STATE OF ARKANSAS Arkansas Geological Survey RICHARD J. ANDERSON

Acting State Geologist

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ARKANSAS MINING AND MINERAL LAW

By
GEORGE ROSE SMITH
of the Little Rock Bar

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LETTER OF TRANSMITTAL

ARKANSAS GEOLOGICAL SURVEY

Little Rock, Ark., July 26, 1942.

Hon. Homer M. Adkins, Governor of Arkansas, Little Rock, Arkansas.

Sir:

I have the honor to submit herewith Bulletin 9, "Arkansas Mining and Mineral Law," by George Rose Smith.

For many years there has been an outstanding need for a concise compilation of mining laws in the State of Arkansas. Since the state contains two national forest areas in which the regulations governing the exploitation of mineral deposits vary considerably from the mining laws of the State itself, the legal problems which confront the prospector and miner are perhaps more complicated than is commonly realized.

With the growing mining industry of Arkansas has come an increased demand for an official guide to mineral and mining law. The State Geological Survey is fortunate in having secured the services of one of our most able attorneys in the preparation of this important contribution to the state's mineral and mining industry.

Respectfully submitted,

RICHARD J. ANDERSON, Acting State Geologist.

PREFACE

One of the minor echoes of the present war has been a quickening interest in Arkansas' mineral resources. The strategic importance of a few minerals, the decreased imports of all minerals, have made possible the profitable extraction of many ores that were formerly considered worthless.

This realization of the value of our resources has spread rapidly—among prospectors, mining operators and established mining companies. It is principally for these practical mining men that this volume was prepared. For their convenience technical legal phrases have been used as infrequently as possible; and where their use has not been conveniently avoidable, definitions or explanations are given. Mining terms, on the other hand, have been used freely, upon the assumption that the reader is entirely familiar with their significance.

It is not inappropriate to add a word of caution to the mining men for whom this book is intended. It must be remembered that changes occur in the law as well as elsewhere. While the present federal mining laws have undergone little alteration during the past seventy years, and are not likely to change materially for some time to come, the state law is constantly being modified—principally by the legislature, to a smaller extent by the courts. Hence this treatise, like any other exposition of law, will inevitably tend to become obsolete in some respects. What is said here should be supplemented by an attorney's advice before important action is taken.

Though this book is written primarily for those engaged in the mineral industry, an effort has been made to provide at the same time a ready reference manual for the practicing lawyer. No principle of mining law to be found in the Arkansas decisions or statutes has been consciously omitted. This modest volume does not pretend, however, to be an exhaustive treatise such as too frequently offered to the members of the bar, in which every decided case is parroted to the reader. Here practically every

statement of law is supported by a citation to at least one leading case or to the governing statute. More detailed research is left to the individual lawyer, lest the practical mining man be lost in a sea of footnotes.

Several of my friends have given assistance for which I am grateful. Mr. Claude Rankin's extensive knowledge of the history of state land ownership has been indispensable in the preparation of Chapter 5. Mr. W. Henry Rector suggested much needed amendments to the original draft of Chapters 6 and 7. Mr. Richard J. Anderson has guided me safely through a labyrinth of menacing geological terms. And, as always, I am indebted to my wife—in this instance for her patient typing, re-typing and proofreading of the manuscript.

G. R. SMITH.

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ARKANSAS MINING AND MINERAL LAW

PART ONE

LOCATIONS OF THE PUBLIC DOMAIN

CHAPTER 1

INTRODUCTORY

§ 1. GENERAL POLICY OF THE UNITED STATES.—For more than seventy-five years it has been the policy of the federal government to encourage the development of mineral resources underlying public lands¹. In conformity to this policy, mineral lands are deemed to be excluded from grants to the states, to railroads, to schools, and the like, unless such lands are expressly included². The federal land department determines whether or not public lands are mineral in character, its judgment being conclusive³.

All valuable mineral deposits in lands belonging to the United States are open to exploration and purchase⁴. Of course if lands have been granted to private persons, they are no longer public lands, and miners cannot enter them⁵; but otherwise the federal policy is to permit miners to go upon public lands and explore for minerals⁶. No charge is made for this privilege and no one's permission need be obtained. It is only necessary that the prospector observe federal regulations, applicable state laws, and the established customs of miners in the particular district⁷.

¹The present federal mining statutes were adopted in 1872 and later years. The earlier laws are of little practical importance in Arkansas and are not treated in this work.

²United States v. Sweet, 245 U. S. 563 (1918).

³Burfenning v. Chicago, etc., Ry Co., 163 U. S. 321 (1896).

⁴³⁰ U. S. C., § 22.

⁵Francoeur v. Newhouse, 40 Fed. 618 (C. C., 1889).

⁶Forbes v. Gracey, 94 U. S. 762 (1876); Steele v. Smelting Co., 106 U. S. 447 (1882).

⁷30 U. S. C., § 22.

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§ 2. What Are Public Lands.—In general, any unpatented lands owned by the United States are part of the public domain and are subject to lode or placer location. There are, however, some exceptions which should be noticed. Lands withdrawn for reservoir sites and certain other purposes are not subject to mining location. Military reservations and National parks are excepted from the public domain. The beds of navigable rivers, such as the Arkansas River, are not subject to mining locations. Locations in National forests are subject to special regulations, which are discussed in Chapter 4.

If specific information is desired as to any particular tract of land, inquiry should be made to the Register of the United States Land Office, Washington, D. C.

§3. "Lode" Defined.—The word "lode," as used in mining law, does not always have the same meaning as that in which a geologist uses it. Lode is an alteration of the verb "to lead," and whatever a miner would follow with the expectation of finding ore is a practical test of a lode. A lode is a zone or belt of mineralized rock, lying within boundaries clearly separating it from the neighboring rock. A lode must be continuous in the sense that it can be traced through the surrounding rock, though slight interruptions will not destroy its identity.

A lode has two essential characteristics: First, it must be held in place within or by the adjoining country rock; and, second, it must be impregnated with valuable minerals¹¹.

To be "in place" means that the lode is in a fixed position in the general mass of country rock¹². Where the boundaries of a lode are not clearly defined, or not defined at all, either at the surface or at depth, the value of the material must be so in excess of the country rock as to dif-

⁸Eureka Consol. Min. Co. v. Richmond Min. Co., Fed. Cas. No. 4,548 (C. C., 1877).

⁹Buffalo Zinc & Copper Co. v. Crump, 70 Ark. 525 (1902); Iron. Silver Min. Co. v. Mike & Starr etc. Co., 143 U. S. 394 (1892).

¹⁰ Buffalo Zinc & Copper Co. v. Crump, supra.

¹¹ Meydenbauer v. Stevens, 78 Fed. 787 (D. C., 1897).

¹²Leadville Co. v. Fitzgerald, Fed. Cas. No. 8,158 (C. C., 1879).

ferentiate it from such rock; else the material cannot constitute a lode13.

A broad metalliferous zone having within its limits true fissure veins, plainly bounded, cannot be regarded as a single lode, even though the zone itself has traceable boundaries14. At the other extreme, unconnected pocket of cre, scattered at intervals through quartz, do not constitute a lode15.

The terms "lode." "vein." and "ledge" are synonymous as used in mining terminology¹⁶. In this volume the words are used interchangeably, unless the context indicates otherwise.

§4. STRIKE, DIP, AND APEX—Every lode has its "strike," its "dip," and its "apex." Ordinarily a lode con-

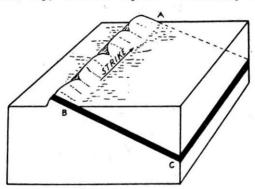


Diagram to illustrate the position of a vein (shown in black) in the earth. The line A-B is the strike of the vein. The line B-C is the dip of the vein. (Courtesy McGraw-Hill Book Company)

sists of a sheet of mineralized rock, of varying thickness, inserted vertically in the earth. Thus its principal dimensions are length along or near the surface and depth into the earth. Its width is ordinarily small, in comparison to

¹³ Grand Cent. Min. Co. v. Mammoth Min. Co., 83 Pac. 648 (Utah,

<sup>1905).

14</sup> Mount Diablo, etc., Co. v. Callison, Fed. Cas. No. 9,886 (C. C.,

<sup>1879).

15</sup> Cheesman v. Shreeve, 40 Fed. 787 (C. C., 1889).

16 United States v. Iron Silver Min. Co., 128 U. S. 673 (1888);

7 Pag 82 (Idaho, 1885). For a good discussions. sion of these terms, see Cheesman v. Shreeve, supra, note 15.

its length and depth. The mining laws are framed on the view that lodes occupy vertical positions in the earth, and stand on edge17.

The strike of a lode is its onward course across the country, its longitudinal direction along or beneath the surface. Occasionally the strike is a perfectly straight line, but ordinarily the course of the vein contains curves or turns.

The dip of a lode is the direction of its other principal dimension, its downward course into the earth. Occasionally on its dip a vein enters the earth at an exact right angle to the surface, but ordinarily it is several degrees off the true perpendicular. Normally the course of the dip will not be uniform throughout the length of the vein, so that at one point on the strike the vein may dip toward one side and father along it may dip in the opposite direction.

The apex is the top edge of the vein—that part of the vein lying on or nearest to the surface. In one sense the apex means the highest single point in the vein, but as generally used (and as used in this volume) the term refers to a line along the entire course of the strike18, a line so drawn as to pass through the highest point of every cross-section of the vein. Hence the dip at any particular point begins at the apex at that point and goes downward.

"PLACER" DEFINED .- A placer deposit differs from a lode deposit in that it is not held in place in the neighboring rock. Placers are superficial deposits, usually occupying beds of ancient rivers or valleys, washed down from some lode or vein19. They include mineral in the earth, in sand, or in gravel; mineral that is not in place, but in a loose state²⁰. Stated differently, placer mines are those in which minerals are found in the softer material which covers the earth's surface, and not among the rocks beneath²¹. Similarly, the statute authorizes placer claims "for all forms of deposits except lodes in place"22.

 ¹⁷Stevens v. Williams, Fed. Cas. No. 13,413 (C. C., 1879).
 ¹⁸Larkin v. Upton, 144 U. S. 19 (1892).

¹⁹Northern Pac. R. Co. v. Soderberg, 188 U. S. 526 (1903) ²⁰United States v. Iron Silver Min. Co., 128 U. S. 673 (1888). ²¹Reynolds v. Iron Silver Min. Co., 116 U. S. 687 (1886).

²²³⁰ U. S. C., § 35.

§ 6. STATE LAWS AND CUSTOMS OF MINERS.—While the general scheme of mining locations upon the public domain is fixed by federal statute, the states are free to legislate upon matters not covered by Congressional acts. Such state laws are invalid insofar as they conflict with a federal statute, but otherwise they are valid and must be observed23.

Congress has expressly recognized the power of the miners in any particular mining district to establish binding rules and customs²⁴. Such customs or rules cannot validly override an act of Congress, or a state law, but they may operate in fields not covered by legislation²⁵.

§ 7. SENIORITY RIGHTS.—The principle of seniority is firmly embedded in American mining law. In many instances a conflict arises as to a matter concerning which the claimants have equal rights so far as the written law goes. In such cases it is the universal rule to give the preference to him whose claim is earlier in time. Thus if miners are working separate lodes which cross one another, the right to work the intersection goes to the claimant who first established his mining location.

 ²³Butte City Water Co. v. Baker, 196 U. S. 119 (1905).
 2430 U. S. C., § 22.
 25Woody v. Bernard, 69 Ark. 579 (1901).

CHAPTER 2

LODE LOCATIONS

§ 8. Who May Locate.—A location may be made by a citizen of the United States or by one who has declared his intention to become a citizen. Citizenship in the particular state is not required. A corporation, partnership or association whose stockholders or members are all United States citizens may locate. Several persons may locate a claim jointly. A locater may act by agent. A minor who has reached the age of discretion may locate, and a locator may be either a man or a woman.

Although a locator must be a citizen, a location by an alien is not void, but is voidable at the instance of the United States. An adverse claim in patent proceedings is considered to be on behalf of the United States, and hence proof of citizenship is essential in such a case The statute also requires proof of citizenship when application is made for a patent.

§ 9. GENERAL PLAN OF LODE LOCATIONS.—Congress has specified certain essential steps to be taken by a miner in making his location upon the public domain. When these steps have been completed, his location is valid and carries with it the right of possession and the right to extract ore from his mining claim. Thus, in a technical sense, a location is a series of acts to be performed by the locator, and the location is not complete until the necessary steps are taken. The word is also used, however, to refer to the mining claim itself, by which is meant the actual land selected by the miner.

The acts necessary to constitute a valid location include discovery, the marking of the boundaries, and the

 ¹³⁰ U. S. C., § 22.
 2McKinley v. Wheeler, 130 U. S. 630 (1889).
 3McCulloch v. Murphy, 125 Fed. 147 (C. C., 1903).

⁴See post, § 33. ⁵Matlock v. Stone, 77 Ark. 195 (1905).

⁶See post, § 32. ⁷Cole v. Ralph, 252 U. S. 286 (1920); Belk v. Meagher, 104 U. S. 279 (1881).

⁸St. Louis Smelting, etc., Co. v. Kemp, 104 U. S. 636 (1882).

giving of notice of the location. The performance of annual labor, though not technically an act of location, is required to avoid a forfeiture of the claim. Still later the locator may apply for a patent to the property, though he need not do so as a condition to working the claim. These various steps are discussed in the succeeding sections of this chapter.

- § 10. ORDER OF STEPS.—The order in which the several acts of location are performed is not material except as far as one is dependent upon another⁹. Thus discovery need not precede the other acts of location, though all are necessary to create a right of possession¹⁰. The marking of boundaries may precede discovery, or vice versa¹¹. Marking may precede the recording of the location notice, or vice versa¹².
- § 11. Effect of Invalid Location; Amendment.—
 If a locator fails to perform one or more of the acts of location in the manner required by law or custom, his location is invalid and the claim remains a part of the public domain, open to location by another. If, however, the claimant is in possession and working upon the property, his location is presumed to be valid, unless a better right is shown. Nevertheless if another claimant enters peaceably and openly, as distinguished from forcibly or by stealth, and complete a valid location, the latter obtains the superior right¹³.

The law is liberal in permitting amendments and corrections of acts of location, if no adverse rights have intervened. Hence if the locator marks his boundaries incorrectly or makes an error in his notice of location, he is permitted to rectify his error if he acts before any one else has acquired a valid claim. Or a locator may change the

Greede, etc., Min. Co. v. Uinta Tunnel Min., etc., Co., 196 U. S. 337 (1905).

¹⁰Union Oil Co. v. Smith, 249 U. S. 337 (1919); Walton v. Wild Goose, etc., Co., 123 Fed. 209 (C. C. A. 9, 1903).

¹¹Creede, etc., Min. Co. v. Uinta, supra, note 3.

 $^{^{12}}North\ Noonday\ Min.\ Co.\ v.\ Orient\ Min.\ Co.,\ 1$ Fed. 522 (C. C., 1880).

¹³Ware v. White, 81 Ark. 220 (1906).

boundaries of his claim, if by doing so he does not affect the rights of any one else.

§ 12. DISCOVERY.—The statute requires, as a condition to a valid location, the discovery of a vein or lode within the limits of the claim located14. Hence the location is not valid until discovery¹⁵. The object of requiring a discovery is to prevent frauds upon the government¹⁶.

To form the basis for a lode location, the discovery must be of mineral in place, not of float rock¹⁷. There is no specific requirement as to the value of the mineral discovered18; but the discovery must give reasonable evidence of the presence of a vein or lode of such character that a miner would be justified in developing the claim¹⁹. A placer discovery will not support a lode claim²⁰.

The locator need not be the original discoverer; he may claim a known lode that is open to location²¹. But discovery within the limits of another's valid existing location cannot be the basis for location; it must be on unoccupied public domain²². Where overlapping claims are marked upon the surface, prior discovery gives the prior right 23 .

§ 13. SIZE, SHAPE AND NUMBER OF LOCATIONS.—A location cannot exceed 1500 feet in length along the lode, nor can it extend more than 300 feet on each side of the middle of the lode at the surface24. Hence the maximum claim permitted is 1500 feet long and 600 feet wide. The customs of miners in the district may establish smaller limits, but such customs may not restrict a claim to less than twentyfive feet on each side of the middle of the vein at the surface25. If the end lines are not at right angles to the side

 ¹⁴³⁰ U. S. C., § 23.
 15Donnelly v. United States, 228 U. S. 243 (1913).
 16Lange v. Robinson, 148 Fed. 799 (C. C. A. 9, 1906).

¹⁷Lange v. Robinson, supra; Shoshone Min. Co. v. Rutter, 87 Fed.

^{801 (}C. C. A. 9, 1898) 18Chrisman v. Miller, 197 U. S. 313 (1905)

¹⁹Ibid.; Cameron v. United States, 252 U. S. 450 (1920).

²⁰Cole v. Ralph, 252 U. S. 286 (1920). ²¹Erwin v. Perego, 93 Fed. 608 (C. C. A. 8, 1899).

²²Belk v. Meagher, 104 U. S. 279 (1881). ²³Johanson v. White, 160 Fed. 901 (C. C. A. 9, 1908).

²⁴³⁰ U. S. C., § 23.

²⁵Ibid.; Northmore v. Simmons, 97 Fed 386 (C. C. A. 9, 1899).

lines, the width of the claim is the distance between the side lines, not the length of the end lines²⁶.

A claim which exceeds the legal limits is valid except as to the excess, if made in good faith and no third person is harmed by the reduction²⁷. A claim is valid if made in good faith even though actual development shows that the middle of the lode is not in the center of the claim's 600 foot width²⁸.

The law contemplates that the location shall be lengthwise with the vein rather than across it²⁹. The location will therefore be roughly a parallelogram, with the end lines crossing the strike of the vein at right angles and the side lines parallel to it³⁰. Variations in the course of the strike, however, will frequently affect the general shape of the claim.

A single location may embrace two or more separate tracts of land, as where it is necessary to overlap an existing location (see § 15). In such cases a discovery on any part of the claim will suffice to hold the whole claim.

There is no limit upon the number of locations that a person may make³¹, but of course he must perform the necessary acts of location as to each separate claim.

§ 14. END LINES AND SIDE LINES.—The end lines are those which cross the strike of the vein, at each end of the claim. Upon the location of the end lines depend the locator's extra-lateral rights³², and hence great care should be exercised in selecting these lines. They must be parallel to each other³³, and hence by implication each must be a single straight line, without turns or angles, as otherwise parallelism would be impossible.

The side lines run the length of the claim, roughly

²⁶Davis v. Shepherd, 72 Pac. 57 (Colo., 1903).

²⁷Richmond Min. Co. v. Rose, 114 U. S. 576 (1885).

²⁸Harper v. Hill, 113 Pac. 162 (Calif., 1911).

²⁹Walrath v. Champion Min. Co., 171 U. S. 293 (1898).

³⁰Iron Silver Min. Co. v. Elgin Min. Co., 118 U. S. 196 (1886).

³¹Last Chance Min. Co. v. Bunker Hill, etc., Co., 131 Fed. 579
(C. C. A. 9, 1904).

³²See post, § 23.

³³³⁰ U. S. C., § 23.

parallel to the strike of the vein³⁴. There is no requirement that they be parallel35, and usually they contain turns and angles, which may be necessary to follow the strike. At no point should a side line be more than 300 feet from the middle of vein.

§ 15. OVERLAPPING LOCATIONS.—Overlapping claims are frequent in occurrence, because of the absence of fences or other visible marks of possession. In such cases the later claim is valid to the extent that it does not conflict with the earlier claim, or its rights36.

In some instances an overlap may even be necessary, as, for example, to establish parallel end lines to a triangular piece left by existing claims³⁷. Or a claim may overlap an earlier crossing claim in order to obtain the full 1500 feet (overlap exluded) along the lode³⁸.

§ 16. MARKING BOUNDARIES OF CLAIM.—Marking the boundaries of the claim is an essential act of location, without which the location is invalid³⁹. The location must be distinctly marked on the ground itself so that the boundaries can be traced40. A reasonable time after discovery is allowed for marking⁴¹, but it should be done as quickly as possible, to prevent some one else from "jumping" the claim.

The markings should be so placed that a person accustomed to tracing lines of mining claims can readily find all stakes or monuments⁴². Marking may be by stakes, mounds, written notices, blazed trees, cutting of trails, or piles of stone⁴³. Ordinarily stakes or monuments at the corners of the claim are sufficient¹⁴, though it would be advisable to

³⁴Jim Butler, etc., Min. Co. v. West End Consol. Min. Co., 247 U.S. 450 (1918)

³⁵ Ibid.; Del Monte Min., etc., Co. v. Last Chance, etc., Co., 171 U. S. 55 (1898).

³⁶Del Monte Min., etc., Co. v. Last Chance, etc., Co., supra.

³⁷Stenfjeld v. Espe, 171 Fed. 825 (C. C. A. 9, 1909). ³⁸Cheesman v. Hart, 42 Fed. 98 (C. C., 1890).

³º30 U. S. C., § 28; Worthen v. Sidway, 72 Ark. 215 (1904); Malecek v. Tinsley, 73 Ark. 610 (1905); Matlock v. Stone, 77 Ark. 195 (1905); Ware v. White, 81 Ark. 220 (1906). 4030 U. S. C., § 28.

⁴¹Doe v. Waterloo Min. Co., 70 Fed. 455 (C. C. A. 9, 1895). 42Ledoux v. Forrester, 94 Fed. 600 (C. C., 1899). 43Oregon King Min. Co. v. Brown, 119 Fed. 48 (C. C. A. 9, 1902). 44 Hammer v. Garfield Min., etc., Co., 130 U. S. 291 (1889).

attach a notice to each stake indicating the position of the others.

The lines may be corrected or changed, if no other rights have intervened 45. Destruction of the markers without fault of the locator does not affect his rights46.

§ 17. Notice of Location.—Neither the federal law nor the Arkansas law requires the recording of a notice of location⁴⁷ (usually referred to by miners as a declaratory statement). Nevertheless it is a convenient and permanent record of the boundaries of the claim, and for that reason it is usually good policy to file the notice. In some districts there is a custom of the local miners that the notice be filed⁴⁸, and such a custom must be followed in order to perfect a valid location⁴⁹. Filing should be with the county recorder⁵⁰, for which a recording fee of one dollar is charged51.

Even where the notice is required by custom to be recorded, a third person with actual notice of the claim will be bound, although the notice as recorded is defective⁵². Failure to record the notice promptly does not invalidate the claim, where recorded before intervening rights accrue⁵³.

Where notice of location is filed for record, it must contain the name of the claim, the names of the locators, the date of location, and such a description of the claim by reference to some natural object or permanent monument as will identify the claim⁵⁴. The description should be so clear that the claim can easily be ascertained 55.

The notice of location must refer to some natural object or permanent monument⁵⁶. The natural object may

⁴⁵ Tonopah, etc., Min. Co. v. Tonopah Min. Co., 125 Fed. 389 (C. C.,

⁴⁶Walton v. Wild Goose, etc., Co., 123 Fed. 209 (C. C. A. 9, 1903). 47Ibid.; Thompson v. Underwood, 138 Ark. 323 (1919). § 9382 of Pope's Digest seems clearly permissive rather than mandatory.

⁴⁸ Such a custom was mentioned in Thompson v. Underwood,

⁴⁹ See § 6, ante.

⁵⁰Pope's Digest, § 9382. 51 Ibid., § 9383.

⁵² Thompson v. Underwood, supra, note 47.

⁵³Buffalo Zinc, etc., Co. v. Crump, 70 Ark. 525 (1902).

⁵⁴³⁰ U. S. C., § 28. 55 Hammer v. Garfield, etc., Min. Co., 130 U. S. 291 (1889).

⁵⁶Seidler v. Lafave, 20 Pac. 789 (N. M., 1889).

be any fixed natural object, while the permanent monument may be a stake or post firmly planted in the ground. Among natural objects are blazed trees, streams, mountain peaks, etc.⁵⁸. Permanent monuments include stone monuments, mining shafts, stakes, crossings of roads, etc. 9. Specification of the position of the claim by reference to an existing mining claim is generally held sufficient⁶⁰, as, for example, a notice giving the dimensions of the claim and stating that it lies immediately north of the boundaries of a specified claim⁶¹. Defects in the notice may be supplied by the actual markings on the ground⁶².

The following is suggested as a satisfactory form for a notice of location:

NOTICE OF LOCATION

Notice is hereby given that on April 3, 1937, the undersigned John Doe located Doe Claim Number One, in accordance with the federal mining laws, upon the following described property, and that he claims all veins, lodes, spurs, angles and dips within and appurtenant to said claim: Beginning at a stake 100 feet west of the point where U.S. Highway 143 crosses Clear Creek, thence north 1500 feet to a stake, thence west 600 feet to a blazed white oak, thence south 1500 feet to a stake, thence east 600 feet to point of beginning; being part of the SW1/4 of the NW1/4 of Section 10, Township 2 South, Range 23 West, Polk County, Arkansas.

Dated April 4, 1937.

(Signed) John Doe.

§ 18. ANNUAL LABOR OR IMPROVEMENTS.—Until a patent is issued, at least \$100 worth of labor must be per-

⁵⁷ North Noonday Min. Co. v. Orient Min. Co., 1 Fed. 522 (C. C., 1880).
⁵⁸Worthen v. Sidway, 72 Ark. 215 (1904).

⁶⁰Glacier, etc., Min. Co. v. Willis, 127 U. S. 471 (1888).

⁶¹ Walton v. Wild Goose, etc., Co., 123 Fed. 209 (C. C. A. 9, 1903).

⁶²Smith v. Newell, 86 Fed. 56 (C. C., 1898).

formed, or its equivalent in improvements be made, during each year⁶³. The first one year period begins at noon on July 1 following the date of location⁶⁴. Thereafter each year begins on July 1. The locator is entitled to the full year within which to do his work or make his improvements⁶⁵. The work may be done by some one other than the locator, so long as it is done in the interest of the claim⁶⁶.

The requirement of \$100 worth of work or improvements each year is mandatory⁶⁷. The test is the reasonable value of the work or improvements to the mine, not the price paid⁶⁸. The custom of miners may not reduce this requirement, as by making twenty days' work the arbitrary equivalent of \$100, because the statute has fixed the minimum that is permissible⁶⁹.

The improvements or the assessment work, as miners generally refer to the annual labor, does not have to be on the claim itself, if it actually improves the claim to the required amount and is so intended ⁷⁰. Hence a single owner of several contiguous claims, or joint owners of such claims, may do upon one or more claims the work required for all, if all are benefited ⁷¹. Or several separate contiguous owners may agree that all the work be done on one claim, if circumstances make it proper ⁷².

If one of several co-owners fails or refuses to contribute his proportionate share of the assessment work, those who have done the work may give him notice (either personal notice or notice by publication once each week for ninety days in the nearest newspaper), and if he fails to contribute within ninety days after the date of personal notice or

⁶³³⁰ U. S. C. § 28.

⁶⁴Ibid.

⁶⁵Malone v. Jackson, 137 Fed. 878 (C. C. A. 9, 1905).

⁶⁶McDonald v. McDonald, 144 Pac. 950 (Ariz., 1914).

⁶⁷Chambers v. Harrington, 111 U. S. 350 (1884).

⁶⁸McKay v. Neussler, 148 Fed. 86 (C. C. A. 9, 1906).

⁶⁹Woody v. Bernard, 69 Ark. 579 (1901).

⁷⁰ Jackson v. Roby, 109 U. S. 440 (1883).

⁷¹Ibid.; Smelting Co. v. Kemp, 104 U. S. 636 (1881).

⁷²Hawgood v. Emery, 119 N. W. 177 (S. D., 1909).

within 180 days after the date of the first publication, his interest forfeits to the others 73.

§ 19. FILING PROOF OF ASSESSMENT WORK.—The federal laws do not require that the locator record proof of his assessment work, and a state law requiring such proof would probably be invalid as conflicting with the federal act 74. But in Arkansas a locator may file with the county recorder an affidavit showing the performance of his assessment work, and that affidavit is prima facie evidence that the work has been done. It must be filed by December 31st of the year in which the time for doing the work expired⁷⁵. While the presumption created by the affidavit may be rebutted by proof that the work was not actually done, such an affidavit might be valuable evidence where other proof was lacking, and it is recommended that it be filed. The statutory form is as follows:

State of Arkansas
State of Arkansas County of Ss.
being duly sworn, deposes
and says that at least dollars' worth of work
or improvements were performed or made upon (here
describe claim) situated in mining district,
County of and State of Arkansas, between
the day of , 19 , and the
day of, 19, and that
such expenditure was made by or at the expense of
, owners of said claim for the
purpose of complying.
(Signature)
Subscribed and sworn to before me this
day of, 19
(Signature)
Notary Public

§ 20. FAILURE TO PERFORM ANNUAL LABOR; RELOCA-TION.—If the locator fails to perform his annual labor or

⁷³30 U. S. C., § 28. ⁷⁴Betsch v. Umphrey, 270 Fed. 45 (C. C. A. 9, 1921).

⁷⁵Pope's Digest, § 9386.

to make his improvements, he forfeits his claim, and the land again becomes part of the public domain⁷⁶. The land then becomes subject to relocation by another claimant. The original locator, however, may preserve his rights by resuming work before some one else has completed his acts of location⁷⁷. The first claimant must resume work in good faith and prosecute it with reasonable diligence until the annual requirement of \$100 is satisfied78.

The claim cannot be relocated by another until the expiration of the time allowed the first locator for doing his assessment work. An earlier relocation is void, even though the first claimant does no more work and his location subsequently forfeits79. A different rule would apply, however, if the first locator should abandon his claim, by leaving it with no intention of returning. In that situation his rights would immediately terminate and a subsequent relocation would be valid, even though the first locator's time had not expired80. It might be difficult, however, for the second claimant to prove that the earlier claimant left the claim with no intention of returning; so it is not always safe to rely upon an abandonment.

A locator whose claim has forfeited for failure to perform his annual labor may relocate his own claim, except as a means of avoiding the requirement of annual labor thereon81.

§ 21. 'RIGHTS OF LOCATORS: POSSESSION OF SURFACE. When a miner completes his acts of location, he acquires a peculiar interest in the claim. He is entitled to exclusive possession of the surface within his boundaries82, although title remains in the United States until a patent is issued.

⁷⁶Belk v. Meagher, 104 U. S. 279 (1881). 77 Ibid.; Worthen v. Sidway, 72 Ark. 215 (1904); Buffalo Zinc,

etc., Co. v. Crump, 70 Ark. 525 (1902).

78 Worthen v. Sidway, supra.

⁷⁹Belk v. Meagher, supra, note 76; Street v. Delta Min. Co., 112

Pac. 701 (Mont., 1910).

SoStreet v. Delta Min. Co., supra; Buffalo Zinc etc. Co. v. Crump, 70 Ark 525 (1902).

⁸¹ Lehman v. Sutter, 198 Pac. 1100 (Mont., 1921; Sellers v. Tay-

lor, 279 Pac. 617 (Idaho, 1929).
 8230 U. S. C. § 26; Belk v. Meagher, supra, note 76; Worthen v. Sidway, 72 Ark. 215 (1904).

He is entitled to extract ore from the property⁸³, but he cannot use it for purposes other than mining; for example, he cannot remove the timber except in the reasonable conduct of his mining operations⁸⁴. His right to exclusive possession continues as long as he performs his annual labor⁸⁵. If a stranger wrongfully takes possession of all or part of a locator's claim, suit for its recovery must be brought within one year after the cause of action accrues⁸⁶.

- § 22. RIGHTS OF LOCATOR: TRANSFERABILITY.—A mining claim is property which can be transferred⁸⁷. Since it is property, it is subject to taxation by the state, even before a patent has been issued⁸⁸.
- § 23. EXTRALATERAL RIGHTS (FOLLOWING THE DIP). —The extralateral rights which pertain to a valid mining location are a peculiarity to mining law, having no analogy in other fields of law. Briefly stated, the rule is that in working his claim the locator may follow the dip of any vein having part of its apex within the planes of his surface lines extended downward, even though the vein on its dip passes outside his side lines and enters adjoining property. There are several conditions to the exercise of these extralateral rights, which will be discussed in the succeeding sections. First, his extralateral rights apply only to the dip of the vein; the locator cannot follow the strike of the vein outside his surface lines⁸⁹. Second, his end lines must be parallel in order for him to assert extralateral rights. Third, except where by mistake he has located his claim across instead of along the vein, he can never pass beyond the plane of his end lines extended in their own direction, even while following the dip. Fourth, he has extralateral rights only to the extent that the vein apexes within the planes

⁸³Black v. Elkhorn Min. Co., 52 Fed. 859 (C. C. A. 9, 1892).

⁸⁴Teller v. United States, 113 Fed. 273 (C. C. A. 8, 1901).

⁸⁵Belk v. Meagher, 104 U. S. 279 (1881).

⁸⁶Pope's Digest, § 9385.

STForbes v. Gracey, 94 U. S. 762 (1876); Worthen v. Sidway, supra, note 82.

SéWilbur v. United States, 280 U. S. 306 (1930).
 Sempire State, etc., Co. v. Bunker Hill, etc., Co., 114 Fed. 417
 (C. C. A. 9, 1902).

of his surface lines extended vertically downward. Subject to these qualifications, the locator acquires not only the right to work veins within his particular slice of the earth but also the right to follow those veins on their dip no matter how far beyond his side lines they may carry him. Such rights apply equally to the discovery vein and to any other veins which he may find within his surface boundaries.

The right to follow the dip extends only as long as the vein continues its downward course into the earth. Should the vein, outside the bounds of the claim, flatten and extend horizontally in a departure from its general course, or should it take an upward trend for a considerable distance, extralateral rights terminate 10. A vein in the form of a synclinal fold would have two apices and hence a locator on either apex would be entitled to follow the dip from his apex until it flattened out or turned upward.

Extralateral rights apply only beneath the surface, not to surface rights⁹¹. The right to follow the dip continues only as long as the vein is separate and identifiable 2.

- § 24. REQUIREMENT OF PARALLEL END LINES. There is no right to follow the dip beyond the side lines unless the end lines are parallel93. The absence of parallel end lines does not invalidate the claim, but it does deprive the locator of extralateral rights94.
- § 25. APEX WITHIN SURFACE LINES.—Extralateral rights are wholly dependent upon there being a part of the apex within the claimant's surface lines. Hence one who locates upon the dip has no right to work the lode as against even a junior claim located on the apex.

Various possibilities exist with reference to the position of the apex within the surface lines. In the simplest

⁹⁰ Tom Reed Gold Mines Co. v. United Eastern Min. Co., 209 Pac. 283 (Ariz., 1922).

⁹¹Empire State, etc., Co. v. Bunker Hill, supra, note 89. 92Iron Silver Min. Co. v. Cheesman, 116 U. S. 529 (1886). 93Elgin Min., etc., Co. v. Iron Silver Min. Co., 14 Fed. 377 (C.C., 1882). Some authorities hold that even where the end lines are not parallel, the dip may be followed within the lines on the side on which they converge. Other authorities take the contrary view.

⁹⁴Iron Silver Min. Co. v. Elgin Min. Co., 118 U. S. 196 (1886); Gibson v. Hjul, 108 Pac. 570 (Nev., 1910).

situation, where the apex extends the length of the claim and crosses both end lines, the locator is entitled to work the entire dip of the vein within the planes of his end lines extended in their own direction⁹⁶. If the apex crosses one end line and passes out of the surface boundaries by crossing a side line before it reaches the other end line, the locator is limited to a segment of the dip bounded by the plane of the end line which the vein crosses and a second parallel plane dropped at the point at which the vein crosses the side line⁹⁷. If the apex crosses both end lines but passes out one side line and then comes back in, planes must be dropped at the point of departure and the point of reentry, and the locator has no extralateral lateral rights between these planes98. Similarly, if the apex crosses neither end line, but enters one side line and farther along leaves by the same side line, planes parallel to the end lines are dropped at the points of entry and departure, and the locator has extralateral rights only between those planes 99. Finally, if the vein enters one side line and departs across the other side line, but the location is more nearly lengthwise than crosswise of the vein (that is, the angles made by the vein with the side lines are less than forty-five degrees), planes are dropped at the points of entry and departure, and extralateral rights are bounded by those planes¹. As to locations across the vein, see §§ 27-29.

The foregoing situations may be summarized in this manner: The locator is entitled to a segment of the dip that corresponds to the segment of the apex within his surface lines. Where the apex crosses a side line, his right to follow the dip terminates at that point, and a plane dropped at that point becomes his end line with respect to that particular vein.

§ 26. SPLIT APEX.—If the apex of the vein is split lengthwise by two claims, priority as to the dip goes to the

 ⁹⁶³⁰ U. S. C., § 26.
 97 Last Chance Min. Co. v. Tyler Min. Co., 61 Fed. 557 (C. C. A.
 9, 1894).

⁹⁸Waterloo Min. Co. v. Doe, 82 Fed. 45 (C. C. A. 9, 1897).
99Rico-Argentine Min. Co. v. Rico Consol. Min. Co., 223 Pac. 31
(Colo., 1923)

Last Chance Min. Co. v. Tyler Min. Co., supra, note 97; Consol. Min. Co. v. Champion Min. Co., 63 Fed. 540 (C. C., 1894).

senior claim, as it is the custom of miners to consider a vein as indivisible in width². If two claims should split the apex of a vein which was an anticlinal fold, probably each could follow the dip on his own side.

- § 27. LOCATION ACROSS LODE.—It sometimes happens that by mistake a miner locates his claim across the discovery vein instead of lengthwise. In that case, for the purpose of extralateral rights, his side lines are treated as end lines and his original end lines are moved in to within 300 feet of the middle of the lode and become his side lines³. His extralateral rights are then determined by these new end lines and side lines. As to a new vein crossing a claim which was located along the discovery vein, see § 28.
- § 28. VEINS OTHER THAN DISCOVERY VEIN.—A valid location confers not only the right to work the discovery vein but also the right to work any other veins which apex within the claim4. Extralateral rights to such new veins are determined according to the statement of apex within the surface boundaries, under the rules stated in § 25. There is, however, one exception: The original end lines are the end lines for all veins within the claim, and hence if a new vein runs across the claim the side lines cannot be considered as end lines for the purpose of that vein, as it is possible to have only one set of end lines⁵. In such a situation the locator can work the cross vein only within his surface boundaries, as he cannot follow it across his side lines because of the fundamental rule that a vein can never be followed on its strike outside the claim; nor can he follow its dip outside his original end lines, because of the rule that a locator may never pass the planes of his end lines. The rule stated in this section (that end lines for the discovery vein are the end lines for all veins) applies to a location across the discovery vein. The original side lines are then

²St. Louis Min., etc., Co. v. Montana Min. Co., 104 Fed. 664 (C. C. A. 9, 1900).

³Mining Co. v. Tarbet, 98 U. S. 463 (1878).

⁴³⁰ U. S. C., § 26.

⁵Conkling Min. Co. v. Silver King, etc., Co., 230 Fed. 553 (C. C. A. 8, 1916).

considered as end lines not only for the discovery vein but for all other veins as well.

§ 29. Intersecting, Crossing and Uniting Veins.—Intersections, crossings and unions of veins on the strike are not likely to give rise to conflicting claims, as only the claimant whose boundaries include the apex is entitled to work the vein on its strike. Where, however, the discovery vein of one claimant is crossed by another vein which crosses his location, a second locator whose claim overlaps the first claim on both sides is entitled to a right of way across the intersection of claims for the purpose of working the crossing vein on both sides of the senior claim⁶.

Where veins unite on their dip and continue as one vein, the senior claimant is entitled to work the space in the intersection and to work the vein below the point of union. Where two veins intersect on their dip but do not cross, the senior locator is entitled to work the space in the intersection, and the owner of the vein which continues is entitled to a right of way across the intersection to continue working that vein. Where two veins cross on their dip (it has been suggested that this is geologically impossible), the senior claimant is entitled to work the space of intersection, but the junior claimant is entitled to a right of way across the intersection to enable him to continue working his vein.

§ 30. Tunnel Site Locations.—As a means of encouraging the running of tunnels in the search for unknown veins, Congress has provided that where a tunnel is run for discovery or for development of a lode, its owner shall have the right of possession of all veins within 3,000 feet of the face of the tunnel, not previously known to exist, discovered in the tunnel, to the same extent as if discovered

⁶Calhoun Gold-Min. Co. v. Ajax Gold Min.-Co., 59 Pac. 607 (Colo., 1899), aff. 182 U. S. 499 (1901). The rule stated in the text is thought to be the better rule, though some courts have held that the junior claimant's right of way is only across the intersection of veins, not the intersection of claims. The decisions on this disputed question cannot be reconciled.

⁷³⁰ U. S. C., § 41.

SIbid.

⁹Ibid.

on the surface. There is no requirement of annual labor on the tunnel, but it must be run with reasonable diligence; and failure to prosecute work on it for six months constitutes an abandonment of the owner's right to undiscovered veins on the line of the tunnel¹⁰. A tunnel site location is subject to prior surface locations, and hence undiscovered veins beneath prior surface locations belong to the surface locators¹¹. But any discovery made in the tunnel relates back to the date of its commencement; so the rights of the tunnel owner are superior to a surface location made on the line of the tunnel after its commencement¹².

The statute limits the length of the tunnel to 3,000 feet from its face, by which is meant the first working face—the point at which it first enters cover¹³. Tunnel rights are limited to previously unknown veins which the tunnel itself crosses¹⁴. The location of the tunnel immediately gives its owner an inchoate right to all unknown veins on its line and within 3,000 feet of its face, dependent only on diligent prosecution and subsequent actual discovery¹⁵. No permit is needed for tunnel exploration, nor is the discovery of mineral necessary to create the above mentioned inchoate right¹⁶.

The line of the tunnel is usually held to be its width, though some authorities indicate that it extends 1500 feet on each side of the center of the tunnel¹⁷. The best view is that the inchoate right to previously unknown veins applies only to those veins which cross the projected line of the tunnel within its actual width; but since the tunnel owner, upon discovery, is entitled to make a surface location of the usual size, no one else would be safe in making, after the commencement of the tunnel, a surface location within 1500 feet of its line.

¹⁰³⁰ U. S. C., § 27.

¹¹Calhoun Gold Min. Co. v. Ajax Gold Min. Co., 59 Pac. ¹²Enterprise Min. Co. v. Rico-Aspen, etc., Co., 167 U. S. 108

¹³40 C. J. 826, § 261.

¹⁴Enterprise Min. Co. v. Rico-Aspen, supra, note 12.

¹⁵ Ibid.

¹⁶Creede, etc., Min. Co. v. Uinta Tunnel, etc., Co., 196 U. S. 337 (1905).

¹⁷See Enterprise-Min. Co. v. Rico-Aspen, supra, note 12.

Congress has not specified just what is necessary to obtain a tunnel right (other than the actual running of the tunnel); so state laws on the subject (Arkansas has no statutes on this matter) and the customs of miners should be ascertained¹⁸. Land Office regulations require that notice be given by the erection of a substantial post or monument at the commencement of the tunnel, to which should be affixed a notice giving the name of the person claiming the tunnel right, the proposed course or direction of the tunnel, its height and width, and the course of the tunnel by reference to some well-known object or monument. It is also required that stakes or monuments be placed on the surface at intervals along the boundary lines of the tunnel¹⁹.

When a discovery is actually made in the tunnel, its owner must make a surface location and create a mining claim in the usual manner. His claim is limited to the statutory 1500 feet along the lode, but he may stake his claim on either side of the line of the tunnel or partly on one side and partly on the other²⁰.

- § 31. APPLICATION FOR PATENT; NECESSITY.—It is not necessary for a locator to apply for a patent unless he wishes. Even without a patent he is entitled to exclusive possession and to work his claim, as long as he fulfills the annual requirement of assessment work²¹. But until he obtains a patent he risks the loss of his rights through failure to perform his annual labor; and, furthermore, he cannot use the property except for mining purposes. It is therefore desirable for the claimant to apply for a patent as soon as he is eligible for it.
- § 32. PROCEDURE.—In order to obtain a patent, the locator must file with the United States Land Department, Washington, D. C., a sworn application therefor, showing that he has complied with the location laws. The application

¹⁸Creede, etc., Min. Co. v. Uinta, supra, note 16.

^{19§185.22} of Lode and Placer Mining Regulations, being Part 185, Title 43 of the Code of Federal Regulations.

²⁰ Enterprise Min. Co. v. Rico-Aspen, supra, note 12.

²¹Black v. Elkhorn Min. Co., 52 Fed. 859 (C. C. A. 9, 1892).

must be accompanied by a plat and field notes of the claim, made by or under the direction of a United States supervisor of surveys. This plat must show the boundaries of the claim, which must be distinctly marked on the ground. The applicant must post a copy of the plat, together with a notice of his application, in a conspicuous place on the claim, and he must file the affidavit of at least two persons that the notice has been posted. He must also file a copy of the notice. The register of the land office then publishes notice of the application in a newspaper designated by him as being published nearest the claim. The notice is also posted in the land office. The applicant must file with his application, or within sixty days thereafter, a certificate of the supervisor of surveys that at least \$500 worth of labor or improvements have been done by the applicant or his grantors. The supervisor must also certify that the plat is correct and furnish an accurate description to be used in the patent. At the expiration of the sixty days of publication, the applicant must file his affidavit showing that the plat and notice have been posted in a conspicuous place on the claim during that time. Where the applicant is not a resident of the district, the proceedings may be by agent. If no adverse claim is filed by the expiration of the sixty days, a patent is issued upon payment at the rate of five dollars an acre²². Information and forms of application may be obtained from the United States Land Office, Washington, D. C.

§ 33. ADVERSE CLAIMS.—Any person contesting the applicant's right to a patent must file an affidavit in opposition thereto during the sixty-day period of publication²³. The affidavit may be by agent 24. Within thirty days after filing his opposing affidavit the adverse claimant must bring suit for a determination of the right of possession, which suit must be diligently prosecuted to final judgment²⁵. Proceedings upon the application, except publication of notice, are stayed pending determination of the

²²30 U. S. C., § 29. ²³30 U. S. C., § 30. ²⁴30 U. S. C., § 31. ²⁵30 U. S. C., § 30.

suit26. The winning party may file a certified copy of the judgment and proceed to obtain a patent²⁷. The judgment may award part of the claim to each claimant28, but if neither shows a right to a patent the judgment should be against both29.

Any person who fails to adverse the claim or bring suit within the allotted time forfeits his right to object. But only independent claimants are required to adverse; a cotenant of the applicant need not adverse the application³⁰. Nor need a tunnel site owner adverse the claim if his rights are still inchoate31.

The suit does not necessarily involve a federal question, and hence it should ordinarily be brought in the state court³². If the plaintiff is not in possession it is a law action³³. The complaint is limited to the grounds set forth in the affidavit of opposition to the claim³⁴.

§ 34. PATENT BASED ON POSSESSION.—Where the applicant for a patent has been in continuous possession of the claim for a period equal to the time allowed by the state statute of limitations for mining claims, and has performed his annual labor each year, he may obtain a patent in the absence of an adverse claim³⁵. The effect of this statute is to declare that possession for the statutory period is equivalent to a valid location³⁶; so the claimant may obtain his patent even though there was some defect in his location. In Arkansas the statutory period for the creation of a possessory right is three years³⁷.

§ 35. ISSUANCE AND EFFECT OF PATENT.—The issuance of a patent vests title to the surface and subsurface,

²⁶Ibid.

²⁷ Ibid.

²⁸Ibid.

²⁹Jackson v. Roby, 109 U. S. 440 (1883). ³⁰Turner v. Sawyer, 150 U. S. 578 (1893)

³¹ Enterprise Min. Co. v. Rico-Aspen, etc., Min. Co., 167 U. S. 108

³²Bushnell v. Crooke Min., etc. Co., 148 U. S. 682 (1893). 33Ware v. White, 81 Ark. 220 (1906). 34Marshall Silver Min. Co. v. Kirtley, 21 Pac. 492 (Colo., 1889).

³⁵³⁰ U. S. C., § 38.

³⁶Belk v. Meagher, 104 U. S. 279 (1896).

subject to superior extralateral rights³⁸. The locator's duty to perform his annual assessment work terminates upon payment of the price for the patent³⁹. The patent may be canceled by the United States if obtained by fraud40, but otherwise it gives full legal title to the patentee⁴¹.

³⁸St. Louis etc. Min. Co. v. Montana Min. Co., 194 U. S. 235 (1904).

³⁹Benson Min. etc. Co. v. Alta Min. etc. Co., 145 U. S. 428 (1892). 40Diamond Coal Co. v. United States, 233 U. S. 236 (1914). 41Benson Min. etc. Co. v. Alta, supra, note 39.

CHAPTER 3

PLACER LOCATIONS

§ 36. ACTS OF LOCATION.—The same acts of location are required for placer1 claims as for lode claims. See Chapter 2. There must be a discovery of a placer deposit that gives evidence of value for mining purposes2. A discovery of a lode will not support a placer location³. The locator must mark the boundaries of his claim as in the case of a lode location4. Is is necessary to file a notice of location only where required by the customs of miners, but, as in the case of lode locations, its filing is to be recommended. The description of the claim in the notice should refer to some natural object or permanent monument⁶. It is doubtful is a mere reference to the legal subdivision, such as the S½ of the NW¼ of the SE¼, is sufficient; for the average miner is not a skilled surveyor and hence would derive little information from such a description7.

The order in which the acts of location are performed immaterial, except as one is dependent upon another⁸. After the location is completed, the requirement of assessment work or improvements is the same as for lode claims9. The same requirement of citizenship of the locator applies¹⁰.

§ 37. SHAPE, SIZE AND NUMBER OF PLACER CLAIMS.— By their very nature placer claims differ in shape from lode claims. A placer claim must conform to legal subdivisions so far as practicable, and a single individual claim cannot exceed twenty acres¹¹. Legal subdivisions of forty acres

¹For definition of a placer deposit, see § 5, ante.

²Steele v. Tanana Mines R. Co., 148 Fed. 678 (C. C. A. 9, 1906).

³Cole v. Ralph, 252 U. S. 286 (1920).

⁴See § 16, ante; Worthen v. Sidway, 72 Ark. 215 (1904).

⁵Freezer v. Sweeney, 21 Pac. 20 (Mont., 1889).

⁶Malecek v. Tinsley, 73 Ark. 610 (1905); and see § 17, ante.

⁷W.orthen v. Sidway, supra, note 4. 8See § 10, ante; Waskey v. Hammer, 170 Fed. 31 (C. C. A. 9,

⁹See § 18, ante; Hodgson v. Midwest Oil Co., 17 Fed. 2d 71 (C. C. A. 8, 1927).

¹⁰ See § 8, ante; Lee Doon v. Tesh, 6 Pac. 97 (Calif., 1885). 1130 U. S. C., § 35.

may be divided into ten-acre tracts¹². There is no limit upon the number of locations that one person or association may make13, but for each separate location there must be a separate discovery, marking of boundaries, etc.14

- § 38. LOCATIONS BY ASSOCIATIONS.—An association may locate not exceeding 160 acres in a single claim, but there must be at least one member of the association for each twenty acres in the claim¹⁵. Thus an association with five members could locate not more than one hundred acres in one claim. A single discovery is sufficient for a location by an association, even though the claim exceeds twenty acres¹⁶. An association does not include a corporation, which is treated as one person¹⁷.
- § 39. Possession of Lodes Within Placer Loca-TION.—A placer location gives the locator the right to any unknown lodes within its boundaries, but it gives no right to lodes previously known to exist18. Such known lodes remain a part of the public domain and are subject to location by a third person or by the owner of the placer location¹⁹. Where a lode location is made within an existing placer claim the locator is limited to twenty-five feet on each side of the lode, instead of the usual three hundred feet²⁰.

Since a placer location carries the right to unknown lodes, it is not permissible for a prospector to enter a placer claim for the purpose of exploring for such lodes21. Concerning the effect of a patent to a placer claim which contains lodes, see § 41.

§ 40. PATENTS.—The procedure for obtaining a patent to a placer claim is similar to that with respect to lode claims²². Several holders of contiguous placer claims may,

¹²³⁰ U. S. C., § 36. 13Riverside Sand, etc., Co. v. Hardwick, 120 Pac. 323 (N. M.,

¹⁴United States v. Ickes, 98 Fed. 2d 271 (App. D. C., 1938).

¹⁵Hall v. McKinnon, 193 Fed. 572 (C. C. A. 9, 1911). 16 Thid.

¹⁸Mt. Rosa Min. Co. v. Palmer, 56 Pac. 176 (Colo., 1899).
19McCarthy v. Speed, 77 N. W. 590 (S. D., 1898).
20Sullivan v. Iron Silver Min. Co., 109 U. S. 550 (1883). ²¹Clipper Min. Co. v. Eli Min. Co., 194 U. S. 220 (1905).

²²See § 32 ante; 30 U. S. C., § 35.

however, apply for a joint patent if they wish²³. A patent may be based upon possession rather than upon a valid location, just as in the case of lode claims²⁴. The price for a patent is \$2.50 an acre²⁵.

§ 41. PATENT TO LODES WITHIN PLACER CLAIMS.— As stated in § 39, a placer location gives no right to previously known lodes. Hence the applicant for a placer patent has no right to a patent to such lodes, unless he has made a lode location or has worked the lodes long enough to have had possession for the statutory period²⁶.

Where the applicant for a placer patent has a right to a known lode within his claim (either a previously known lode or a lode discovered subsequent to his location), he must apply for a placer patent, stating in his application that the claim includes a lode²⁷. The price for such a patent is \$5.00 an acre for the lode and twenty-five feet on each side of it. and \$2.50 an acre for the rest of the claim²⁸.

It is very important for the applicant to mention in his application all known lodes which he claims, as failure to mention a known lode constitutes a conclusive declaration that the applicant has no right to the lode29. A known lode, as used in this section, is a lode known to the applicant at the time he applies for his placer patent, but he is charged with whatever is generally known in the community and with what would be disclosed by a reasonable and fair inspection of the premises30.

A patent vests full title to all lodes which are discovered after the locator files his application for his placer patent31.

²³³⁰ U.S. C., § 36; Tucker v. Masser, 113 U.S. 203 (1885). 2430 U.S. C., § 38; see § 34 ante. 2530 U.S. C., § 37.

²⁶For application based on possession, see § 34 ante.

²⁷³⁰ U. S. C., § 37.

²⁸Ibid.

²⁹Ibid.; Reynolds v. Iron Silver Min. Co., 116 U. S. 687 (1886). 30 Iron Silver Min. Co. v. Mike & Starr, etc., Co., 143 U. S. 394

³¹Mt. Rosa Min. Co. v. Palmer, 56 Pac. 176 (Colo., 1899).

CHAPTER 4

MISCELLANEOUS LOCATIONS AND LEASES

A. MILL SITE LOCATIONS

- § 42. GENERAL SCHEME.—The federal mining laws recognize that the owner of a lode location¹ may need additional land for use in connection with his mining operations. Hence it is provided that not more than five acres of nonmineral land, not contiguous to the vein, may be appropriated as a mill site². It is essential that a mill site be nonmineral and nonadjacent to the vein—a precaution against the use of valuable mineral land for mill site purposes. The mill site location must be upon the public domain; a location upon an existing mining claim is void, even though the claim is subsequently abandoned³.
- § 43. Who May Locate.—A mill site location may be made in two situations only: First, by the owner of a lode claim, for use in connection with the operation of his mine; and second, by the owner of a quartz mill or reduction works, whether or not he owns a mine in connection therewith. If a lode locator permits his location to forfeit, he also loses his right to an accompanying mill site location.

There is no provision for the location of a mill site by the owner of a placer claim which contains no lodes.

§ 44. ACTS OF LOCATION.—The boundaries of a mill site location should be marked on the ground, as in the case of other locations. Filing of notice of location is necessary only where required by the custom of miners. As in other cases, customs of miners must be observed; but a custom conflicting with the federal law, such as the prac-

¹See Chapter 2 for main treatment of lode locations.

²30 U. S. C. § 42.

³Kershner v. Trinidad Milling etc. Co., 201 Pac. 1055 (N. M., 1921)

⁴30 U. S. C. § 42.

⁵Watterson v. Cruse, 176 Pac. 870 (Calif., 1918).

⁶Kershner v. Trinidad etc. Co., supra, note 3.

⁷See § 17, ante. ⁸See § 6, ante.

tice of permitting mill site locations on mineral land, is invalid and should be ignored9.

The only other requirement for a mill site location is the use and occupancy of the land in connection with the mine, or for milling or reduction purposes. Any good faith used in connection with a mine is sufficient, as, for example, the erection of a cabin on the mill site for the storage of tools and for use as an ore house10. The mere maintenance of a quartz mill or reduction works on the site is a sufficient location to protect its owner against encroachments by a third person11.

§ 45. PATENTS.—Where a mill site is used in connection with a lode claim, it should be included in the application for a patent to the claim. (See § 32, ante, for patent procedure.) The same preliminary requirements as to survey and notice are applicable. The price for a mill site patent is five dollars an acre12. An adverse claimant may contest the application, as by showing that the land contains minerals which can be extracted with profit¹³. The owner of a quartz mill or reduction works may obtain a patent in a similar manner14.

COAL LEASES AND PERMITS

§ 46. GENERAL SCHEME.—It was formerly the policy of Congress to permit the entry and purchase of coal lands, in a manner somewhat similar to the making of lode locations¹⁵. These laws have now been superseded, however, and the present legislation provides only for the granting of leases and prospecting permits upon coal lands¹⁶. Any one desiring to obtain such a lease or permit should write to the General Land Office, Washington, D. C., for a copy of the regulations which have been issued upon the sub-

⁹Cleary v. Skiffich, 65 Pac. 59 (Colo., 1901). 10 Hartman v. Smith, 14 Pac. 648 (Mont., 1887); Silver Peak Mines v. Valcalda, 79 Fed. 886 (C. C., 1897).

11 Kershner v. Trinidad etc. Co., supra, note 3.

¹²³⁰ U. S. C. §§ 42 and 29. 13Cleary v. Skiffich, supra, note 9.

¹⁴³⁰ U. S. C. § 42. 1530 U. S. C. § 71 et seq.

¹⁶³⁰ U. S. C. §§ 181-209.

ject. The succeeding sections outline the general plan under which such leases are made. As to lands within a national forest, see § 54, post.

- § 47. APPLICATION FOR LEASE.—Application for a lease may be made by any one who is a citizen or has declared his intention to become such, or by an association or corporation whose members are severally so qualified. The applicant must first file with the General Land Office a petition setting forth (a) his name and address: (b) an affidavit of his citizenship, or, in case of a corporation, a certified copy of its charter and a statement as to the residence and citizenship of its stockholders; (c) a legal description of the land, which may not exceed 2560 acres; (d) a statement of the general situation of the land, with reference to other mines, topography, outlet to market, and transportaion facilities; (e) the character and extent of known coal deposits; (f) the contemplated investment for the development of a mine of a stated daily output; and (g) the maximum royalty which petitioner is willing to pay if a lease is granted, with a statement promising to execute a lease within 30 days after the auction, if awarded to petitioner, and to comply with its terms in good faith17.
- § 48. AUCTION OF LEASE.—Upon the filing of an application for lease of coal lands, the Land Office first determines whether or not the lands are suitable for blocking into a leasing unit and whether or not the proposed royalty payments are satisfactory. If not, an opportunity may be afforded the applicant to amend his offer upon terms satisfactory to the Government. If the application or amended application is approved, the register of the land office publishes notice for thirty days in a newspaper in the county where the lands lie, stating the terms of the applicant's offer and the time when bids for the lease will be received. If no one offers a bonus for the lease it will be awarded to the applicant. If a bonus is offered, the lease is awarded to the highest bidder. One fifth of the bonus

¹⁷Code of Federal Regulations, Part 193, Title 43.

must be deposited by the successful bidder on the day of sale¹⁸.

§ 49. EXECUTION AND TERMS OF LEASE.—The successful bidder must execute a lease within thirty days after the auction. The form is determined by the Land Office, but ordinarily it is quite similar to the usual coal lease. Royalties must be at least 5 cents per ton of 2,000 pounds, and rentals must be at least 25 cents an acre for the first year, 50 cents an acre for each of the next four years, and \$1 an acre thereafter; but rentals may be used as a credit against royalties for the current year. Leases are for an indefinite period, continuing during diligent operation, but they are subject to modification by the Government at the end of every twenty years.

It is also required that the lessee post a bond for the completion of the investment which the lease requires him to make, and after such investment a further bond must be given to insure compliance with other terms of the lease¹⁹.

§ 50. PROSPECTING PERMITS.—Where exploratory work is necessary to determine the existence or workability of coal deposits upon the public domain, prospecting permits may be obtained upon application to the General Land Office, upon a form obtainable on request. Not more than 2560 acres may be included within such a permit. A bond must be given to insure compliance on the part of the permittee. A prospecting permit gives the exclusive right to explore the lands for a period of two years, and if within that period the holder of the permit shows that the land contains coal in commercial quantities he is entitled to a lease without competitive bidding, upon rentals and royalties to be fixed by the Secretary of Interior²⁰.

C. OIL AND GAS LEASES

§ 51. GENERAL SCHEME.—Congress formerly permitted the entry and purchase of public lands containing known

¹⁸Code of Federal Regulations, supra, note 17.

¹⁹Code of Federal Regulations, supra, note 17.

²⁰Code of Federal Regulations, supra, note 17.

deposits of oil and gas. This policy has now been changed, the present laws²¹ providing only for leases upon such lands. Where lands are known or believed to contain oil or gas, leases are made upon competitive bidding. On the other hand where lands are not within the known geologic structure of a producing field, a lease may be obtained without competitive bidding. The procedure in each case is outlined in the succeeding sections.

Any one interested in obtaining an oil and gas lease upon public lands (other than lands within a national forest, as to which see § 54, post) should obtain from the Department of Interior its General Land Office Circulars 672 and 1386, as amended, which contain the regulations on this subject.

§ 52. Leases Upon Competitive Bidding.—Where public lands are within the known geologic structure of a producing oil or gas field, it is the duty of the Secretary of Interior to divide them into leasing blocks of not more than 640 acres each and offer them for lease to the highest responsible qualified bidder. Notice of the auction is published for 30 days in a newspaper in the county where the lands lie. Rentals and royalties are fixed by the Secretary in advance, so that the bidders bid only upon the bonus to be paid for the lease.

One-fifth of the bonus bid must be deposited at the time a bid is made. The bidder must also file proof of his citizenship if an individual, or certified copy of its charter and statement of residence and citizenship of its stockholders if a corporation; and an affidavit stating the direct or indirect interests held in permits or leases in the same State, citing the records where such interests may be found.

If the lease is awarded, copies are sent to the successful bidder, who must within thirty days execute the lease, pay the remainder of the bonus, pay the first annual rental, and execute any bond that may be required in connection with the lease. Such leases ordinarily follow the customary form for oil and gas leases, the term being five or ten years and as long thereafter as oil or gas is produced

²¹³⁰ U. S. C. §§ 221-236.

in paying quantities. Rentals are usually 50 cents an acre for the first year and 25 cents an acre thereafter until oil or gas is produced, when the rental becomes \$1 an acre and is credited upon royalties. The minimum royalty is $12\frac{1}{2}\%$ of all production, and a sliding scale is provided whereby the royalty increases with production, the present maximum being 32% for a well producing 2000 barrels or more a day²².

- § 53. Leases Without Competitive Bidding.—Application for leases upon lands not within the known geologic structure of a producing field should be filed with the Commissioner of the General Land Office, Washington, D. C. (As to lands within a national forest, see § 54, post.) Blanks for this application are not furnished, as no particular form is required, but it must be a sworn statement containing the following information:
 - (a) Applicant's name and address.
 - (b) Statement of citizenship if an individual; if a corporation, certified copy of charter and a showing as to citizenship and residence of stockholders.
 - (c) Statement of interests, direct or indirect, held by applicant in permits and leases, or applications for leases, in same State, citing records where such interests may be found.
 - (d) Legal description of land on which lease is sought, which may not exceed 2,560 acres, must be as compact as possible, and should involve only one geologic structure.
 - (e) Statement that to best of applicant's knowledge and belief lands are not within the known geologic structure of any producing oil or gas field and are believed to contain oil and gas.
 - (f) Names and addresses of three references as to applicant's reputation and business standing.
 - (g) Statement that applicant is ready to pay in advance the annual rental under the lease and to furnish any bond required by lease or regulations.

If the application is approved (preference being given

²²³⁰ U. S. C. §§ 221-236, and regulations issued thereunder.

to the first applicant), a lease is sent to the applicant for execution. Its form is substantially similar to that discussed in § 52, except that no bonus is required and no rental is charged for the second or third year unless there is production²³.

D. LOCATIONS AND LEASES WITHIN NATIONAL FORESTS

§ 54. GENERAL SCHEME.—It is the policy of Congress to permit the extraction of valuable minerals from forest lands, though of course forest regulations must be observed. The procedure, however, is not the same with respect to all forest lands, as the applicable law depends upon the manner in which the lands were acquired by the Government. It is therefore important first to determine in which category a particular tract belongs. This information may be obtained from the forester in charge or upon inquiry addressed to the Forest Service, Department of Agriculture, Washington, D. C.

§ 55. Types of Forest Lands.—In Arkansas there are three different types of national forest lands, insofar as mineral development is concerned: First, forest lands created from the public domain by Presidential proclamation; second, Weeks Law lands; and, third, lands acquired by the Forest Service in exchange for national forest lands. Mining regulations as to each type will now be examined.

1. Public Domain Forest Lands

§ 56. ORDINARY RULES APPLICABLE.—Public domain forest lands are those that have been created from the public domain by Presidential problamation²⁴. Such lands are subject to placer or lode location, as described in Chapters 2 and 3. They may also be leased for the extraction of coal, oil and gas, and the other minerals specifically treated in this chapter²⁵. In either case the applicable forest regulations should be ascertained and observed.

²³³⁰ U.S.C. §§ 221-236, and regulations issued thereunder.

²⁴¹⁶ U. S. C. § 471.

²⁵¹⁶ U. S. C. § 482.

2. WEEKS LAW LANDS

- § 57. GENERAL SCHEME.—The Weeks Law²⁶ authorized the purchase for forest purposes of lands already under private ownership. Mining upon such lands is governed by regulations issued by the Forest Service, Department of Agriculture, Washington, D. C., a copy being obtainable on request. The succeeding sections briefly outline their provisions.
- § 58. PROSPECTING PERMITS.—Preliminary prospecting may be carried on without a permit, but a permit is necessary for the making of extensive excavations, for the erection of structures, and for the acquisition of exclusive rights.

Written application for a prospecting permit should be made to the forest officer in charge. No particular form is specified, but the application should describe the land which the applicant wishes to prospect, should show United States citizenship on the part of the applicant (in the case of a corporation, a majority of its stock must be owned by United States citizens), and should state that the applicant does not then hold another prospecting permit.

The forester in charge issues the permit, a fee of \$5 being required. The lands included in a permit cannot exceed 100 acres, nor may a permit extend for more than one year. A permit may be extended at the option of the forest officer. Prospecting permits confer no right to remove minerals in merchantable quantities and are not transferable. Upon discovery of valuable mineral deposits the permittee may surrender his prospecting permit and for thirty days has a preference right to apply for a mining permit.

§ 59. MINING PERMITS.—Written application for a mining permit should be made to the forest officer in charge, setting forth the information required to be in an application for a prospecting permit and also describing the development work that has been done, if any, the character and approximate value of the minerals to be extracted, the results of any assays that have been made, and a copy

²⁶¹⁶ U. S. C. § 515.

of any report made by an examining mining engineer. A survey of the land is then made by the Forest Service and a plat prepared. The regional forester fixes the rentals and royalties to be paid.

Mining permits are issued to applicants who have made discovery under prospecting permits, or, in the absence of such preference rights, to any qualified person who has discovered valuable mineral deposits. An annual rental of not less than \$1 an acre is charged, and in addition a royalty of from two to eight percent must be paid. Permits issued by the forest officer in charge may not exceed five years, though the regional forester may issue permits from five to twenty years in duration.

Mining permits do not carry extralateral rights (see § 23, ante), and hence care should be taken to see that the tract includes as much of the dip as possible. Nor do such permits carry the right to cut timber of any kind; special permission must be obtained. Permits confer only such surface rights as are included within their terms, and overlapping permits for the removal of some other mineral may be granted. The permittee must keep accurate records of his operations, and any permit may be canceled for non-compliance with its terms or for lack of diligence in conducting operations²⁷.

3. EXCHANGE LANDS

§ 60. RULES APPLICABLE.—Lands which have been acquired by the Forest Service in exchange for forest lands may be leased under a special use permit, for which a charge of from 25 to 50 cents an acre is usually made. Each application is given individual treatment, there being no general regulations on this subject. Information is obtainable from the forester in charge.

E. MISCELLANEOUS MINERALS

§ 61. Sodium.—Prospecting permits and leases upon lands containing sodium are governed by a special act of

 $^{^{27}\}mathrm{See}$ regulations issued by Forest Service with reference to Weeks Law lands.

Congress²⁸. As this mineral is not of particular commercial importance in Arkansas, detailed treatment is omitted. Any one interested should obtain from the Department of Interior its General Land Office Circular No. 1194, as amended, containing regulations on the subject.

- § 62. POTASH.—Potash, like sodium, is not of great importance in this State. The applicable regulations may be found in General Land Office Circular No. 1120, as amended, obtainable from the Department of Interior²⁹.
- § 63. PHOSPHATES.—Phosphates are an important mineral in Arkansas but deposits are not known to exist upon the public domain. For regulations governing phosphate deposits upon the public domain, reference should be made to General Land Office Circular No. 696, as amended, issued by the Department of Interior30.
- § 64. BUILDING STONE.—Entry upon public lands that are chiefly valuable for building stone is made under the laws governing placer locations³¹, for which see Chapter 3, ante.

²⁸³⁰ U. S. C. §§ 261-263. 29 See also 30 U. S. C. § 281 et seq. 30 See also 30 U. S. C. § 211 et seq.

³¹³⁰ U. S. C. § 161.

PART TWO

ACQUISITION OF STATE AND PRIVATE LANDS

CHAPTER 5

PURCHASING AND LEASING STATE LANDS

§ 65. Introductory.—In the history of Arkansas land legislation may be traced the State's transition from a sparsely settled territory to a well-populated state. Shortly after Arkansas was admitted to the Union in 1836, it received from Congress grants totaling hundreds of thousands of acres. At that time a primary concern of the State was to increase its population, and with this end in view it adopted a land policy of great liberality. Homestead land was given to any one who would come to the State and cultivate its soil, and every one could buy state land for other purposes at a small fraction of its value.

Today the picture has changed completely. All that remains of that era is the phrase "doing a land-office business." While the digest of statutes still bulges with legislation specifying the procedure for the sale of swamp lands, internal improvement lands, seminary lands, saline lands, and the various other grants received from Congress, such statutes are no longer of any practical value; for almost every acre that once belonged to the State has now passed into private ownership. Occasionally a tiny tract is found that somehow has been overlooked through the years, but for the most part the liberal land policy has accomplished its purpose. The State's lands have found their way into the sacred leaves of the taxbooks.

With this transition has come a corresponding change in the State's attitude toward its holdings, which are now almost entirely the result of tax forfeitures. No longer may valuable tracts of timber and mineral land be purchased for a dollar an acre; every tract is carefully appraised before its sale price is fixed. No longer are tax forfeitures treated as necesary evils, to be set aside as quickly as possible; now the State hastens to confirm its ownership in order that it may offer a merchantable title to the buying public. Even when a sale is made, all mineral rights are reserved to the State. In short, the State has come to realize, and to capitalize upon, the possibilities of deriving substantial revenues from the thousands of acres that annually pass through its hands.

- § 66. DISPOSITION OF LANDS RECEIVED FROM THE UNITED STATES.—As stated in the preceding section, the State has sold practically every acre of the vast grants that were received from Congress a century or so ago. Hence it is unnecessary to set forth here the provisions of the laws governing the sale of such lands. If a tract should be discovered still to be on the books of the State Land Office, reference should be made to Chapter 99 of Pope's Digest for the applicable statutes.
- § 67. Purchase of Tax Forfeited Lands; Minerals Reserved.—Where lands have forfeited to the State for non-payment of taxes, any one may make application to purchase them. In the case of acreage property, the purchase price is fixed by an appraisal made for the purpose¹. City and town lots are sold for the amount of the taxes for which they forfeited, with costs, penalties, expenses, and subsequently accrued taxes for not exceeding three years². Application to purchase should be made to the State Land Commissioner.

There are two practical objections to the purchase of tax forfeited lands. First, the title so acquired can usually be set aside at the instance of the original owner, as there are many technical defects which may invalidate a tax sale. The purchaser can feel reasonably secure only if the State has obtained a decree confirming its title under Act 119 of 1935³, or, in the absence of such a decree, only after he has had two years actual and continuous possession under his

¹Act 331 of 1939.

²Act 299 of 1941.

³Confirmation under this act cures practically all defects. See Fuller v. Wilkinson, 198 Ark. 102 (1939).

deed from the State⁴. Where the validity of a tax title is in question, the advice of a competent attorney should always be obtained.

Second, an act adopted in 1939 requires that in the sale of tax forfeited lands all minerals, including oil and gas, be retained by the State⁵. Hence a purchaser who is primarily interested in mineral rights should avoid purchasing the State's title, and should instead seek to acquire the original owner's title and effect a redemption.

§ 68. REDEMPTION OF TAX FORFEITED LANDS.—The procedure for redeeming tax forfeited land is easily understood if the simple mechanics of Arkansas tax sales are borne in mind. When the taxes upon a particular tract are not paid when due, the land is sold by the county collector on the first Monday in the following November. Should no one bid the amount of the taxes, penalty and costs, the land is automatically sold to the State⁶. For a period of two years after the day of sale the owner or his assignee has an absolute right to redeem the property, by paying to the county treasurer the amount of taxes, etc., that were due at the time of sale, plus any subsequently accruing taxes⁷. During this two year interval any third person is entirely safe in purchasing the owner's title and exercising his right of redemption.

If the property is not redeemed within two years after the sale it is the duty of the county clerk to execute a deed, where some one other than the State was the purchaser⁸. As stated in the preceding section, such tax deeds can usually be canceled for some defect in procedure; but after the purchaser has had two years' continuous actual possession his title is good, unless the owner was under a disability at the time of sale. Persons under a disability may redeem within

⁴Pope's Digest, § 8925; see *Finley v. Hogan*, 60 Ark. 499 (1895). But persons under disability are not barred. See Pope's Digest, § 8939, and *Brandon v. Parker*, 124 Ark. 379 (1916).

⁵Act 331 of 1939, § 5.

⁶Pope's Digest, § 13849.

⁷Ibid., § 13860.

⁸Ibid., § 13872.

two years after its removal and may require an accounting for all minerals extracted by the purchaser9.

Where the property was sold to the State and remains unredeemed for two years, it is then the county clerk's duty to certify it to the State Land Office¹⁰. As soon as this is done the property becomes subject to sale by the State, under the procedure outlined in § 67. The owner, however, or any one claiming under him, is enitled to redeem the land at any time before it is sold by the State¹¹. Persons under a disability at the time of sale may redeem within two years after its removal¹². Redemption is effected by applying to the State Land Office and paying the amount due at the time of sale, plus costs, expenses of confirmation, and subsequently accrued taxes 13. Where redemption is effected, the State issues a redemption deed without reserving the minerals14.

From this and the preceding section it will be seen that a prospective purchaser who is interested in the minerals in tax forfeited land should proceed by redemption rather than by purchase from the State. For two years after the date of sale it is a simple matter of purchasing from the owner and redeeming from the county treasurer. But after the property has been certified to the State the prospective purchaser should first ascertain whether or not it has been sold by the State. If not, he should immediately obtain a deed from the original owner and redeem before the State makes a sale to some one else.

§ 69. PURCHASE OF ISLANDS IN NAVIGABLE STREAMS. —It is a settled principle of American law that the beds of navigable streams (between the high water marks) are the property of the State¹⁵. In Arkansas there is no statutory authority for the sale of the beds themselves, but a method is provided whereby islands which form in navigable streams or rivers may be purchased from the State. Navi-

⁹Ibid., § 13860.

¹⁰ Ibid., § 13876. 11 Ibid., § 8672.

¹²Ibid., § 8666. ¹³Ibid., § 8673.

¹⁺Act 331 of 1939, § 5.

¹⁵Little Rock v. Jeuryens, 133 Ark. 126 (1918).

gability is a question of fact in each case, all the larger rivers being generally navigable. Application to purchase should be made to the State Land Commissioner, accompanied by a deposit of \$1.25 an acre and a sum sufficient to pay the estimated cost of a survey. The island is then surveyed and platted, and a deed is made to the applicant 16.

§ 70. Purchase of Sixteenth Section Lands.—By the provisions of a compact between Congress and the state legislature, executed immediately after Arkansas' admission to the Union, the section numbered sixteen in each township was granted to the State for use for school purposes for the benefit of the inhabitants of the township. Many of these lands have already been sold, but a considerable quantity are still open to sale.

Any one wishing to purchase unsold sixteenth section lands is required to make application to the county court, depositing with the county clerk a sum sufficient to cover the costs of survey, appraisement, and sale, and filing a written guaranty that he will bid at least \$2.50 an acre if it is acreage property and the full appraised value if it is lots. The court then orders the sale and appoints three appraisers to value the land and timber, and a survey is made if necessary. The property is offered at public sale by the sheriff, after publication of four weeks' notice. Report of the sale is made to the county court, which may either confirm the sale and authorize the State Land Commissioner to execute a deed upon payment of the bid, or reject the report and order a new sale if it wishes¹⁷.

§ 71. MINERAL LEASES OF BEDS OF NAVIGABLE STREAMS.—The Commissioner of Revenues has authority, with the approval of the Attorney General, to execute leases for the taking of oil, gas, sand, gravel, and other minerals from the beds and bars of navigable streams and rivers. (See also § 69, ante.) Not more than 1,000 acres of such beds and bars may be leased to any one person, association, or corporation. The lessee must attain commercial production within one year, else the lease terminates; but a lease

¹⁶Pope's Digest, §§ 8739-8745.

¹⁷Pope's Digest, §§ 11740-11748.

may be renewed where it is shown that the lessee has incurred expenses and is in the process of obtaining production. A lease terminates six months after production ceases. Royalties are payable to the State at the rate of 2½c per cubic vard of sand, 5c per cubic yard of gravel, 6c per ton of coal, and one-eighth of the value of oil, gas, and casinghead gas. Rentals and royalties for other minerals are fixed by agreement between the Commissioner and the lessee18. Though this act refers generally to the beds of navigable rivers "and other lands held in the name of the state," it does not authorize a mineral lease upon the Confederate Home or other state property already dedicated to particular purposes¹⁹.

- § 72. PURCHASE AND LEASE OF MINERALS RETAINED IN SALE OF TAX FORFEITED LANDS.—As pointed out in § 67, a 1939 statute requires the State to reserve all minerals when it sells lands acquired through tax forfeitures. Such minerals are subject to sale or lease at the discretion of the Land Use Committee of the State Planning Board. Application for lease or purchase should be made to the State Land Commissioner, who is Secretary of the Committee. If the Committee finds that the requested lease or sale is advisable, it makes a favorable recommendation to the Commissioner of Revenues. The Commission is thereupon authorized to execute the necessary lease or conveyance, with the approval of the Attorney General. Royalties and rentals are at the rates specified in § 71, ante, and in case of sales the purchase price is fixed by the Commissioner²⁰.
- § 73. MINING LEASES UPON SCHOOL LANDS.—The directors of any common or special school district have authority to execute oil, gas, and other mineral leases upon the lands of the district, upon such terms as they deem advisable21.

¹⁸Act 321 of 1937 and Pope's Digest, §§ 8733-35 (§ 8732 of the Digest being an inaccurate copy of said Act 321). A similar act was held valid in State ex rel. Moose v. Southern Sand etc. Co., 113 Ark. 149 (1914).

¹⁹Pulaski Min. Co. v. Vance, 185 Ark. 653 (1932).

²⁰ Act 351 of 1941.

²¹Pope's Digest, § 11770.

CHAPTER 6

ACQUISITION OF PRIVATE LANDS

- § 74. INTRODUCTORY.—An extended discussion of real estate law and conveyances is beyond the scope of this volume. There are, however, a number of legal principles that are peculiarly applicable to the transfer of mineral rights, and these will be noticed in this chapter.
- § 75. GENERAL THEORY OF MINERAL OWNERSHIP.— For centuries it has been a fundamental rule of English and American law that the ownership of land extends upward to the farthest reaches of the sky and downward to the center of the earth. It follows from this theory that one who owns a tract of land also owns whatever minerals that may be found upon its surface or within its depths. Hence the simplest method of acquiring the ownership of minerals is through the purchase of the land itself. No specific reference to the minerals need be made in the deed, as the description of the land includes the minerals unless they are expressly excepted.
- § 76. SEPARATION OF MINERAL AND SURFACE OWNER-SHIP.—In Arkansas, as in most of the states, the surface of land may be owned by one person and the underlying minerals by another. This is true even of oil and gas, though they are said to be of a fugacious nature and to percolate from place to place within the earth². The owner of land may convey to another all the minerals within his land, or he may convey only one or more particular minerals. He may convey an undivided part of such minerals, as an undivided half of all oil and gas within a certain tract.

The "surface" means primarily the layer of soil that is valuable for agricultural purposes. However the term also includes every part of the land except the minerals that have passed into separate ownership; so the surface

¹II Blackstone's Commentaries, p. 18.

²Bodcaw Lumber Co. v. Goode, 160 Ark. 48 (1923). As a matter of fact, oil and gas are thought by geologists to remain stationary until their penetration by a well creates a point of reduced pressure which results in movement. See § 133.

owner also owns the substructure beneath the minerals³. The owner of minerals in place is entitled to use his passages and tunnels for transporting minerals from adjoining land, until his own minerals are all removed. Upon such removal the space formerly occupied by the minerals reverts to the surface owner.

The word "minerals," when used in a deed or lease, includes not only fixed minerals, such as gold, zinc, coal and the like, but also oil and gas5.

§ 77. FORM OF CONVEYANCE OF MINERALS.—Since minerals in their natural state constitute part of the land, their transfer is governed by the laws applicable to real estate⁶. A contract for the sale of minerals must be in writing to be valid. A conveyance of minerals must meet the legal requirements of a deed and must be acknowledged by the grantor to be entitled to record⁸. The wife of the grantor has an inchoate dower interest in the minerals, which must be released in the manner specified by law9. Should the purchaser fail to obtain a release of dower, the grantor's wife can compel him to deposit in court one-third of the value of all minerals extracted to be held for her in the event she outlives her husband. 10. She may even be able to prevent any mining operations at all, until she consents11.

The landowner may convey the minerals and retain his surface ownership, or, conversely, he may convey the surface and reserve all or part of the minerals. In Arkansas there was once a technical rule requiring a reservation of this kind to be made in the granting clause of the deed; a reservation in the habendum was held to be ineffective. This rule has recently been abandoned, the law being now to the effect that the intention of the parties is to be gath-

³Gearhart v. McAlester Fuel Co., 199 Ark. 981 (1940). ⁴Goodson v. Comet Coal Co., 182 Ark. 192 (1930).

⁵Mo. Pac. R. Co. v. Strohacker, 202 Ark. 645 (1941)

⁶Osborn v. Ark. Territorial etc. Co., 103 Ark. 175 (1912).

⁷Pope's Digest, § 6059.

⁸Osborn v. Ark. Territorial etc. Co., supra, note 6; Pope's Digest, § 1840.

⁹B. H. & M. Oil Co. v. Graves, 182 Ark. 659 (1930). 10Ibid.

¹¹ See § 88, post.

ered from the instrument as a whole, regardless of the particular place at which the reservation is expressed12.

- § 78. IMPLIED RIGHTS OF MINERAL OWNER.—Where the ownership of minerals has been separated from the surface ownership, the mineral owner has by implication the right to enter upon the land to prospect and explore for minerals, the right to erect all necessary appliances for their removal, the right to conduct mining or drilling operations, and the right to occupy as much of the surface as is reasonably necessary for mining purposes. These rights need not be specifically reserved in the mineral deed, as they are necessarily implied as a part of the grant¹³.
- § 79. Adverse Possession of Minerals.—Where the ownership of the surface has been separated from the mineral ownership, possession of the surface by its owner or adverse possession thereof by a stranger does not affect the title of the mineral owner. If, however, there is an actual invasion of the minerals by the opening of mines, the invader acquires title by seven years' adverse possession14.
- § 80. MINERAL LEASES.—A lease of land for mining or drilling purposes differs from the ordinary lease in that it also grants to the lessee an interest and easement in the land itself¹⁵. Hence a mining lease must be in writing, even though its term is less than a year. It must be acknowledged to be entitled to record, and the lessor's wife must release her dower and homestead rights (see § 77 and § 84). It is good practice for the lessee also to sign the lease, though this is not customary with respect to oil and gas leases.

There is no particular form to be followed in the preparation of a mining lease. Among the matters ordinarily set forth are the names and addresses of the parties, the description of the property, the initial consideration for the

¹²Beasley v. Shinn, 201 Ark. 31 (1940).

¹³Bodcaw Lbr. Co. v. Goode, 160 Ark. 48, 60 (1923).

 ¹⁴Claybrook v. Barnes, 180 Ark. 678 (1929).
 15Standard Oil Co. v. Oil Well Salvage Co., 170 Ark. 729 (1926). A mineral lease is not a present transfer of title, but title passes upon severance. Osborn v. Ark. Territorial Oil & Gas Co., 103 Ark. 175 (1912).

lease, the term of the lease, the time within which mining operations must begin, the amount of rentals and royalties to be paid, the manner of determining the extent of production (as by railroad weights), permissible excuses for cessation of production, liability of the parties for taxes (including severance taxes), a warranty of title, and such other matters as may be appropriate under the particular circumstances. In all instances an attorney's assistance should be obtained.

As to the necessity of affixing federal revenue stamps to a mining lease or oil and gas lease, see § 146, post.

§ 81. MINERAL LEASES UPON LANDS OWNED BY MINORS.—Where lands in Arkansas are owned by a resident minor (a male under twenty-one or a female under eighteen), his guardian or curator may petition the probate court of the county in which the greater part of the lands lie, for authority to execute a lease for the production of oil, gas or any other mineral. If the court finds from disinterested testimony that a lease would be for the minor's benefit, it may authorize its execution upon such terms as the court deems proper, first requiring the guardian or curator to give bond for the faithful execution of the lease and faithful accounting for its proceeds¹⁶.

In addition to the foregoing procedure, special authority is conferred upon guardians, curators and tutors, whether appointed in this State or in another State, to execute oil and gas leases upon lands in Arkansas owned by a minor, or to sell oil and gas royalty owned by a minor. Within thirty days after the execution of such a lease or sale the guardian must report it to the probate court of the county in which the greater part of the lands lie. If the court finds the transaction to be for the ward's best interest it must within six months enter its order approving he lease or sale and requiring a bond for faithful performance by the guardian. If the guardian is a nonresident, an authenticated copy of his order of appointment, or, if there be no order, a certified copy of his letters of guardianship, must be filed. Should the court disapprove the transaction,

¹⁶Pope's Digest, §§ 6264-66.

it must enter its order canceling it and directing the return of any consideration received by the guardian. Where the guardian fails to report within thirty days, the lessee or any purchaser of the minor's royalty interest may apply to the court within ten additional days for an order requiring the guardian to file his report. If the lease or sale is not reported to the court in either manner within forty days, it becomes void17.

The guardian or curator of a nonresident minor owning land in this State may also apply to the probate court for authority to execute an oil and gas lease, the procedure being similar to that outlined in the first paragraph of this section¹⁸. There is no statutory authority for the guardian of a nonresident minor to execute any other type of mining lease upon lands in this State.

Where a resident or nonresident minor is a male over eighteen or a female over sixteen, it is usually simpler to obtain an order removing his disabilities, in which case he may execute a lease without the intervention of his guardian19.

MINERAL LEASES UPON LANDS OWNED BY IN-SANE PERSONS.—Oil and gas leases upon lands owned by resident or nonresident insane persons may be executed by their guardians or curators, under procedure identical to that set forth in the second paragraph of § 81, ante²⁰. The guardian of a nonresident insane person may also apply to the probate court for authority to execute an oil and gas lease, the procedure being similar to that described in the first paragraph of § 8121. There is no statutory authority for the execution of any other type of mining lease upon the land of an insane person.

§ 83. Purchase of Lands Owned By Minors and INSANE PERSON.—Statutory authority is provided for the

¹⁷Act 69 of 1941, repealing §§ 6280-6284 of Pope's Digest. See also Act 303 of 1941, which would appear to have been in force only from its effective date to the effective date of said Act 69.

¹⁸Pope's Digest, §§ 6289-6291. ¹⁹Pope's Digest, §§ 7451-7453; Act 336 of 1941.

²⁰Act 69 of 1941.

²¹Pope's Digest, §§ 7589-7591.

outright sale of property owned by minors or insane persons, the procedure being by petition to the probate court, order of sale, appraisement, publication of notice, public sale to the highest bidder, report of sale, and confirmation by the court. Sales of this kind should be conducted only upon the advice of an attorney.

§ 84. Purchase or Lease of Homestead.—Property which is owned and occupied as a home by a person who is married or the head of a family constitutes his homestead²². A conveyance of, or a mineral lease upon, such property by the husband alone is void; the wife must join and release her homestead rights23.

Upon the intestate death of the husband, his widow or minor children or both have a right to occupy the homestead and receive its rents and profits—the widow during her life, the children (male or female) until they reach twenty-one²⁴. The widow cannot sell her homestead right; an attempt to do so constitutes an abandonment on her part, vesting the entire homestead right in the minor children²⁵. Upon the widow's death or abandonment of her homestead right and the youngest child's reaching twenty-one, the right to possession passes to the heirs of the original owner26. A father may defeat his children's homestead right by devising the property to another²⁷.

A widow in possession of the homestead has no power to open new mines or oil and gas wells upon the property; but she is entitled to work, even to the point of exhaustion, mines or wells which were open at the death of her husband²⁸. Where a coal mine had been opened and abandoned during the husband's lifetime, it was held that the widow had power to make a lease by which the same vein was to

²²Ark. Const., Art. 9. An urban homestead cannot exceed one acre; a rural homestead cannot exceed 160 acres. If its value exceeds \$2500, former may be reduced to not less than ¼ acre and latter to not less than 80 acres.

²³Pope's Digest, § 7181. ²⁴Ark. Const., Art. 9, § 6.

²⁵Garibaldi v. Jones, 48 Ark. 230 (1886); Brownfield v. Bookout, 147 Ark. 555 (1921).

²⁶Griffin v. Dunn, 79 Ark. 408 (1906).

 ²⁷Brown v. Nelms, 86 Ark. 368 (1908).
 28Cherokee Const. Co. v. Harris, 92 Ark. 260 (1909).

be worked through a new pit, the old pit having filled with water²⁹. The important factor in determining the widow's rights is whether or not a mine had been opened during the husband's life.

If an oil and gas or other mineral lease is executed by the husband and wells or mines are opened under the lease after his death, they are considered as having been opened during his lifetime, and the widow and minor children, by virtue of their homestead right, are entitled to the rentals and royalties under the lease³⁰.

Not only does an attempted sale by the widow forfeit her homestead right; an attempted sale of 63/64ths of the minerals was held to be an abandonment by her to that extent, and as there were no minor children that interest at once vested in her husband's heirs³¹. An oil and gas lease given by the widow upon the homestead is invalid, as beyond her power³².

From what has been said it will be seen that the homestead right is not equivalent to ownership of the property; it is a mere right of occupancy (though the minor children may also have title as heirs of their father, subject to their mother's dower). Hence one who desires to purchase or lease homestead lands after the husband's death must obtain a deed or lease from the widow (who has a right of possession), from the husband's adult heirs (who have the remainder interest), and from the guardian of the minor children, if any (who share the widow's right of possession and also have a remainder interest). Purchases or leases from guardians are discussed in §§ 81 and 83. Where the husband left a will, title is vested in his devisee, but it is safest to have his widow join in the deed or lease, as the court has not decided whether or not her homestead right can be defeated by will. Of course her dower right cannot be so defeated.

§ 85. SALE OR LEASE BY LIFE TENANT.—A life tenant has the right to work to exhaustion mines which were

²⁹Butler v. Butler, 176 Ark. 126 (1928).

³⁰Warren v. Martin, 168 Ark. 682 (1925).

³¹ Ibid.

³²Lee v. Straughan, 146 Ark. 504 (1920).

open when his estate vested, but the opening of new mines constitutes waste and may be enjoined by the remainderman³³. As in the case of a widow in possession of the homestead, he is also entitled to the rents and royalties under a lease made before his estate vested³⁴. He has power to sell only his life estate.

A rather peculiar statute authorizes the execution of an oil and gas lease by a person to whom property has been conveyed or devised under language which at common law would create an estate in fee tail (that is, a grant or devise to him and his bodily heirs). In Arkansas such a grant or devise creates a life estate in the first taker and a contingent remainder in those to whom the estate would first pass at common law. The statute in question enables such a life tenant to apply to the chancery court for authority to execute an oil and gas lease upon the property. If the court approves the lease, it apportions to the life tenant a sufficient part of the rents and royalties (not exceeding one-sixteenth) to compensate him for the occupancy of and damage to the surface by the lessee, and directs that the rest of the rents and royalties be paid to a bonded trustee, to be held for the remaindermen³⁵. Apparently the act applies only to oil and gas leases, though in this respect it is somewhat ambiguous.

§ 86. Leases By Charitable Institutions.—Specific statutory authority exists for the execution of oil and gas leases by churches, lodges, and other eleemosynary institutions. A majority of the trustees, deacons, or other governing body of the institution may authorize the execution of such a lease³⁶. It would seem, however, that the pertinent provisions of the constitution, by-laws or other governing rules of such an institution should also be observed in the authorization and execution of such leases. Authority for the execution of other types of mineral leases by a charitable organization must be found in its governing rules.

³³Cherokee Const. Co. v. Harris, supra, note 28.

³⁴Warren v. Martin, supra, note 30. 35Pope's Digest, §§ 1800-08. This act was held valid in Love v. McDonald, 201 Ark. 882 (1941).

§ 87. MINERAL LEASES WHERE OWNERS ARE NUMERous.—It frequently happens that land or mineral rights are owned by several persons jointly, some of whom may refuse to execute a mining lease. In such a situation one or more of the owners may file suit against the others in the chancery court for the county in which the greater part of the property lies, for the purpose of compelling the execution of a lease. It is the duty of the court to appoint a receiver and authorize him to negotiate for a mining lease upon the property. The lessee may be one of the owners of the land. If the receiver is successful in leasing the property upon satisfactory terms, he must report the lease to the court for its approval. If approved, it then becomes binding upon all the landowners. After the receiver has accounted for the initial consideration received for the lease, he must be discharged, and thereafter rentals and royalties are paid by the lessee directly to the owners37.

In the alternative, one or more of the owners may bring suit for partition of the property. It is then the court's duty to divide it in kind, or, if physical division is impossible, to order a public sale. In either case the proceedings lead to separate ownership, eliminating the difficulty of obtaining the consent of several persons to the lease.

§ 88. VALIDITY OF LEASE NOT SIGNED BY ALL OWN-ERS.—The Arkansas Supreme Court has not yet passed upon the validity of an oil and gas or other mineral lease which has not been signed by one or more owners of the property. In some jurisdictions it is held that the non-assenting owners are entitled to enjoin operations under such a lease³⁸. Other courts, including the Eighth Circuit Court of Appeals, hold that the lessee is entitled to drill or mine, subject to a similar right in the non-assenting owner, but of course the lessee must deliver to the non-assenting owner his share of the minerals³⁹. Until the question is decided

³⁷Pope's Digest, §§ 11195-11207. The court has not yet passed upon the constitutionality of this act.

³⁸Gulf Refining Co. v. Carroll, 82 So. 277 (La., 1919); Freeman v. Egnor, 79 S. E. 824 (W. Va., 1913); Clark v. Whitfield, 105 So. 200 (Ala., 1925).

³⁹Prairie Oil & Gas Co. v. Allen, 2 Fed. (2d) 566 (C. C. A. 8, 1924). See annotation in 40 A. L. R. 1389.

in this State the only safe practice is to be certain that all owners join in the execution of the lease.

- § 89. RECORDING OF LEASE OR DEED .- A mineral lease or deed should be filed for record with the circuit clerk of each county in which any part of the land lies, for the reason that a subsequent purchaser or lessee without notice of an unrecorded lease or deed is not bound by it40. A subsequent purchaser or lessee is deemed to have notice of an unrecorded instrument if he has actual knowledge of it or if he has sufficient notice to put him upon inquiry, as where the lessee or grantee is in possession.
- § 90. Assignment of Lessor or Lessee Interest.— The lessor of a mineral lease may assign his interest in the lease, though it is customary for the lease to provide that the lessee is not bound by a change in the ownership of the land until he has been furnished with satisfactory evidence thereof. Such a provision is valid and justifies the lessee in paying rentals and royalties to the original lessor until he receives notice of an assignment. Under such a clause even one who obtains a judgment lien against the land cannot hold the lessee for royalties until he gives the required notice of his claim⁴¹. As the lessors royalty interest is real estate⁴², his wife should join in the assignment.

The lessee can assign his interest in the lease unless it contains an express clause forbidding assignment⁴³. Since the lessee has an interest in the land itself (see § 80, ante), it would appear that his wife should join in the assignment for the purpose of releasing dower.

§ 91. EXTENSION OF LEASE.—The original term of a lease may be extended by agreement of the parties. Such an agreement must be acknowledged and recorded to be binding upon third persons without notice. See § 89, ante.

⁴⁰Pope's Digest, § 1847. ⁴¹Standard Oil Co. v. Craig, 202 Ark. 168 (1941). ⁴²Arrington v. United Royalty Co., 188 Ark. 270 (1933).

⁴³Lawrence v. Mahoney, 145 Ark. 310 (1920).

PART THREE

DEVELOPMENT AND OPERATION OF MINES AND WELLS

CHAPTER 7

LESSEE'S DUTIES TO LESSOR

§ 92. DUTY TO BEGIN DEVELOPMENT.—In mineral leases the principal consideration moving to the lessor consists of the royalties which he expects to accompany the extraction of minerals. Even where a substantial bonus is paid to the lessor upon execution of the lease, the reason for the bonus ordinarily lies in the known probability of the presence of minerals, and in such situations the expected royalties are still the lessor's main interest. It follows that unless the royalties materialize the lessor's purpose in executing the lease is defeated.

Recognition of this peculiarity of mineral leases has led to the lessee's implied duty to develop the property. It is a fundamental rule, applicable to all types of mineral leases (including oil and gas leases), that the lessee is under a duty to commence exploration and development with reasonable diligence¹. Should he fail to perform this duty he is deemed to have abandoned the lease, entitling the lessor to declare its forfeiture².

No rule of thumb can be stated by which the lessee's duty in every instance can be measured exactly. Each case is to be decided upon its own particular facts, having regard to all the various circumstances, such as the size and accessibility of the property, the usual method of development in similar situations, the expense involved, etc. The court's inquiry will be directed toward determining whether or not the lessee's actions are such as to indicate an intention to develop the property diligently or an intention to abandon the lease³.

²Concerning abandonment, see §§96-97, post.

3Millar v. Mauney, supra, note 1.

¹Mansfield Gas Co. v. Alexander, 97 Ark. 167 (1911); Millar v. Mauney, 150 Ark. 161 (1921).

- § 93. Duty of Development As Affected By Lease Provisions.—The lessee's duty to explore and develop the property is usually an implied one, arising from the lessor's right to expect royalties. Where the lease itself expressly defines the extent of the lessee's duty in this regard, there is no room for implication. In such instances the parties are bound by their contract, even though the lease provisions require a greater or smaller degree of diligence than would otherwise have been the case. Thus where an oil and gas lease provided that the lessee should have five years in which to drill a well, it was held that this express provision superseded the implied covenant to develop that would otherwise have existed.
- § 94. Effect of Provisions For Delay Rentals.—The duty of development is frequently qualified by a provision permitting the lessee to obtain an extension of time by paying a rental to the lessor. A good example of such a provision is found in Form 88 1/8 Oil and Gas Lease, the form in general use in Arkansas. This lease provides that if no well be commenced within one year the lease shall terminate unless the lessee pays a specified sum which operates as a rental and extends for another year the time for commencing a well. Similar extensions are obtainable throughout the primary term of the lease—usually five or ten years.

A provision for delay rentals is valid and entitles the lessee to an extension according to its terms⁵. Under Form 88 1/8 (and Form 88, formerly in general use), upon the lessee's failure to pay the delay rental when due the lessor has power to declare a forfeiture. This he may do by endorsing notice of forfeiture on the record⁶, by refusing to accept overdue rentals, by notifying the lessee that he has declared a forfeiture, by executing a new lease to some one else, or by any other affirmative act inconsistent with the continuance of the lease⁷. The lessor waives the forfeiture if

⁴Grooms v. Minton, 158 Ark. 448 (1923). ⁵Lawrence v. Mahoney, 145 Ark. 310 (1920).

⁶See § 107, post.

⁷See Epperson v. Helbron, 145 Ark. 566 (1920); Harrell v. Saline Oil & Gas Co., 153 Ark. 104 (1922); Bray v. Woodley, 162 Ark. 186 (1924).

he accepts an overdue rental⁸, if he retains an overdue rental check for an unreasonable time before returning it to the lessee⁹, if he permits the lessee to commence operations, or if he does any other act by which he recognizes the continued existence of the lease¹⁹.

Under the so-called "unless" lease (of which Forms 88 and 88 1/8 are examples), the lessee is not bound to pay delay rentals and cannot be held liable for them if he elects to let the lease forfeit. But the so-called "or" lease by its terms requires the lessee either to drill or pay a rental. If he fails to do either, and also fails to exercise the express surrender right contained in that form of lease, the lessor can hold him liable for delay rentals throughout the primary term of the lease or until he completes a well. The "or" lease is an early form which has been almost entirely supplanted by the "unless" lease.

§ 95. To Whom Delay Rentals are payable to the lessor. Where he sells an interest in the minerals to a third person, the rentals should be apportioned between the two¹¹. Sale of the surface by the lessor does not affect the payment of delay rentals, as their purpose is to extend the time for performance of the lessee's duty to the mineral owner. Concerning the payment of delay rentals to life tenants and occupants of a deceased lessor's homestead, see §§ 84 and 85, ante.

§ 96. FAILURE TO DEVELOP; ABANDONMENT.—Where the lessee fails to perform his covenant, express or implied, to proceed with exploration and development, he is held to have abandoned the lease¹². Or where the lessee's conduct is such as to indicate that he does not intend to perform his duty, he is deemed to have abandoned¹³. In each case abandonment is primarily a question of fact, to be determined

Bray v. Woodley, supra.

[&]quot;Cordell v. Enis, 162 Ark. 41 (1924).

¹⁰ Some expressions in the Arkansas decisions indicate that failure to pay delay rentals works an automatic forfeiture, but the view stated in the text seems clearly to be the ultimate result of the cases.

Segars v. Goodwin, 196 Ark. 221 (1938).
 Mansfield Gas Co. v. Alexander, 97 Ark. 167 (1911).

¹³ Millar v. Mauney, 150 Ark. 161 (1921).

by considering the circumstances of the particular situation¹⁴.

§ 97. Remedies of Lessor Upon Abandonment.—Where the lessee of a mining lease for coal or other fixed minerals abandons the lease, the lessor has three available remedies: First, he may sue in chancery for a cancellation of the lease and for incidental damages; second, he may sue at law for damages for breach of contract; or, third, he may treat the contract as rescinded and sue to recover possession of the property¹⁵. Where the abandonment is only partial, as where the lessee develops part of the property but ignores the rest, the lessor must sue at law for damages¹⁶. If the lease is canceled by reason of abandonment, the lessee is ordinarily permitted to remove his improvements, but he is not entitled to compensation for his expenditures¹⁷.

Under the standard form of oil and gas lease the lessee is not obligated either to drill a well or to pay a rental, and upon his failure to do either the lessor's remedy is to declare a forfeiture¹⁸. If, however, the lessee has failed to drill necessary offset wells, with the result that oil and gas have been drained from the property, the lessor can recover damages¹⁹.

- § 98. DUTY TO CONTINUE DEVELOPMENT WHEN COM-MENCED.—The preceding sections have dealt with the lessee's duty to begin exploration and development of the lease. Once the lessee has commenced operations, he is bound to continue them with reasonable diligence. A cessation of operations amounts to an abandonment and entitles the lessor to cancellation of the lease²⁰.
- § 99. DUTY OF OIL AND GAS LESSEE TO DEVELOP ENTIRE PROPERTY.—In a mining lease for minerals of a fixed

¹⁴Hughes v. Cordell, 174 Ark. 757 (1927).

¹⁵ Millar v. Mauney, supra, note 13.

 ¹⁶Mauney v. Millar, 134 Ark. 15 (1918).
 17Smith v. Hously Min. Co., 188 Ark. 1083 (1934).

 $^{^{18}\}mathrm{See}$ Ezzell v. Oil Associates, Inc., 180 Ark. 802 (1930), and \S 94, ante.

¹⁹Blair v. Clear Creek Oil & Gas Co., 148 Ark. 301 (1921).

²⁰Mansfield Gas Co. v. Alexander, supra, note 12.

character, such as coal, development is usually a slow process, involving the concentration of work at one point at a time. In the case of oil and gas a different rule is occasioned by the fact that those minerals are of a vagrant character and may be drained off through wells on adjacent land. When the lessee of an oil and gas lease obtains production, he must drill a sufficient number of wells to drain the producing area as a whole, having regard to the best interests of both lessor and lessee. Should the lessee fail in his duty the lessor is entitled to cancellation of the lease as to that part of the property which is not being properly developed²¹.

§ 100. DUTY OF ENTIRE DEVELOPMENT AMONG SEVERAL ASSIGNEES.—It often happens that the original lessee, as a means of developing a large lease, assigns parts of the land to others. It is settled that the attainment of production by any assignee terminates the obligations of all assignees to pay delay rentals²². To this extent the entire lease is treated as a unit.

In most jurisdictions the property is also treated as a unit insofar as the implied covenant for development of the entire tract is concerned. That is, if the actual development is such as would satisfy the implied covenant if a single lessee were developing the whole property, it is immaterial that one particular assignee is not developing his tract as diligently as he would have to do if it were the only parcel under lease.

Several early Arkansas decisions leaned toward this rule; indeed, one of the cases seems actually to have adopted it²³. But the most recent decision on the question holds that each assignee must rely upon his own operations and can derive no benefit from the activities of his fellow as-

²¹See Drummond v. Alphin, 176 Ark. 1052 (1928); Ezzell v. Oil Associates, Inc., 180 Ark. 802 (1930); Standard Oil Co. v. Giller, 183 Ark. 776 (1931); Smith v. Moody, 192 Ark. 704 (1936). As the lessor in the decided cases has never asked cancellation of the producing part of the lease, the court has not yet decided whether he is entitled to complete cancellation. It would seem not, as the lessee has expended large sums in drilling the producing well, and the lessor by receiving royalties has had the benefit of the expenditures. Hence cancellation would be highly inequitable.

 ²² Ezzell v. Oil Associates, Inc., supra.
 23 Hughes v. Cordell, 174 Ark. 757 (1927). See also Drummond v. Alphin and Ezzell v. Oil Associates, supra, note 21.

signees²⁴. The result is that each assignee must proceed to develop his tract with the diligence that would be required if it were the subject of a separate lease. It is believed that the court's decision was erroneous; but until the court has an opportunity to overrule the case, assignees have no choice except to abide by it²⁵.

§ 101. EFFECT OF DRILLING OPERATIONS UPON DELAY RENTALS.—Delay rentals are paid for the privilege of deferring the commencement of drilling operations. Hence the commencement of such operations suspends the duty to pay delay rentals, by the express terms of the lease. Under the rule stated in § 98, operations must be continued until the well is completed. If it proves to be a dry hole, the standard form of lease permits the lessee to resume the payment of delay rentals or commence another well. When production is reached, the implied covenant to develop the property as a whole becomes effective (see § 99), and hence the lessee cannot confine his production to a particular tract and pay delay rentals upon the remainder²⁶, unless the lease expressly authorizes that procedure²⁷.

§ 102. DUTY TO DRILL OFFSET WELLS.—As a result of the fluid character of oil and gas, it is possible for a well on one tract of land to drain adjacent land. Under the so-called "law of capture" the original owner has no claim to oil or gas which has been drained from his land through a neighboring well. This possibility of loss through drainage gives rise to the implied duty of the lessee to drill a sufficient number of offset wells to protect the lessor. Failure to offset entitles the lessor to cancellation of the lease²⁸

²⁴Standard Oil Co., v. Giller, 183 Ark. 776 (1931).

²⁵Several considerations justify the statement that the Giller case was erroneously decided. First, the lessor elected to execute a single lease, assignable by its terms, without requiring the development of any particular tract. Hence he should not be permitted to complain if the development by all the assignees meets the standard required for a single lessee. Second, the earlier cases had apparently established the majority rule in Arkansas, and they were not expressly overruled. Third, the three Texas cases upon which the court relied do not seem upon analysis to support its conclusion, while the overwhelming majority of cases elsewhere is opposed to the Giller decision.

²⁶24 Am. Jur. 568.

²⁷As in Ezzell v. Oil Associates, Inc., 180 Ark. 802 (1930).

²⁸Ezzell v. Oil Associates, Inc., 180 Ark. 802 (1930).

and to damages equal to the royalty that he would have received on the oil and gas lost for want of protection²⁹. Where the lessee drills an insufficient number of offset wells, the lessor is entitled to damages but not to cancellation³⁰. If the lessor accepts delay rentals with knowledge of the lessee's failure to offset, he waives his right to complain³¹.

Act 348 of 1939 provides that upon the execution of a contract whereby royalties are to be paid in lieu of drilling offset wells on forty acre units adjacent to forty acre units already in production, the forty acre units adjacent to those receiving royalties in lieu of offset wells thereupon become offset units, and drilling must be commenced within ninety days. It is questionable if this act can validly apply to leases executed prior to its effective date (March 16, 1939).

§ 103. DUTY TO CONTINUE PRODUCTION.—When production has commenced it is the lessee's duty to continue with the extraction of the minerals. A cessation of production ordinarily constitutes an abandonment and entitles the lessor to cancellation. See § 99, ante.

Most mineral leases, especially oil and gas leases, provide that they shall remain in force as long as minerals are produced in paying quantities. This clause means only that the returns from the mine or well must exceed its current cost of operation, even though the venture as a whole may result in a loss to the lessee³².

- § 104. Use of Property For Purposes Other Than Mining.—A mineral lessee has no right to use the property for purposes other than those expressed in the lease or necessarily implied from the nature of the undertaking. For example, a coal lessee is not permitted to suspend operations under the lease and use the passages for removing coal from adjacent land...
- § 105. FALSE REPORT OF PRODUCTION BY LESSEE.—Where a written lease provides for a royalty to be paid to

²⁹Blair v. Clear Creek Oil & Gas Co., 148 Ark. 301 (1921).

[&]quot;" Murdock v. Sure Oil Co., 171 Ark. 61 (1926).
"I Clear Creek Oil and Gas Co. v. Brunk, 160 Ark. 574 (1923).

[&]quot;"Denker v. Mid Continent Petroleum Co., 56 Fed. 2d 725 (C. C. A. 10, 1932).

[&]quot;"Quality Coal Co. v. Guthrie, 203 Ark. — (1942).

the lessor upon ore or minerals extracted from the land, a false report of production by the lessee or a failure or refusal to make an accurate report of production, with the intention of defrauding the lessor, constitutes a felony, punishable by imprisonment for from one to five years³⁴.

§ 106. DUTY TO PAY RENTALS AND ROYALTIES.—The lessee's duty to pay rentals and royalties (see § 94 as to delay rentals) is obviously fundamental. His failure to mine the required minimum tonnage or to pay the required minimum royalty entitles the lessor to cancellation of the lease and to damages35. But if the lessee merely fails to pay royalties punctually when due, the lessor's remedy is ordinarily a suit at law for their recovery with interest, cancellation being too severe a penalty for mere delay³⁶. Nevertheless, the lease may provide for forfeiture in the event of a delay in the payment of royalties; but under such a provision a court will find a waiver of forfeiture upon very slight circumstances37.

§ 107. PROTECTION OF OIL AND GAS ROYALTY OWNER. -The Arkansas laws require that the owner of an oil and gas royalty be paid the full value of his share of production. The purchaser must pay him the same premium or bonus above the posted market price that is paid to the operator. It is unlawful for the purchaser to increase the operator's price by paying part of the expenses of production or operation, without paying the royalty owner on the same basis. Any subterfuge by which the operator receives more than the royalty owner is illegal. Furthermore, the purchaser must pay the royalty owner direct at the same time it pays the operator, though this requirement may be waived in writing. Not later than the 12th of each month the purchaser must furnish the royalty owner with a statement showing the amount of oil or gas purchased during the preceding month, and the amount paid each interest. A violation of these statutes by the operator for-

³⁴Pope's Digest, § 9342.

³⁵ Arkola Bauxite Co. v. Horn, 184 Ark. 1044 (1931).
36 In re Barnhardt Coal etc. Co., 265 Fed. 385 (D. C., Ohio, 1919).
37 See Little Rock Granite Co. v. Shall, 59 Ark. 405 (1894).

feits his interest in the lease, and a violation by the purchaser or pipe line company subjects it to treble damages38.

§ 108. SATISFACTION OF RECORD ON TERMINATION OF OIL AND GAS LEASE.—Upon termination of an oil and gas lease, either by its terms or for breach of an implied covenant, it is the duty of the record owner of the lease to execute a release to the lessor or to endorse a cancellation upon the record. Such an endorsement should read "Forfeited and Canceled," followed by the date of entry and the signature of the record owner of the lease, and it must be atested by the clerk or his deputy. Upon termination of an oil and gas lease for any cause the lessor may serve upon the lessee, in the same way a summons is served, a notice requiring him to satisfy the lease of record, and the lessee's failure to do so within 30 days subjects him to double damages, which may not be less than two annual rentals, plus costs and attorney's fees39.

If an installment of delay rentals is not paid when due, causing a forfeiture, the landowner may endorse a statement to that effect on the record, dated and attested by the clerk. Such an endorsement is notice to subsequent purchasers of the lease and is prima facie true; but a false endorsement subjects the landowner to double damages to any person injured40.

 ³⁸Pope's Digest, §§ 10498-10502.
 39Pope's Digest §§ 10505-06.
 40Pope's Digest, § 10507.

CHAPTER 8

RIGHTS AND DUTIES OF MINERAL OWNER

§ 109. RIGHTS OF MINERAL OWNER GENERALLY.—The conveyance or reservation of minerals, in the absence of express language to the contrary, carries the right to enter upon the surface to prospect and explore for minerals, the right to erect all necessary appliances for their removal, the right to conduct mining or drilling operations, and the right to occupy as much of the surface as is reasonably necessary for mining purposes1. Hence the mineral owner incurs no liability to the surface owner in the exercise of these incidents to his mineral ownership. A mineral lease would normally carry the implied rights mentioned above, but it is customary for the lease expressly to define the lessee's rights of entry and occupancy. For example, the standard form of oil and gas lease makes the lessee liable for damage to growing crops. Of course implied rights are qualified to the extent that their field is covered by definite agreement.

§ 110. DUTY OF SUBJACENT AND ADJACENT SUPPORT.

—Where mining is conducted by means of tunnels or other underground works, the mineral owner and his lessee are under an absolute duty of subjacent support; that is, a duty to provide sufficient natural or artificial support to sustain the surface and its improvements. Since the duty is absolute, the fact that mining operations are conducted in a skillful and customary manner is no defense to an action for injury to the surface through subsidence².

The duty of adjacent support requires the mineral owner and his lessee to provide sufficient natural or artificial support to prevent the subsidence of lands adjacent to the tract being mined. There is, however, a peculiar distinction to be noticed. The adjacent owner may recover damages for injury to his land in its natural state without showing negligence on the part of the mining operator—the drain-

¹See § 78, ante.

²Paris Purity Coal Co. v. Pendergrass, 193 Ark. 103 (1937).

ing of wells is an instance of such an injury. But in order for the adjacent owner to maintain a claim for damages to his improvements he must establish negligence on the defendant's part³. In this respect the duty of adjacent support is not so strict as that of subjacent support.

- § 111. WHEN CAUSE OF ACTION ACCRUES.—An action for breach of the duty of subjacent or adjacent support does not accrue until subsidence or other damage actually occurs, regardless of when the dangerous conditon was created. Hence the statute of limitations does not begin to run until injury is suffered⁴.
- § 112. Conversion of Minerals.—If the operator of a mine takes minerals to which he is not entitled, as from land adjacent to his lease, he is civilly liable for conversion. The measure of damages depends upon the circumstances under which the taking occurred. If it was the result of an honest mistake, the converter is liable for the value of the mineral in place. But if the conversion was willful, with knowledge of the true ownership, the wrongdoer is liable for the value of the mineral at the mouth of the mine, without deduction for his cost of production⁵. It may be added that one who purchases minerals that have been wrongfully mined from another's property is also liable to the owner for conversion⁶.
- § 113. Injuries To Other Mines.—As a general rule there will be no conflict between the rights of those operating adjacent mines, as each is limited by the boundaries of the tract which he owns or has leased. Under familiar principles of law one is liable to the other for trespass or for negligence resulting in damage.

Less familiar rules govern the flooding of another mine. In general, the owner of a mine on a higher level may permit water to flow where it naturally will in the course of ordinarily careful mining, and he is not bound to protect the mine owner on a lower level against such water. But

³Western Coal & Mining Co. v. Randolph, 191 Ark. 1115 (1936).
⁴Ibid.

⁵Ward v. Spadra Coal Co., 168 Ark. 853 (1925). ⁶McGraw v. Berry, 170 Ark. 426 (1926).

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if a mine owner conducts into an adjoining mine water which would not go there if he exercised ordinary care, he is liable. In a decided case the defendant pierced an abandoned mine and caused water to flood the plaintiff's mine. It was held that the defendant was liable, as he was negligent in failing to give the plaintiff sufficient notice to enable him to protect himself⁷.

⁷Spadra Coal Co. v. Eureka etc. Co., 104 Ark. 359 (1912).

CHAPTER 9

MINING AND DRILLING LEGISLATION

A. GENERALLY

§ 114. STATE MINE INSPECTOR; POWERS AND DUTIES.—The State Mine Inspector, who must have had ten years experience as a practical miner, is appointed by the Governor for a two year term. His office is at Fort Smith¹.

The Mine Inspector must devote his full time to the duties of his office. It is his duty to examine all mines as often as necessary, and not less than once every three months. The employees of a mine may call him at any time in cases of emergency for the enforcement of the mining laws. It is the Inspector's duty to inspect the works and machinery of all mines; their ventilation, circulation and drainage; the extent to which the mining laws are being observed; and any other matters which he deems useful and proper. Inspections may be made at any time, and it is the operator's duty to furnish the means necessary for his entry and inspection².

The Mine Inspector's jurisdiction extends to all mines, regardless of the number of men employed³. If he finds any dangerous or defective condition, it must be remedied by the operator immediately upon written notice⁴. The Inspector may also file a complaint in the circuit court concerning any illegal or unsafe practices, and after two days' notice the court may enjoin operation of the mine until the condition has been corrected⁵. The Inspector has power to make arrests for violations of the mining laws. In cases of emergency, where an unsafe condition creates immediate danger to employees, he may order the dangerous area cleared of all persons except those necessary to remedy it. When such an order is made the operator may test its va-

Pope's Digest, § 9305.

²Ibid., §§ 9308-09.

³The former exemption of coal mines employing less than ten men underground was repealed by Act 101 of 1939.

⁴Pope's Digest, § 9308.

⁵Ibid., § 9310.

lidity in the chancery court by applying for an injunction against its continued enforcement.

Severe criminal penalties are provided for violations of the mining laws or for obstructing the Mining Inspector in the performance of his duties7.

§ 115. LABOR LEGISLATION.—It is a misdemeanor to employ a child under the age of sixteen in any tunnel, excavation, mine, coal breaker, coke oven, or quarry8. Children under sixteen may not be permitted to work in any occupation for more than six days in any week, nor more than forty-eight hours in any week, nor more than eight hours in any day, nor before six in the morning or after seven in the evening.9. Children under eighteen may not be permitted to work in any occupation for more than six days in any week, nor more than fifty-four hours in any week, nor more than ten hours in any day, nor before six in the morning or after ten in the evening¹⁰. Hours and wages for female workers are also regulated 11. See also § 120, post, with reference to employment in coal mines.

All corporations are required to pay their employees at least semi-monthly¹². Coal mining companies must give bond to secure the payment of wages; see § 121.

An extended discussion of the federal Fair Labor Standards Act, generally known as the Wages and Hours Law, is outside the scope of this volume. Briefly, the law applies to all persons or corporations engaged in interstate commerce or in producing for such commerce13. A person is producing for interstate commerce if any part (except a trivial and occasional part) of his production will be transported across a state line in the normal course of operations¹⁴. Thus a mining or drilling operator is subject to the law if he intends or expects a substantial part of his

⁶Ibid., § 9311.

⁷Ibid., §§ 9309-9312.

⁸Pope's Digest, § 9071.

⁹Ibid., § 9072. ¹⁰Ibid., § 9073.

¹³¹bid., §§ 9082-9100. 121bid., §§ 9082-9100. 121bid., § 9117. 1329 U. S. C., §§ 201 et seq. 14United States v. Darby, 312 U. S. 100 (1941).

output to be sent to another state, even though he sells his ouput in Arkansas¹⁵. Those subject to the law must observe the maximum hour and minimum wage standards established under its provisions.

§ 116. LABORERS' AND MATERIALMEN'S LIEN.—A lien is given to any person, firm, or corporation (including subcontractors) furnishing material or labor under contract with the owner, lessee, agent or receiver of any mine. quarry, oil or gas well, pipe line, or gasoline refinery, to secure sums due for labor or material furnished for such mines, quarries, wells, pipe lines or refineries. The lien extends to the entire output of the property, as well as to buildings, fixtures and appurtenances. If the labor or material is furnished to a leaseholder, the lien does not affect the fee title to the land16.

The lien is prior to all subsequent mortgages and encumbrances placed upon the property. A previously existing mortgage upon the land is subordinate to this lien insofar as concerns the specific improvements for which the lienholder furnished labor or material¹⁷. Lienholders under this statute are on a parity with one another, except that priority is given to laborers and those hauling supplies18.

The enforcement of the lien is governed by the mechanic's lien statutes, under which the lien is lost unless a lien notice is filed with the circuit clerk within ninety days after the last work was done or material furnished by the claimant, or unless suit is filed within that time. Ten days' notice of intention to file a lien notice must be given¹⁹. The lien cannot be defeated by the sale or removal of the property²⁰. See also § 128, post.

¹⁵An administrative ruling has held the law to be applicable to employees in mines where a substantial part of the output enters interstate channels. Wage & Hour Opinion Letter, March 31, 1941.

¹⁶Pope's Digest §§8905-07. This act appears to have repealed § 9349 of the Digest, in spite of its declaration that it is cumulative of existing legislation.

¹⁷Pope's Digest, § 8908.

 ¹⁸ bid., § 8915.
 19 Ibid., § 8912. See §§ 8865-98 of the Digest, and cases construing those statutes.

²⁰Ibid., § 8912.

§ 117. OPERATION OF RAILWAYS AND TRAMWAYS.—Persons owning or operating copper, lead, zinc, iron, marble, stone, rock, granite, slate, coal or other mineral lands are entitled to construct and operate such short line railways or tramways as may be necessary to successful mining and marketing. Incorporation must be under the general railway laws, and the company has the right of eminent domain and certain other specified rights of common carriers²¹.

B. COAL MINING LEGISLATION

§ 118. MINE FOREMAN, ETC., TO HOLD CERTIFICATE.—It is unlawful for any person to be employed in a coal mine as a fire boss, hoisting engineer, or mine foreman unless he holds a certificate from the Coal Mine Examining Board. This Board, consisting of five members, meets from time to time at Fort Smith to examine applicants for certificates. Inquiries concerning examinations should be addressed to the Board.

All applicants for examination must be able to read and write the English language, be of good moral character and not addicted to the use of liquor, and be citizens of the United States. An applicant for a certificate as mine foreman must be at least twenty-five years old and must have had at least five years' experience as a practical coal miner, mining engineer or man of general underground experience. An applicant for a fire boss certificate must have like qualifications and experience, and must also have had experience in mines that generate explosive and noxious gases. The State Mine Inspector (see § 108) must also hold a certificate. All applicants are carefully examined by the Board concerning their fitness for the position for which they apply.

Applicants for certificates as mine foreman or hoisting engineer pay a fee of \$2 before examination, and if successful, an additional \$3 for the certificate. Other applicants pay \$1 before examination and \$2 for the certificate.

²¹Pope's Digest, §§ 9350-54.

A person holding a first grade certificate may serve as a mine foreman or fire boss, and one holding a second grade certificate may serve except in mines which generate explosive or noxious gases. In an emergency a truthworthy or experienced man who does not hold a certificate may, with consent of the Board, serve as foreman or fire boss for not more than thirty days.

Duplicate of lost certificates are obtainable from the secretary of the Board. Any certificate may be revoked by the Board for cause, after notice and hearing; but the former holder may apply for a rexamination three months or more after revocation.

Criminal penalties are provided for forgery of certificates or other violations of the law²².

§ 119. MAP OR PLAN OF MINE.—It is the duty of every owner, agent or operator of a coal mine to furnish to the State Mining Inspector an accurate map or plan of the workings of the mine and every vein or deposit thereof, showing the general inclination of the strata, material deflections in the workings, and the boundary lines of the mine. A copy of the map or plan must also be deposited with the clerk of the county court. In January of each year the Inspector and clerk must be furnished with a further map or plan of the progress of the workings of the mine since the last report, with a sworn statement verifying the map or plan. The exhaustion or abandonment of a mine must be reported to the Inspector. If no map or plan is furnished, the Inspector may have one made at the expense of the operator²³.

§ 120. SAFETY REGULATIONS.—In addition to the safety measures specified by the State Mining Inspector (see § 114), there are a number of such measures fixed by statute. The operator's failure to take these precautions subjects him to criminal penalties; and where a miner sues for injuries caused by a violation of safety requirements, the operator is denied the defenses of assumed risk and

²²Pope's Digest, §§ 9373-9381.²³Pope's Digest, §§ 9316-17.

contributory negligence²⁴. The requirements fixed by statute are discussed in this section.

Mines employing less than ten men underground were formerly exempted from the operation of these safety requirements, but this exemption has now been repealed and all mines must comply²⁵.

Escapement Shaft. Every operator of a coal mine is required to provide an escapement shaft at least 100 feet away from the main shaft, making two distinct means of ingress and egress for all persons working in the mine. The escapement shaft must be constructed within ninety days after the mine is put into operation, or sooner if the Inspector requires it, and must connect with every vein or stratum of coal in the mine. Where the working force of a mine has been driven up to or into the workings of another mine, the respective operators must keep open a communicating roadway at least six feet wide and three feet high²⁶.

Ventilation. The minimum ventilation requirement for all mines, whether operated by shaft, slope or drift, is 100 cubic feet of air per man per minute, measured at the foot of the downcast, but the Inspector may specify a higher standard. Air must be circulated to every working face, eliminating standing gas of every kind. If fire damp is generated, every working place where it is known to exist must be inspected every morning with a safety lamp by a competent person before any one else is allowed to enter. Where a furnace is used for ventilating, the upcast has to be lined with incombustible material for a sufsufficient distance to prevent the communication of fire to any part of the works²⁷.

All slopes, drifts or shafts used for hoisting or hauling coal must be made the intake of air except at the op-

²⁷Ibid., § 9319.

²⁴Pope's Digest, §§ 9131-32; Western Coal & Min. Co. v. Watts, 131 Ark. 562 (1917); Southern Anthracite Coal Min. Co. v. Rice, 156 Ark. 94 (1922). See also Pope's Digest, § 9325, giving right of action.

²⁵Act 101 of 1939. ²⁶Pope's Digest, § 9318.

tion of the operator or by direction of the State Mine Inspector. Air entering a mine must be split so that not more than fifty employees work on each split of air. Not less than 200 cubic feet of air must pass each working face per minute. Ventilating machinery is required to be so arranged that the air currents may be quickly reversed in emergencies²⁸.

Bore-holes. A bore-hole must be kept twenty feet ahead of the face of every working place, and if necessary on both sides when driving toward an abandoned mine or part of a mine suspected of containing gas or water²⁹.

Signal Facilities; Cages. The operator of a shaft mine is required to provide suitable means for signaling between the top and bottom of the shaft. He must also furnish a safe means of hoisting and lowering persons in a cage covered with boiler iron. The cage is to be equipped with guides and with a sufficient brake on every drum, to prevent accident in case the machinery is disabled. Spring catches must be provided to prevent, as far as possible, the consequences of cable breaking or the loosing or disconnecting of the machinery. The opposite cage must be empty while men are ascending or descending, and at such times no props or rails may be lowered.

The engine operating the cage must be run by an experienced, competent and sober person, at least eighteen years old. No one may be permitted to ride upon a loaded cage or wagon used for hoisting purposes, except persons employed for that purpose. A maximum of eight persons may ride in a cage at any one time, and only one member of a family may ride at the same time. Coal cannot be hoisted while anyone is descending into the mine. The maximum speed for hoisting or lowering persons is 500 feet a minute³⁰.

Prop Timbers. The operator must keep on hand a sufficient amount of timber to meet requests by miners for

²⁸Ibid., § 9340.

²⁹Ibid., §9320.

³⁰Ibid., §§9321-22.

prop timbers to secure the workings against caving in. It is the operator's duty to send down such timbers when requested and to deliver them to the place where cars are delivered31.

Room and Pillar Plan. If a coal mine is worked on the room and pillar plan, work must be prosecuted by driving two parallel entries for the ingress and egress of air. Cross cuts are required at intervals not exceeding forty feet. If gas exists the cross cuts must be thirty feet apart and at any other place specified by the operator. No room may be turned inside the last cross cut³².

Daily Inspection. In mines where a fire boss is employed, all working places and worked-out places adjacent to working places must be examined, when it can be done, by a competent fire boss, whose duty it is to enter a report of existing conditions of such working or worked-out places in a well-bound book kept by him for the purpose. All dangerous places that are marked out must be marked on a blackboard before any other employee enters the mine33.

Lard Oil For Lighting.—Where oil is used for lighting purposes, nothing but pure lard oil may be used in any underground works, except in the main upcast. This provision does not apply to rope-riders34.

Emergency Supplies. The operator is required to keep in the engine room or some nearby and convenient place a supply of oils, bandages, blankets or covers for wraps, and a cot or stretcher, for the use of injured persons. He must also maintain at a convenient place a convevance in which to take injured persons to their homes³⁵.

Gates, Bonnets and Safety Appliances. Every landing on a level or above the surface of the ground, and the entrance to each intermediate vein, must be securely fenced

³¹ Ibid, § 9327; Mama Coal Co. v. Colo, 158 Ark. 408 (1923).

³²Pope's Digest, § 9333.

³³Ibid., § 9335. 34Ibid., § 9336. 35Ibid., § 9337.

by a gate and bonnet, covering and protecting the shaft and its entrances. The entrances to abandoned slopes and air or other shafts are required to be securely fenced off. Every steam boiler has to be equipped with a proper steam guage, water guage and safety valve. All underground self-acting or engine plains or gang-ways on which cars are drawn and persons allowed to travel must be provided with a proper means of signaling between stopping places and the end of such plains or gangways, and adequate places of refuge at the side of the plains or gang-ways must be provided at intervals of not more than thirty feet³⁶.

Wash Houses and Locker Rooms. The operator of a coal mine must provide a suitable building, convenient to the principal entrance of the mine, equipped with individual lockers or hangers, benches or seats, proper light and hot and cold water and shower baths, for the use of the miners. The flooring in the wash room must be of concrete or cement. Steel lockers must be at least sixty inches high, twelve inches wide and twelve inches deep; wooden lockers must be of that size and have partitions in the center. Individual hangers must have at least three clothes hooks and a receptacle of suitable size for use in connection therewith. Hangers must be attached to a proper chain or wire rope and be so suspended as to permit the clothing to be raised seven feet above the floor and be locked in that position. A locker or hanger has to be furnished for each employee, and there must be at least one shower bath for each fifteen employees. Employees must furnish their own towels, soap, and locks for lockers or hangers. Separate or partitioned wash houses are required for whites and blacks. The operator must maintain them in a clean and sanitary condition37.

Calling Miners Out of Dangerous Mines.—When a mine becomes dangerous from high water or overflow of streams adjacent to it, whereby the lives of the miners are jeopar-

³⁶Ibid., § 9323.

³⁷Ibid., §§ 9343-48.

dized, the manager must call the miners out and forbid their working until the danger is past³⁸.

Reports of Accidents. Whenever loss of life or serious personal injury occurs by reason of an explosion or accident in or about a mine, the person in charge must immediately report the facts to the Mining Inspector. Where death occurs he must also notify the coroner or a justice of the peace. The Inspector must make an investigation, for which he may compel the attendance of witnesses at the expense of the county, and keep a written record of his findings³⁹.

Minors and Females Excluded From Mines.—No person under fourteen, and no female of any age, may be permitted to enter a coal mine to work therein. No boy under sixteen may work in a mine unless he can read and write⁴⁰. See also § 115.

Penalty For Injuring Appliances. It is a misdemeanor, punishable by fine or imprisonment, for any miner, workman or other person to injure knowingly a watergauge, barometer, air course or brattice; to obstruct or throw open an air way; to carry a lighted lamp or match into a place worked by safety lamps; to handle or disturb the machinery of the hoisting engine; to open and not close a door to a mine, causing danger to the mine or those working in it; to enter any part of a mine against caution; to disobey any safety regulation; or to do any willful act endangering the lives and health of persons working in the mine, or the security of the mine, miners or machinery⁴¹.

Fellow Servant Doctrine Abolished. The common law rule denying an employee the right to recover compensation from his employer for injuries due to the negligence of a fellow servant has been abolished as to all companies engaged in mining coal, whether incorporated or not⁴².

§ 121. BOND TO SECURE PAY ROLL.—Wages for employees in coal mines employing three or more persons

³⁸Ibid., § 9341.

³⁹Ibid., § 9324. ⁴⁰Ibid., § 9322.

must be paid semi-monthly; but wages for labor performed during the first half of any month are not due until the first of the following month and for labor performed during the last half of any month until the 16th of the following month.

Every operator of a coal mine employing at least three persons must file with the clerk of the chancery court a bond to secure the payment of wages. The bond and its surety must be approved by the court. The amount of the bond is graduated according to the number of employees, as follows: Three to eleven employees, \$1,500; twelve to forty-nine employees, \$5,000; fifty to 149 employees, \$7,500; 150 to 299 employees, \$10,000; 300 or more employees, \$15,000. A separate bond must be given for each mine.

Claims for unpaid wages may be enforced against the bond by a proceeding in the chancery court, brought by the wage-earner or his assignee within thirty days after default in the payment of wages. The plaintiff's attorney's fees may also be charged against the bond. The remedy upon the bond is in addition to the lien mentioned in § 116, but it must be exhausted before recourse to the lien.

Failure to file the bond is a misdemeanor, punishable by fine. Any interested person, including the Mine Inspector and labor unions, may enjoin operation of the mine until the bond is filed⁴³.

§ 122. Weighing Coal At Mine.—Every operator mining and selling coal by weight or measure must keep on hand the necessary scales and measures, which are tested by the Mine Inspector at least once a year⁴⁴. The owner or operator, or any two or more miners, may request the Inspector to test the scales at other times⁴⁵. The operator must keep on hand 500 pounds of standard testing weights for the Inspector's use ⁴⁶. Violation of this act is punishishable as a misdemeanor.

⁴³Act 193 of 1939.

⁴⁴Pope's Digest, § 9329. The former exemption of mines employing less than ten men underground was repealed by Act 101 of 1939.

⁴⁵Pope's Digest, § 9329.

⁴⁶Ibid., § 9330.

The weighman employed at a mine must take an oath to weigh the output honestly and correctly. The miners may, if they wish, employ a check-weighman at their expense, who must also take an oath. The operator must keep a record of the weight of his output each day, in a well-bound book which is subject to examination by the Inspector and by the lessor of the mine⁴⁷.

§ 123. COAL NOT SCREENED UNTIL WEIGHED.—With the exception hereafter noticed, no coal operator employing miners at quantity rates may pass the output over a screen or other device which takes any part from its value until it has been weighed and credited to the proper employee. A contract by which a miner attempts to waive his rights under this law is void.

An exception is made for mines in Cane Creek, River and Logan townships in Logan county and for mines in all Johnson county except Grant township. In those areas coal may be screened before it is weighed, if authorized by agreement between the operator and the miners, but the statute fixes detailed specifications concerning the size and construction of the screens⁴⁸.

- § 124. RAILROADS TO WEIGH COAL SHIPMENTS.—Railroads are required to keep scales at all stations where as many as one hundred cars of coal, corn or cotton seed are received annually. At the request of the consignee the railroad must weigh each car of coal after it reaches its destination and furnish a certificate showing its correct weight. The railroad must also weigh all coal loaded at a station where scales are kept and furnish the shipper with a similar certificate⁴⁹.
- § 125. WEIGHING OF COAL SHIPPED BY TRUCK.—Before coal is shipped by truck or any other carrier except a railroad, it must be weighed by an official weigher, appointed by a board of which the Mine Inspector is a member. Any person operating scales tested according to law

⁴⁹Pope's Digest, §§ 1131-34.

⁴⁷Ibid., § 9328.

⁴⁸Pope's Digest, § 9332. The exemption of mines employing less than ten men underground was repealed by Act 101 of 1939.

is entitled to become an official weigher, upon filing the \$1,000 bond that is required. Application should be made to the Inspector.

An official weigher must accurately weigh all coal so shipped and make a certificate in quintuplicate, setting forth the date, the name and address of the buyer and of the seller, the name of the mine from which the coal was taken, the destination of the coal, the name and address of the person in charge of the vehicle, the gross weight of the load, the weight of the truck, the net weight of the coal, and the motor number and license number of the vehicle. One copy of the certificate must be carried upon the truck at all times during the trip; another copy must be delivered by the trucker to the consignee; two copies must be sent to the Mine Inspector; and the remaining copy must be kept by the weigher.

Official coal weighers may charge not exceeding 20c per ton of 2,000 pounds for their services, with a minimum charge of 20c for any load⁵⁰.

§ 126. OPERATOR TO REPORT OUTPUT.—On the first of each July the operator of every coal mine must make a sworn report to the State Mine Inspector, showing the amount of coal mined each month during the preceding twelve months. Forms for the report are obtainable from the Inspector⁵¹.

C. OIL AND GAS LEGISLATION

- § 127. Introductory.—In this subchapter are mentioned a few miscellaneous statutes relating to oil and gas. The greater part of the legislation in this field is discussed in Chapters 7 and 10. For particular legislation the index should be consulted.
- § 128. LABORERS' LIEN.—A lien to secure the payment of wages is given to persons working in or about the drilling or operation of any oil or gas well⁵². This special

⁵⁰Act 382 of 1941.

⁵¹Pope's Digest, § 9338.

⁵²Pope's Digest, § 8916-17.

provision with reference to oil and gas wells supplements the general lien discussed in § 116, ante⁵³. The lien attaches to the output of the well, and to all machinery and equipment, regardless of ownership. Hence the fact that the well operator merely leases his equipment from its real owner does not prevent the lien from attaching⁵⁴.

This lien also attaches to the leasehold interest of the person who contracts with the lienholder for his services. It does not affect the fee ownership, nor a previously existing encumbrance (except as to improvements to which the labor of the lienholder contributed), nor an overriding royalty reserved by the original lessee in his assignment to the well operator 55.

Enforcement of this lien is governed by the statutes relating to laborers' liens generally, which require suit to be instituted within eight months after the work is done⁵⁶.

- § 129. TEAMSTERS' AND TRUCKSTERS' LIEN.—A lien very similar to that described in § 116 is given to persons hauling supplies by team or truck to wells being drilled or operated. The lien applies to substantially the same property and is enforced in the same manner⁵⁷.
- § 130. Performance or Assignment of Lease On DEATH OF LESSEE OR TRUSTEE.—Where one of two or more oil and gas lessees dies intestate and his interest vests wholly or partly in minor heirs, the provisions of an elaborate statute permit the guardian of the minors to pay delay rentals, drill the property, assign the minors' interest, organize a corporation to develop the lease, and do anything else necessary to protect the interest of the minors⁵⁸. The same act provides that upon the death of one holding an oil

⁵³Pilcher v. Parker, 173 Ark. 837 (1927).

⁵⁵Roberts v. Tice, 198 Ark. 397 (1939).

⁵⁶Pope's Digest, §§9816, 8804 et seq. In Clark v. Dennis, 172 Ark. 1096 (1927), it was held that a suit to enforce a purchase money lien against the lessee's interest in an oil and gas lease was a local action, involving the title to real estate. Hence it appears that a suit to enforce a laborer's lien against the operator's leasehold interest is not maintainable before a justice of the peace, in view of Art. VII. § 40, of the Arkansas Constitution.

⁵⁷Act 71 of 1941.

⁵⁸Act 143 of 1939.

and gas lease as trustee, his personal representative may apply to the probate court for authority to transfer the lease to the beneficiary of the trust.

- § 131. Measurement of Crude Oil.—All crude petroleum oil produced from wells brought in after March 9, 1939, must be measured in gauge-tanks. The pipe line from the well to the gauge-tank must be laid upon the surface of the ground and must contain no by-passes. The Oil and Gas Commission (see § 135) has power to issue regulations for the enforcement of this act⁵⁹.
- § 132. No REDUCTION FOR SHRINKAGE.—The purchaser of crude oil produced in Arkansas is prohibited from making any reduction in price for shrinkage, waste, or other cause. Purchases must be based on tank tables, at 100% corrected to sixty degree Fahrenheit⁶⁰.

⁵⁹Act 205 of 1939.

⁶⁰Act 397 of 1941.

CHAPTER 10

OIL AND GAS CONSERVATION PROGRAM

§ 133. Basis For Conservation Program.—Arkansas is now conceded to have the best oil and gas conservation legislation of any of the oil producing states. It is, however, impossible to understand or appreciate the value of these statutes without at least a rudimentary conception of the geologic structure of an oil field, as the laws were written in the light of the best scientific information on the subject. Hence it is appropriate to begin this chapter with a very simple description of a typical oil and gas field. Individual differences exist among the various oil pools, but the picture given in this section is sufficiently accurate for its purpose.

The underground structure of an oil field is best understood by conceiving of it as a series of layers within the earth. The top layer, which may be several thousand feet below the surface, is a stratum of rock or other impervious matter. This layer is roughly in the shape of an inverted bowl, forming a cap over the oil and gas beneath it.

Immediately below the ceiling of cap rock there is a layer of porous sandstone or limestone. The upper part of this layer is saturated with oil, which may be said to float upon the salt water that permeates the lower part of the stratum. This water extends outside the cap rock in one or more directions and unites with other subterranean water, called "edge water." The water table rests upon another layer of impervious matter, which forms the bed of the deposit. Occasionally the entire structure is repeated, the bed of one pool forming the ceiling of another.

In the Arkansas oil fields natural gas always accompanies the existence of oil. Sometimes there are pockets of free gas at the highest point of the porous layer of oilbearing stratum. Whether or not free gas exists, the oil itself always contains a quantity of gas in solution which

¹The Arkansas conservation law is Act 105 of 1939, as amended by Act 305 of 1941. Act 105 covers the entire subject and hence appears to have repealed §§ 9355-9372 of Pope's Digest, by implication.

gives the oil a bubbly character, like soda pop or effervescent wine.

It is important to realize that an oil deposit is constantly under very great pressure. The weight of the edge water presses inward against the layer of oil, pushing it against the ceiling of the pocket within which it is tightly confined. In addition to the force of the water, the expansive power of the compressed gas contributes to the high degree of pressure that exists below the cap rock.

With the foregoing background, it is easy to understand what happens when a drill penetrates the ceiling of the pool. The tremendous pressure of the water and gas forces the oil to gush upward through the drill hole, like a bottle of wine foaming over when it is opened. If the well is allowed to run wild, great quantities of oil and free gas will be wasted at the surface. Even more serious, however, is the invisible underground waste that is caused by a gushing well. In fact, the conservation program is principally aimed at the prevention of this type of waste.

Underground waste takes several forms, each the result of a particular cause. If free gas or gas in solution is permitted to escape too rapidly, the pressure within the pool may be reduced to a point at which the oil will no longer flow naturally to the surface. Expensive pumping and other secondary methods of recovery then become necessary. Furthermore, the gas in solution not only helps to lift the oil to the surface; it also makes the oil more fluid than it would be in its natural condition. If the gas content of the oil is substantially lowered, the oil becomes sticky and clings to the porous stratum so closely that it can never be recovered. Hence the conservation program contemplates the fixing of an efficient oil-gas ratio for each producing well, to the end that withdrawals of gas will not be so disproportionate to withdrawals of oil as to endanger the recovery of the remaining oil.

Underground waste may also result from what is called "coning." If a large quantity of oil is withdrawn quickly from the pool, the fluid salt water will push up to take its place before the more sluggish oil can level out

and fill the vacancy. Unless the rapid flow of oil is checked within a short time, the salt water may form a cone that projects into the layer of oil. When the point of the cone reaches the drill hole, the well begins to pump salt water instead of oil. There is then no hope of further production from that well, as the pressure of the edge water holds the cone in place, even though the well is immediately capped.

Not only does a cone of salt water destroy the well under which its rises; it seriously injures the future productivity of the rest of the field. Each cone constitutes a partition through which the oil cannot pass. Hence the presence of one or more cones divides the pool into pockets, which may be too small to warrant the sinking of wells for their recovery. To meet the dangers of coning, the conservation law authorizes the Oil and Gas Commission to limit the number of wells that may be drilled in a field and to restrict the rate of withdrawal from each well.

Another form of underground waste occurs when the edge water is permitted to advance into the pool more quickly at one point than at another. This process, known as channeling, may be considered as a horizontal form of coning and is equally dangerous to the life of the field. The uniform advance of the edge water is attained by beginning a general retreat toward the center of the field as soon as a well on the edge produces salt water. The Commission is given power to make whatever orders are required to insure the uniform advance of the edge water.

This brief discussion shows in some measure the dangers to which an oil field is subject—dangers that can be avoided by correct methods of development. The ideal of development involves the drilling of only a sufficient number of wells to drain the pool adequately and uniformily. The oil should then be drawn off gently, as rapid withdrawal tends to permit the escape of undue amounts of gas. This gradual process also enables the layer of oil to rise slowly and uniformly, preventing the underlying salt water from forming cones. The edge water is permitted to creep in evenly upon all sides, so that the water pressure may be utilized to drive the last remaining oil to the bottom of the

wells in the center of the field. In this way the field will in the long run produce several times as much oil as it would if every operator were allowed to pump out the oil as quickly as he could. The goal of ideal development is being attained in the new fields in the southwestern part of the State.

- § 134. Constitutionality of Conservation Statutes.—The validity of conservation laws in other States has been frequently questioned by owners or operators who failed or refused to see that in the long run a wise conservation program is beneficial to the lessor, to the operator, and to the consumer. In a long line of decisions the Supreme Court of the United States has sustained the constitutionality of such legislation; so there can be no question concerning the validity of the Arkansas legislation².
- § 135. OIL AND GAS COMMISSION.—The conservation act³ is administered by the Oil and Gas Commission, consisting of seven members appointed by the Governor. The offices of the Commission are at El Dorado. All common sources of supply of oil or gas or both are subject to regulation and control by the Commission if discovered after January 1, 1937. The expenses of the Commission are paid by assessing a charge of not exceeding five mills to the barrel against the production of oil and not exceeding one-half mill to each 1,000 feet of gas produced and saved. This charge may be deducted by the purchaser from the price he pays the producer.
- § 136. PREVENTION OF WASTE.—The purpose of the conservation statutes is to prevent waste of oil and gas. Waste is defined to include physical waste; the inefficient, excessive or improper use or dissipation of reservoir energy; the locating, spacing, drilling, equipping, operating or producing of any oil or gas well in a manner that tends to reduce the quantity of oil or gas ultimately to be recovered

²Some of the most recent decisions are Champlin Refining Co. v. Corporation Com'n of Okla., 286 U. S. 210 (1932); Patterson v. Stanolind etc. Co., 305 U. S. 376 (1939); Railroad Com'n of Texas v. Rowan & Nichols Oil Co., 310 U. S. 573 (1940); Same v. Same, 311 U. S. 570 (1941).

³Act 105 of 1939, as amended by Act 305 of 1941.

or that tends to cause unnecessary or excessive surface loss or destruction of oil or gas; the inefficient storing of oil; the abuse of the correlative rights and opportunities of each owner in a common reservoir due to nonuniform, disproportionate and unratable withdrawals causing undue drainage between tracts of land; the production of oil or gas in such manner as to cause unnecessary water channeling or coning; the operation of an oil well with an inefficient gas-oil ratio; the drowning with water of a stratum or part thereof capable of producing oil or gas; underground waste however caused; the creation of unnecessary fire hazards; the escape into the open air, from a well producing both oil and gas, of gas in excess of the amount necessary in the efficient drilling or operation of the well; the use of gas for the manufacture of carbon black; and the escape into the air of gas produced from a gas well. It will be appreciated that many of the foregoing practices may be wasteful only in view of the surrounding circumstances. Hence the Commission necessarily has considerable discretion in controlling and regulating waste.

§ 137. Powers of the Commission.—Fundamentally the Commission's sole function is to prevent the waste of oil or gas. Besides its specific powers, it has general authority to make investigations, examine properties and records, examine and check wells, tanks, refineries and means of transportation, hold hearings, and do whatever else is necessary to enforce the conservation law.

The Commission is given specific authority to regulate the drilling, casing and plugging of wells; to require reports and the filing of logs and drilling records; to prevent water from drowning a stratum or encroaching upon it prematurely or irregularly; to fix efficient gas-oil ratios; to prevent blow outs, caving, seepage, and fires; to identify the ownership of wells, leases, refineries, storage and transportation facilities, etc.; to regulate the shooting, perforating and chemical treatment of wells; to regulate all secondary recovery methods; to limit and prorate production; to require certificates of clearance or tenders in connection with transportation; to regulate the spacing of wells; to

establish drilling units; and to prevent reasonably avoidable drainage from each developed unit which is not equalized by counter-drainage.

- § 138. Hearings.—Except in emergencies the Commission cannot make any regulation or order until after a hearing upon seven days' notice⁴. Any member of the Commission has power to summon witnesses and require the production of books and records at a hearing. Contumacious witnesses may be arrested on order of the circuit court and compelled to testify. Any interested person may request the Commission to call a hearing upon any matter within its jurisdiction, and the Commission must take action within thirty days after the hearing.
- § 139. Drilling Units.—The Commission may establish drilling units, a drilling unit being an area which can be efficiently and economically drained by one well. Drilling units cannot exceed forty acres, except that in instances involving leases covering more than forty acres a drilling unit may be as large as fifty acres. The well upon a drilling unit must be approximately in the center, in the absence of special circumstances justifying its location elsewhere. Where a drilling unit is owned by more than one person, the Commission may, after a hearing, order the property developed by a single well, with apportionment of expenses and income.
- § 140. Proration of Production.—The Commission is empowered to fix the authorized production of a particular pool or field, which may be less than could be produced if there were no restriction. Each owner's production may also be restricted, so that his share of the total production is proportionate to his share of the developed field.
- § 141. PERMIT TO DRILL WELL.—No person may drill an oil or gas well in a field discovered after January 1, 1937, without first obtaining permission from the Commission. If permission is granted, a fee of \$50 must be paid.

⁴An emergency order temporarily shutting down an entire field was upheld in *Lion Oil Refining Co. v. Bailey*, 200 Ark. 436 (1940).

§ 142. Enforcement and Review of Commission's Orders.—Various means are provided for enforcing the orders of the Commission. Violation of an order is punished by severe civil and criminal penalties, and the violator may be enjoined upon personal or constructive service. Confiscation of oil produced in disregard of the Commission's regulations is authorized. The Commission may take over and operate any well that is wild or uncontrolled, after twenty-four hours' notice to the owner.

Any person dissatisfied with an order of the Commission may obtain a review by seeking an injunction against its enforcement, in the chancery court of the county in which the property involved is located.

CHAPTER 11

TAXATION

§ 143. PROPERTY TAX.—General property taxes upon real and personal property are payable to the county collector between the third Monday in February and the third Monday in April of each year. Payment may be made in instalments, one-fourth of the taxes being payable on or before the third Monday in April, one-fourth on or before the third Monday in July, and the remaining half on or before the first day of October¹. As between grantor and grantee the tax lien attaches on the third Monday in February; so a vendor who gives a warranty deed after that date obligates himself to pay the taxes falling due in the current year². See § 68 with reference to forfeiture of real estate for nonpayment of property taxes.

The property tax applies to all real estate and tangible personal property within the State³. The lessee interest in a mineral lease constitutes an interest in land and is taxable even though its owner is a nonresident⁴. By the same reasoning, an Arkansas citizen's interest in a lease upon lands in another State is not subject to the Arkansas tax⁵.

Taxation of Minerals. Where the ownership of minerals has been separated from the surface ownership, and the assessor has actual notice of the separation or constructive notice from the recorded deed, it is his duty to assess the minerals separately from the surface. If he fails to make a separate assessment and the property is sold for nonpayment of taxes, the assessment is deemed to be against the surface interest and the mineral owner's rights are not affected.

¹Pope's Digest, § 13826.

²Act 337 of 1941.

³Pope's Digest, § 13597. The taxation of intangible property is beyond the scope of this volume.

⁴State ex rel. Atty. Gen. v. Ark. Fuel Oil Co., 179 Ark. 848 (1929).

⁵Greene County v. Smith, 148 Ark. 33 (1921). ⁶Pope's Digest, § 13600.

⁷Huffman v. Henderson Co., 184 Ark. 278 (1931).

§ 144. SEVERANCE TAX.—A severance tax is levied upon the privilege of extracting or severing natural resources from the soil. The term "natural resources" includes all minerals and ores, diamonds and other precious stones. bauxite, fuller's earth, phosphates, shells, chalk, cement, clay, sand,, gravel, asphalt, ochre, oil, gas, salt, sulphur, lignite, coal, marble, stones and stone products8.

Permit Required. It is a misdemeanor for any person, firm or corporation to engage in the business of severing natural resources without first obtaining a permit from the Commissioner of Revenues9.

Monthly Reports By Producers and Purchasers. ery producer of natural resources must file with the Commissioner of Revenues, within ten days after the end of each month, a sworn report of business done during the month. Forms for this report are obtainable from the Commissioner¹⁰. It is also the duty of all purchasers and other dealers in natural resources to file a sworn statement with the Commissioner within ten days after the end of each month, showing the names and addresses of all persons, firms or corporations from whom such purchaser or dealer has acquired any natural product during the month, together with the quantity acquired and the gross value paid. The purchaser is also required to see that the tax is paid and may be civilly and criminally liable if he fails to do so¹¹.

Rate of Tax. The basic tax rate for all natural resources except coal is $2\frac{1}{2}\%$ of the gross cash market value at the time and place of severance; the rate for coal is one cent per ton¹². In addition to the basic tax there is levied upon the severance of all minerals except manganese and coal a tax of one-tenth of one per cent of the gross cash market value, the proceeds of this additional levy being used to support the State Geological Department. The additional

⁸Pope's Digest, § 13371. The tax was held valid in Floyd v. Miller Lumber Co., 160 Ark. 17 (1925).

⁹Pope's Digest, § 13372.

¹⁰Ibid., § 13373. 11Ibid., § 13386. 12Ibid., §§ 13374-75 and § 13391.

tax upon manganese is one mill per ton; there is no tax upon coal except the basic levy of a cent a ton13.

When Tax Due; Penalty. The tax must be paid at the time the producer's monthly report is filed14. A penalty of 25% is imposed for failure to pay the tax when due. Should the producer fail to file the required monthly report, the Commissioner may examine his books to determine his liability and add the cost of examination to the tax15.

Who Liable For Tax. Primary liability for the tax rests upon the producer or operator who is actually engaged in severing natural resources, whether he does so as owner or lessee. He is, however, authorized to deduct from the payment of royalties the lessor's proportionate part of the tax16. It is of course permissible for the lessor and lessee to apportion liability between themselves in any way they see fit. Possible liability on the part of the purchaser has been mentioned earlier in this section.

Means of Enforcement. The Commissioner has at his disposal a variety of methods of enforcing payment of the severance tax. The State has a lien against the natural resources and the equipment used in their production, to secure payment¹⁷. The Commissioner may examine books and records and take testimony in determining tax liability¹⁸. He may require all carriers except pipe line companies to furnish information with respect to the shipment of natural resources¹⁹. Where the tax is delinquent he may certify its amount to the circuit clerk, after which it operates as a judgment upon which execution may issue²⁰. Various criminal penalties are also provided.

§ 145. MISCELLANEOUS STATE TAXES.—There are a number of state taxes which must be paid by mine or well

¹³Ibid., §§ 13392-95.

¹⁴Ibid., § 13374. ¹⁵Ibid., § 13381.

¹⁶Ibid., § 13382.

¹⁷Ibid., § 13376.

¹⁸Ibid., § 13383.

¹⁹Ibid., § 13378.

²⁰Ibid., § 13384.

operators; but as their application is not peculiar to the mineral industry they will be discussed only very briefly.

Income Tax. The Arkansas income tax is levied upon the entire net income of resident individuals and upon that part of the net income of nonresident individuals and of domestic and foreign corporations that is attributable to business done or property owned within the State²¹. Returns must be filed with the Revenue Commissioner on or before May 15 if made on a calendar year basis, or within four and a half months after the close of the fiscal year if made on that basis. The tax may be paid in two installments, one-half with the return and one-half within six months after the due date of the return²².

Corporate Franchise Tax. All corporations doing business in Arkansas are required to file an annual report with the Corporation Commission by March 1 and to pay an annual franchise tax to the State Treasurer on or before August 10²³. The tax rate is 11/100ths of one per cent of the value of the property owned by the corporation within the State²⁴. Foreign corporations must qualify with the Secretary of State before they may do any business in the State²⁵.

Gross Receipts Tax. The gross receipts tax, generally called the sales tax, is levied primarily upon the retail sale of tangible personal property. Sales to persons regularly engaged in reselling the articles purchased are not taxable. The sale of property for use in manufacturing, compounding, assembling or preparing a finished product is not taxable if such property becomes a recognizable, integral part of the finished product²⁶. The Commissioner of Revenues has ruled, however, that this provision means only that the original ingredient must be chemically recognizable in the finished product, which ruling exempts from the tax prac-

²¹Pope's Digest, § 14026, as amended by Act 129 of 1941; Mc-Carroll v. Gregory-Robinson-Speas, Inc., 198 Ark. 235 (1939).

²²Pope's Digest, §§ 14045 and 14047.

²³ Ibid., § 13488; Act 271 of 1925.

²⁴Pope's Digest, § 13490.

²⁵ Ibid., §§ 2247-51.

²⁶Act 386 of 1941.

tically all sales of minerals to manufacturers or processors. The tax rate is 2% of the sale price.

§ 146. FEDERAL STAMP TAX ON CONVEYANCES.—A federal stamp tax is levied upon every deed, instrument or writing whereby any land or other interest in realty sold is granted, assigned or otherwise conveyed to the purchaser. Sales for a consideration not exceeding \$100 are exempt. The tax is 55 cents upon sales for more than \$100 and not exceeding \$500; thereafter the rate is 55 cents for each \$500 or fraction thereof. The tax does not apply to instruments given to secure a debt²⁷. Payment is made by affixing revenue stamps (not postage stamps) to the deed and canceling them by writing the grantor's initials and the date across the face of each stamp²⁸. The grantor is liable for the tax²⁹.

Obviously conveyances of land or of minerals in place are subject to the tax. Inasmuch as the Arkansas Supreme Court has held that a mining lease or oil and gas lease vests an interest in land (see § 80, ante), the Treasury Department has ruled that the making or assignment of an oil and gas lease or other mineral lease upon Arkansas land is subject to the tax³⁰.

There is no difficulty in determining the amount of the tax upon the execution or assignment of a lease for a specified consideration to the lessor or assignor. Most mineral leases, however, provide for a royalty to the lessor, which presents a difficult problem in determining the amount of tax due upon the execution of such a lease. The fundamental rule is that where the consideration for a conveyance is indefinite or is dependent upon future contingencies, the tax is to be based upon the net value of the property conveyed³¹. In arriving at the value of the interest conveyed by a mineral lease, any cash bonus and guaranteed minimum royalty should be included at full

²⁷Internal Revenue Code, § 3482.

²⁸Treasury Regulations 71, Arts. 113.131-33.

²⁹Internal Revenue Code, § 1800.

³⁰G. C. M. 16510, appearing on page 416 of Internal Revenue Cumulative Bulletin XV-1 (January-June, 1936).

³¹Treasury Regulations 71, Art. 113.82.

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value. If recoverable minerals are known to underline the property leased, it will usually be possible to make a fair estimate of their value, over and above the bonus and minimum royalty. If, however, the existence of recoverable minerals is speculative, as in an unproved oil field, the tax need be based only upon the bonus and guaranteed royalty. Delay rentals should not be included in the tax base, as they are paid for the privilege of deferring drilling or mining operations—not for an interest in land.

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