa
               N. Y.
              Minn.
                                                                        ervisors to allow).
                                                            Act Feb. 12, 1884, S. L., p. 250; Inst. for Ed. Mute and Blind v. Henderson, 18, Colo. 98, (unconstitutional on technicality). Act Apr. 12, 1884, S. L., ch. 102; Feb. 25, 1885, S. L. ch. 2: See Act Apr. 9, 1886, S. L., ch. 118, (injury to bounty trees); Act June 23, 1909,
              Colo.
              Conn.
                                                          9, 1886, S. L., ch. 118, (injury to bounty trees); Act June 23, 1909, ch. 86.
Act Nov. 19, 1884, No. 20; cf. No. 22; 1888 No. 154, 1890 No. 71.
Act Apr. 14, 1896, p. 536; sec. 41, county boards might pay bounty; same in Comp. L. 1907, sec. 511, par. 17; Act March 20, 1911, ch. 119.
See provisions of this character in a number of the bounty and tax exemption acts given in the next division of this chapter.
Session Laws, 1893, ch. 97, sec. 46; see Pol. Code, 1908, Vol. 1., Sec. 2228, cf. sec. 2238.
Act Apr. 3, 1871, S. L. ch. 60; Act Mar. 13, 1872, S. L. ch. 100; Act Mar. 13, 1873, S. L. ch. 65.
Act July 1, 1893, S. L. ch. 89; See Ky. Stat. 1909, secs. 2848, 2851 and 2858.
              Utah
3. Ida
              Kan.
              Ky.
            Me.
                                                            Rev. Stat.
                                                                                                                 1871, p. 84, sec. 40.
                                                                                                             (Footnote 3 continued on next page)
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In recent years laws for the encouragement of the planting of trees in streets and highways and for the protection of such trees have been enacted in many states and in several provision has been made for the appointment of foresters, commissioners or other officials charged with the duty of planting and protecting shade and ornamental trees.¹

(Footnote 3 concluded from preceding page) Session Laws, 1857, ch. 115; same in Gen. Stat. 1860, ch. 46, sec. 9.
S. L. 1869, ch. 381; Act. Apr. 3, 1885, S. L. ch. 123, p. 588; Act Apr. 13, 1885
S. L. ch. 157, p. 608.
Act May 18, 1807, given in Laws Mich. Terr. (1871), Vol. 1., p. 142, Mass. 13, 1885 S. L. ch. 157, p. 608.
Act May 18, 1807, given in Laws Mich. Terr. (1871), Vol. 1., p. 142, Vol. 3, p. 286.
Act Mar. 5, 1877, Gen. Laws, 1877, p. 229.
Act Mar. 1, 1871, S. L., p. 51; (See Gen. St. 1873, p. 87, sec. 52-58.).
Session Laws 1893, p. 160; S. L. 1903, ch. 156, p. 300.
Act June 4, 1853, given in Laws Terr. Utah, Great Salt Lake, 1855, p. 251, ch. 59, sec. 3; Act Mar. 20, 1911, ch. 120, sec. 206, par. 9; Act Mar. 20, 1911, ch. 120, sec. 206, par. 9; Act Mar. 20, 1911, ch. 123, sec. 302, par. 5.
Session Laws, 1884, No. 10, No. 20; S. L. 1888, No. 154; S. L. 1890, 71. No. 71; Cf. Gen. St. 1870, p. 943 (penalty for destruction)
Code of 1849, p. 285 ch. 54, sec. 17; S. L. 1878-79, p. 398.
Session Laws 1869, ch. 152, sec. 146; Stat. 1898, p. 600.
Rev. Stat. 1901, Par. 465, sec. 2, par. 545, sec. 9; par. 716, sec. 54.
Act Mar. 11, 1893, S. L. ch. 140; Act Mar. 13, 1909, S. L. ch. 217; Act Mar. 28, 1909, S. L. ch. 729; Act May 1, 1911, ch. 746, sec. 36; Act Apr. 23, 1913, S. L. ch. 51, p. 21; S. L. 1913 ch. 329.
Session Laws 1901, ch. 174; Gen. Stat. 1902, secs. 4443-45; Act May 11, 1903, S. L. ch. 14; Act July 13, 1905, ch. 232, sec. 2; Act Aug. 1, 1907, S. L. ch. 264; Act May 20, 1909, S. L. ch. 164; Act June 6, 1905, S. L. ch. 114; Act July 13, 1905, ch. 232, sec. 2; Act Aug. 1, 1907, S. L. ch. 264; Act May 20, 1909, S. L. ch. 56.
Act Apr. 19, 1901, S. L. ch. 4958; S. L. 1901, ch. 5005; Both given in Gen. St. 1906, secs. 863-8, 3677-8. Comp. L., 1914 same sections.
Act Mar. 13, 1911, S. L. 81.
Act May 18, 1905, S. L., p. 279; Act Dec. 21, 1911, S. L., p. 245; Act June 27, 1913, S. L., p. 385, (see People v. Rinaker, 252, Ill. 266, holding act of 1911 unconstitutional). Mich. Neb. N. H. Ore. Utah Vt. Va. Wis. 1. Ariz. Cal. Conn Del. Fla. Ida. 111. ing act of 1911 unconstitutional).

Act Feb. 23, 1905, S. L. ch. 105; Act Mar. 5, 1907, S. L. ch. 115; Act May 27, 1907, S. L. ch. 114; Act. Mar. 13, 1909, S. L. ch. 125.

See Ky. Stats. 1909, secs. 2848, 2851, 2858, 3235a par. 7 and 10; 4340, Kan Ky. 4343.

4343.

Act Feb. 26, 1907, S. L. ch. 27.

Act Feb. 26, 1907, S. L. ch. 196, p. 179; Act Mar. 6, 1891, S. L. ch. 49, p. 691; Resolve Apr. 30, 1891, S. L. ch. 70, p. 1082; Act Mar. 25, 1896, S. L. ch. 190 p. 138; Act Apr. 9, 1897, S. L. ch. 254, p. 225; Act May. 4, 1899, S. L. ch. 330; cf. Act Apr. 6, 1914, S. L. ch. 304, p. 269. Laws codified and amended, Act Apr. 7, 1915, ch. 145, p. 127.

Act Feb. 19, 1895, S. L. No. 3; S. L. 1895, No. 215; Act Mar. 31, 1897, S. L., p. 64, No. 54; Act Apr. 22, 1901, S. L. No. 74 (Highway Act); June 2, 1909, S. L. No. 283, ch. X1., p. 601, see M. S.

Session Laws, 1895, ch. 59 (highway); Act Apr. 25, 1895, S. L. ch. 243; Act Apr. 11, 1899, S. L. ch. 171 (cities); Comp. Laws, 1905, ch. 9 (villages and cities), ch. 13 (hedges); Act Apr. 19, 1905, ch. 335; Act Apr. 25, 1907, ch. 440, sec. 2; Act Apr. 22, 1909 ch. 441 (city and village park boards.) 4343.Me. Mass. Mich. Minn. 25, 1907, ch. 440, sec. 2; Act Apr 22, 1908 ch. 441 (city and vinage park boards.)
Rev. Stat. 1909, secs. 9133-38 (cities); secs. 10516-19 (counties).
Act Mar. 7, 1901, p. 75 (See Rev. Code, 1907, sec. 3319).
Comp. Stat. 1909 (Br. & Wh.) Pars, 490-496; 1220 sec. 11; 1431, sec. 32; 1591 sec. 50; 3057-58 (cities); 5320, sec. 71; 6117 (highway).
Act Mar. 27, 1907, S. L. ch. 125.
Pub. Stat. 1891, ch. 40, sec. 4, p. 144; ch. 53, p. 174; ch. 89, p. 252; S. L. 1895, ch. 85; S. L. 1897, ch. 44; S. L. 1901, ch. 98; S. L. 1905, ch. 119; Act Apr. 21, 1915, ch. 138.
Act Mar. 28, 1893, ch. 285; Act Mar. 28, 1904, S. L. ch. 142; Act Apr. 6, 1905, S. L. ch. 108, Act May 2, 1906, S. L. ch. 186; Act May 17, 1906, S. L. ch. 245; Act Apr. 15, 1912, S. L. ch. 395 (highway); Act Apr. 9, 1913, S. L. ch. 317 (highway); Act Apr. 17, 1914, S. L. ch. 255; Act Apr. 6, 1915, S. L. ch. 502, p. 1161 (town warden).
Annot. Code, 1910, secs. 3630 and 3812.
Act Feb. 17, 1899, S. L. 69 (city park Commissioners).
Act May 23, 1889, S. L., p. 289; Act May 17, 1901, S. L., p. 39; Act June 17, 1901, S. L., p. 569; Act May 31, 1907, S. L., No. 251, p. 349 (shade tree commission).

(Footnote I continued on next page) park boards.) Mo Mont. Neb. Nev. N. H. N. J. N. Y. Ohio Ore. Pa. (Footnote 1 continued on next page)

TAX EXEMPTIONS AND BOUNTIES BY STATES DI-RECTED TO THE ESTABLISHMENT OF FOREST AREAS IN LOCALITIES NATURALLY DEVOID OF FORESTS

After the close of the Civil War the settlement of the territories west of the Missouri River proceeded at a rapid rate under the stimulus of the Homestead Act of May 20, 1862 (12 Stat. L., 392) and its amendments. The occupation of the vast treeless areas between the Missouri River and the Rocky Mountains and of the arid regions between these mountains and the coast ranges developed a keen realization of the disadvantages of agricultural enterprises in a country having an inadequate supply of timber. The advisability of lending public encouragement to the planting of trees within the arid and semiarid areas evidently received its first legislative recognition in the form of a tax exemption. The revised statutes of the Territory of Nebraska published in 1866 provided in the chapter regarding taxation that the cultivation of fruit, forest or ornamental trees was not to increase the value of the land for revenue purposes. 1

Minnesota. A Minnesota act of March 7, 1867 ² appropriated three hundred dollars annually to enable the state agricultural society to offer premiums for the best five acres of cultivated timber or for the best continuous half-mile of live hedge fence. These premiums were limited to groves or hedges artificially grown from seeds, cuttings or lavers.

⁽Footnote 1 concluded from preceding page)

⁽Feotnete 1 concluded from preceding page)

R. 1. Gen. Laws 1896, ch. 40; Act Nov. 22, 1901, ch. 922 (Gen. Laws 1909, Ti(dc 23, Ch. 241); Act Apr. 23, 1907, ch. 1479.

S. D. Session Laws 1901, ch. 28 and ch. 200; S. L. 1909, ch. 272; See Comp. Laws 1909, Pol. Code, sees. 1003, 1229, 1438, 1641, 1642.

Utah Session Laws 1907, p. 140; Same Comp. L. 1907, sec. 286, par. 3.

Va. Session Laws 1907, p. 140; Same Comp. L. 1907, sec. 286, par. 3.

Va. Jan. 14, 1909, No. 96; Act Jan. 28, 1911, No. 115, sec. 3.

Va. Act June 26, 1908, S. L., p. 623; See Pollard's Suppl. 1910, sec. 1038.

Wis. Sess. Laws 1909, ch. 52; See Code Suppl. 1909, sec. 1515s aub. 92-93.

Wis. Sess. L. 1903, ch. 99, sec. 55; St. L. 1901, ch. 308 (branches); Act May 1, 1911, ch. 62 (branches); Act June 16, 1911, ch. 408 (city forester); Act June 27, 1911, ch. 459.

1. Rov. Stat., Neb., 1866, p. 301, ch. 54, sec. 4; See Comp. Stat. 1911, (Br. & Wh.), par. 4934, ch. 77, sec 11; Cf. First Colo, Const. 1876, Art. 18 sec. 7.

2. Sess. Laws, Minn., 1867, ch. 32, p. 60, cf Act Mar. 7, 1867, p. 63.

Kansas. By an act of March 2, 1868 the legislature of the state of Kansas declared that every person who should, within ten years from the passage of the act, plant one acre or more of prairie land to any kind of forest trees, except black locust, or plant forest trees for one-half mile, or more, along a highway and so care for them that the trees should be not over one rod apart at the end of three years, should be entitled to a bounty from the county treasury for twentyfive years in the annual sum of two dollars for each acre or one half mile of trees planted. This act was amended by an act of March 29, 1872 to require the planting and cultivating of at least one hundred and sixty trees upon each acre and to authorize the payment of a bounty to any one who fulfilled the requirements of the act at any time. However, the existing law was repealed by an act of March 5, 1874. ³

Wisconsin. A Wisconsin act of March 4, 1868 4 provided that every land owner or possessor of five acres or more who should reserve from the natural growth, or successfully grow by planting, on not to exceed one-fifth of the land, belts of forest trees, should be entitled to an exemption from taxation on the tract upon which the trees grew until they should reach a height of twelve feet; and when the trees should attain a height of twelve feet he was to be entitled to a bounty of two dollars per acre annually for the area planted or grown as a tree belt, the bounty to be made effective in the form of a tax rebate. These tree belts were required to be reserved or planted on the west or south sides of each tract, and to be not less than thirty feet wide, except that belts one rod wide along the east or north sides and adjacent to a highway were entitled to the benefits of the act. The belts must be of uniform width and there must be not less than eight trees to each square rod. For tracts of ten acres the belts must be sixty feet wide and for tracts of forty acres one hundred feet wide. The assessor was authorized to allow planting on interior lines in his discretion and he might declare the benefits of the act forfeited be-

Gen. Stat. Kan., 1868, p. 1094, ch. 112.
 Session Laws, Kan., 1872, ch. 204, p. 402.
 Session Laws, Kan., 1874, p. 110.
 Session Laws, Wis., 1868, ch. 102; Correctional amendment in S. L. 1871, ch. 138 S. L. 1876, ch. 258.

cause of a failure of the owner to properly care for the trees. The species allowed for planting were: arbor-vitae, ash, balsam fir, basswood, beech, birch, butternut, black cherry, cedar, chestnut, coffee tree, cucumber tree, elm, blackberry, hemlock, hickory, larch, locust, maple, oak, pine, spruce, tulip tree and walnut.

Iowa. An Iowa act of April 6, 1868 provided a state tax exemption of one hundred dollars each year for a period of ten years for each acre planted to forest trees not over eight feet apart and properly cultivated and fifty dollars for a period of five years for each acre of fruit trees planted not over thirty-three feet apart and kept in a healthy growing condition. Section five of this act authorized the board of supervisors of any county to exempt property from taxation, except for state purposes, to an amount not exceeding five hundred dollars for each acre that should be planted to forest trees and suitably cultivated provided the trees were not over three years old and the minimum number prescribed by the board were planted and maintained. Section six authorized a similar exemption for each one-half mile of hedge or for each mile of shade trees planted along a public highway and properly cultivated and cared for.

On February 21, 1872 2 section six was amended to authorize supervisors to allow one-half of the exemption for a quarter of a mile of hedge or a half mile of shade trees, to provide that no one should be allowed an exemption exceeding one-half the value of his real estate and to forbid the allowance of the bounty for trees grown by nurserymen for sale.

Dakota. An act of January 5, 1869 in the Territory of Dakota provided that any person who should, by sowing the seed or by planting, grow, cultivate, and keep in good condition five acres of timber with trees not over eight feet apart, should be allowed to hold exempt from taxation

Session Laws, Iowa, 1868, ch. 92, p. 126.
 Session Laws, Iowa, 1872, ch. 3, p. 4.
 Session Laws, Dak. Terr., 1868-9, ch. 26, p. 306; Same in Code 1877, ch. 28, sec.

with all improvements, one-fourth part of the one-fourth section whereon the trees were cultivated, provided the property should not exceed one thousand dollars in value. The exemptions were to continue for a term of ten years after the planting or for such part of ten years as the trees were kept in good growing condition and a change of ownership of the land was not to affect the right to an exemption.

Nebraska. A Nebraska act of February 12, 1869 1 provided for a one hundred dollar tax exemption annually for a period of five years for each acre that any land owner should plant to forest trees. The law required that the trees be planted not over twelve feet apart, that the total exemption for one person owning less than one hundred and sixty acres should not exceed five hundred dollars, and that the five acres or less for the planting of which exemption was claimed must be a part of the one hundred and sixty acres as to which tax exemption was claimed. Homesteaders on federal lands who had perfected their claims were allowed an exemption of fifty dollars per acre; and an exemption of fifty dollars per acre for five years was allowed for the planting of fruit trees not over thirty-three feet apart.

Missouri. A Missouri act of March 25, 1870 ² was substantially the same as the Kansas act of March 2, 1868, except that it provided for the payment of bounties from county treasuries in the sum of two dollars per acre or for each one-fourth mile along a highway, for a period of only fifteen years after the third year from the planting and the trees were required to be planted not over one rod apart and to stand not over two rods apart at the end of the third year.

Minnesota. Under a Minnesota act of March 6, 1871 ³ every person planting one acre or more of prairie land,

Session Laws, Neb., 1869, p. 68; Same in Gen. St. 1873, p. 88, sec. 59-63; Cf. Act Feb. 15, 1869, p. 181, sec. 4 (cultivation of trees not to increase value of land for taxation purposes). Bounty Act repealed by session Laws, 1899, ch. 3. See Constitutional Prov., Comp. St. 1909, Cobbey, sec. 622.
 Session Laws, Mo. 1870, p. 69) This act was amended by Act of Feb. 4, 1875, S. L. p. 97, as to punctuation and held unconstitutional in 1891 in Deal v. Mississippi County, 107 Mo. 464, 18 S. W. 24.
 Session Laws, Minn., 1871, ch. 30, p. 75.

within five years after the passage of the act, with any kind of forest trees, except black locust, or one-half mile along a highway, and caring for the same so that they should stand not over one rod apart at the end of three years, was entitled to receive from the county treasury annually, for a period of ten years following the said three years, a bounty of two dollars for each acre or half mile so planted, provided the trees were properly cultivated and kept in a growing condition.

A new act of February 20, 1873 1 contained the same provisions as the act of 1871 except that it specified that, if trees were planted on both sides of a highway, they should not be planted within the four rods allowed for the highway and provided that the bounty was to be paid by the state. However, the total annual liability of the state for such bounties was limited to twenty thousand dollars.

Nevada. An act of March 7, 1873 in Nevada afforded an annual bounty from county treasuries for a period of twenty years, beginning two years after the planting of This bounty was in the sum of ten dollars for each acre or for each one-half mile along a highway upon which the trees stood one rod apart at the end of the third year. The bounty was to be continued only so long as the trees were cultivated and the planting was to be done within five years from the passage of the act. However, the latter limitation was extended to ten years by an act of March 5, The bounty was not applicable to willows or cottonwoods planted for the express purpose of protecting ditches and canals.

Illinois. An Illinois act of February 9, 1874 authorized the board of supervisors or commissioners of any county in the state to offer a bounty for the planting of one or more acres to forest trees and the cultivating of the same for three years. The trees were required to be not over ten feet apart each way and the bounty could not exceed ten

Session Laws, Minn , 1873, ch. 29, p. 136; Same in Stat. at L. 1873, p. 595.
 Comp. Laws, Nevada. 1873, Vol. 2, p. 411, ch. 145, secs. 3838-3842.
 Session Laws, Nevada. 1877, p. 185 (same Gen. Stat. 1885, sec. 366-370.)
 Rovised Stats. Ill. 1874, ch. 436, p. 1056.

dollars per acre each year for three years. This act was still in force on January 1, 1917. 1

Idaho. On January 4, 1875 the Territory of Idaho provided a tax exemption, for a period of ten years after the planting, of one hundred dollars for each acre upon which trees were planted and maintained at a distance of not over twelve feet apart. The exemption was not applicable t plantations of less than five acres nor to nursery trees grown for sale purposes. To earn exemption under the act, trees must be planted before August 1, 1885.

Washington. An act of October 27, 1877 in the Territory of Washington required the boards of commissioners in Stevens and Whitman counties, which were situated in a treeless portion of the state, to exempt annually from taxation, except for territorial purposes, the real or personal property, of the amount of three hundred dollars, of any person who had within that year or the preceding one, planted one or more acres of forest trees and kept them cultivated and growing. The said boards were empowered to prescribe the minimum number of trees that must be grown upon each acre.

A subsequent Washington act provided that the value added to land within the state through the planting of forest trees or fruit trees, except when they were grown for sale as nursery stock, should not be considered in an assessment of the land for taxation purposes. 4

Wyoming. A Wyoming act of December 14, 1877, 5 allowed a tax exemption of two hundred dollars annually for five years for every acre of forest trees planted and maintained not over twelve feet apart. The maximum exemption was five hundred dollars for a person owning one hundred and sixty acres or less and there was no exemption allowed to one having less than forty acres. Those holding

Annot. Stat. Ill., 1913, ch. 136, par. 11183-11186.
 Comp. & Rev. Laws, Ida. Terr. 1875, p. 712.
 Session Laws, Wash. Terr., 1877, p. 411.
 Code of Wash. 1910, Rem. & Bal. sec. 9098. Code of Wash. 1905, Pierce, sec. 8595, par. 5.
 Session Laws, Wyo, 1877, p. 129.

unperfected homestead claims were allowed an exemption of one hundred dollars per acre annually for five years. By an act of December 9, 1879 the period of exemption was extended to ten years and the number of acres upon which a bounty could be claimed was increased to twenty-five acres out of each one hundred and sixty owned.

Nebraska. A Nebraska act of February 27, 1879 2 required counties to pay three dollars and thirty-three cents annually so long as the same should be cultivated, not exceeding five years, for not over three acres of forest trees planted in rows along the north section lines or half section lines of any tract.

Colorado. On February 21, 1881³ the state of Colorado provided an exemption from taxation for a period of ten years of all increase in value of irrigated lands because of the planting of fruit or forest trees and afforded a bounty of two dollars per annum for a period of six years for each hundred trees planted sixteen feet apart along a public highway or an irrigation ditch and kept in a growing condition. The six-year bounty period was not to begin until the fourth year after the planting. Special provision was made in the act for the gathering of information as to the most successful plantations and as to the causes of such success.

Minnesota. On March 2, 1876 the legislature of Minnesota appropriated twenty-five hundred dollars from state funds to enable the state forestry association (an unofficial organization) to offer premiums for the planting of forest trees in such counties as they should think advisable with restrictions as to the amount to be offered in a single county. This was followed by an act of March 5, 1881 5 providing that every person who should thereafter plant and cultivate one acre and not more than ten acres of prairie land with any kind of forest trees except black locust, and keep the same in thrifty condition for six years, or should

Session Laws, Wyo., 1879, ch. 83, p. 148.
 Session Laws, Neb., 1879, p. 187; Same in Comp. L. 1893, pp. δ9-60.
 Session Laws, Colo., 1881, p. 250.
 Session Laws, Minn., 1876, ch. 110, p. 120.
 Session Laws, Minn., 1881, ch. 151, p. 201.

plant trees along a highway, should be entitled to compensation from the state at the rate of three dollars annually for each acre and two dollars for each half mile for the said six years. The results achieved under the bounty acts of 1871 and 1873 had evidently proven unsatisfactory for the new act required that twenty-seven hundred trees be planted to the acre, that at least eighteen hundred of the trees be kept cultivated and in a growing condition during the first and second years after the year in which the plantation was made and that nine hundred growing trees be maintained on each acre during the remaining three years of the bounty period. Trees planted along a highway were required to be not over eight feet apart and they must be cultivated during the first and second years after the one in which they were planted and kept in thrifty condition for the remaining three years. The act permitted planting by sowing of seed or by cuttings, but was not applicable to plantations by railroads within two hundred feet of their track nor to lands claimed under the federal tree culture acts. A general state tax of one-tenth of one mill was provided for the creation of a forestry fund to meet the expenses to be incurred under the act. Very extensive expenditure has been made under this act and it was still in effect on Januarv 1, 1917. 1

New Mexico. On March 1, 1882 ² the Territorial Assembly of New Mexico provided a tax exemption of one hundred dollars annually for a period of ten years for every acre of forest trees planted not over twelve feet apart and properly cultivated and the same exemption for fruit trees not over thirty-three feet apart.

Dakota Territory. An annual bounty of two dollars per acre for a period of ten years from the territorial treasury was granted by a Dakota act of March 13, 1885 ³ to any one who should plant one acre or more, within five years after the passage of the act, to any kind of forest trees, except black locust or cottonwood, and cultivate the same for

See Gen. Stat. 1913, Tiffany, secs. 5191-5195; Cf. sec. 2560 (highway).
 Session Laws, N. M. Terr., 1882, ch. 62, sec. 4; Same, comp. L. 1884, sec. 2809.
 Session Laws, Dak. Terr. 1885, p. 212, ch. 145.

three years. Like the Minnesota law this act made plantings by railroads within two hundred feet of their track and those made under the federal timber culture laws ineligible to a bounty.

Utah Territory. By an act of March 10, 1886 the Territory of Utah sought to encourage arboriculture by exempting five hundred dollars worth of property from taxation for a period of five years for each acre planted to forest trees for timber purposes, provided the trees were planted not more than ten feet apart and properly cared for. A fifty dollar exemption was allowed for each one hundred forest trees planted along a highway, street or irrigation stream.

Kansas. On March 2, 1889 ² a new law was enacted in Kansas for the encouragement of tree planting. This act, modeled after the Illinois act of 1874, made it lawful for the board of supervisors of any county of the state to offer a bounty of not over ten dollars for a period of five years, for each acre upon which any one should plant, cultivate and keep in good condition, during said five years, trees spaced not more than ten feet apart each way, provided that no bounties were to be paid upon lands entered under the federal timber culture laws. This law was still in effect on January 1, 1917. ³

Wyoming. A Wyoming act of March 11, 1890 4 authorized the board of commissioners of any county to offer a bounty, to any one who should plant one or more acres with forest trees and properly cultivate them for five years, in a sum not exceeding ten dollars for five years for each acre. The trees must be planted not over ten feet apart each way and be kept thrifty and growing for the five years before the bounty was to be due and the provisions were not applicable to lands acquired under federal timber culture entries. This law was still in force on January 1. 1917. 5

Session Laws, Utah. Terr., 1886, ch. 1, p. 1; Same, Comp. L. Utah, 1888, p. 764, secs. 2139-2142.
 Session Laws, Kan. 1889, ch. 254, p. 386.
 Gen. Stat. Kan., 1999, Dassler, ch. 254, sec. 9681-9684; Gen. St. 1915, McIntosh, secs. H660-H663.
 Session Laws, Wyo., 1890, ch. 42, p. 71.
 Comp. Stat. 1910, Mullen, sec. 1327-1330.

South Dakota. The first legislature in the new state of South Dakota by an act of March 6, 1890 provided that every person planting one acre or more within ten years after the passage of the act with forest trees, not less than nine hundred to the acre and one hundred or more evergreens, and cultivating the same for three years, should be entitled for ten years subsequent to the third year, to an annual bounty from the state treasury of two dollars per acre for not over six acres of forest trees and one dollar for each one hundred evergreens to an amount not exceeding twelve hundred dollars. Provision was also made for the earning of the bounties by the planting of trees along the border of forty acre tracts.

A new forest bounty act approved March 9, 1909 2 declared that to any person who should have, after the year 1908, planted, cared for and cultivated successfully forest trees for a period of three years and who should have otherwise complied with the provisions of the act, there should be paid, by the county commissioners, a bounty in the amount of two dollars per acre per year for a period of six years, upon not over five acres. Proof must be made by the owner of the land that at least one thousand trees were planted to the acre and that at least three hundred were living at the time the bounty for any year was claimed. All conflicting acts were repealed.

The South Dakota act of March 9, 1909 was amended by an act of March 14, 1913 so as to make the bounty payable to any one who had planted trees after 1910, and properly cared for the same for one year, five dollars per acre on not over six acres for a period of six years. This act also reduced the number of trees per acre that must be living when a bounty was paid to one hundred and fifty. Bounties for the unexpired period of plantings made under the act of 1909 were to be paid in accordance with the terms of the new act.

North Dakota. In an act approved February 5, 1890 4 the newly admitted state of North Dakota reenacted the

Session Laws, S. Dak., 1890, ch. 152, p. 320.
 Session Laws, S. Dak., 1909, ch. 268, p. 414.
 Session Laws, S. Dak., 1913, ch. 216, p. 299.
 Session Laws, N. Dak., 1890, ch. 70, p. 245.

Dakota territorial law of 1885 with the modification that three dollars per acre was to be paid for ten years from the state treasury provided four hundred living trees were maintained upon each acre. A bounty of four dollars for each one hundred and sixty rods along a highway where the trees were maintained three to each rod was also added.

A new act of February 28, 1905 authorized an annual tax rebate of three dollars per acre, for not over ten acres, if the trees were planted not over eight feet apart each way and four hundred to the acre maintained. Provision was also made for the planting of the trees in rows, with a bounty of two dollars for each eighty rods for not over five years, if there were two trees to each rod.

A new law of March 12, 1907 authorized a bounty of three dollars for each acre from county funds, provided not less than one nor more than ten acres of prairie land on a tract of not less than eighty acres were planted to trees not over eight feet apart and at least four hundred living trees maintained on each acre. The bounty could not be allowed in excess of the real estate tax of the claimant, nor in excess of his taxes. Bounties were still payable in North Dakota on January 1, 1917. 3

FEDERAL ENCOURAGEMENT TO TREE PLANTING IN WESTERN STATES PRIOR TO 1917

Coincident with these efforts of state legislatures to encourage the planting of trees on the open lands of the western states were the attempts of the federal government to secure afforestation of portions of such states through grants of public lands in recognition of the benefit conferred upon the nation by tree planting.

A federal act of March 3, 1873 (17 Stat. L., p. 605; Rev. Stat. of 1878, sec. 2464, offered to donate a quarter section of public land to any person who would plant forty acres of the same to trees, not more than twelve feet apart each way, and keep the trees in a healthy and growing condition by cultivation for a period of ten years. Section four of

Session Laws, N. Dak. 1905, ch. 187, p. 335.
 Session Laws, N. Dak. 1907, ch. 41, p. 34.
 Comp. Laws, N. Dak. 1913, secs. 2813 and 2814.

this act provided that any homesteader who should, at the end of three years' residence, submit satisfactory proof of having had under cultivation for two years, in the manner prescribed by section one, one acre of trees for each sixteen in his homestead claim should at once receive a patent, the planting and cultivation of the trees being accepted in lieu of the additional two years' residence required by the homestead law. To encourage a wide distribution of the benefits of this act, the act limited the amount of land to be acquired in a section to one hundred and sixty acres. The testimony of two credible witnesses in addition to the affidavit of the claimant was required as proof of compliance with the terms of the act.

On March 13, 1874 (18 Stat. L., 21), the federal timber culture law was amended so as to limit the right of acquisition to those eligible to the homestead privilege (i. e., to heads of families, or to persons who, being twenty-one years old, were citizens of the United States or had declared an intention to become citizens) reduced the period of cultivation to eight years and authorized the issuance of a patent to a quarter section or to any fractional subdivision of a quarter section upon proof of the cultivation of trees on one-fourth of the area in the manner prescribed. This act forbade the acquisition of more than one hundred and sixty acres by one person, but allowed more than one entry if less than a quarter section were first entered. The provision of the earlier act as to homestead land was retained. The act required that a party entering a quarter section should plow ten acres the first year, ten acres the second year and twenty acres the third year and that he plant ten acres of timber the second year, ten acres the third year and twenty acres the fourth year. Those entering less than a quarter section were required to break and plant proportional areas each year. The heirs of an entryman who died after compliance with the act for three years were allowed either to complete the eight years or to receive at once a patent for one-fourth of the area entered upon relinquishment of all claim to the remaining three-fourths. Those who had entered land under the act of 1873 were declared entitled to the benefits of the new act.

By act of May 20, 1876 (19 Stat. L., 54), the period during which the required planting and cultivation must be accomplished was extended one year for each year that the trees were destroyed by grasshoppers, or by other inevitable cause, the planting of seeds, nuts and cuttings was declared a compliance with the requirements of the law and the offering of separate parcels of planting, not exceeding four, was permitted. On June 19, 1876 (19 Stat. L., 59), March 3, 1877 (19 Stat. L., 405) and June 19, 1878 (20 Stat. L., 169) other acts for the relief of those whose trees had been injured by grasshoppers were passed.

An act of June 14, 1878 (20 Stat. L., 113) reduced the proportional area to be planted to one-sixteenth of the amount entered for areas not less than forty acres and required the breaking of one thirty-secondth of the entered area the first year, the cultivating of this and the breaking of an equal area the second year, for cultivation the third year, and the planting of five acres of trees in each of the third and fourth years. It authorized an extension of one year for each year that the trees were destroyed by grasshoppers or drought but increased the number of trees to be planted from three hundred to twenty-seven hundred per acre, six hundred and seventy-five of which must be living at the time of final proof upon the land. This act, which repealed the preceding acts, having itself failed to achieve satisfactory results was repealed by an act of March 3, 1891 (26 Stat. L., 1095). The repealing act also exempted those who had planted trees under the act of 1878 from the requirement that they prove the planting of twenty-seven hundred trees to the acre and provided that those who had complied with the provisions of the act as to planting for a period of four years might at once receive a patent upon the payment of one dollar and twenty-five cents per acre. subsequent act of March 3, 1893 (27 Stat. L., 593) allowed those who had entered land under the timber culture act to acquire title irrespective of the number of trees planted. 1

For decisions see 32 Cyc. 835-836 and see Hartman v. Warren, 76 Fed. 157, 22 C. C. A. 30 for definition of timber entry. Cf. Act Mar. 4, 1913, (37 Stat. 840) and (38 Stat. 1098) nursery stock free for private planting in certain area in Neb.

STATELEGISLATIVE ENCOURAGEMENT TO PRIVATE FORESTRY IN NATURAL TIMBER REGIONS PRIOR TO 1910.

The years directly following the close of the Civil War marked an interest in tree planting, not only in the prairie and plain States, but also in the eastern States which had been heavily forested at the advent of European immigration. The encouragement to forest preservation and extension in the east took the form of tax exemption. Laws of this character were enacted between 1870 and 1890 in Connecticut. Maine, Massachusetts, Rhode Island and Pennsylvania. Between 1890 and 1911 the laws were amended in each of these States and similar acts passed in New Hampshire and Vermont. During the same decade a reviving interest in forestry resulted in tax exemption acts in Alabama, Indiana, Iowa, Louisiana and Wisconsin.

A Maine act of February 20, 1872 provided that if any land holder, within ten years after the passage of the act, should plant or set apart and devote to the successful growth of forest trees land bearing at least two thousand trees to the acre at the end of three years, the land should be exempt from taxation for a period of twenty years if the grove or plantation were kept in thriving condition during such time.

Connecticut. A Connecticut act of March 4, 1877² provided that anyone who should plant chestnut, locust, hickory, ash, catalpa, white oak, sugar maple, European larch, white pine or spruce on land which had a value of not more than fifteen dollars per acre and had not previously been woodland, the town board should allow a tax exemption for a period of ten years on each acre after the trees were six feet high, provided twelve hundred trees per acre were planted. This law was amended March 31, 1886 3 so as to allow land worth \$25 per acre to be planted, and to ex-

Laws of Me. 1872, ch. 66. Same in Revised Stat. 1903, p. 156, par. X of sec. 6, which was amended by Act of Mar. 27, 1907, S. L. ch. 169, p. 185 so as to omit the limitation of benefits to plantations made prior to Mar. 30, 1882, and by Act Mar. 24, 1909, S. L. ch. 136, p. 148 so as to require the planting of only 640 trees to the acre instead of 2000.
 Laws of Conn., 1877; ch. 49.
 Laws of Conn., 1886; ch. 90.

tend the exemption to twenty years. Black walnut and tulip were added, and locust dropped, from the list of species authorized. A new act of August 23, 1911 contained the same provisions as the existing law as to the value of the land, the number of trees to be planted to the acre, and the period of exemption, but vested in the state forester the authority to determine the manner of planting and the responsibility for a proper administration of the law.

Massachusetts. A Massachusetts act of April 9, 1878² required the planting of two thousand trees per acre, and allowed an exemption for ten years following the time when the trees had grown an average of four feet in height. This act, like that of Connecticut, limited its benefits to land having a value of not over fifteen dollars per acre upon which trees were not growing at the time of the planting. This act was amended March 17, 1880 3 to include all kinds of pine instead of white pine only. A commission for the study of forest taxation laws was authorized by the legislature on April 28, 1905 ⁴ and an act of February 25, 1908 ⁵ which superseded the previous law provided a ten year exemption for lands well stocked with a natural growth of small trees as well as for plantations.

An act of March 18, 1909 be provided that land, having a value not exceeding ten dollars per acre, which was wellstocked with thrifty white-pine seedlings that had attained an average height of nct less than fifteen inches, upon the presentation of satisfactory proof to the assessors, should be exempt from taxation for a period of ten years thereafter. The removal from the land of trees of commercial value, except such as were reasonably removed for the improvement of the white-pine growth, operated to defeat further exemption for such forest tract under the terms of the law.

Rhode Island. An act of April 8, 18787 in the State of Rhode Island contained substantially the same provisions

Laws of Conn., 1911; ch. 205.
 Session Laws, Mass., 1878, ch. 131, p. 94 (Rev. L. 1902, ch. 12, sec. 6, vol. 1,

Session Laws, Mass., 1878, cn. 131. p. 94 (Rev. L. 1502, cn. 12, sec. 6, vol. 6, p. 208.).
 Act Mar. 17, 1880, ch. 109, p. 71.
 Resolve Apr. 28, 1905, ch. 60, p. 540; Report in II. Doc. No. 134.
 Session Laws, Mass., 1998, ch. 120, p. 89. Suppl. to Rev. L. 1902-08, p. 198., Cf. Acts of 1818, p. 114, sec. 5 (Rev. Laws 1902, ch. 124, sec. 10) authorizing agricultural societies to offer premiums for the growing of oak; Laws 1904, ch.

^{409 (}planting stock.). 6. Sess, L. Mass., 1909, ch. 187, p. 140, 7. Session Laws, R. I., 1878, ch. 663. Pub. Law 1873-78, p. 415.

as the Massachusetts act of April 9, 1878, except that the minimum value of land per acre was placed at twenty-five dollars, and the exemption was allowed for a period of fifteen years. This act was superseded by an act of May 22, 1908 is similar to the Massachusetts act of February 25, 1908.

Pennsylvania. By an act of June 1, 1887 ² the State of Pennsylvania formally adopted the policy of encouraging private enterprise in the establishment of forests by the planting of trees. This act recited that in view of the public benefit to be derived from the planting and cultivation of forest or timber trees, the owner of any land in the commonwealth planted with not less than twelve hundred trees to the acre should receive an annual tax exemption for a period of thirty years. The exemption for the first ten years was to equal ninety per cent of all the taxes, or such part of ninety per cent as should not exceed forty-five cents per acre; for the second decade eighty per cent of the taxes, or such part of eighty per cent as should not exceed forty cents per acre, and for the final ten years fifty per cent of the taxes or such part thereof as should not exceed twenty-five cents per acre.

The act authorized a thinning to six hundred trees per acre after the first ten years and permitted the owners of lands equally well stocked with a natural growth of young trees to enjoy the benefits of the act, provided such lands were given proper care and the number of trees not reduced below six hundred at the end of ten years.

A Pennsylvania act of May 25, 1897 ³ provided that any owner of land in Pennsylvania, having upon it an average of not less than fifty timber trees to the acre each not less than eight inches in diameter at six feet from the ground, might, by the making of required declarations, receive a rebate equal to eight per cent of all taxes, or such part thereof as did not exceed forty-five cents per acre, during such time as the forest was maintained in satisfactory condition. No single owner was entitled to a tax rebate on more than fifty acres. This act received minor amendment on April 11,

Session Laws, Mass., 1908, ch. 1581, p. 204.
 Session Laws, Pa., 1887, No. 173, p. 287. See amendment in Act Mar. 22, 1901, P. L. p. 52, Act. No. 19.
 Session Laws, Pa., 1897, p. 88; Act No. 70.

1901 and an act of April 8, 1905 which replaced the two previous acts, contained the same general provisions. The act of April 8, 1905, was declared unconstitutional in 1906.3

On April 20, 1905 4 a new and very specific law superseded the Pennsylvania act of June 1, 1887, as amended by the act of March 22, 1901. This provided that any land owner planting not less than three hundred trees to the acre and properly caring for them, or preserving in a growing condition the same number of trees to the acre of natural growth, should be given a rebate of eighty per cent of all taxes for a period of thirty-five years, provided that the exemption should not exceed forty-five cents per acre. This act allowed the exemption on lands bearing a mixed stand of natural and planted trees, and raised the maximum area held by one person or corporation entitled to the exemption to five hundred acres. In 1908 the act of April 20, 1905, was declared unconstitutional. 5

Indiana. An Indiana act of March S, 1899 ⁶ provided that one-eighth of the total area of any tract of land in the state might be set aside for forest growth and assessed for taxation on a basis of one dollar per acre, provided at least one hundred and seventy trees per acre of the species named in the act, either natural or planted, were maintained and properly cared for. This act was repealed on February 27, 1905.7

New Hampshire. A New Hampshire act of April 2, 1903 s contained essentially the same provisions as the Pennsylvania act of June 1, 1887, as to tax abatements for forest planting.

Vermont. A Vermont act of December 7, 1904,9 like

Session Laws, Pa., 1901, p. 77; Act No. 48.
 Session Laws, Pa., 1905, p. 118; Act. No. 88.
 Tubbs v. Tioga Township, 32 Penn. Co. Ct., 504.
 Session Laws Penn., 1905, No. 179, p. 246.
 Christley v. Butler Co., 37 Pa. Super, Ct. 32.
 Session Laws of Indiana, 1899, p. 570, ch. 256.
 Session Laws of Indiana, 1905, p. 64, see, 3, ch. 49.
 Laws of N. H., 1903, ch. 124, p. 127. Cf. Act Apr. 15, 1911, S. L. ch. 166, p. 213, authorizing state forester to sell planting stock for private planting within the state.
 Sess, L. Vt. 1904, No. 17, p. 21; Same in Pub. St., 1906, Secs. 368-70, 496, cf. S. L., 1804, p. 121; Stat., 1894, sec. 254 and Pub. St. 1906, Secs. 340-341 re maple sugar premiums.

the Massachusetts act of 1878, provided for a tax exemption of ten years upon forest plantations that were made and cared for as should be required by the state forestry commissioner. Under an act of December 18, 1908, 1 creating the office of state forester, the supervision of such planting was vested in the forester.

By act of April 10, 1906 2 the legislature of Iowa provided for a special assessment of lands devoted to the growth of forest trees or of fruit trees. Forest reservations might consist either of natural forest or of areas artificially stocked with forest trees. At least two hundred forest trees per acre were required. If all the trees were planted or a part were planted so as to make the minimum number of two hundred per acre the area could not be classed as a forest reservation until at least two years had elapsed from the planting, during which time the trees must be properly cared for. Forest reservations were to be assessed at one dollar per acre but must have an area of at least two acres. species which might be accepted as forest trees were: "Ash, black cherry, black walnut, butternut, catalpa, coffee tree, the elms, hackberry, the hickories, honey locust, mulberry, the oaks, sugar maple, European larch, and other coniferous trees and all other forest trees introduced into the state for experimental purposes." The act also allowed "willows, box-elder, soft maple, cottonwood and other poplars' to be included when used in a protecting border not over two rods wide, and allowed the counting of one hundred box-elder or soft maple trees to the acre when planted as nurse trees. Plantations of at least seventy fruit trees to the acre were entitled to an assessment of one dollar per acre for eight years from the time of the planting. The act also provided that whenever forest, fruit, shade or ornamental trees were planted or trees were planted for windbreak purposes in such manner or number as not to be entitled to classification as forest or fruit tree reservations, there was to be no increase in the assessment of the land because of such planting. Section fourteen of the act required that the secretary of the state horticultural

Sess. L., Vt. 1908, No. 11, p. 9. Act authorized furnishing stock from state nurseries to private owners. See Act Dec. 16, 1906, No. 15.
 Session Laws, Iowa, 1906, ch. 52, p. 35.

society perform the duties of a state forestry commissioner without additional salary in promoting the objects of the act. He was authorized to appoint non-salaried county deputies and to require them to report annually upon the operation of the act and upon other forestry matters.

An act of March 22, 1911 amended the act of 1906 so as to authorize the planting of Norway and Carolina poplars as regular forest species, as well as for border purposes.

Wisconsin. Under a Wisconsin act of July 12, 1907² the owner of any tract of land in the state who should set apart a portion thereof, not exceeding forty acres, for forest culture and plant the same with timber or forest trees. not less than twelve hundred to the acre, was declared entitled to exemption from all taxation on the planted land for a period of thirty years from the time of planting. The trees must be kept in a healthy condition, but all except six hundred trees might be thinned out at the end of ten years from the planting. The exemption was not allowable to lands having a value of over ten dollars per acre. The examination and valuation of the land was to be made by the board of review of the town in which the land was situated. If land had been planted before the valuation was fixed and the town board then held the planted tract not entitled to exemption, an appeal might be made by the owner to a state official. The exemption could be allowed as to lands within two miles of an incorporated city or village only with the written approval of a state officer, and any exemption could be canceled if the owner failed to comply with the law. Corporations, copartnerships and associations of persons might enjoy the benefits of the act.

Alabama. In section five of a general forestry act of November 30, 1907 ³ Alabama provided that any owner of land assessed at not over five dollars per acre might contract with the state commissioner of forestry to plant or grow useful timber trees thereon in the manner prescribed

Sess, L. Iowa, 1911, vol. 34, ch. 65, p. 48. For law of 1906 amended in 1911, see Suppl. of 1913 to lowa code of 1897, secs. 1400c to 1400p.
 Laws 1907, chap. 592 (Amendment by Chap. 663, sec. 234-6, Laws 1911, did not affect substance of law); Statutes of Wisconsin, 1913, sec. 1494-101 to 1944-111.
 General Laws, Special Session Ala., 1907, No. 90, p. 192.

by the commission. If in accordance with such agreement the owner should keep the trees upon the designated forest tract in thrifty condition for ten years and cut no trees except as permitted by his contract, the tract was to be exempt from taxation for the following ten-year period, or for such part thereof as the forest was maintained.

Louisiana. By an act of July 7, 1910 the legislature of the State of Louisiana provided that any owner of land within the State of Louisiana having an assessed value not exceeding five dollars per acre who should contract in writing with the State Conservation Commission to plant trees upon the land and care for them as required by the said commission for a period of not less than thirty nor more than forty years might have the assessment of the land fixed at one dollar per acre throughout the contract period or for such part of the period as the owner should comply with his contract.

FOREST TAXATION LAWS INVOLVING NEW PRIN-CIPLES ENACTED IN AMERICAN STATES FROM 1910 TO 1917.

Michigan. A Michigan act approved by the governor on April 25, 1911 ² followed the Indiana act of 1899 in providing for the devotion of one-eighth of the area of separate holdings to purposes of forest growth, and exempted from taxation all value of such forest reservation above one dollar per acre. However, the benefits of the Michigan act were limited to those who held tracts not exceeding one hundred and sixty acres in extent, one half of which was improved and devoted to agricultural purposes; and provision was made for the collection before removal of a yield tax equal to five per cent of the estimated value of the timber which the owner proposed to remove. This act, like a provision in a Michigan act of June 2, 1909 3 re-

sec. 11.

Laws of Louisiana, 1910, No. 261, sec. 13. See also Laws 1912, Act No. 127, vesting the administration of the act in the reorganized conservation commission.
 Session Laws of Mich., 1911, No. 135. Same Annot. Stat. 1914, Howell, Sec. 2063-2074, Vol. 1, p. 999-1001.
 Session Laws of Mich., 1909, No. 280, sec. 7. Cf. Act May 1, 1911, S. L., No. 294, see 1.

quiring those homesteading state lands to maintain a timber reserve, was aimed at the establishment and maintenance of farm woodlots as distinguished from actual forest reserves.

New York. In the year 1912 three tax exemption laws were enacted in the State of New York. An act of April 10, 1912 provided that whenever any land owner should plant not less than one nor more than one hundred acres for forestry purposes, with not less than 800 trees to the acre on open land, nor less than three hundred trees to the acre on existing forest or brush land, the non-forested land thus planted should be exempt from all taxation, and the underplanted forest land from taxation on all value except one half the value of the land exclusive of all forest growth, for a period of thirty-five years. Lands situated within twenty miles of the corporate limits of a city of the first class, within ten miles of a city of the second class, or within one mile of an incorporated village, were declared not entitled to exemption. Proof of proper planting must be made to the satisfaction of the State forest officers, and if at any time within the thirty-five year period the land should cease to be devoted exclusively to forest growth purposes, the exemption or reduction in taxation should at once termi-After the expiration of the thirty-five year period the land must be assessed at its full rate, exclusive of the timber growth, and five per cent of the stumpage value of the timber must be paid whenever it was cut.

An act of April 15, 1912 provided that the owner of any tract not exceeding fifty acres occupied by a natural or planted growth of trees, or by both, not closer to any city or village than the minimum distances given in the act of April 12, 1912, above, upon a showing to the satisfaction of the state forest office that the land might be properly classed as a woodlot within the meaning and purpose of the act and upon the execution of an agreement to manage the forest as the state officials should prescribe, might have the land classi-

Session Laws N. Y., 1912, ch. 249, Vol. 1, p. 469.
 Session Laws N. Y., 1912, ch. 363, Vol. 1, p. 710. Cf., Act of Apr. 5, 1910, S. L. ch. 72, p. 15 authorizing the sale of planting stock to citizens and Act April 16, 1912, S. L. ch. 444, p. 883, providing that price shall be no more than cost.

fied for taxation as a woodlot. Such assessment should not take into account the value of the trees, nor exceed ten dollars per acre. Whenever the owner should cut live timber, except for firewood or building material for domestic use, he must cut in accordance with the instructions of state officials and pay a five per cent yield tax on the value of the material removed.

An act of April 16, 1912 authorized the classification of waste, denuded, or wild forest lands in tracts of five acres or more as forest land by the state forest officers, provided the value was not over five dollars per acre. After such classification the assessment should not be raised for a period of thirty-five years if the owner complied with his agreement with the state to plant, protect and maintain the forest growth on the land so classified. There was no yield tax provision in this law, and no exemption, merely a fixed assessment rate for thirty-five years.

Vermont. A Vermont act of February 13, 1913 ² provided that land situated outside the limits of a city or village and sufficiently stocked with young trees of certain named species or other species approved by the state forester should, upon application by the owner, be classified as forest land for purposes of taxation. Such classification should be allowed when the condition of the forest growth on the land met any one of three distinct requirements, namely, when cut-over land was fully stocked with forest trees not more than fifteen years old, when cut-over or other land partially stocked with trees not more than fifteen years old had been planted with a sufficient number of additional trees to assure an average spacing of six by six feet, and when open land had been planted with not less than one thousand trees to the acre.

Subsequent to classification forest land was to be taxed at the local rate on the land alone at an assessment of not over three dollars per acre until the year 1950. In 1950 the land was to be revalued without regard to the three dollar limit, and the new valuation was to be maintained as

Session Laws New York, 1912, ch. 444, art. 5, sec. 89, Vol. 2, p. 907.
 Session Laws, Vermont, 1913, No. 40, p. 33.

a basis of taxation at the local rate for fifty years subsequent to 1950. Whenever a commercial cutting was made a ten per cent tax on the gross stumpage value of the timber removed was to be levied. The use of the land for pasture, destruction of tree growth or other failure to maintain proper forest conditions in the opinion of the state forester should constitute ground for a cancellation of the classification. When a cancellation was declared the owner must pay a tax of one-half of one per cent per annum for the period that the land had been under classification in addition to any annual or yield tax paid previous to the cancellation. No yield tax need be paid on material cut for domestic use or upon improvement cuttings where the cost of removal was equal to the value of the material removed.

This act provided that the previous forest tax exemption law should not apply to land planted subsequent to January 1, 1913.

A companion act of February 22, 1913 authorized the classification as forest land of waste, partially denuded, or wild forest land of five acres or more in extent, lying outside a city or village, occupied wholly or in part by a natural or planted growth of trees more than fifteen years old, or both natural and planted, and unsuitable for cultivation. From the time of classification until the year 1950 such lands were to be taxed at the local rate upon the valuation fixed in the last quadrennial appraisal preceding the classification. 1950 a revaluation of both land and timber was to be made as a final basis for taxation during the fifty years following. Any cutting, except for domestic use of the owner or his tenant, was to be reported, and before removal of the timber a tax of one-tenth of one per cent of such valuation for each year that the land had been classified as forest land should be paid, but such tax should not exceed seven per cent of such valuation. A penalty of three times the amount of the tax might be imposed for a failure of the owner to report a commercial cutting or to pay the required tax. Whenever in the opinion of the tax listers trees on such land were mature, or the land was no longer used as contemplated

^{1.} Session Laws Vermont, 1913, No. 41, p. 34.

by the act, notice should be given the owner. If the owner declined to cut the trees he must pay a tax as if they were cut, and the classification should no longer apply. Controversies between owners and the tax listers were to be decided by the chairman of the selectmen, the town clerk and the state forester.

Connecticut. In 1913 a report was made to the Connecticut legislature by a commission on forest taxation authorized by an act of May 2, 1911 and a forest taxation law of May May 7, 1913 ² provided that woodland and land suitable for forest planting, not less than five acres in area and having a value not exceeding twenty-five dollars per acre, exclusive of the timber growing thereon, might be given special classification as forest land for purposes of taxation. Land bearing timber of taxable value and of more than ten years' growth which was classified under the act as forest land must be taxed annually, at not to exceed a rate of ten mills, upon the value of the land and timber separately at the value assessed at the time of the classification. sessment on both land and timber was to remain fixed for a period of fifty years. Upon the basis of the revaluation made at the end of fifty years, both land and timber were to be subject to an annual tax at the local rate, but not to exceed ten mills, for another period of fifty years. At the end of the hundred years the land and timber should, if necessary, be revalued separately and assessed annually at the local rate.

Whenever a cutting was made on lands classified as forest lands, except cuttings for domestic uses, a graduated yield tax was to be collected. This tax was to be two per cent of the stumpage value of the timber removed during the first decade after classification, and to increase one per cent for each subsequent decade until the tax should reach seven per cent at the beginning of the sixth decade. Thereafter the yield tax was to remain at seven per cent of the stumpage value at the time of removal.

Session Laws of Conn., 1911, ch. 45, p. 1304.
 Laws of Conn. 1913, ch. 58., p. 1666. Cf. Act May 26, 1913, ch. 108, directing that the state forester issue no certificate under Chapter 205 of 1911 after June 1, 1913 and making that Act inapplicable to lands planted to forest trees after January 1, 1913; and see Act March 31, 1915, S. L., Conn. ch. 90, p. 1953, regulating the matter of assessment of forest land and of appeal from the decision of the assessors to the County Superior Court.

Land fully stocked with forest trees under ten years of age, whether planted or of natural growth, and with at least twelve hundred planted trees to the acre of the species approved by the state forester, might be classified as forest land and would thereafter be taxed on a valuation of the land only, with a revaluation of the land at the end of a fifty year period. Whenever a cutting for sale purposes was made in such a forest a yield tax of ten per cent of the stumpage value of the material removed was to be levied.

Application for classification, reclassification, and permission to cut must be made to the state forester, and he might cancel a classification if the requirements of the act were not being complied with, either from the fault of the owner or from other cause.

Pennsylvania. Forest taxation bills pending in the Pennsylvania legislatures in 1907, 1909 and 1911, failed of passage, but in 1913 three laws were passed providing for the classification of certain private lands as forest lands and for the taxation of the same. One of these 1 which declared that its purpose was to encourage the growing of trees suitable for merchantable forest products provided that any owner of surface land desirous of having the same placed in a classification of land to be known as auxiliary forest reserves might notify the State Forestry Reservation Commission of his desire with a description of the land and the timber thereon. The commission might in its discretion have the lands examined by a forester and determine whether the land should properly be thus classified. Such classification could not become operative until the owner had agreed in writing with the commission to care for the trees growing thereon according to the instructions of the commission, and the land might be removed from such classification because of a failure of the owner to care for the trees as agreed, and back taxes recovered for the land on the regular taxation basis. On a similar basis the land might be removed from the auxiliary forest reserve classification upon the request of the owner.

^{1.} Act June 5, 1913, S. L. Penn., No. 284, p. 426.

When the trees became merchantable the commission was to determine the amount of timber to be cut. classification might be maintained after the harvest of the forest crop, if the owner complied with the instructions of the commission and protected the young growth. owner might at all times remove dead or injured trees, and under the direction of the commission make thinnings.

A companion act 1 provided that the surface of lands classified as auxiliary forest reserves should be assessed for taxation purposes at not over one dollar per acre so long as thus designated. Minerals in the land might be separately assessed and taxed. Whenever timber was to be harvested the owner was required to give a bond to the county treasurer in the sum of twenty per cent of the value of such timber as estimated by the commission to insure the payment within ninety days after the harvesting of ten per cent of the actual stumpage value of the timber removed, as a yield tax.

A third act of 1913 2 provided that the state should pay an annual tax of two cents per acre on auxiliary reserves for the benefit of schools, and the same amount for the construction and repair of roads in the districts in which such reserves were situated.

Massachusetts. In 1912 the constitution of Massachusetts was amended so as to authorize the separate classification of forest land for taxation purposes. A resolution of the Massachusetts legislature, approved June 16, 1913³ provided for the appointment of a commission of five to investigate the question of forest taxation and report to the legislature as to the legislation necessary for the acquisition and management of wild and forest land. The report of the commission was submitted in January, 1914 4 and the legislation therein recommended was enacted into law on June 2, 1914. 5 This act provided that owners of

Act June 5, 1913, S. L., Penn., No. 269, p. 405.
 Act June 5, 1913, S. L., Penn., No. 270, p. 408. Cf. Act Apr. 22, 1909, S. L. No. 69, p. 115, authorizing distribution of planting stock at not over cost and transportation and Act April 21, 1915, S. L. No. 76 removing all charges except for boxing and for transportation.
 Resolves Mass., 1913, ch. 131, p. 1180.
 Senate Doc., Mass., 1914, No. 426.
 Session Laws 1914, ch. 598, p. 529.

woodland or land suitable for forest planting of not less than three acres might have the same classified for taxation purposes either as a woodlot or as a plantation. The classification was to be made by the town assessors, but there was a right of appeal to the state forester, whose determination was to be final. Land classified as woodlot or plantation was to be taxed upon the basis of a fair value for the land exclusive of the value of the trees growing thereon, and a yield or product tax was to be levied whenever timber or other products were removed for sale, or other income derived. This product tax was to equal one percent of the income in any year during the first five years subsequent to April 1, 1914, and was to increase one per cent each fivevear period subsequent to April 1, 1919, until the end of five five-year periods, or a total period of twenty-five years was reached in the year 1939, after which time the product tax should remain equal to six per cent of the gross income received from timber stumpage or from other production of the land during any year. A penalty must be imposed for any failure by an owner or his representative to report any cutting upon which a product tax was due.

To protect towns from a decrease of revenue during the transition period from the existing method of taxation of timber, as land, to the system of levying an annual tax on the land and a yield tax on the timber when removed, provision was made in the Massachusetts law for the payment of a third form of tax called a forest commutation tax on lands classified as woodlot. The forest commutation tax levied between April 1, 1914, and April 1, 1919, as to any particular tract was to consist of its proportionate share of the remainder derived by the subtraction of the annual forest land tax levied in the town under the new plan of taxation from the total tax, exclusive of that on buildings, levied in the said town in 1913 on the lands classified as woodlot between April 1, 1914, and April 1, 1919; such proportionate share to be dependent upon the stumpage value of the timber standing upon any tract at the time of classi-Subsequent to 1919 this tax was to remain the same as in the year 1919. Upon lands classified as woodlot subsequent to April 1, 1919, the commutation tax was to

equal the remainder obtained by the subtraction from the last land tax before classification, exclusive of buildings, of the forest land tax levied in the year subsequent to such classification. Provision was made for a reduction of the forest commutation tax where timber of a value not less than ten per cent of the stumpage value of the trees standing at the time of classification had been destroyed by fire or otherwise, and for a reduction in this tax on similar terms as timber was cut and a product tax paid thereon. When the reductions for any purpose should equal the stumpage value of the timber standing at the date of classification, any woodlot should thereafter be taxed on the same basis as if classified as plantation.

No product tax need be paid on timber of a stumpage value not exceeding twenty-five dollars removed in any one year for personal use or for use of a tenant. Portions of a tract classified as woodlot or plantation not fully stocked or cut over should be planted or otherwise stocked under regulations prescribed by the state forester. A failure by the owner to restock the land would make him liable for the cost of planting by the state at a cost not exceeding ten dollars per acre. Provision was made for the ownership of classified land by corporations. The existing legislation providing for a tax exemption on forest plantations was repealed with a saving of all exemption rights previously earned and a provision for the classification of such land as plantation at the end of the ten-year exemption period of the former law.

PROVISIONS FOR THE ESTABLISHMENT AND MAIN-TENANCE OF FORESTS BY CITIES, TOWNS AND OTHER MUNICIPALITIES ENACTED PRIOR TO 1917

Massachusetts. The awakening interest in forestry in America in the last quarter of the nineteenth century drew its inspiration largely from a few men who had enjoyed the opportunity of studying or of observing forestry in countries of Continental Europe. This foreign influence

See Session Laws Mass., 1909, ch. 490, p. 543, sec, 6, and interpretation of tax laws, 111 Mass. 473; 118 Mass. 386, and 137 Mass., 272.

was strikingly illustrated by a Massachusetts act of May 25, 1882 authorizing the voters of any town, or the council of any city, to establish a municipal forest and make appropriations therefor, or to receive donations of land for forest purposes. So impressed were the legislators of Massachusetts by the reports received as to the success of communal forests in Europe that they even authorized the condemnation of land for community forest purposes. This act required the state board of agriculture to act as a board of forestry, without compensation other than traveling expenses, and charged the said board with the supervision and management of all such forests. They were to regulate the care and use of the forests and the planting and cultivating of trees therein. The one or more keepers of each forest to be appointed by this board were to have the powers of constables and police officers. All receipts of the forests were to be paid to the board which was to return to the municipality the net surplus not needed for the care and improvement of its public domain. The approval of two-thirds of the voters of a town at a special meeting, or of the council of a city, was required for the establishment of a forest, but the issuance of bonds to meet the expenses of such enterprises was authorized.

This law, as contained in chapter twenty-eight of the Revised Laws of pineteen hundred two was amended by an act of April 26, 1913 2 to limit the indebtedness that might be incurred by a city or town for municipal forest purposes to one-half of one per cent of the last assessed valuation of the city or town; to permit the acquisition of such public domain for purposes of water supply preseryation; and to allow the erection of buildings and lease of the same for purposes beneficial to the property. The act contained detailed provisions for the issuance of town or city bonds for the acquisition of such public domain, with limitations that the bonds should not run for more than

Session Laws, Mass. ISS2, ch. 255, p. 200. Cf. the Act of March 24, 1744, (Laws of 1743-44, ch. 25), Acts and Resolves, Province of Mass. Bay. Vol. III, p. 132 and Act of January 9, 1755, (Laws of 1755, ch. 21.) same volume p. 799, both authorizing the cooperative practice of forestry by private owners in Massachusetts under quasi corporate form.
 Sess. L., Mass., 1913, ch. 564, p. 483. See Act of April 12, 1915, 8. L. ch. 162 authorizing a city or town to acquire and maintain a public domain within another town for water supply purposes.

thirty years and should not bear a rate of interest above four and one-half per cent per annum. Cities and towns were authorized to place their public domain under the general supervision and control of the state forester to whom the local city or town forester and the keepers should be subordinate. When this was done buildings could not be erected upon the public domain without the approval of the state forester.

New Jersey. A New Jersey act of April 20, 1906 ¹ authorized the governing body of any municipality within the state to use any lands of such municipality for forest growth, and gave them the power to cut and sell timber, and to enter into contract with the state board of forest park reservation commissioners for the control and management of such lands for forestry purposes.

Pennsylvania. A Pennsylvania act of April 22, 1909, ² the preamble of which referred to the successful management of municipal forests in European countries and to the expediency of such a system in Pennsylvania, provided that any city, borough or township of the first class might acquire by purchase, gift or lease, hold and administer forest lands within, adjacent to, or at a distance from its corporate limits. The approval of the state commissioner of forestry must be obtained before the acquisition was accomplished and the lands were to be managed under his direction. After a three weeks' advertisement of their intention and the affording of an opportunity for a hearing, any lands approved by the state commissioner could be acquired by a vote of the township commissioners or of a city council. Such lands were made subject to use as parks, but the primary purpose was to be the realization of revenue. Any vote of the governing authorities to alienate lands acquired for forest purposes must receive a popular vote of approval to become effective.

Session Laws, N. J., 1906, ch. 136, p. 261.
 Session Laws, Pa., 1909, No. 79, p. 124. Cf. Act April 24, 1903, S. L. No. 227, p. 294 authorizing cities of the first class to acquire farmlands or woodlands for public park purposes, not over one thousand acres to each city.

Wisconsin. By act of April 28, 1909 1 any town board in the State of Wisconsin was authorized to acquire by purchase or otherwise a sufficient tract of land to use and maintain as a woodlot and to preserve and reforest the same under regulations approved by the state board of forestry. The sale of such a wood lot by the town board was authorized.

New York. On March 26, 1912 the New York law relating to municipal corporations was amended by the addition of a new section authorizing the governing board of any county, town or village to acquire for the county by purchase, lease, gift or condemnation tracts of land having a forest growth, or suitable therefor, and to appropriate public funds for the management of such lands according to the principles of scientific forestry for the benefit of the municipality. A two-weeks' notice of purpose and a public hearing must precede the final action of any governing body in acquiring land for forest purposes. Payment for the lands acquired might be made either by a tax levy or by the issuance of bonds. Although use of such tracts for other purposes was authorized, the act declared that the primary object was to be one of municipal revenue. After two weeks' notice and a public hearing forest lands might be disposed of by a two-thirds vote of the governing body.

A New York act of May 8, 1915 3 amended the conservation law of 1911 by inserting a new section providing that any county or town in the state might acquire, by purchase or by gift, vacant or abandoned land for reforestation purposes. The determination of whether land should be thus acquired was to be made by a vote of the county board of supervisors for a county forest and by majority vote of the people at a town meeting for a town forest. Such lands might be acquired at tax sales.

The state conservation commission was required to aid counties and towns in the reforestation and management

Session Laws, Wis., 1909, ch. 77, p. 82. Cf. Laws 1911, ch. 408, authorizing the employment of foresters in cities of the first class.
 Session Laws, N. Y., 1912, ch. 74, inserting section 72a in chap. 29 of the consolidated Laws of 1909.
 Session Laws, N. Y., 1915, ch. 558, p. 1737, inserting sec. 62a in art. IV of chap. 647 of 1911.

of such lands, and no sale of lands thus reforested could be made without the approval of the state commission.

Indiana. An act of February 12, 1913 provided that any five or more persons might, by written articles of association, organize a forestry association in any county, city, town or township. Upon the due filing of these articles the association was to become a perpetual corporation, with the power to establish and maintain forests. corporation might accept gifts of money, lands or property for the purpose of acquiring and holding in perpetuity forest lands which were not to be subject to taxation for any purpose. Counties were authorized to contribute to the objects of such associations. The forestry board selected by the members of the association were vested with administrative control of these forests. They might employ a forester. Fines might be imposed for injuring trees, and teachers were given the right to take pupils to a forest for instruction. All forestry corporations were required to report in writing to the secretary of the Indiana forestry association a description of all land acquired in any manner and a statement of the mode of acquisition and the cost, and the president of every forestry board was an ex-officio member of the state association. The legislature declared that the act was to be construed liberally for the encouragement of forestry practice.

New Hampshire. Under a New Hampshire act approved March 14, 1913 ² any town or city of the state was authorized to vote at any legal meeting, such sums of money as they should judge necessary to purchase, manage and improve lands for the purpose of growing wood and timber. The lands thus purchased were to be managed under the direction of the state forester. The net proceeds from the sale of wood and timber from these lands were to accrue to the benefit of the town or city.

Minnesota. A Minnesota act of April 8, 1913 3 au-

Session Laws, Ind., 1913, ch. 13, p. 18.
 Session Laws, N. H., 1913, ch. 27, p. 497. Cf. Laws 1901, ch. 98, regarding shade trees, amended by Laws 1905, ch. 119, and Laws 1915, ch. 138.
 Session Laws, Minnesota, 1913, ch. 211. Cf. Laws 1915, ch. 108, providing for a municipal forest for the City of St. Paul.

thorized the governing body of any city, village or town in the state to accept donations of land suitable for forest production purposes, and manage the same on forestry principles. The donor of not less than one hundred acres was entitled under the law to have the tract donated perpetually bear his or her name. When authorized by a majority vote at any general or special election, the governing body of any city, village or town might obtain by purchase or condemnation proceedings any tract that was better adapted for the production of timber and wood than for any other purpose and that was conveniently located for such purpose. The selection of land and the management thereof must have the approval of the state forester. An annual tax of not exceeding five mills on the dollar of assessed real estate valuation for the acquisition and maintenance of the communal forests of any municipality was authorized.

An act of April 21, 1915 ¹ containing provisions substantially identical with those of the act of 1913 as to acceptance, purchase, condemnation and management of lands primarily suitable for forest production purposes was applicable only to cities governed under a state charter and having a population of more than fifty thousand inhabitants. The only essential difference between this act and the one applicable to smaller communities was that the governing body of the city might acquire lands by resolution without a submission of the proposition to the voters of the city.

Vermont. By an act of April 1, 1915 ² the legislature of Vermont authorized any city or town to vote money at any legal meeting for the purchase, management and improvement of lands suitable for the growing of wood and timber. Any town or city having a tract of land not less than forty acres in extent, acquired through donation, purchase or forfeiture for taxes, was authorized to have the same examined without cost by the state forester to determine whether it was suitable for maintenance as a school

Session Laws, Minn., 1915, ch. 217, p. 318.
 Session Laws, Vt., 1915, No. 24, p. 84.

endowment forest. If a tract were so designated by the forester, he was required to give advice as to planting and management, and might distribute at cost annually from the state nurseries one hundred and fifty thousand trees for planting in such forests. These forests must be managed under the direction of the state forester, and only such trees cut as he should designate. The town forest warden was required to protect school endowment forests and, upon accounts submitted and approved by the forester, he might receive the same compensation for this work as for fire suppression. The net proceeds were to be deposited in the town treasury.

CHAPTER VI

A Summary of the Progress of Forest Legislation in American States to the close of the Year Nineteen Hundred Sixteen ¹

Introduction. The first stages of the forestry movement as directed to the conservation of state and national resources was marked by the establishment of public associations and legislative commissions for the investigation of forest resources, and the submission of reports as to the means to be adopted to effect an improvement of conditions. The members of the legislative commissions were often selected from those prominent in political or business life, but the appointment of publicists and scientists upon such boards was also common. In many of the states this investigation was conducted by the state geological survey and the national geological survey rendered very important service during the period preceding the establishment of a separate bureau for the management of national forests.

These investigative commissions were regularly succeeded by permanent commissions or boards that served without compensation, other than reimbursement of expenses. In the earlier developments each board or commission was usually authorized to select a salaried secretary who acted as an administrative officer and as a director of the educational efforts of the board. These permanent boards almost invariably included the governor and one or more other state executive officers with one or more members representing the scientific or educational interests of the state and often one or more owners or manufacturers of timber to be appointed by the governor. In several instances, as in Indiana and Minnesota, these members were

^{1.} In the preparation of Chapter VI the author has enjoyed the privilege of consulting a monograph on State Forest Organization by J. Girvin Peters, published in 1913, and desires to acknowledge the helpful suggestions derived therefrom.

to be nominated by associations or educational corporations named in the act creating the board.

In many states later laws substituted for the secretary of the board a technically trained forester who was made responsible for the general administration of forestry activities of all kinds, including fire protection and educational propaganda. In the majority of the states a board has been retained with advisory or supervisory duties.

SYSTEMS OF ADMINISTRATION IN 1916

Supervision by a Board of Forestry. At the close of the year 1916 there were permanent official boards of forestry in Alabama (called Commission of Forestry), California, Delaware, Indiana, Kentucky, Maryland, Michigan (called Public Domain Commission), Minnesota, Montana, New Hampshire (called Forestry Commission), New Jersey (called Board of Conservation and Development and with other jurisdiction), Oregon, Pennsylvania (called Department of Forestry) and Washington.

Supervision by an Agricultural Board. In Colorado and Vermont the state board of agriculture acts as a board of forestry. In Connecticut, Kansas and Ohio forestry work is conducted under the supervision of the state agricultural experiment stations and in Texas under that of the board of directors of the State agricultural and mechanical college.

Supervision by Other Boards. In North Carolina the geological survey, in Virginia the geological commission, and in Tennessee and West Virginia the forest, fish, and game commissioner is charged with responsibility for all forest administration and protection. In Idaho the state board of land commissioners directs all forestry work and in Colorado and Utah the same board is required to administer state forest lands so as to conserve the water supply. In Florida, Mississippi, and Missouri, which have no forest administration system, the state geological survey is required to gather information as to forest resources.

A Single Executive. In Williams a conservation commission of three salaried members has general charge of forests, fish and game with one commissioner in direct charge of each branch. In Louisiana a single commissioner of conservation is assisted by an advisory board of four members in directing forestry work. Full responsibility for the direction of forestry work is vested in the forest commissioner in Maine, the state forester in Massachusetts, the conservation commissioner in New York and the commissioner of forestry in Rhode Island. In North Dakota the president of the state school of forestry is required by law to act as state forester and in South Dakota the commissioner of school and public lands is authorized to appoint a state forest supervisor who is required to protect the forests upon state lands. In Iowa the Secretary of the state horticultural society acts as forestry commissioner in the gathering of statistics and in promoting the objects of the forest reservation tax exemption law.

Technical Representatives upon Board. In Alabama, Delaware, Louisiana and Oregon the forestry board includes the professor of forestry at the state college or university and in Alabama one member of the Federal Forest Service also. In California, Connecticut, Delaware, Indiana, Kansas, Louisiana, Montana, Ohio, Pennsylvania and Wisconsin the person acting as forester is a member of the directing forestry board.

A State Forester. In California, Colorado, Connecticut, Delaware, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Vermont, Virginia, Washington, West Virginia and Wisconsin provision is made for the employment of an administrative forest officer. This officer is designated as forester except in Maine, New York, Pennsylvania Rhode Island, South Dakota and Wisconsin. In California, Connecticut, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York,

Texas, Vermont, Virginia, West Virginia and Wisconsin the law requires that this official shall have had a technical education or a practical training as a forester. The Oregon law requires that he be a "practical forester."

STATE FORESTS

Management. In Alabama, California, Colorado, Connecticut, Delaware, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee (probably repealed by Ch. 152 of laws of 1915), Texas, Utah, Vermont, Virginia, Washington, West Virginia and Wisconsin provision has been made for the management for forestry purposes of lands held or to be acquired by the state.

Acquisition through Gift. In Alabama, Delaware, Louisiana, Maryland, Massachusetts, Minnesota, New Hamshire, New Jersey, New York, North Carolina, Texas, Vermont, Virginia and West Virginia there are laws specifically authorizing the acceptance by the state of gifts of land for forestry purposes.

Acquisition by Purchase. In Connecticut, Delaware, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Vermont, Virginia, West Virginia and Wisconsin the acquisition of state forest reserves through purchase by forestry officials has been authorized. Lands within the Maine forestry district which are forfeited for a non-payment of the special protective tax are held as state forest lands.

Establishment by Reservation. In Idaho, Michigan, Minnesota, Montana, Oregon, Utah, Washington and Wisconsin the setting aside of state lands for forestry purposes is provided for by law. A California law, enacted many years ago, provided that whatever funds should be acquired by the state under a certain claim against the United States should be used for the acquisition of state forests.

Nurseries, Demonstration Forests and Parks. In Indiana and Nebraska, in addition to a number of the states above mentioned, lands may be acquired for forest nursery and forest demonstration purposes. In California, Massachusetts, Minnesota, Montana, New Jersey, New York and Wisconsin the forestry officials are given partial or full jurisdiction over state parks.

Preservation of Trees as Water Conservators. In Nevada the cutting of timber of certain species and sizes from water sheds is forbidden, and in Colorado and Idaho and Utah trees must not be cut from state lands if needed to conserve the water supply. In Montana trees less than eight inches in diameter at twenty feet from the ground must not be cut from state land.

STATE ASSISTANCE TO INDIVIDUALS AND COR-PORATIONS IN FOREST EXTENSION AND CON-SERVATION

Legislative Encouragement of Private Forestry. Several of the western states in which laws for the enactment of tree planting were enacted between 1860 and 1890 no longer had such laws at the close of 1916. However, laws providing either for the payment of bounties or for the exemption of property from taxation as a reward for tree planting were still in effect in Illinois, Iowa, Minnesota, Nebraska, North Dakota (amended in 1905 and 1907). South Dakota (amended in 1909 and 1913), Washington and Wyoming.

The tax exemption laws directed to the reestablishment of forest areas enacted in Connecticut, Maine, Massachusetts and Rhode Island in the seventies were followed by amendments in those states and by similar enactments in Pennsylvania, Indiana, New Hampshire, Vermont, Iowa, Wisconsin, Alabama and Louisiana between 1880 and 1910. Although these laws all contemplated the restoration of forest growth to areas formerly forested rather than the establishment of woodlots within regions naturally treeless, as did the bounty and exemption laws in the states previously mentioned, the underlying conception as to the results to be

attained and the provisions as to the methods to be pursued were generally very similar to the laws for the afforestation of areas within the prairie and plains region.

Between 1910 and 1916 laws were enacted in Connecticut, Massachusetts, Michigan, New York, Pennsylvania, and Vermont which exhibit a broader conception of the possibilities of the production of forest crops on private lands and which recognize more fully the fact that forest producing areas are entitled to a different classification from other lands for purposes of taxation. These laws provide for a long period of fixed valuation for taxation purposes with a tax upon the yield when the timber is cut in addition to the relatively light land tax during the period of fixed assessment.

In Massachusetts and New Hampshire laws have been enacted providing that private lands, which may be acquired by the state for forest improvement purposes, may be repurchased by the former owners at the close of ten years by the payment of all sums expended thereon by the state with interest upon the same at four per cent. In North Carolina private owners of forest land lying at an elevation of two thousand feet or more above sea level may apply to the governor for the classification of such land as "state forest." If the governor so designate the land it is given protection, at the expense of the owner, by special state appointees, is required to pay a county school tax of one-half cent per acre, and is managed under a plan formulated by the state geological survey.

Legislative Encouragement to Municipal Forestry. In Indiana, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Vermont and Wisconsin legislative provision has been made for the acquisition and maintenance of forests by cities, towns and other municipalities as a means of deriving a revenue for governmental purposes. In Illinois there is a very comprehensive law for the establishment of forest districts for esthetic and recreational purposes, while a number of states have made special or general provision for forested recretaion parks.

Distribution of Forest Trees for Private and Municipal Planting. In Kentucky, Maryland, Massachusetts,

New Hampshire. New York, North Dakota, Pennsylvania, Vermont and Virginia provision has been made by law for the distribution of young trees, grown in state nurseries, to residents of the state or municipalities at cost or upon terms to be fixed by state forest officials.

Cooperation by the States in Forestry Activities. In nearly every state having a forestry organization there is legislative provision for the cooperation of the state officials with counties, towns, cities, corporations and individuals in the furtherance of all forestry interests within the state; in several there is express authority for cooperation with the federal government, especially as to investigations and fire protection; in a few (e. g. Minnesota) provision has been made for cooperation with other states; and in Washington cooperation with the Dominion of Canada is authorized.

No action by state legislatures was necessary for the placing of more than one hundred fifty million acres within public-land states in the status of National Forest. To authorize the establishment of National Forests within states that never contained federal public land, or that no longer had such lands suitable for forest purposes, laws providing for the acquisition of National Forests have been enacted in Alabama, Georgia, Kentucky, Maine, Maryland, New Hampshire, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia and West Virginia. Laws specifically authorizing cooperation with the federal government in fire protection have been enacted in Connecticut, Kentucky, Minnesota, New Hampshire, Virginia, Washington, West Virginia and Wisconsin, and cooperation has been effected under general laws in a dozen other states.

RESTRICTIONS DIRECTED TO THE PREVENTION OF FOREST FIRES

Closed Seasons for the Setting of Fires in the Open. Laws forbidding the setting of fires in proximity to marshes, prairies or woodland and during certain portions of the year date from the early colonial period. Subsequent to the in-

stitution of a national government new laws of this character were enacted in many of the original states and in the newly admitted states. Early laws of this character are still in force in Alabama, Florida, Georgia, Illinois, Iowa, Kansas, Nebraska, North Dakota, and South Dakota. A notice to one's neighbors in advance of the firing of the woods marshes or prairies, as a means of escaping a penalty or full liability for all damages caused, is required in Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Michigan (north of the 44th parallel of latitude), Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, Oregon, South Dakota and Tennessee. Open fires set in Idaho, New Jersey and Pennsylvania (near producing gas or oil wells) must be watched. ¹

Recent Laws Authorize Burning under Permits. In the states in which laws fixing closed seasons for burning have been enacted since the rise of the forest conservation movement, provision is ordinarily made for a burning during such season through the issuance of permits by state, county or town officials. Such permits are issued in Connecticut, Idaho, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Washington, and Wisconsin.

Separate closed seasons in the spring and autumn extend from March 15 to June 1 and from September 15 to November 15 in Connecticut; from April 1 to May 20 and from September 10 to November 10 in Pennsylvania. The closed season extends from March 1 to December 1 in Massachusetts, from April 1 to November 1 in New Hampshire, from July 1 to October 1 in Idaho, Oregon, Washington, and from April 1 to December 1 in Rhode Island. In Minnesota, New Jersey and New York the entire year is closed, while in Michigan and Wisconsin each township board may dec'are a closed season whenever danger from fire is considered by them unusually great.

The closed season is applicable in New York only to the fire towns in the Adirondack and Catskill regions, and in

^{1.} A provision of this kind in chapter 397 of the Session Laws of Tennessee of 1907 was evidently repealed by chapter 152 of the laws of 1915.

Pennsylvania only to regions in which there are producing oil and gas wells. The Connecticut and Massachusetts laws except the burning of material along railroad rights of way and domestic or agricultural refuse at a distance of two hundred feet from forest land, or the maintenance of fires on sandy or barren land, under proper precautions, by persons over eighteen years of age. The Rhode Island law allows the burning of domestic, agricultural and railroad refuse within one hundred feet of forest land. In Oregon permits may be issued by county judges, as well as forest wardens, and the law is not applicable to fires set under proper precautions and control for the burning of small quantities of material in the clearing of land; though the escape of such a fire to the damage of another is declared to constitute presumptive evidence of a violation of the law. The Washington law is so stringent as to forbid, apparently any burning in the open during the closed season without a permit and it requires the cutting down of all dead trees over twenty-five feet in height before an area is fired under a permit.

The Extinguishment of Camp Fires. The total extinguishment of camp fires before leaving them, if in the vicinity of forest or brush land, is required in Connecticut, California, Colorado, Idaho (August 1 to May 15), Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New York, North Carolina, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Vermont, Washington (during the closed season), West Virginia, Wisconsin and Wyoming.

The Suspension of the Hunting Season. In Connecticut, Maine, Massachusetts, New Hampshire, New York (within the fire towns) Oregon, Vermont and Washington the governor may in periods of drought suspend the hunting season. During such period the building of fires or the discharging of a firearm within forested regions thus closed is unlawful.

The Clearing of a Space for a Fire. Several states require the clearing away of all inflammable material

for a prescribed distance before a fire is set in the open. Such provisions exist in Alabama, California, Colorado, Connecticut, Delaware, Kentucky, Maryland and Minnesota.

The Setting of Fires by Gun-wads, Matches or Burning Tobacco. In a number of states the setting of fires by combustible gun-wads, or by the dropping of burning matches, cigars, cigarettes, or other burning material is declared to render the offender subject to the penalties of the law against the setting of fires in forest, brush or prairie land. Such provisions exist in Connecticut, Idaho, Louisiana, Minnesota, New Hampshire, New York, Oregon and Washington.

General Provisions for the Prevention of Forest Fires. Within Connecticut, California, Maine, New Hampshire, Oregon and West Virginia it is unlawful to kindle a fire upon the land of another without his permission, except to check a fire already burning. The Oregon law is applicable to uninclosed land only when due notice is given that the owner forbids the building of fires. Maine and Colorado require non-residents camping within forested districts to employ local wardens or registered guides who are required to guard against the escape of fires. In Massachusetts there are special restrictions as to the setting of fires in particular localities by unnaturalized citizens, or the burning of charcoal in certain localities during a specified period. In Idaho, Minnesota, Pennsylvania and South Carolina, the carrying of a naked torch or fire-brand on or near public forest land or that of another has been forbidden. In Maryland, New Hampshire and New Jersey, persons discovering forest fires are required to extinguish or report them. Special measures to prevent the setting of fires along highways or to facilitate the use of highways as fire lines have been adopted in California, Connecticut. Kansas, Nebraska, New Jersey, North Dakota and South Dakota. In Minnesota the creation of fire lines for the protection of cities and villages especially exposed to forest fire danger is required and appropriations are made for fire lines in the northern counties. New York, Vermont and other states have made specific provision for the

employment of watchmen by the state, Rhode Island has provided for the payment of the salaries of look-out men in equal shares by the state and the town protected; and New Hampshire has even authorized the condemnation of land for look-out sites. Massachusetts, New Hampshire and Vermont have specifically provided for the payment by the state of expenses connected with conferences of fire wardens. The releasing of fire-balloons is unlawful in Massachusetts or in the fire towns or adjacent towns of New York and the sale of them is unlawful in Pennsylvania. In Washington all dead trees within a radius of twenty-five feet of each setting of a donkey logging engine must be cut down, a watchman kept on duty for two hours after the operation of such engine ceases, and special precautions in the burning of mill refuse must be exercised.

PROVISIONS FOR THE DISPOSAL OF LOGGING DEBRIS

The Disposal of Slash in Cutting Operations. Although it has been recognized for many years that one of the most prolific sources of destructive forest fires consisted of the brush, tops and other debris left by loggers, only within recent years has public opinion become sufficiently aroused to enforce measures for the protection of the public from this menace.

The New York law now requires a lopping of the branches from all tops, to a point where the size of the top does not exceed three inches, after all cutting operations within the "fire towns" of the forest preserve regions, unless the conservation commissioner shall have, before the trees are cut, authorized a different disposition. The Minnesota law requires that notice of lumbering operations shall be given the state forester in advance of their commencement and authorizes him and district rangers to require, under penalty of a fine, such disposition of the slash as shall be deemed necessary for the protection of surrounding areas. Upon failure of a logger to care for the slash, the same may be disposed of by the state at the expense of the one responsible for the disposal of it. The Idaho law requires the disposal of all branches and refuse over four inches in diameter in such manner as the district fire warden may direct, and the Montana law requires a proper disposition of all debris resulting from cutting operations on state lands. In Michigan the forest, fish and game wardens may enter private lands to dispose of inflammable material that constitutes a fire menace. In Washington the felling of trees so that the tops lie within green timber belonging to another is unlawful.

The Disposal of Slash Along Highways, Rail-roads, etc. A proper disposition of the slash resulting from lumbering operations is required adjacent to: (a) highways in Connecticut, (b) highways, railroads or the woodland of another in Massachusetts, (c) railroads in New Hampshire, (d) highways or railroads in Maine and the "fire towns" of New York, (e) the watershed of any town or city water supply in North Carolina, (f) producing oil or gas wells, or railroads in such regions in Pennsylvania. In Maine, Minnesota, Oregon and Washington all debris resulting from the building of roads, trails or railroads through forest land must be disposed of properly.

The treatment of Slash as a Nuisance. In California, New Jersey, Oregon and Washington these are statutes providing that any area upon—which slash has been left and which is inadequately protected may be declared to constitute a public nuisance. If, subsequent to a determination by forest officials that any area is a nuisance and after due notice, the one responsible for such condition fail or refuse to abate the same or to guard adjacent property from danger; the dangerous area may be patrolled (in New Jersey) or abated by state officials at the expense of the one responsible for the nuisance.

LEGISLATION REGARDING THE OPERATION OF RAILROADS AND STATIONARY ENGINES

Development of Such Legislation. The advent of the railroad locomotive in America was followed promptly by a legislative recognition of the unusual danger of the communication of fire therefrom to property adjacent to

the track. The early laws making railroad operators liable for fire damage caused by locomotives, which often declared the communication of a fire to constitute prima facie evidence of negligence in the operation of the locomotive, were followed by others affording railroads an insurable interest in the property for which they were made liable. Some of the earlier laws made the railroad operators liable irrespective of the question of negligence (e.g. Iowa, Massachusetts, and New Hampshire) and in recent years this attitude has been announced in several state statutes (e. g. Arkansas, Ohio and Virginia). The settlement of the prairie and plains states of the middle west was followed by the enactment of laws requiring the removal of grass and other inflammable material or the plowing or burning of fire guards along railroad rights-of-way. The rise of the forestry movement at the close of the nineteenth century was marked by the enactment of laws of this character in timber regions. In the same period, laws requiring spark arresters on smoke stacks and suitable devices to prevent the communication of fires from fire-boxes and ashpans also became common. In several states laws have been enacted to require the inspection of locomotives and the rejection of defective ones by state officials. In a few a patrol of the right of way is required and in Maine the windows of smoking cars, operated through the forestry district, must be screened. The burning of oil in locomotives on day trains, during all periods of fire danger from April 15 to November 1, is required within the Adirondack forest preserve in New York.

Spark Arresters on Smoke Stacks. The use of spark arresters during the dry season upon locomotives, not burning oil, operated through forest regions, is required in Alabama, California, Colorado, Connecticut, Delaware, Idaho, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, (in "fire towns" only), Ohio (except in December, January and February), Oregon, Pennsylvania (in oil and gas producing regions), (Tennessee) ¹ Virginia, Washington, West

Provision as tolo ging lo omotives in Chapter 397 of 1907 evidently repealed by Chapter 152 of 1915.

Virginia and Wisconsin, and upon stationary engines or boilers in Alabama, California, Delaware, Idaho, Kentucky, Maryland, Michigan, Minnesota, New Hampshire (on portable saw mills only), New York (in fire towns only), Oregon, Virginia, Washington and Wisconsin.

Boats using wood as fuel on navigable waters of Michigan must have suitable spark arresters.

Devices on Fireboxes and Ashpans. Suitable devices upon fire boxes and ashpans of locomotives are required in Alabama, California, Colorado, Connecticut, Delaware, Kentucky, Maine, Maryland, Minnesota, New Hampshire, New Jersey (in general terms), New York, Pennsylvania (in oil and gas regions), Washington, West Virginia and Wisconsin; and upon other engines and boilers in Alabama, California, Delaware, Kentucky, Maryland, Minnesota, New York (in fire towns only), Washington and Wisconsin.

Inspection and Rejection of Locomotives and Boilers. In Maine, Massachusetts, Minnesota, New Hampshire, New York, Oregon, Washington and Wisconsin provision is made for an inspection of appliances for the prevention of the setting of forest fires, and in Minnesota, New York, and Wisconsin the use of defective locomotives, engines or boilers after their rejection by state officials is a misdemeanor. In Ohio and Oregon the use of a locomotive (or stationary engine in Oregon) which is not properly equipped may be enjoined by resort to the courts. In practically every state requiring the use of protective devices, the operation of a locomotive or other engine without proper equipment may be punished by a fine.

The Deposition of Live Coals or Ashes. In Idaho, Louisiana (does not apply within rails), Maine, Massachusetts, Michigan, Minnesota, New Jersey (in general terms), New York, Pennsylvania (in oil and gas regions only), (Tennessee), ¹ Washington, West Virginia and Wisconsin the depositing of fire, live coals or ashes along the

^{1.} Provision in Chapter 397 of 1907 probably repealed by Chapter 152 of 1915.

right of way within or near forest land by railroad employees is forbidden under penalty of a fine. There are similar provisions as to threshing engines in California and Michigan.

The Clearing of Inflammable Material from Rights of Way. In Colorado, Idaho, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania (in oil and gas producing regions), Virginia, West Virginia, Wisconsin and Wyoming there are laws requiring the removal of inflammable material from the rights of way of railroads once or twice annually.

The laws in Colorado, Illinois, Kentucky, Missouri. Nebraska, New Mexico, North Dakota, Ohio, Virginia, and Wyoming were not primarily directed to the prevention of forest fires and the requirement as to clearing is not limited to forest lands. If a railroad fails to comply with the law in Missouri the owner of adjacent land may clear away the material and collect double the cost, in Ohio he may collect single cost, and in Oregon the clearing may be done by the state forester and the cost collected for the state. East of the Cascades in Oregon rights of way must be moved annually, and the cost of mowing may be collected by an adjacent owner. In Oregon, Wisconsin and Wyoming the railroad operators may be relieved from such clearing in places where it is considered unnecessary as a means of protection; while in Maine and Minnesota all burning of old ties or other material along railroad rights of way may be forbidden in dangerous periods. In North Carolina care in burning along a railroad right of way is required under a general statute.

The Construction of Fire-breaks Adjacent to Rights of Way. In Colorado, Minnesota, Montana, New Mexico, South Dakota and Wyoming the construction of fire breaks adjacent to railroad rights of way is authorized or required and under recent laws in Massachusetts, New Hampshire and Rhode Island railroad operators are authorized, under the supervision of state officials, to enter private

lands adjacent to their rights of way, for the purpose of removing inflammable material. The New Jersey law of April 12, 1909 requiring the construction of fire-breaks adjacent to railroad rights of way without compensation to the adjacent owners has been declared unconstitutional.

The Patrol of Rights of Way. A patrol of railroad rights of way may be required in dangerous seasons in Maine (in forestry district), Minnesota, New Hampshire, New Jersey, New York, Pennsylvania (in oil and gas regions), Washington, West Virginia and Wisconsin. ¹

SYSTEMS OF FOREST FIRE CONTROL

Direction of Control by the State. In California, Connecticut, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, North Carolina, Oregon, Texas, Vermont, and Washington, the state forester is charged with the supervision of forest fire control. However, in Massachusetts and New Jersev a state fire warden is in direct charge. In Idaho the state land commissioners, in Maine the forestry commissioner, in New York the superintendent of forests, in North Dakota the state forest warden, in Pennsylvania the bureau of forest protection, in Rhode Island the commissioner of forestry, in South Dakota the forest supervisor and in Wisconsin the forestry member of the conservation commission has charge of forest fire protection. In Michigan, Tennessee and West Virginia the direction of forest fire control is vested in the state forest, fish and game commissioner, which officer is subject to the direction of the Publie Domain Commission in Michigan.

In all of the above named the state not only pays the salaries of the officials engaged in fire prevention work but also pays a large part or all of the expense of controlling fires, at least within such portions of a state as are devoted especially to forestry purposes. Thus in Louisiana the whole expense of maintaining the state forestry depart-

^{1.} For citations of railroad fire prevention acts in the various states see "The Essentials of American Timber Law, Kinney, p. 121.

ment, including fire protection expense, is paid from a special forestry fund derived from a license tax on forest products. Within the "forestry district" of Maine the state pays all expense from a special tax levied within the said district; within the area north of township twenty north in Michigan, one-third; within "fire towns" of the forest preserve counties of New York, one half. The state pays four-fifths of fire control in Pennsylvania, two-thirds in Oregon and Washington, and one-half in Connecticut, Maryland, New Hampshire, New Jersey and Rhode Island. In Massachusetts one-half of the amount expended by local communities for fire breaks or apparatus for fire prevention is refunded from state appropriations.

Local Control with General State Supervision. In Alabama, Ca'ifornia, Colorado, Delaware, North Carolina, North Dakota, Virginia and West Virginia there is a certain amount of state supervision but the expense of fire control is borne by the counties or individuals interested.

The duty of controlling forest fires is vested: for Alabama, in county game and fish wardens, sheriffs and other county officers; for California, in wardens appointed by the state forester at the request and expense of counties and individuals; for Colorado, in sheriffs and their deputies for North Carolina, in township and district wardens appointed by the state forester at local expense; for North Dakota, in county supervisors or commissioners; for Virginia, in wardens appointed by the state geological survey; and for West Virginia, in local deputy fish and game wardens.

Local Control without State Supervision. In a number of states the cost of fire control is met entirely from local funds without state supervision. Such is the case in Indiana, Iowa, Maine (outside the "forestry district"), Michigan (south of township twenty-one north), New York (outside the "fire towns"), Ohio, South Carolina (board of assessors to control), Utah (sheriffs to control), and Wisconsin (town officials control, but special wardens paid by state and county in equal shares.)

General Provisions as to Control. In Alabama, Cali-

fornia, Colorado, Connecticut, Idaho, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, (Tennessee) 1, Vermont, Washington, West Virginia and Wisconsin there is now specific legislative authority for the requiring of the services of citizens and property in the controlling of existing fires and in many of these states (e. g. Connecticut, Idaho, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont and Washington) a patrol in times of unusual danger is authorized. In Oregon. private owners may be required to exercise a patrol equal to that maintained by one half of the timberland owners in the locality. Residence of an owner in the immediate vicinity of the land is deemed a sufficient compliance with the Oregon requirement as to a patrol.

The power to arrest offenders detected in the violation of state forest laws is vested in specially-appointed forest officers or in game wardens, sheriffs, or other executive or judicial officers in Alabama, California, Colorado, Connecticut, Idaho, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, Washington, West Virginia and Wisconsin.

LIABILITY FOR FIRE DAMAGE AND PENALTIES FOR VIOLATIONS OF FOREST LAW

Civil Liability for Fire Damages. Under the common law any one who wilfully or negligently sets a fire on the land of another or allows one to escape from his own land may be required to respond in damages for the injury caused. In many American states the common law has been supplemented by statutes declaring that such persons shall be liable for all dmages, and in several the law pro-

^{1.} Chapter 397 of 1907 probably repealed by Chapter 152 of 1915.

vides for multiple civil damages (e. g. California, Michigan, Missouri, Nevada and Oregon).

In determining the damage suffered through the injury of trees by fire, courts have admitted evidence as to the value of the trees as protectors of the land or other trees and even as to the cost of reproducing them artificially. ¹

Statutes specifically provide that fire damage may include: injury to the land and vegetation in California and Oregon; the value of the trees as conservators of water and as a benefit to other trees in Colorado; and the cost of producing trees artificially in Louisiana.

In Maine any one injured by a fire because of the neglect of the selectmen to perform their duty is given a specific right of action against the town for the damages, suffered.

In recent years several states have enacted laws that allow the state, municipality or private individual to recover, from the party responsible for a forest fire, the cost of extinguishing or combatting the fire, in addition to the actual damages suffered. There are provisions of this character in California, Delaware, Kentucky, Louisiana, Maryland, New York, Oregon, Virginia, West Virginia, and Wisconsin. In New Jersey the commission of Conservation may permit an offender to pay to the state the cost of extinguishing a forest fire in lieu of the prescribed penalties, if the setting of the fire was not willful or malicious. In Connecticut, Massachusetts, Minnesota and New Hampshire railroad operators have specifically been made liable for the cost of extinguishing a fire set by them or their employees, in addition to other damages.

Criminal Liability for Forest Fires. In every American state there are now penalties for the willful or malicious firing of the woods, marshes or prairies and in most states it is a misdemeanor to negligently permit a fire to spread so as to injure or endanger the property of another. ² The statutes are construed strictly, but there has been a decided tendency in recent years to make such laws more

See cases cited pp. 74 to 77 of "The Essentials of American Timber Law."— Kinney.

^{2.} For citations of statutes see "The Essentials of American Timber Law" Kinney, pp. 118 and 119.

comprehensive as a means of preventing the careless setting of fires. Most laws now provide for maximum and minimum fines and for imprisonment.

Penalties for the Violation of Various Forest Laws. Nearly all of the laws imposing restrictions as to the building of fires, disposal of slash, operation of railroads, etc., provide for the imposition of fines for violations of their provisions. The willful destruction of fire warning notices is punishable by a fine in California, Colorado, Connecticut, Idaho, Louisiana, Maine, Massachusetts, Maryland, Michigan, Minnesota, Montana, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington and Wisconsin and in New York any willful interference with fire protective supplies is a specific offense. In many states informers are allowed moieties of the fines collected. In a majority of the states the net collections are covered into the general fund of the state; but in a few they are credited to a special fund for school or forestry purposes.

CHAPTER VII

Federal Legislation for the Protection and Administration of the Forests Belonging to the United States Enacted prior to January First Nineteen Hundred Seventeen

LEGISLATION DIRECTED TO THE MAINTENANCE OF A SUPPLY OF TIMBER FOR NAVAL PURPOSES

During the Revolutionary War and the succeeding period of the Confederation the relationship of the American States was not such as to promote the establishment of a national navy.

The repeated depredations of Algerine pirates upon American merchant vessels subsequent to the adoption of the Constitution led to a demand for a national navy, and by act of March 27, 1794 (1 Stat. L., 350), Congress authorized the President to provide, by purchase or otherwise, four ships of forty-four guns each and two of thirty-six guns each. This was followed by supplementary acts of April 20, 1796 (1 Stat. L., 453), July 1, 1797 (1 Stat. L., 523) and April 27, 1798 (1 Stat. L., 552). The latter act which was prompted mainly by the aggressions of the French navy upon American merchantmen, authorized the President to build, purchase or hire not exceeding twelve vessels carrying not over twenty-two guns each.

An act of April 30, 1798 (1 Stat. L., 553), established a new executive department, the chief officer of which was to be called the Secretary of the Navy. A part of the Secretary's duty was defined to be the procurement of naval stores and equipment and the construction of vessels of war.

The building of the vessels authorized by these early acts served to impress upon government officials the necessity of making provision for a future supply of timber suitable to the purposes of national defense and by an act of February 25, 1799 (1 Stat. L., 622), Congress appropriated two hundred thousand dollars for the purchase of timber or of lands on which timber suitable for purposes of naval construction was growing and for the preservation of such timber for future uses. Under authority of this act the President purchased two islands off the coast of Georgia. These were Grover's Island, comprising about 350 acres, purchased December 13, 1799, for a consideration of seven thousand five hundred dollars, and Blackbeard's Island, with an area of 1,600 acres, purchased in April of the following year for fifteen thousand dollars.

Foreign relationships becoming more amicable presently, on March 3, 1801 (2 Stat. L., 110), Congress authorized a retrenchment in the naval establishment to a peace basis in which only six frigates should be retained in constant service. Two years later—April 30, 1803—France ceded to the United States the vast domain known as Louisiana. It is probable that the assurance in the minds of government officials that there were abundant supplies of timber near the mouth of the Mississippi, as well as the lack of interest in naval armament, tended to delay any further proposed purchases of timber land under the act of February 25, 1799.

This national apathy was soon disturbed. In 1812 the second war with Great Britain came and the navy was, of necessity, greatly increased. So brilliant was the success of the American navy in this war and so convinced was the nation of the advantage of maintaining an efficient navy as a means of national defense, that an act of April 29, 1816 (3 Stat. L., 321), passed after the close of the war, contemplated a gradual increase of the navy and carried an appropriation of one million dollars per annum for a period of eight years. Thus the United States entered upon a definite policy of naval expansion.

But in those days ships were made only of wood and this policy of navy building raised again the question of supplies. The result was that an act of March 1, 1817

See Acts of March 30, 1812 (2 Stat. L., 699); January 2, 1813 (2 Stat. L., 789); April 18, 1814 (3 Stat. L., 139); and November 15, 1814 (3 Stat. L., 144).

(3 Stat. L., 347), required the Secretary of the Navy, under the direction of the President, "to cause such vacant and unappropriated lands of the United States as produce the live oak and red cedar timbers to be explored and selection to be made of such tracts or portions thereof, where the principal growth is of either of the said timbers, as in his judgment may be necessary to furnish for the navy a sufficient supply of the said timbers." The Secretary was authorised to appoint an agent or agents and a surveyor to examine and select tracts, their report to be subject to approval in whole or in part by the President. The tracts finally selected by the President were to be reserved from sale as public lands, unless otherwise directed by law, and be appropriated to the sole purpose of supplying timber for the navy of the United States.

Section two of this act imposed a fine of not over \$500 and imprisonment for not over six months for the offense of cutting or removing any timber of any kind from the lands so reserved, or that of cutting or removing any live oak or red cedar from any other public lands of the United States with the intent of disposing of it for transportation to any port or place within the United States or for exportation to any foreign country. Section three provided for the forfeiture of any vessel, the master, owner or consignee of which should knowingly take on board any timber cut or removed from lands of the United States contrary to the provisions of section two, and section four imposed a forfeiture of one thousand dollars upon the captain or master in addition to the forfeiture of the vessel, if such timber were exported to a foreign country. Section five required that all penalties and forfeitures under the act be collected and distributed as under section 91 of a general impost act of March 2, 1799 (1 Stat. L., 697), and provided for a mitigation in the discretion of the Secretary of the Treasury as under Section 1 of an act of March 3, 1797 (1 Stat. L., 506).

An act of May 15, 1820 (3 Stat. L., 607), repealed the provision in the act of March 1, 1817, authorizing the appointment of an agent or agents and a surveyor by the Secretary of the Navy, and devolved the duties of such

officials upon surveyors of the public lands who should be designated by the President.

On February 22, 1819, at Washington, the treaty by which Spain ceded Florida to the United States was signed by the accredited representatives of the two nations. There were valuable stands of live oak in Florida, and depredations were common. February 23, 1822 (3 Stat. L., 651), Congress authorized the President to employ so much of the land and naval force of the United States as should be necessary to effectually prevent the cutting and carrying away of the timber of the United States in Florida, and to take such other measures as he should deem advisable for the preservation of such timber.

An agent of the government who had been appointed in 1825 to investigate the resources of Florida as to timber supplies for the navy, reported that live oak was being exported in considerable quantities from eastern Florida. As a result of his report the Secretary of the Navy, in January, 1827, recommended the purchase of timberland, the reservation of timberland, the purchase of large quantities of timber, and the planting of trees on land already owned by the government.

By act of March 3, 1827 (4 Stat. L., 242), Congress appropriated five hundred thousand dollars per annum for a period of six years for the purpose of gradually improving the navy. Section three of this act authorized the President to take proper measures to preserve the live oak timber growing on the lands of the United States and to reserve from sale such lands as should be found to contain live oak or other timber in sufficient quantity to render the same valuable for naval purposes. An attempt at the cultivation of live oak was made under this act. The use of ten thousand dollars of the amount appropriated for the improvement of the navy under the act of March 3, 1827, in the purchase of lands suitable for a supply of live oak and other timber for the navy was authorized on March 19, 1828 (4 Stat. L., 256).

The need of protecting the timber on the lands reserved and purchased was apparent, and an act of March 2, 1831 (4 Stat. L., 472), imposed a fine of not less than three times the value of the timber and imprisonment for not exceeding twelve months upon any one who should cut, wantonly destroy, or remove any live oak, red cedar or other timber standing, growing or being on any lands theretofore or thereafter reserved or purchased by the United States for the use of the navy, unless he be duly authorized to remove such timber for the use of the United States. The same penalties were to be inflicted upon any one who should cut or remove any live oak, red cedar, or other timber from any other lands of the United States with intent to export it or use it for any other purpose than for the navy of the United States. Section two of this act provided for the complete forfeiture of any vessel which should take on board any timber cut and removed from government lands contrary to the provisions of section one, and imposed an additional fine of one thousand dollars upon the captain or master of any vessel wherein any timber should be thus unlawfully transported to a foreign country. This act superseded section two of the act of March 1, 1817, and has remained until today the fundamental law as to the offense of cutting, wantonly destroying, or removing timber from public lands of the United States.

An act of March 2, 1833 (4 Stat. L., 646), which was additional to the act of March 3, 1827, continued the appropriation of five hundred thousand dollars per annum for another six years. Section three of this act required "all collectors of customs within the territory of Florida, and the States of Alabama, Mississippi and Louisiana, before allowing a clearance to any vessel laden in whole or in part with live oak timber, to ascertain satisfactorily that such timber was cut from private lands, or, if from public ones, by consent of the Navy Department."

Under authority of these various acts approximately twenty-five thousand acres of timberland were reserved and purchased in many separate parcels in the States of Georgia, Florida, Alabama, Mississippi and Louisiana. The government experienced difficulty in preventing trespasses upon these lands by timber thieves and encroachments by settlers, and before the middle of the nineteenth century was reached it was established to the satisfaction

of government officials that there was no timber of any real value to the navy on some of the tracts. On March 3, 1843 (5 Stat. L., 611), Congress opened to settlement certain described lands which had been reserved in 1832 for their supposed value as sources of supply of live oak for the navy.

The development of a new era in shipbuilding was presaged in an act of April 14, 1842 (5 Stat. L., 472), authorizing the Secretary of the navy to "contract with Robert L. Stevens for the construction of a war-steamer, shot and shell proof, to be built principally of iron, upon the plan of said Stevens," and one of June 15, 1844, (5 Stat. L., 669), which contained an item reading: "for the building of an iron steamer at Pittsburgh, Pennsylvania, on Lieutenant Hunter's plan, and now in progress of construction there, one hundred thousand dollars."

On March 3, 1853 (10 Stat. L., 259), the cedar lands which had been reserved in Clarke County, Alabama, under the act of March 1, 1817, for naval purposes, were opened to sale like other public lands. The development of the art of building iron ships subsequent to the Civil War removed the necessity for maintaining naval timber reserves. March 3, 1879, (20 Stat. L., 470), Congress authorized the restoration to the public domain of all such reserves in Florida, except the navy yard at Pensacola, which the Secretary of the Navy should certify to the Secretary of the Interior as no longer needed for naval purposes. A simlar within the States of Alaaffecting all tracts bama and Mississippi was passed March 2, 1895 (28 Stat. L., 814). It is understood that certain small tracts within the State of Louisiana are still held by the national government in the status of naval reserves.

Although little interest was manifested in the maintenance of public timber reserves during the four decades following 1850, considerable attention was directed to the prevention of timber trespass upon public lands by those who had not complied with the very liberal provisions of the laws under which title to public lands might be obtained. Thus the trespass section in the act of March 2, 1831, was supplemented by an act of March 3, 1859 (11 Stat. L., 408), and the provisions of these two acts were incorporated in

the Revised Statutes of 1878 as sections 2461 and 5388, respectively. However, the provisions of these sections were modified in the interests of actual settlers and local residents by an act of April 30, 1878 (20 Stat. L., 46) and one of June 3, 1878 (20 Stat. L., 89). On June 4, 1888 (25 Stat. L., 166) section 5388 of the Revised Statutes was amended so as to make its penalties applicable to the cutting of timber from lands within Indian reservations.¹

FEDERAL LEGISLATIVE DEVELOPMENTS BETWEEN 1875 AND 1900

With the scientific progress that removed the need for governmental reserves to insure an adequate supply of timber suitable for shipbuilding came an era of industrial development unprecedented in the history of the world. The marvelous increase in the amount of timber required for domestic enterprises and for foreign exportation subsequent to 1850 led to a rapid depletion of the more accessible supplies of timber in the northern states. it was not until after the close of the Civil War that any general interest was awakened as to the possibility of an ultimate exhaustion of timber resources. In the decade beginning with the year 1865 several influential publicists pointed out the wasteful manner in which the natural forests were being exploited, and urged the adoption of means for the conservation of existing forests and the extension of tree growth in treeless regions and on denuded areas.

At its annual meeting in August, 1873, the American Society for the Advancement of Science arranged for the appointment of a committee to present to the Federal Congress and the several state legislatures the advisability of legislation directed to the extension and preservation of forests in the United States. The report which this committee prepared was transmitted to the Forty-third Con-

Cf. Act of Mar. 3, 1875 (18 Stat. L. 481) imposing a penalty for the injuring of trees on lands reserved by the U. S. for public purposes. This Act not applicable to public domain.

See Act of June 3, 1878 (20 Stat. 88) for benefit of miners and agriculturists, imposing penalty of \$500 or six months' imprisonment for violation of act or regulations thereunder, and Act of Aug. 4, 1892, (27 Stat. L. 348) extending provision of timber and stone Act of June 3, 1878, (20 Stat. L., 89) to all public land states.

gress with a special message by President Grant. Federal legislature had previously enacted the timber culture act of March 3, 1873 (17 Stat. L., 605), which was amended on March 13, 1874 (18 Stat. L., 21), and on May 20, 1876 (19 Stat. L., 54), but the first real recognition of the importance of forestry investigation as a branch of the governmental service came in the form of an item in the general legislative, executive and judicial appropriation act for the fiscal year ending June 30, 1877.1 This act directed the Commissioner of Agriculture to appoint a qualified person to gather forestry statistics of general nature and to transmit the report of such person to Congress. Subsequent appropriation acts contained provisions for the continuance of forestry investigations. In 1881 the forestry work was organized as a separate office under the Commissioner of Agriculture, and by an act of June 30. 1886 (24 Stat. L., 100, 103), this office received statutory recognition as a distinct division of the Department of Agriculture.

During the decade following the establishment in 1881 of forestry investigations as a regular part of the agricultural work of the executive branch of the national government, no real advance in federal forestry legislation may be noted. The appropriation of five thousand dollars in 1881 was increased to ten thousand dollars in 1883, but the latter amount remained the fixed annual appropriation available each year prior to 1891. With this small amount little could be accomplished beyond the dissemination of information as to the existing conditions and the aims of forestry science and practice.

While the forestry division of the national department of agriculture was giving advice as to planting within areas where real forests could never be successfully established, and as to reforestation in regions where the growing of timber as a crop was not economically profitable, another executive department under the direction of a national law was diligently engaged in disposing of federal timber lands. However, the man charged with the administration of the

Act Aug. 15, 1876 (19 Stat. L., 143, 167). Cf. Act Mar. 3, 1877 (19 Stat. L., 360).
 Sce Instructions of General Land Office, Sept. 19, 1882 (1 L. D. 696), directing special timber agents to require tops cut up and to control fires.

division of forestry was not unmindful of the absurdity of the situation, and largely through his efforts, and those of his associates in the American Forestry Association, a half-concealed but radical step in the national policy as to public forests was taken by Congress in an act of March 3, 1891 (26 Stat. L., 1095, 1103). Section twenty-four of this act, entitled "An Act to repeal timber-culture laws, and for other purposes," authorized the President to establish forest reservations in any state or territory having public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not.1

It is interesting to note that this act marking so radical a change in the policy of the nation as to public timber lands was enacted sixty years, to a month, from the last preceding congressional act contemplating a general reservation of lands for timber conservation purposes.2 During this long period the pineries of the northern states which had seemed inexhaustible in 1831 had largely disappeared; the future exhaustion of the timber supply of the southern states had become apparent to the far-sighted; and the transference of the title, from the federal government to private individuals and corporations, of vast areas of the incomparable forests of the Pacific coast region had been effected.

However, so immense an empire had been acquired through the French and Mexican cessions and the Lewis and Clark explorations that even the greed of the home-

^{1.} See Act Oct. 1, 1890 (26 Stat. L., 650), creating certain forest reservations in Cali-

^{2.} Comparatively limited and isolated tracts had been reserved for a wood supply for military reservations.

omparatively limited and isolated tracts had been reserved for a wood supply for military reservations.

Fort Leavenworth, Kan., established, June 21, 1838; Act of 1841, 939 A.

Fort Walla Walla, Wash, established May 22, 1859, Relin, Oct. 7, 1869.

See Act Mar. 22, 1876 (19 Stat. 417.)

Camp Independence, Cal. established Jan. 23, 1866, Relinq, July 22, 1884.

Fort Hallaeck, Nevada, established Oct. 4, 1870, Relinq, July 22, 1884.

Fort Colville, Wash., established, Jan. 27, 1871, Relinq, Feb. 26, 1887.

Fort Fetterman (old reserve), established, Aug. 29, 1872, Relinq, July 22, 1884.

Whipple Barracks, Ariz., established, June 30, 1873, Relinq, July 22, 1884.

Fort Fetterman, Wyo. (new), established, Feb. 9, 1877, Relinq, July 22, 1884.

Fort Robinson, Neb., established, Feb. 19, 1877, Aug. 5, 1878.

Fort Rossell, Wyo., established, Oct. 4, 1879.

Fort Rossell, Wyo., established, May 31, 1880, Relinq., Nov. 5, 1894.

Fort Fed Steele, Wyo., established, May 31, 1880, Relinq., Aug. 8, 1886.

Fort Laramie, Wyo., established, Mar. 26, 1881.

Fort Wingate, N. Mex., established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, Apr. 8, 1881, Sept. 16, 1889.

Fort Thornburg, Utah, established, May 12, 1883, Relinq, July 22, 1884.

Fort Sill, Okla., established, June 4, 1892.

For further information as to many of these reservations, see Report of Commissioner of General Land Office for 1901, pp. 178 to 195, and United States Military Reservations, etc., War Dept., Wash., D. C., Rev. Ed. 1916.

steader and the cupidity of the railroad and timber corporations had not been equal to the task of taking full advantage of the reckless indifference of a laissez faire policy. When the belated act of March 3, 1891, authorized the reservation of public forest resources for the benefit of the public there were, happily, still millions of acres covered with magnificent forests which had not passed into private ownership under the homestead acts, the timber and stone act of 1878 (20 Stat., 89), and the numerous acts granting lands to states, railroads and other corporations.

Under the administrations of Presidents Harrison 1 and Cleveland 2 extensive areas were withdrawn from sale or entry and proclaimed national forest reserves. However, such withdrawal provoked bitter opposition on the part of many inhabitants and interests in the West, and for several vears the general public seemed to have little comprehension of the new development in national life that was possible of fulfillment under the "rider" that had been appended to the law repealing the timber culture acts. In fact, so brief and general in terms was the section in the act of 1891, authorizing the proclaiming of forest reserves, that discussion arose as to the actual intent of the Congress in enacting this legislation and as to the authority possessed by the President thereunder. Furthermore, no legislative provision had been made for the administration of the millions of acres that had been set aside as forest reserves. act of June 11, 1896 (28 Stat. L., 413, 432), authorized an investigation under the direction of the National Academy of Sciences for the purpose of submitting recommendations as to a national policy regarding forest reserves.

An act of June 4, 1897 (30 Stat. L., 11, 34), undertook to clarify the legal status of the national forest reserves which had been created by presidential proclamations under section 24 of the act of March 3, 1891, and to provide for their administration. This act confirmed the power of the President to revoke, modify or suspend all Executive Orders regarding national forest reserves from time to time

 ²⁶ Stat. L., p. 1565; 27 Stat. L., 994-1068.
 28 Stat L., p. 1240; 29 Stat. L., 893-911. Cf. Act June 4, 1897, (30 Stat. L., 34) suspending proclamations of Feb. 22, 1897.

as he might deem best for the public interest; announced the purpose of the creation of such reserves, and defined in a general way the character of land to be included therein: authorized the Secretary of the Interior to make provisions for the protection of the forests against fire and depredations, and attached the penalties of the act of June 4, 1888 (25 Stat. L., 166), to violations of such regulations; provided for the sale of timber after due advertisement for not less than sixty days in two newspapers of general circulation in the state or territory where the reservation existed on condition that the timber be not exported therefrom; permitted the free use of timber on such reservations by bona fide residents for agricultural and mining purposes and other domestic uses; safeguarded the rights of settlers, miners and other residents; and provided for the restoration to the public domain of lands within the forest reserves found to be chiefly valuable for agricultural or mining purposes.

To make mineral, medicinal and other springs within the public forest reserves available for public use the Secretary of the Interior was authorized, on February 28, 1899 (30 Stat. L., 908), to lease suitable lands near such springs.

Successive general acts of March 3, 1899 (30 Stat. L., 1095), February 9, 1900 (31 Stat. L., 21) and June 6, 1900 (31 Stat. L., 614), provided that those charged with the field administration of the forest reservations should aid in the enforcement of the fish and game laws of the states and territories in which the respective forests were located. The act of March 3, 1899 (30 Stat. L., 1097), also regulated the survey of lands within forest reservations, and a "deficiency" act of the same date (30 Stat. L., 1233), extended over the forest reserves the existing law authorizing the Secretary of the Interior to grant rights of way across the public lands for wagon roads, railroads and other highways, wherever the granting of such a right would not injuriously affect the public interest (Cf. 30 Stat., 1214).

The forest reserve area was greatly increased in the closing years of the nineteenth century by proclamations promulgated by President McKinley.

^{1. 30} Stat. L., pp. 1767-1788; 31 Stat. L., pp. 1953-1956.

FEDERAL FOREST ADMINISTRATION LEGISLATION DURING THE FIRST SIXTEEN YEARS OF THE TWENTIETH CENTURY

The first federal act specifically providing for the administration of the national forest reserves, approved by the President on June 4, 1897, had provided for the selection of lands outside of forest reserves in lieu of lands claimed under the homestead law within reserves. This was amended by act of June 6, 1900 (31 Stat. L., 614), so as to confine lieu selections to vacant non-mineral surveyed public lands subject to homestead entry, and the lieu selection provisions were completely repealed March 3, 1905 (33 Stat. L., 1264).

On June 6, 1900 (31 Stat. L., 661), the provisions of the act of June 4, 1897, regarding the administration of forest reserves were amended so as to require but thirty days' advertisement of a timber sale in one or more newspapers within the state or territory; to permit cutting in advance of the completion of a sale where circumstances were urgent; to authorize sales of less than one hundred dollars worth of timber without advertisement; and to allow private sales in excess of that amount to be made at not less than the appraised value where no bid was received in response to an advertisement or where the successful bidder failed to comply with his agreement. The act of June 6. 1900 excepted reserves within the State of California from its provisions, but the agricultural appropriation act approved June 30, 1906 (34 Stat. L., 669), removed this exception.

On February 1, 1905 (33 Stat. L., 628), the administration of the national forest reserves was transferred from the Secretary of the Interior to the Secretary of Agriculture and the exportation of pulp wood or wood pulp manufactured from timber in the district of Alaska was authorized. On March 4, 1907 (34 Stat. L., 1256), Congress declared that thereafter the forest reserves should be called national forests, and forbade the creation of any more national

Cf. Sch. Land, Dec. 28 L. D. 57; 29 L. D. 365; 34 L. D. 657; 35 L. D. 158; 84 Fed. R. 571; 33 Mont. 821; 83 Pac. Rep. 879.

forests, or additions to existing ones, by executive order within the States of Oregon, Washington, Idaho, Montana. Colorado or Wyoming. 1 An act of May 23, 1908 (35) Stat. L., 251), authorized the Secretary of Agriculture to permit the exportation from all states of timber cut on National Forests except that cut on the Black Hills National Forest in South Dakota, from which dead and insect infested timber might be exported for a limited time under certain conditions. There have been several subsequent special provisions as to the Black Hills Forest² and the Secretary was given discretion as to all states in act of March 4, 1913 (37 Stat. 839). On August 24, 1912 (37 Stat. L., 497), the further creation of National Forests in California by executive order was forbidden.

An act of February 6, 1905 (33 Stat. L., 700) ³ gave all persons employed in the forest-reserve or national parkservices of the United States authority to make arrest for violations of the laws and regulations relating to these portions of the public domain; and an act of May 23, 1908 (35 Stat. L., 251), declared that thereafter officials of the Forest Service designated by the Secretary of Agriculture should aid in the enforcement of state and territory laws regarding stock, fish, game and forest fires. 4

An act of June 11, 1906 (34 Stat. L., 233), provided for the acquiring of homestead rights within national forests subsequent to the creation of the forest, and one of August 10, 1912 (37 Stat. L., 269), required the Secretary of Agriculture to select, classify and segregate as soon as practicable all lands within national forests suitable for homestead entry and directed him to sell matured, dead, and down timber to homestead settlers and farmers at actual cost. On June 25, 1910 (36 Stat. L., 855), Congress authorized the making of Indian allotments within national forests. 5

During the second administration of President Mc-Kinley 6 and the two administrations of President Roose-

See Act Apr. 24, 1912 (37 Stat. L. 497.) adding California to the list of states within which National forests could be created only by Act of Congress. (cf. Act June 25, 1910 (36 Stat. 847) containing list aside from California.)
 36 Stat., pp. 424 and 1246: 37 Stat., pp. 280 and 839, including the Harney National Forest also.
 Cf. Act March 3, 1905 (33 Stat. L. 873.).
 Cf. 30 St. 1095; 31 St. 21; 31 St. 614; 33 St. 872; 34 St. 683; 34 St. 1269.
 See Three Year Homestead Act of June 6, 1912 (37 Stat. L., 123.).
 31 St. 1962, 1977, 1981; 32 Stat. 1969-1985.

velt, ¹ very extensive areas were reserved for forestry purposes by proclamation, and by special act of Congress on May 23, 1908 (35 Stat. L., 268), the Minnesota National Forest was created.

On March 1, 1911, another epochal step in forest policy was taken by the United States. This consisted in an act of that date (36 Stat. L., 961), that authorized the expenditure during the succeeding five years of eleven millions of dollars in the examination, survey, and acquisition of lands located at the headwaters of navigable streams, or of streams that were being developed for navigable purposes. though the terms of the act were general, the purpose of advocates of the measure was to provide means for the establishment of national forests in the eastern states and particularly in the White Mountain and Appalachian Within these mountainous regions are the sources of the great coastal and interior rivers of the eastern states, and the maintenance of a forest cover upon these rugged highlands is evidently essential to the maintenance of regularity in stream flow and the prevention of flood damage. As the national government had never held public lands in this region, and the states had generally parted with title to all lands once held as public lands, it was essential that provision be made for the purchase of lands either by the states or the nation to effect the maintenance of extensive forests under a management which aimed primarily at the welfare of the public. This act, which provided for a commission of national executive and legislative officers to determine what land should be purchased, declared that all lands acquired should be administered, under existing legislation, by the Department of Agriculture, as were other national forests created from national public lands either by presidential proclamation or by special acts of Congress.

The act of March 1, 1911, embraced another important provision authorizing cooperation between the federal government and the separate states or groups of states in forest fire protective measures on condition that any state receiving federal aid must have a law providing for forest

^{1. 32} Stat. 1988-2030; 33 Stat. 2320-2380; 34 Stat. 2995-3309; 35 Stat. 2107-2246.

fire protection and must spend at least as much as the federal government in such protective work. This act has received several amendments, but its main features remain unchanged. The utilization of minerals within the lands acquired was authorized by act of Aug. 11, 1916 (39 Stat., 446, 462).

In a large number of states laws have been enacted authorizing the acquisition of lands for national forests² or cooperation in fire protection 3 as provided by this act. Cooperation is also carried on in various states under general forest protection acts enacted either before or subsequent to the passage of the National act known as the Weeks law.

An act of March 11, 1912, (37 Stat., 74), extended to employees of the national forest service who were engaged in any hazardous work the provisions of the act of May 30, 1908 (35 Stat., 556), affording compensation for injuries received in the line of duty. 4 This act was superseded by the act of September 7, 1916 (39 Stat., 742), which provided for compensation to any civil employee injured while employed in line of duty.

A federal act of March 4, 1906 (34 Stat., 1256, 1276), provided that ten per centum of the receipts from any national forest should be used for school or road purposes within the state in which the forest was situated in such manner as the state legislature should direct. By act of

Act Aug. 10, 1912 (37 Stat. 269); Act Mar. 4, 1913 (37 Stat. 828 and 855); Act June 30, 1914 (38 Stat. 415); Act August 11, 1916 (39 Stat. 446, 462 (\$3,000,000 additional for purchase purposes).
 Ala. Act Nov. 30, 1907, S. L. No. 90, sec. 18 1-2.
 Ga. Act December, 18, 1901, S. L., p. 84. Cf. J. Res. No. 60, Aug. 16; 1910, S. L. 1970.

S. L. 1249. Act Mar. 17, 1914, S. L. ch. 24, p. 96: Same in Thum's Suppl. of 1915 to Ky. Stat. 1909, sec. 2376f to 2376i. Resolves 1903, ch. 102.

Me. Md. N. H. N. C.

Resolves 1903, ch. 102.
Act Apr. 1, 1908, ch. 217.
J. Res., L. 1903, ch. 137.
Laws 1901, ch. 17; Pell's Revisal, 1908, sec. 5430.
Act May 11, 1911, P. L., p. 271.
Act Feb. 21, 1901, No. 346, Laws 1901, Vol. 23, p. 609; (Same, Civil Code, 1912, sec. 12.)
Laws 1901, ch. 47, Act Apr. 23, 1901.
Act Mar. 14, 1912, S. L. ch. 260, p. 563, Same Pollard's Biennial Code 1912, p. 5 S. C. Tenu.

Va. Act Mar, 14, 1912, S. L. ch. 260, p. 563, Same Pollard's Biennial Code 1912, p. 5.

W. Va. Act Feb. 27, 1909, ch. 61, p. 494; Code 1913, secs. 6-8.

3. Conn. Act Sept. 26, 1911, S. L. ch. 292.

Ky. Act Mar, 19, 1912, S. L. ch. 133, p. 529.

Minn. Act Apr. 12, 1914, S. L. ch. 125, sec. 6.

N. H. Act May 21, 1913, S. L. ch. 159, p. 696.

Va. Act Mar, 21, 1914, S. L. ch. 195, p. 696.

Wash. Act Mar, 11, 1911, S. L. ch. 125, p. 623, sec. 4.

W. Va. Act Mar, 4, 1915, S. L. ch. 125, p. 162.

Wis. Cf. Act May 25, 1905, S. L. ch. 264; Same in Stats, 1915, sec. 1494-45

4. Cf. Act Aug. 24, 1912 (37 Stat. 539) regarding rights and privileges of civil service-employees. employees.

May 23, 1908 (35 Stat., 260), the portion of the receipts to be used for school and road purposes was increased to twenty-five per centum. An act of August 10, 1912 (37 Stat., 288), authorized the Secretary of Agriculture to expend an additional ten per centum of the receipts of the year ending June 30, 1912, upon roads and trails within the state from which the receipts were derived, and an act of March 4, 1913, (37 Stat., 828, 843), made this provision permanent.

The general agricultural appropriation act of March 4, 1913, also authorized the Secretary of Agriculture to permit the free use of timber for telephone line construction where such lines would be of benefit to the national forest 1. the reimbursement of private parties for property injured or destroyed in the control of forest fires.2 the distribution free of charge for planting on certain private lands of young forest trees grown in nurseries upon the Nebraska National and the exportation from any state in the dis cretion of the Secretary of Agriculture of timber cut fro national forests within that state. 4

An act of June 30, 1914 (38 Stat., 415, 430), provided for the use of funds received as contributions for cooperative work and forbade the building of rangers' stations upon lands upon which a settlement had been made under the homestead law. In the appropriation act approved March 4, 1915 (38 Stat., 1086, 1100), provision was made for the free use of timber by the navy department and for government railway construction in Alaska. This act authorized the Secretary of Agriculture to grant permits for a period not exceeding thirty years and of an area not exceeding five acres to each individual or association for use as summer homes, hotels, stores and other proper structures for recreation or public convenience. 5 The act also limited the cost of any building to be erected for forest service uses without special congressional authority to six hundred and fifty dollars. 6

 ³⁷ Stat. 843.
 37 Stat. 843.
 37 Stat. 840.
 437 Stat. 840.
 538 Stat. 1096.
 54 Stat. 101.
 55 Stat. 101.
 56 Stat. 1086.
 57 Act Mar. 4, 1907 (34 Stat. 1269;) May 23, 1908 (35 Stat. 259); Mar. 4, 1911 (36 Stat. 1235), all regarding the cost of service buildings.

The act of June 4, 1897 (30 Stat. L., 11, 35), providing for the administration of national forests, conferred very extensive powers upon the Secretary of the Interior as to the making of regulations to govern the administration of the forest reserves. This authority was vested in the Secretary of Agriculture by the act of 1905 transferring the administration of the forest reserves to that department. The regulations prescribed by the executive departments within the scope of the authority conferred have been repeatedly sustained as having the force of law. 1

In the first year of the twentieth century 2 the federal act of February 24, 1897 (29 Stat. L., 594), imposing a maximum fine of five thousand dollars and imprisonment for two years for the willful or malicious setting of a fire or the careless or negligent leaving of one unattended near inflammable material on the public domain, and penalties one-half as severe for the leaving of a camp fire or other fire burning, was amended by the omission of the words "carelessly and negligently" and of the specific reference to camp-fires. On June 4, 1906 (34 Stat. L., 208), a maximum penalty of five hundred dollars and imprisonment for one year was provided for the cutting or chipping, for turpentine purposes, of trees on lands of the United States.

The provisions of existing federal laws as to the cutting or injuring of timber and as to the building or leaving of fires on public lands of the United States were incorporated as sections 49 to 53, inclusive, of a federal penal code enacted March 4, 1909 (35 Stat. L., 1088, 1098), with the omission of the word, "maliciously" in the section regarding the setting of fires. Sections 50 and 53 of this act were amended by section six of an act of June 25, 1910 (36 Stat. L., 855, 857), so as to include Indian tribal lands and Indian allotments, to which the Government still held the fee, within the prohibition as to trespass and the leaving of fires. 3

Light v. U. S., 220 U. S. 523; U. S. v. Grimaud, 220 U. S. 506; Shannon v. U. S. C. C. A (160 Fed. 870) cf. 151 Fed. 863; U. S. v. Domingo, 152 Fed. 566; Dastervignes v. U. S., 122 Fed. 30; see 118 Fed. 199; 22 Opin. Atty. Gen. 266; contra U. S. v. Matthews, 146 Fed. 306; See Field v. Clark, 143 U. S. 692, 23 Opin. Atty. Gen. 589.
 Act May 5, 1900 (31 Stat. L., 169).
 See Act June 10, 1896 (29 Stat. L. 32) imposing a fine of \$250 or one hundred days' imprisonment, for offense of cutting boundary or witness tree on public land.

Extensive areas of timberland are embraced within Indian reservations. The first general legislative authority for the sale of timber from Indian reservation lands was contained in an Act of February 16, 1889 (25 Stat. L. 673) which was limited to dead timber. An act of June 25, 1910. (23 Stat. L. 855, 857) authorized the Secretary of the Interior to sell the mature and dead and down timber from the unallotted lands of any Indian reservation, except within the States of Minnesota and Wisconsin, and to use the proceeds for the benefit of the tribe occupying the reservation. Under this law a conservative management of the unallotted timber lands within Indian reservations is possible. Laws specifically providing for a management of unallotted Indian lands in accordance with forestry principles have been enacted as to the Menominee Reservation in Wisconsin and the Red Lake Indian Reservation 2 in Minnesota.

Within several of the national parks there are forest areas of considerable extent. The acts creating the Yellowstone, ³ Sequoia, ⁴ General Grant, ⁵ Mount Ranier, ⁶ and Crater Lake, ⁷ National Parks all made it the duty of the Secretary of the Interior to make and publish the regulations necessary for their management so as to attain the ends for which they were reserved, and required that such regulations provide for the preservation from wanton spoliation of all timber within them so that the parks might be maintained in their natural condition. The acts creating the Glacier National Park ⁸ and the Rocky Mountain National Park ⁹ required that the Secretary of the Interior make such regulations as should provide for the preservation of the parks in a state of nature so far as was consistent with the purposes of the acts, but specifically authorize

Act March 28, 1908 (35 Stat. L. 51); act March 3, 1911 (36 Stat. L. 1058, 1076); act May 18, 1916, (39 Stat. L. 123, 157)

^{2.} Act May 18, 1916, (39 Stat. L. 123, 137)

^{3.} Act March 1, 1872, (17 Stat. L. 32)

^{4.} Act Sept. 25, 1890, (26 Stat. L. 478); Act Oct. 1, 1890, (26 Stat. L. 650)

^{5.} Same acts as for Sequoia.

^{6,} Act March 2, 1899, (30 Stat. L. 993)

Act May 22, 1902, (32 Stat. L. 200)
 Act May 11, 1910, (36 Stat. L. 354)

^{9.} Act January 26, 1915, (38 Stat. 798)

the Secretary to arrange for the removal of such matured or dead and down timber as he might deem necessary or advisable for the protection or improvement of the parks. ¹

An Act of August 25, 1916, (39 Stat. L. 535) creating a National Park Service in the Department of the Interior, for the administration of all parks and reservations under the jurisdiction of the Department declared that the Secreary of the Interior "may also upon terms and conditions to be fixed by him, sell or dispose of timber in those cases where in his judgment the cutting of such timber is required in order to control the attacks of insects or diseases or otherwise conserve the scenery or the natural historic objects of any such park, monument or reservation."

Violations of any of the rules and regulations for the management and use of the parks which should be made by the Secretary of the Interior as authorized by the act were declared punishable under the provisions of section fifty of the federal criminal Act of March 4, 1909, as amended by the Act of June 25, 1910, (36 Stat. L. 855, 857)

⁵ 1, Cf. Yosemite National Park, California, Act June 30, 4864, (13 Stat. L. 325); Oct. 4, 1890, (26 Stat. L. 650); Feb. 7, 1905, (33 Stat. L. 702); June 11, 1906, (34 Stat. L. 331)

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