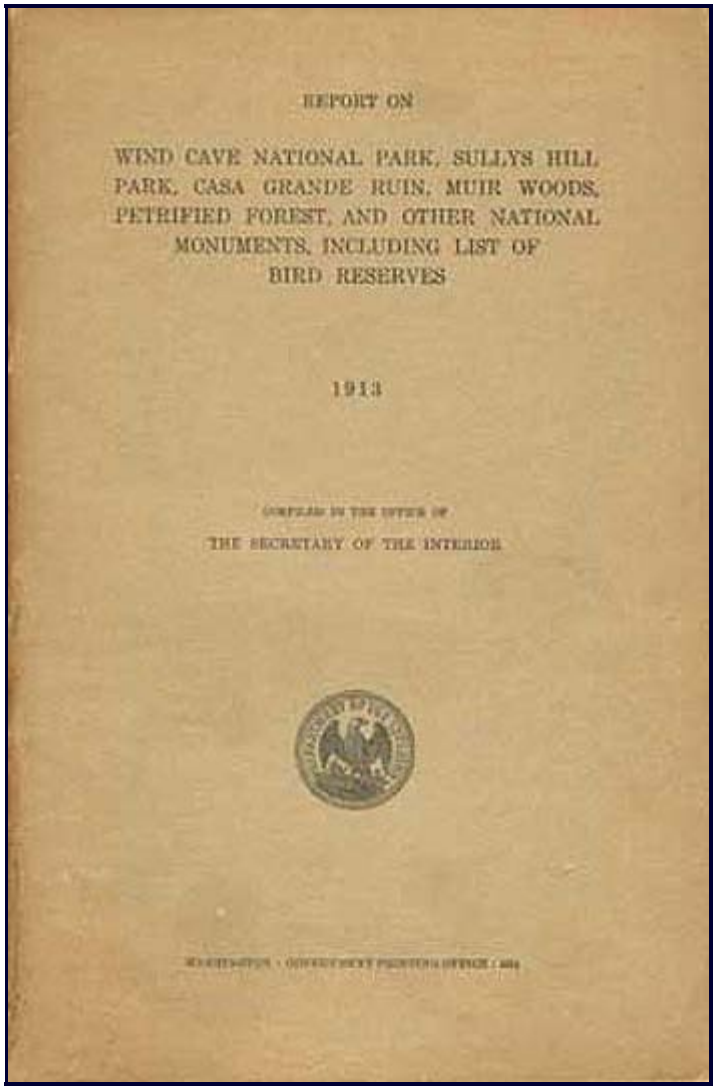


REPORT ON
WIND CAVE NATIONAL PARK, SULLYS HILL PARK, CASA GRANDE RUIN, MUIR WOODS, PETRIFIED FOREST, AND OTHER NATIONAL MONUMENTS, INCLUDING LIST OF BIRD RESERVES

1913


REPORT ON

WIND CAVE NATIONAL PARK, SULLYS HILL PARK, CASA GRANDE RUIN, MUIR WOODS, PETRIFIED FOREST, AND OTHER NATIONAL MONUMENTS, INCLUDING LIST OF BIRD RESERVES

1913

COMPILED IN THE OFFICE OF

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Government Printing Office
Washington
1914

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2-Apr-2007



REPORT ON

WIND CAVE NATIONAL PARK, SULLYS HILL PARK, CASA GRANDE RUIN, MUIR WOODS, PETRIFIED FOREST, AND OTHER NATIONAL MONUMENTS, INCLUDING LIST OF BIRD RESERVES

1913

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Sitka National Monument
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Pinnacles National Monument
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Gila Cliff-Dwellings National Monument
Tonto National Monument
Grand Canyon National Monument
Jewel Cave National Monument

Wheeler National Monument
Mount Olympus National Monument
Oregon Caves National Monument
Devils Postpile National Monument
Bird Reserves

ILLUSTRATION.

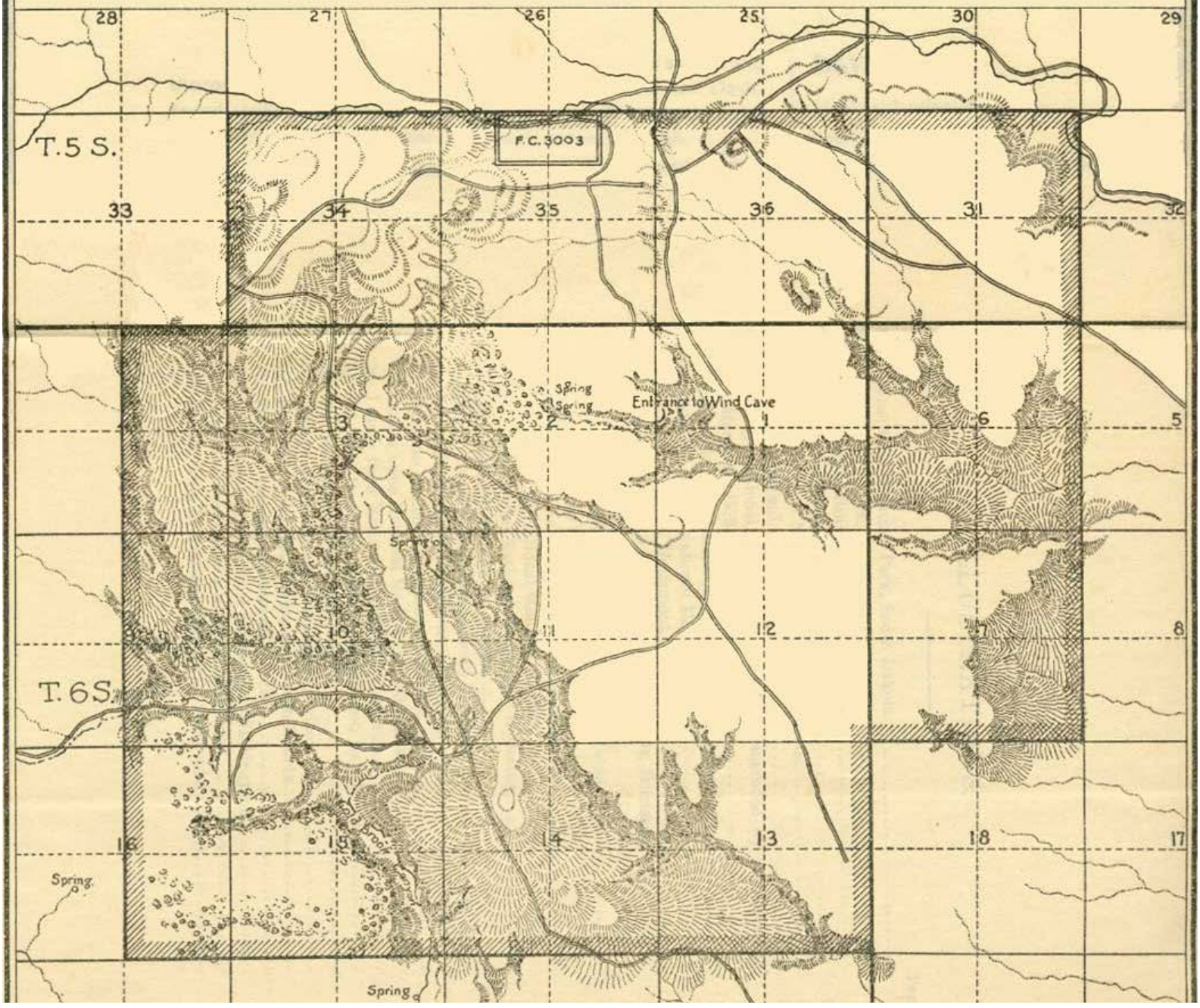
Map of Wind Cave National Park, South Dakota
Fig. 1. Sullys Hill Park, North Dakota
2. Casa Grande Ruin Reservation, Arizona
3. Muir Woods National Monument, California
4. Petrified Forest National Monument, Arizona
5. Navajo National Monument, Arizona
6. Navajo National Monument, Arizona (as amended by proclamation March 14, 1912)
7. Chaco Canyon National Monument, New Mexico
8. Rainbow Bridge National Monument, Utah
9. El Morro National Monument, New Mexico
10. Lewis and Clark Cavern National Monument, Montana
11. Tumacacori National Monument, Arizona
12. Montezuma Castle National Monument, Arizona
13. Natural Bridges National Monument, Utah
14. Gran Quivira National Monument, New Mexico
15. Mukuntuweap National Monument, Utah
16. Shoshone Cavern National Monument, Wyoming
17. Sitka National Monument, Alaska
18. Devils Tower National Monument, Wyoming
19. Pinnacles National Monument, California
20. Colorado National Monument, Colorado
21. Cinder Cone National Monument, California
22. Lassen Peak National Monument, California
23. Gila Cliff-Dwellings National Monument, New Mexico
24. Tonto National Monument, Arizona
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26. Jewel Cave National Monument, South Dakota
27. Wheeler National Monument, Colorado
28. Mount Olympus National Monument, Washington
29. Oregon Caves National Monument, Oregon
30. Devils Postpile National Monument, California

WIND CAVE NATIONAL PARK

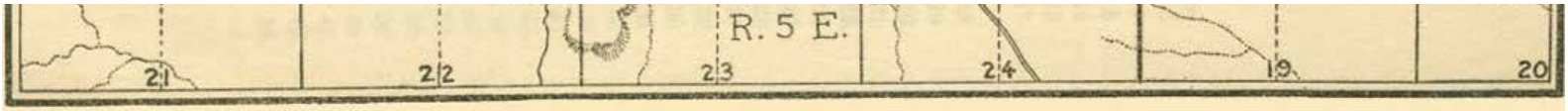
Embracing Sections 34, 35 and 36, T. 5 S., R. 5;
Sections 1, 2, 3, E½ of 4, E½ of 9, and Sec's 10, 11, 12, 13, 14, 15, E½
of 16, T. 6 S., R. 5, Section 31, T. 5 S., R. 6; Sections 6
and 7 T. 6 S., R. 6,
All East of BLACK HILLS MERIDIAN

SOUTH DAKOTA

Containing 10,522.17 acres

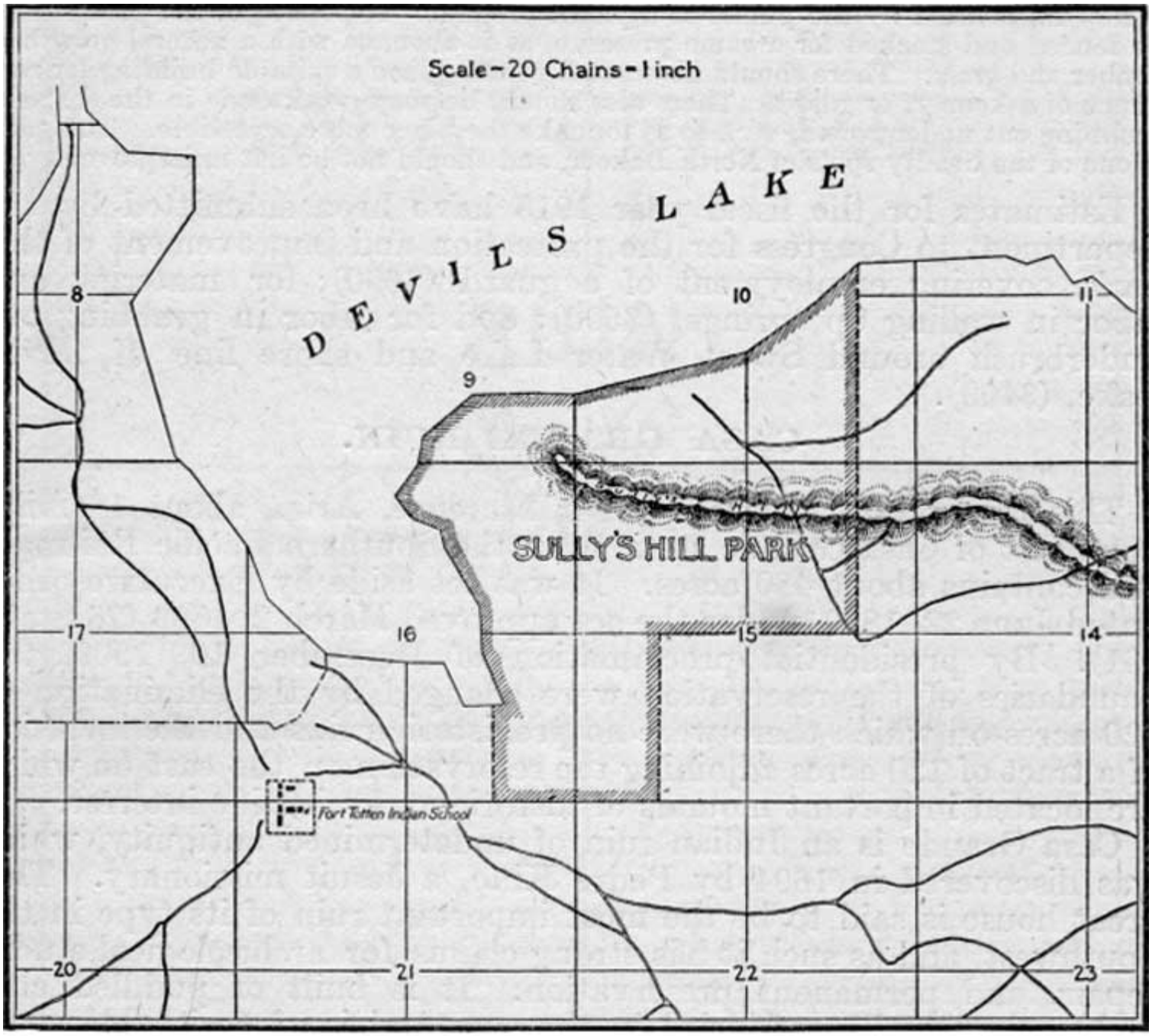


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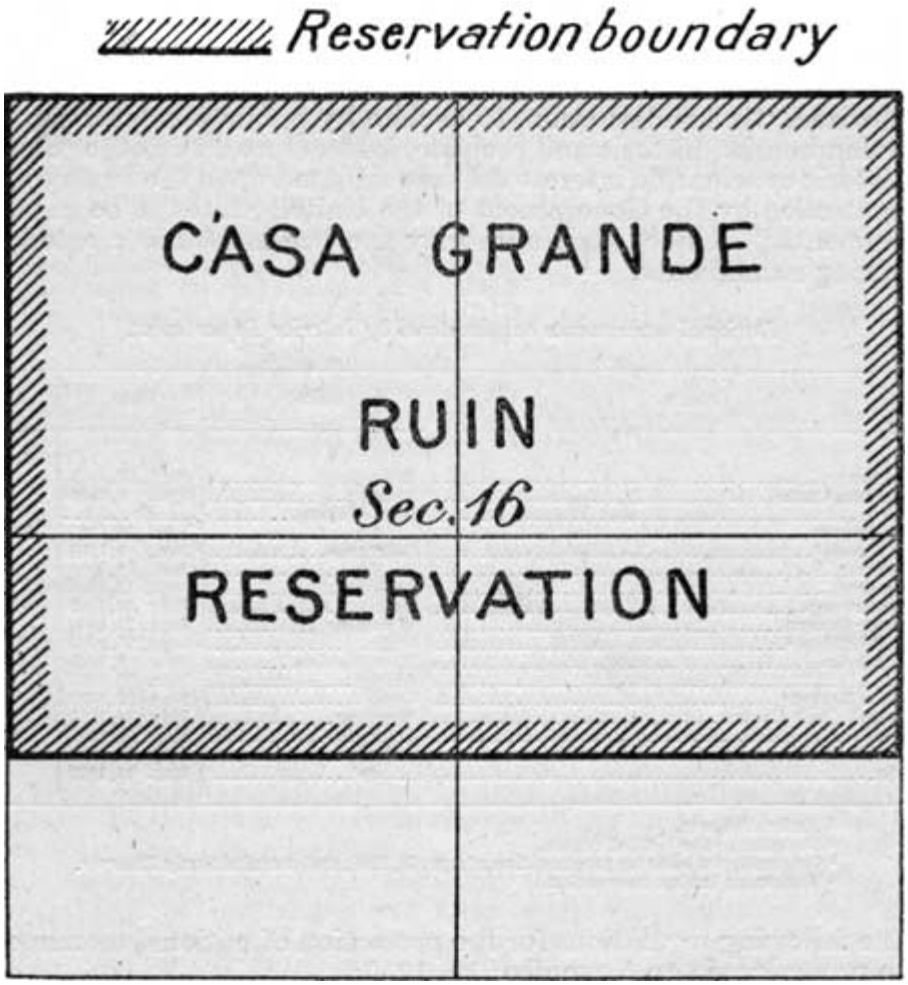
42854—14. (To face page 3.)

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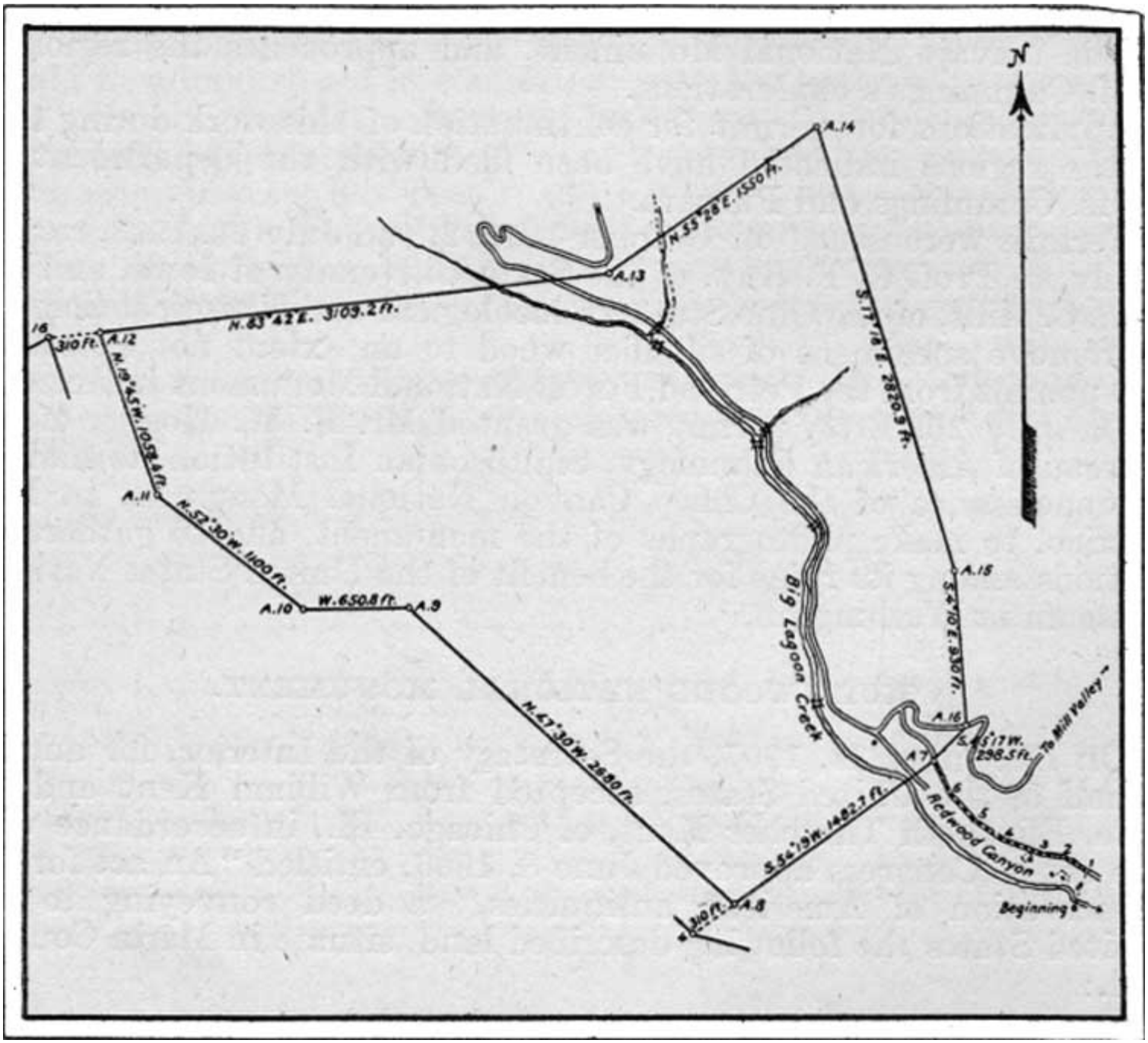


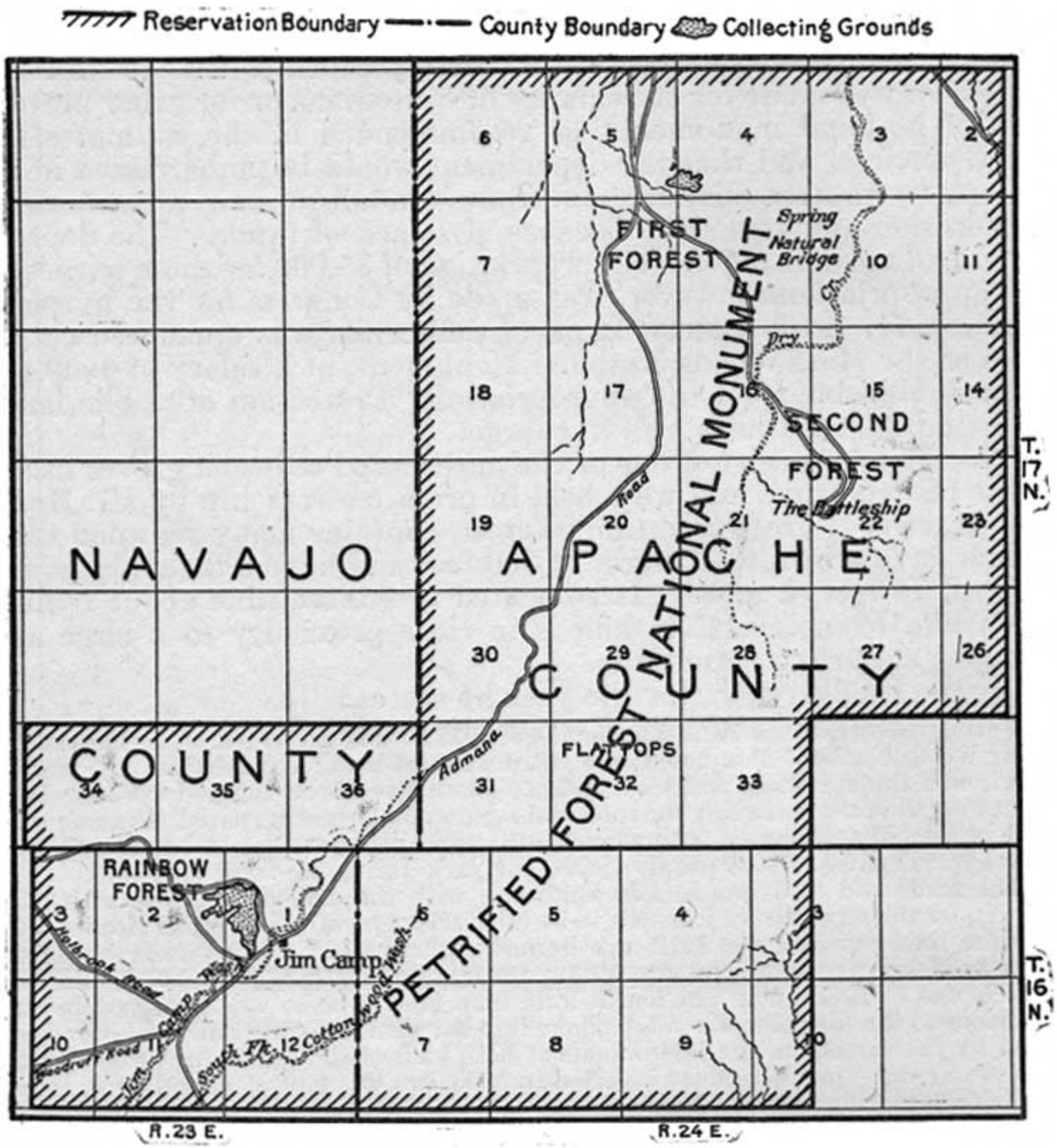
Township No. 152 North, Range No. 65 West.

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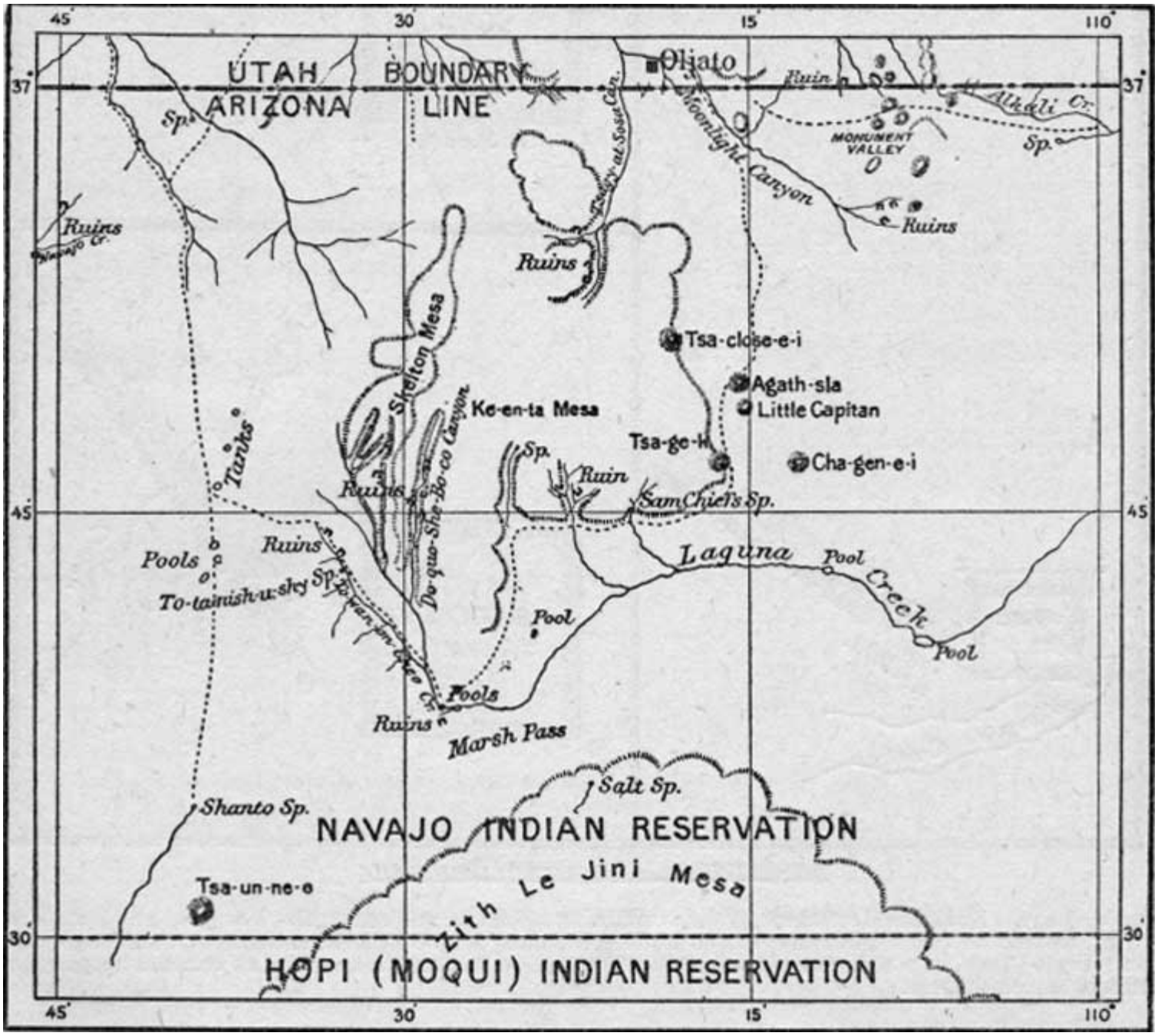


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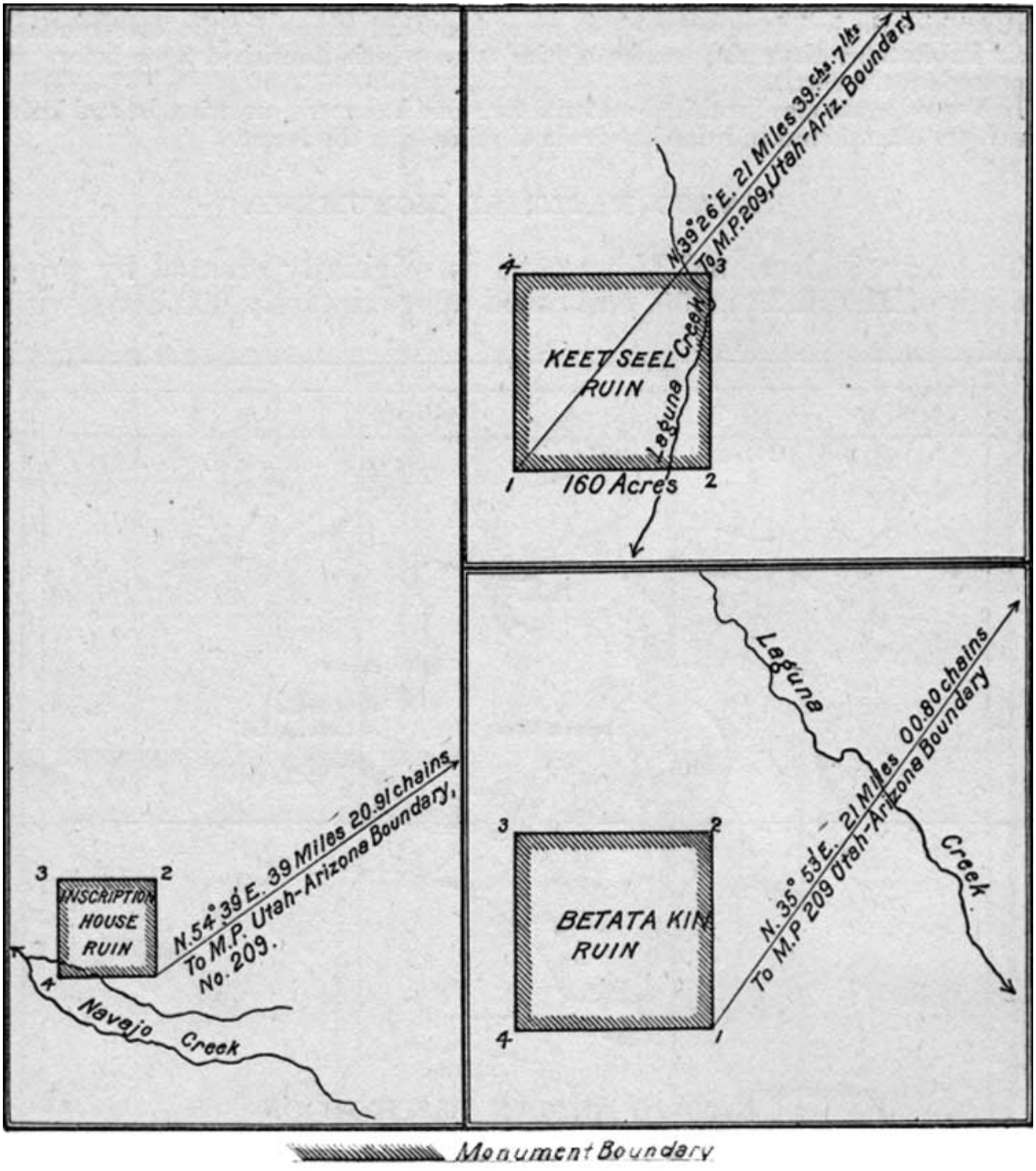

N
A.14
N. 55° 28 E. 1550 ft.
A.13
N. 83° 42 E. 3109.2 ft.
16
310 ft.
A.12
N. 19° 45 W. 1058.8 ft.
A.11
N. 52° 30 W. 1400 ft.
A.10
W. 650.8 ft.
A.9
N. 47° 30 W. 2850 ft.
S. 54° 19 W. 1482.7 ft.
310 ft.
A.8
S. 17° 18 E. 2820.3 ft.
A.15
S. 47° 30 E. 330 ft.
A.16
S. 45° 17 W. 298.5 ft.
To Mill Valley
A.7
Big Lagoon Creek
Redwood Canyon
Beginning



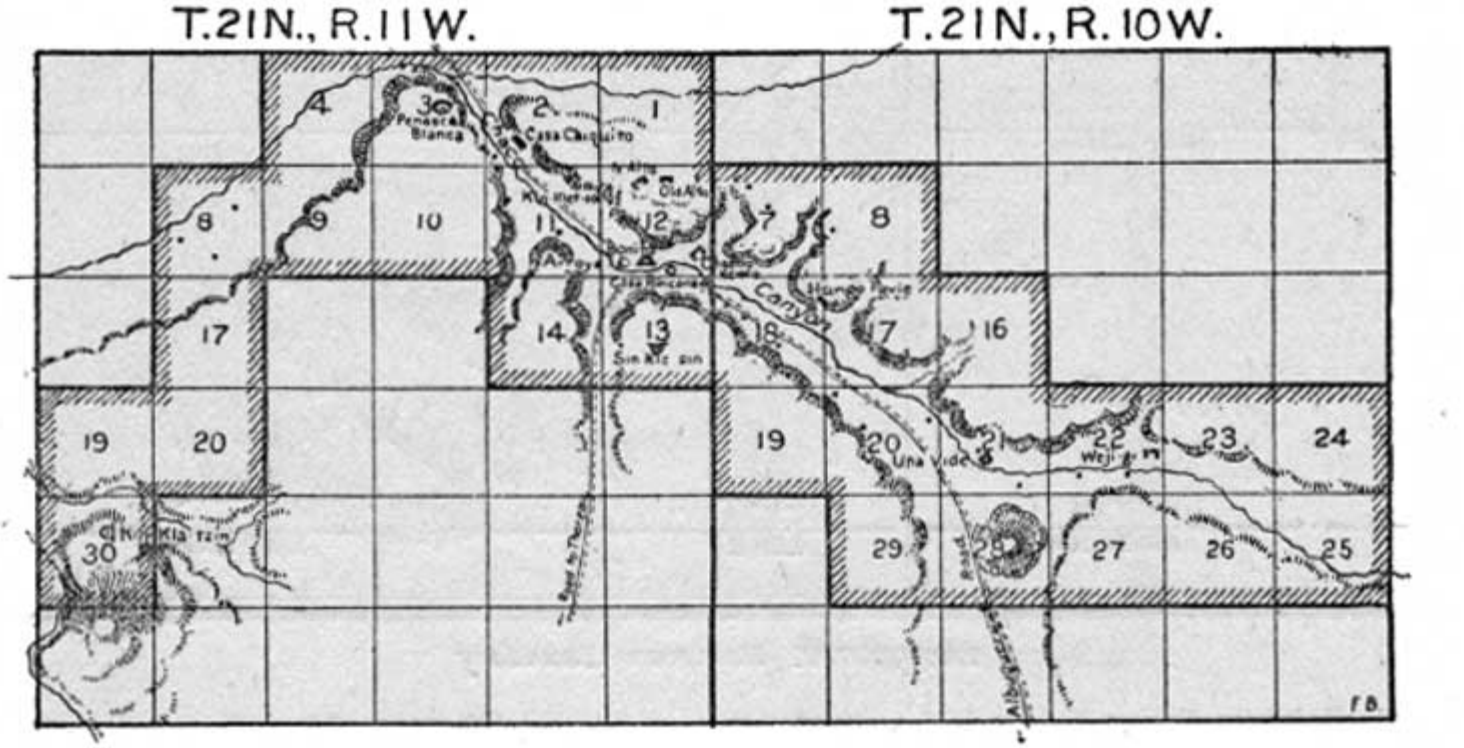
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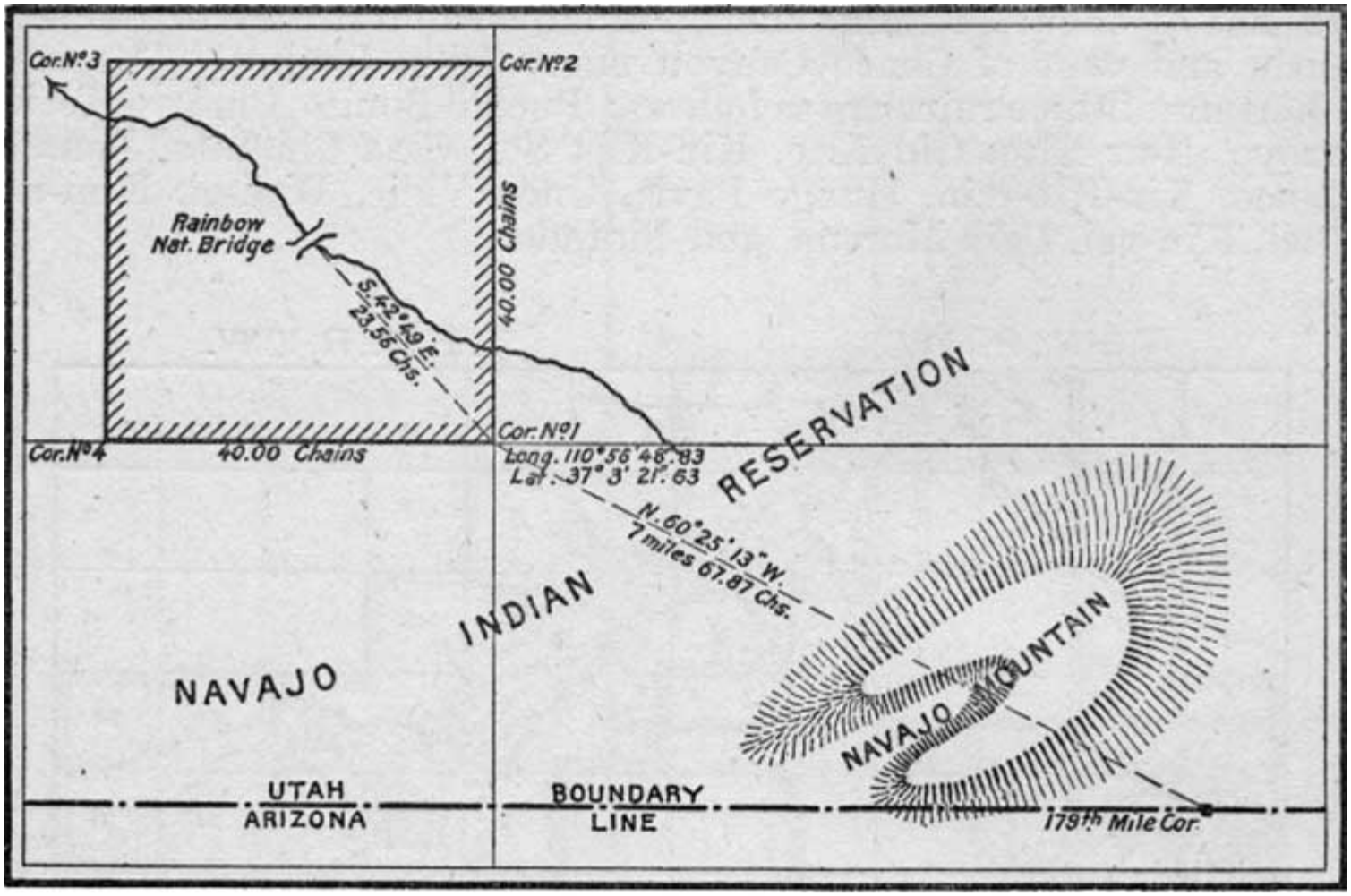
T.21N., R.12W.

T.17N., R.12W.

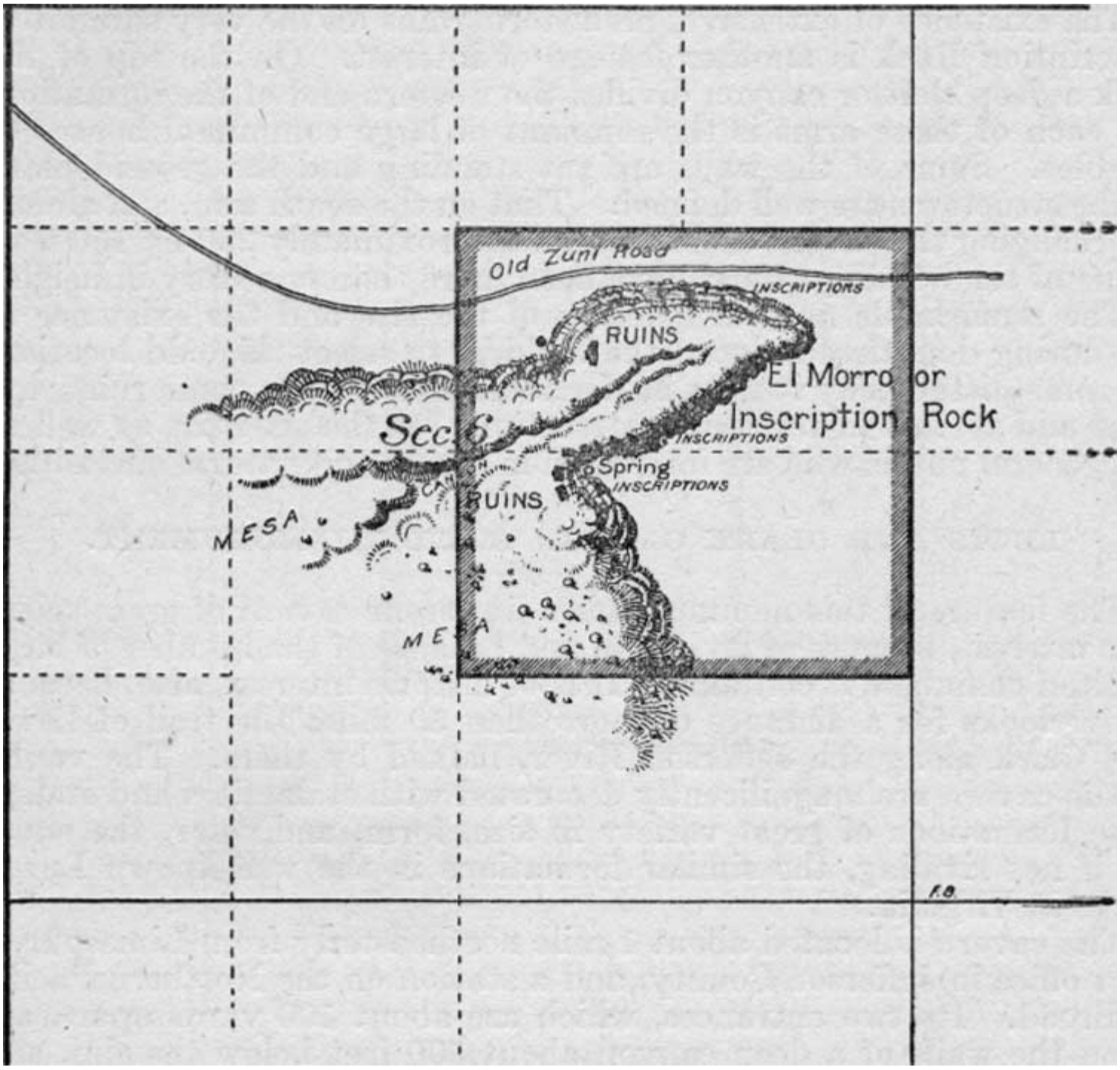
T.17N., R.10W.

T.20N., R.8W.

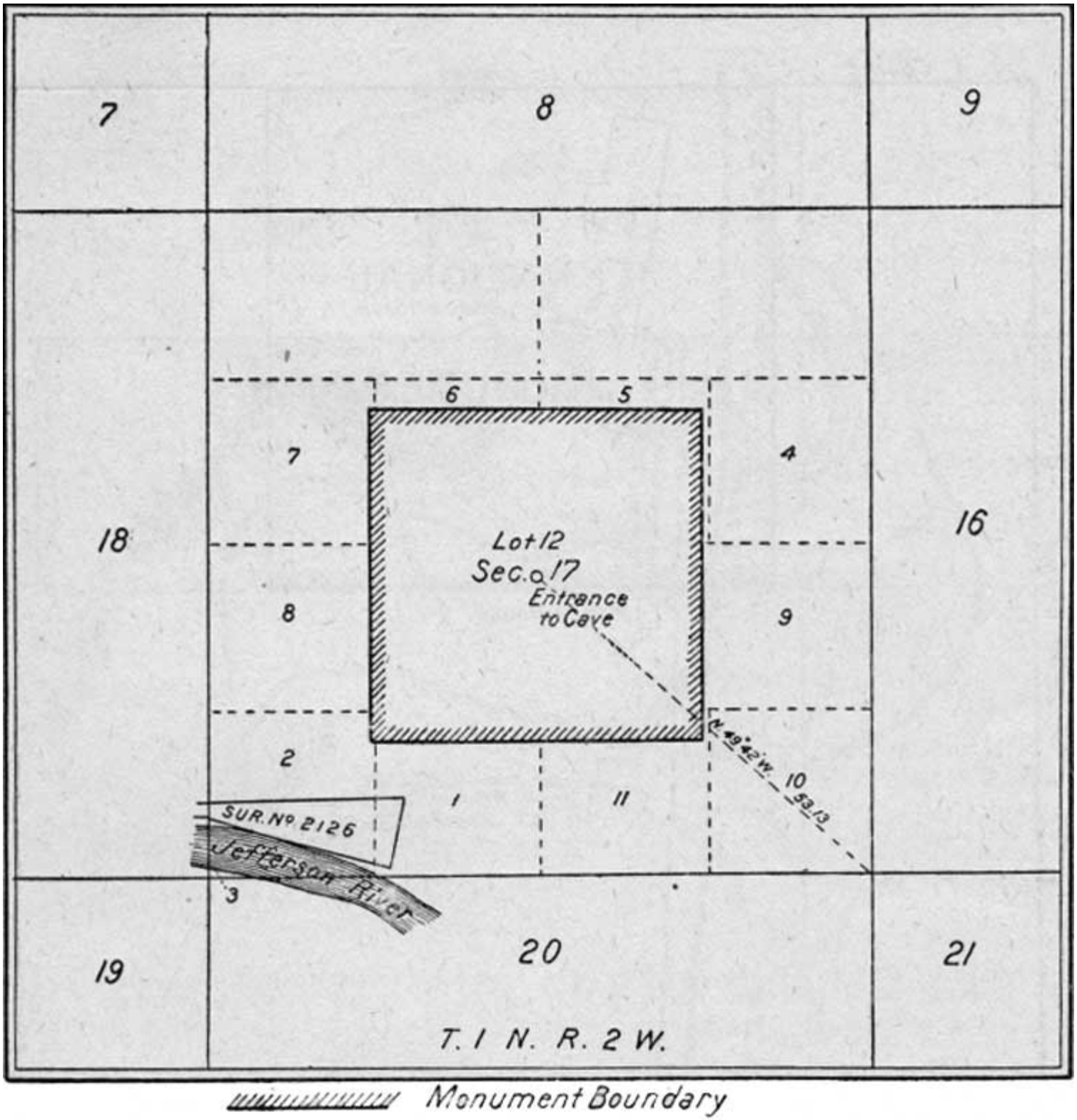
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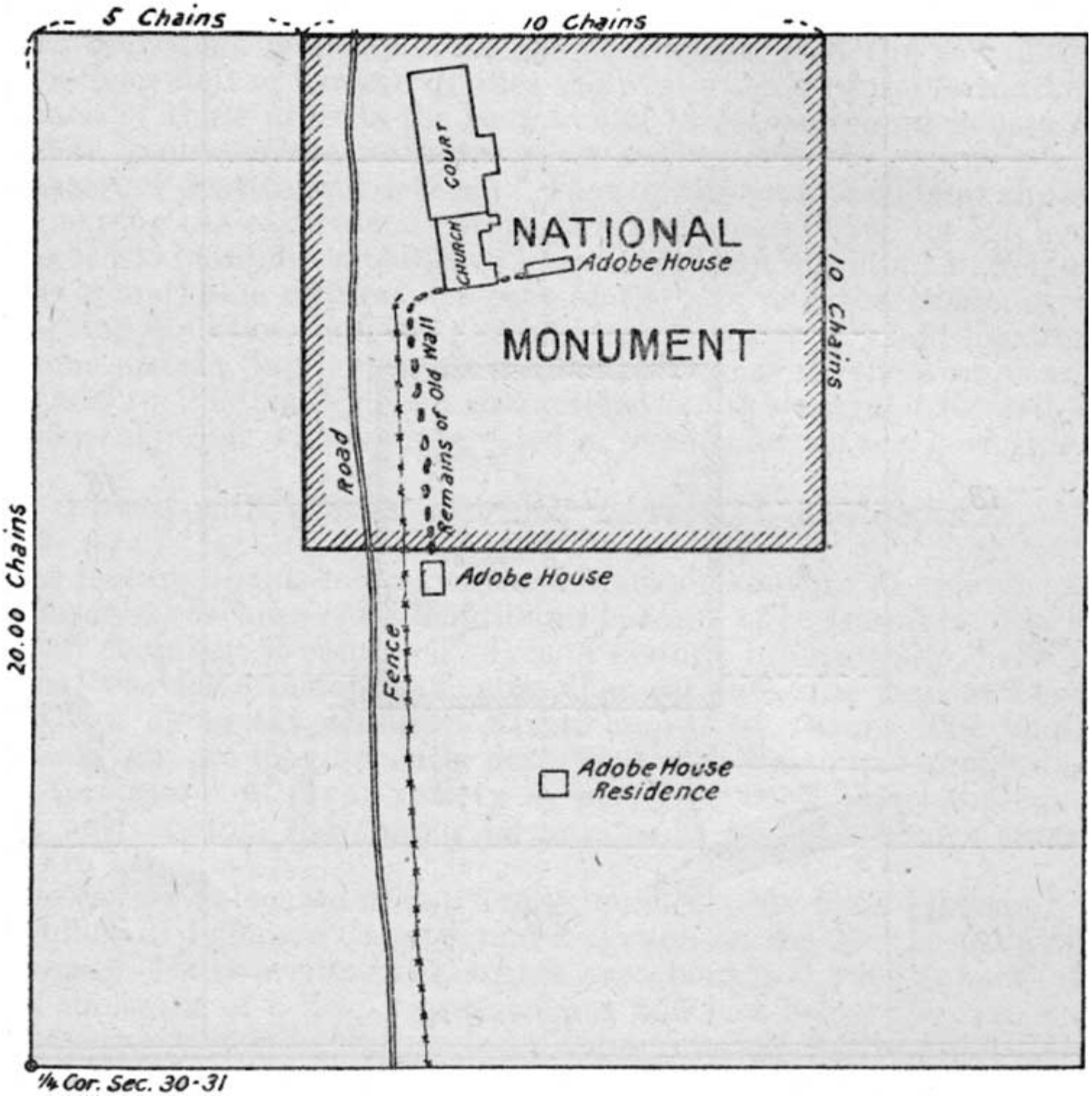


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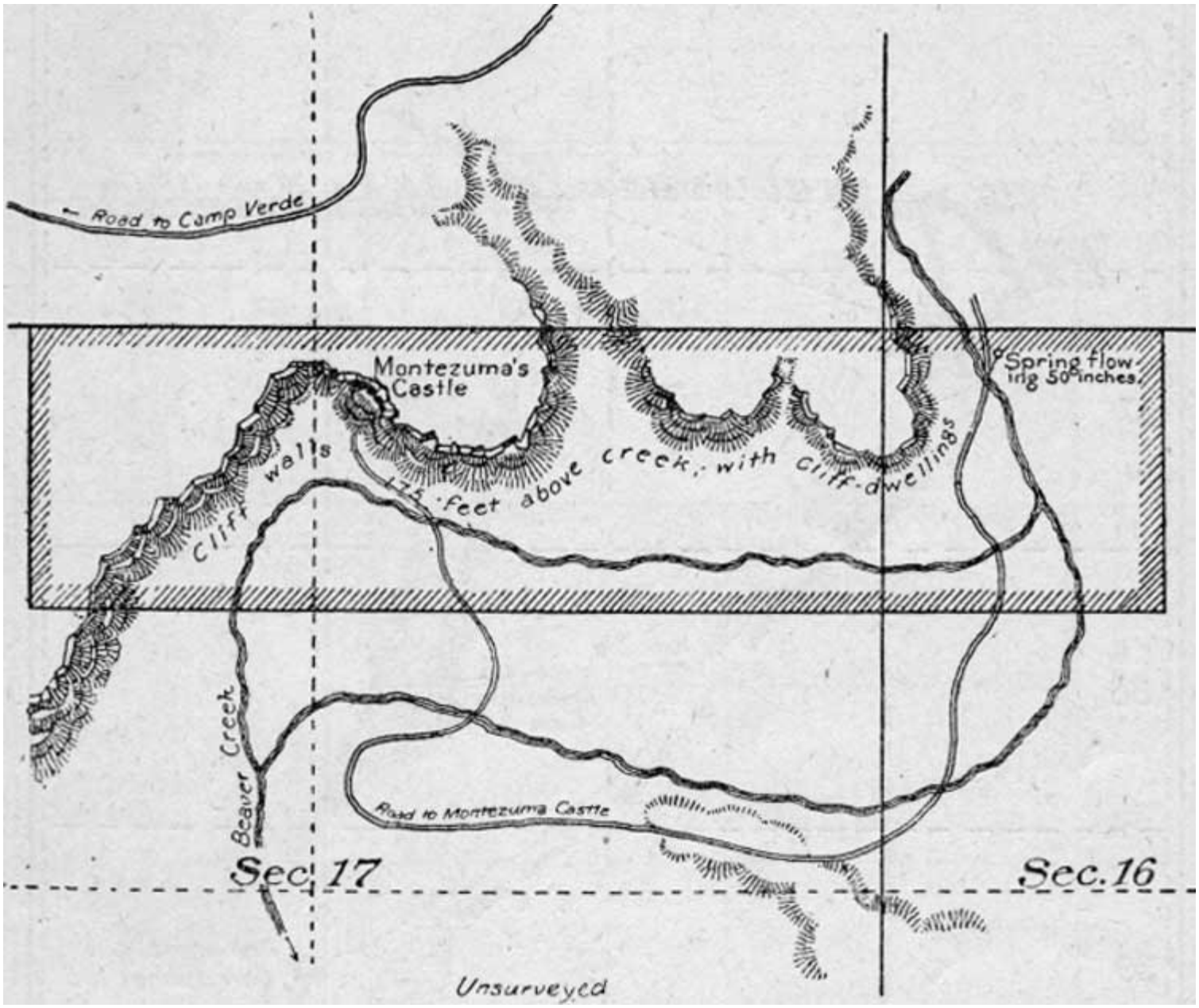


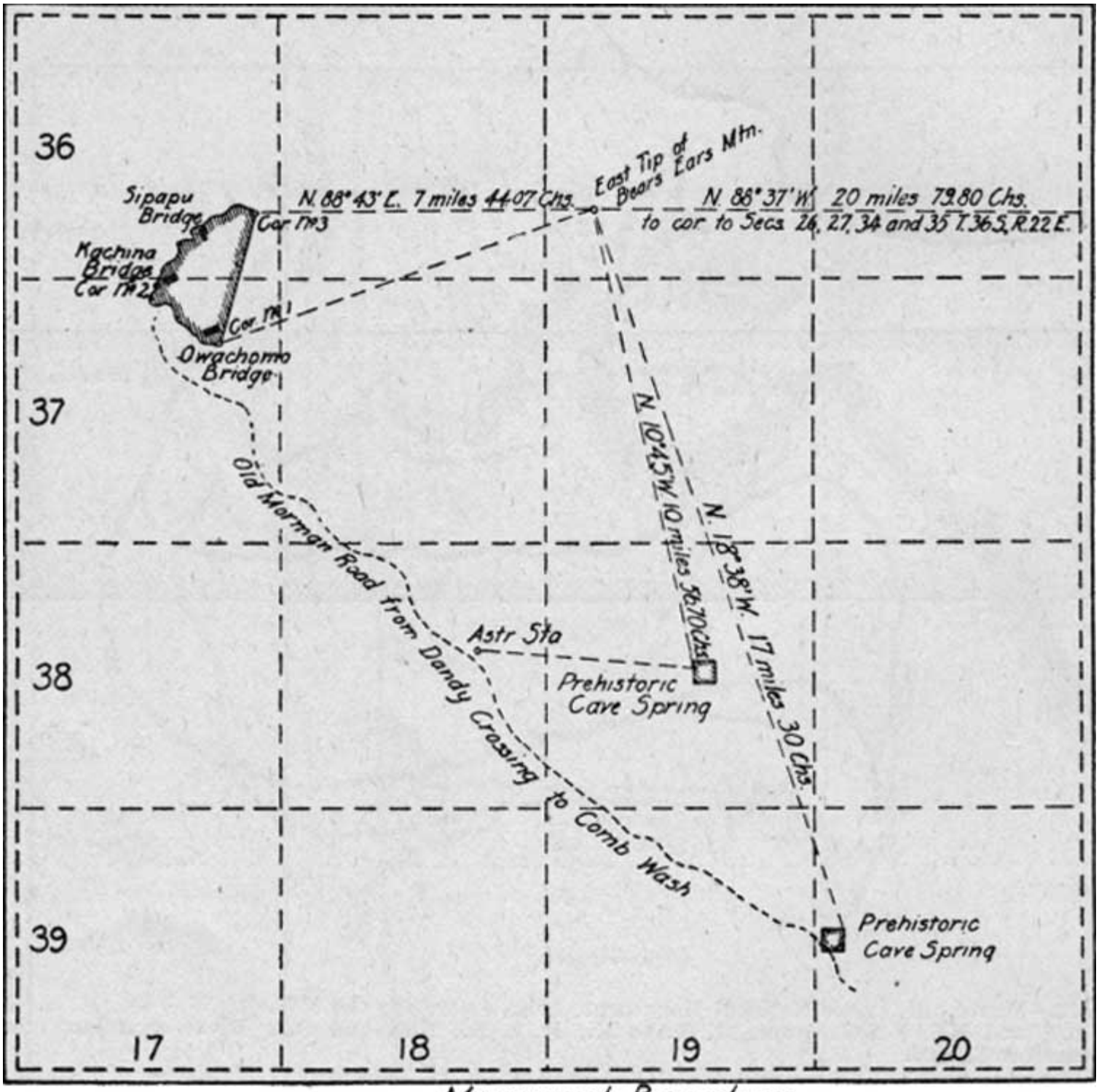
Monument Boundary

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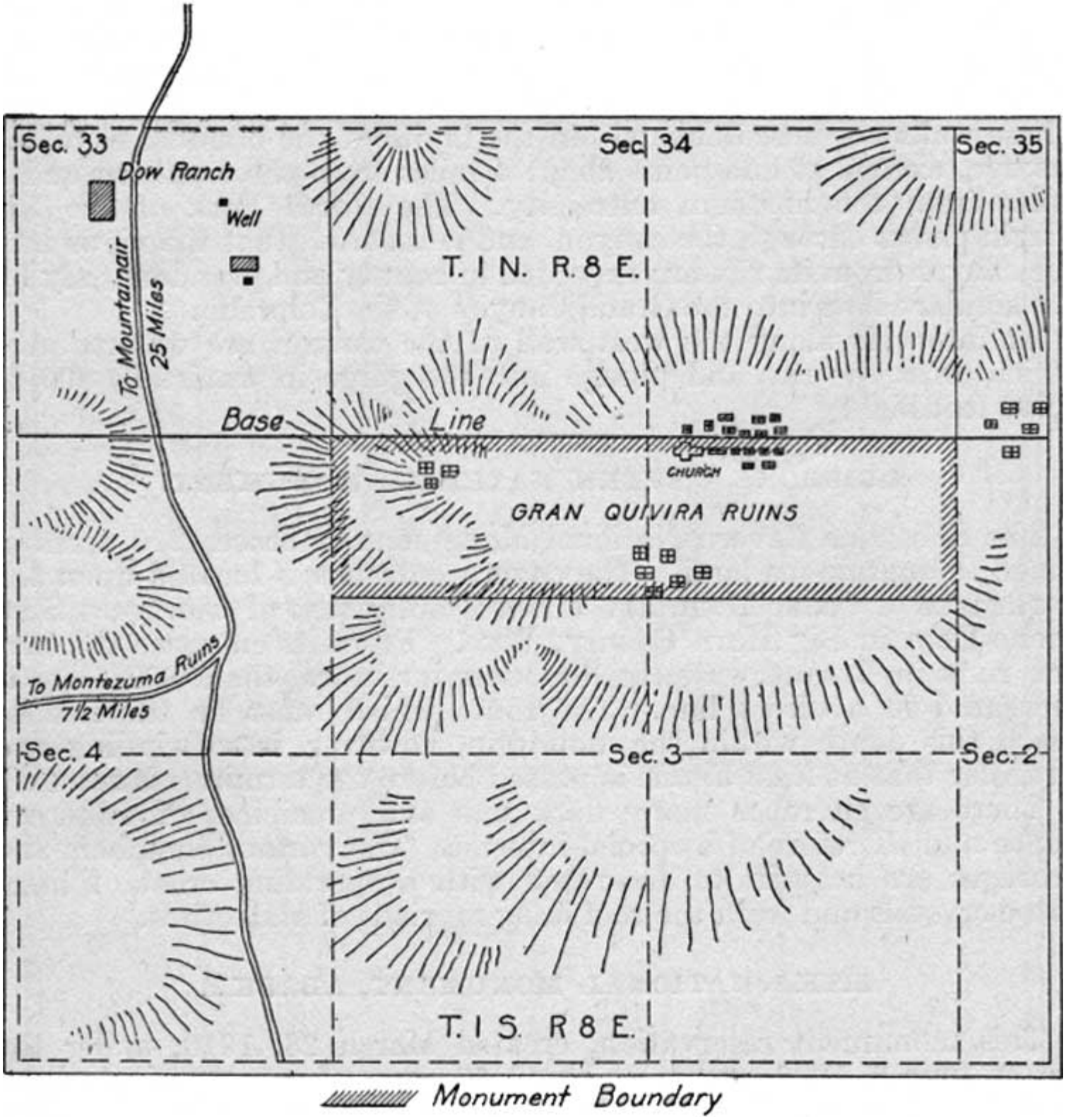


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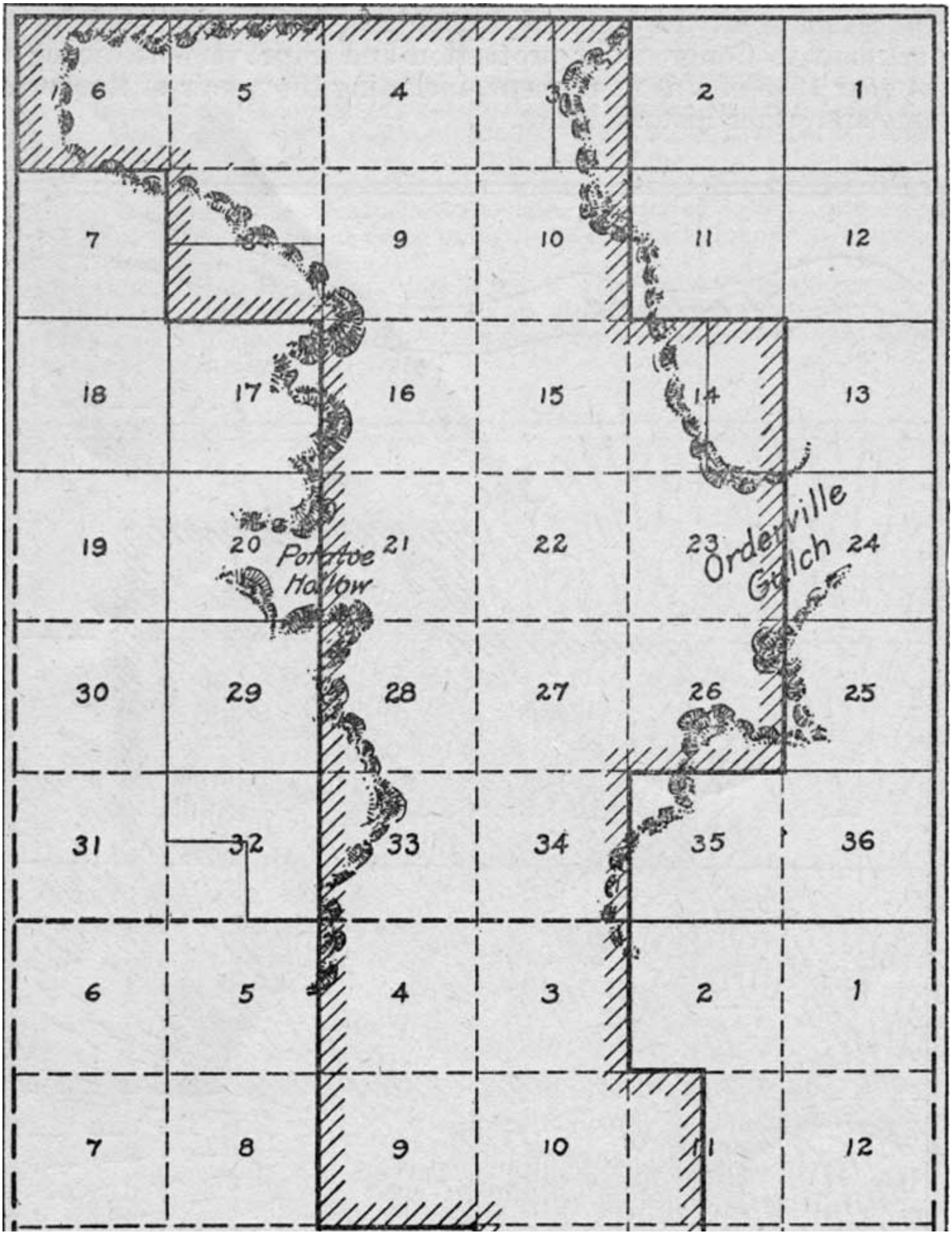

Road to Camp Verde
Montezuma's Castle
Spring flowing 50 inches.
Cliff wells
175 feet above creek, with cliff-dwellings
Beaver Creek
Road to Montezuma Castle
Sec. 17
Sec. 16
Unsurveyed

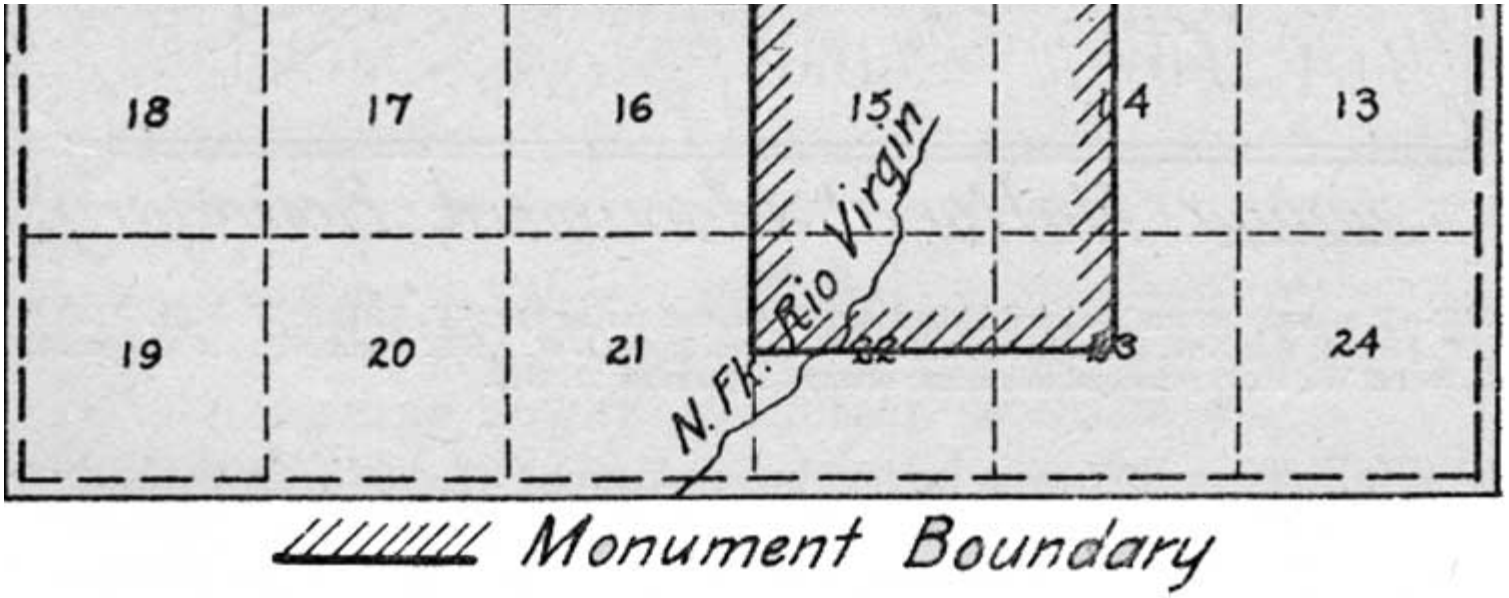


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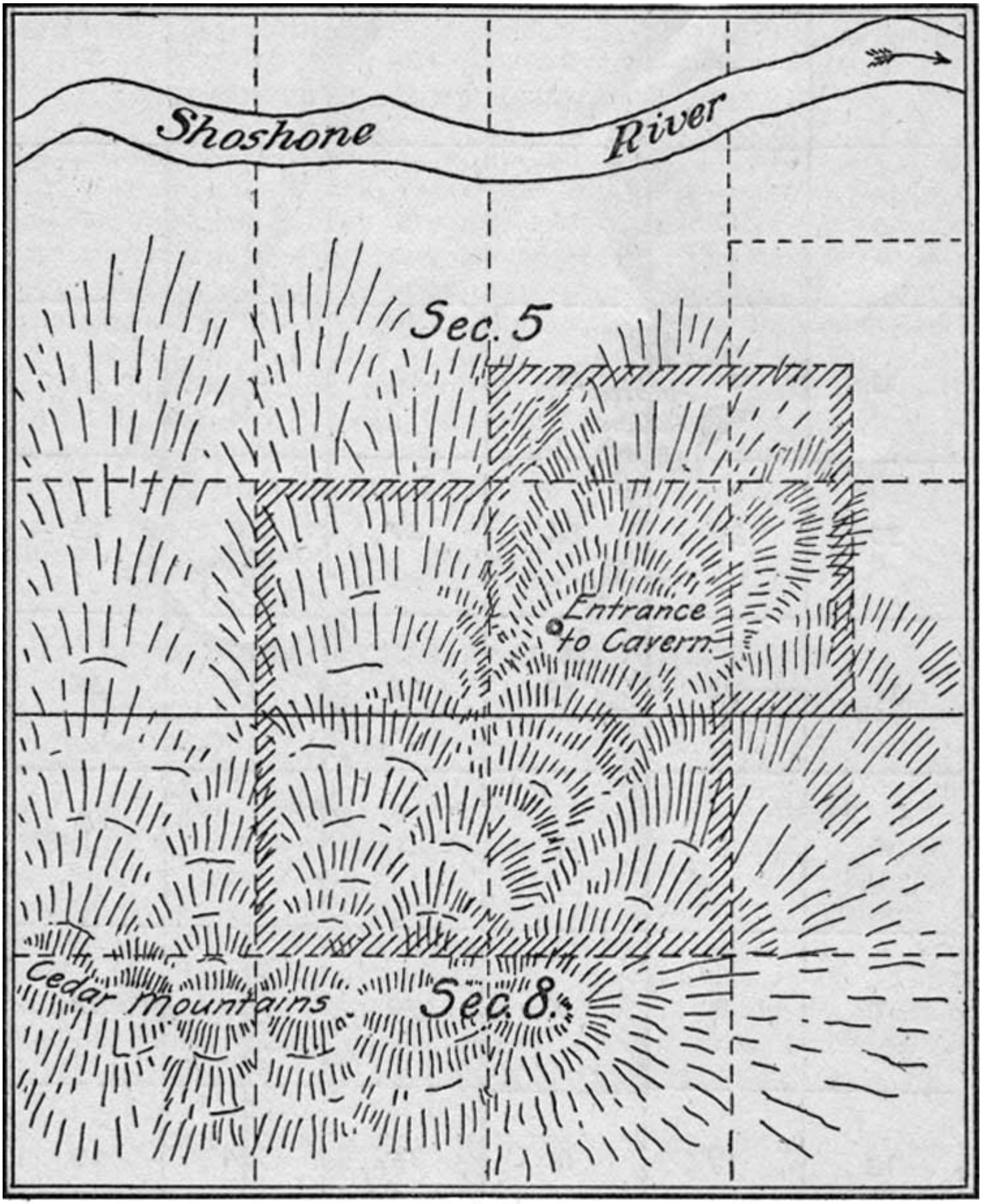


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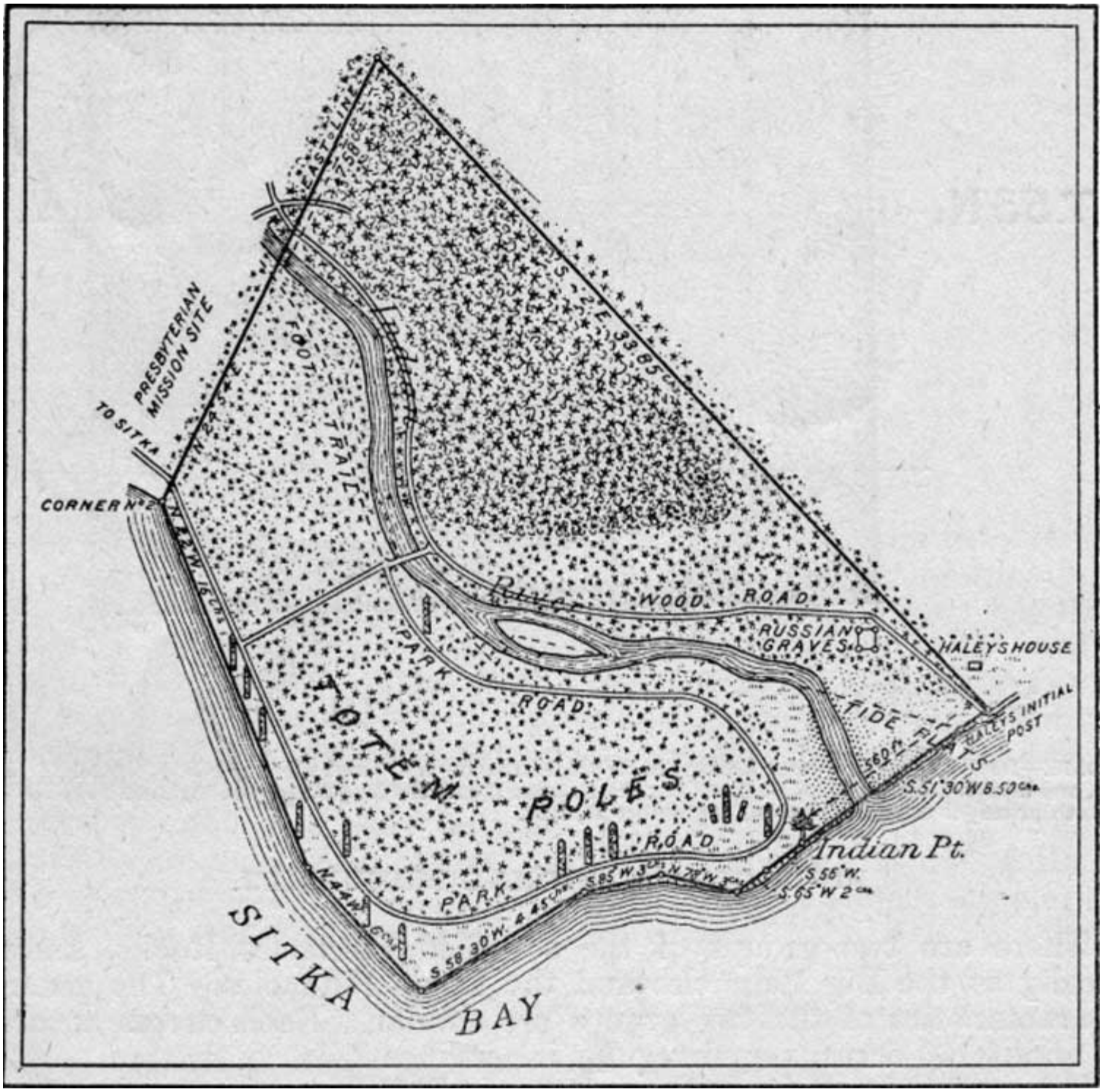

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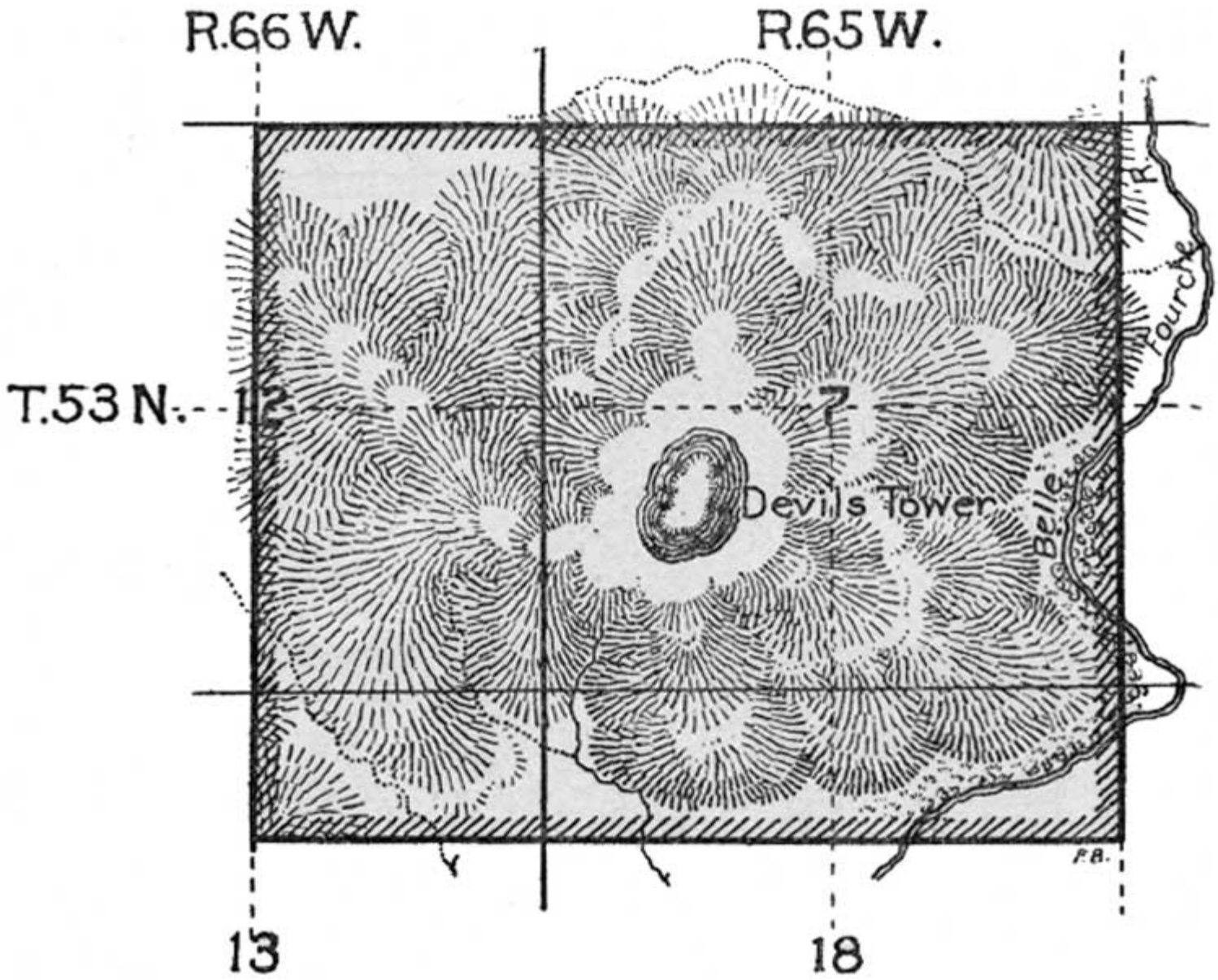
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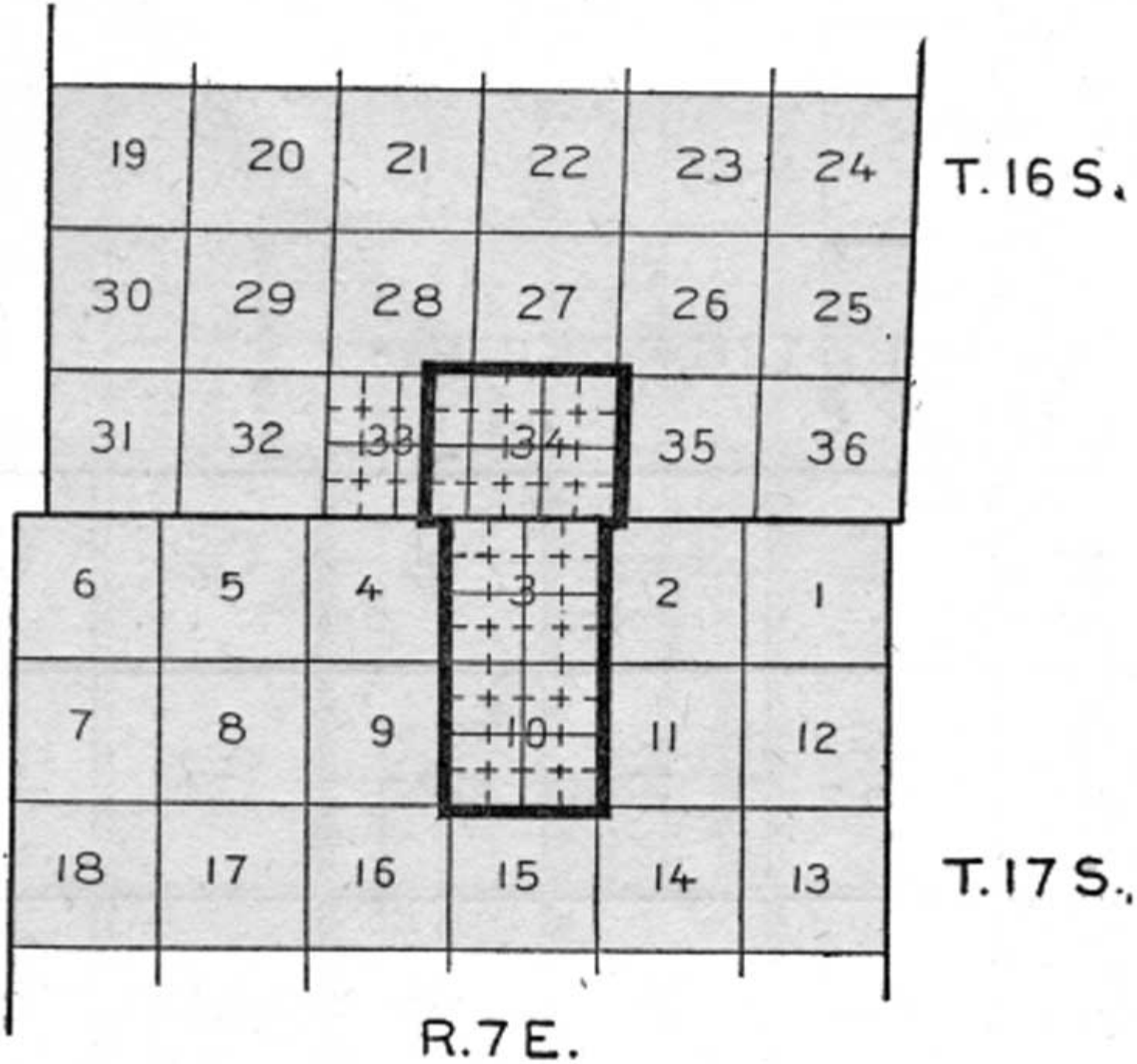
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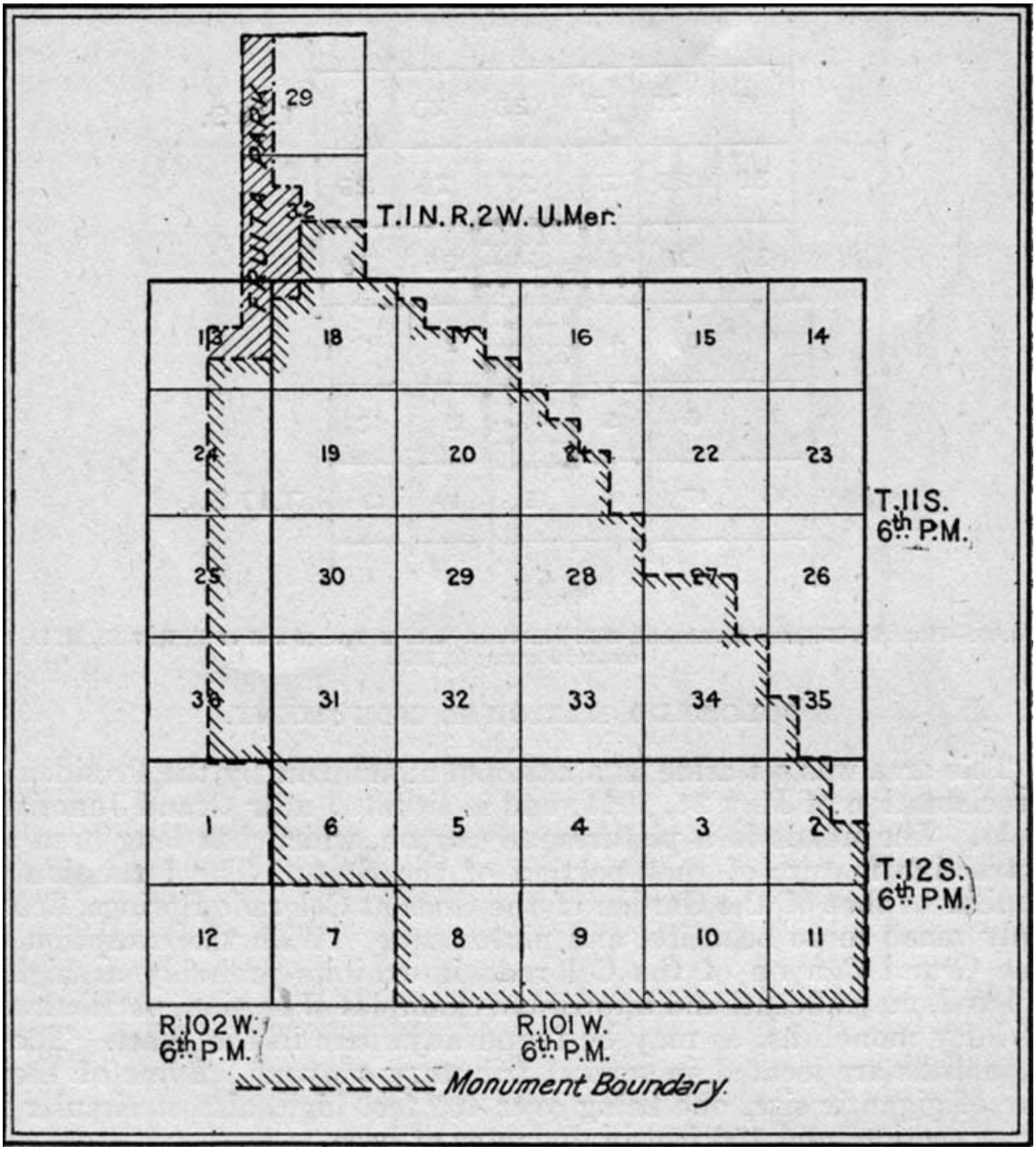
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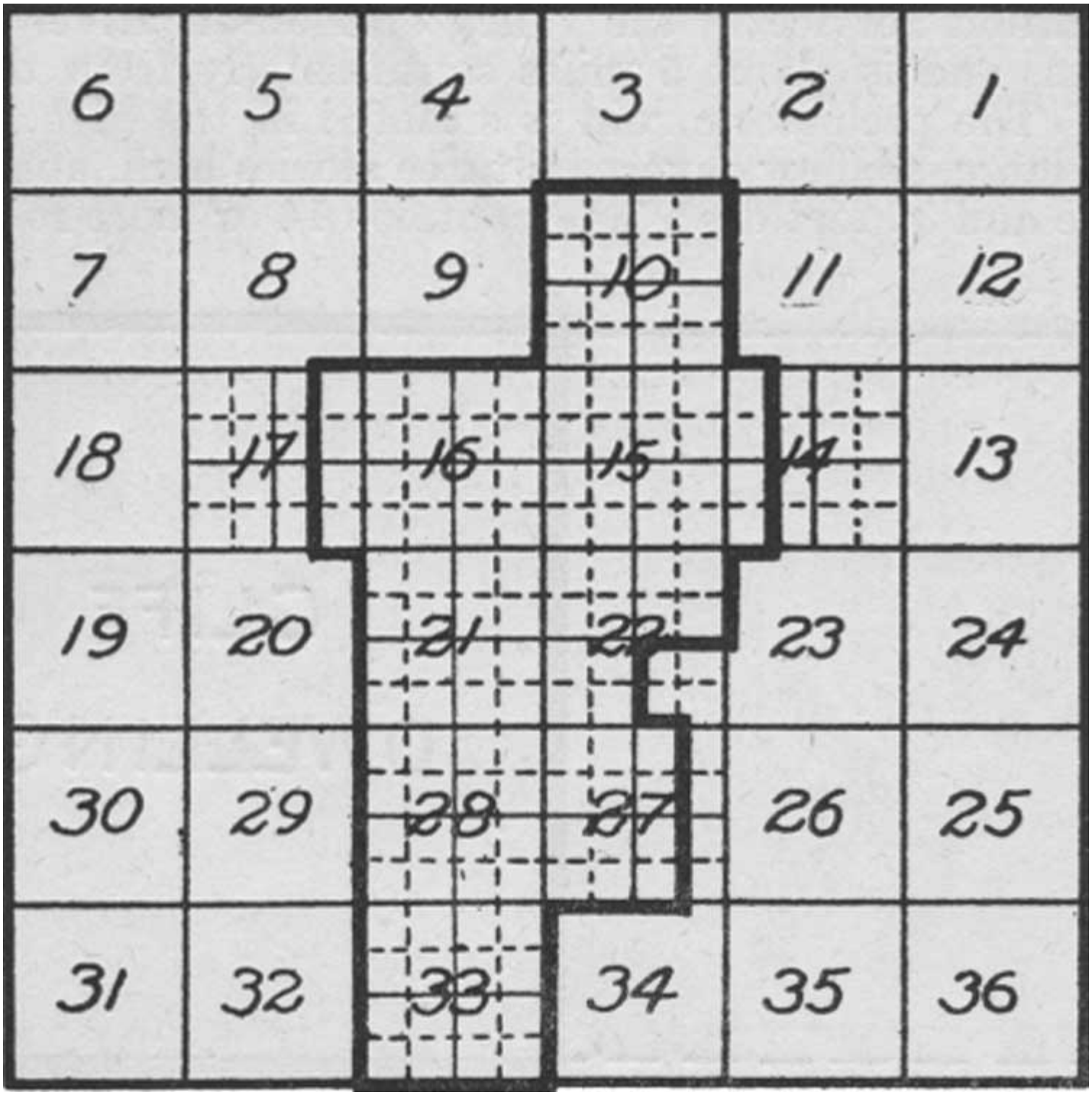
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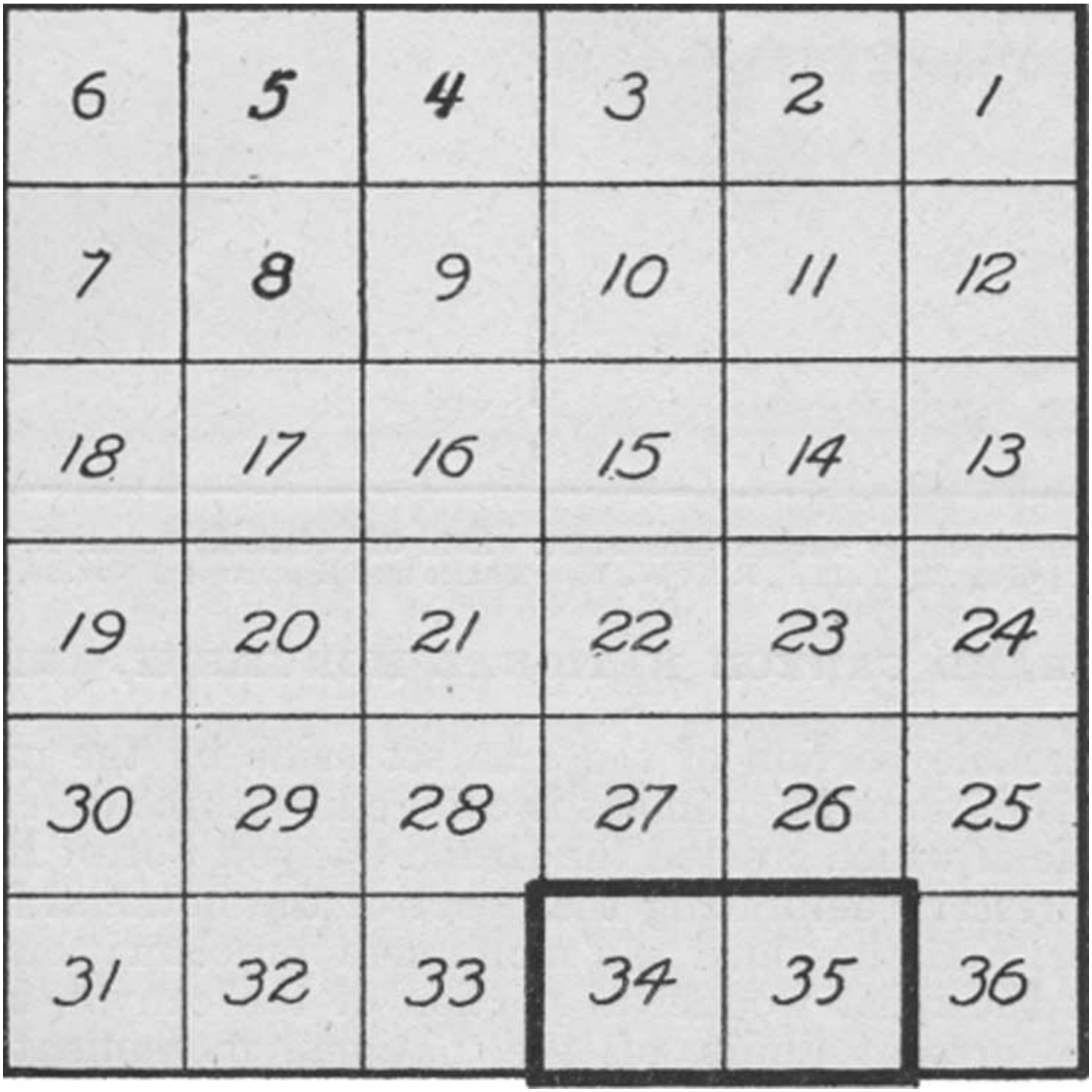


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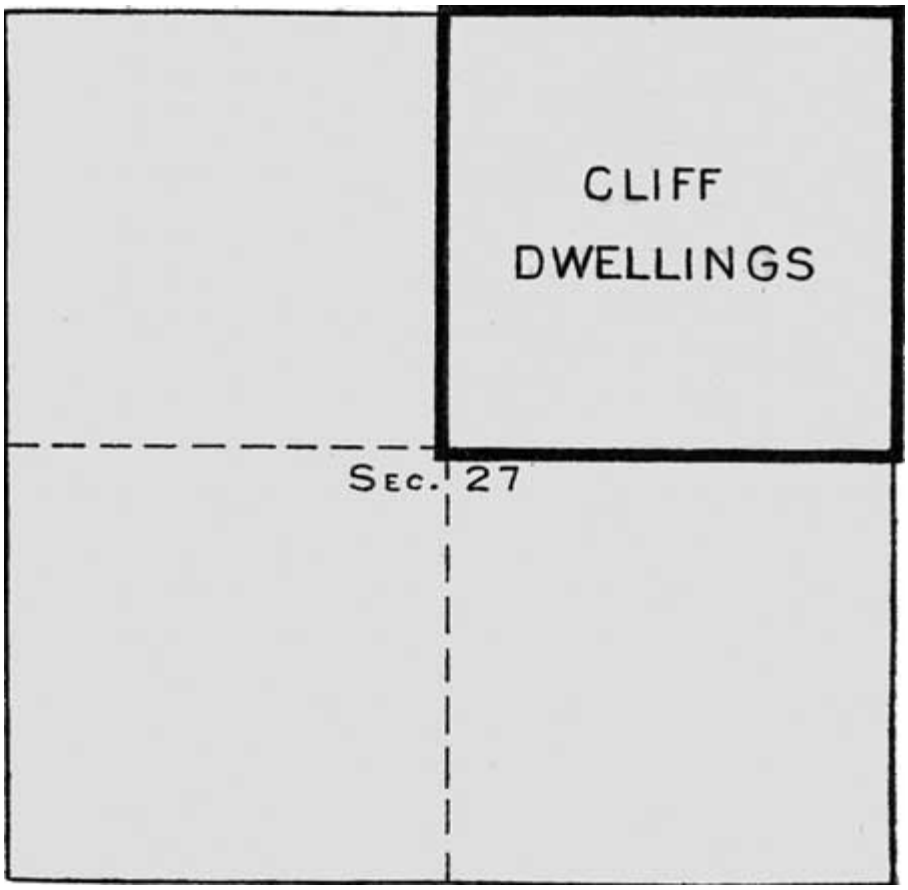


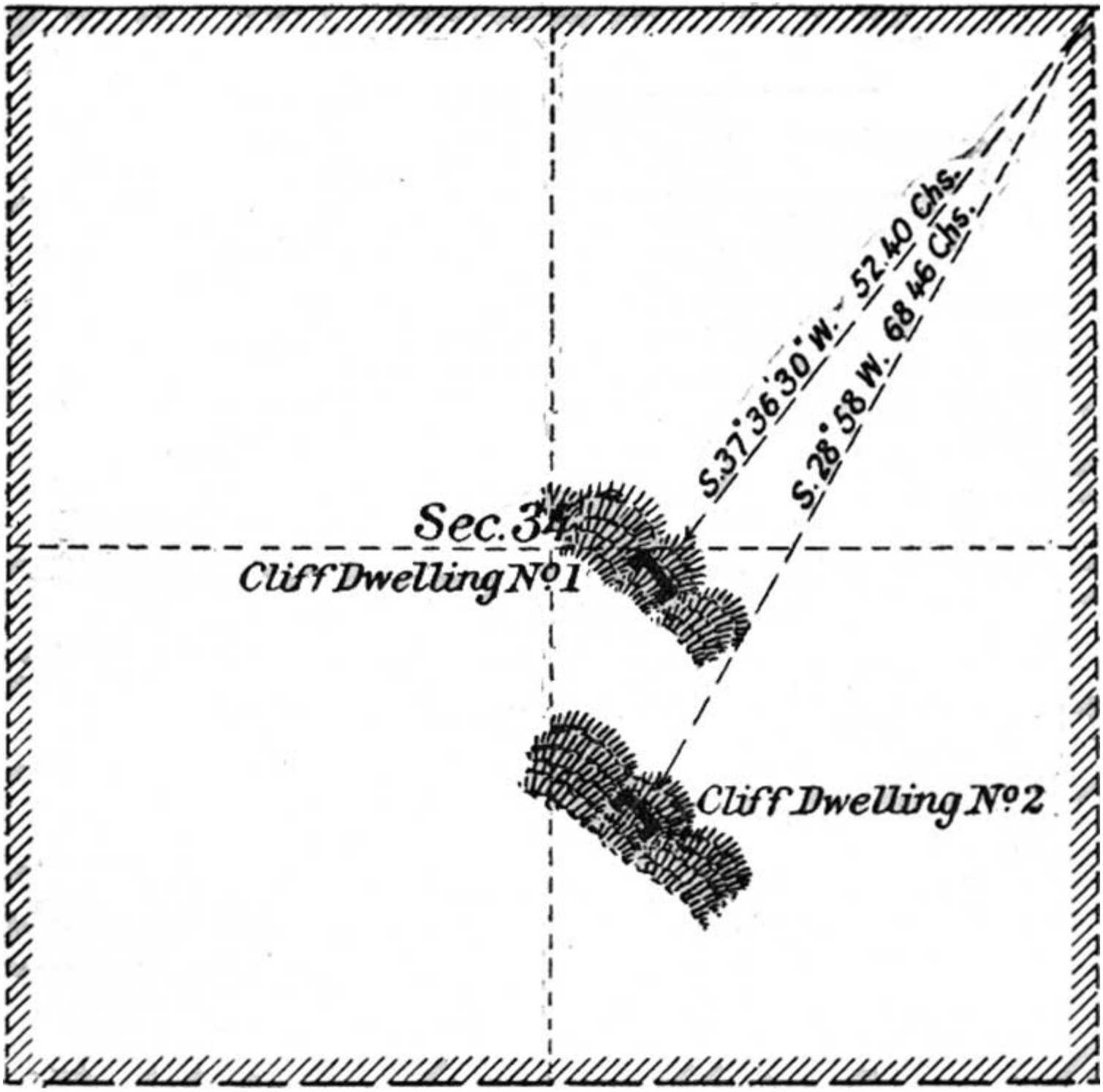
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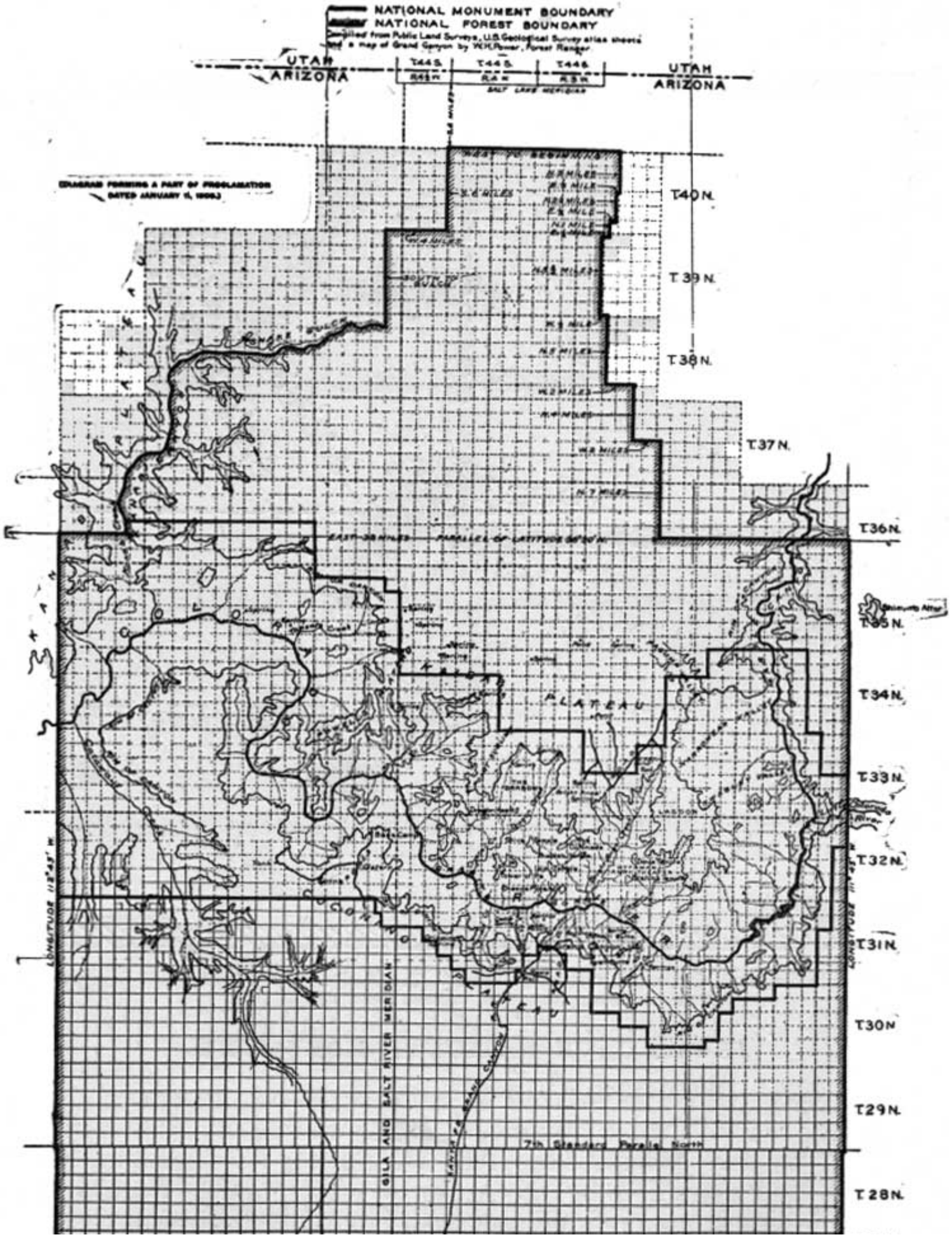


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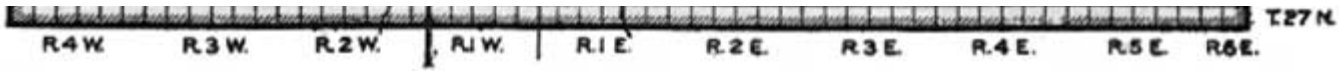

CLIFF
DWELLINGS
SEC. 27



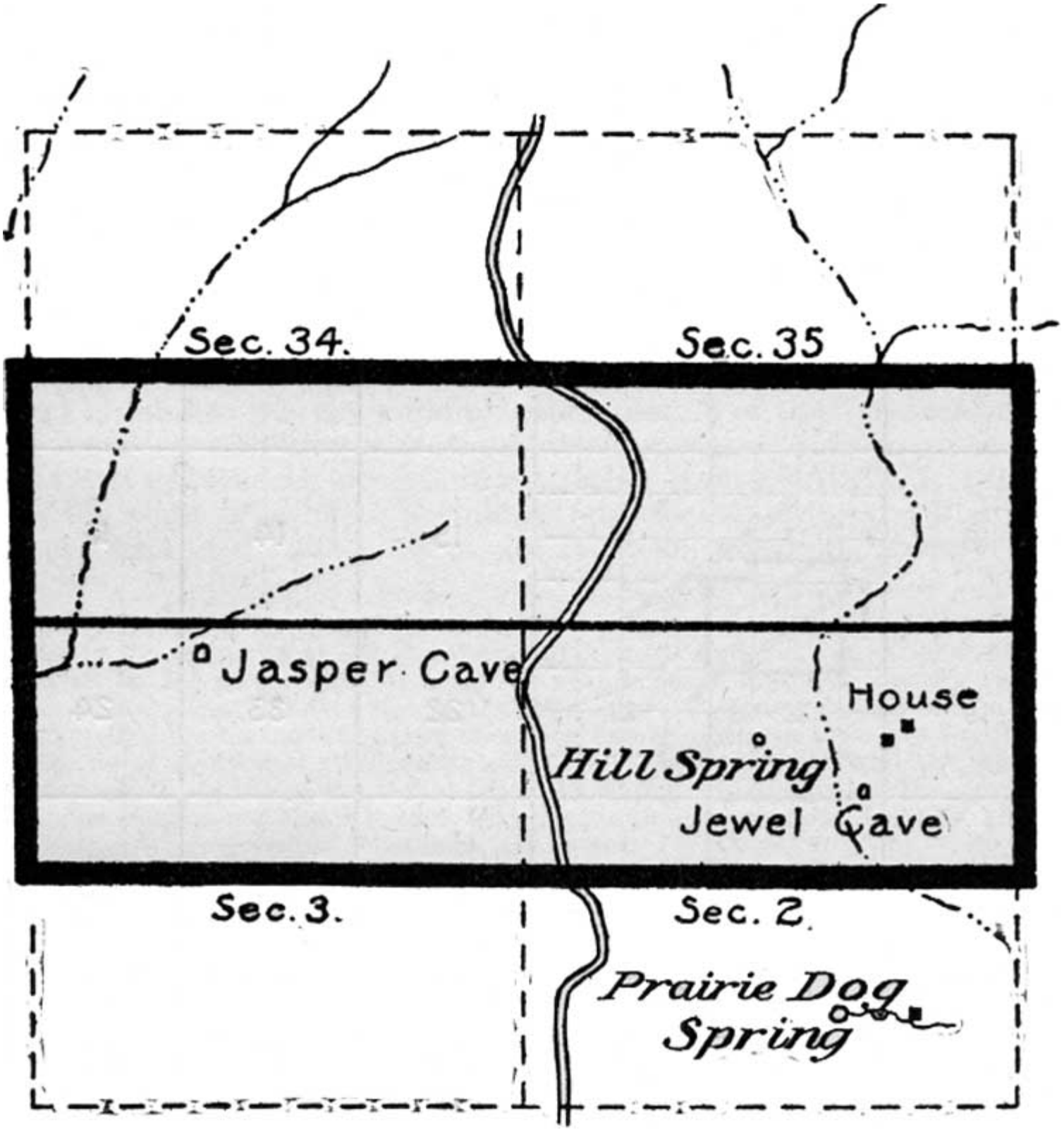
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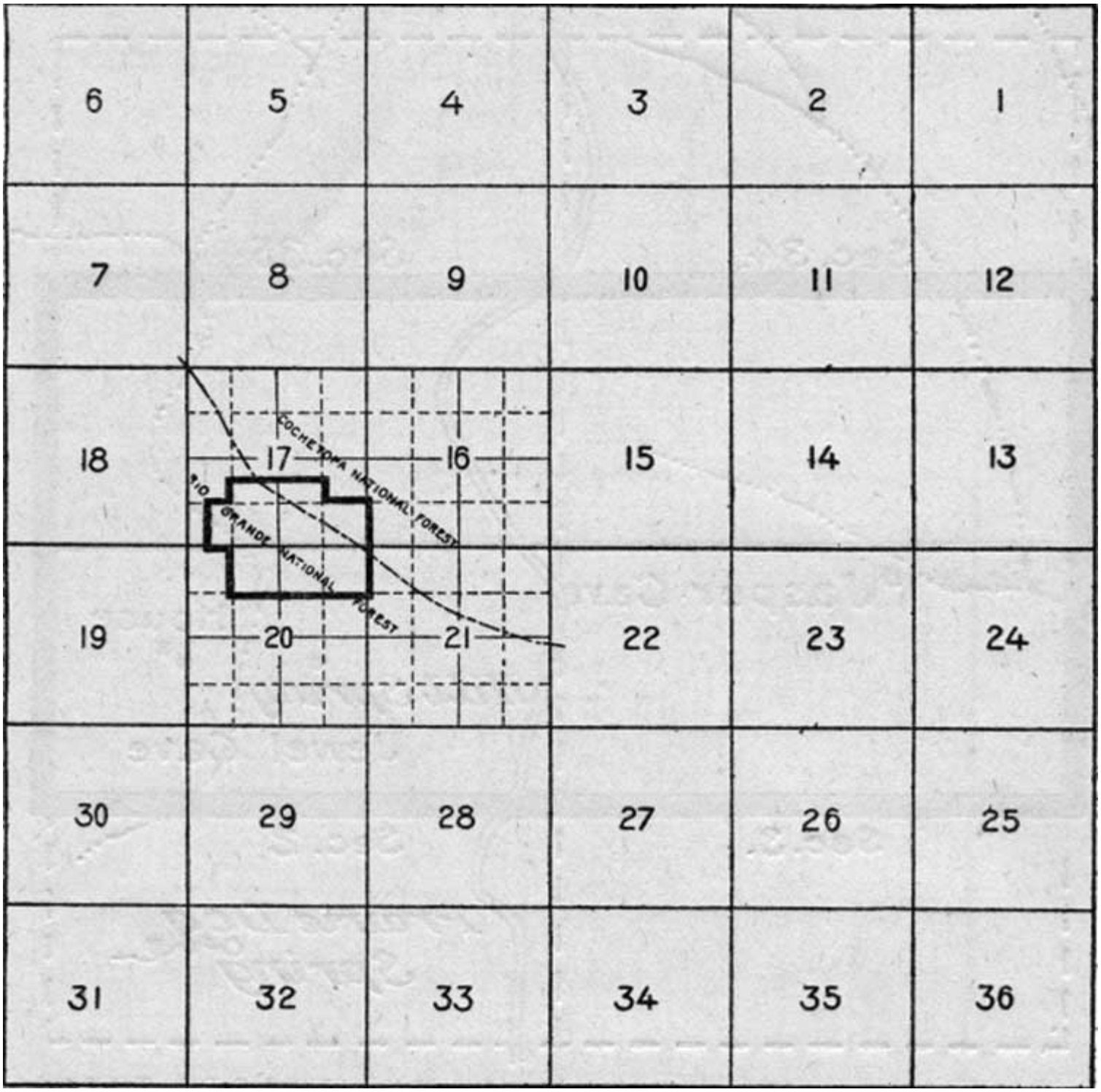


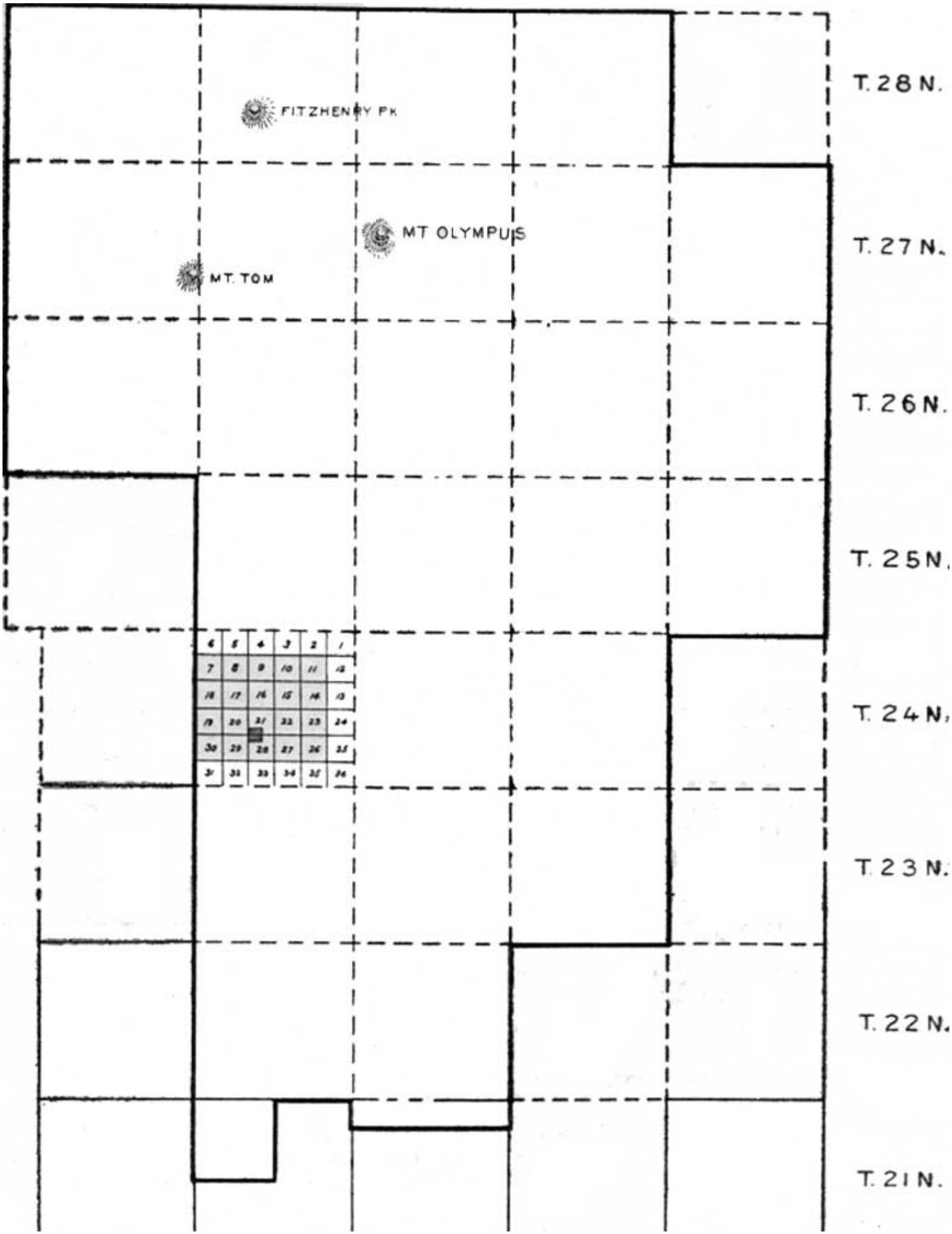
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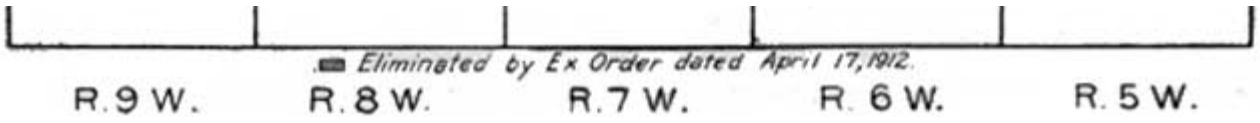


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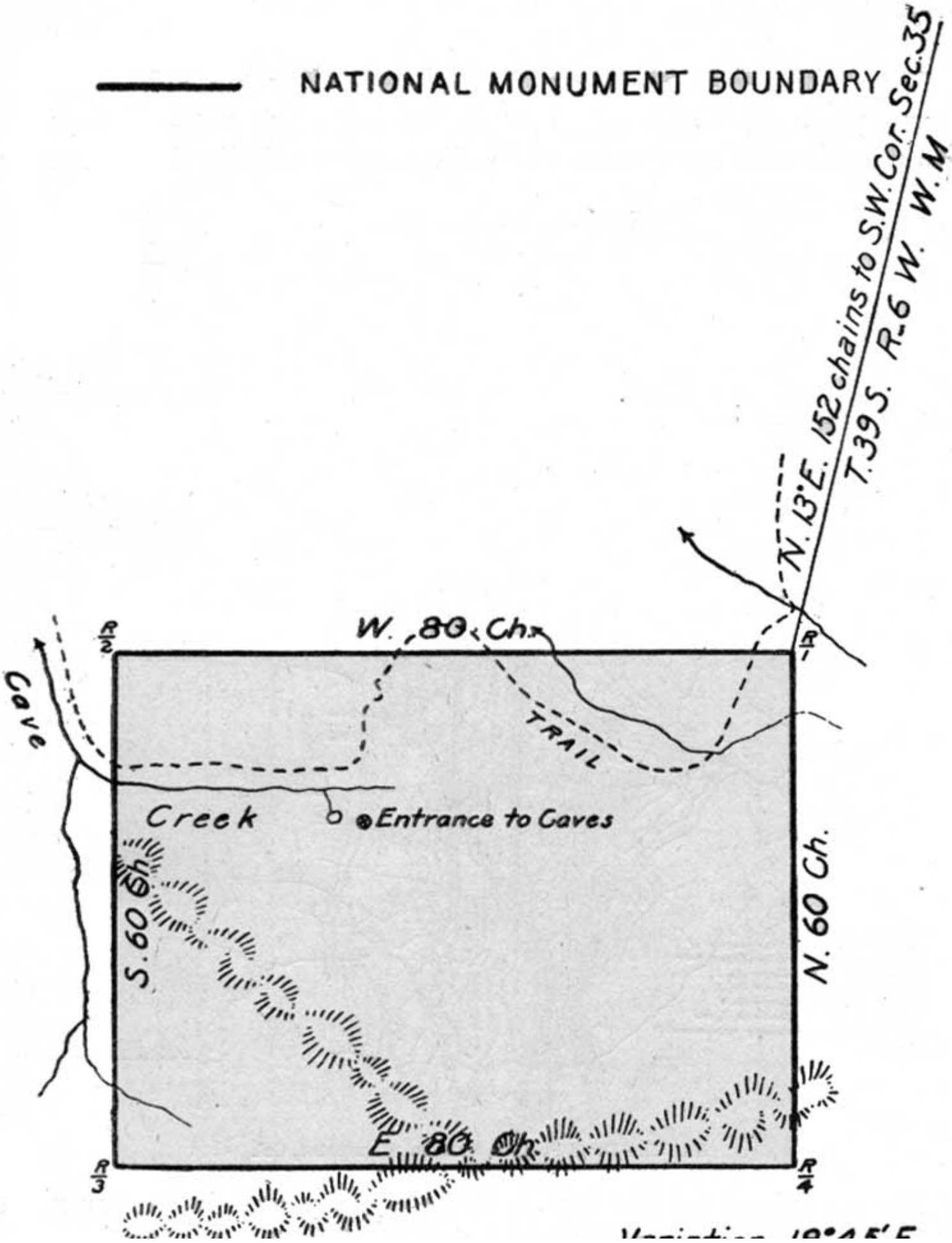

Sec. 34.
Sec. 35
Jasper Cave
House
Hill Spring
Jewel Cave
Sec. 3.
Sec. 2.
Prairie Dog Spring


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COCHETOPA NATIONAL FOREST
RIO GRANDE NATIONAL FOREST
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FITZHENRY PK
MT OLYMPUS
MT. TOM
T. 28 N.
T. 27 N.
T. 26 N.
T. 25 N.
T. 24 N.
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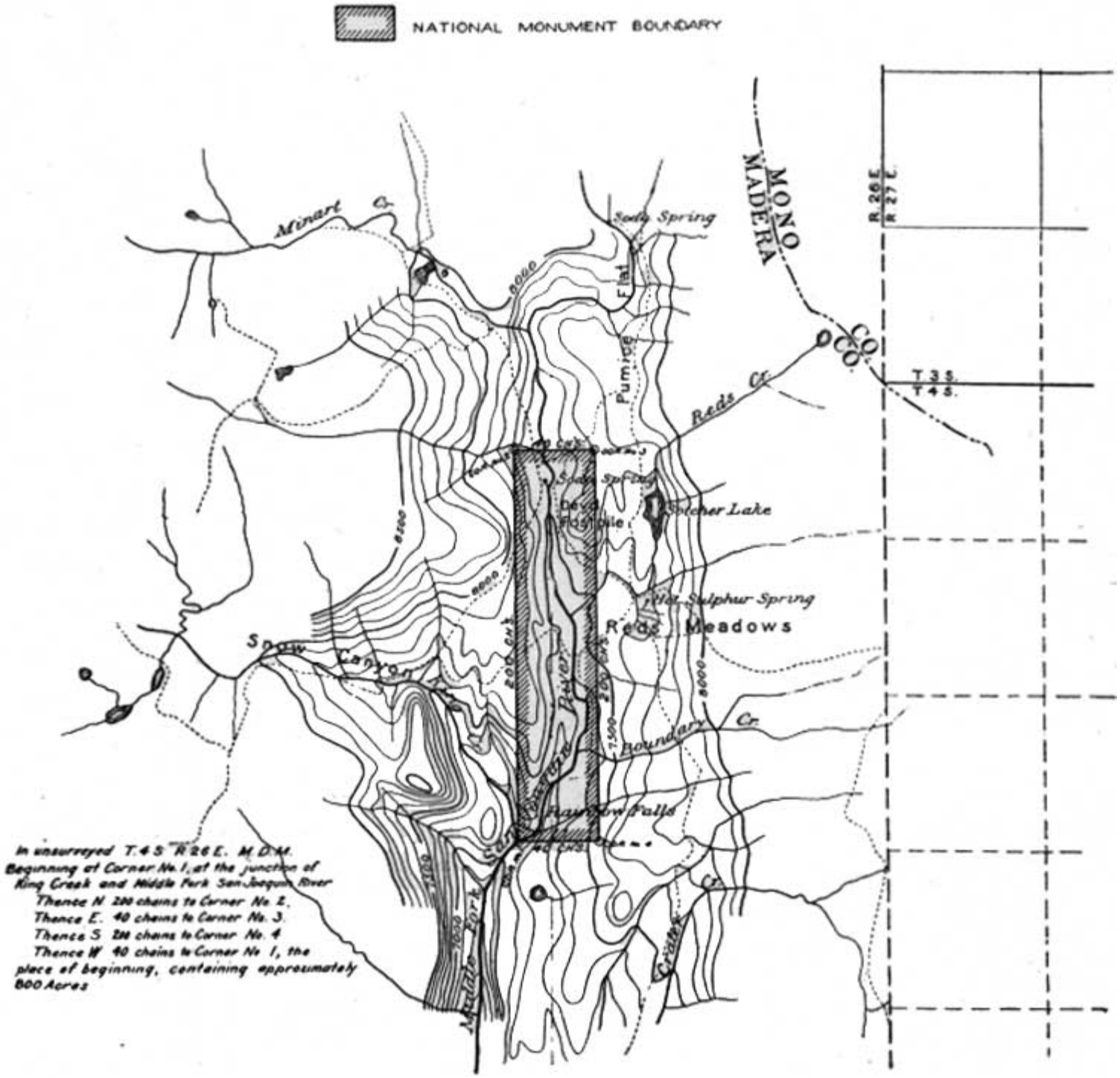


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variation 13 43 E.



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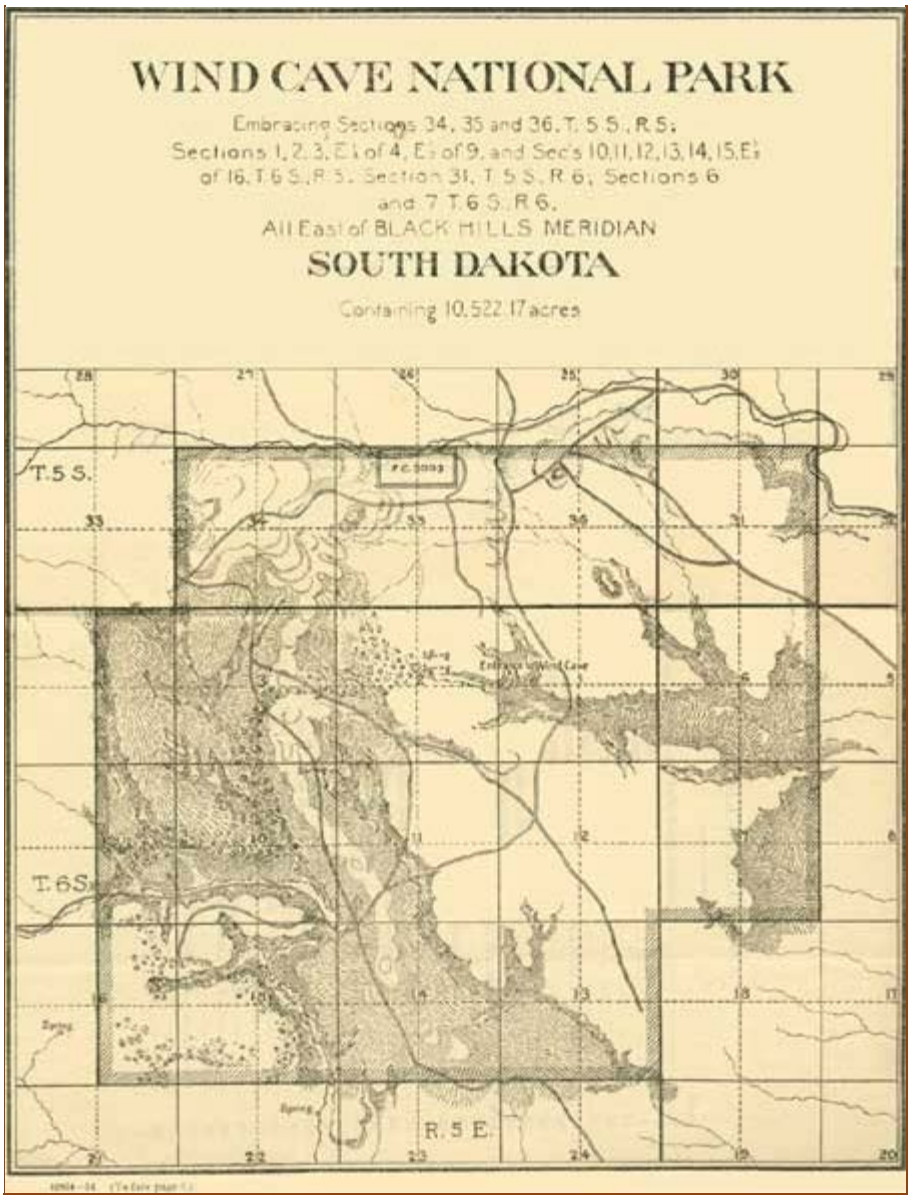
1913

WIND CAVE NATIONAL PARK.

The act of Congress approved January 9, 1903 (32 Stat., 765), reserved a tract of land containing 10,522 acres in the State of South Dakota, 12 miles east of the town of Hot Springs and about the same distance southeast of Custer, as a public park, to be known as the Wind Cave National Park.

At the time of the creation of the park there were 10 entries covering lands within the park, aggregating 1,519.15 acres. Thereafter up to 1913, the Government had secured title to all lands within the park excepting the NE. 1/4 NW. 1/4 and NW. 1/4 NE. 1/4 sec. 35, T. 5 S., R. 5 E., Black Hills meridian, embracing 80 acres, patented to Jonathan C. West on December 31, 1904. This land, however, has since been purchased by the Government from W. A. Rankin, the last owner, and now forms part of the game preserve established by the act approved August 10, 1912 (37 Stat., 293), to which reference is made hereafter.

Mr. A. C. Boland acted as superintendent of this park from May 1, 1911, until November 15, 1913, when he resigned. He was succeeded on December 2, 1913, by Mr. F. M. Dille, the present acting superintendent.



Wind Cave National Park. *(click on image for an enlargement in a new window)*

During the fiscal year ending June 30, 1913, 3,988 tourists entered the park, an increase of 789 over the preceding year, of whom 2,155 came in licensed vehicles and the remainder in private conveyances. More than a hundred privately owned automobiles passed through the park. No stock was driven through the park.

Nine permits were granted for transportation of passengers through the park, at the rate of $50 per vehicle, all of which were for use of automobiles.

The roads and bridges in the park are in good condition, but there is need of constant repair work to the roads, especially after rains.

The buildings in the park consist of superintendent's house and barn, blacksmith shop, and registration office and dressing rooms, all in good condition; also a cave house (through which entrance to the cave is effected), which requires some minor repairs. During the year the old

hotel building opposite the superintendent's house was torn down, and a registration office built on its site, the same being a frame building 20 by 40 feet, one story high, with double floor, ceiled and painted inside, shingled, painted, and sided. Within the cave the bridges, stairs, and paths are in good condition,

The park water system is in good condition, and the supply has been sufficient for all purposes. Plans have been made for a cement reservoir to be built near the superintendent's house, which when completed will permit water to be run into the house, registration office, and to any place on the grounds.

On account of lack of appropriation by Congress for maintenance of the park during the fiscal year 1913, it was impossible to do much improvement work.

A new telephone line was built by the Peoples Telephone & Telegraph Co., of Hot Springs, S. Dak., from the south boundary of the park to the superintendent's house, making it possible to have direct connection with Hot Springs and all lines connecting at that point.

A national game preserve has been established in the Wind Cave National Park under the provisions of "An act making appropriations for the Department of Agriculture for the fiscal year ending June thirtieth, nineteen hundred and thirteen," approved August 10, 1912 (37 Stat., 293), as follows:

For the establishment of a national game preserve, to be known as the Wind Cave National Game Preserve, upon the land embraced within the boundaries of the Wind Cave National Park, in the State of South Dakota, for a permanent national range for a herd of buffalo to be presented to the United States by the American Bison Society, and for such other native American game animals as may be placed therein. The Secretary of Agriculture is authorized to acquire by purchase or condemnation such adjacent lands as may be necessary for the purpose of assuring an adequate, permanent water supply and to inclose the said game preserve with a good and substantial fence and to erect thereon all necessary sheds and buildings for the proper care and maintenance of the said animals, twenty-six thousand dollars, to be available until expended.

Estimates have been submitted to Congress for protection and improvement of the Wind Cave National Park during the fiscal year commencing July 1, 1914, in total sum of $2,500, covering repairs and maintenance of roads and bridges ($500); a similar amount for improvements and repairs to the cave; improvements of grounds ($250); general repair and upkeep of the park water system ($200); for telephone service ($50); and for salary of superintendent ($1,000).

GENERAL REGULATIONS OF MARCH 30, 1912.

Pursuant to authority conferred by the act of Congress approved January 9, 1903, the following rules and regulations for the government of the Wind Cave National Park, in South Dakota, are hereby established and made public:

1. It is forbidden to remove or injure the specimens or formations in and around the Wind Cave, or to deface the same by written inscription or otherwise, or to injure or disturb in any manner or carry off any of the

mineral deposits, specimens, natural curiosities, or wonders on the Government lands within the park.

2. No person shall be permitted to enter the cave unless accompanied by the superintendent or other park employee, or by competent guides.

3. It is forbidden to cut or injure any timber growing on the park lands, or to deface or injure any Government property. Camping parties will be allowed to use dead or fallen timber for fuel.

4. Fires should be lighted only when necessary and completely extinguished when no longer required. The utmost care must be exercised at all times to avoid setting fire to the timber and grass.

5. Hunting or killing, wounding, or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

6. Fishing in any other way than with hook and line is forbidden and may be prohibited by order of the superintendent in any of the waters of the park, or limited therein to any specified season of the year, until otherwise ordered by the Secretary of the Interior. Fishing for purposes of merchandise or profit is forbidden. All fish less than 8 inches in length should at once be returned to the water with the least damage possible to the fish. Fish that are to be retained must be at once killed by a blow on the back of the head or by thrusting a knife or other sharp instrument into the head.

7. No person will be permitted to reside permanently, engage in any business, or erect buildings, etc., upon the Government lands in the park, without permission, in writing, from the Secretary of the Interior. The superintendent may grant authority to competent persons to act as guides and revoke the same in his discretion. No pack trains will be allowed in the park unless in charge of a duly registered guide.

8. Owners of patented lands within the park limits are entitled to the full use and enjoyment thereof; the boundaries of such lands, however, must be determined, and marked and defined, so that they may be readily distinguished from the park lands. While no limitations or conditions are imposed upon the use of such private lands so long as such use does not interfere with or injure the park, private owners must provide against trespass by their stock or cattle, or otherwise, upon the park lands, and all trespasses committed will be punished to the full extent of the law. Stock may be taken over the park lands to patented private lands with the

written permission and under the supervision of the superintendent, but such permission and supervision are not required when access to such private lands is had wholly over roads or lands not owned or controlled by the United States.

9. Allowing the running at large, herding, or grazing of cattle or stock of any kind on the Government lands in the park, as well as the driving of such stock or cattle over same, is strictly forbidden, except where authority therefor has been granted by the superintendent. All cattle or stock found trespassing on the park lands will be impounded and disposed of as directed in regulations approved March 30, 1912.

10. No drinking saloon or barroom will be permitted upon Government lands in the park.

11. Private notices or advertisements shall not be posted or displayed on the Government lands within the reservation, except such as may be necessary for the convenience and guidance of the public.

12. Persons who render themselves obnoxious by disorderly conduct or bad behavior, or who violate any of the foregoing rules, will be summarily removed from the park and will not be allowed to return without permission, in writing, from the Secretary of the Interior or the superintendent of the park.

No lessee or licensee shall retain in his employ any person whose presence in the park shall be deemed and declared by the superintendent to be subversive of the good order and management of the reservation.

13. Any person who violates any of the foregoing regulations will be deemed guilty of a misdemeanor and, upon conviction, be fined not more than $1,000, or be imprisoned not more than 12 months, or both, in the discretion of the court, as provided by the act creating the park.

14. The superintendent designated by the Secretary is hereby authorized and directed to remove all trespassers from the Government lands in the park and enforce these rules and regulations and all the provisions of the act of Congress aforesaid.

REGULATIONS OF MARCH 30, 1912, GOVERNING THE IMPOUNDING AND DISPOSITION OF LOOSE LIVE STOCK.

Horses, cattle, or other domestic live stock running at large or being herded or grazed on Government lands in the Wind Cave National Park without authority therefor will be taken up and impounded by the superintendent, who will at once give notice thereof to the owner, if known. If the owner is not known, notice of such impounding, giving a description of the animal or animals, with the brands thereon, will be posted in six public places inside the park and in two public places outside the park. Any owner of an animal thus impounded may, at any time before the sale thereof, reclaim the same upon proving ownership and paying the cost of notice and all expenses incident to the taking up and detention of such animal, including the cost of feeding and caring for the same. If any animal thus impounded shall not be reclaimed within 30 days from notice to the owner or from the date of posting notices, it shall

be sold at public auction at such time and place as may be fixed by the superintendent after 10 days' notice, to be given by posting notices in six public places in the park and two public places outside the park, and by mailing to the owner, if known, a copy thereof.

All money received from the sale of such animals and remaining after the payment of all expenses incident to the taking up, impounding, and selling thereof shall be carefully retained by the superintendent in a separate fund for a period of six months, during which time the net proceeds from the sale of any animal may be claimed by and paid to the owner upon the presentation of satisfactory proof of ownership, and if not so claimed within six months from the date of sale such proceeds shall be turned into the Wind Cave National Park fund.

The superintendent shall keep a record in which shall be set down a description of all animals impounded, giving the brands found on them, the date and locality of the taking up, the date of all notices and manner in which they were given, the date of sale, the name and address of the purchaser, the amount for which each animal was sold and the cost incurred in connection therewith, and the disposition of the proceeds.

The superintendent will, in each instance, make every reasonable effort to ascertain the owner of animals impounded and to give actual notice thereof to such owner.

SULLYS HILL PARK.

This reservation, set aside by Executive proclamation dated June 2, 1904, under the act approved April 27, 1904 (33 Stat., 319), contains about 780 acres. It is located on the south shore of Devils Lake, N. Dak., having about 2 miles of shore line, with its western boundary 1 mile east of the Fort Totten Indian School. Inasmuch as no appropriation has been made for the care and protection of this reservation Mr. Charles M. Ziebach, in charge of the Indian industrial school (Fort Totten), has been continued as acting superintendent, and required to exercise the necessary supervision and control over the same until appropriation is made therefor by Congress.

The tract is well wooded and has an ample supply of water and many rugged hills, among which, on the western boundary, lies what is known as Sullys Hill. In the southwestern part is a small body of water known as Sweet Water Lake, west of which the surface is generally level and the soil good. The acting superintendent in his report for 1913 states:

No appropriation has been made by Congress for the improvement or maintenance of this park since the date of its creation, and nothing has been done toward building permanent roads or otherwise making this site attractive. It is estimated that an aggregate of 300 people visited this park during the past year, a very small portion of them spending a single night there, as there are no other attractions than its natural beauties. By means of a small appropriation this park could be made one of the most beautiful and attractive spots in the State of North Dakota, as its natural beauties can not be excelled. All that is necessary would be to make some roads so as to be easily accessible to the public, as but a small

space bordering on a fresh-water lake is now frequented by the public as a picnic grounds. A portion of the park should be fenced and stocked for a game preserve, as it abounds with a natural growth of timber and grass. There should be erected at this place a suitable building for residence of a keeper, or guard. There also should be some work done in the shape of grubbing out undergrowth, etc., so as to make the place more accessible. This park is one of the beauty spots of North Dakota, and should not be left unimproved.

Estimates for the fiscal year 1915 have been submitted by the department to Congress for the protection and improvement of this park, covering employment of a guard ($600); for material and labor in walling up springs, ($500); and for labor in grubbing out underbrush around Sweet Water Lake and shore line of Devils Lake, ($400).

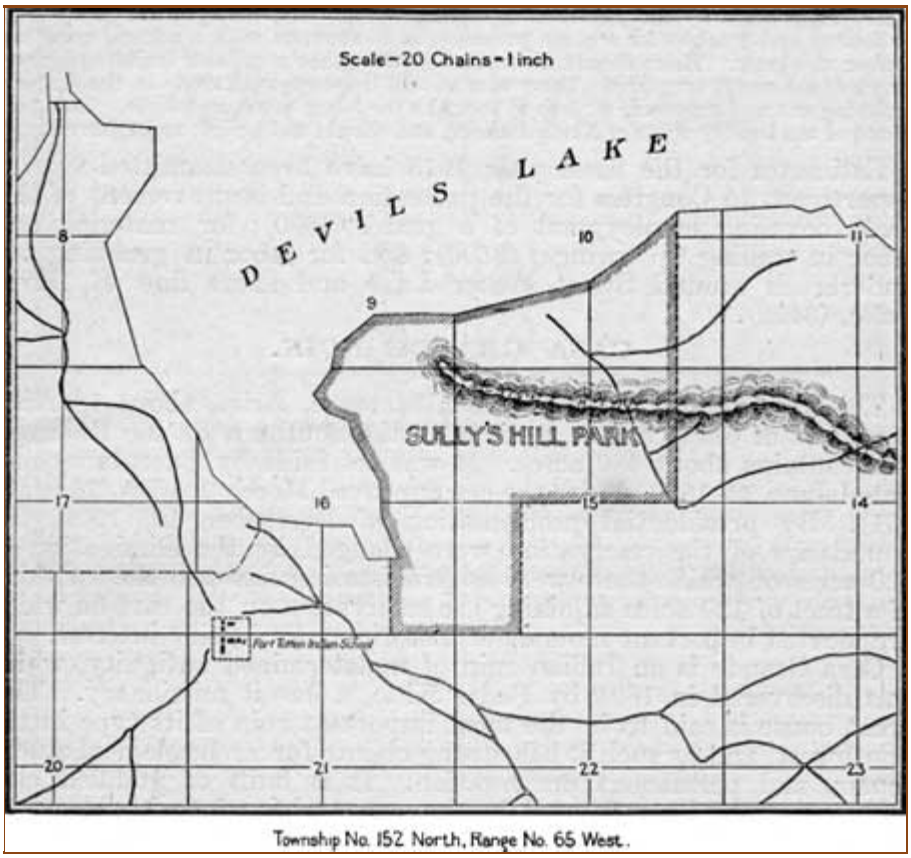


FIG. 1.—Map of Sullys Hill Park. *(click on image for an enlargement in a new window)*

CASA GRANDE RUIN.

This reservation is located near Florence, Ariz., about 18 miles northeast of Casa Grande station, on the Southern Pacific Railroad, and contains about 480 acres. It was set aside by Executive order dated June 22, 1892, under the act approved March 2, 1889 (25 Stat., 961). By presidential proclamation of December 10, 1909, the boundaries of the reservation were changed by the elimination of 120 acres on which there were no prehistoric ruins and the inclusion of a tract of 120 acres adjoining the reservation on the east on which are located important mounds of historic

and scientific interest.

Casa Grande is an Indian ruin of undetermined antiquity, which was discovered in 1694 by Padre Kino, a Jesuit missionary. This great house is said to be the most important ruin of its type in the Southwest, and as such it has strong claims for archaeological study, repair, and permanent preservation. It is built of puddled clay molded into walls and dried in the sun, and is of perishable character. The main building was originally five or six stories high and covered a space 59 feet by 43 feet 3 inches. The walls have been gradually disintegrating, owing to the action of the elements. A corrugated iron roof has heretofore been erected over this building to protect it, so far as practicable, from further decay.

Surrounding Casa Grande proper is a rectangular walled inclosure or "compound," having an area of about 2 acres. In this inclosure, which has been called Compound A, excavations conducted under the Bureau of American Ethnology have resulted in the uncovering of a number of buildings or clusters of rooms, and others are known to exist, but have not been excavated. Two other compounds were discovered and designated, respectively, Compound B and Compound C, but the latter has not been excavated and is still in the form of a mound. These three compounds together constitute what is known as the Casa Grande group of ruins. As a result of this work, conducted under the Bureau of American Ethnology, the points of interest to visitors have been materially augmented. The ground plan of the ruin was increased by some 58 rooms, a number of plazas and surrounding walls, making the total number of rooms now open on the ground floor 100.

Mr. Frank Pinkley, the custodian, who resides on the reservation, reports the number of visitors during 1913 to have been larger than for any year during the past 12 years. Mr. Pinkley was supplied in June with a quantity of the department's circular of general information relating to the ruin, which is an abstract from a detailed report on the ruin by Prof. J. W. Fewkes, published in the Twenty-eighth Annual Report of the Bureau of American Ethnology. It is anticipated that, due to distribution of this circular, the number of visitors during 1914 will be largely increased.

The department has submitted to Congress estimates for the fiscal year beginning July 1, 1914, for painting of protecting roof of the main ruin, $125; repairing curbing of well, $75; and for providing windmill or engine for lifting water for visitors' use, $300.

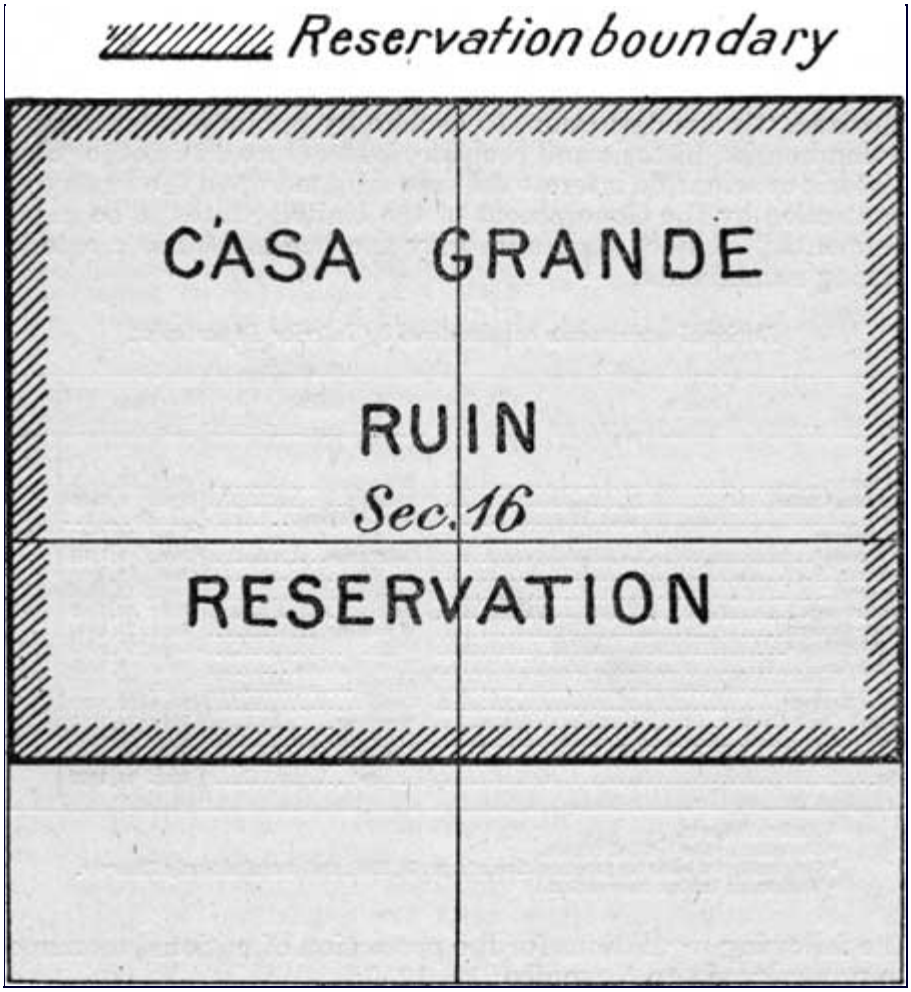


FIG. 2.—Casa Grande Ruin Reservation, Ariz., embracing the NW. 1/4, the NE. 1/4, the N. 1/2 of the SW. 1/4, and the N. 1/2 of the SE. 1/4 of sec. 16, T. 5 S., R. 8 E., Gila and Salt River meridian; set aside by Executive order of June 22, 1892, under act of March 2, 1889.

NATIONAL MONUMENTS AND PRESERVATION OF AMERICAN ANTIQUITIES.

GENERAL STATEMENT.

By the act approved June 8, 1906, entitled "An act for the preservation of American antiquities," the President of the United States is authorized "in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments." Under such authority the President has created the following monuments:

National monuments administered by Interior Department.

Name.	State.	Date.	Area.
			Acres.

Devils tower	Wyoming	Sept. 24, 1906	1,152
Montezuma Castle	Arizona	Dec 8, 1906	160
El Morro	New Mexico	do	160
Chaco Canyon	do	Mar. 11, 1907	[1]20,629
Muir Woods[2]	California	Jan. 9, 1908	295
Pinnacles	do	Jan. 16, 1908	2,080
Tumacacori	Arizona	Sept. 15, 1908	10
Mukuntuweap	Utah	July 31, 1909	[1]15,840
Shoshone Cavern	Wyoming	Sept. 21, 1909	210
Natural bridges[3]	Utah	Sept. 25, 1909	[1]2,740
Gran Quivira	New Mexico	Nov. 1, 1909	[1]160
Sitka	Alaska	Mar. 23, 1910	157
Rainbow Bridge[4]	Utah	May 30, 1910	160
Lewis and Clark Cavern	Montana	May 16, 1911	160
Colorado	Colorado	May 24, 1911	13,883
Petrified forest	Arizona	July 31, 1911	25,625
Navajo	do	Mar. 14, 1912	360

[1]Estimated area.

[2]Donated to the United States.

[3]Originally set aside by proclamation of Apr. 16, 1908, and contained only 120 acres.

[4]Within an Indian reservation.

The following regulations for the protection of national monuments were promulgated on November 19, 1910:

1. Fires are absolutely prohibited.

2. No firearms are all owed.

3. No fishing permitted.

4. Flowers, ferns, or shrubs must not be picked, nor may any damage be done to the trees.

5. Vehicles and horses may be left only at the places designated for this purpose.

6. Lunches may be eaten only at the spots marked out for such use, and all refuse and litter must be placed in the receptacles provided.

7. Pollution of the water in any manner is prohibited; it must be kept clean enough for drinking purposes.

8. No drinking saloon or barroom will be permitted.

9. Persons rendering themselves obnoxious by disorderly conduct or bad behavior, or who may violate any of the foregoing rules, will be summarily removed.

NAMES AND ADDRESSES OF OFFICERS HAVING SUPERVISION OF NATIONAL MONUMENTS.

George Hayworth, new customhouse building, San Francisco, Cal.:
Muir Woods National Monument, Cal.
Pinnacles National Monument, Cal.

Gratz W. Helm, Federal building, Los Angeles, Cal.:
Montezuma Castle National Monument, Ariz.
Petrified Forest National Monument, Ariz.
Tumacacori National Monument, Ariz.
Navajo National Monument, Ariz.

George E. Hair, Federal building, Salt Lake City, Utah:
Mukuntnweap National Monument, Utah.
Natural Bridges National Monument, Utah.
Rainbow Bridge National Monument, Utah.

Theo N. Espe, Santa Fe, N. Mex.:
El Morro National Monument, N. Mex.
Chaco Canyon National Monument, N. Mex.
Gran Quivira National Monument, N. Mex.[1]

Ira Lantz, Helena, Mont.,
Lewis and Clark Cavern National Monument, Mont.

Adelbert Baker, Cheyenne, Wyo.:
Devils Tower National Monument, Wyo.
Shoshone Cavern National Monument, Wyo.

A. Christensen, special agent in charge field service, Alaska (307 Federal building, Seattle, Wash.), Sitka National Monument, Alaska.

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[1]By arrangement with the Secretary of Agriculture, the district forester of the Manzano National Forest, with headquarters at Albuquerque, N. Mex., has taken charge of patrol and protection of the Gran Quivira National Monument, as the Interior Department has no field officer in the immediate vicinity of the monument.

One new monument, Cabrillo National Monument, was created October 14, 1913, at Point Loma, of a small tract of land containing 21,910 square feet which lies within the military reservation at Fort Rosecrans, Cal., the same being of historic interest because of the discovery of the territory now partly embraced in the State of California, by Juan Rodriguez Cabrillo, who at this point first sighted land on September 28, 1542. This monument is under the jurisdiction of the War Department.

Administrative conditions.—The supervision of these various monuments has, in the absence of any specific appropriation for their protection and improvement, necessarily been intrusted to the field officers of the department having charge of the territory in which the several monuments are located.

Administrative conditions continue to be unsatisfactory, as no appropriation of funds has yet been made available for this important, protective, and preservative work. Such supervision as has been possible in the cases of a few monuments only has been wholly inadequate and has not prevented vandalism, unauthorized exploitation or spoliation of relics found in those prehistoric ruins, whose preservation is contemplated by the passage of the act of June 8, 1906. An estimate in the sum of $5,000 for protection of these monuments was submitted last year, but no appropriation was made.

An estimate in similar amount for preservation, development, administration, and protection of these national monuments was submitted on December 15, 1913 (through the Secretary of the Treasury), by the Department of the Interior to Congress, and is incorporated in House Document No. 506, Sixty-third Congress, second session. This fund is needed, not so much for the purpose of preserving by restoration the objects reserved in the national monuments as to prevent the removal of valuable relics and vandalism. Monuments suffering from these causes should be provided with a custodian or superintendent, and in this way a small general appropriation can be made most useful and its expenditure will be wholly in the interest of the public. The protection and preservation of the national monuments as public reservations are of great interest and importance because a great variety of objects, historic, prehistoric, and scientific in character, are thus preserved for public use intact, instead of being exploited by private individuals for gain and their treasures scattered. These reserves should be administered in connection with the national parks, which they strongly resemble. It would be difficult to define one in terms that would exclude the other. The renewal of the estimate for a small appropriation has been made for the purpose of keeping this class of reserves intact until such time as Congress shall authorize the creation of some administrative unit which shall take over both the parks and monuments and administer them under a general appropriation.

National monuments under other departments.—The following national monuments are not administered by the Secretary of the Interior:

National monuments administered by the Department of Agriculture.

Name.	State.	Date.	Area.
			Acres.
Cinder Cone	California	May 6, 1907	[1]5,120
Lassen Peak	do	do	[1]1,280
Gila Cliff dwellings	New Mexico	Nov. 16, 1907	160
Tonto	Arizona	Dec. 19, 1907	[1]640
Grand Canyon	do	Jan. 11, 1908	[1]806,400
Jewel Cave	South Dakota	Feb. 7, 1908	[1]1,280
Wheeler	Colorado	Dec. 7, 1908	300

Oregon Caves	Oregon	July 12, 1909	480
Devil Postpile	California	July 6, 1911	860
Mount Olympus	Washington	Apr. 17, 1912	[1]608,480

[1]Estimated area.

National monuments administered by the War Department.

Name.	State.	Date.	Area.
			Acres.
Big Hole Battle Field	Montana	June 23, 1910[1]	4
Cabrillo	California	Oct. 14, 1913[2]	1

[1]Set aside by Executive order.

[2]Set aside by presidential proclamation.

PERMITS FOR ARCHEOLOGICAL EXPLORATION.

The uniform rules and regulations promulgated by the Secretaries of the Interior, Agriculture, and War, under date of December 28, 1906, to carry into effect the general provisions of the act for the preservation of American antiquities provides (par. 3) that—

> Permits for the excavation of ruins, the excavation of archaeological sites, and the gathering of objects of antiquity will be granted, by the respective Secretaries having jurisdiction, to reputable museums, universities, colleges, or other recognized scientific or educational institutions, or to their duly authorized agents.

On July 11, 1913, a permit was granted by the department to Prof. Byron Cummings, of the University of Utah, to make examinations and excavations as continuation of explorations under a similar permit granted him by the department on June 26, 1912, within the Navajo National Monument, and in the Navajo and Piute Indian Reservations as well as on lands 30 miles northwest of Bluff, Utah.

On June 18, 1913, another permit was granted by the department to Prof. F. W. Putnam, honorary director of the Peabody Museum, Harvard University, to make examination and excavation of ruins in the Chinlee Valley, west and northwest of Canyon del Muerto, Ariz., on behalf of the Peabody Museum. This locality is in the vicinity of the Navajo National Monument, and approaches the region of Prof. Cummings's explorations.

Applications for permit for continuation of this work during 1914 in the regions indicated have been filed with the department by Profs. Cummings and Putnam.

Permits were issued on October 1, 1912, and July 11, 1913, respectively, to Prof. G. F. Kay, of the State University of Iowa, and Mr. Wm. C. Mills, of the Ohio State Archaeological and Historical Society, to remove

specimens of silicified wood to an extent not exceeding 500 pounds from the Petrified Forest National Monument in Arizona.

On July 26, 1913, permit was granted Mr. F. W. Hodge, of the Bureau of American Ethnology, Smithsonian Institution, to make a reconnoissance of the Chaco Canyon National Monument in New Mexico, to make photographs of the monument, and to gather collections among its ruins for the benefit of the United States National Museum in Washington.

MUIR WOODS NATIONAL MONUMENT.

On December 31, 1907, the Secretary of the Interior, for and on behalf of the United States, accepted from William Kent and his wife, Elizabeth Thatcher Kent, of Chicago, Ill., in accordance with the act of Congress approved June 8, 1906, entitled "An act for the preservation of American antiquities," a deed conveying to the United States the following-described land, situate in Marin County, Cal.:

Beginning at a stake, A. 7, driven in the center of the road in Redwood Cañon and located by the following courses and distances from the point of commencement of the tract of land, which was conveyed by the Tamalpais Land and Water Company to William Kent by a deed dated August 29th, 1905, and recorded in the office of the county recorder of Marin County, California, Book 95 of Deeds at page 58, to wit: North eighteen degrees thirty-two minutes, east two hundred thirty-two and sixty-four hundredths feet, north sixty-six degrees thirty minutes, west one hundred sixty-seven and thirty-four hundredths feet, north eighty-six degrees twenty-five minutes, west ninety-eight and sixty-two hundredths feet, north seventy degrees no minutes, west two hundred forty-one and seven hundredths feet, north fifty-seven degrees twenty-nine minutes, west one hundred seventy-eight and three-hundredths feet, north forty-six degrees twenty-two minutos, west two hundred thirty-five and thirty-nine hundredths feet, and north twenty-four degrees twenty-five minutes, west two hundred twenty-five and fifty-six hundredths feet; thence from said stake, A. 7, the point of beginning, south fifty-four degrees nineteen minutes, west fourteen hundred eighty-two and seven-tenths feet to Station A. 8, from which Station 4 of the survey of the tract of land conveyed to William Kent as aforesaid bears south fifty-four degrees nineteen minutes, west three hundred ten feet distant; thence from said Station A. 8 north forty-seven degrees thirty minutes, west twenty-six hundred eighty feet; thence due west six hundred fifty and eight-tenths feet; thence north fifty-two degrees thirty minutes, west eleven hundred feet; thence north nineteen degrees forty-five minutes, west ten hundred fifty-eight and four-tenths feet to Station A. 12, from which Station 16 of the survey of the tract of land conveyed to William Kent as aforesaid bears south eighty-three degrees forty-two minutes, west three hundred ten feet distant; thence north eighty-three degrees forty-two minutes, east thirty-one hundred nine and two-tenths feet; thence north fifty-five degrees twenty-eight minutes, east fifteen hundred fifty feet to an iron bolt, three-quarters of an inch in diameter and thirty inches long, Station 14; thence south seventeen degrees eighteen minutes, east twenty-eight hundred twenty and nine-tenths feet; thence south four degrees ten minutes, east nine hundred thirty feet to a stake, A. 16, driven in the center of a graded road; and thence south forty-five degrees seventeen minutes, west two hundred ninety-eight and five-tenths feet to said stake A. 7, the place of beginning. Containing an area of two hundred ninety-five acres, a little more or less.

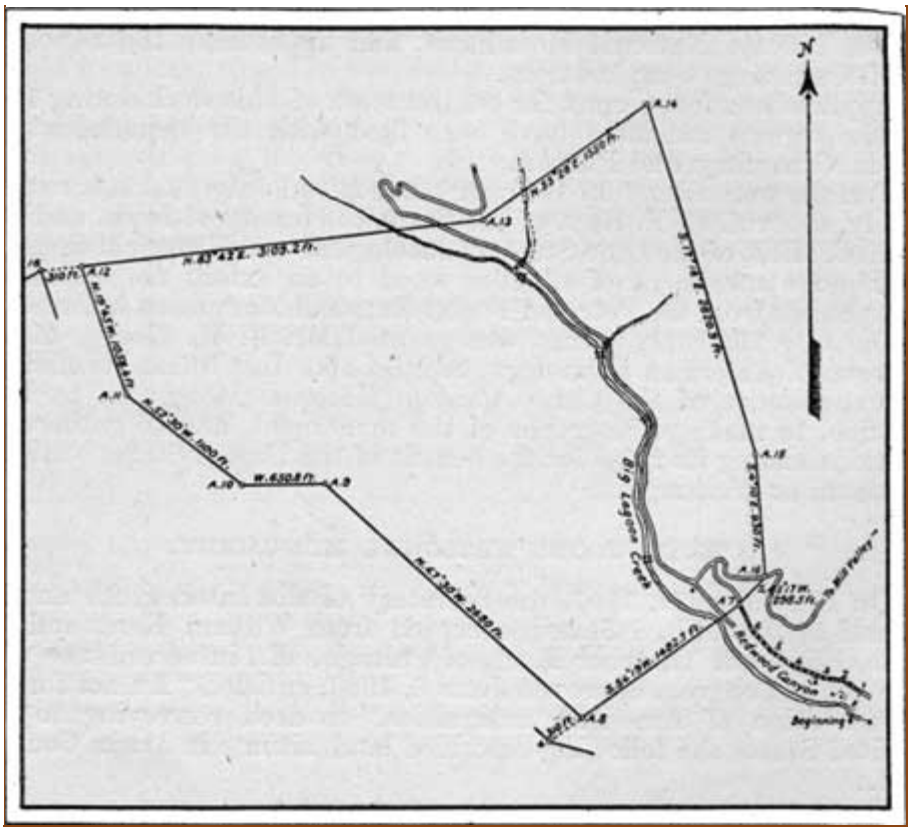


FIG. 3.—Muir Woods National Monument, Cal., in T. 1 N., R. 6 W., Mount Diablo meridian; created January 9, 1908. *(click on image for an enlargement in a new window)*

On January 9, 1908, the President, by virtue of the power and authority vested in him by section 2 of said act, declared, proclaimed, and set apart the lands described as a "national monument to be known and recognized as Muir Woods National Monument." The Secretary of the Interior had, prior to the date last mentioned, withdrawn the lands from entry or sale.

On September 10, 1908, the department prescribed regulations as follows for the government and protection of said monument:

The following rules and regulations for the government of the Muir Woods National Monument, in the State of California, set side under the provisions of the act of Congress approved June 8, 1906, are hereby established and made public pursuant to the authority conferred by said act:

1. Fires are absolutely prohibited.

2. No firearms allowed.

3. No fishing permitted.

4. Flowers, ferns, or shrubs must not be picked, nor may any damage be done to the trees.

5. Vehicles and horses may be left only at the places designated for this purpose.

6. Lunches may be eaten only at the spots marked out for such use, and all refuse and litter must be placed in the receptacles provided.

7. Pollution of the water in any manner is prohibited. It must be kept clean enough for drinking purposes.

8. No drinking saloon or barroom will be permitted.

9. Persons rendering themselves obnoxious by disorderly conduct or bad behavior, or who may violate any of the foregoing rules, will be summarily removed.

While the sundry civil act approved May 27, 1908 (35 Stat., 317), was pending before Congress attention was called to the fact that no provision was made for the salaries of custodians or for other protection of national monuments, as recommended in the estimates for these services, and that the department would be embarrassed in its efforts to protect monuments from vandalism and unauthorized exploration and spoliation because of a lack of funds. The department had recommended an appropriation of $5,000 for these purposes. No appropriation, however, was made by Congress for the purpose. On July 11, 1910, Andrew Lind, of California, was appointed custodian of the Muir Woods National Monument, at a salary of $900 per annum, payable from the appropriation "Protection of public lands and timber," and he is still in charge.

These lands consist of one of the most noted redwood groves in the State of California, and were held in private ownership by Mr. Kent. The tract is of great scientific interest, contains many redwood trees which have grown to a height of 300 feet and have a diameter at the butt of 18 feet or more. It is located in a direct line about 7 miles from San Francisco, Cal., and is in close proximity to a large and growing suburban population.

In Mr. Lind's report for the year he states:

During the fiscal year 1913 the amount of $972.50 was expended on account of the Muir Woods National Monument, the entire amount being expended in payment for services of the custodian and his assistant. Both have been engaged exclusively in patrolling the park, enforcing the rules and regulations governing national monuments, and in removing fallen trees, branches, etc., from roads and trails. Is is estimated that approximately 40,000 people visited the park during the fiscal year 1913.

The roads and trails are in fair condition, with the exception of the main road which, for the most part of it, needs to be filled with gravel. The brush cleaned from the fire lines during June, 1912, was burned without additional expense during the months of January and February, 1913. During the month of June, 1913, Muir Inn, which was situated about one-fourth mile from Muir Woods, was destroyed by fire. Previous to the fire there was a telephone line between Muir Inn and the house occupied by the custodian, the instruments at both ends of the line being owned by the Government. The instrument installed in Muir Inn was destroyed and there is now no telephone connection to Muir Woods.

It is very important that the fire lines he cleaned during the coming fall; the work should be done during the months of November and December, when the brush can he burned as soon as removed from the fire lines.

PETRIFIED FOREST OF ARIZONA.

The Petrified Forest of Arizona lies in the area between the Little Colorado River and the Rio Puerco, 15 miles east of their junction and 6 miles south of Adamana, a station on the Santa Fe Pacific Railroad, from which place it is accessible by horse or vehicle. This area is of great interest because of the abundance of petrified coniferous trees, as well as

its scenic features. The trees lie scattered about in great profusion; none, however, stands erect in its original place of growth, as do many of the petrified trees in the Yellowstone National Park. The trees probably at one time grew beside an inland sea; after falling they became waterlogged, and during decomposition the cell structure of the wood was entirely replaced by silica derived from sandstone in the surrounding land. Over a greater part of the entire area trees lie scattered in all conceivable positions and in fragments of all sizes. Perhaps the most prominent of all the scenic features of the region is the well-known Natural Bridge, consisting of a great petrified trunk lying across a canyon 45 feet in width and forming a footbridge over which anyone may easily pass.

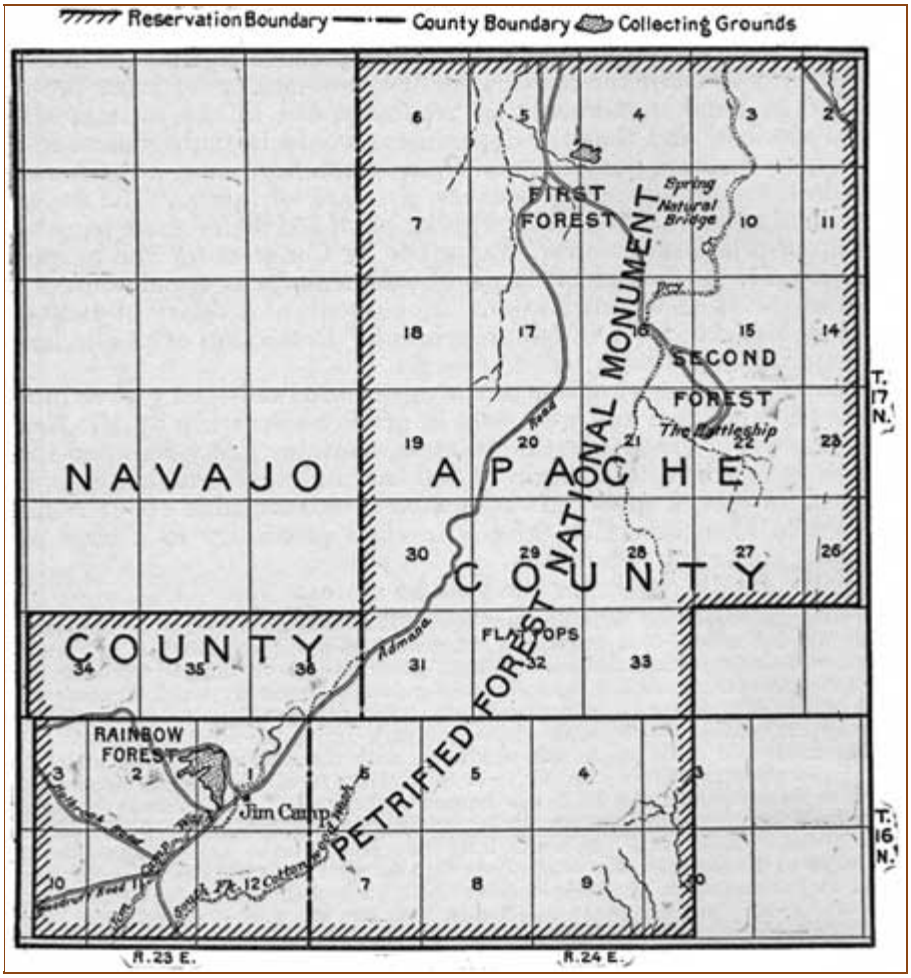


FIG. 4.—Petrified Forest National Monument, Ariz., embracing secs 1, 2, 11, and 12 and E. 1/2 secs. 3 and 10; T. 16 N., R. 23 E.; secs. 4 to 9 and W. 1/2 secs. 3 and 10, T. 16 N., R. 24 E.; secs. 34, 35, 36, T 17 N., R. 23 E., secs. 3 to 10, 11 to 22, 27 to 33, and W. 1/2 secs. 2, 11, 14, 23, 26, T. 17 N., R. 24 E., Gila and Salt River meridian, containing 40.04 square miles, set aside by proclamation of the President July 31, 1911. *(click on image for an enlargement in a new window)*

Prof. Lester F. Ward, of the Geological Survey, has stated that—

There is no other petrified forest in which the wood assumes so many varied and interesting forms and colors, and it is these that present the chief attraction for the general public. The state of mineralization in which much of this wood exists almost places them among the gems or precious stones. Not only are chalcedony, opals, and agates found

among them, but many approach the condition of jasper and onyx. The degree of hardness attained by them is such that they are said to make an excellent quality of emery.

Dr. Walter Hough, of the Smithsonian Institution, who visited this monument, states that—

In the celebrated Petrified Forest, which is some 18 miles from Holbrook, Ariz., on the picturesque Santa Fe Railroad, there are ruins of several ancient Indian villages. These villages are small, in some cases having merely a few houses, but what gives them a peculiar interest is that they were built of logs of beautiful fossil wood. * * * The prehistoric dwellers of the land selected cylinders of uniform size, which were seemingly determined by the carrying strength of a man. It is probable that prehistoric builders never chose more beautiful stones for the construction of their habitations than the trunks of the trees which flourished ages before man appeared on the earth.

This wood agate also furnished material for stone hammers, arrowheads, and knives, which are often found in ruins hundreds of miles from the forest.

NAVAJO NATIONAL MONUMENT.

The Navajo National Monument as originally created by proclamation of March 20, 1909, embraced approximately 600 acres within the Navajo Indian Reservation, which was reserved tentatively and with a view to reduction to such small tract or tracts as might there after be found to contain valuable prehistoric pueblo or cliff dwellings, when the extent of the same could be determined by an examination on the ground and their locus definitely fixed by traverse lines connecting them with some corner of the public survey. Both of these conditions having been fulfilled, the monument was reduced by proclamation dated March 14, 1912, to three small tracts aggregating 360 acres. Within two of these tracts are located, respectively, two interesting and extensive pueblo or cliff-dwelling ruins in a good state of preservation and known as Betata Kin and Keet Seel, and a third cliff-dwelling ruin called Inscription House, located on Navajo Creek. Inscription House is regarded as extraordinary, not only because of its good state of preservation but because of the fact that upon the walls of its rooms were found inscriptions written in Spanish by early explorers and plainly dated 1661.



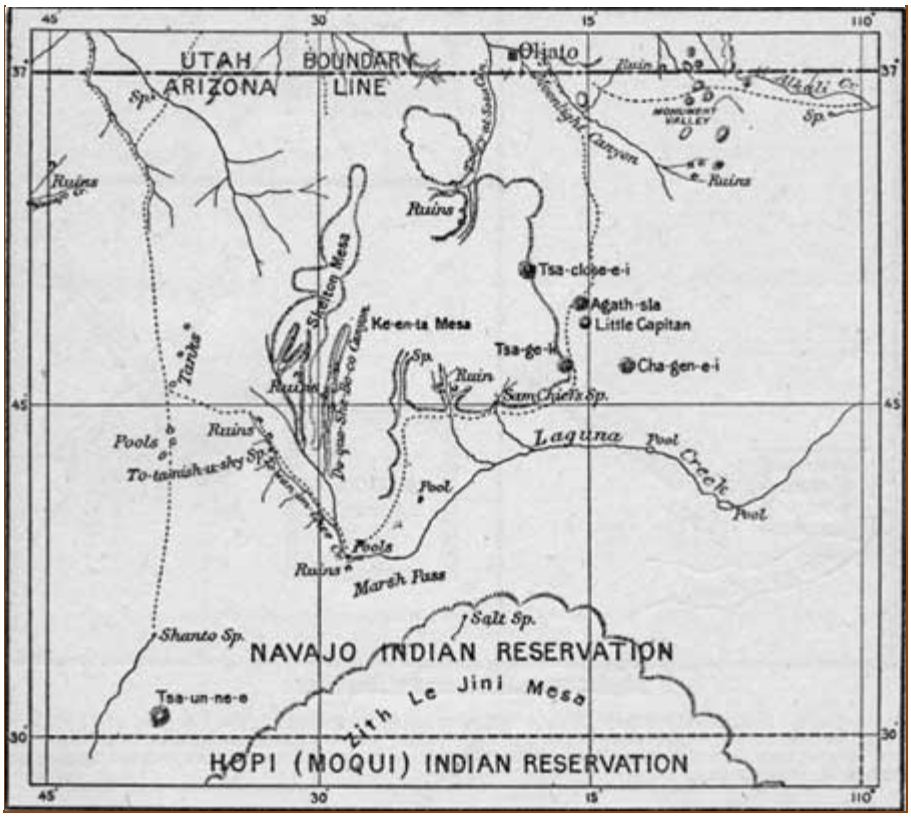


FIG. 5.—Navajo National Monument, Ariz., embracing all cliff-dwelling and pueblo ruins between the parallel of latitude 36° 30' and 37° north and longitude 110° and 110° 45' west from Greenwich, with 40 acres of land in square form around each of said ruins; as originally created March 20, 1909. *(click on image for an enlargement in a new window)*

The new boundaries of the Navajo National Monument under the latter proclamation are shown in fig. 6.

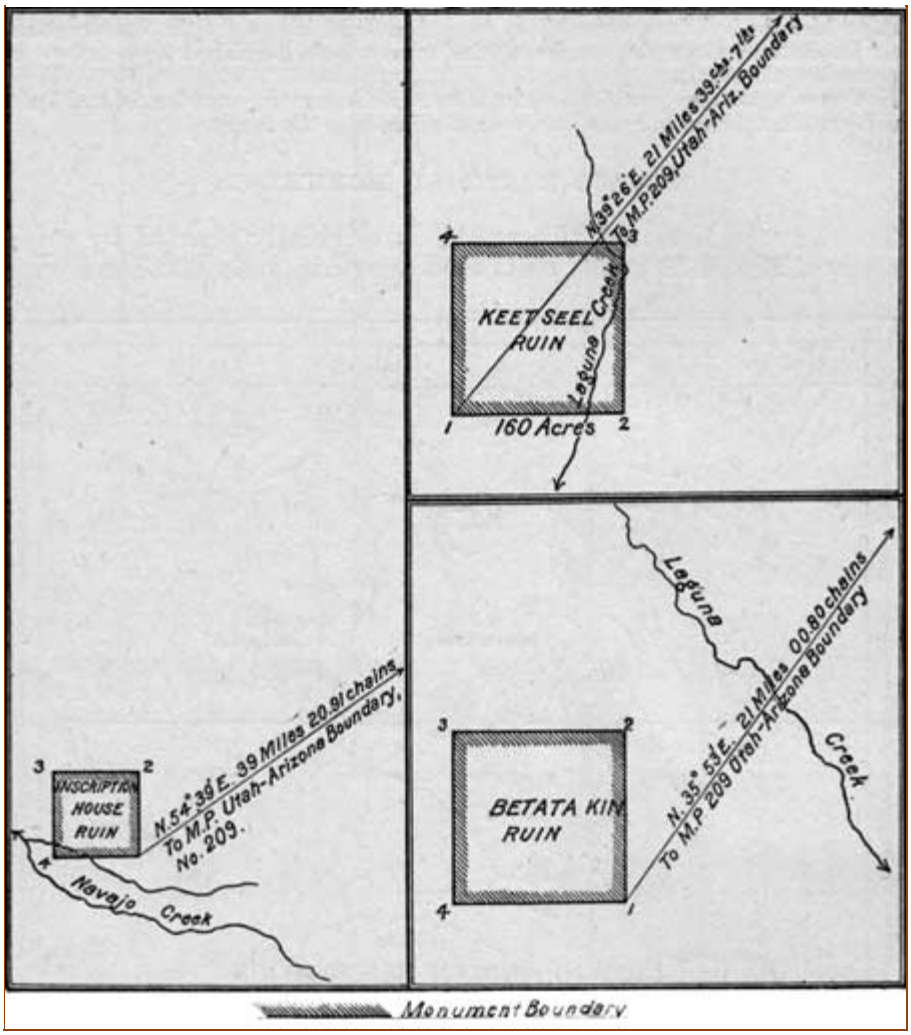


FIG. 6.—Navajo National Monument, Ariz., containing 360 acres, embracing the Keet Seel and Betata Kin ruins, located in two small tracts of 160 acres each, along Laguna Creek, and Inscription House ruins, on Navajo Creek, in a 40-acre tract, all within the Navajo Indian Reservation, as reduced by proclamation of March 14, 1912. *(click on image for an enlargement in a new window)*

CHACO CANYON NATIONAL MONUMENT.

These remarkable relics of an unknown people embrace numerous communal or pueblo dwellings built of stone, among which is the ruin known as Pueblo Bonito, containing, as it originally stood, 1,200 rooms and being the largest prehistoric ruin yet discovered in the Southwest. Numerous other ruins, containing from 50 to 100 or more rooms, are scattered along Chaco Canyon and tributaries for a distance of about 14 miles and upon adjacent territory to the east, south, and west of Chaco Canyon many miles farther. The most important of these ruins are as follows: Pueblo Bonito, Chettro Kettle, Arroyo, New Alto, Old Alto, Kin-Klet Soi, Casa Chiquita, Penasco Blanco, Kin-Kla-tzin, Hungo Pavis, Unda Vidie, Weji-gi, Kim-me ni-oli, Kin-yai, Casa Morena, and Pintado.

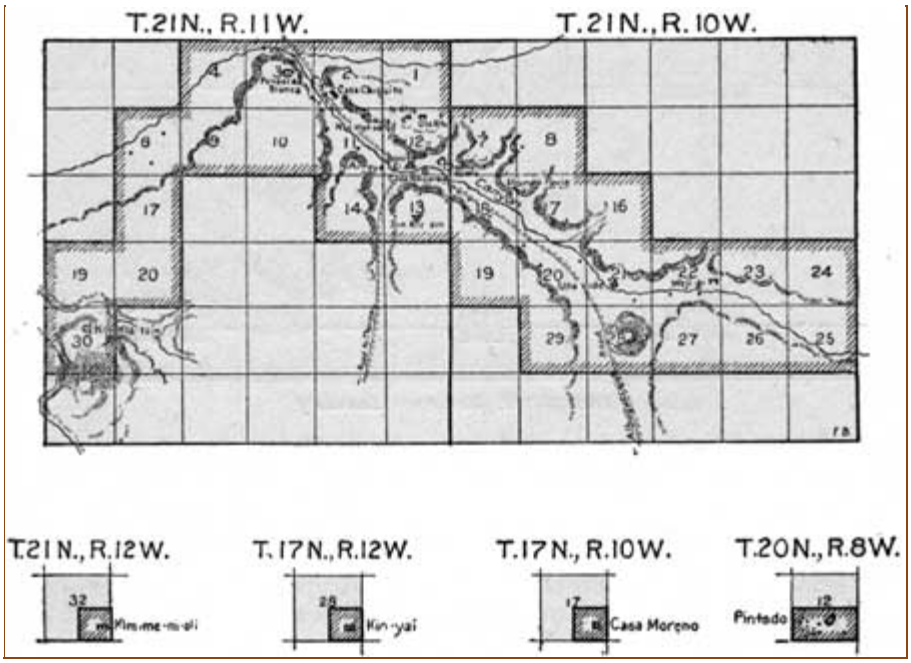


FIG. 7.—Chaco Canyon National Monument, N. Mex., embracing secs. 7 and 8 and 16 to 29, inclusive, T. 21 N., R. 10 W. ; secs 1, 2, 3, 4,and 8 to l4,inclusive and 17, 19, 20, and 30, T. 21 N., R. 11 W.; S. 1/2 sec 12, T 20 N.; R. 8 W.; SE. 1/4 sec. 32, T. 21 N., R. 12 W.; SE. 1/4 sec. 28, T. 17 N., R. 12 W.; SE. 1/4 sec. 17, T. 17 N., R. 10 W.; New Mexico principal meridian; created March 11, 1907. *(click on image for an enlargement in a new window)*

RAINBOW BRIDGE NATIONAL MONUMENT.

This natural bridge is located within the Navajo Indian Reservation, near the southern boundary of Utah, a few miles northwest from Navajo Mountain, a well-known peak and landmark, and spans a canyon and small stream which drains the northwestern slopes of this peak and is of great scientific interest as an example of eccentric stream erosion. Among the known extraordinary natural bridges of the world, this bridge is unique in that it is not only a symmetrical arch below but presents also a curved surface above, thus presenting roughly, the character of the rainbow, for which it is named. Its height above the surface of the water is 309 feet and its span is 278 feet.

The existence of this natural wonder was first disclosed to William B. Douglass, an examiner of surveys of the General Land Office, on August 14, 1909, by a Piute Indian, called "Mike's boy," later "Jim," who was employed in connection with the survey of the natural bridges in White Canyon, Utah.

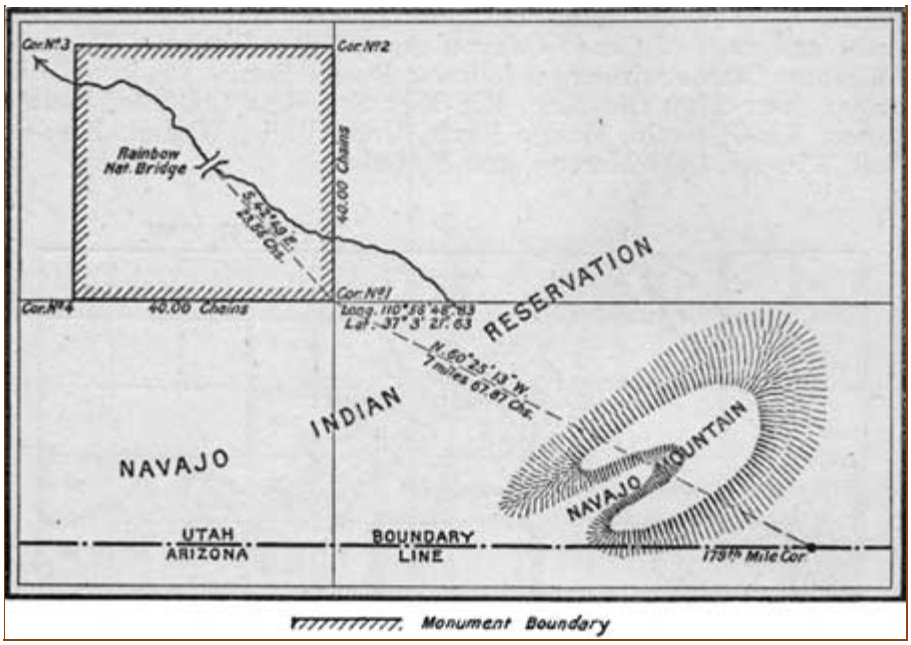


FIG. 8.—Rainbow Bridge National Monument, Utah, embracing 160 acres of land in square form, the southeast corner of which bears from one hundred and seventy-ninth mile corner on the Utah and Arizona boundary N. 60° 25' 13" W. 7 miles 67.87 chains distant; created May 30, 1910. *(click on image for an enlargement in a new window)*

EL MORRO NATIONAL MONUMENT.

A feature of great historic interest and importance is the so-called El Morro or Inscription Rock, some 35 miles almost due east of Zuni Pueblo in western central New Mexico.

El Morro is an enormous sandstone rock rising a couple of hundred feet out of the plain and eroded in such fantastic forms as to give it the appearance of a great castle, hence its Spanish name. A small spring of water at the rock made it a convenient camping place for the Spanish explorers of the seventeenth and eighteenth centuries, and the smooth face of the "castle" well adapted it to receive the inscriptions of the conquerors of that early period.

The earliest inscription, and historically the most important, is that of Juan de Onate, a colonizer of New Mexico and the founder of the city of Santa Fe, in 1606. It was in this year that Onate visited El Morro and carved this inscription on his return from a trip to the head of the Gulf of California. There are 19 other Spanish inscriptions of almost equal importance, among them that of Don Diego de Vargas, who in 1692, reconquered the Pueblo Indians after their rebellion against Spanish authority in 1680.

It is not too much to say that no rock formation in the West or perhaps in the world is so well adapted to the purpose for which this table of stone was used—at least history does not record any collection of similar data. Here are records covering two centuries, some of which are the only extant memoranda of the early expeditions and explorations of what is now the southwestern part of the United States. On these smooth walls,

usually under some projecting stratum, inscriptions were cut by the early conquerors and explorers, which have made this rock one among the most interesting objects on the continent.

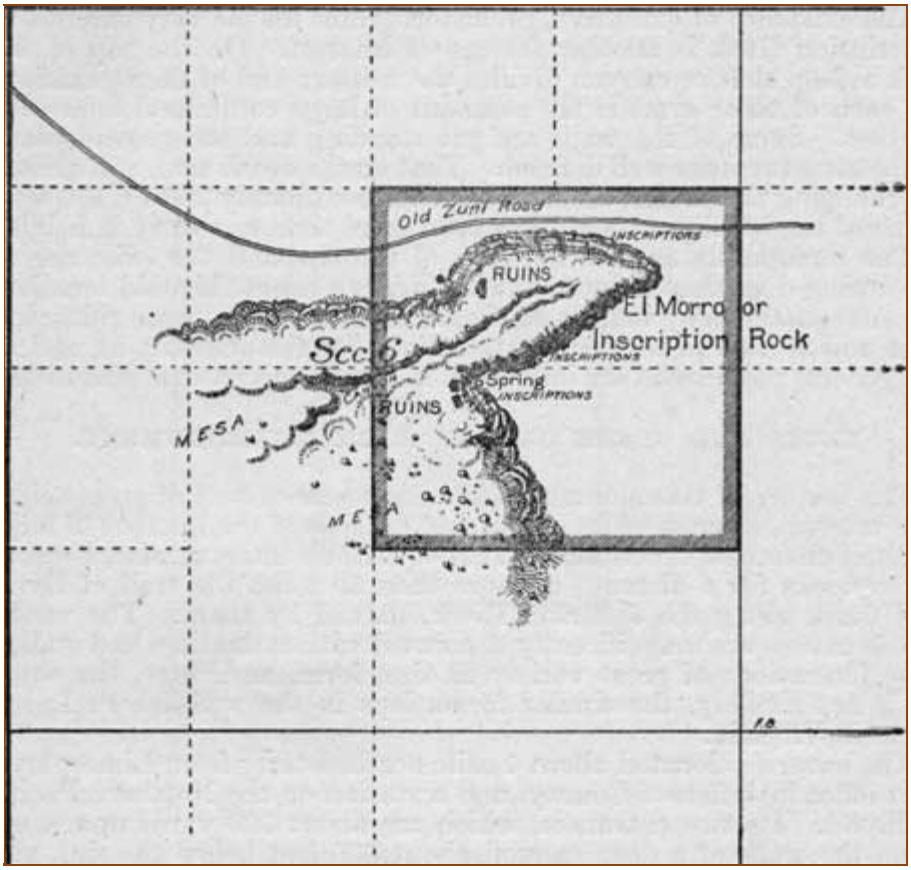


FIG. 9.—El Morro National Monument, N. Mex., embracing the S. 1/2 NE. 1/4 and N. 1/2 SE. 1/4 sec. 6, T. 9 N. R. 14 W., New Mexico meridian; created December 8, 1906. *(click on image for an enlargement in a new window)*

Here, in this remote and uninhabited region, in the shadows of one of nature's most unique obelisks, wrapped in the profound silence of the desert, with no living thing to break the stillness, it is hard to realize that 300 years ago these same walls echoed the clank of steel harness and coats of mail; that with the implements of Spanish conquest the pathfinders in the New World were carving historical records upon the eternal rock.

Locally Inscription Rock and El Morro are known as separate and distinct monumental rocks. The latter, translated The Castle, is the rock standing out in bold relief to the east, while Inscription Rock is the name applied to the formation to the west, which is a part of the mesa. On the south side in the angle formed by the two, one extending east and the other south, is a great chamber or cavern, a natural amphitheater where secure refuge from storm or human foe could easily be secured. It is here, too, that the only spring within many miles wells up as if to make the natural fortification doubly secure. Upon these walls are many of the best preserved Spanish inscriptions, although there are quite a number 200 feet east, under the shadows of a stately pine tree and on the north side of El Morro. Most of them are as plain and apparently as legible as

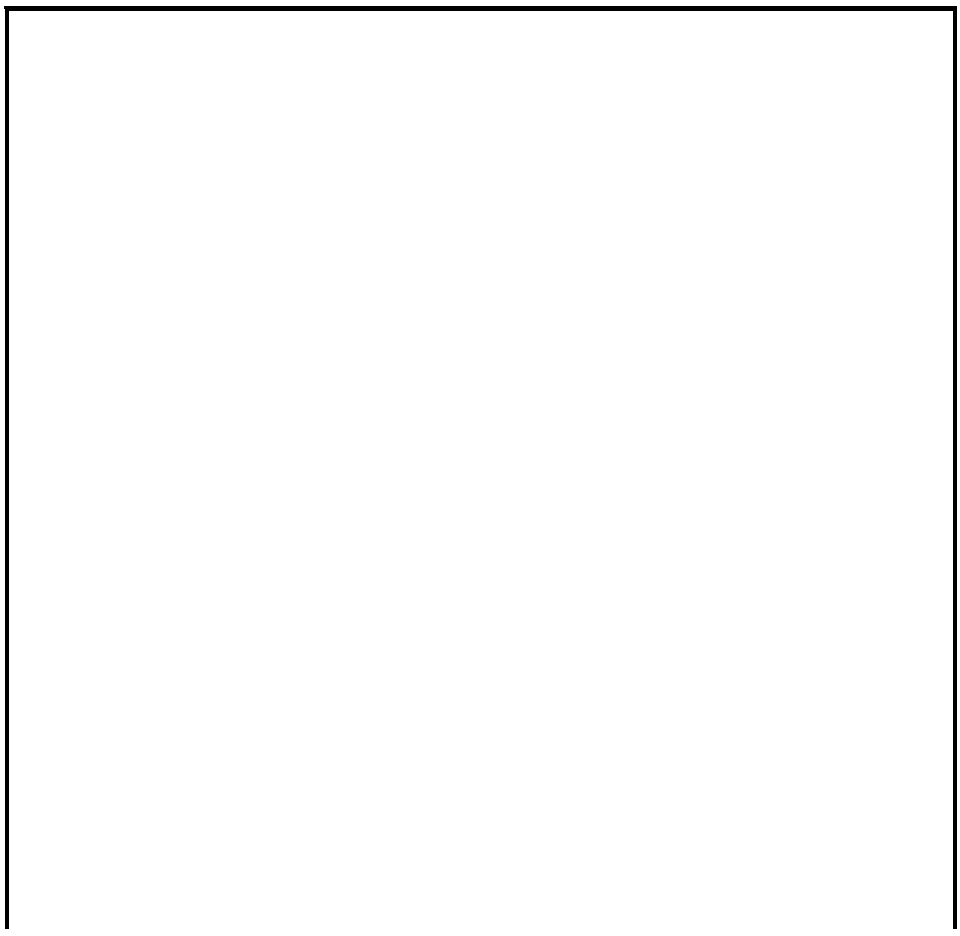
the day they were written; especially is this true of the older ones, carved during the sixteenth and seventeenth centuries.

The existence of extensive, prehistoric ruins on the very summit of Inscription Rock is another feature of interest. On the top of the rock a deep cleft or canyon divides the western end of the formation. On each of these arms is the remnant of large communal houses or pueblos. Some of the walls are yet standing and the ground plans of the structures are well defined. That on the south arm, and almost overhanging the cavern and spring, is approximately 200 by 150 feet. Some of the buildings must have been more than one story in height.

The remarkable natural defenses of the site and the existence of the spring doubtless induced the builders to select this odd location. At some distant day it may be desirable to excavate these ruins and thus add to this historic spot attractions for the scientist as well as the general public who are interested in scenic and natural curiosities.

LEWIS AND CLARK CAVERN NATIONAL MONUMENT.

The feature of this monument is a limestone cavern of great scientific interest, because of its length and because of the number of large vaulted chambers it contains. It is of historic interest, also, because it overlooks for a distance of more than 50 miles the trail of Lewis and Clark along the Jefferson River, named by them. The vaults of the cavern are magnificently decorated with stalactites and stalagmite formations of great variety in size, form, and color, the equal of, if not rivaling, the similar formations in the well-known Luray caves in Virginia.



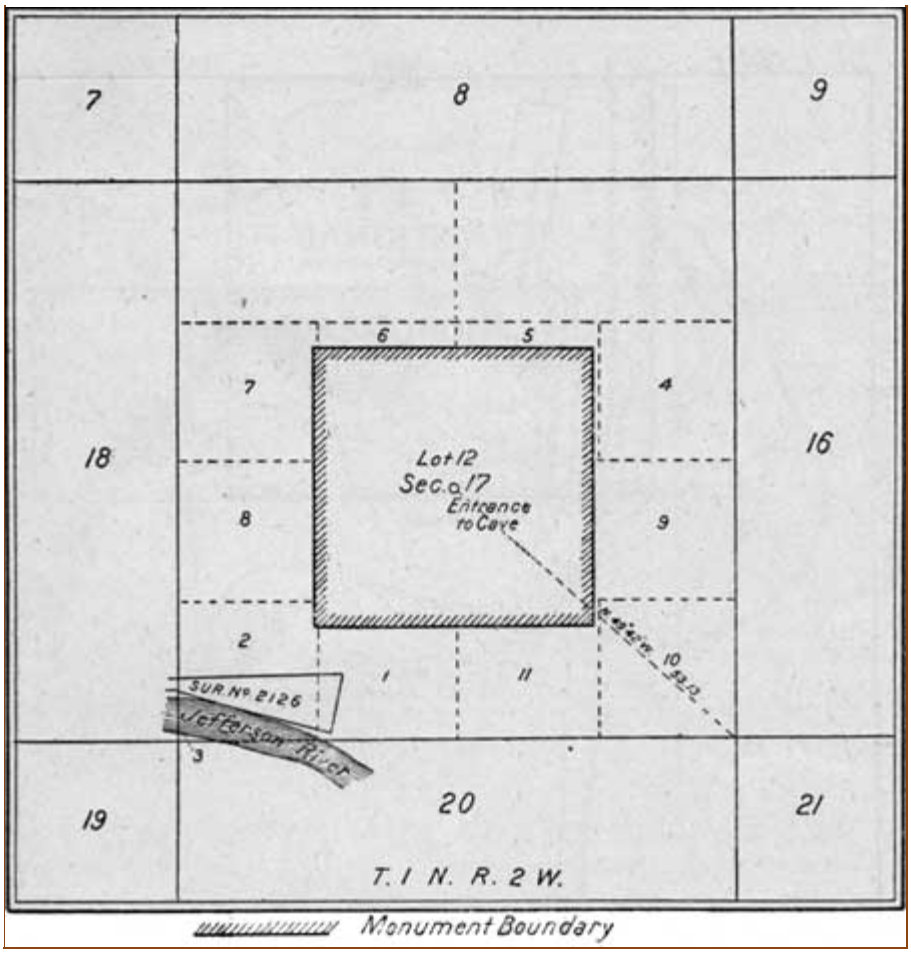


FIG. 10.—Lewis and Clark Cavern National Monument, Mont., embracing lot 12, sec. 17, T. 1 N., R. 2W.; Montana principal meridian; created by proclamations of May 11, 1908, and May 16, 1911. *(click on image for an enlargement in a new window)*

The cavern is located about 1 mile northeasterly from Limespur, a post office in Jefferson County, and a station on the Northern Pacific Railroad. Its two entrances, which are about 100 yards apart, are upon the walls of a deep canyon about 500 feet below the rim, and the cavern extends back therefrom approximately half a mile. The second proclamation establishing this monument is as follows:

Whereas the unsurveyed tract of land containing an extraordinary limestone cavern and embracing one hundred and sixty acres, situated in township one north, range two west of the Montana principal meridian, Montana, and which was created the Lewis and Clark Cavern National Monument by proclamation dated the 11th day of May, 1908, has recently been definitely located by an official survey thereof, made under the direction of the Commissioner of the General Land Office, and such survey having determined that the tract in question lies wholly within the limits of the grant of the Northern Pacific Railway Company but has not yet been patented to that company;

And whereas, by its quitclaim deed the said Northern Pacific Railway Company relinquished unto the United States all its right, title, and interest to lot twelve, section seventeen, township one north, range two west of the Montana principal meridian, Montana, the same being the original tract proclaimed a national monument, for the purpose of maintaining thereon the said Lewis and Clark Cavern National Monument, under the condition that the instrument of relinquishment shall become void and the premises immediately revert to the grantor should the monument no longer be maintained.

Now, therefore, I, William H. Taft, President of the United States of America, by virtue of the power in me vested by section two of the act of Congress approved June 8, 1906, entitled "An act for the preservation of American antiquities," do hereby set aside and confirm as the Lewis and Clark Cavern National Monument the said tract, embracing one hundred and sixty acres of land, at and surrounding the limestone cavern in section seventeen, township one north, range two west, Montana, subject to the conditions set forth in the relinquishment and quitclaim deed No. 18129E, dated February 14, 1911, of the Northern Pacific Railway Company, the said tract being in square form and designated as lot twelve in the survey and deed, with side lines running north and south and all sides equidistant from the main entrance of the said cavern, the center of said entrance bearing north forty-nine degrees, forty-two minutes west, fifty-three and thirteen hundredths chains distant from the corner to sections sixteen, seventeen, twenty, and twenty-one, as shown upon the diagram hereto attached and made a part hereof.

Warning is hereby expressly given to all persons not to appropriate, injure, or destroy any of the natural formations in the cavern hereby declared to be a national monument, nor to locate or settle upon any of the lands reserved and made a part of said monument by this proclamation.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

[SEAL.] Done at the city of Washington this sixteenth day of May, in the year of our Lord one thousand nine hundred and eleven, and of the independence of the United States the one hundred and thirty-fifth.

TUMACACORI NATIONAL MONUMENT.

This monument embraces 10 acres of land in Santa Cruz County, Ariz., relinquished to the United States by a homestead entryman for the purposes specified in the act of June 8,1906. Upon the tract is located a very ancient Spanish mission ruin, erected probably, as appears from the reports, in the latter part of the sixteenth century. The church is in a remarkable state of preservation, owing to the fact that it was erected out of burned bricks and cement mortar. In August of 1913 the department authorized the construction of a substantial fence around the ruin as a means of protection against depredations of cattle and other stock.



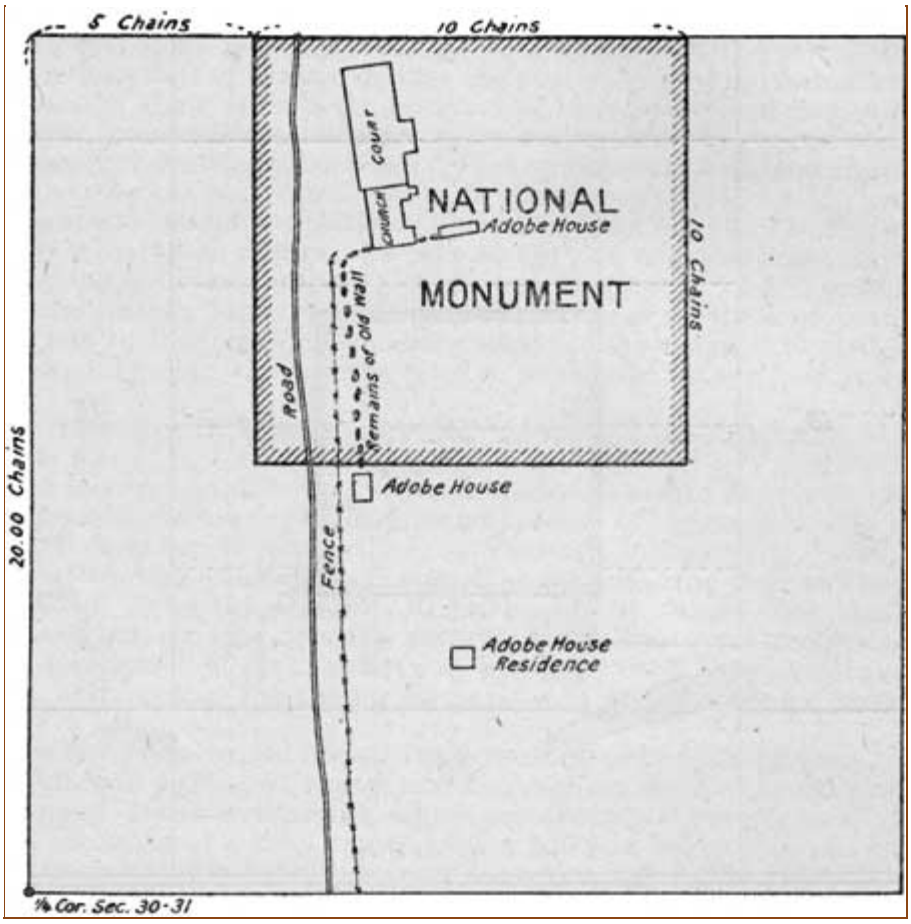


FIG. 11,—Tumacacori National Monument, Ariz., embracing the E. 1/2 NW. 1/4 SW. 1/4 SE. 1/4 and the W. 1/2 NE. 1/4 SW. 1/4 SE. 1/4, sec. 39. T. 21 S., R. 13 E., Gila and Salt River meridian; created September 15, 1906. *(click on image for an enlargement in a new window)*

MONTEZUMA CASTLE NATIONAL MONUMENT.

This national monument is situated in the northeastern part of Yavapai County, Ariz., and contains an assemblage of cliff dwellings, from the principal of which, known as Montezuma's Castle this monument is named. This structure is of very great interest, not only because of its picturesqueness, but for ethnological and other scientific reasons. It is strictly a cliff dwelling, with the added importance that it is also a communal house. Although very small as compared with the great ruins of Chaco Canyon, Canyon de Chelley, Mesa Verde, the Mancos, and other localities of the Southwest, it is so unique in location and structural design, and so perfectly preserved, that it may be said to have no equal in the United States.

The character of the material used in the Verde cliff ruins, adobe, rubble, and a soft calcareous stone, rendered the progress of disintegration and ruin somewhat rapid, though many centuries must have elapsed since the passing of the race. The Mojave Apache Indians, who occupied the valley at the advent of the white men, have no tradition respecting the existence of the people who formerly occupied this region. Montezuma's Castle, it is stated, is the only single perfect specimen and type of the architectural skill of the prehistoric cliff dwellers of this valley.

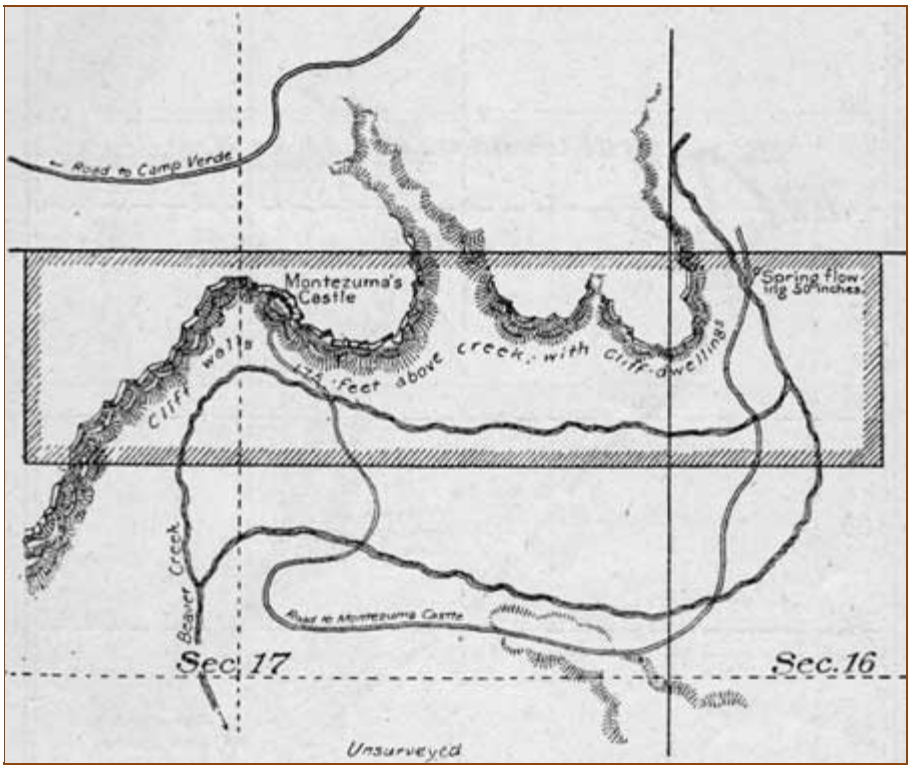


FIG. 12.—Montezuma Castle National Monument, Ariz., embracing the NW. 1/4 NW. 1/4 sec. 16, the N. 1/2 NE. 1/4 and NE. 1/4 NW. 1/4 sec. 17, T. 14 N., R. 5, E., Gila and Salt River meridian; crested December 8, 1906. *(click on image for an enlargement in a new window)*

NATURAL BRIDGES NATIONAL MONUMENT.

This monument is located in the vicinity of Bluff, San Juan County, in the extreme southeastern portion of Utah, and was created, originally, by presidential proclamation of April 16, 1908.

A second proclamation, issued by the President September 25, 1909, includes, besides the three bridges originally reserved, a much more extended territory, but within which, along the walls of the canyons in the vicinity of the bridges, are found many prehistoric ruins of result of remarkable and eccentric stream erosion. These bridges are understood to be among the largest examples of their kind, the greatest of the three having a height of 222 feet, being 65 feet thick at the top of the arch. The arch is 28 feet wide, the span is 261 feet, and the height of span 157 feet. The other two bridges are only a little smaller. All three are within a space of about 5 miles.

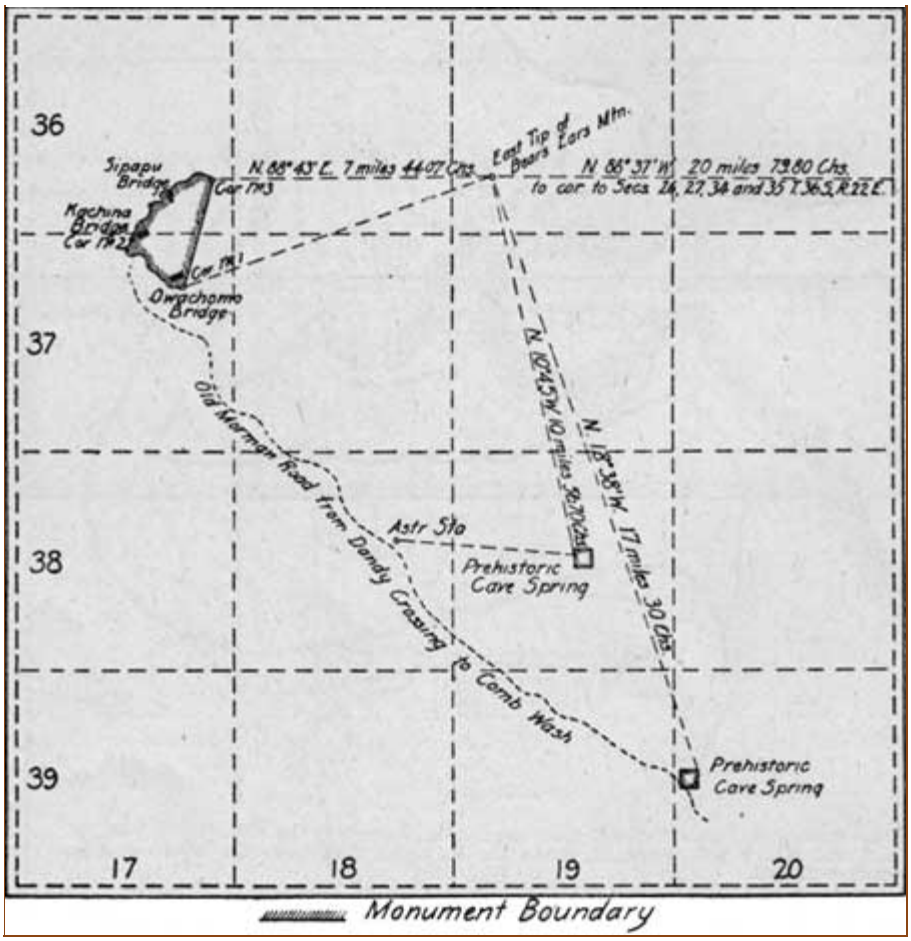


FIG. 13.—Natural Bridges National Monument, Utah, embracing a subtriangular tract in unsurveyed Tps. 36 and 37 S., R. 17 E., and two smaller tracts, one each in T. 38 S., E. 19 E., and T. 39 S., R 20 E Salt Lake meridian; created September 25, 1909. *(click on image for an enlargement in a new window)*

GRAN QUIVIRA NATIONAL MONUMENT.

The Gran Quivira has long been recognized as one of the most important of the earliest Spanish church or mission ruins in the cavern and cliff dwellings. There are also two cavern springs containing some prehistoric ruins, which are located approximately 13 and 19 miles southeast of the bridges, respectively. These cavern springs are included within the Natural Bridges Monument. They are located upon the ancient and only trail to the bridges from the south, and are important way stations in the desert surrounding this monument.

The monument is reached by a two days' horseback journey from Bluff. The natural bridges spring from the high walls of White Canyon, through which part of the journey is taken, and are the Southwest. Near by are numerous Indian pueblo ruins, occupying an area many acres in extent, which also, with sufficient land to protect them, was reserved. The outside dimensions of the church ruin, which is in the form of a short-arm cross, are about 48 by 140 feet, and its walls are from 4 to 6 feet thick and from 12 to 20 feet high.

The Gran Quivira National Monument is located 1-1/2 miles outside of the exterior boundaries of the Manzano National Forest, and is remote

from the headquarters of any officer of this department.

On September 12, 1910, the Interior Department requested the Department of Agriculture to assume temporary charge of patrol and protection of this monument, in view of the better facilities at disposal of the Forest Service in the Manzano National Forest, inasmuch as the monument is remote from location of any field officer of the Interior Department; and this charge was accepted by the Department of Agriculture.

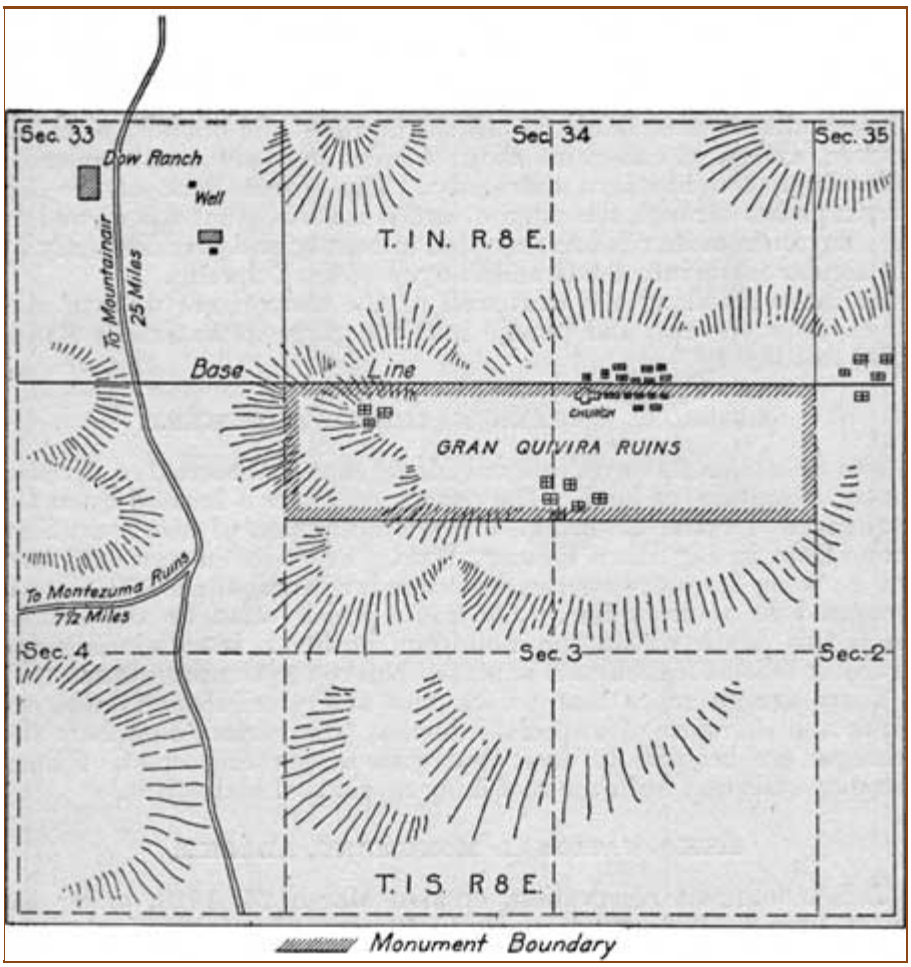


FIG. 14.—Gran Quivira National Monument, N. Mex., embracing unsurveyed N. 1/2 of N. 1/2 sec. 3, T. 1 S., R. 8 E., New Mexico principal meridian; created November 1, 1909. *(click on image for an enlargement in a new window)*

MUKUNTUWEAP NATIONAL MONUMENT.

The Mukuntuweap National Monument, Utah, embraces the magnificent gorge of Zion Creek, called the Mukuntuweap Canyon by the Powell Topographic Survey of southwestern Utah, Kanab sheet, and the same is of the greatest scientific interest. The canyon walls are smooth, vertical sandstone precipices, from 800 to 2,000 feet deep. These walls are unscalable within the limits of the boundaries of the reserve, except at one point about 4 miles from the southern and 6 miles from the northern extremity. The North Fork of the Rio Virgin passes through the canyon, and it is stated that the views into the canyon from its rim are exceeded

in beauty and grandeur only by the similar views into the Grand Canyon of the Colorado.

At intervals along the west wall of the canyon are watercourses which cross the rim and plunge into the gorge in waterfalls 800 to 2,000 feet high.

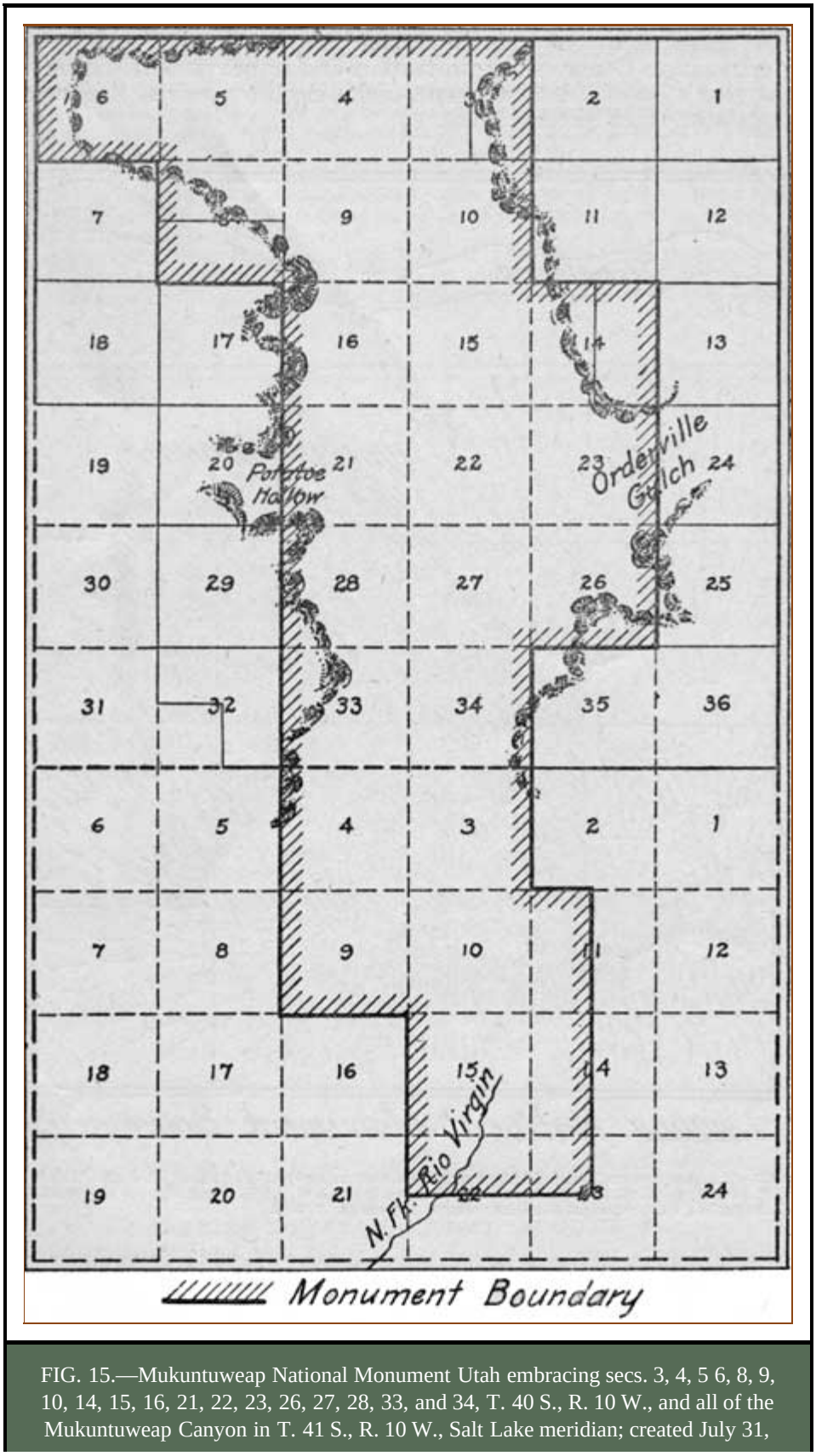


FIG. 15.—Mukuntuweap National Monument Utah embracing secs. 3, 4, 5 6, 8, 9, 10, 14, 15, 16, 21, 22, 23, 26, 27, 28, 33, and 34, T. 40 S., R. 10 W., and all of the Mukuntuweap Canyon in T. 41 S., R. 10 W., Salt Lake meridian; created July 31,

1909. *(click on image for an enlargement in a new window)*

SHOSHONE CAVERN NATIONAL MONUMENT.

The Shoshone Cavern National Monument embraces 210 acres of rough, mountainous land. The cavern entrance is located upon the north face of Cedar Mountain, about 3 miles east of the great Shoshone Dam in Big Horn County, Wyo. From its entrance the cavern runs in a southwesterly direction for more than 800 feet, if measured in a direct line. The route which must be traveled to reach this depth within the mountain, however, is so winding and irregular that at least a mile is passed before the terminus is reached.

There are en route many dark pits and precipices of unknown depth and therefore of a special interest. The various chambers and passages are beautifully decorated with a sparkling crust of limestone crystals and from the roof hang myriads of stalactites.

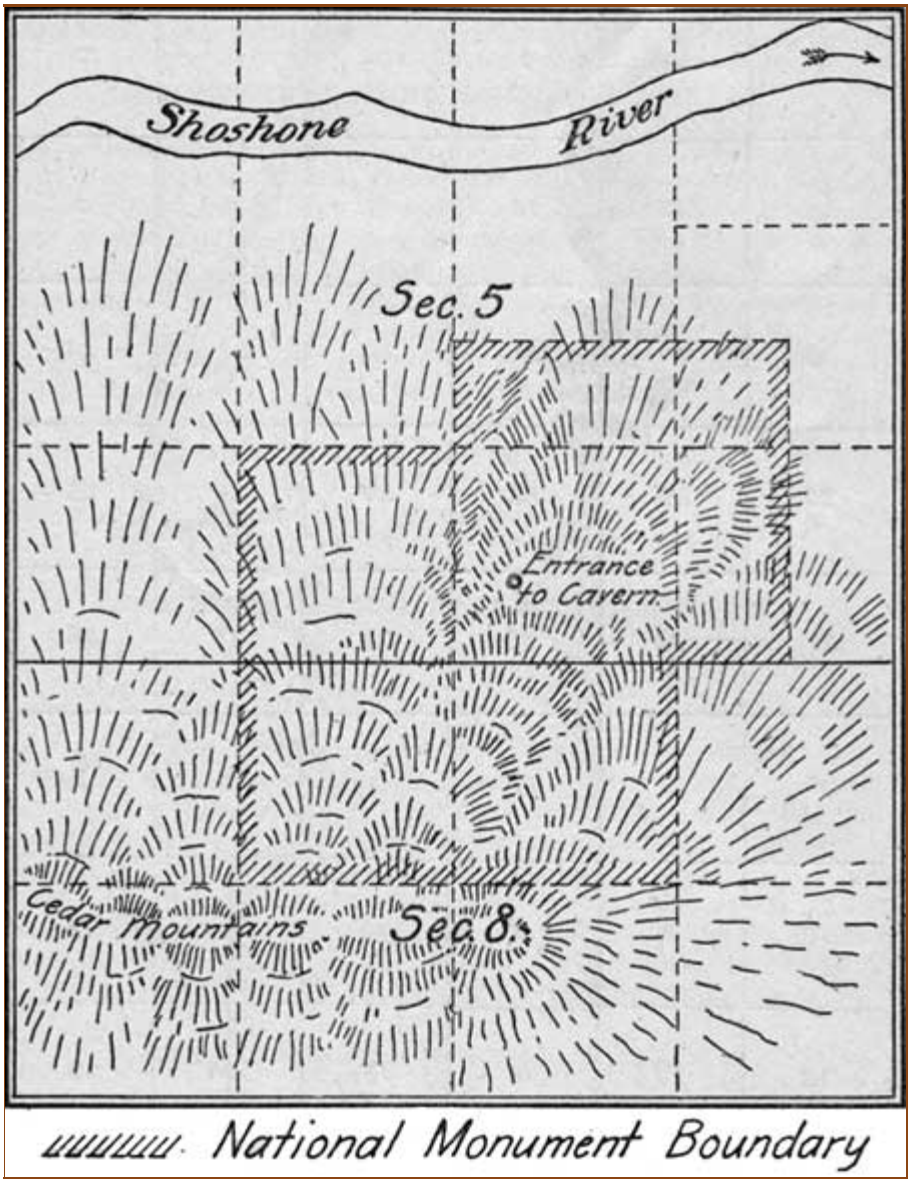


FIG. 16.—Shoshone Cavern National Monument, Wyo., embracing the SW. 1/4 SE.

1/4; W. 1/2 SE. 1/4 SE. 1/4; SW. 1/4; NE. 1/4 SE.1/4; S. 1/2 NW. 1/4 SE. 1/4; and SE. 1/4 SW. 1/4, sec. 5; the NW. 1/4 NE. 1/4 and NE. 1/4 NW. 1/4 sec. 8, T. 52 N., R. 102 W., sixth principal meridian; created September 21, 1909. *(click on image for an enlargement in a new window)*

SITKA NATIONAL MONUMENT, ALASKA.

This monument reservation, created March 23, 1910, under the act of June 8, 1906, embraces about 57 acres of comparatively level gravel plain formed by sea wash and by the deposits of Indian River, which flows through the tract. Upon this ground was located formerly the village of a warlike tribe—the Kik-Siti Indians—who, in 1802, massacred the Russians in old Sitka and thereafter fortified themselves and defended their village against the Russians under Baranoff and Lisianski. Here also are the graves of a Russian midshipman and six sailors, who were killed in a decisive battle in 1804. A celebrated "witch tree" of the natives and 16 totem poles, several of which are examples of the best work of the savage genealogists of the Alaska clans, stand sentrylike along the beach.

An estimate in the sum of $1,500 has been submitted by the department to Congress for protection and improvement during the fiscal year 1915 of this monument, including the repair of the ancient totems and other historic relics.

The following is from a letter dated August 31, 1913, from Arthur G. Shoup, member of Alaskan Legislature, to J. W. Lewis, special agent, General Land Office, and now part of General Land Office files:

The great natural beauty of this park is extolled by every tourist who has ever visited Sitka and it is partly on account of the exceptional opportunities that it affords for visitors from the States to see at once the timber growth, wild mosses, and small verdure, and mountain streams of Alaska that our Government has so carefully guarded this reservation.

Referring briefly to the historical features of the Sitka National Monument, or Indian River Park as it is called: It was here that the Russians under Baranoff in 1802 fought and won the "decisive battle of Alaska" against the Indians, and effected their lodgment in southeastern Alaska that placated the then very active attempts of Great Britian to get possession of this part of the country. The Russian title thus acquired to the Alexander Archipelago was later transferred to the United States, and because of this battleground being in the Sitka National Monument, it is of great patriotic interest to every Alaskan.

Another interesting feature of this park is that it is the place where the natives used to conduct their weird trials and executions for witchcraft. The tree where the victims were hanged still stands as an object of awe to the descendants of the old schamen, and a subject of curiosity to the whites.

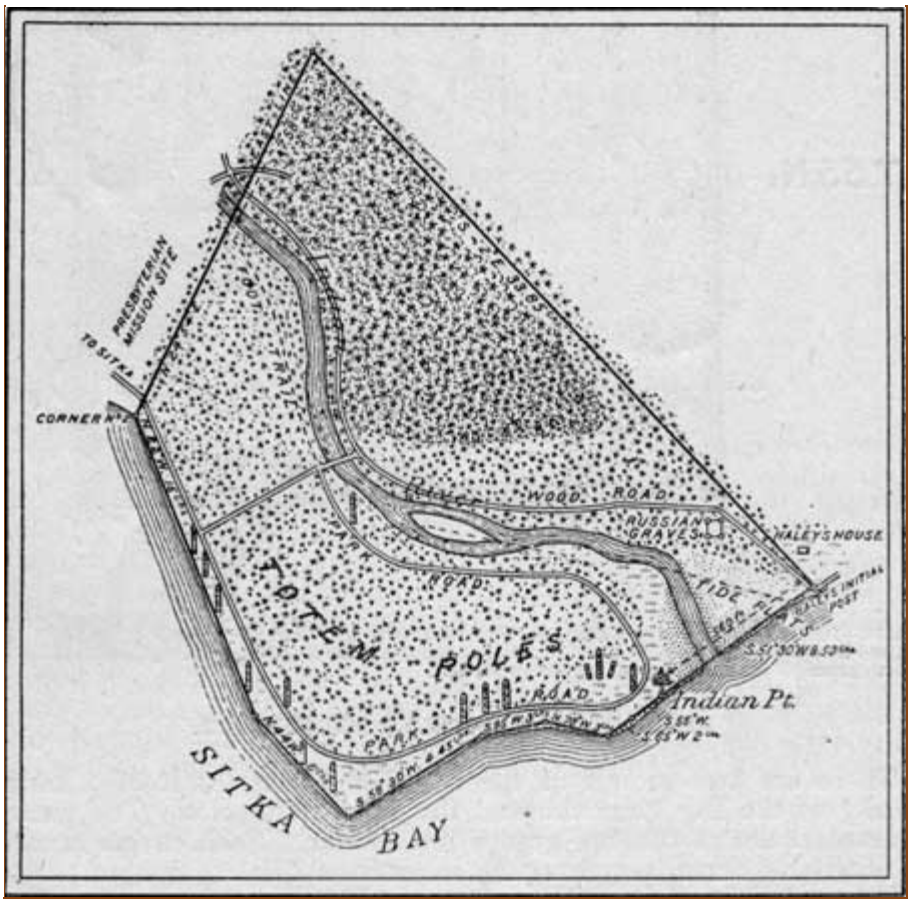


FIG. 17.—Sitka National Monument, Alaska, embracing a tract of land which includes the mouth of Indian River and adjacent territory near Sitka; created March 23, 1910. *(click on image for an enlargement in a new window)*

DEVILS TOWER NATIONAL MONUMENT.

This extraordinary, natural monument has been known and utilized, doubtless, from time immemorial by the aborigines of the plains and mountains, for the American Indian of the last century was found to be directing his course to and from the hunt and foray by reference to this lofty pile. In their turn the white pioneers of civilization in their explorations of the great Northwest which began with the expedition of the Verendryes, pathfinders of the French colonies of Canada, in 1742, utilized the tower as a landmark, and still later the military expeditions into the Sioux and Crow Indian country during the Indian wars of the last century carried on operations within sight of the Devils Tower or directed their march by the aid of its ever-present beacon, for the tower is visible in some directions in that practically cloudless region for nearly 100 miles.

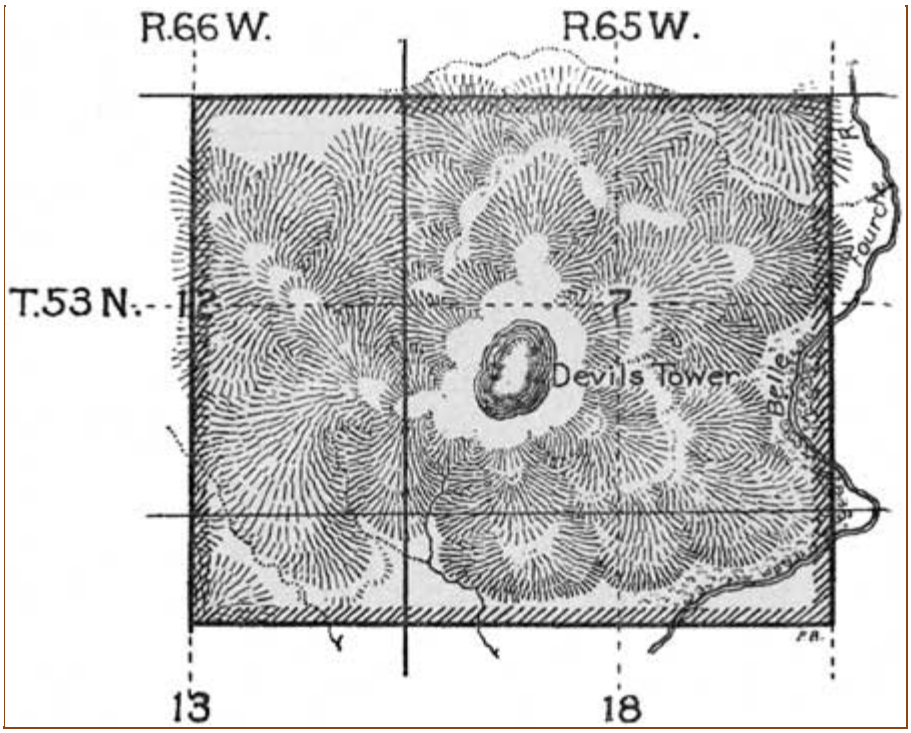


FIG. 18.—Devils Tower National Monunent, Wyo., embracing sec. 7 and the N. 1/2 NE. 1/4, the NE. 1/4 NW. 1/4, and lot No. 1, sec. 18, T. 53 N., R. 65 W.; the E. 1/2 sec. 12 and the N. 1/2 NE. 1/4 sec. 13, T. 53 N., R. 66 W., sixth principal meridian; created September 24, 1906. *(click on image for an enlargement in a new window)*

PINNACLES NATIONAL MONUMENT.

There are two groups of the so-called Pinnacles Rocks, known locally as the Big Pinnacles and the Little Pinnacles. The general characteristics of the two groups are similar. Each covers an area of about 160 acres, very irregular in outline.

The name is derived from the spirelike formations rising from 600 to 1,000 feet from the floor of the canyon, forming a landmark visible many miles in every direction. Many of the rocks are so precipitous that they can not be scaled. A series of caves, opening one into the other, lie under each of the groups of rock. These caves vary greatly in size, one in particular, known as the Banquet Hall, being about 100 feet square with a ceiling 30 feet high. The caves are entered through narrow canyons, with perpendicular rock walls and overhanging bowlders. One huge stone, called the Temple Rock, is almost cubical in form. It stands alone in the bottom of the canyon and its walls rise perpendicularly to a height of over 200 feet. There are also several specimens of "balancing rocks" in each of the groups.

The railroad station nearest this monument is Soledad, Monterey County, Cal.

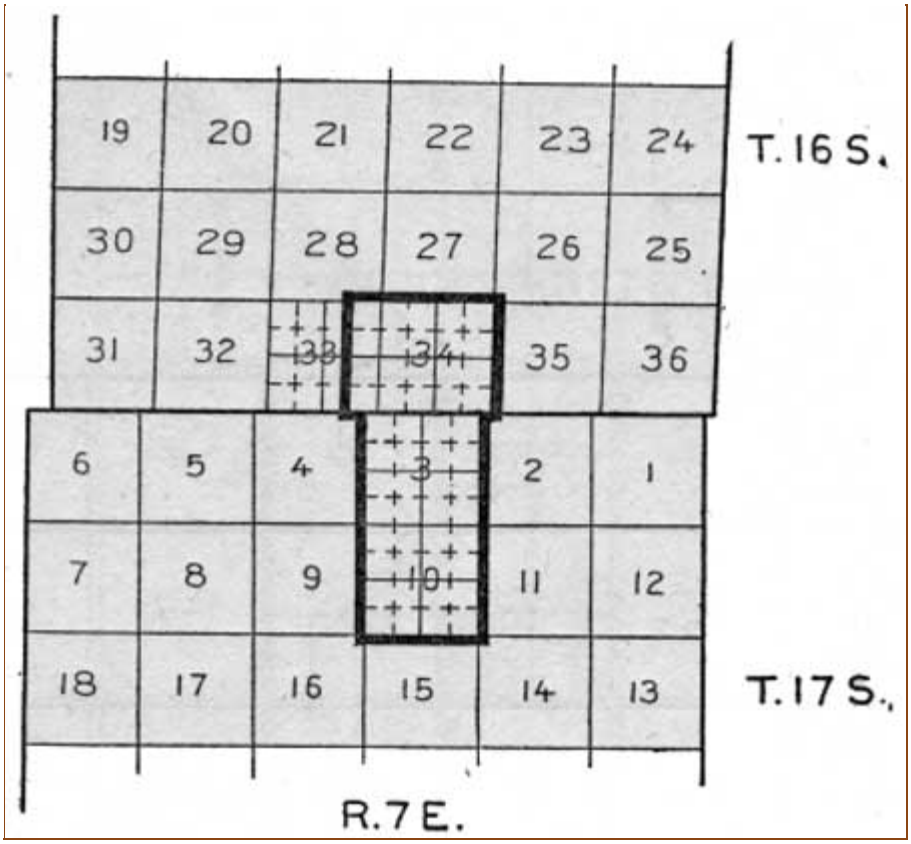


FIG. 19.—Pinnacles National Monument, Cal.; embraces parts of Tps. 16 and 17 S., R. 7 E., M. D. M.; created January 16, 1908. *(click on image for an enlargement in a new window)*

COLORADO NATIONAL MONUMENT.

This area was set aside as a national monument by the President's proclamation of May 24, 1911, and is situated near Grand Junction, Colo. The site is in a picturesque canyon, which has long been an attractive feature of that portion of the State. The formation is similar to that of the Garden of the Gods at Colorado Springs, Colo., only much more beautiful and picturesque. With the exception of the Grand Canyon of the Colorado it exhibits probably as highly colored, magnificent, and impressive examples of erosion, particularly of lofty monoliths, as may be found anywhere in the West. These monoliths are located in several tributary canyons. Some of them are of gigantic size, one being over 400 feet high, almost circular in cross section, and 100 feet in diameter at base.

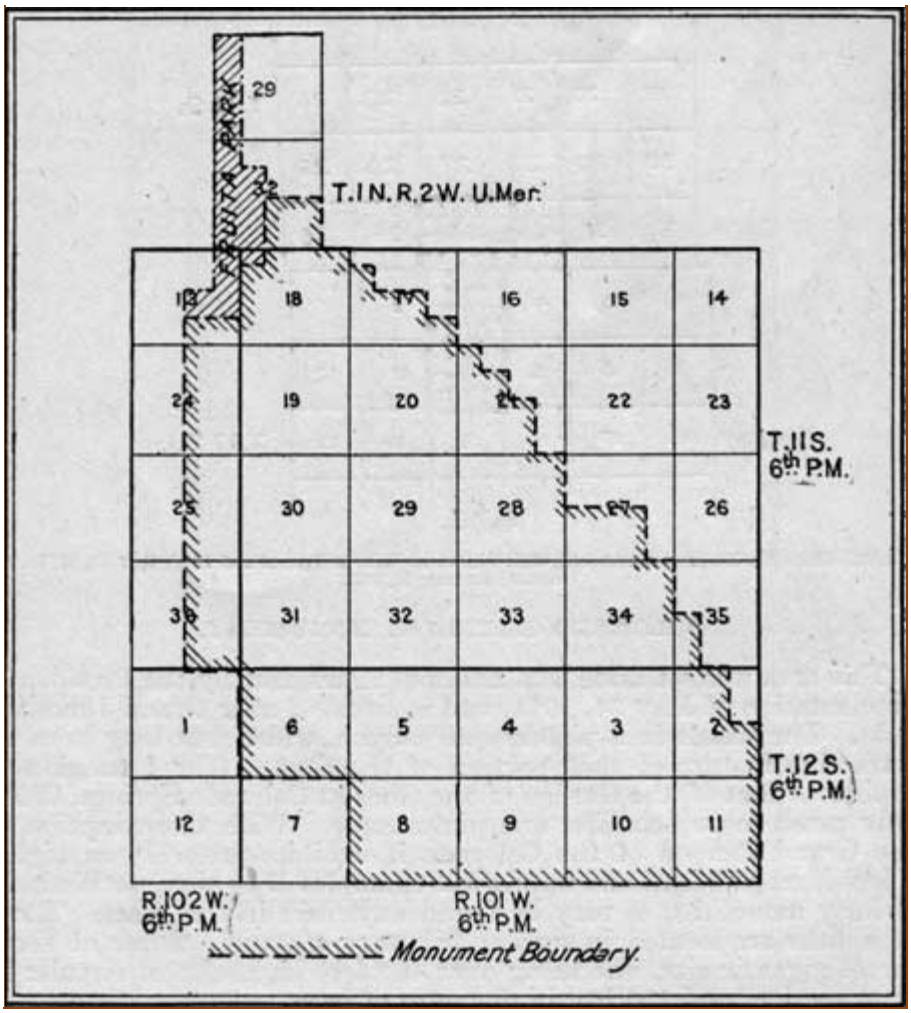


FIG. 20.—Colorado National Monument, Colo., embracing parts of Tps. 11 and 12 S., Rs. 101 and 102 W. of the sixth principal meridan, and part of sec. 32, T. 1 N., R. 2 W. of the Ute meridian, Colorado, containing 13,833.06 acres; created May 24, 1911. *(click on image for an enlargement in a new window)*

CINDER CONE NATIONAL MONUMENT.

The Cinder Cone National Monument was created by proclamation dated May 6, 1907. It is situated within the Lassen Peak National Forest, and with the adjacent area, embracing a lava field and Snag Lake and Lake Bidwell, is of scientific interest as illustrative of volcanic activity, and is of special importance in tracing the history of the volcanic phenomena of that vicinity.

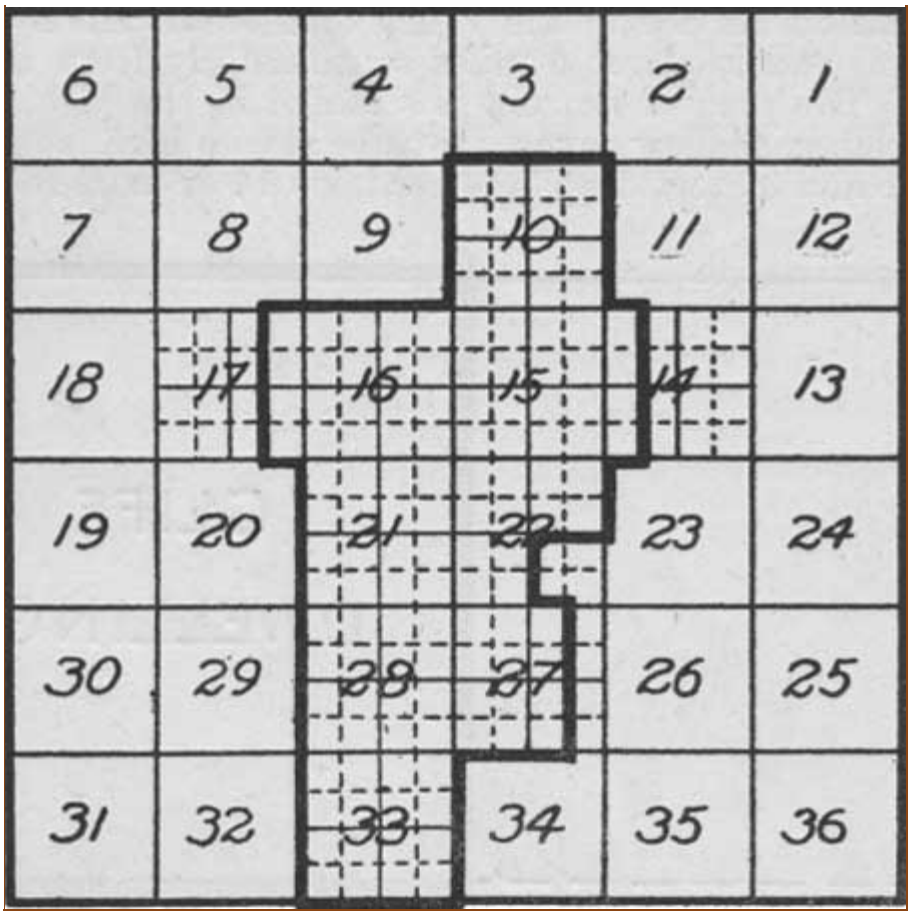


FIG. 21.—Cinder Cone National Monument within Lassen Peak National Forest, Cal., embracing part of T. 31 N., R. 6 E., M.D. M.; created May 6, 1907. *(click on image for an enlargement in a new window)*

LASSEN PEAK NATIONAL MONUMENT.

The Lassen Peak National Monument was created by proclamation dated May 6, 1907. It is situated within the Lassen Peak National Forest and marks the southern terminus of the long line of extinct volcanoes in the Cascade Range, from which one of the greatest volcanic fields in the world extends, and is of special importance in tracing the history of the volcanic phenomena of that vicinity.

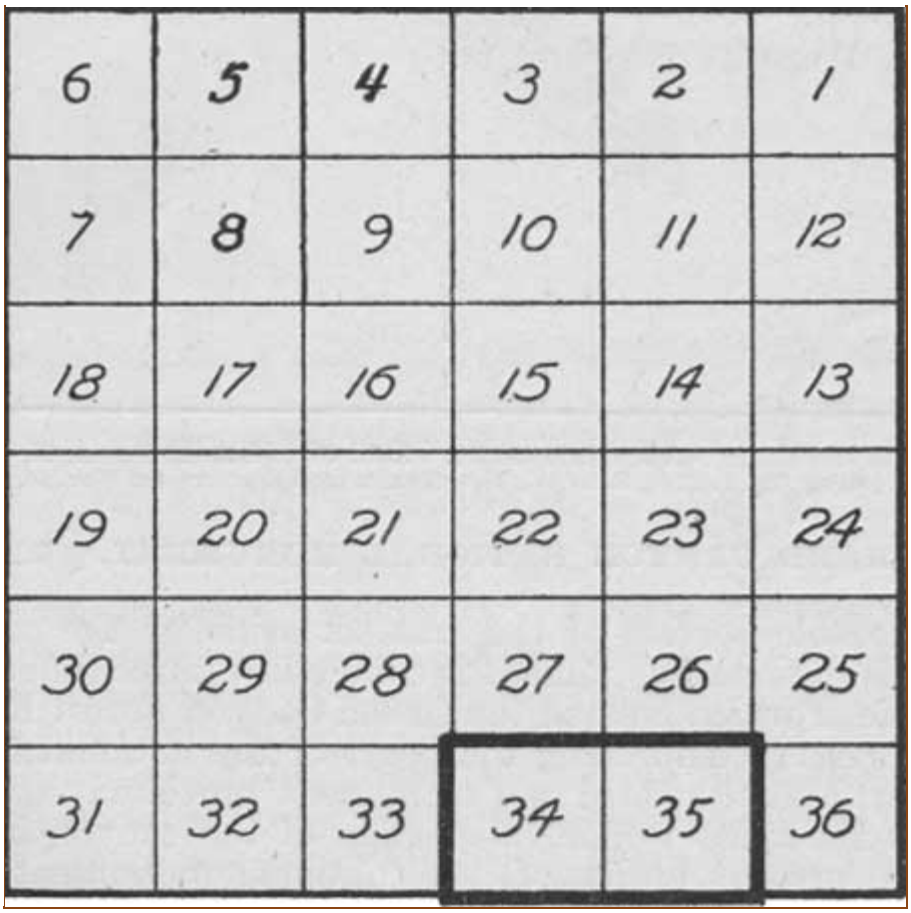


FIG. 22.—Lassen Peak National Monument within Lassen Peak National Forest, Cal., embracing part of T. 31 N., R. 4 E., M.D. M.; created May 6, 1907. *(click on image for an enlargement in a new window)*

GILA CLIFF-DWELLINGS NATIONAL MONUMENT.

The Gila Cliff-Dwellings National Monument was created by proclamation dated November 16, 1907. These cliff-dweller ruins are neither very large nor very important, but are located in a district in which few prehistoric ruins are found.

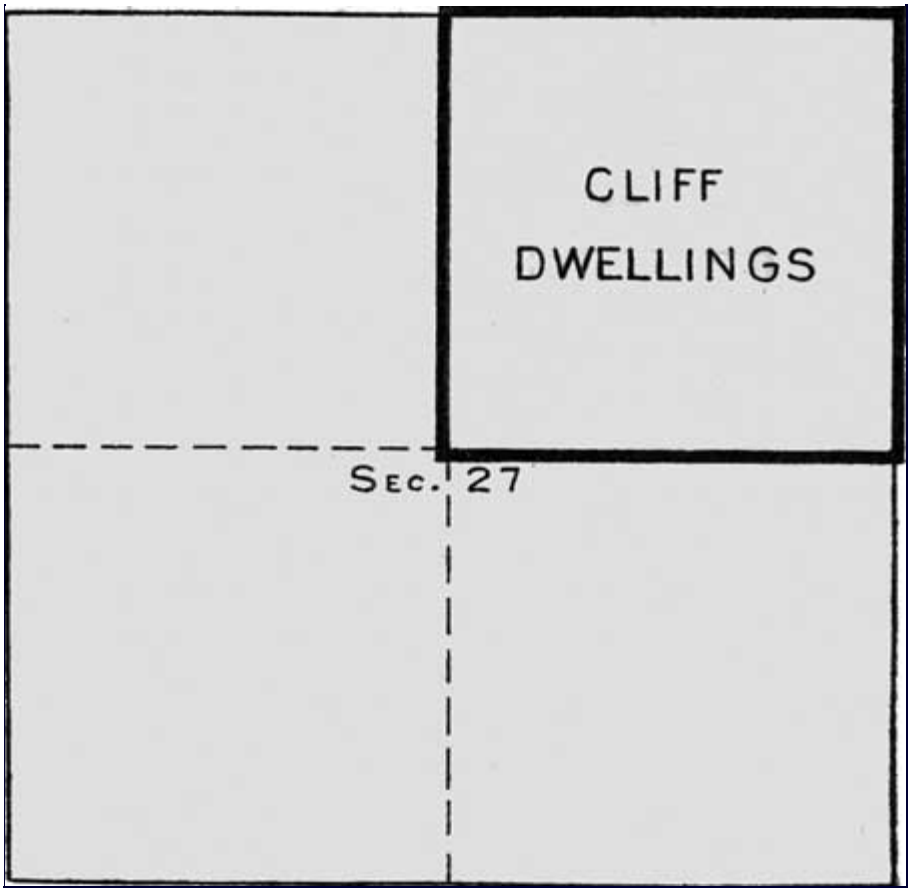


FIG. 23.—Gila Cliff-Dwellings National Monument, within Gila National Forest, N. Mex., embracing NE. 1/4 of sec. 27, T. 12 S., R. 14 W., New Mexico meridian; created Nov. 16, 1907.

TONTO NATIONAL MONUMENT.

The Tonto National Monument was created by proclamation dated December 19, 1907. It is located in Gila County, Ariz., and embraces two prehistoric ruins of cliff dwellings located somewhat less than 2 miles south of the Salt River Reservoir constructed by the Reclamation Service in the valley of the Salt River within the Tonto Basin, and is about 5 miles southeasterly from the town of Roosevelt. The prehistoric ruin is situated in the high, flaring entrance to a large, shallow cavern, is three stories high, approximately 60 feet wide and 30 feet deep, and contains 14 or more rooms.

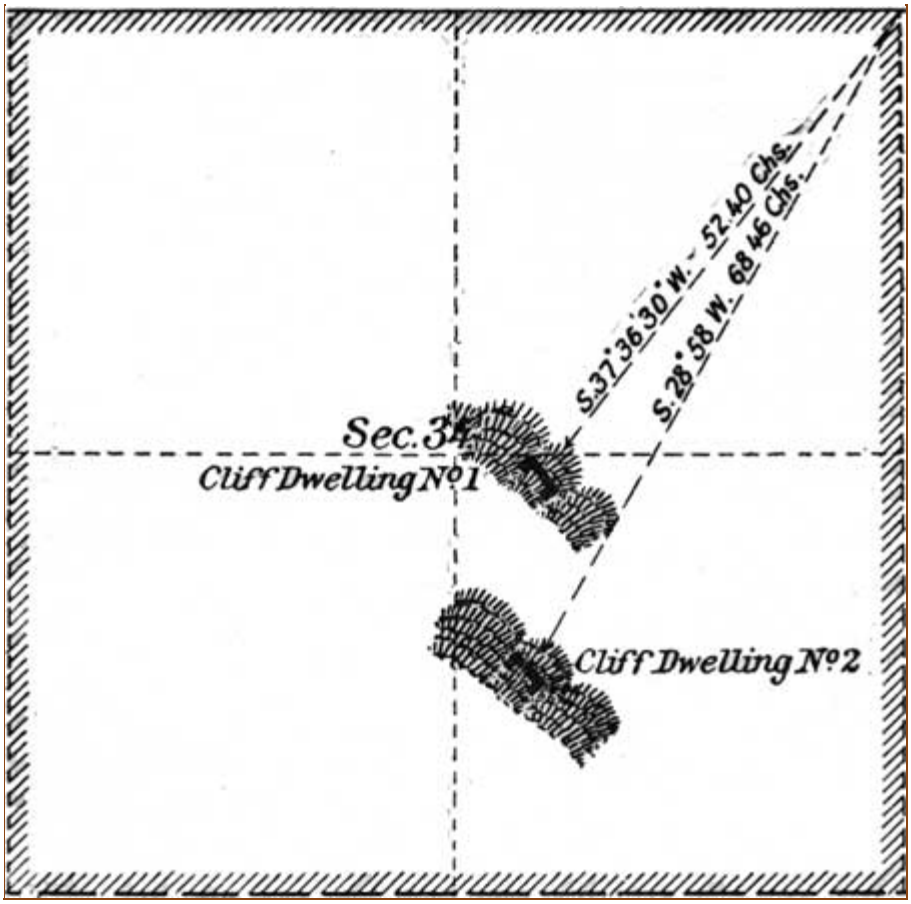


FIG. 24.—Tonto National Monument, unsurveyed sec. 34, T. 4 N., R. 12 E., Gila and Salt River meridian, Ariz., containing 640 acres; created December 19, 1907. *(click on image for an enlargement in a new window)*

GRAND CANYON NATIONAL MONUMENT, ARIZ.

A considerable portion of the area set aside by the proclamation creating this national monument is covered by three different proclamations, one of which created the Grand Canyon Forest Reserve, one the game preserve embracing that part of the national forest north of the river, and the third the monument proclamation. It is believed that the most wonderful portion of the canyon is contained within the present limits of the national monument and game preserves.

Steps were taken to create a national park of the Grand Canyon of the Arizona, and a bill (H. R. 6331) providing for such purpose was introduced in Congress April 20, 1911. The bill, however, did not become a law. The Association of American Geographers has recommended that the above-mentioned park be designated as Powell National Park, and the Geological Society of America has approved the naming of the national park in the Grand Canyon of the Colorado after its explorer, Maj. J. W. Powell.

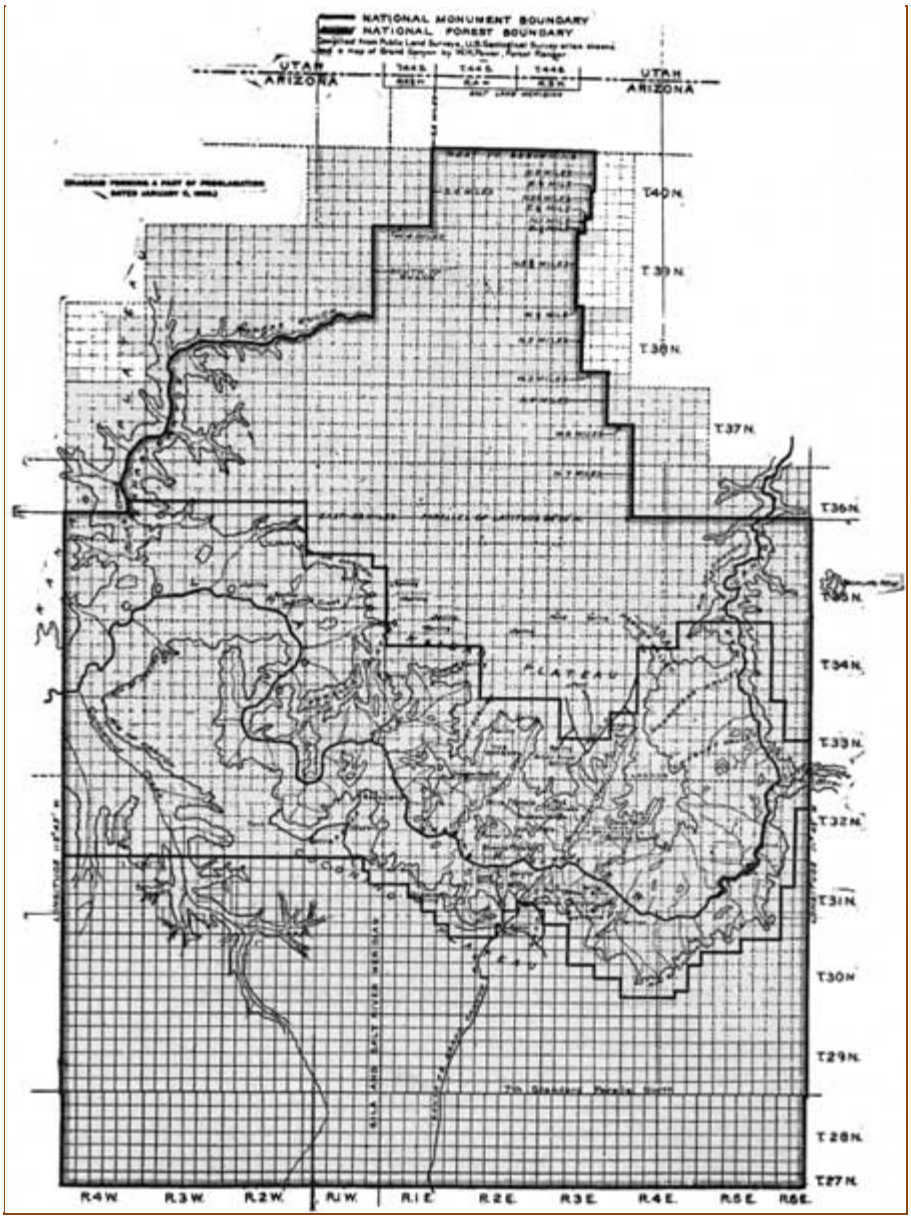


FIG. 25.—Grand Canyon National Monument, within Grand Canyon National Forest, Ariz.; created January 11, 1908. *(click on image for an enlargement in a new window)*

JEWEL CAVE NATIONAL MONUMENT.

Jewel Cave, which is located 13 miles west and south of Custer, the county seat of Custer County, S. Dak., was discovered on August 18, 1900, by two prospectors, Albert and F. W. Michaud, whose attention was attracted by the noise of wind coming from a small hole in the limestone cliffs on the east side of Hell Canyon. In the hope of discovering some valuable mineral and the source of the wind, these men, in company with one Charles Bush, enlarged the opening. Jasper and manganese are found in the cave, but to what extent is not definitely known.

The prospectors have followed the main descending wind passage for a distance of 1-1/2 miles, which point the explorers believe to be from 600 to 700 feet below the entrance, and have explored numerous side galleries and passages. However, the cave is far from being fully

explored.

The cave, as far as known, is located in limestone formation and is apparently the result of action of water. A prominent geologist who visited this cave believes it to be an extinct geyser channel. The cave, as far as explored, consists of a series of chambers, connected by narrow passages with numerous side galleries, which increase in size as the distance from the entrance becomes greater.

The explorers have been careful observers of the action of the wind within the cave. They have discovered that ordinarily the wind blows in and out of the cave for regular periods, the periods of blowing in and out being 15 hours each, although they have known the periods to be of 72 hours' duration. Other wind passages have been discovered in the vicinity of the cave.

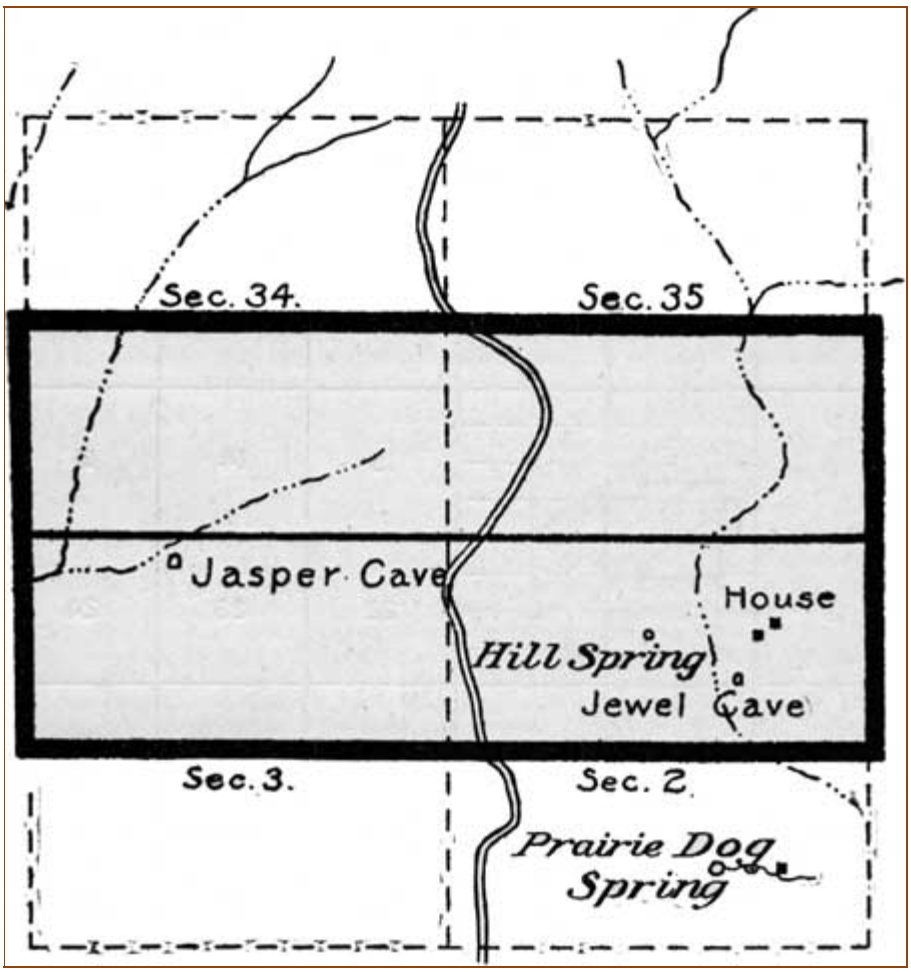


FIG. 26.—Jewel Cave National Monument, within Black Hills National Forest, S. Dak., Tps. 3 and 4 S., R. 2 E., Black Hills meridian; created Feb. 7, 1908. *(click on image for an enlargement in a new window)*

WHEELER NATIONAL MONUMENT, COLO.

The lands embraced in this national monument are situated near the head-waters of the middle fork of Bellows Creek, a northern tributary of the Rio Grande del Norte, about 10 miles northeast of Wagon Wheel

Gap, Colo., and 2 miles south of the crest of the Continental Divide.

The tract lies on the southern slope of the ridge which forms the crest of the Continental Divide. It is traversed from north to south by numerous deep canyons with very precipitous sides, the intervening ridges being capped by pinnacle like rocks, making it practically impossible to cross the tract from east to west, even on foot. There are also many crevices cutting the ridges transversely, making an intricate network of ravines separated by broken, precipitous ledges and broken mesas.

It is probable that the formation found here is the result of a succession of outpourings of lava and showers of volcanic ash which have left a series of nearly horizontal strata of varying degrees of hardness. Numerous pebbles and breccia of a flint-like rock are embedded in the softer lavas which were probably gathered up by the flowing lava mud from the original bedrock. The formation is for the most part scoriaceous tuf a and trachyte, with some rhyolite. The effect of erosion on this formation has been to cut it into sharply defined forms of many kinds. The harder broken rocks embedded in the lavas have acted as veritable chisels, greatly accelerating erosive action and making the lines and angles more sharply defined than would be the case in ordinary weathering. This erosion is still going on at a remarkably rapid rate, making the place very interesting from the geological point of view.

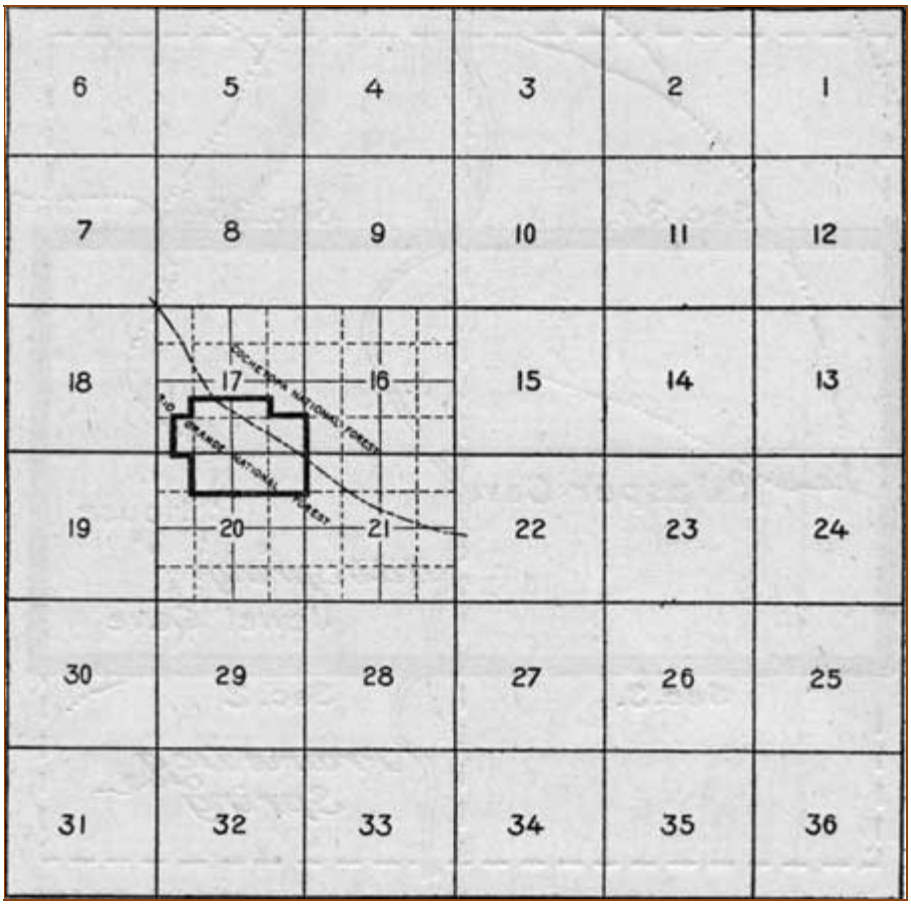


FIG. 27.—Wheeler National Monument, within Cochetopa and Rio Grande National Forests, Colo., T. 42 N., R. 2 E., New Mexico meridian; created Dec. 7, 1908. *(click on image for an enlargement in a new window)*

The fantastic forms resulting from the rapid erosion make this spot one of exceptional beauty. The numerous winding canyons, broken ridges, pinnacles, and buttes form such striking and varied scenes that it will be much visited by tourists when it has been made accessible by the construction of roads and trails.

From the most reliable data it is believed that the ill-fated expedition of John C. Fremont, in 1848, reached this immediate vicinity, when disaster came upon the party, compelling it to turn back. Skeletons of mules, bits of harness, and camp equipage are found here, lending force to the recorded data.

MOUNT OLYMPUS NATIONAL MONUMENT, WASH.

This monument was set aside by presidential proclamation of March 2, 1909, and contained approximately 608,640 acres. It was created for the purpose of preserving many objects of great and unusual scientific interest, embracing numerous glaciers, and the territory has also been from time immemorial the summer range and breeding ground of the Olympic elk, a species which is rapidly decreasing in numbers. A bill was introduced in Congress on July 15, 1911, providing for the setting aside as a national park the same tract of land as was set aside by proclamation of the President creating the Mount Olympus National Monument.

It was reduced by presidential proclamation of April 17, 1912, to 608,480 acres in order to permit certain claimants to land therein to secure title to the land. This proclamation providing therefor is as follows:

I, WILLIAM H. TAFT, President of the United States of America, by virtue of the power in me vested by section 2 of the act of Congress approved June 2, 1906, entitled "An act for the preservation of American antiquities," do hereby declare and proclaim that the south half of the southwest quarter of section twenty-one, and the north half of the northwest quarter of section twenty-eight, in township twenty-four north, range eight west, Willamette meridian, Washington, be, and the same are hereby, eliminated from the Mount Olympus National Monument. The provisions of the proclamation of March 2, 1909, shall remain in full force and effect as to all other lands thereby reserved as a national monument.

In witness whereof I have hereunto set my hand and caused the seal of the United States to he affixed.

[SEAL.] Done at the city of Washington this seventeenth day of April, in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States the one hundred and thirty-sixth.

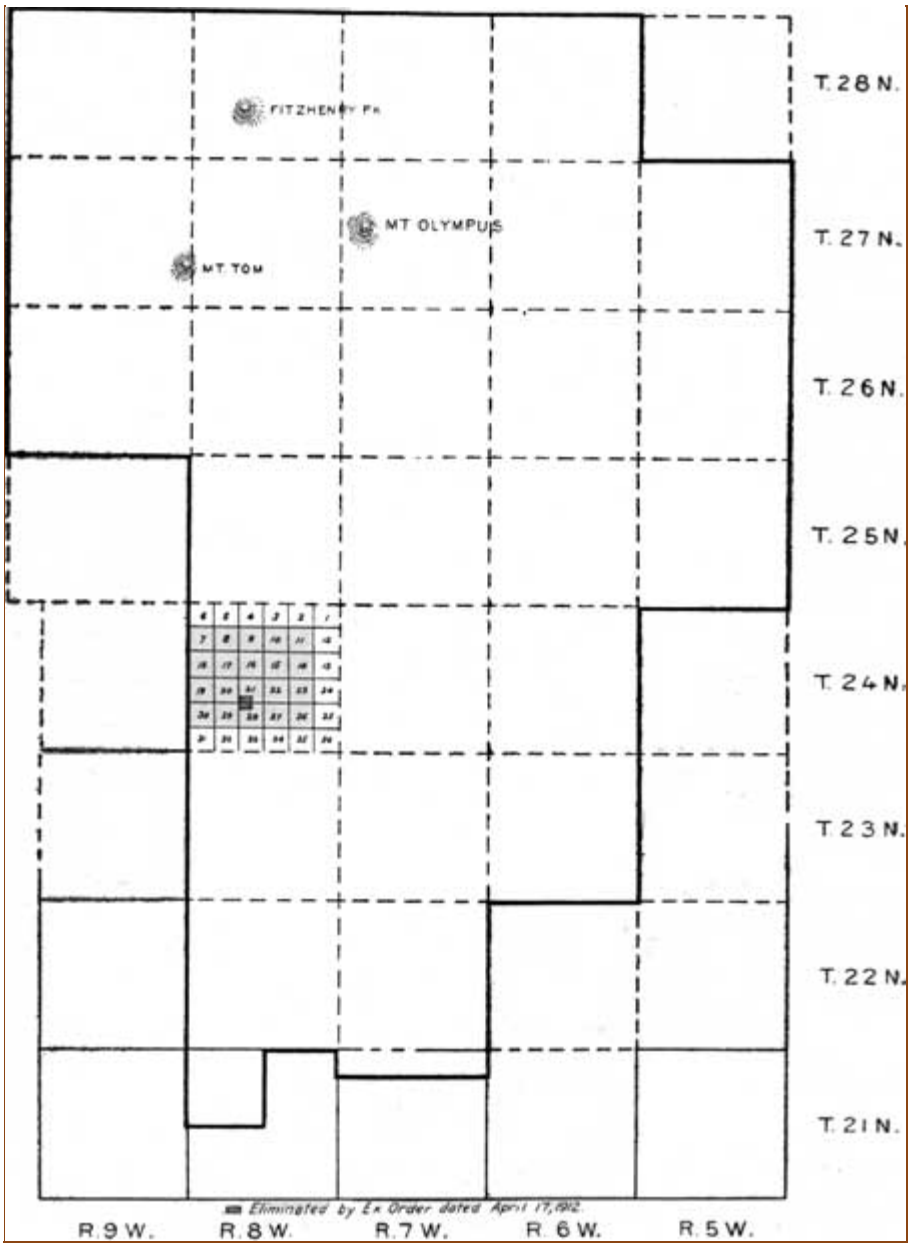


FIG. 28.—Mount Olympus National Monument, within Olympic National Forest, Wash.; created March 2, 1909; elimination of April 17, 1912. *(click on image for an enlargement in a new window)*

OREGON CAVES NATIONAL MONUMENT, OREG.

The Oregon Caves or "Marble Halls" of Josephine County, discovered in 1874, are located in the Siskiyou National Forest, about 30 miles south of Grants Pass in Cave Mountain, a peak of the Greyback Range, that divides the head-waters of the Applegate and Illinois Rivers, and connects with the Siskiyou Mountains near the north line of California.

Cave Mountain, the peak which contains these caves, rises to an elevation of about 6,000 feet, and is of limestone formation. The main openings around which the national monument has been created are at an elevation of 4,000 feet, but the entire mountain side for 5 or 6 miles shows caverns of various sizes, and in all probability throughout its interior is honeycombed like the portion that has been explored.

These caves are more of a series of galleries than of roomy caverns, though many beautiful rooms have been discovered, while miles of galleries have been visited; but there are thousands of passageways leading in all directions—partly closed by stalactites—that have never been opened, and with the distant and unexplored openings on the opposite side of the mountain the magnitude of the Oregon Caves can be said to be practically unknown.

Many small streams are found at different elevations, and larger bodies of running water can be heard in pits bottomless so far as measured (by 300-foot line). This running water probably accounts for currents of wind that in some of the galleries blow so hard as to extinguish an open light at once.

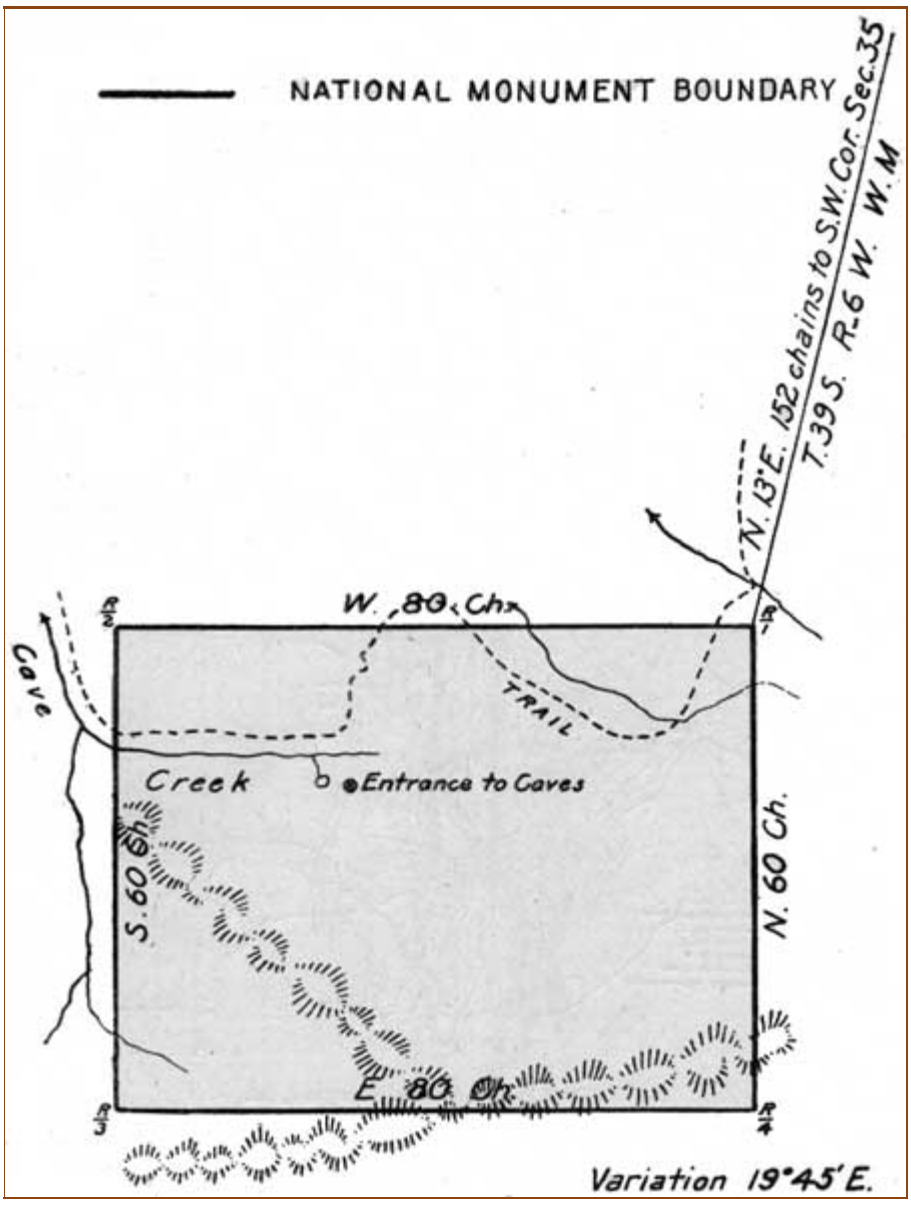


FIG. 29.—Oregon Caves National Monument, within Siskiyou National Forest, Oreg.
(click on image for an enlargement in a new window)

The lime deposits take many beautiful forms—massive pillars, delicate

stalactites of alabaster whiteness with the crystal drop of water carrying its minute deposit of lime from which they are formed, and broad sheets resembling drapery with graceful curves and waves that were certainly made by varying currents of wind during formation.

The Forest Service has rebuilt and improved the trails leading to the caves from each side of the divide in order to more easily protect the valuable forest surrounding and to make the caves more accessible to tourists.

DEVIL POSTPILE NATIONAL MONUMENT, CAL.

The Devil Postpile consists of basaltic rocks laid down in the form of an immense pile of posts, and while there are similar formations in different parts of the country, this is especially prominent, being one of the most noted of its kind on the continent and said to rank with the famous Giants Causeway on the coast of Antrim, in the north of Ireland.

Below the post pile and above the junction of King Creek and the middle fork of the San Joaquin River is Rainbow Falls, similar to the well-known Vernal Falls of the Yosemite Valley, and one of the few of its kind on the continent.

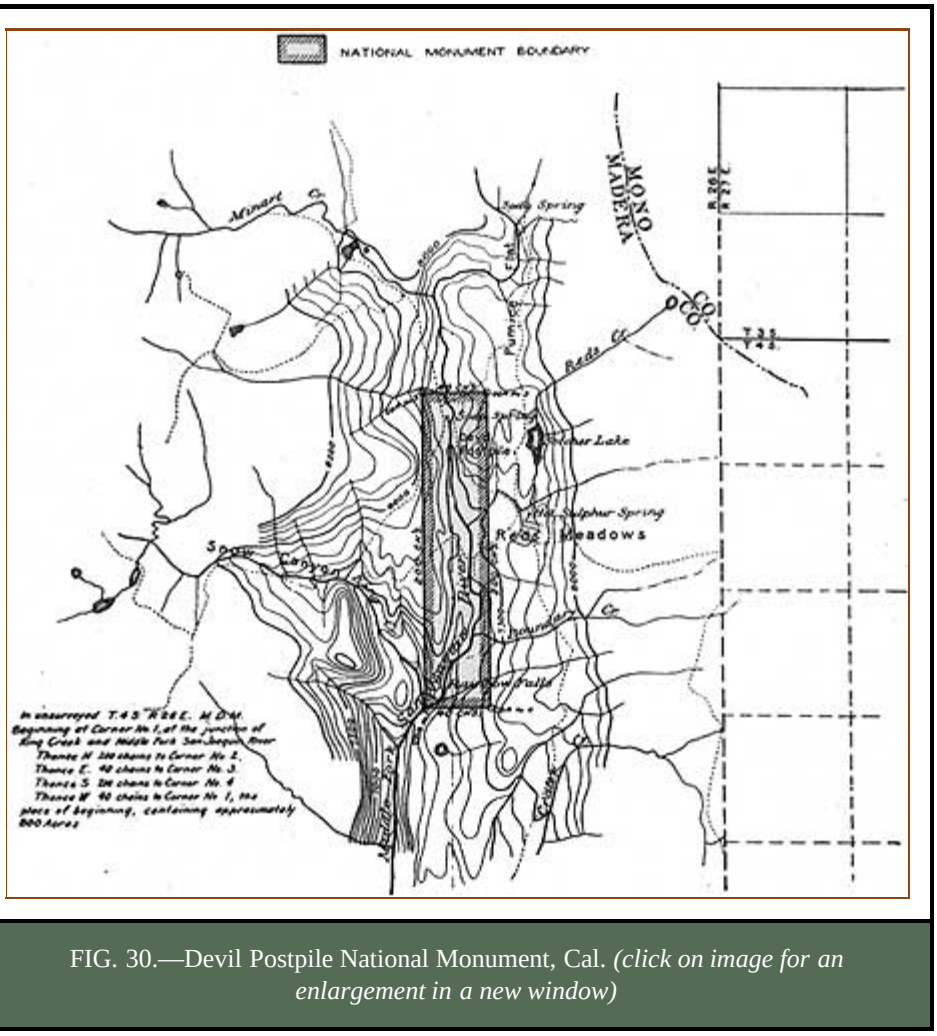


FIG. 30.—Devil Postpile National Monument, Cal. *(click on image for an enlargement in a new window)*

BIRD RESERVES.

All of the bird reserves have been created through reference from the Interior Department to the President of forms of Executive orders providing therefor. These reserves are regarded as in all essential particulars reservations of public lands for public use or other purposes, for which there are numerous precedents. The first specific act of Congress providing for the protection of birds by bird reserves created by Executive order was introduced by Hon. John F. Lacy, of Iowa, and became a law on June 28, 1906. (34 Stat., 536.) This act made it unlawful to kill birds, to take their eggs, or to willfully disturb birds upon the reservations, and it provides a fine of not exceeding $500 or imprisonment for not exceeding six months, or both fine and imprisonment, for each conviction secured. This law was substantially reenacted in the new penal code approved March 4, 1909 (35 Stat., 1104), in the following language:

SEC. 84. Whoever shall hunt, capture, willfully disturb, or kill any bird of any kind whatever, or take the eggs of any such bird, on any lands of the United States which have been set apart or reserved as breeding grounds for birds by any law, proclamation, or Executive order, except under such rules and regulations as the Secretary of Agriculture may from time to time prescribe, shall be fined not more than five hundred dollars or imprisoned not more than six months, or both.

The reservations now existing, which are being administered under the direction of the Biological Survey, Department of Agriculture, are 65 in number, as follows:

Bird reserves created.

Name of reservation.	Date.	Location.	Area.
Pelican Island	Mar. 14, 1903	East Florida coast	5.50 acres.
Breton Island	Oct. 4, 1904 Nov. 11, 1905	Southeast coast of Louisiana	Unknown.
Stump Lake	Mar. 9, 1905	North Dakota	27.39 acres.
Huron Islands	Oct. 10, 1905	Lake Superior, Mich	Unknown.
Siskiwit Islands	do	do	Do.
Passage Key	do	Tampa Bay, Fla	36.37 acres.
Indian Key	Feb. 10, 1906	do	90 acres.
Tern Islands	Aug. 8, 1907	Mouths of Mississippi River, La	Unknown.
Shell Keys	Aug. 17, 1907	South Louisiana coast	Do.
Three Arch Rocks	Oct. 14, 1907	West Oregon coast	Do.
Flattery Rocks	Oct. 23, 1907	West Washington coast	Do.
Quillayute Needles	do	do	Do.
Copalis Rock	do	do	Do.
East Timbalier Island	Dec. 7, 1907	South Louisiana coast	Do.
Mosquito Inlet	Feb. 24, 1908	East Florida coast	Do.
Tortugas Keys	Apr. 6, 1908	Florida Keys, Fla	Do.
Klamath Lake	Aug. 8, 1908	Oregon and California	Do.
Key West	do	Florida Keys, Fla	Do.
Lake Malheur	Aug. 18, 1908	Oregon	Do.

Chase Lake	Aug. 28, 1908	North Dakota	Do.
Pine Island	Sept. 15, 1908	West Florida coast	Do.
Matlacha Pass	Sept. 26, 1908	do	Do.
Palma Sola	do	do	Do.
Island Bay	Oct. 23, 1908	Florida	Do.
Loch Katrine	Oct. 26, 1908	Wyoming	Do.
Hawaiian Islands	Feb. 3, 1909	Hawaii	Do.
East Park	Feb. 25, 1909	California	Do.
Cold Springs	do	Oregon	Do.
Shoshone	do	Wyoming	Do.
Pathfinder	do	do	Do.
Bellefourche	do	South Dakota	Do.
Strawberry Valley	do	Utah	Do.
Salt River	do	Arizona	Do.
Deer Flat	do	Idaho	Do.
Minidoka	do	do	Do.
Willow Creek	do	Montana	Do.
Carlsbad	do	New Mexico	Do.
Rio Grande	do	do	Do.
Keechelus Lake	do	Washington	Do.
Kachess Lake	do	do	Do.
Clealum Lake	do	do	Do.
Bumping Lake	do	do	Do.
Conconully	do	do	Do.
Bering Sea	Feb. 27, 1909	Alaska	Do.
Pribilof	do	do	Do.
Tuxedni	do	do	Do.
Farallon	do	California	Do.
Culebra	do	Porto Rico	Do.
Yukon Delta	do	Alaska	Do.
St. Lazaria	do	do	Do.
Bogoslof	Mar. 2, 1909	do	Do.
Clear Lake	Apr. 11, 1911	California	Do.
Forrester Island	Jan. 11, 1912	Alaska	Do.
Hazy Islands	do	do	Do.
Niobrara	do	Nebraska	[1]14,640 acres.
Green Bay	Feb. 21, 1912	Wisconsin	1.87 acres.
Chamisso Island	Dec. 7, 1912	Alaska	Unknown.
Pishkun	Dec. 17, 1912	Montana	Do.
Desecheo Island	Dec. 19, 1912	Porto Rico	Do.
Gravel Island	Jan. 9, 1913	Wisconsin	Do.
Aleutian Islands	Mar. 3, 1913	Alaska	Do.
Canal zone	Mar. 19, 1913	Panama	Do.
Walker Lake	Apr. 21, 1913	Arkansas	Do.
Petit Bois Island	May 6, 1913	Alabama and Mississippi	Do.
Anaho Island	Sept. 4, 1913	Nevada	247.73 acres.

BIRD RESERVES ENLARGED AND REDUCED.

Pelican Island	Jan. 26, 1909	Florida (enlarged)	Unknown.
Mosquito Inlet	Apr. 2, 1909	do	Do.
Cold Springs	Nov. 21, 1911	Oregon (enlarged)	Do.
Clear Lake	Jan. 13, 1912	California (reduced)	Do.
Minidoka	Feb. 21, 1912	Idaho (enlarged)	Do.
Niobrara	Nov. 14, 1912	Nebraska (enlarged)	[1]15,253.7 acres.

[1]Approximate area.

During the year 9 new reserves for the protection of native birds were created, as follows:

BIRD RESERVES CREATED DURING FISCAL YEAR 1913.

Chamisso Island Reservation, Alaska, created December 7, 1912.
Pishkun Reservation, Mont., created December 17, 1912.
Desecheo Island Reservation, P. R., created December 19, 1912.
Gravel Island Reservation, Wis., created January 9, 1913.
Aleutian Islands Reservation, Alaska, Created March 3, 1913.
Canal Zone, Panama, created March 19, 1913.
Walker Lake Reservation, Ark., created April 21, 1913.
Petit Bois Island Reservation, Ala. and Miss., Created May 6, 1913.
Anaho Island Reservation, Nev., created September 4, 1913.
Niobrara Reservation, Nebr., enlarged November 14, 1912.

As appears from this list these reservations are scattered between Alaska and Porto Rico, two new ones in Alaska, one of which (the Aleutian Islands) was established not only for the purpose of protecting native birds but also for the encouragement of propagation of fur-bearing animals, reindeer, and food fishes. For the first time a bird reserve was established in the States of Arkansas, Nevada, Alabama, and Mississippi, and after a careful consideration, based upon representations made by this department, the Isthmian Canal Commission secured an Executive order for the protection of the native birds within the zone, which, in its punitive features, conforms to section 84 of the United States Penal Code. Jurisdiction over the Canal Zone Reservation is, however, retained by the Isthmian Canal Commission instead of being placed with the Department of Agriculture, as is the case in all other Government bird reserves.

In addition to these 9 new reserves, the Niobrara Reservation, Nebr., which was created by Executive order dated January 11, 1912, was enlarged by a second order of November 14, 1912, so as to include within its boundaries about 614 acres, covering the old parade ground of the Fort Niobrara Military Reservation, including a spring of fresh running water and some of the military buildings and barracks which could be used for stables and for residence purposes by a custodian. This additional tract has been fenced and small herds of buffalo, elk, and deer, donated by J. W. Gilbert, a citizen of Nebraska, have been permanently domiciled therein, and it is believed that the climate and natural

environment will insure the healthful and rapid increase of all of these most valuable of the larger native mammals.

The creation of these 9 additional reservations brings the total number of bird reserves up to 65. and active administrative work by the Agricultural Department upon all of the reserves within its jurisdiction, which have been in serious need of efficient warden service, has been most satisfactory.

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