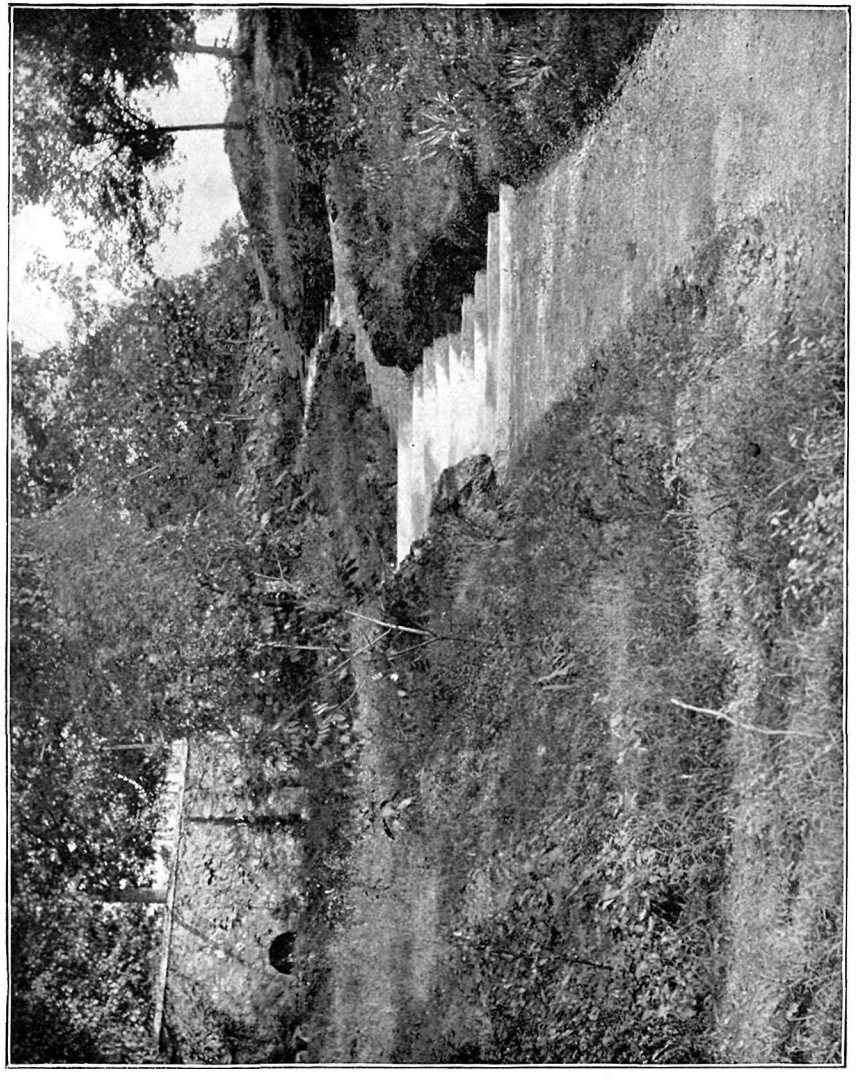


STAIRWAY CUT OUT OF TUFA ROCK, NEAR ARLINGTON HOTEL.

REPORT

OF THE

SUPERINTENDENT OF THE HOT SPRINGS RESERVATION.

HOT SPRINGS RESERVATION,
OFFICE OF THE SUPERINTENDENT,
Hot Springs, Ark., June 30, 1899.

SIR: I have the honor to respectfully submit my annual report of the Hot Springs Reservation for the fiscal year ended June 30, 1899, briefly reviewing the general conditions at this time and enumerating the several items of improvement accomplished since my last report.

The number of persons visiting Hot Springs for health and pleasure during this period have been by far the largest in the history of the place; the hotels and bath houses have enjoyed a good business, and, so far as I have been able to observe, those using the baths have been greatly benefited.

Since the removal of this office to a more convenient location, the number of applications made both in person and by letter for information about Hot Springs have increased to such an extent that it has been with much difficulty that I could collect sufficient reliable printed matter with which to supply the demand. I conclude from this not alone but as well from the high order of intelligence of the people visiting "the springs" for the past several years, that the future of Hot Springs as the standard health and pleasure resort of the United States is well assured. That this desirable condition has been brought about by the Government's prudent control of the hot waters and the improvements heretofore made and now being continued, is not to be doubted.

By the act of Congress approved April 20, 1832, four sections of land embracing all the hot waters were set aside and reserved for the future disposal of the United States. From this period or even earlier the hot waters seem to have attracted considerable attention from the Indians, the earliest settlers, and others, who in the meantime had set up separate claims to this land embracing all the hot waters. In 1851 and 1852 these claims began to come prominently before the courts, and from that time on until they were finally decided adversely to all the claimants by the Supreme Court of the United States, they attracted almost national attention. In the meantime a considerable population had settled on the original reservation, having acquired a shadow of title from the original claimants or those holding under

them; and it was this condition which brought about the necessity for the act of Congress approved March 3, 1877, authorizing the appointment of commissioners to survey and lay out the land in blocks, lots, streets, courts, and alleys, and pass upon the rights of settlers to purchase their claims at a price fixed by the Government.

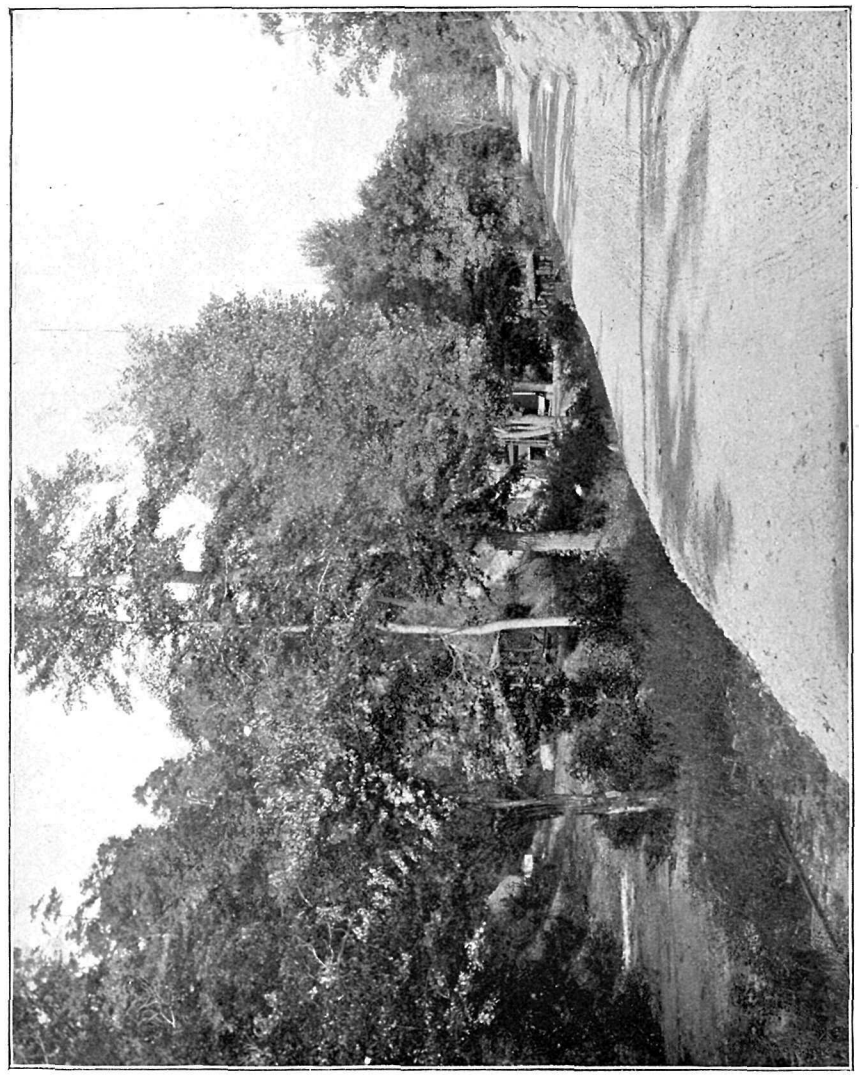
Under this provision all the tracts and parcels of land surveyed and platted by the commissioners were sold to the claimants or otherwise disposed of except 476, the title to which remained in the hands of the Government without the right to purchase being awarded to anyone. Two separate sales of these unawarded lots have since been had under authority of the Department, the first being at Little Rock on May 6, 1884, at which 149 lots were sold for the aggregate sum of $29,803. The second sale was held at Hot Springs April 12, 1892, at which 170 lots were sold for the sum of $74,255, leaving still in the hands of the Government 157 of these unawarded lots, the value of which at this time is estimated to be $75,000.

By the act of Congress approved June 16, 1880, the mountainous districts of the Hot Springs Reservation, known as North Mountain, Sugar Loaf Mountain, and West Mountain, together with Hot Springs Mountain, were forever reserved from sale and dedicated to public use as parks, to be known as the Permanent Reservation.

These, with the Whittington Avenue Reservation, comprise 911.63 acres, divided as follows:

	Acres.
Hot Springs Mountain Reservation	264.93
North Mountain Reservation	224.74
Sugar Loaf Mountain Reservation	129.02
West Mountain Reservation	281.94
Whittington Avenue Reservation	11.00
Total	911.63

The hot springs, which are 73 in number, issue from the side and base of Hot Springs Mountain, the waters from each being secured at the source and conveyed through pipes laid from one to several feet under ground to the bath houses and reservoirs. The actual quantity of hot water discharged by all these springs is not definitely known, but that which is required for the daily supply of the bath houses is 538,000 gallons, the maximum supply for each tub being estimated at 1,000 gallons per day. The hot water which is under control in addition to this is about 300,000 gallons, and is conveyed through a system of pipes to the impounding reservoir and discharged through it into Hot Springs Creek. The total daily supply of hot water under control at present is estimated to be 888,000 gallons. I think it probable that with careful development and the use of suitable pumps to raise the water from the lower levels, the total supply of hot water might be increased to 1,000,000 gallons each twenty-four hours. The temperature and elevation of each of the hot springs is indicated by the following table:



HAPPY HOLLOW SPRING, FROM FOUNTAIN STREET DRIVE.

Springs on Hot Springs Mountain Reservation.

[Datum of levels: The lowest point on the Hot Springs Reservation, being on the east side where the Hot Springs Railroad enters the same, approximates 500 feet above the tide water of the Gulf.]

No.	Temperature.	Elevation.	Character.	No.	Temperature.	Elevation.	Character.
	Degrees	*Feet.*			*Degrees.*	*Feet.*	
1	77	91.4	Constant flow.	38	128	90.2	Constant flow.
2	76	98.7	Do.	39	125.5	92.2	Do.
3	124	98	Do.	40	112	93.3	Do.
4	124	98.3	Do.	41	157	113.5	Do.
5	80	115.6	Do.	[1]42	.....	110.2	Do.
6	103	171.6	Do.	43	144	164.4	Do.
7	115	172.2	Do.	[1]44	.....	162.8	Do.
8	121.5	117.5	Do.	45	111	171.8	Do.
9	122	179.6	Do.	[2]46	.....	109.8	Do.
10	121.5	181.2	Do.	47	144.5	176.5	Do.
11	105	120	Do.	48	91	178.9	Do.
12	111	117.5	Do.	49	131	176.1	Do.
13	135.5	85.2	Do.	50	145	179.6	Do.
14	137	84.3	Do.	51	144	182.8	Do.
15	134	84.7	Do.	52	142	178.3	Do.
16	101	135.8	Do.	53	145.5	186.1	Do.
17	.....	140	Seepage.	54	146	186.1	Do.
18	93	158	Constant flow.	55	122	92.7	Do.
19	84	159.3	Do.	56	133	95.3	Do.
20	83	162.8	Do.	57	128	100.2	Do.
21	106	107	Do.	[3]58	.....	101.9	Do.
22	122	118.2	Do.	59	133	102	Do.
23	125	123.8	Do.	60	134.5	112.9	Do.
24	113	127.7	Do.	61	133	186.1	Do.
25	111	127.7	Do.	62	109	186.3	Do.
26	106	127.9	Do.	63	83	186.2	Do.
27	127.5	130.3	Do.	64	135	186.6	Do.
28	145	129.4	Do.	65	141	186.1	Do.
29	90	140.4	Do.	66	87	185.3	Do.
30	134.5	148.3	Do.	[4]67	.....	113	Intermittent.
31	147	133.2	Do.	68	131	85	Constant flow.
32	124	95.7	Do.	69	83	89.7	Do.
33	140	89.8	Do.	70	89	89.4	Do.
34	120	91.8	Do.	71	94	89.3	Do.
35	135	91.8	Do.	72	122	.....	Do.
36	110	90.4	Do.	73	122	.....	Do.
37	120	155.5	Do.				

[1] Under Big Iron bath house.
[2] Under bath house on hill.
[3] Inaccessible; near Arsenic spring.
[4] In Arlington yard; flows after heavy rain; 134°.

With the increased attention directed to Hot Springs in the last few years comes the demand for more specific information. Especially is this noted in the inquiries for an authoritative analysis of the hot waters. This I have not been able to furnish, for the reason that, so far as I have been able to learn, none has ever been made by or under authority of the Government. Neither have I been able to find any of recent date coming from a reliable source. Those which I have been able to gather up, and which seem best authenticated and are accepted here as reliable, were made forty-odd years ago by Prof. E. H. Larkin, of St. Louis, Mo.; Prof. David Dale Owen, State geologist, and Dr. William Elderhorst, the waters analyzed being from different springs.

A quantitative analysis made by Prof. E. H. Larkin, of St. Louis, gives 8½ grains of mineral constituents to the gallon. The temperature of the water analyzed was 145°. The following is the analysis made:

	Grains.		Grains.
Silicic acid	24.74	Water	1.72
Sesquioxide of iron	1.12	Sulphuric acid	4.40
Alumina	5.15	Potash	1.46
Lime	28.93	Soda	2.01
Magnesia	.73	Iodide and bromide	Trace.
Chlorine	.07		
Carbonic acid	21.36	Total	100.00
Organic matter	8.31		

By Prof. David Dale Owen, State geologist:

	Grams.
Organic matter, combined with some moisture	1.16
Silica, with some sulphate of lime and dissolved by water	1.40
Bicarbonate of lime	2.40
Bicarbonate of magnesia	.50
Chloride of potassium	.40
Chloride of sodium	.218
Oxide of iron and a little alumina	.133
Sulphate of lime dissolved by water	.350
Loss, iodine (?) bromine (?)	.053

From a later report by Professor Owen:

Silicate with base.	Bicarbonate of lime.
Bicarbonate of magnesia.	Alumina, with oxide of iron.
Carbonate of magnesia.	Carbonate of potash.
Sulphate of magnesia.	Sulphate of lime.
Oxide of magnesia.	Chlorate of magnesia.
Bromide, a trace.	Organic matter, a trace.

The waters are thoroughly impregnated with free carbonic acid.

By Dr. William Elderhorst, analysis of 100 grams:

	Grams.		Grams.
Lime	.059024	Chlorine	.002275
Silicates	.045600	Sapo	.004650
Sulphuric acid	.019400	Potash	.001560
Magnesia	.007629		

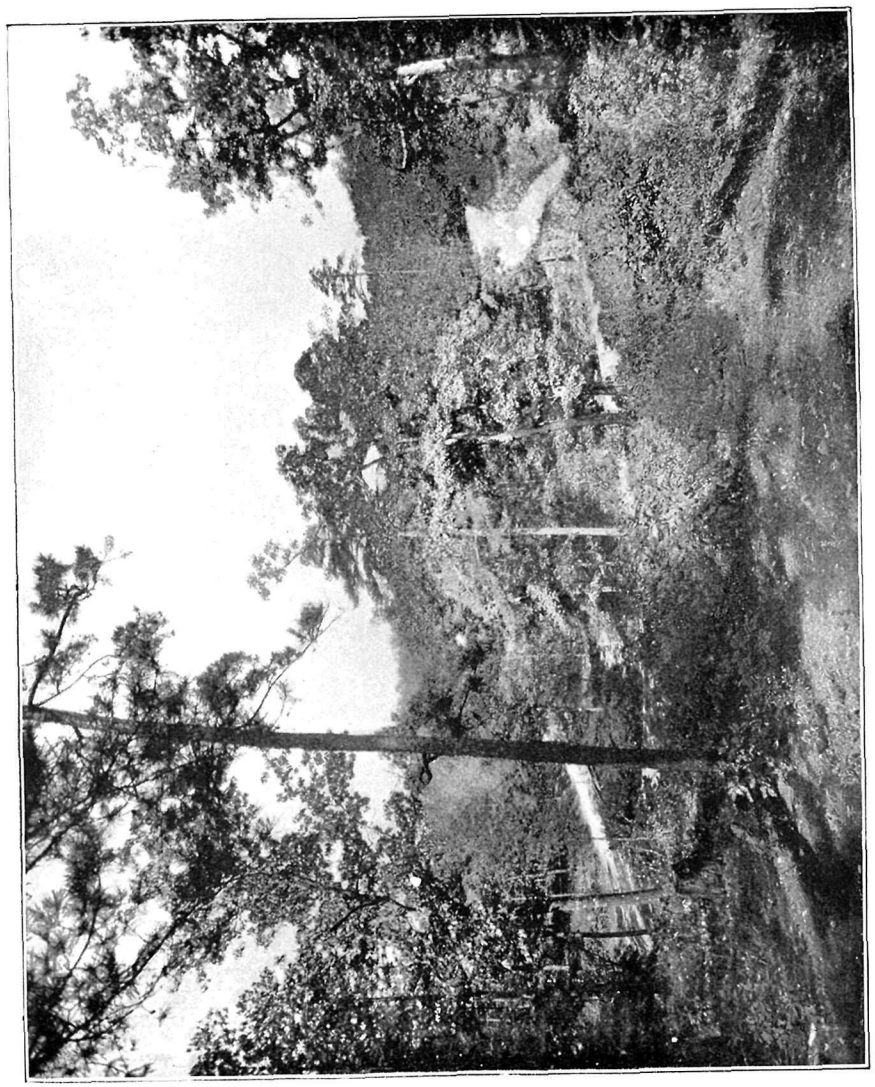
THE BATH HOUSES.

During the period intended to be covered by this report no leases for additional hot water have been granted, and no new bath houses have been erected.

The Rammelsberg bath house has been the only one to make considerable repairs, which have consisted of replacing the worn-out wooden floors with concrete floors, rebuilding the framework over the bathing department so as to provide better ventilation, a new roof, additions to the plumbing and painting, the aggregate cost of which has been $4,800.

The repairs made to the other houses have only been such as were necessary to keep the buildings in a good state of repair, and have consisted mainly of carpenters' repair work, plumbers' work, and painting, with some interior decorations and additions to the furnishings.

The attendance of visitors has materially increased during the past year, and as a result the business of the bath houses has been much more satisfactory. The bath-house rules and regulations have been better observed than heretofore. The bath-house owners themselves have manifested a better disposition in this respect, and I am encouraged to believe that with the promulgation of the new rules and regulations, as they are to be revised, that bath-house drumming will be brought under better control and materially reduced. There are many conditions in Hot Springs which induce and encourage bath-house drumming, not the least of which is bath-house competition. There are eighteen active bath houses in Hot Springs, each striving with the other for the largest share of business. Apply to them the settled business principle, "that all men do not succeed equally though all may have started with equal advantages." Those who find themselves falling behind conclude at once, without accusing themselves of inefficient management, that the more fortunate ones have achieved their



SECTION OF THE FOUNTAIN STREET DRIVE.

success by bath-house drumming; and in this they are encouraged by both the drummers and the drumming doctors, who are ever alert to break through the lines, and who are unscrupulous in the means they employ to convince the one who has fallen behind that the success of his competitor has been accomplished through doing business with them. In like manner the drumming doctors will occasionally send all their patients to one particular bath house in order to create the impression among the others that they are getting paid for the patronage they send.

Out of the ninety-odd doctors practicing here, about one-half openly employ drummers or other means not recognized by the medical profession for getting their patients. They form a fraternity with the hundred or more drummers, whose business it is to get every stranger they can to the doctor who will pay the most for this service, regardless of his qualifications or standing. Here they induce the stranger, if possible, to pay for a month's medical treatment in advance, usually $25 to $40, which is divided with the drummer, and the stranger sent with him farther down the line to the drug store and the bath house, if they have one on their list, often with the advice from the doctor that the waters at the bath house, where they propose to sell him again, are better for his particular complaint than at any other. It is owing to these reasons, which are perpetuated by the drumming doctors and drummers, that bath-house drumming obtains to any considerable extent in Hot Springs. Whenever the nefarious practices of the drumming doctor can be eliminated, then will the balance pass away, or at least that which would be left would be of little consequence.

In order to accomplish this desirable end, I again renew my recommendation "that a board of competent medical examiners be appointed, whose duty it shall be to pass upon all qualifications of all physicians who desire to prescribe the hot waters in connection with their practice, and to refuse license except to those of good moral and professional standing." And if it is considered that sufficient authority is not at present vested in the Secretary of the Interior to warrant the issuance of this order, that at the proper time the Assistant Attorney-General for the Interior Department be directed to prepare a bill for enactment by the next legislature of this State which will grant sufficient authority to the United States to regulate the practice of medicine on the Hot Springs Reservation. There is but little doubt that such a bill would, upon the request of the Secretary of the Interior, be promptly passed, and would bring to an end the disgraceful practice of drumming by doctors for clients and remove all the trouble and difficulty now experienced in the management of the bath houses. Such a condition would be hailed with delight by the responsible citizens of Hot Springs and by the large colony of regular physicians, many of whom have attained very high standing in the medical profession of the United States. I hope that at the proper time this subject may have the thoughtful consideration of the Department.

The following table, corrected to June 30, 1899, giving the name to whom issued, the date and expiration of the several leases for hot water now in force, is, after being corrected, continued from last report:

Date and expiration of the several leases now in force.

Name of bath house.	Lessees.	Tubs.	Date of lease.	Expiration of lease.
Alhambra	Alhambra Bath House Co	40	Feb. 28, 1894	Feb. 28, 1914
Arlington	Arlington Hotel Co	40	Mar. 3, 1892	Mar. 2, 1912
Avenue	Avenue Hotel Co	20	Feb. 17, 1898	Dec. 31, 1902
Cheshire	Butterick Publishing Co	8	Sept. 16, 1898	Sept. 16, 1905
Eastman	New York Hotel Co	40	May 12, 1892	May 12, 1912
Great Northern	Curnel S. Williamson	19	May 25, 1897	May 15, 1912
Hale	Roots & Eastman	26	Jan. 1, 1893	Dec. 31, 1907
Horse Shoe	D. Fellows Platt	30	Jan. 1, 1895	Dec. 31, 1909
Hot Springs	Mark J. Smith	16	Jan. 1, 1893	Dec. 31, 1902
	Hot Springs Medical Co	4	July 24, 1894	July 24, 1904
Imperial	Fred N. Rix and J. L. Barnes	25	Jan. 1, 1892	Dec. 31, 1906
Lamar	M. C. Tombler and D. C. Buckstaff	40	Jan. 1, 1897	Dec. 31, 1916
Magnesia	Chas. B. Platt	30	Jan. 1, 1895	Dec. 31, 1909
Maurice	Maurice, Converse & Maurice	21	Jan. 1, 1897	Dec. 31 1916
Ozark	I. W. Carhart and F. B. Latta	22	Jan. 1, 1892	Dec. 31, 1902
Palace	Samuel W. Fordyce	23	Jan. 12, 1893	Dec. 31, 1906
Park	Park Hotel Co	40	May 12, 1892	May 12, 1912
Rammelsberg	Jeanette Hogaboom and G. H. Buckstaff.	18	Jan. 1, 1892	Dec. 31, 1898
Rector	Henry M. Rector	12	Apr. 16, 1894	Apr. 16, 1904
Rockafellow's	Charles N. Rockafellow	20	July 1, 1898	June 30, 1901
St. Joseph's Infirmary	Sister Mary Aloysius	4	Dec. 31, 1896	Dec. 31, 1901
Sumpter	John J. Sumpter	8	Mar. 7, 1894	Mar. 7, 1904
Superior	Robert Proctor and Henry W. Myar.	16	Sept. 15, 1896	Sept. 14, 1906
Waverly	New Waverly Hotel Co	20	Mar. 24, 1893	Mar. 24, 1913

NOTE.—Lease of Jeanette Hogaboom and George H. Buckstaff for 18 tubs at Rammelsberg bath house expired December 31, 1898, but have continued to furnish water by authority of Department letter of December 17, 1898.

By the act of Congress approved March 3, 1891, the Secretary of the Interior is authorized to prescribe rules and regulations for the government and control of the bath houses receiving hot water from the Hot Springs Reservation, and to regulate the prices to be charged for baths at the different bath houses. Owing to the changing conditions, it is found desirable, from time to time, to change or revise the rules and regulations, in order to more nearly conform to present demands. Those under which the bath houses here for some time have been operated were approved by the Department October 15, 1897, and are as follows:

RULES AND REGULATIONS FOR THE GOVERNMENT OF ALL BATH HOUSES RECEIVING HOT WATER FROM THE PERMANENT RESERVATION AT HOT SPRINGS, ARK.

The superintendent of the Hot Springs Reservation is directed to enforce a prompt and faithful compliance with the following rules:

RULE 1. Rentals shall be paid quarterly, in advance, at the office of the superintendent, and if not paid within five days from the beginning of each quarter, the supply of water will be cut off.

RULE 2. No bath house or hotel shall be supplied with more than enough water for 40 tubs of the usual size, and vapor baths when especially agreed upon, and then only for so much hot water as said vapor baths absolutely require when used economically.

RULE 3. The constant flow of hot water for vapor or other baths, even during business hours, or the unnecessary waste of water in any manner is strictly prohibited, and will, if continued after written notice from the superintendent to stop such waste of water, be considered by the Department sufficient grounds for the canceling of the lease of such offending lessee.

RULE 4. The charge for baths at the different bath houses shall be the rates fixed by the Department, and no bath or ticket shall be sold for more or less than said rate. No bath or ticket shall be sold except at the office of the bath house issuing them, and must show the date when issued, the name of the purchaser, and the amount

paid therefor. Bath tickets shall be redeemable for the same proportionate price for which they were sold when presented by the original purchasers together with satisfactory evidence of being able to use them. Application for a change of rates may be made through the superintendent to take effect at the beginning of the next quarter. A neatly printed copy of the rates for baths and attendant's fees shall be conspicuously posted in the office of each bath house.

RULE 5. Bath-house attendants shall be allowed to charge not exceeding 15 cents for a single bath, 75 cents per week, or $2.25 per course of 21 baths, payable weekly in advance. It shall be optional with the bathers whether they employ attendants or not. Bath-house attendants may be required to make good any breakage or damage caused by his or her negligence or dereliction of duty, but shall not be required to pay any part of the operating expenses of the bath house.

RULE 6. The payment of any sum of money, or anything of value, directly or indirectly, by any bath-house owner, manager, clerk, or attendant, as a compensation for drumming customers to said bath house, or allowing any hotel or doctor drummer to show persons through or to loiter in or about any bath house, is positively prohibited by the Department, and upon satisfactory proof of the violation of this rule, the superintendent may shut off the water from any bath house and report the case to the Department for action upon the facts.

RULE 7. The superintendent may cause the discharge of any bath-house manager, clerk, or attendant for drumming or for making false statements about any other bath house; and when said persons are so discharged, they shall not be employed by the same or any other bath house without the consent of the superintendent.

RULE 8. The payment of any sum of money or anything of value for drumming, the giving away of single bath complimentary tickets, the frequent visits of hotel or doctor drummers, whether licensed or not, or those known to work with them as inside men, or hotel or boarding-house proprietors or those employed by them, or by any doctor employing drummers, or the sale of bath tickets through brokers or otherwise than at the office of the bath house, is positively prohibited.

RULE 9. All bath houses shall be kept in a neat, cleanly, and good sanitary condition, and all sewerage and waste water properly conducted away, and all under drainage kept in perfect order. The water-closets shall have sufficient and free connection with the public sewers, and be kept in the best order and with the best plumbing, furnishings, and appliances. Each bath-house lessee on the permanent reservation shall, under the direction of the superintendent, cultivate and maintain a part of the bath-house park in front of their respective bath houses, the space for each to cultivate to be allotted by the superintendent.

WM. J. LITTLE,
Superintendent of the Hot Springs Reservation.

DEPARTMENT OF THE INTERIOR,
October 15, 1897.

Approved.

CORNELIUS N. BLISS, *Secretary.*

The prices which the different bath houses may charge for baths are subject to approval and revision by the Secretary of the Interior, and are in all cases regulated by the class of bathing accommodations each house is in position to furnish, the newer and better equipped houses of course being allowed to charge higher prices than those of less modern build and inferior equipment. The scale of prices in force at present are fixed prices, and may not be deviated from by any bath house. The price per course of 21 baths and for single bath is set forth in the following table:

Name of bath house.	Course of 21 baths.	Single bath.	Name of bath house.	Course of 21 baths.	Single bath.
Arlington	$10.00	$0.50	Maurice	$7.00	$0.40
Alhambra	5.00	.30	Ozark	4.00	.25
Avenue	6.00	.35	Ozark Sanitarium	6.00	.35
Eastman	10.00	.50	Park	8.00	.45
Great Northern	7.00	.40	Palace	7.00	.40
Hale	7.00	.40	Rockafellow's	5.00	.30
Horseshoe	5.00	.30	Rector	7.00	.40
Hot Springs	7.00	.40	Rammelsberg	3.00	.20
Imperial	8.00	.45	Superior	6.00	.35
Lamar	7.00	.40	St. Josephs Infirmary	6.00	.35
Magnesia	5.00	.30	Waverly	6.00	.35

ELECTRIC BATHS.

Electric baths and massage treatment may now be had at several of the bath houses, for which they are allowed by the Department to charge as follows:

1 electric bath	$1.00
7 electric baths	5.00

The prices are to include the regular hot bath and the services of an attendant.

MASSAGE TREATMENT.

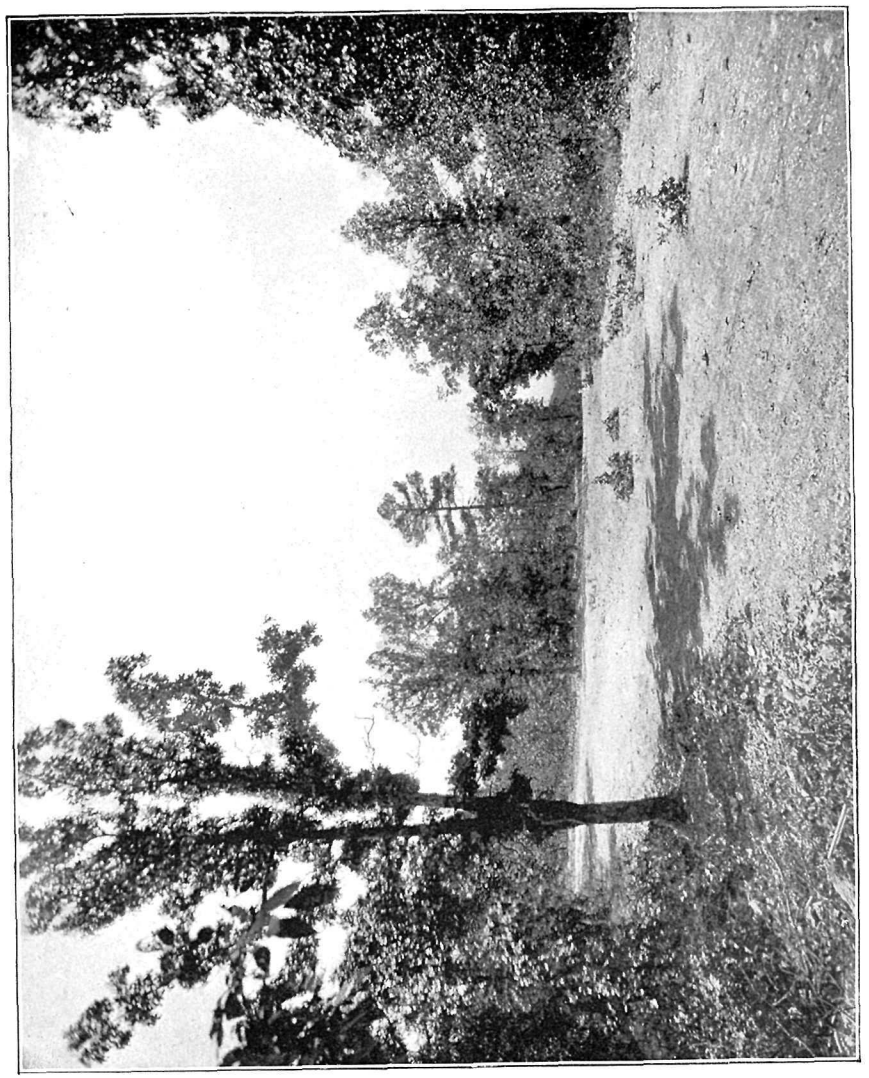
One-fourth to one-half hour	$0.75
One-half to one hour	1.00
7 treatments, one-fourth to one-half hour	5.00
7 treatments, one-half to one hour	6.00

These prices to include alcohol and cocoa oil rubbing.

The services of bath-house attendants are intended to cover all the necessities of the bath, except laundrying bath robes, rubbing mercury, and handling helpless invalids. They are allowed by the Department to charge for their services, as follows: For a single bath, 15 cents; one week's attendance, 75 cents, and for a course of 21 baths, $2.25. Extraordinary service may be had by agreement with the attendants themselves or the managers of the bath house.

Of the whole number of leases for hot water in force at this time only eighteen bath houses have been operated continuously from June 30, 1898, to June 30, 1899. From the operations of these I submit a table showing the cost of each, the number of tubs, the rate per course charged for baths, the number of baths sold, and the amount received therefor; also the percentage of gross earnings, the income per tub, the number of attendants employed and the average amount earned by each.

Name of bath house.	Tubs.	Rate per course.	Cost of bath house.	Baths sold.	Amount received for baths.	Gross earnings.	Income from each tub.	Attendants.	Amount paid attendants.	Average amount made by attendants.
						Per ct.				
Arlington	40	$10.00	$54,000.00	30,884	$14,707.00	27¼	$367.67	13	$3,309.60	$254.58
Alhambra	40	5.00	50,000.00	16 798	4,000.00	8	100.00	4	1,800.00	450.00
Avenue	20	6.00	20,000.00	9,468	2.705.00	13½	135.25	7	1,015.00	145.00
Great Northern	19	7.00	15,000.00	20,290	6,762.00	45	355.89	8	2,173.50	271.69
Hale	26	7.00	30,500.00	20.495	6,832.00	22½	262.77	7	2,196.00	313.71
Horse Shoe	30	5.00	17,000.00	11,109	2.644.00	15½	88.13	6	1,190.25	198.37
Hot Springs	16	7.00	38,000.00	5,715	1.911.00	5	119.43	4	614.25	153 55
Imperial	25	8.00	40,000.00	21,000	8,000.00	20	320.00	7	2,250.00	321.42
Lamar	40	7.00	28,000.00	25.108	8.369.00	29½	209.22	7	2,690.70	384.38
Magnesia	30	5.00	17,000.00	17,787	4 233 00	24¼	141.11	5	1,905.75	381.15
Maurice	21	7.00	30,000.00	48,423	16,142.00	53½	768.66	15	5,188.50	345.90
Ozark	22	4.00	24,000.00	27,090	5,160.00	21½	234.54	6	2,902.50	483.75
Palace	23	7.00	16,000.00	10,209	3,402.00	21¼	147.91	5	1 003.50	218.70
Rammelsberg	18	3.00	22,000.00	27,386	4,012.00	18¼	222.88	4	2,943.00	735.75
Rector	12	7.00	15,000.00	15,200	5,068.00	33¾	422.33	5	1,629.00	325 80
Rockafellow's	20	4.00	20.000.00	5,065	1.222.50	5⅛	60.87	3	550.10	183 36
Waverly	20	6.00	14,000.00	15,534	4 440 00	34½	222.00	6	1,665.00	277.50
Superior	16	6.00	25,000.00	13,292	3.798.00	15¼	237.37	5	1,424.25	284.85
	438	.....	475,500.00	340,853	103,407.50	23	245.33	117	36,540.90	318.30
Park (open 4⅔ months)	40	8.00	35 000.00	7.434	2.832.00	.....	.....	.....	.....	.....
Eastman (open 2¾ months)	40	10 00	53,000.00	9 656	4.828.00	.....	.....	.....	.....	.....
St. Joseph's Infirmary	4	6.00	5,000.00	3,539	1,011.00	.....	.....	.....	.....	.....
Ozark Sanitarium (3 mos.)	8	6.00	6,000.00	750	225.00	.....	.....	.....	.....	.....
Hot Springs Medical Co	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
John J. Sumpter	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	538	.....	574,500.00	362,232	112,294.50	.....	.....	.....	.....	.....



INTERSECTION OF HOT SPRINGS AND NORTH MOUNTAIN ROADS.

From the foregoing table it will be seen that the bath houses have made considerable gains over the business of last year, the gain in the number of baths given being 37,925 and in the receipts for baths $10,495.50, while the average gross earnings have been increased from 20½ to 23 per cent. The gross amount paid for baths and attendants' fees has increased $13,066.40. The total number of baths given in Hot Springs during the past year, including 147,713 given at the free bath house, has been 509,945. The estimated number of baths given during the year would have been 556,265 had the free bath house remained open the entire time. These results show conclusively that Hot Springs is rapidly gaining confidence and favor with the public. The number of visitors who come for pleasure and for the use of the hot waters is rapidly increasing from year to year, not alone in numbers, but in the wealth and intelligence of a very large portion of those who have been coming for the past several years. There can be no doubt but that these desirable results have been brought about largely by the reservation improvements and the prudent Government control of the bath houses.

FREE BATH HOUSE.

The free bath house is operated under the provisions of the act of Congress approved December 16, 1878, which provides that the superintendent shall supply a sufficient number of free baths for the indigent poor. The hard usages to which this house has been put for the past several years has necessitated extensive repairs, which have been made during the past year under plans and specifications approved by the Department June 29, 1898. After advertising for bids in Hot Springs and St. Louis, contracts for the work were let and approved by the Department July 28, 1898. From September 25, 1898, until the repairs were completed, December 20, 1898, the house was closed and no baths given. Since it was reopened until now it has been in constant use, and the demand for free baths has been almost equal to the capacity of the house. I am now able to offer much better bathing facilities than heretofore. The addition of two new bathing pools and much needed floor space enable us now to have four separate bathing departments, each consisting of a bathing pool and cooling or dressing rooms attached, all of which are reached through the main office. Being thus able to furnish separate accommodations to colored and white people, great satisfaction has been given to those of both races who use the baths and to the public generally, and has allowed the business of the house to be carried on in a much more quiet and satisfactory manner.

The character of the persons furnished baths since my last report has been much the same as that previously described, being as a rule the paupers and very poor people from all over the United States, in many cases sent here by the charity of the communities in which they lived. They come suffering from all manner of diseases and without the means of procuring medical advice or medicines or even shelter after they arrive; but they continue to come and bathe in the hot waters, and a large majority of them get well. I have stated in my annual reports for the past several years that we either cure or greatly benefit 75 per cent of all the persons to whom we furnish baths at the free bath house. I see no reason to change this estimate now unless it would be to increase it.

The free dispensary, for some time operated under the patronage of Maj. H. O. Perley, surgeon in charge of the Army and Navy General Hos-

pital, in connection with the free bath house, has been of great benefit to persons using the free baths, as well as a great assistance in the management of the bath house. Considerable notoriety has for some time been attracted to the free bath house on account of the large number of persons in the advanced stages of syphilis and other horrible diseases bathing there. A morbid desire to see these people during the bath has obtained among visitors and others to an extent that has interfered with the management of the bath house and caused serious complaint from those using the baths. To correct this as far as possible it has been found necessary to deny admission to the bathing departments during bathing hours except upon written permission from the superintendent, and these permissions are restricted as nearly as possible to physicians, newspaper correspondents, and others in the pursuit of public or scientific knowledge. Bathing is suspended on Wednesday of each week at 12 o'clock noon and the house thrown open for public inspection, and is always visited by a large number of people on these days.

The repairs and additions to the house have consisted of three brick additions to allow two new bathing pools and outside stairway to reach the rooms of the free dispensary, complete new heating plant, new floors and partitions to form the bathing departments, partially new roof, new plastering, and general repairs to nearly all parts of the building, and entirely new painting, the aggregate cost of which has been $3,885.80. The house is now in a good state of repair and is being operated almost to its capacity.

The whole number of baths given during the year has been 147,713, the daily average for the time during which the house was open for bathing being 528, divided as follows: White men, 344; white women, 31; colored men, 117; colored women, 36.

The operating expense for the year, exclusive of the repairs, has been:

Salary of manager	$1,020.00
Salary of male attendant	660.00
Salary of female attendant	360.00
Salary of scavenger	120.00
Expense for fuel, light, and supplies	336.70
Total	2,496.70

Net cost per bath, 1.7 cents.

The house is operated under the personal supervision of the manager, whose time is constantly employed in receiving applications, issuing and punching tickets, and such other duties as are incident to handling a large crowd of people, while such matters of administration, as from time to time seem necessary have attention from the superintendent.

The following rules and regulations approved October 15, 1897, under which the house is at present being operated, seem to meet the requirements in this respect:

RULES AND REGULATIONS FOR THE GOVERNMENT OF THE FREE BATH HOUSE AT HOT SPRINGS, ARK.

These baths are provided and maintained for indigent persons only; neither the manager nor attendants are authorized to supply them to others.

The manager of the free bath house is required to enforce a strict observance of the following rules and regulations:

RULE 1. No baths will be supplied except on written applications made on blanks furnished at the office of the bath house, making full answers to the questions therein propounded, when, if the applicant is found to be indigent, the manager will issue a ticket good for 21 baths, which may be reissued on the same application, if necessary.

RULE 2. Persons using the free baths are required to maintain quiet and orderly deportment while in or about the bath house; to abstain from the use of tobacco, either by chewing or smoking, while in the pool rooms or dressing rooms; not to scatter rags or paper on the floor, or to loiter in or about the building after bathing.

RULE 3. The wanton exposure of person or entering any of the front rooms in a nude state, the use of loud, vulgar, or profane language, the use of rags, paper, soap, or any foreign substance in the pool rooms is positively prohibited.

RULE 4. Persons using these baths are not allowed to stand or sit on or in any way interfere with the water pipes or valves, or to stand on the chairs or benches. All persons entering the house are required to clean their feet at the door and avoid as much as possible bringing dirt or mud on the floors. Boys over 5 years of age will not be allowed in the female department during bathing hours.

RULE 5. Any wanton or repeated violation of these rules, or any disorderly or contemptuous conduct, will subject the person so offending to suspension or expulsion, at the discretion of the superintendent of the reservation.

RULE 6. Neither the manager nor attendants shall be allowed to receive or become responsible for any valuables or to accept any fees or other remuneration for any service rendered to persons using the baths or others.

RULE 7. The manager is required to enforce all the foregoing rules and to maintain good order in and about the bath house, to see that all indigent persons applying are supplied with baths, and to make a written report to the superintendent each week on blank forms supplied for that purpose. He may reject any application for free baths if he has reason to believe the applicant has made false answers in his written application, and refer the same to the superintendent of the reservation

WM. J. LITTLE,
Superintendent of the Hot Springs Reservation.

DEPARTMENT OF THE INTERIOR,
October 15, 1897.

Approved.

CORNELIUS N. BLISS, *Secretary.*

FREE DISPENSARY.

By direction of the Secretary of the Interior the rooms in the second story of the free bath house, then occupied by the bath-house attendants, were vacated, suitably refitted, and placed at the disposal of Dr. H. O. Perley, surgeon in charge of the Army and Navy General Hospital, for use as a free dispensary. He assumed charge of them on May 1, 1898, since which time, except during the period while the building was undergoing repairs, the dispensary has been in constant operation.

Under Dr. Perley's direction a staff of physicians was organized, consisting of himself, Dr. J. Cabel Minor, U. S. A., Dr. Eugene C. Hay, Dr. Gaston A. Hebért, and Dr. Paul Turner Vaughan, and it has been with the assistance of these able physicians that the dispensary has since been successfully carried on. The organization being such as to allow some one of the number to be on duty during certain days and hours, which has allowed those seeking medical advice opportunity to find a dispensary physician on duty at almost any time. It is due to the gentlemen comprising the staff of this dispensary to say that their services have been honestly and faithfully given, not with any hope of pecuniary reward, but as their tender of charity to that portion of suffering humanity which so numerously finds its way to Hot Springs.

Year after year since the inception of the free bath house it has cured hundreds upon hundreds of helpless, indigent people and put them on the road to become again at least self-sustaining if not useful citizens. When the additional benefits to be derived from the free dispensary are joined to those of the free bath house the charity in this way extended to the indigent people becomes at once the greatest and most far-reaching of any charity in the United States, and one of which

the Government has great reason to be proud. The small store of medical supplies and medicines at the free dispensary are kept up by contributions from charitably disposed persons, benefit entertainments, and such other sources as can be commanded from time to time for this purpose. The actual operations of the dispensary are set forth in the annual report of Dr. H. O. Perley for the fiscal year ended June 30, 1899, which is herewith submitted:

ARMY AND NAVY GENERAL HOSPITAL,
Hot Springs, Ark., June 30, 1899.

SIR: I have the honor to make the following report upon the work done by the members of the staff of the Hot Springs Free Bath House Dispensary for the part of the fiscal year ended June 30, 1899.

The rooms, six in number, in the second story of the free bath house were put in good order, completely fitted up, and turned over by you to me on the 17th of December, 1898.

From that date to the present day one of the members of the dispensary staff has been in daily attendance to examine, vaccinate, and treat the poor who apply for free baths.

Under your orders none have been allowed to bathe before they had had a careful medical examination. The wisdom of the order is shown by the fact that 362 were found to be afflicted in such a way that the baths would be injurious to them and they were refused the permission to bathe.

Every patient was required to be vaccinated, and, altogether, 3,084 persons were either vaccinated or revaccinated. The virus used was the best that could be obtained in the market, and was furnished by the health officer of this city. The benefits to be derived from this compulsory vaccination, both to the city and the surrounding country, can not be overestimated. The wandering class of poor, both black and white, who seek Government aid here, come from all over the country. This class of people spread smallpox, and it is surprising to note how few of them have ever been vaccinated. Two cases of smallpox in its early stages were detected at the dispensary this year and turned over to the health authorities of the city.

One thousand two hundred and thirty-one patients have been treated in the different departments, as follows:

General medicine and nervous diseases, under the charge of Drs. H. O. Perley, United States Army, and Gaston A. Hebert, 729 patients.

Diseases of women and children, under charge of Dr. J. Cabell Minor, United States Army, 83 patients, of whom 64 were discharged cured or greatly improved, 10 unimproved, and 9 were under treatment June 30, 1899.

Department of general surgery and diseases of the genitourinary organs, under the charge of Dr. Eugene C. Hay, 320 patients.

Department of the eye, ear, nose, and throat, under the charge of Dr. Paul Turner Vaughn, 99 cases, divided as follows: Diseases of the eye, 32; diseases of the ear, 9: diseases of throat and nose 58. All of the above cases have been discharged cured or improved except 8 remaining under treatment.

One thousand eight hundred and thirty-nine prescriptions have been compounded at the dispensary and given free to the patients. The contributions of our friends, both citizens and visitors, have been sufficient to pay all the necessary expenses and leave a small balance in our treasury.

In conclusion, on behalf of all the members of the staff of the dispensary, I desire to express their thanks to you for your unfailing courtesy and assistance on every occasion.

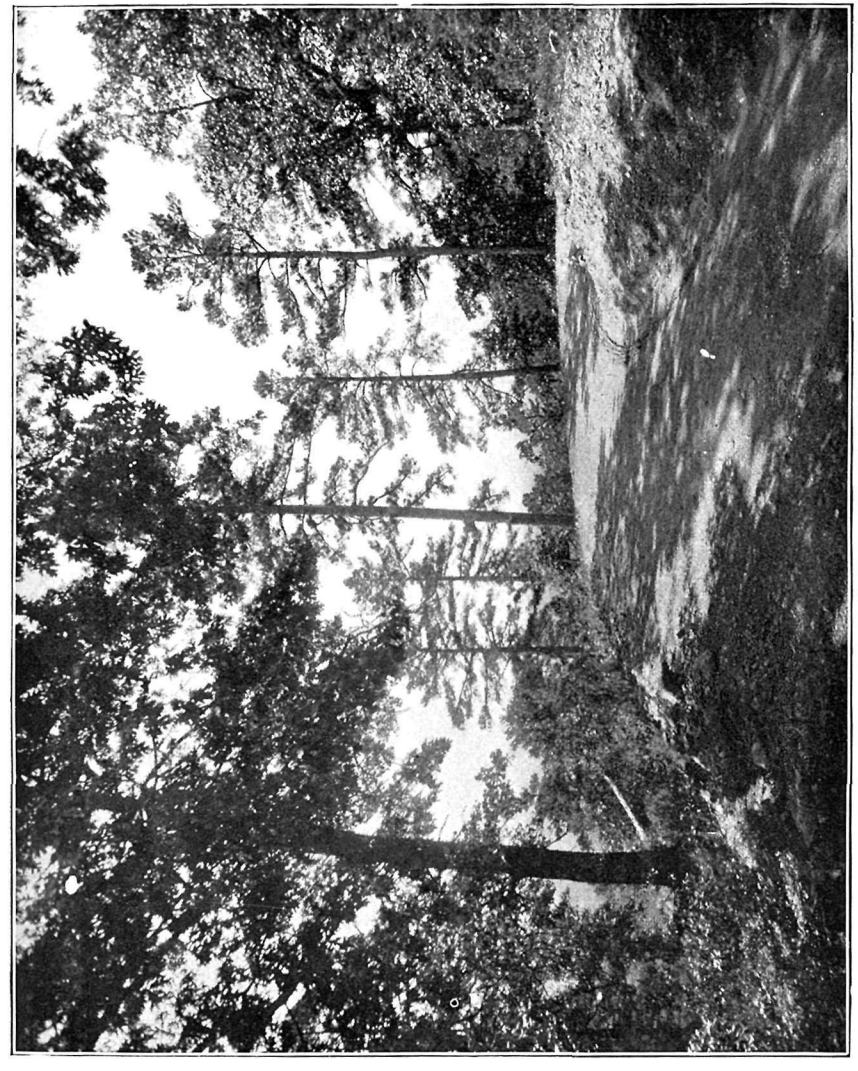
Very respectfully,

H. O. PERLEY,
Major and Surgeon, U. S. Army, President of the Dispensary Staff.

Col. WILLIAM J. LITTLE,
Supt. U. S. Reservation, Department of the Interior, Hot Springs, Ark.

HOT SPRINGS CREEK ARCH.

It is gratifying to be able to report that during the year but little damage from floods and freshets has accrued to the Hot Springs Creek arch. The repairs made heretofore have stood the test of some heavy volumes of water since they were put in, and I am encouraged to believe that the weak points have been located and repaired, and that hereafter but little care and expense will be necessary to keep the arch in good



VIEW FROM NEAR OBSERVATORY POINT, HOT SPRINGS MOUNTAIN.

condition. The difficulty heretofore experienced has been that at times of heavy rains large volumes of water pass very swiftly through this arch, washing the earth or any imperfect masonry from under the walls of the arch, where they were not originally founded solidly on the rock. When repairs are necessary, they have to be made under considerable difficulty on account of the heat caused by the close proximity to several hot springs and the hot water discharged from the bath houses, which make it impossible for men to work in the arch more than a few minutes at a time. Such repairs as have been found necessary during the year have been made, and the arch is at this time in good condition. On December 20, 1895, an allotment of $500 was made for the repairs to the creek arch, from which expenditures have from time to time been made amounting to $319.30, leaving at the date of my last report an unexpended balance of $180.70; expended and reported since last report, $22; leaving a balance to the credit of the allotment of $158.70, which I respectfully recommend be continued at the disposal of the superintendent for current repairs and cases of emergency, if any should arise.

RESIDENCE BUILDING.

This building, heretofore known as the office and residence building, has received such repairs during the year as have been necessary for the preservation of the building. Under authority of Department letter of October 12, 1898, some repairs were made to the roof, which was never a good one, and is again somewhat out of condition. And the plastering, which had been badly broken up from the settling of the building—such portions of this as needed to be—was removed and the balance repaired, so as to admit of papering the rooms and halls, which has been done. Under this authority I have also reupholstered a portion of the furniture and replaced a portion of the carpets, rugs, and curtains, which had become worthless through long use.

The house is now in fairly good condition, except the need of painting the woodwork outside and some mending incident to the proper care of such buildings, the particular items and estimates of which will be submitted under the head of recommendations.

PUMPING STATION.

The building heretofore known as the pumping station, now occupied in part by the superintendent as an office, was erected under the provisions of an act of Congress, approved October 2, 1888, appropriating $31,000 for the construction of reservoirs, piping, and machinery necessary to the economical distribution of the hot waters. At about the period of the completion of the work of laying pipes, constructing reservoirs, and installing machinery in this building, necessary to carry into effect the provisions of the act above referred to, the act of Congress, approved March 3, 1891, providing that the authority heretofore conferred upon the Secretary of the Interior to collect the hot water upon said reservation, shall be so construed as to require water to be collected only where such collection is necessary for its proper distribution, and not where by gravity the same can be properly utilized, rendering the act of October 2, 1888, inoperative, except, in so far as it provided for the collection of hot water not available for use by gravity, and the impounding reservoir which is situated on the same lot and in close proximity to this building.

Since this time, until December 19, 1898, this building has served no useful purpose for the Government, except as shelter for the pumping

machinery contained therein. Under authority of Department letter dated October 12, 1898, I have removed the pumps and other machinery contained in the north portion of this building and stored the same in the boiler room, where it is now put away in such manner as to protect it from rust and other damage incident to machinery not in use, and have refitted that portion of the building from which it was removed for an office, and have occupied it for such purpose since December 19, 1898. This has afforded much relief from the cramped quarters in which the office was previously located, besides adding greatly to the convenience of those having business with the superintendent.

The changes and improvements made in the building have consisted of, first, removing the large pumps and other machinery into the south half of the building, where the boilers and large smokestack are still located, and dividing the portion thus vacated into rooms suitable for the convenience of this office. No inside finish had ever been made to the building, and it was found necessary to lay floors, set up partitions, plaster the walls, add overhead ceilings, and generally such finishings in woodwork as are incident to completely finishing the inside of a building. The woodwork is of native yellow pine finished in hard oil; the plastering rough finished for painting, and steel ceilings of suitable design. The painting and decorating is in light leather shades. The offices are lighted by both electricity and gas and heated by steam taken from the plant of the Lamar bath house near by. They furnish every convenience necessary to the transaction of the Department's business at Hot Springs, and are much appreciated by those having business with the superintendent, on account of being more accessible than heretofore.

The cost of the improvements made and such additions to the office furniture as was allowed by the allotment for this purpose has been $990.56.

RESERVE PARK.

This park is the distinguishing feature of Hot Springs and embraces the most notable objects to be found here. It has a frontage of nearly 1,700 feet on Central avenue, which is the main business street of the city, and recedes back from that, taking in the entire Hot Springs Mountain, a considerable portion of the west side being already under cultivation as a park. It embraces all the hot springs, the free bath house and ten other bath houses, the reservation residence and office, and the Arlington Hotel. It has 3 miles of pleasant mountain drives, which connect with 3 miles more on North Mountain, and about 2 miles of graveled walks. All the handsome hot-water drinking fountains are located along the front of this park, which is traversed by a broad concrete walk, 15 feet wide, along its entire front.

The general plan of improvement has been to begin at the Central avenue front, making as many finished improvements as possible each year, and extending back as circumstances would permit toward the summit of the mountain. The most notable improvements yet made to this park is the Grand Central entrance, designed by Capt. Robert R. Stevens, United States Army, which consists of two massive stone columns flanked by heavy cut stone exedra walls inclosing two marble drinking fountains; from this the second terrace is reached by a succession of cut stone steps and landings, terminating in a handsome cut stone pavilion. Next in importance after this comes the marble and stone drinking fountains, which are placed along and at either end of the broad walk, the marble fountain at the south end of the walk being

named the John W. Noble fountain, in honor of ex-Secretary John W. Noble, while the stone fountain at the north end of the walk is named the Hoke Smith fountain, in honor of ex-Secretary Hoke Smith. The alum spring, which has been improved by the erection of a small (though handsome) cut-stone pavilion over it, is also located on this walk. These improvements, together with the more advanced stage of cultivation in this part of the park, renders it very attractive, and makes it the subject of favorable comment by strangers and others from all parts of the country.

The improvements to the park during the past year have consisted of extending the walks, planting additional shrubbery and grass, and preparing additional grounds for cultivation next year, and generally exercising such care as has been necessary to the grounds heretofore brought under cultivation. The cultivated grounds of this park, which have assumed considerable proportions, and Whittington Park now requires most of the time of the regular force of foresters and gardeners for their proper care and cultivation, leaving but little time or means of making considerable extension to the cultivated grounds. I am making the further improvement and extension of this park a matter of special study, and will in a short time submit plans in detail and estimates for the improvements which seem most desirable to be made next. By your letter of October 12, 1898, $900 was allotted for the maintenance and improvement of this park, of which amount $422.94 has been expended and previously reported, leaving a balance still to the credit of the allotment of $477.06.

WHITTINGTON PARK.

The improvement of the Whittington Avenue Reservation, which comprises 11 acres, was completed last year and has since been in general use, and has afforded much pleasure and recreation to both visitors and citizens. The improvements of these grounds have consisted in building two small lakes and a park, the area of the first lake being 43,600 square feet and having capacity for 1,800,000 gallons of water. The second lake is somewhat smaller, having only an area of 35,400 square feet, with capacity for 930,000 gallons of water. A considerable portion of the excavation, to get sufficient depth for both these lakes, had to be made in solid rock, which increased the cost to some extent, but has proved beneficial in that it developed several springs which add materially to the lakes by way of furnishing the water during the hot weather. At the head of each of these lakes are placed two sets of cut-stone steps which lead down to the water's edge, terminating on a large flat stone suitable for a boat landing, the intention at the time being to provide two small pleasure boats for each lake; but I have not yet received authority to provide these boats or to allow others to put them on. I have all along thought it advisable to allow the privilege of boating on these lakes, inasmuch as it may not be had at any other place near Hot Springs.

I again respectfully recommend that authority be granted to some suitable, trustworthy person to place, at his own expense, not more than two small pleasure boats, of suitable and tasteful design, on each of these lakes, with permission to charge small fees, such as may be allowed by the Department, for his service and the use of the boats. But little danger of accident or drowning could result from the use of boats, as the water in the lakes is not over 5½ feet deep. The lakes are inclosed by a substantial iron fence, inside of which on

top of the banks a graveled walk extends entirely around. The sloping banks are fairly well set in Bermuda grass and planted in water-growth trees which will soon afford ample shade and very greatly add to the appearance of the lakes. Whittington Park, which comprises the balance of these grounds not taken up by the lakes, is about 6 acres in extent and has been improved by first grading the grounds, straightening, widening, and securing the banks of Whittington Creek, which passes through it; building suitable bridges to furnish easy access to all parts of the grounds, music and shelter pavilions, park gardeners' cottage and tennis grounds, in connection with which are two other shelter pavilions with seating capacity for 100 people; all being inclosed by substantial iron fence.

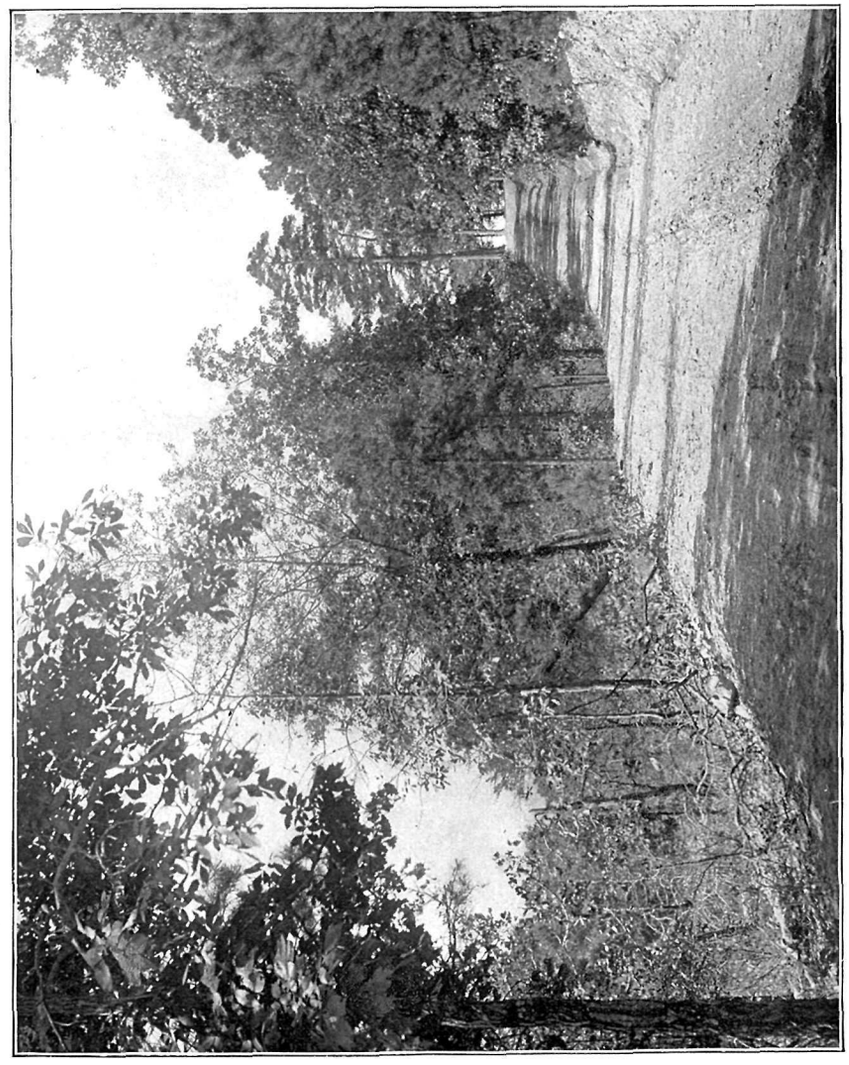
The South Whittington Avenue carriage entrance to this park is somewhat elaborate, being formed by six white limestone columns, the two larger or center ones forming the carriage entrance proper and supporting the massive iron gates. To the right and left of these are two smaller columns and gates, forming the entrance for pedestrians. Still to the right and left and somewhat in front of these are placed the last two columns, the spaces between being filled by semicircular stone walls surmounted by an ornamented iron fence, the whole forming a somewhat imposing entrance. On the north side of the park, opposite to this, is another carriage entrance supplied with massive iron gates and side entrances, but of much less costly design. The park itself is supplied with ample drives and walks and is well set in grass, but is yet somewhat deficient in shrubbery. I have been very successful in the cultivation of flowers in this park, having now about one thousand rose cuttings in first and second year's growth. The large flower beds have attracted much attention and added greatly to the beauty of the park; this, with the abundant growth of native trees, makes Whittington Park not only restful and attractive, but in reality a beautiful little park. It is one of the attractions of Hot Springs and is much appreciated and used by both strangers and citizens.

The total amount of funds allotted for the Whittington avenue improvements have been $30,000. Of this amount $29,590.08 was expended, leaving a balance at the date of my last report of $409.92.

October 12, 1898, $200 was allotted for grass and flower seeds, irrigating hose, etc., of which $74.87 has been expended, leaving an unexpended balance at this time of $535.05, which I respectfully recommend be continued, subject to the disposal of the superintendent, for the improvement and maintenance and for removing the accumulation of sediment from the bottom of the lakes, which should be done on the approach of cold weather. It is not possible at this time to furnish an estimate of the cost of this work, for the reason that it must be hauled out a considerable distance in wagons, and the quantity to be removed can not be ascertained until the lakes are drained, which it is not thought advisable to do in warm weather.

ROADS AND DRIVES.

The roads and drives heretofore completed on Hot Springs Mountain have been kept in a good state of repair and have been in more constant use than almost any other of the Hot Springs improvements. During the year these have been added to by the completion of the roads and drives on North Mountain, which now make a continuous drive 6 miles



HIGH POINT ON HOT SPRINGS MOUNTAIN.

long. The roads have an average grade of about 7 per cent and a driving surface of 20 feet in width, which afford ample room for passing in opposite directions. The construction of these drives has been somewhat difficult and not inexpensive, for the reason that they have had to be built on the steep sides of the mountains and on such grades as would finally bring them to the top. A large portion of the grading, which consists mainly of cutting on the upper and filling on the lower sides, has had to be done in solid rock. On most of the grounds it has been necessary to build retaining walls of either rock or timber on the lower side to hold the embankments until the fillings became settled and solid.

It has been found during the progress of this work that the surface of the mountains, or such of it as is not composed of rock, is made up of a cement gravel, which, after being put in place and allowed a sufficient time to settle, becomes so hard as to render retaining walls of but little further use. For this reason such timber as had to be removed from the right of way and other undesirable timber near it has been used for this purpose where the retaining walls were only required to be built to a moderate height, and has resulted in a considerable saving in the construction of the roads. Particular care has been taken to provide sufficient drainage, without which roads built on such steep grounds as these would be quite difficult and expensive to maintain.

The roads just now being completed on North Mountain are much appreciated on account of the beautiful views brought out from the high points reached, besides the additions made to the length. No other improvements made at Hot Springs have seemed to meet with such uniform approval from visitors and strangers as the roads and drives.

Hot Springs has become somewhat celebrated for its fine livery, and there is perhaps more horseback riding indulged in here than almost any other place. Many persons taking treatment here are advised by their physicians to take considerable exercise, and there is no other means of doing this in so pleasant and desirable a way as by horseback riding and driving over the well-kept mountain roads, where one is almost in the city and yet at the same time in the forest, and being successively greeted by pleasant scenery and beautiful views, extending as far as the eye can reach. It has been mainly for these reasons that I have for several years past urged the completion of the roads and drives as laid out by Capt. Robert R. Stevens in the general plans for the improvement of the reservation, believing that the class of improvements which seemed to contribute most to the pleasure and enjoyment of the visitors should be made first. Still in this belief, I respectfully recommend that the sum of $4,500, or so much thereof as may be necessary for the completion of the roads and drives on West Mountain, be allotted and set aside for this purpose, and that authority be issued to begin the work at an early date, in order that it may be completed by the beginning of the next Hot Springs season, the opening of which is considered to be the 1st to the 15th of December.

The roads and drives as now constructed on Hot Springs and North Mountains are all in good condition and are in daily use for both horseback riding and carriage driving. The roadbeds are perfectly solid, and with only ordinary attention to the drainage and repairs will continue to improve by reason of constant use for many years to come.

The total amount of funds allotted for the construction of these roads since my last report has been $4,000. Of this amount $3,473.94 has been expended, as previously noted in my semimonthly reports of this work.

IMPROVEMENTS.

The improvements made on the reservation during the fiscal year have been the additions and improvements made to the free bath house, the completion of the Fountain street drive and the roads and drives on North Mountain, the repairs to the residence building, and refitting the pumping station for use as an office, and generally extending and putting additional grounds in Reserve Park under cultivation and planting trees and shrubbery, extending and improving the walks, and giving such care and attention to the improvements heretofore made and the Government property as seemed necessary.

The repairs made on the free bath house have been most extensive and perhaps the most needed of any made this year, and have added greatly to the usefulness of the building and to the conveniences it affords in giving baths. The addition of the new pools and cooling rooms enables me to furnish separate bathing facilities for colored people, a matter which is greatly appreciated by them and very generally approved by the public. The convenience with which the business of the bath house can now be conducted has been greatly facilitated by the improvements made, and the building is now in a good state of repair. The cost of the improvements has been $3,885.80.

The Fountain street drive has been fully completed to a connection with the drives on Hot Springs and North Mountains and is in constant daily use. It is one of the best and most frequently used drives yet constructed and affords general satisfaction to the public. A large portion of the work done on this drive has been done by the regular force of foresters and gardeners, only $500 being allotted for it, which has been entirely expended.

The roads and drives on North Mountain have been practically completed and have added greatly to the general attractiveness of the roads and drives on the Hot Springs Reservation. They, as the others, have been somewhat difficult to build, for the reason of being located on the sides of the mountain and passing over several ledges of solid rock, which had to be blasted away, and several other places where very high and strong retaining walls had to be built. These roads reach some of the highest points on the mountain and bring out some very beautiful views, besides being well shaded and passing through very pretty mountain scenery. There have been two allotments of funds for these roads, the first being under date of October 12, 1898, for $2,500, and the second May 27, 1899, for $1,000. Of these amounts $2,973.94 had been expended on June 30, 1899.

The repairs made to the residence building have consisted in mending the roof and plastering, papering the walls and ceilings, making needed repairs to the furnace and plumbing, and the addition of some carpets and furnishings. The total cost of which has been $521.82.

The improvements made in the pumping station, to fit the building for use as an office, have consisted of first removing the machinery to the boiler room, leaving clear the space 30 by 30 feet, to be converted into an office, the walls being entirely bare of any inside finishings and without ceilings or floors. This space was divided by partitions into three rooms, the first being 17½ by 30 feet, the next 12 by 18 feet, and the last, which is used for closet and lavitory, 11 by 12 feet. Floors of hard yellow pine were laid, the walls plastered rough to receive oil finish, and steel ceilings put up. The interior woodwork is all of native yellow pine finished in hard oil, and the walls and ceilings painted and decorated in colors to harmonize with this. Combined

gas fixtures, admitting the use of gas or electricity, have been provided and rooms fitted for steam heat, which is taken from the Lamar bath house near by. All the purposes and necessities of an office for the superintendent are now provided for in this improvement. The allotment of funds for this improvement and for office furniture, made October 12, 1898, was $1,000, of which $990.46 has been expended and previously reported, leaving an unexpended balance of $9.56.

The total amount expended for improvements this year, exclusive of the ordinary repairs and fixed expense, has been as follows:

Improvements on free bath house	$3,885.80
Fountain street drive	500.00
Roads and drives on North Mountain	2,973.94
Residence building	521.82
Superintendent's office	990.46
Total	8,872.02

GOVERNMENT LOTS.

Of the whole number of lots, tracts, and parcels of land laid off and platted by the Hot Springs Commission, 157 lots remain unsold, the value of which is at this time about $75,000. The lots lay mostly on the outskirts of the town, but many of them are desirable for residence purposes because of being of considerable size and suitably located for a residence and small garden. Some, however, are located near the center of the town and are quite valuable. Block 94, on Ouchita avenue, has heretofore been valued at from $25,000 to $30,000, and would probably sell for that now, while in block 194 there are several lots that are now in request for the fine oil stone with which they are underlaid, and would no doubt sell for a fair price, while the prospects generally at this time are that in the early spring a successful sale of these lots could be held. Real estate at Hot Springs, which has always been held at a very high figure, is again, after a season of depression, assuming its normal values, and will doubtless be further stimulated by the building of another railroad from this place to Little Rock, which is expected to be in operation by or before March 1, 1900.

Considering the advisability of augmenting the reservation improvement fund by the proceeds of a sale of these lots, which it seems now may be successfully held not later than next March, I take occasion to again renew my recommendation that such sale be authorized to be held during March of next year, feeling very sure that if all the lots do not find buyers at the appraised value, that enough would be sold to furnish sufficient funds with which to complete the improvement of Reserve Park, which, after the completion of the roads and drives on West Mountain, is the most desirable improvement to be next undertaken. I have, during the year, received some inquiries from persons at a distance and in other States as to when the balance of the Government lots would likely be disposed of, and besides this considerable personal inquiries are made at this office. From these and the general prosperous condition of the country at this time, I conclude that no better or more favorable time can be selected in the near future for a sale of these lots than the date above mentioned, March, 1900, and I respectfully request that this matter may at an early day receive the consideration of the Department, in order that sufficient time may be had

for appraisement and such other details as may be incident to this sale, if it should be determined that one may be had at about the time mentioned.

RECOMMENDATIONS.

The unexpended balance remaining in the Treasury to the credit of the fund for the protection and improvement of Hot Springs Reservation, Ark., on June 30, 1899, was $5,084.29, to which may be added $5,500 from the receipts for water and ground rents for the fiscal year of 1899–1900, which is estimated to be over and above the fixed and ordinary expense of the reservation, making a total of $10,584.29 available for new improvements during the next fiscal year.

The improvements which, in my opinion, are most desirable to be next undertaken are the construction of the roads and drives on West Mountain, which, when completed, will make a system of mountain drives on the Hot Springs Reservation somewhat over 10 miles long and fully complete the system of roads and drives originally laid out by Capt. Robert R. Stevens, U. S. A. For this purpose I respectfully recommend that the sum of $4,500, or so much thereof as may be necessary, be allotted and set aside for this improvement, $2,500 of which to be at once available, so that the work may be inaugurated and completed during the fall months.

The next most important improvement is the construction of an additional hot-water reservoir at the foot of the bluff back of the big iron bath-house site. On the hill back of this site is supposed to be a large body of hot water, a considerable portion of which finds its way through the tufa rock and discharges at the foot of this bluff. These springs have heretofore been secured by being walled in with masonry and a portion of the water piped away to supply some of the bath houses on the lower end of the reservation, to which it would run by gravity, the balance finding its way through the general supply system to the impounding reservoir from which about 140 tubs are supplied. The masonry with which these springs was originally secured has for some time been giving way from the pressure of the water, allowing a considerable quantity of hot water to go to waste, besides the constant danger that the masonry might at any time collapse and cause considerable trouble and delay to the bath houses supplied from this source. For the purpose of constructing a reservoir extending across the foot of this bluff with sufficient capacity for storing and distributing the waters from these springs, I respectfully recommend that the sum of $1,392.50, or so much thereof as may be necessary, be allotted and set aside for this purpose, the same to be at once available. Plans, specifications, and estimates for this work will be furnished the Department within a short time.

During the heated term of almost every summer more or less trouble is experienced with the broad concrete walk which traverses the reservation front, it being 15 feet wide and some 1,700 or more feet long. The work of constructing this walk does not seem to have been well done in the first place, and from time to time a considerable portion of the finished surface—say from three-fourths to 1 inch thick—parts from the lower portion to which it should have been firmly bonded and cups up and breaks in such a way as to render it impossible to mend the walk except by replacing the portion affected. Some 300 square feet, located at different places along the walk, is in need of repairs at this time, and I respectfully recommend that the sum of $75, or so much thereof as may be necessary, be allotted and set aside for mending the walk and for resetting one of the small exedra fountains, the water connection of which requires some repairs.

I have heretofore called the attention of the Department to the exposed condition of the residence building to fire; it is located back of the Arlington Hotel on the south side of Fountain street, some 350 feet from Central avenue and the nearest fire hydrant, and in case of fire could only be reached by a line of hose running up Fountain street. The dangerous exposure is a large four-story frame building, which was formerly a part of the old Arlington Hotel, but is now moved to the north side of Fountain street diagonally across from the residence building, and is at present occupied as a colored hotel. In case of the burning of this building, fire protection could only be afforded the residence building by running a line of hose from Central avenue up Fountain street, which the heat would soon cut off, and it is very probable that without some assistance from the fire department, which can not be reckoned upon, that the residence building would be sacrificed. If such an emergency should arise the efforts of the fire department would no doubt be directed toward saving the Arlington Hotel, the Hot Springs bath house, and other buildings which could be reached by the fire department from Central avenue, while the residence building would be cut off.

I have had some conference with the Hot Springs Water Company upon this subject, and am informed by them that they will lay a 4-inch main a sufficient distance up Fountain street to pass the residence building, and will at the instance of the city government put in one fire hydrant provided the Government will put in one, which might properly be located somewhat back of the residence, which with a small supply of hose to be kept on the premises would afford ample protection from fire and afford very much better water facilities for the building than are had at present. The water connection is at present through an inch iron pipe, laid from the mains on Central avenue, some 350 feet away, and which reaches the house under a very weak pressure. The water company proposes that the Government buy and own the hydrant to be placed on the premises, and to pay a yearly water rent therefor. I respectfully recommend that I be authorized to enter into negotiations on this subject with the city government and the water company, and to submit to the Department the best proposition I can obtain for its consideration, with a view of providing such fire protection to this building as the circumstances would seem to warrant. The building is in need of some repairs to the outside woodwork, which is rotting away, and should be replaced; repairs to the roof, the plumbing and furnace, and painting, the estimated cost of which will be as follows: Repairs to woodwork, $27; roof, $23; plumbing and furnace, $35; painting outside and inside and roof, $138.

I also respectfully recommend that the sum of $150, or so much thereof as may be required, be allotted and set aside for the purchase of tools and implements for use during the current year.

I further respectfully request that I be authorized to employ a suitable person as park keeper, whose duties shall be to have charge of that portion of reserve park which fronts on Central avenue, and particularly to sweep and keep clean the concrete walk which traverses this part of the park, and look after the drinking fountains, and perform such other duties as are incident to keeping the walk cleanly swept, gathering paper and trash from this part of the park, etc.; salary to be $30 per month, payable from the regular reservation fund.

I further respectfully recommend that I be authorized to use so much of the funds now standing to the credit of the Whittington avenue improvement as will be necessary for removing the sediment from and cleaning the bottoms of the two lakes. Some complaints have been made by the citizens living near the lakes, under the impression that the settlings in the bottoms make them unhealthy in summer. I can not at this time furnish a good estimate of the cost of this work, for reason of not knowing the amount of sediment necessary to be removed, but do not expect that it would exceed $150 for each lake. I think it desirable that this should be done on the approach of cold weather, for reasons set forth elsewhere in this report.

I respectfully recommend that a sale of the Government lots be ordered to take place in Hot Springs, Ark., during the month of March, 1900.

I further respectfully recommend that such additional funds as may become available for improvements during the current year be allotted and set aside for the improvement and extension of reserve park, which seems the most desirable improvement to be next undertaken.

RECEIPTS AND DISBURSEMENTS.

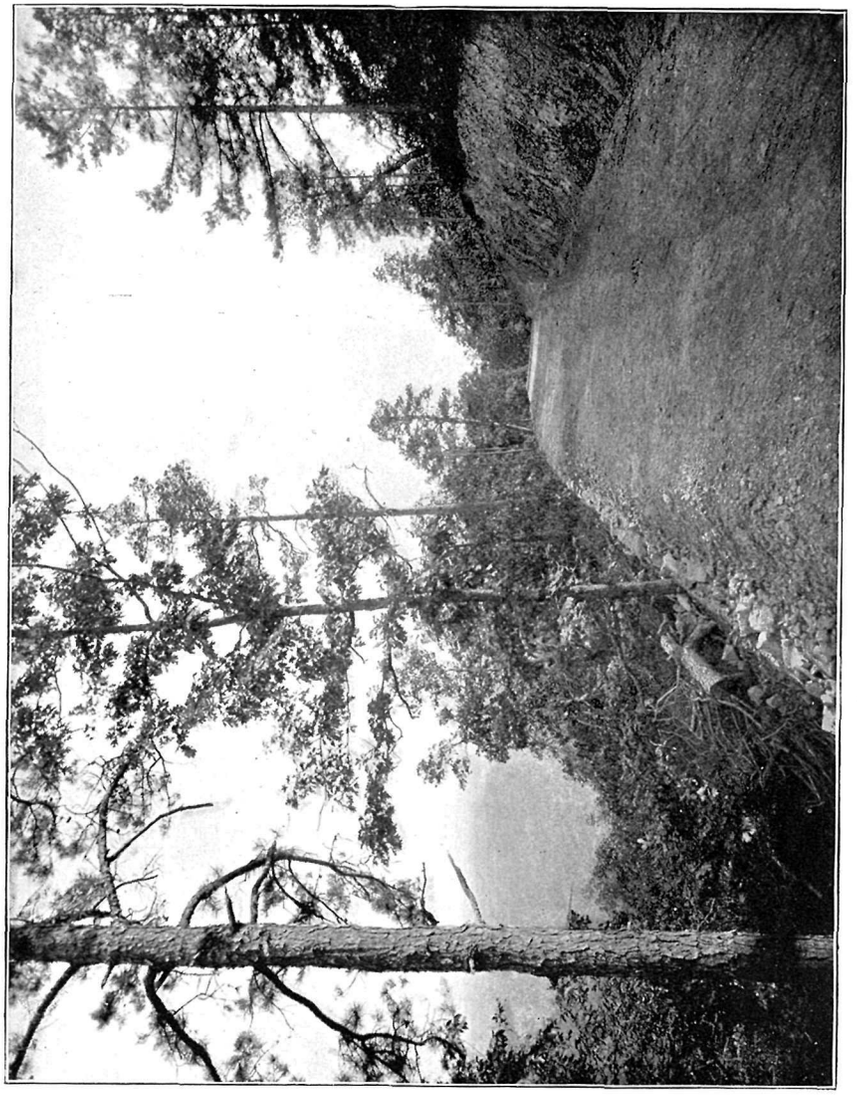
The revenue which the Government receives from Hot Springs is from water and ground rents, and is collected quarterly in advance and deposited in the subtreasury at St. Louis, Mo., to the credit of the fund for the protection and improvement of the Hot Springs Reservation, Ark., being appropriated for this purpose by the act of Congress approved June 16, 1880; the water rent being at the rate of $30 per year for each bath tub under lease, and the ground rent $2,500 per year being for the ground occupied by the Arlington Hotel. The total amount collected during the fiscal year amounts to $18,580, as shown by the following table:

RECEIPTS.

The receipts of this office for water and ground rents for the fiscal year ended June 30, 1899, have been as follows:

Name of bath house.	Tubs.	Amount.	Name of bath house.	Tubs.	Amount.
Alhambra	40	$1,200	Palace	23	$690
Arlington	40	1,200	Park	40	1,200
Avenue	20	600	Rammelsberg	18	450
Eastman	40	1,200	Rector	12	360
Great Northern	19	570	Rockafellow's	20	600
Hale	26	780	St. Joseph's Infirmary	4	120
Horse Shoe	30	900	Superior	16	480
Hot Springs	16	480	Sumpter	4	120
Imperial	25	750	Waverly	20	600
Lamar	40	1,200	Hot Springs Medical Company	4	120
Magnesia	30	900	Eastman (extra water)	.....	30
Maurice	21	630	Arlington (ground rent)	.....	2,500
Ozark	22	660			
Ozark Sanitarium (Cheshire)	8	240	Total	.....	18,580

NOTE.—Rammelsberg bath house was closed for repairs for sixty days, during which time water rent was remitted by authority of Department.



HIGH POINT ON NORTH MOUNTAIN.

DISBURSEMENTS.

The disbursements made from the fund for the protection and improvement of Hot Springs Reservation, Ark., from this office have been for salaries, fixed expenses, and such other items of expense and improvement as I have been from time to time authorized to pay from this office, and other items of improvement for which payment has been made from the Department, all of which are shown by the following table:

DISBURSED BY SUPERINTENDENT.

Salaries per annum:		
Superintendent	$2,500.00	
Clerk to the superintendent	769.91	
Messenger at superintendent's office	180.00	
		$3,449.91
Manager of free bath house	1,020.00	
Male attendant at free bath house	660.00	
Female attendant at free bath house	360.00	
Scavenger at free bath house	120.00	
		2,160.00
Reservation waterman (also acts as foreman of reservation foresters and gardeners)	600.00	
Night policeman on the reservation	600.00	
Day policeman on the reservation	480.00	
		1,680.00
Salary of 2 foresters and gardeners, at $40 per month, earned	947.42	
Salary of 6 foresters and gardeners, at $1.50 per day, earned	2,777.24	
		3,724.66
Disbursed on account of:		
Fuel and lights at superintendent's office	391.15	
Fuel and lights at free bath house	264.40	
Horse feed, shoeing, and bedding	251.16	
4 gas street lamps on reservation	171.00	
2 incandescent lights on Hoke Smith fountain	54.00	
City water for buildings, sprinkling, and irrigating, and ice	646.58	
Repairs to creek arch	22.00	
Purchase of horse and trap	200.00	
Incidental expenses, including repairs to buildings springs, fountains, tools, and implements	433.69	
		2,433.98
Total amount disbursed from this office		13,448.55

EMPLOYEES.

There are in all 18 persons regularly employed on the Hot Springs Reservation, whose duties and pay range from superintendent to laborer. I have at all times been very careful in the selection of persons to be given employment on the reservation, and the utmost harmony and fellowship has prevailed among those who work together. It often becomes necessary to require extra work from the foresters and gardeners, such as sprinkling the grounds in summer, repairing the roads after heavy rain storms, and other emergencies as they may occur after working hours; but settlements are made on a basis of eight hours' work per day, and they are paid for whatever extra time that may be required of them.

There is no person employed on the reservation in whom the utmost confidence can not be placed, and I am greatly indebted to each and every one for the faithful and efficient manner in which their duties have been performed.

Table showing personnel of employees on the reservation, the Congressional district from which appointed, amount of compensation, and duties.

Name, occupation, and duties.	Compensation per year.	Congressional district whence appointed.
William J. Little, superintendent	$2,500.00	Second Arkansas.
William W. Little, clerk to superintendent	840.00	Do.
James Daniels, messenger at superintendent's office. Duties are to act as messenger to the superintendent and have charge of the furnace and lights at the office and residence building and of the stable.	180.00	Do.
William Sumpter, manager of free bath house. Duties are to have general charge of the bath house, receive applications for free baths, collect tickets, and see that the rules and regulations are carried out, together with such instructions as he may from time to time receive from the superintendent.	1,020.00	Do.
Simon Schultice, male attendent at free bath house. Duties are to have charge of and keep in a cleanly condition the pools and bathing departments of the free bath house; to perform such other duties as required in and about the bath house, and act as manager in his absence.	660.00	Do.
Mary L. Schultice, female attendant at free bath house. Duties are to have charge of and keep in a cleanly condition the pools and women's departments of the free bath house.	360.00	Do.
John H. Jones, scavenger at free bath house. Duties are to remove all rubbish, paper, and rags and to preserve sanitary conditions under direction of the manager.	120.00	Do.
Charles Payton, night policeman on the reservation. Duties are to have a general supervision over all Government property from 9 p. m. to 9 a. m., keep a lookout for fires, see that no stock or persons commit depredations on the reservation, and make arrests when necessity requires.	600.00	Do.
Christopher C. Cooper, day policeman on the reservation. Duties are to have a general supervision over all Government property from 9 a. m. to 9 p. m., see that no stock or persons commit depredations on the reservation, observe and report all cases of violation of the bath-house rules and regulations, and to make arrests when necessity requires.	480.00	Do.
Ed Hardin, waterman on the reservation. Duties are to have charge of the distribution of the hot water and see that each bath house gets the amount allotted it, and to act as foreman to the reservation force of foresters and gardeners.	600.00	Do.
A. A. Graham, forester and gardener	480.00	Do.
Charles Schmike, forester and gardener	480.00	Do.
Alfred Eddleman, forester and gardener	*a* 1.50	Do.
Jonathan A. Jordan, forester and gardener	*a* 1.50	Do.
Peter Nelson, forester and gardener	*a* 1.50	Do.
Dan T. Richardson, forester and gardener	*a* 1.50	Do.
James Horan, forester and gardener	*a* 1.50	Do.
Willis L. Shaw, forester and gardener	*a* 1.50	Do.

a Per day.

Duties of foresters and gardeners are to cultivate and care for the flowers, trees, and shrubbery; keep up the roads, drives, and walks, and make and maintain other improvements on the reservation under the direction of the superintendent.

ADMINISTRATION.

During the period since my last report considerable progress has been made in the quiet and orderly management of the reservation. The bath houses have seemed to enjoy a good season of business and have rendered a better compliance with the rules and regulations than heretofore, bath-house drumming has been considerably diminished, and more favorable attention has been directed to the Hot Springs Reservation than at any time in the past several years. The revenues accruing to the Government from water and ground rents have all been promptly collected and deposited in the subtreasury at St. Louis. All the improvements which I have been authorized to make have been practically completed, and generally the affairs of the reservation have progressed in a most satisfactory manner.

In the matter of the improvements and the purchase of material and supplies in "open market" and the employment of labor I have in no

sense lost sight of the interests of the Government, and have endeavored to practice such economy as seemed consistent and honorable with all concerned and with public policy.

The free bath house has been enlarged and repaired in accordance with the plans approved by the Department for this purpose, and the convenience with which the business of the house can now be transacted has been greatly facilitated. All indigent persons applying for free baths have been supplied, and a large portion of those using the baths have been cured and put on the way to become useful citizens. The free dispensary, for some time past operated in connection with the free bath house, has accomplished great good and is beginning to receive more liberal support from charitable persons by whom it is sustained. If it is charity to help those who can not help themselves, the Government and all concerned have great reason to feel proud of that which has been accomplished at the free bath house and free dispensary during the past year.

The cultivation and extension of the parks has proceeded in a satisfactory manner; considerable additional shrubbery has been gathered up and planted and additional grounds set in grass. This branch of the reservation improvements is well in hand, and the parks themselves present a very creditable appearance and afford much pleasure and recreation to the visitors, and are much used and frequented by the citizens. A feature of considerable enjoyment in Reserve Park this summer has been the biweekly concerts given in the pavilion at the head of the grand central entrance, each of which is attended by a large number of people. The concerts are supported by public subscriptions.

Bath-house drumming has again been somewhat reduced, and it is probable that during the past year less of it has been indulged in than in any other year since the inception of the bath houses; that of it which is left at this time is so inseparably connected with the drumming doctors that it is almost impossible to reach it. Neither the drummers themselves nor the drumming doctors are permitted to take persons to or loiter in or about the bath houses, yet in some way a species of communication is kept up between some of the drumming doctors and some of the bath houses, which is the principal means of perpetuating that which is left of bath-house drumming.

Since the removal of this office to the present quarters the inquiries made in person about Hot Springs have very greatly increased and the business of the office has been very greatly facilitated. It is now located in the center of the business section and is accessible alike to visitors and others having business with the superintendent. During the year a great many inquiries have been received from all parts of the United States and some from foreign nations, including England, Germany, Austria, and France, generally calling for the minutest information about the hot waters, the mode of application, the cost of medical treatment, hotel and boarding-house charges, the cost of transportation, and the probable effect of the water on certain diseases, the necessary time to effect a cure, etc. To all these courteous answers have been returned, and the effect has been to bring a great many persons to Hot Springs, many of whom have been cured. Through these and others coming to Hot Springs a great demand has sprung up for authentic information descriptive of Hot Springs and the hot waters, in suitable form for mailing to friends and acquaintances who need the benefit of the waters; an analysis of the hot waters made by a competent Government officer is continuously called for, and anything bearing the stamp of the Government Printing Office is gladly and often eagerly accepted. I have

collected and distributed all the reliable printed information I could, but have not nearly been able to supply the demand. Through these sources and other intelligent means of advertising, supported and maintained by the citizens and through the magical effect of the hot waters, Hot Springs is rapidly becoming famous the world over.

During the year I have received several requests for information about the unsold Government lots from persons desiring to know when another sale would probably be held and for specific information about certain lots and parcels of land yet unsold. From this and the somewhat frequent personal inquiries made at this office I conclude that a successful sale of these lots may be had at the pleasure of the Department after this date, and I think it advisable that such sale should be authorized to take place not later than March 15, 1900, in order that the proceeds thereof may become available for the continuance of the reservation improvements which have done so much toward bringing Hot Springs up to the high standard it has now attained.

I have the honor to be, very respectfully, your obedient servant,

WM. J. LITTLE, *Superintendent.*

The SECRETARY OF THE INTERIOR,
Washington, D. C.