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Report of the Governor of New Mexico, 1894.

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R E P O R T
OF
THE GOVERNOR OF NEW MEXICO.

EXECUTIVE DEPARTMENT,
TERRITORY OF NEW MEXICO,
Santa Fe, N. Mex., October 10, 1894.

SIR: I have the honor to herewith inclose you my annual report upon the Territory of New Mexico for the year ending June 30, 1894.

Very respectfully,

W. T. THORNTON,
Governor.

Hon. HOKE SMITH,
Secretary of the Interior,
Washington, D. C.

POPULATION.

New Mexico has suffered from the general depression which has affected the entire country during the past twelve months probably not so seriously as that portion of the country which has been less bountifully blessed by the abundant rains which have fallen throughout this Territory and given to our people an unprecedented crop year, all classes of cereals and grasses being at their maximum. It is doubted if the Territory ever had more abundant crops than have been raised throughout its length and breadth. There has been no material change in our population, but a healthy growth has set in of a very desirable class of immigration in almost every county in the Territory, especially in the agricultural portions thereof. Irrigation enterprises begun within the last two or three years have succeeded admirably, bringing under cultivation large areas of desert land. In more than half the counties of the Territory, enterprises of importance have been begun which will add largely in the near future to the productiveness and prosperity of our people. Among the fruit-growers in the Mesilla Valley, upon the Rio Grande, many new settlers have purchased and planted large orchards and vineyards. This industry is rapidly growing, and is one of great importance in that locality, as well as in the counties of Colfax, Santa Fe, Bernalillo, Eddy, Chaves, and San Juan, all of which localities are destined, in the near future, to become large shippers.

The increase of population has been of a character calculated to increase the prosperity of this community in a greater degree than would be expected from its numbers. In the southeastern counties—Eddy, Chaves, and Lincoln—this influx of new settlers has been more widely noted than in any other section. The people who have made new homes there were from the old States of the East; each family that cast its lot there brought in a considerable sum of money, generally about \$2,000, but some of them were persons of wealth. It necessarily follows that in an irrigated country the settlement will be of this class. In San Juan County, in the northwest, the same thing has been noted, but as this county lies off of the railroad but little has been heard of the steady development that goes on there. In Colfax and Union counties a steady growth has been observed. This goes on quietly and unheralded, but is no less certain and productive of good order and the advance of the people. The attraction to these sections is the choice irrigated land that is offered the settler at reasonable figures. The most notable influx of settlement, however, was that which followed the discovery of the precious minerals in that section of Bernalillo County known as the Cochiti Mountains. The immigration here was of the hardest class of miners and prospectors, and a remarkable thing to note is the fact that during the life of the camp there has been only one quarrel in which firearms or deadly weapons were used. That several thousand men bent on the search for wealth should live in the hills for a year, and although under no apparent rules of law should live peaceably and in good order far surpassing that of any organized town in the United States, or in the world, for that matter, is a high and singular commentary on the class of immigration that has blessed New Mexico during the past year. The addition to our population from this one source may be conservatively stated at 2,000 persons. A more extended review of the characteristics and resources of this region will be given in the proper place.

LAND TITLES.

The work of the U. S. Court of Private Land Claims is progressing rapidly, and the result thereof is one of vast importance to this Territory. As said in my last report:

No act of Congress for many years has effected so important an advance toward the permanent prosperity and well-being of this Territory as the act creating this court. The colonization policy of the Spanish and Mexican governments shaped itself in the granting of large areas of land to communities or individuals. The aim seemed to be to attract the mass rather than the individual elements of population. Vast acreages, with undefined and uncertain boundaries, were believed to be fraudulent. Small tracts were often held under valid grants with exterior boundaries designated by natural monuments, which were by designing or evil-disposed persons often changed to include territory vastly greater than that to which they were entitled. For many reasons Congress has delayed action in this matter for more than a generation after the acquirement of the Territory and the guaranty of its ancient land tenures. Clouded titles and insecure tenures were therefore uncommonly frequent in New Mexico, creating an insuperable barrier to settlement and a blight to prosperity.

The work of this court, which advanced so rapidly during the first year of its existence, has continued and progressed with equal rapidity during the past year. The work performed has been most important, and has been thoroughly and capably done; title to many of the large tracts of land has been finally determined; many of them in favor of the claimant, and others in favor of the Government; but, in either event, the question of title has been settled, thus giving to the owners

new heart to improve and develop the grants which were confirmed, and to the public thousands of acres which were wrongfully claimed. In my last report I gave the following recapitulation of the work of the Court of Private Land Claims from the date of its organization to the 31st of August, 1893:

Recapitulation of the work of the Court of Private Land Claims, August 31, 1893.

Total number of cases filed for land in New Mexico.....	262
Grants confirmed for land in New Mexico (cases Nos. 1, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 18, 21, 22, 28, 30, 31, 35, 39, 43, 53, 57)	23
Grants rejected for land in New Mexico (cases Nos. 4, 12, 26, 27, 49, 100)	7
Appealed to Supreme Court:	
By claimants (Nos. 26, 27, 50, 100)	4
By United States (Nos. 1, 31, 35, 43)	4

The following is a complete list of claims determined:

No. of case.	Name.	County.	Estimated number of acres claimed.	Estimated number of acres confirmed.
1	Cubero	Valencia.....	47, 743	16, 000
4	San Antonio del Rio Colorado	Taos.....	18, 000	.....
5	Arroyo Hondo.....	do.....	23, 040	23, 040
6	Sebastian de Vargas.....	Santa Fe.....	41, 000	14, 000
7	B. M. Montado.....	Bernalillo.....	151, 000	43, 597
8	Albuquerque.....	do.....	17, 361	17, 361
9	Lucero de Godoi.....	Taos.....	40, 000	27, 000
10	Rancho del Rio Grande.....	do.....	109, 043	109, 043
11	Alameda.....	Bernalillo.....	106, 244	106, 244
12	José Duran.....	Santa Fe.....	426	.....
13	Socorro.....	Socorro.....	17, 361	17, 361
14	Fr. Montes Vigil.....	Rio Arriba.....	35, 000	35, 000
15	Antonio Sedillo.....	Bernalillo and Valencia.....	152, 879	88, 000
16	Gijosa.....	Taos.....	20, 000	20, 000
18	Pachecho.....	Santa Fe.....	500	500
21	Cristabel de la Serna.....	Taos.....	30, 000	30, 000
22	San Marcos.....	Santa Fe.....	1, 890	1, 890
26	Rancho de Galvan.....	Bernalillo.....	30, 000	.....
27	San Antonito.....	do.....	32, 000	.....
28	Nuestra Señora, etc.....	Rio Arriba.....	20, 000	20, 000
30	Piedra Lumbre.....	do.....	39, 062	39, 062
31	Luis Jaramillo.....	Bernalillo.....	18, 000	18, 000
35	Jacona.....	Santa Fe.....	46, 241	36, 241
39	Cajá del Rio.....	do.....	70, 000	60, 000
49	Domingo Valdez.....	do.....	500	500
50	Zia, Santa Ana and Jemez Pasture Grant.....	Bernalillo.....	382, 849	.....
53	Canada de los Alamos.....	Santa Fe.....	13, 706	9, 500
57	Nicolas Duran de Chaves.....	Valencia.....	50, 000	49, 000
100	Canyon de San Diego.....	Bernalillo.....	10, 000	.....
	Estimated total.....		1, 558, 875	815, 839

	Acres.
Estimated total confirmed	789, 595
Estimated total cut and rejected.....	819, 280

The following cases have been tried and final judgment rendered during the past year:

Statements of grants tried, with area confirmed and rejected, since July 1, 1893.

No.	Grant.	Area claimed.	Area confirmed.	Area rejected.
		<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
2	Plaza Colorado	19,200	19,200	.....
6	De Vargas	45,000	15,000	30,000
23	Santa Teresa de Jesus	6,886	.....	6,886
25	San Miguel El Vado	315,300	315,300	.....
30	Pedro Lumbra	30,000	30,000	.....
31	Luis Jaramillo	18,000	18,000	.....
32	Plaza Blanca	16,000	16,000	.....
35	Jacona	45,000	45,000	.....
37	Antonio Chaves	130,138	.....	130,138
39	Caja del Rio	60,000	.....	.....
61	Bartolome Fernandez	25,000	25,000	.....
126	.....	.....	.....	.....
66	Bosque Grande	4,000	.....	4,000
72	Arroyo de los Chamisos	1,500	.....	1,500
80	City of Santa Fe	17,361	17,361	.....
202	.....	.....	.....	.....
86	Juan de Gabaldon	12,000	12,000	.....
94	.....	.....	.....	.....
88	Ojo Caliente	40,000	10,000	30,000
98	Canada de San Francisco	1,600	.....	1,600
100	Canyon de San Diego	10,000	.....	10,000
103	Juan Cavetano, Labato	1,000	.....	1,000
105	Antonio Dominguez	500	.....	500
116	Talaya	2,000	500	1,500
150	Juan Jose Lovato	100,000	50,000	1,500
180	Roque Lobato	2,000	.....	2,000
43	Polverada	35,000	35,000	.....
46	Nolan	575,968	.....	575,968
48	Corpus Christi	696,960	.....	696,960
49	Domingo Valdez	500	.....	500
50	Zia, Santa Ana and Jemez	276,000	.....	276,000
51	Rancho de Albuquerque	40,000	40,000	.....
106	.....	.....	.....	.....
52	Abiquiu	13,000	13,000	.....
53	Lorenzo Marquez	13,700	13,700	.....
55	Cevilleta	224,770	224,770	.....
57	Nicolas Duran	50,000	50,000	.....
		2,828,383	940,831	1,770,052

RECAPITULATION.

	Acres.
Area sued for	2,828,383
Area confirmed	940,831
Area rejected	1,770,052

NOTE.—In cases Nos. 60 and 198 the petitions were dismissed and confirmation made for full amount in No. 25.

In No. 140 the amount claimed, 100,000 acres, was reduced to about 50,000 acres by the confirmation of other and conflicting grants.

The confirmation of 4 leagues to the city of Santa Fe, No. 80, rejects 17 grants for which appeals are now pending, the areas of which are not given.

The areas given are as stated, in round numbers, in the petitions and where confirmed without deductions the same areas are given, although in most cases the actual amount of land claimed or confirmed is unknown, as no surveys have ever been made. On final approval in some instances these may increase and in others decrease.

Private land claims surveyed during the year ending June 30, 1894.

No.	Grant.	Area.
		<i>Acres.</i>
40	Canyon del Agua.....	341.04
91	Town of Alameda.....	11,019.22
53	Canada de los Alamos.....	7,110.02
153	Cristobal de la Serna.....	22,232.57
123	Francisco Montes Vigil.....	8,253.74
18	Pacheco.....	581.29
102	San Marcos Pueblo.....	1,895.44
63	Caja del Rio.....	66,848.78
58	Rancho del Rio Grande (not platted).....	
116	Lucero de Godoi (not platted).....	
	Total.....	218,282.10

The land court has been steadily engaged in settling the number of suits before it, and people can now see an early date at which many choice sections of our land will be available for settlement because there will be a secure and certain title on which to found the investment of capital. Large holdings of land in individual or corporate hands, as a general thing, is to be deprecated. The conditions in New Mexico are such that it is necessary the land and water should be under our control. The peculiar conditions of the national land laws which were framed to influence the rapid settlement of an open humid region, are impossible to be complied with in an arid country. The homestead laws are very good on the broad prairies of Illinois, Missouri, or Kansas, but are absolutely without reason or common sense when applied to the peculiar conditions of arid New Mexico. Except under specially favorable circumstances, no man can take up a desert-land claim and reduce it from barren aridity to fruitful acres; the expenditures for an irrigation plant are too costly for individual effort. It is only by community effort, or by the ordered and far-seeing work of a corporation, that the waters of great rivers can be brought upon the barren plains and utilized for their reclamation, and the severe aspect of nature here softened and her face brought to smile with verdure. "Man does not tickle the earth with a hoe and compel her to laugh a crop" in New Mexico; he must go about his work with order and precision; science must be brought to his aid, and he must work with his neighbors, or not at all. The Spanish conquerors of this Territory were traditional irrigators, and at the same time were imbued with the ideas and beliefs of feudalism; consequently, large grants of lands with their appurtenant water rights were parceled out to favorite soldiers, or men who promised to plant colonies. These men had not the means to draw out immense high-line irrigation canals, but were content with their little rivulets, watering a few acres of bottom land, which has not detracted from the modern possibilities of these grants. In the neighborhood of Albuquerque, large grants covering all the available land and water have been confirmed by the land court. This country is on the railroad adjacent to a large and growing city. Without going further into details, it offers larger attraction to the investment of capital than any other known region; and this condition is the immediate result of the labor of the Court of Private Land Claims.

In this connection I desire to repeat a portion of my last report:

NECESSITY OF IMMEDIATE SURVEYS.

"I desire to call the attention of the Department to the importance of immediately surveying the grants confirmed by the court and the

small holdings passed upon by the surveyor-general. Until such surveys are made it can not be accurately known where the boundaries of these tracts are located. Doubt as to their location prevents in many instances the settlement of adjacent lands. If the work proceed *pari passu* with the labors of the land court, it may be handled very easily. If, on the other hand, it is allowed to accumulate much hardship will be wrought and the Department greatly embarrassed in the end. It is therefore hoped and earnestly urged, both for public and private interests, that a sufficient appropriation will be made by the present Congress for the survey of these grants. Delay in this matter will be expensive and prejudicial to national and Territorial interests." In addition to the work performed in the land court many titles of small tracts have been settled by the surveyor-general under authority given him to confirm tracts containing less than 160 acres where the claimant had been in possession for more than twenty years. The number of claims of this character filed up to date reaches nearly 3,000, of which number contracts have been awarded to survey 307, this being about the number that have been filed upon lands in townships heretofore surveyed which are in such shape that the claimants can not readily secure their interest by an entry of the lands by legal subdivision. The larger number of these claims are still unsurveyed, and, as may be seen from the above report, large acreage of lands which have been confirmed by the Court of Private Land Claims, the boundaries of which are indefinite and can only be settled by final survey, remain unsurveyed, which induces me to again call the attention of the Department to the importance of immediate surveys of the grants which have been confirmed, as well as the small holdings passed upon by the surveyor-general. Until such surveys are made it can not be accurately known where the boundaries of these tracts are located, and until this is definitely determined settlement and improvements upon the lands in the vicinity of the boundary will be greatly impeded.

PUBLIC LANDS.

During the year ending June 30, 1894, the entries at the various land offices of the Territory were as follows:

	Acres.
<i>Sante Fe land office.</i>	
138 homestead entries, embracing	19, 551. 60
109 final homestead entries, embracing.....	16, 560. 82
Lands sold.....	1, 652. 26
25 desert-land entries, embracing.....	3, 098. 94
2 final desert-land entries, embracing.....	200. 00
1 final timber-culture entry, embracing.....	160. 00
65 coal filings.....	9, 480. 00
Total.....	50, 703. 62
Vacant surveyed lands in this district.....	10, 912, 460. 00
Vacant, unsurveyed.....	3, 840, 860. 00
Total.....	14, 753, 320. 00
School lands, grants, military and forest reservations.....	14, 078, 764. 00
Lands disposed of since establishment of office under the various land laws of the United States, including railroad selections	3, 257, 060. 00

Statement of business transacted at the Las Cruces, N. Mex., land office during the fiscal year ending June 30, 1894.

No. entries.	Class of entry.	Acres.	Com-mission.	Fees.	Amount.
18	Mineral entries.....	1,520.30			\$7,655.00
4	Contested homestead entries.....	518			647.50
16	Original desert entries.....	3,245.77			811.44
114	Homestead entries.....		\$554.89		
114	Homestead entries.....			\$905.00	
74	Final homestead entries.....	10,885.32	408.72		
1	Soldier's declaratory statement.....			3.00	
4	Cancellation notices.....			4.00	
7	Preemption entries.....	560			799.50
9	Excess entries.....	6			7.00
	Fees for making 24 plats.....			72.90	
	Fees for making 5 abstracts.....			81.15	
	Fees for reducing 185,613 words of testimony.....			403.01	
	Total.....		963.61	1,469.06	9,920.94

Statement of the business transacted at Clayton land office for the fiscal year ending June 30, 1894.

Class of entry.	Num-ber.	Acres.	Commis-sions.	Fees.	Amount.
Sales of land by preemption entry.....	4	560			\$700.00
Excess payments on homesteads and other entries and locations.....	5	26.48			33.20
Original entries under the desert act.....	1	80			20.00
Homestead entries commuted to cash under section 2301, Rev. Stat.....	5	800			1,000.00
Commuted timber cultures.....	1	160			200.00
Total cash sales.....	16	1,626.48			1,953.20
Supplemental receipts.....	2			\$12.00	12.00
Original homestead entries.....	82	12,773.37	\$478.50	810.00	1,288.00
Coal declaratory statement.....	1	160		3.00	3.00
Final homestead entries.....	36	5,638.96	210.00		210.00
Amount received for reducing testimony to writing.....				94.45	94.45
Total of all classes and the amount received.....	137	20,198.81	688.50	919.45	3,562.15

Salaries, fees, and commissions of register and receiver.....	\$1,819.09
Expense of depositing.....	6.25
Incidental expenses.....	341.72
Total.....	2,167.06

Roswell land office.

Class of entry.	Num-ber.	Acres.	Commis-sions.	Fees.	Amount.
Preemption cash.....	6	840.12			\$1,050.15
Coal lands.....	1	316.51			3,165.10
Excess payments.....	9	17.94			22.43
Original desert.....	77	15,239.88			3,810.00
Final desert.....	42	(13,222.71)			12,662.71
Homestead (commuted).....	16	(2,160.67)			2,700.84
Timber culture (commuted).....	18	(2,877.54)			3,596.93
Total cash sales.....	169	16,414.45			27,008.16
Final timber culture.....	4	(640.00)	\$16.00		16.00
Homestead entries.....	151	22,620.60	858.20	\$1,445.00	2,303.20
Final homesteads.....	29	4,197.00	157.36		157.36
Coal applications.....	36		108.00		108.00
Soldiers' declaratory statement.....	1		3.00		3.00
Amount received for reducing testimony to writing.....				397.56	397.56
Incidental expenses.....	390	43,231.45			29,993.28
					272.50

Roswell land office—Continued.

County.	Subject to entry, surveyed.	Unsurveyed.	Total.	Area reserved.	Disposed of.	Total in county.
Chaves	4,400,000	1,761,000	6,161,000	274,000	219,000	6,654,000
Donna Ana	230,500		230,500	119,500	30,000	380,000
Eddy	1,708,000	2,350,000	4,058,000	110,000	152,000	4,320,000
Lincoln	2,790,000	1,906,000	4,696,000	557,000	130,000	5,383,000
Socorro	40,840		40,840	1,920	1,240	44,000
Total	9,169,340	6,017,000	15,186,340	1,062,420	532,240	16,781,000

In addition to above, there has been set aside for reservoir purposes by Chaves County 1,280 acres, and by Eddy County 6,300 acres. The reserved lands in Donna Ana County are school, 15,000, and 104,500 Indian. In Lincoln County, school, 176,000; forest, 24,000, and military and Indian, 357,000 acres.

TAXABLE PROPERTY.

The following is the assessed valuation of the real and personal property in the various counties in the Territory for the year 1893. It should be taken into consideration, however, in connection with the value of real estate, that fully three-fourths of the lands of this Territory held by private ownership consists of unconfirmed grants with imperfect titles, and of such grants as have been confirmed by the Court of Private Land Claims, as heretofore set out in the report, such lands under the law are not subject to taxation until after final confirmation of the title. The assessment for personal property would also be very largely increased by the addition of the railroads, which are not assessable under the laws of this Territory until six years from and after the completion of the road.

Below is submitted an itemized valuation of real estate, live stock, railroads, and miscellaneous personal property in the several counties:

Counties.	Lands.		Houses and improvements.		Horses.		Mules.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Bernalillo		\$2,572,290.00		\$1,286,154.00	3,000	\$67,249.00	350	\$11,200.00
Chaves	121,047	507,632.00		141,295.00	3,478	75,209.00	229	12,146.00
Colfax	1,395,600	1,746,000.00		339,252.00	4,350	89,860.00	250	7,500.00
Donna Ana	90,638	529,270.00		408,260.00	2,146	44,920.00	106	4,240.00
Eddy	76,689	902,121.70		362,787.00	6,086	107,384.00	451	31,584.00
Grant		292,827.00		663,640.00	7,690	169,043.00	316	10,285.00
Guadalupe		640,899.80		53,783.30	2,450	46,636.50	127	3,136.00
Lincoln	77,703	329,807.00		247,449.00	7,176	129,360.00	166	5,860.00
Mora		646,742.00		97,945.30	2,720	53,515.69	156	4,470.01
Rio Arriba	60,563	225,001.09		99,127.65	2,250	47,900.89	118	4,048.54
San Juan	48,005	258,021.11		73,255.59	2,664	62,263.48	74	2,304.45
Santa Fe		586,054.04		780,420.12	1,297	29,158.76	168	6,648.17
San Miguel		2,014,925.71		787,900.77	5,524	113,809.83	365	10,683.58
Sierra	279,525	176,466.53		264,161.65	3,156	55,458.00	159	6,426.23
Socorro	443,370	494,978.90		316,243.80	5,167	90,688.50	331	8,361.90
Taos	624,126	266,405.00		5,090.00	1,500	31,200.00	100	5,000.00
Valencia	1,671,467	591,467.89		102,883.00	3,031	49,957.00	260	6,841.00
Total	4,888,733	12,780,909.77		5,969,048.16	63,623	1,263,613.65	3,724	140,732.88

Counties.	Cattle.		Sheep.		Goats.		Swine.	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Bernalillo	9,000	\$75,860.00	150,000	\$162,000.00	570	\$570.00	160	\$812.00
Chaves	74,311	449,213.00	54,973	110,871.00	137	151.00	207	742.00
Colfax	46,510	465,100.00	108,456	157,780.00	1,883	1,883.00	490	1,685.00
Donna Ana	31,628	231,040.00	14,238	16,494.00	1,440	1,620.00	165	310.00
Eddy	40,175	272,835.00	29,158	60,170.00	2,691	3,399.00	414	1,519.00
Grant	134,984	822,565.00	21,652	31,102.00	9,124	9,295.00	629	1,946.00
Guadalupe	29,445	203,937.00	128,260	163,420.15	1,740	1,805.00	71	194.50
Lincoln	90,372	542,233.00	59,576	80,692.00	10,408	15,112.00	1,213	2,426.00
Mora	10,978	87,251.99	118,597	142,728.63	5,200	4,754.36	575	1,105.39
Rio Arriba	3,795	35,691.50	116,458	106,262.11	2,955	2,596.09	219	334.78
San Juan	5,499	51,245.86	17,927	18,930.92	539	574.90	372	1,242.16
Santa Fe	3,056	26,784.33	48,334	45,308.29	2,950	2,765.33	214	531.51
San Miguel	104,095	815,127.86	217,471	263,412.23	9,704	10,543.90	413	1,263.91
Sierra	20,463	112,889.40	6,230	7,184.05	6,971	9,986.92	153	438.75
Socorro	93,441	484,127.00	76,193	69,023.70	5,004	4,503.60	-----	846.00
Taos	2,502	20,200.00	55,345	55,345.00	2,800	2,800.00	636	1,200.00
Valencia	21,418	159,170.00	187,900	188,426.00	1,302	1,119.75	177	408.25
Total	721,672	4,855,270.94	1,261,268	1,679,150.08	65,416	78,479.85	6,108	17,005.25

Counties.	Burros.		Carriages.		Wagons.		Machinery.	Books.
	No.	Value.	No.	Value.	No.	Value.		
Bernalillo	250	\$2,815.00	-----	\$20,145.00	-----	\$14,112.00	\$42,234.00	\$12,862.00
Chaves	125	1,187.00	116	4,472.00	207	6,583.00	1,270.00	1,200.00
Colfax	156	900.00	195	5,720.00	473	10,830.00	57,200.00	1,300.00
Donna Ana	57	385.00	107	5,270.00	238	5,240.00	12,400.00	2,860.00
Eddy	49	455.00	151	5,496.00	336	10,568.00	2,300.00	1,685.00
Grant	128	1,100.00	260	11,025.00	608	17,555.00	22,425.00	6,740.00
Guadalupe	780	2,798.00	79	2,344.75	467	7,335.00	1,853.00	85.00
Lincoln	522	2,610.00	124	2,500.00	300	3,100.00	26,000.00	1,500.00
Mora	316	688.47	199	4,255.98	642	9,192.46	10,487.11	281.38
Rio Arriba	366	2,144.25	1,008	1,024.78	47	10,228.57	5,153.52	236.33
San Juan	81	347.49	89	1,781.19	413	7,827.03	6,255.23	375.03
Santa Fe	382	1,215.81	159	6,991.13	505	12,237.76	68,007.43	14,614.07
San Miguel	950	3,182.57	340	11,275.28	1,064	20,093.55	43,671.31	10,375.12
Sierra	104	760.50	380	12,941.18	-----	-----	80,582.90	2,163.42
Socorro	-----	1,018.80	-----	10,394.10	-----	19,160.10	92,805.30	3,157.30
Taos	216	525.00	90	2,800.00	390	8,100.00	4,590.00	600.00
Valencia	448	1,207.50	158	5,413.00	788	16,389.00	12,742.00	663.00
Total	4,930	23,340.39	2,555	113,849.39	6,478	\$178,551.47	489,776.80	60,697.65

Counties.	Merchandise.	Gold and silver plate.	Capital in manufactures.	Money.	Jewelry.	Household furniture.	Shares of stock.
Chaves	40,035.00	-----	-----	4,289.00	620.00	12,803.00	25,000.00
Colfax	187,680.00	1,340.00	7,200.00	18,000.00	3,300.00	49,420.00	31,880.00
Donna Ana	72,500.00	425.00	480.00	750.00	2,890.00	12,200.00	-----
Eddy	107,515.00	495.00	-----	79,802.00	203.00	34,479.00	60.00
Grant	286,615.00	3,145.00	16,700.00	8,845.00	11,165.00	82,145.00	103,430.00
Guadalupe	14,611.00	-----	-----	2,173.00	355.00	8,462.00	955.00
Lincoln	75,434.67	1,120.00	-----	5,500.00	1,621.00	27,200.00	190.00
Mora	62,307.16	154.52	-----	7,681.95	2,347.69	17,406.44	-----
Rio Arriba	38,814.74	68.44	14,294.44	6,432.77	1,773.80	7,414.57	450.75
San Juan	11,736.90	32.40	2,851.20	1,000.35	764.03	9,567.92	332.10
Santa Fe	178,417.22	5,663.77	-----	30,871.39	5,335.68	64,395.63	146,328.14
San Miguel	305,390.92	-----	6,318.88	19,656.08	9,853.26	104,732.84	164,895.15
Sierra	81,195.08	1,560.00	-----	74,083.47	4,992.98	25,133.55	610.35
Socorro	125,493.30	4.50	652.50	1,572.30	5,765.30	28,020.60	91,512.90
Taos	40,520.00	1,515.00	-----	6,125.00	1,050.00	8,120.00	9,000.00
Valencia	56,596.00	2,294.50	200.00	6,122.25	2,110.00	21,967.00	3,680.00
Total	2,274,879.99	20,731.13	65,107.02	330,558.51	75,063.74	513,777.55	814,689.39

Counties.	Accounts, notes, etc.	Tools.	Railroads.	Property not specified.	Musical instruments.	Bonds, warrants, etc.	Total.
Bernalillo.....	\$42,916.00	\$8,714.00	\$1,027,440.00	.....	\$15,857.00	.....	\$6,377,277.00
Chaves.....	26,927.00	6,537.00	.....	\$13,732.00	3,548.00	.....	1,446,002.00
Colfax.....	20,330.00	8,660.00	615,398.60	1,001.40	5,400.00	.....	3,834,620.00
Donna Ana.....	6,400.00	5,440.00	1,260,178.00	105,371.00	4,620.00	.....	2,733,563.00
Eddy.....	37,870.00	12,885.00	.....	12,821.00	5,662.00	.....	1,997,095.70
Grant.....	2,115.00	6,200.00	1,201,042.00	332,940.34	10,475.00	\$5,100.00	4,129,468.34
Guadalupe.....	1,626.00	1,715.00	.....	7,712.00	283.00	.....	1,166,120.00
Lincoln.....	40,444.00	1,780.00	.....	.....	4,650.00	.....	1,546,588.87
Mora.....	31,310.75	7,001.71	223,120.56	11,680.97	1,046.42	.....	1,427,476.94
Rio Arriba.....	.....	3,849.63	405,072.41	4,688.17	632.33	4,034.85	1,027,277.00
San Juan.....	2,928.15	844.83	259.94	4,957.21	1,131.98	20.25	520,844.69
Santa Fe.....	30,155.22	2,326.63	554,655.92	24,915.45	5,526.91	2,571.29	2,631,898.00
San Miguel.....	23,199.49	5,759.86	718,223.99	463,222.91	9,644.71	17,515.29	5,954,079.00
Sierra.....	19,396.82	6,102.53	434,226.06	.....	3,537.20	.....	1,380,097.52
Socorro.....	13,311.00	976.60	702,423.00	308,556.50	3,370.50	.....	2,935,968.00
Taos.....	8,520.00	5,000.00	203,630.00	.....	1,000.00	.....	688,335.00
Valencia.....	24,578.82	4,386.50	144,147.49	378,577.00	1,787.00	.....	1,783,133.95
Total.....	332,023.25	88,179.29	7,549,820.97	1,670,175.95	78,172.05	29,241.68	41,574,844.81
Add exemptions to heads of family under section 1, chapter 6, Laws of 1893, on total valuation.....							2,055,400.00
Total.....							43,630,244.81

Upon the foregoing property the following is the rate of assessment for the year 1894: For Territorial purposes, 6 mills on the dollar; for casual deficit bonds, interest, 25 mills on the dollar; for Territorial institutions, 1.50 mills on the dollar; for cattle indemnity fund, half of 1 mill on the dollar; for public schools, 2 mills on the dollar.

I herewith submit from the Territorial auditor a statement showing the amount of warrants issued during the forty-fourth fiscal year from March 6, 1893, to March 3, 1894, and the purposes for which the same were issued.

Statement showing the amount of warrants issued during the forty-fourth fiscal year from March 6, 1893, to March 3, 1894.

Penitentiary and current expense fund:

Pay of officers and employees—

From annual appropriation, forty-third fiscal year ...	\$392.23
From annual appropriation, forty-fourth fiscal year...	6,701.38
From convicts' earnings, forty-second fiscal year.....	370.48
From convicts' earnings, forty-third fiscal year.....	304.03
From convicts' earnings, forty-fourth fiscal year.....	2,261.76
From special deficit, forty-fourth fiscal year.....	367.33

Maintenance and repairs—

From annual appropriation, forty-third fiscal year....	1,118.37
From annual appropriation, forty-fourth fiscal year...	9,671.44
From annual convicts' earnings, forty-third fiscal year	1,643.32
From annual convicts' earnings, forty-fourth fiscal year	4,504.08
From special deficit, forty-fourth fiscal year.....	2,790.48

\$30,124.90

Capitol current expense fund:

From annual appropriation, forty-second fiscal year.....	76.71
From annual appropriation, forty-third fiscal year.....	156.55

233.26

Salary fund:

Paid superintendent public instruction, salary, etc.—

From annual appropriation, forty-fourth fiscal year...	1,710.00
From special deficit, forty-fourth fiscal year.....	522.18

Paid district attorneys, salary, etc.—

From annual appropriation, forty-second fiscal year...	45.00
From annual appropriation, forty-third fiscal year....	1,245.00
From annual appropriation, forty-fourth fiscal year...	4,147.99
From special deficit forty-fourth fiscal year.....	247.01

Salary fund—Continued.

Paid solicitor-general, salary—	
From annual appropriation, forty-fourth fiscal year...	\$1,393.20
From special deficit, forty-fourth fiscal year.....	606.80
Paid district clerks, salaries, viz—	
From annual appropriation, forty-third fiscal year....	2,886.85
From annual appropriation, forty-fourth fiscal year...	11,144.59
From special deficit, forty-fourth fiscal year.....	1,921.81
Paid Territorial auditor and clerk, salaries—	
From annual appropriation, forty-third fiscal year....	37.69
From annual appropriation, forty-fourth fiscal year...	1,801.02
From special deficit, forty-fourth fiscal year.....	599.98
Paid Territorial treasurer and clerk salaries—	
From annual appropriation, forty-third fiscal year....	48.97
From annual appropriation, forty-fourth fiscal year...	1,626.31
From special deficit, forty-fourth fiscal year.....	624.99
Paid Territorial librarian, salary—	
From annual appropriation, forty-third fiscal year....	16.93
From annual appropriation, forty-fourth fiscal year...	494.00
From special deficit, forty-fourth fiscal year.....	40.00
Paid penitentiary board, and clerk, salary, etc.—	
From annual appropriation, forty-fourth fiscal year...	929.10
From special deficit, forty-fourth fiscal year.....	116.67
Paid district judges, salaries, viz—	
From forty-fourth fiscal year funds, salary, forty-third fiscal year.....	4,000.00
From forty-fourth fiscal year funds, salary, forty-fourth fiscal year.....	2,639.23
From special deficit, forty-fourth fiscal year, salaries, forty-fourth fiscal year.....	211.26
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	\$39,154.58

Court fund:

Amount paid on accounts filed by warrants drawn, as shown by Exhibit A, annexed to this statement, viz—	
From annual appropriation.....	7,914.39
From special deficit, forty-fourth fiscal year.....	80.75
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	7,995.14

Miscellaneous fund:

Amount paid on accounts filed by warrants drawn, as shown by exhibit B annexed to this statement, viz—	
From annual appropriation, forty-second fiscal year..	194.94
From annual appropriation, forty-third fiscal year...	1,640.50
From annual appropriation, forty-fourth fiscal year...	21,856.96
Special deficit, forty-fourth fiscal year.....	4,391.60
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Total.....	28,084.00
Paid employé's thirtieth legislative assembly.....	172.00
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	28,256.00

Compensation of assessors' fund:

Amount paid on accounts filed for commission on assess- ments of taxes and licenses in 1891, 1892, and 1893, viz—	
From forty-second fiscal year fund, assessment of 1891..	143.96
From forty-third fiscal year fund, assessment of 1892..	3,022.32
From forty-fourth fiscal year fund, assessment of 1893..	4,848.26
From special deficit, forty-fourth fiscal year, assess- ment of 1893.....	1,210.71
	<hr/>
	9,225.25

Transportation of convicts:

Amounts paid by warrants on accounts filed—	
From annual appropriation, forty-third fiscal year....	137.75
From annual appropriation, forty-fourth fiscal year...	2,244.25
Special deficit, forty-fourth fiscal year.....	145.25
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	2,529.25

Deficit 1889-'90 fund:

Total amount paid.....	351.12
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Sinking fund redemption of outstanding warrants:

Total amount of warrants issued to pay interest on warrants during forty-fourth fiscal year.....	7,726.14
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License fund:			
Accounts incurred	\$792.00		
Contingent expenses, governor's office.....	36.12		\$828.12
Territorial institutions, viz:			
University of New Mexico.....	12,610.44		
Agricultural College.....	4,000.00		
New Mexico School of Mines.....	4,765.06		
New Mexico Insane Asylum.....	12,500.00		33,875.50
Old district court certificates:			
Amount paid			21.70
Normal schools:			
To Las Vegas normal school.....	368.33		
To Silver City normal school.....	500.00		868.33
Normal institutes:			
Forty-fourth fiscal year accounts.....			458.50
Territorial purposes, forty-fourth fiscal year:			
To pay employes thirtieth legislative assembly.....			48.00
General fund:			
Warrants issued to pay accounts prior to March 4, 1889, in accordance with decision of district court, fourth judicial district.....			3,138.04
Total amount of warrants issued during forty-fourth fiscal year..			165,576.95
From annual appropriations.....			151,698.13
From special deficit, forty-fourth fiscal year.....			13,878.82
Total.....			165,576.95

EXHIBIT A.—Court fund, expenditures during forty-fourth fiscal year.

County.	Jurors.		Witnesses.		Bailiffs.	Interpreters.		Stenographers.	Sheriffs.		Stationery.
	Forty-second fiscal year.	Forty-third fiscal year.	Forty-second fiscal year.	Forty-third fiscal year.	Forty-third fiscal year.	Forty-second fiscal year.	Forty-third fiscal year.	Forty-third fiscal year.	Forty-second fiscal year.	Forty-third fiscal year.	Forty-third fiscal year.
Bernalillo.....		\$513.00		\$39.00	\$26.00	\$256.00	\$64.80	\$32.40	\$160.15	\$177.97	\$90.00
Chavez.....				1.00					140.71	77.00	3.13
Colfax.....		245.20		220.00			12.80			48.00	
Dona Ana.....	\$6.00	58.50	\$12.90	100.20						155.00	28.75
Eddy.....		239.00		38.50	8.00			16.00		250.00	16.50
Grant.....	6.80	38.00		44.40	68.00			19.80		33.75	18.05
Lincoln.....		232.30		24.50	10.70					84.00	22.00
Mora.....								42.00		172.50	20.00
Rio Arriba.....		18.85								156.23	3.03
San Juan.....		92.20		17.00						71.05	13.50
Santa Fe.....	2.00		1.00	2.00	64.14			19.80		183.70	19.75
San Miguel.....	96.40	879.50	115.00	6.50						125.95	60.10
Sierra.....	13.50	51.30		91.00						172.50	7.75
Socorro.....				156.75						50.00	35.50
Taos.....										44.00	5.60
Valencia.....		225.04	2.50				16.00	28.00	189.01	625.00	5.00
Total.....	124.70	2,593.87	131.40	740.85	176.84	256.00	93.60	158.00	489.87	2,426.65	348.66

	Forty-third fiscal year.	Forty-fourth fiscal year.	Special deficit.	Total.
Total regular court fund.....				\$7,540.44
Supreme court fund:				
Per diem and fees of clerk.....		\$143.30	\$20.75	
Printing dockets.....	\$6.00	20.95	15.40	
Printing briefs.....		49.05	12.75	
Printing rules of the supreme court.....		112.65	31.85	
	6.00	367.95	80.75	454.70
Total.....				7,995.14

EXHIBIT B.—Miscellaneous fund, forty-fourth fiscal year.

Subdivision of fund.	Appropriations, forty-fourth fiscal year.	Payments from forty-second fiscal year.	Payments from forty-third fiscal year.	Payments from forty-fourth fiscal year.	Payments from special deficit, forty-fourth fiscal year.
Auditor's office, postage, printing, etc.	\$900.00		\$109.00	\$476.50	\$93.30
Archives, cataloguing, etc., old Territorial.	600.00			280.00	
Asylum for deaf, dumb, and blind at Santa Fe ..	5,000.00		380.00	2,598.69	345.00
Bureau of immigration.	2,000.00			1,064.60	255.00
Bounty for wild animals killed.	1,000.00		458.50	517.30	66.70
Eleuterio Barela, for saving archives.	200.00			106.45	25.50
Governor's office, contingent expenses.	500.00			227.45	
Historical Society.	400.00			195.05	
Hospital, St. Vincent's, at Santa Fe.	6,000.00			3,784.99	764.80
Hospital, Sisters of Mercy, at Silver City.	3,000.00	\$49.94	155.27	1,609.80	382.50
Hospital, Grant County Charity, Silver City.	3,000.00		368.33	1,733.20	382.50
Ladies' Relief Society of Las Vegas.	3,000.00		110.00	1,455.63	382.50
Librarian's office, postage, stationery, etc.	100.00			46.40	
Library, Territorial, purchase of books, etc.	2,500.00			30.00	
Militia, salary adjutant-general, etc.	1,000.00		15.30	532.30	118.80
Orphans' school at Santa Fe.	5,000.00			2,681.50	637.50
Printing tax rolls, blanks, etc.	750.00	45.00		316.41	
Printing report of superintendent public instruction.	500.00			266.15	63.75
Printing laws and journals, thirtieth legislative assembly.	1,500.00			798.45	191.23
Printing reports, etc. (chap. 74, Laws of 1893).	2,000.00			1,064.60	255.00
Rewards by governor for apprehension of criminals.	1,000.00			400.00	
Requisitions by governor, expenses in serving.	500.00			259.73	34.50
Salary secretary bureau of immigration.	900.00			489.05	110.95
Territorial treasurer's office, postage, etc.	740.00		25.10	384.41	148.21
Translating laws and journals, thirtieth legislative assembly.	1,050.00	100.00		558.92	133.86
Conveying election returns.			19.00		
Total.	43,140.00	194.94	1,640.50	21,856.96	4,391.60
Total miscellaneous.					28,084.00

TERRITORIAL INDEBTEDNESS.

The Territorial treasurer reports to me the following condition of the Territorial indebtedness, the revenue collected, the sources from which the revenue was derived, and the expenditures for the year, with the balance in hand, June 30, 1894:

REVENUES.

Taxes paid by collectors.	\$233,375.20
Fees paid by district court clerks.	9,774.23
From New Mexico penitentiary, convict earnings.	173.39
Support of United States prisoners.	2,681.05
Cattle sanitary board inspection fees and sale of strays.	2,681.99
Territorial auditor, insurance company licenses.	990.00
Pullman Palace Car Company.	40.73
Depositary banks, interest on deposits.	1,833.54
Governor of New Mexico, balance of United States direct tax.	648.00
Total.	258,198.13

EXPENDITURES.

Interest on public debt.	\$60,917.62
Salaries.	26,556.19
Penitentiary of New Mexico.	24,301.80
Court expenses.	18,044.02
Miscellaneous expenses.	72,048.03
Territorial institutions.	39,487.50

Cattle sanitary board.....	\$9,753.15
World's Fair.....	7,500.00
Normal schools of New Mexico.....	1,306.84
Normal institutes.....	605.12
Total.....	260,520.27

The financial condition of the Territory at the close of the period was as follows:

Bonded debt.....	\$925,000.00
Floating debt, outstanding old warrants.....	21,891.80
Total debt.....	946,891.80

Cash balance on hand June 30, 1894, less warrants outstanding, \$139,899.24.

SETTLEMENTS UPON PUBLIC LANDS.

There has been no material change in regard to the settlement of the public lands during the present year. The immigration, while larger than any preceding year, has been limited by the financial condition of the country and the general depression of business. Its extent may more accurately be ascertained from an inspection of the reports of the business done in the several land offices, showing the number of homesteads, preemption, and other cash-entry sales, which have appeared heretofore in this report.

RAILROADS.

During the past year railroad building in New Mexico has been almost at a standstill.

The Pecos Valley Railroad, in the southeast, has, however, been extended from Eddy, in Eddy County, to Roswell, in Chaves County, a distance of nearly 100 miles. Arrangements are being made to extend the construction of this road up the Pecos River to a connection with the Atchison, Topeka and Santa Fe Railroad at a point near Las Vegas, a farther distance of about 170 miles. With this exception, the past year has witnessed no railroad construction in New Mexico.

STOCK-RAISING.

New Mexico has been greatly blessed during the past year with extensive rains. As a result grass is better and more abundant than for years. All classes of stock, therefore, are in first-class condition, and this important industry is in very prosperous circumstances, as fair prices prevail. There has consequently been a great increase in the cattle and horse business. It is claimed by well-informed sheep growers that the lamb crop for the year will reach as high as from 98 to 115 per cent of the ewes in the Territory.

INDIANS.

There has been during the past year no material change in the condition of the Indians in the various pueblos and upon the various Indian reservations throughout the Territory. The experiment of the past year confirms the opinion, expressed in a former report, that the change in the policy of the Government, in putting an officer of the Army in charge, is salutary, and has greatly improved the Indian service.

The discipline maintained has been exceptionally good, the depredations committed by the Indians have greatly decreased, and for the first time in the history of the Territory an Indian located upon an Indian reservation has been arrested, tried and convicted, and sentenced to the penitentiary for murder, while raiding upon the settlements in the vicinity of the reservation. This last was accomplished through the vigilant efforts of Lieut. E. H. Plummer, of the Tenth Infantry, U. S. Army, acting Indian agent, who, after the commission of the crime, compelled the Indians to arrest and surrender to the authorities of San Juan County the assassin of Mr. Welsh, a resident of that county. As a result of this conviction, depredations by these Indians in that county have almost entirely ceased.

PUEBLOS.

These Indians at all times are quiet and law abiding, and continue in about the same condition as in the past. Together with other people in the Territory, they have reaped the results of an auspicious season, and every village will be self-supporting as a result of the abundant products from their farms and stock. The title to the land grants of their various villages have almost all been confirmed by the Court of Private Land Claims and by special acts of Congress.

As bearing upon their condition, their advancement in agricultural knowledge, and the educational facilities afforded them, I submit the following extract from the report of Capt. John L. Bullis, acting agent at this place:

Population.—As no appropriation was made to take a census of the Pueblo Indians this year. I am unable to give their exact number, but I estimate a slight increase over previous figures given, which were 8,536 as the total; males over 18 years of age, 2,701; females over 14 years of age, 2,657; children between 6 and 16, 2,323.

The schools have had an improved attendance over previous years, showing more appreciation of the benefits that education is calculated to confer on their children. The number of Indian schools in connection with this agency is 13. Four of these are sustained and managed solely by the Government, viz, 1 at Santa Clara, 1 at Cochiti, 1 at Lagues, and 1 at Zia Pueblo. The remaining 9 are contract schools, viz, Ramona boarding school at Santa Fe; Lorretto boarding school at Bernalillo, and 7 day schools under the charge of the Roman Catholic archbishop, situated at the following pueblos: Taos, San Juan, Santo Domingo, Jemez, Isleta, Laguna, and Acoma. The total number of children in attendance at these schools during the past fiscal year ended June 30, 1894, was 538. In addition to the foregoing, there are day schools at several of the pueblos conducted by the Home Mission Board of the Presbyterian and Methodist Episcopal churches, but as they do not report to this office I am unable to give the statistics.

The pueblo of San Felipe has a good population of about 280, but no school whatever, and they have expressed a desire to have a Government day school established at their pueblo, stating that they would give the necessary land for school purposes, with water privileges for irrigation. I respectfully recommend that the Department authorize the required school buildings.

With regard to the condition of the Indians financially, there is considerable difference among the various pueblos; some of them are fortunate in possessing large tracts of fertile land, own a fair amount of property, principally in cattle, sheep, and goats; others, with smaller grants of land, inadequately watered, are poor, being scarcely able to sustain themselves. These Indians are all self-supporting, however, the Government merely providing useful articles of husbandry, etc., for the deserving ones.

As to the number of acres of land cultivated and the number of stock owned by them, I have no means of procuring even approximate figures. This also applies to the crops raised, which at this period of the season are not yet gathered. Information gained from visiting Indians leads me to suppose that they have met with ordinary success in their farming operations, and that the result will yield them enough for their own consumption during the coming winter, and in some cases a small amount to dispose of.

I have to report that troubles are constantly arising among these Indians as to the possession of their lands and water rights, owing to the encroachments of Mexicans

and Americans. The cutting of timber on their lands and the stealing of their stock are also fruitful sources of annoyance. The time of the agent is taken up with the settlement of these disputes, which are occasioned by the cupidity of their neighbors and the temptation to take advantage of their ignorance. I am inclined to believe that if the interests of these Indians were not attended to by the Government, as has been done heretofore, they would be in a few years dispossessed of a large portion of their lands by designing persons.

JICARILLA APACHES.

I can not more fully nor accurately describe the condition of this tribe of Indians than has already been done by Capt. Bullis in his report, which is herewith submitted for your information:

The census taken at the end of fiscal year, June 30, 1894, shows the total number of this tribe to be 842, showing neither increase nor decrease since the census of last year. Number of males above 18 years of age, 201; number of females above 14 years, 256; number of school children between the ages of 6 and 16, 240.

The health of the tribe during the past year has been very good. I am pleased to report that when sick almost all call upon the agency physician, very few patronizing the native medicine man.

Education.—There has been a decided improvement in this line, a greater number of old Indians evincing more interest in the education of the young than ever before.

They have expressed a wish to have a school established at the agency to which they could send their younger children and thus be able to see them more frequently. They allege that when small children are sent to distant schools they often become dissatisfied, "homesick, and often pine away and die." As their camps are scattered over the reservation, and many of them some miles distant, I would respectfully suggest that a boarding school be built at the agency sufficient to accommodate 75 pupils. I may state in this connection that lumber is very cheap, a sawmill in operation existing about 4 miles east of the agency.

They were greatly displeased last fall when, without their consent or even knowledge, their children whom they had sent to Santa Fe were removed to the Fort Lewis school, Colorado. Their objection arose from the fact that in going to visit their children at the latter school they would be obliged to pass over the reservation of their old enemies, the Utes.

Farming.—Although this is not a good farming country, seasons being short and rainfall not being sufficient to warrant crops in all years, there has been a great improvement in this direction. On account of the long continued drought very little grain or vegetables will be raised this year. The hay crop particularly will be very light.

During the past year about seventy log houses have been built, large tracts of land fenced, many fence posts set, and by far the greater number of families are now occupying and improving the lands which have been allotted to them.

Stock.—No loss of stock occurred during the past winter, plenty of wild hay having been cut by the Indians for severe weather. Horses, of which they have a great many, are in good condition. By buying and trading they have accumulated 2,200 sheep and 200 goats. These do well here, and I am inclined to believe that the Indians would make a success of sheep and goat raising if provided with these animals by the Government, which I respectfully recommend.

Much annoyance has been occasioned during the past year on account of the trespass of the sheep and cattle men who surround the reservation. Grass being good on, and poor off, the reservation, these people desire to drive or drift their stock across the same very frequently. Immediately after crossing they wish to return, and would, if allowed, spend the entire season in this way. They have been giving much trouble of late, scarcely a day passing without complaint by the Indians against them on account of their stock overrunning the lands of the latter. On the other hand, stockmen complain of Indians demanding pay on account of trespass or of killing the former's stock. The latter charge the Indians deny, and say it is a trumped-up statement done for effect. The Indians admit that some cattle may have been killed, but they say that "there are hungry Mexicans and Americans in the country, as well as hungry Indians; that all the bones that bleach in the sunshine or darken in the shade should not be accredited to the Indians."

Some of the employes and many of the police have been occupied a great deal of their time in driving trespassers off the reservation. In my judgment, much trouble could be avoided if outside stock were kept off the reservation entirely. I have advised stockmen to do this, and shall certainly insist upon it being done in the future. Many stockmen in the vicinity of the reservation look upon the reservation with very covetous eyes, and would resort to disreputable methods to have the Indians

removed therefrom; in fact, the Indians believe such a movement to have been already initiated.

Bona fide settlers.—There are about twenty families on the reservation known as bona fide settlers, all being Mexicans. Some years ago these Indians were sent to the Mescalero Agency, in the southern part of the Territory, with the understanding, as I believe, that if they were not satisfied they could again return to this their reservation. Subsequently, when they were returned, it was found that almost all available farming lands had been taken up by settlers, who still occupy the same. While many of these are good people, others are demoralizing, nonprogressive, and not far advanced in civilization. They depend upon living off the Indians, directly or indirectly, and are calculated to make mischief among them.

Sale of liquor.—It is a fact greatly to be deplored that many unprincipled persons in villages near the reservation make a business of selling and trading whisky to the Indians. Any violence or trouble that has occurred here in the past has been caused, directly or indirectly, by whisky. Great difficulty has been experienced in the attempt to secure testimony which would lead to the conviction and punishment of the parties guilty of selling intoxicants to Indians.

Agency buildings.—During the past year there have been a wagon house and a carpenter and blacksmith shop erected; both are good buildings. Almost all the agency buildings have been painted and are in good repair. In addition to the buildings already existing at the agency a building is required as an office and dispensary for the use of the agency physician.

A number of new bridges, spanning streams and arroyos on the reserve, have also been built.

Turbulent element.—For about two years previous to October, 1893, some 200 indolent, restless, and discontented Indians of this reservation, under the leadership of Largo and Paseta, subchiefs, had been roaming over the counties of Mora and Taos in this Territory, and, although many efforts had been made to get them back to the reservation, they refused to go. They made themselves very obnoxious to the people inhabiting the country, often frightening women and children and killing stock. I went to see them last October, and finally succeeded in inducing them to return to the reservation, which they did about November 1, 1893, arriving at the agency in a most dilapidated and forlorn condition, many of them half naked and almost starved. Their needs were attended to, and many of them went to the lands which had been formerly allotted to them. They have remained on the reservation since; and although Largo, Paseta, and others threatened to leave during the last spring, they did not go, and the majority of their followers seem to be satisfied. There is, however, a restless element among these Indians which would be scarcely contented to remain long at any one place, no matter what the surroundings might be. They appear to have no ambition or desire to improve their condition, and expect to tide over their wants at the issue house, and to move their tepees wherever they can find the most shade in summer and the greatest amount of sunshine in winter.

In conclusion, I take great pleasure in stating that people who have lived near them and have been intimately acquainted with these Indians for many years have informed me that they are, on the whole, in better condition in every respect than ever before, possessing better stock in larger numbers, more and superior houses and outbuildings, and are far more interested in fencing, holding, and improving their lands than at any time in their previous history.

I am happy to report in this connection that since the appointment of Capt. Bullis as agent for these Indians he has been able to prevent their leaving the reservation and marauding upon the surrounding country to a much greater extent than had been possible theretofore. There have been very few complaints on this account during the past year.

MESCALERO APACHES.

I submit herewith the report of the agent for these Indians, Levi F. Burnett, captain of the Seventh Infantry, U. S. Army, dated July 27, 1894.

The census of June 30, 1894, shows the following number of Indians belonging to this agency: Males, 193; females, 261; total, 464. Children who have attended school during past year at the agency school, boys, 27; girls, 18; total, 45. School at Grand Junction, Colo., boys, 7. School at Fort Lewis, Colo., boys, 18; girls, 7; total, 25. Total at the three schools, 77.

The number of acres of land cultivated by Indians is 327; number of acres tillable on reservation, 500. Amount of stock owned by Indians, horses, 795; cattle, 124; burros, 146; mules, 10; sheep, 11; fowls, 41.

These Indians are improving every year. Nearly all the men show a disposition to cultivate the ground and earn money, but their farms are so small they can not do much. There are a good many widows and old women who have no land, and would not be able to cultivate it if they had it. These Indians could not live without rations and clothing from the Government. They are quiet and peaceable. Sometimes they drink "tiswin" and have quarrels among themselves. No complaints have been made by white men against them during the past year. These Indians will give no trouble as long as they are treated right and the white men kept off their reservation with their sheep, cattle, and horses. These Indians do not want other persons' stock eating up the grass needed for their own stock.

THE NAVAJO INDIANS.

The following report from Lieut. Plummer, the agent in charge, fully sets forth the facts as to this by far the most numerous and important Indian tribe in this Territory:

The condition of the Navajoes has not improved materially since last report. They are poorer than at this season last year. Many are starving. They are asking what is to become of them this winter; asking if they are to be left to starve to death. Many of them who come to the agent's office show unmistakable signs of starvation. Most of them have lost their entire crops of corn this season. This is often their only food except mutton.

The continued low price of wool and the worthlessness of pelts seriously affect these poor people. A Michigan farmer thinks it does not pay to keep sheep unless the wool pays \$1 per head. The Navajoes are receiving from 3 to 15 cents per head, the sale of wool being their main source of support. The above comparison will give an approximate idea of their condition financially.

Habits.—There is apparently a slight tendency toward an improvement in the habits of these people, an inclination to make homes and farms. This tendency to change is due to several causes, one, the chief perhaps, being their poverty and suffering, driving them to seek subsistence from other sources than their flocks.

Progress.—It has been considered for years that the Navajoes were self-supporting. This theory has been erroneous for the past few years, and has been a misfortune to the Navajoes, for it has led to their being neglected and allowed to become pitifully poor and driven to thieving and starvation.

When the size of the tribe and the extent of country over which it is scattered is considered, the appropriation of \$7,500 annually for "support and civilization" appears, as it is, entirely inadequate and unjust.

Here again, as in their habits, there seems a tendency toward improvement. The increase of more than 100 per cent in the number of children in schools is a decided step in progress. The often-expressed desire for education of their children is another. The visit of a party of chiefs and leading men of the tribe to Chicago and the Columbian Exposition may be considered the leading factor in these changes.

Agriculture.—The additional farmer stationed at the agency was kept in the field from the time spring work could be commenced until crops were in. He assisted in opening and constructing ditches, constructing reservoirs, and breaking up and seeding land. He worked out from the agency about 75 miles to the northwest and about 35 miles to the west. He found the Indians willing and anxious to have the work done; willing and ready to render all assistance in their power; eager to learn. Many of them stated that they had never been assisted before. They came for miles to beg to have a small piece of land plowed for them. They were easily satisfied and contented when a fair portion of the limited time of the farmer was devoted to their work, though he accomplished only a small part of what they wished. Their gratitude was a continual surprise as well as their eagerness and devotion to work. There is no doubt that if properly assisted now, when they feel so strongly the need of agricultural resources, soon they would become self-supporting.

Education.—The educational value of the visit of the chiefs to Chicago can scarcely be appreciated by anyone except those who have seen the results. The party was made up of chiefs and leading men so selected as to have the effect as widely spread over the reservation as possible. The results have been far beyond what was hoped for.

The enrollment of the agency boarding school increased to 206 during the school year, an increase of more than 100 per cent. In addition to the enrollment at the agency school about 15 were enrolled in the school at Keams Canyon, the parents requesting permission to place them there, nearer home. One of the chiefs living on the San Juan River told me that if we would build a school on the San Juan, so the parents could see their children and be near them, they would put as many children

in school there as were in the school here, at that time about 100. This man was one of the Chicago party.

Preliminary arrangements were made with a view to opening a dayschool at Bluff, Utah, on the reservation. The Indians in the vicinity were much interested and pleased at the prospect. They are practically isolated from the school here. The project was abandoned on account of the limited appropriation not being sufficient to erect suitable buildings at that place. Where lumber is \$75 to \$80 per thousand and other material and labor in proportion a thousand-dollar limit for a day school building is entirely too low.

Missionary work.—Mr. S. E. Snider has succeeded Mr. Riggins as the representative of the Methodist Episcopal Church at this agency. Owing to the limited appropriation for the support of the mission, Mr. Snider has accepted employment with Mr. Vincent, in connection with the development of water on the reservation, pending the appropriation of sufficient funds to support the work.

Mrs. M. L. Eldridge continued in her excellent work on the San Juan River, administering to and caring for the sick, and assisting the Indians in every possible way. In one instance she saved the life of a woman who had been given up to die by the Indian medicine men. The benefits of her work are evident in many ways. Some of the most desperate characters of the tribe who have come under her influence have developed into steady, hard-working men. She has recently accepted the position of field matron, and will continue her work at the same place.

Road making and repairs.—The roads of the reservation are generally very good, and only such changes and repairs have been made as were necessary at crossings, arroyos, etc.

Court of Indian offenses.—The service performed by the members of the court has been very satisfactory.

Allotments.—No allotments have been made on this reservation.

Irrigation.—Work has been commenced on the development of water, construction of irrigating ditches, etc., but is progressing so very slowly that there is danger of the appropriation being consumed in salaries and the Navajoes being left little or no better off than at present.

Events.—So far as known only one murder was committed by Navajoes during the year. Mr. D. M. Smith, a storekeeper, living near Defiance Station on the Atlantic and Pacific Railroad was murdered by a party of Navajoes. The murder is supposed to have been the result of a drunken, gambling row.

The event of the year for the Navajoes, and the source of many of the changes in them for the better, was a trip of a party of chiefs and headmen to Chicago in October. Funds for the expenses of the trip were raised by private subscription. Mr. Herbert Welsh, secretary of the Indian Rights Association, raised \$700. Bishop Kendrick, of the Episcopal Church of New Mexico and Arizona, contributed \$100, and the Ladies' Auxiliary of the Episcopal Church of Westchester, N. Y., contributed \$100. Through the efforts of Mr. George T. Nicholson, general passenger agent, Mr. W. F. White, traffic manager, and Mr. John J. Byrne, assistant traffic manager of the Atchison, Topeka, and Santa Fe Railway, and the kindness of Prof. Putnam, of the Department of Ethnology, the party was permitted to camp in the grounds of the Exposition, giving the Indians a great advantage in seeing the fair. This was enhanced by the marked courtesy of all the officials and exhibitors who rendered every assistance toward giving the Indians all instruction and opportunity possible to learn and see wherever it could be done.

The benefit of this trip has been far greater than anticipated. An incident of the trip will illustrate of what benefit this trip was, aside from the educational value to the chiefs, and through them to the tribe, awakening a desire to be better and more like the whites. Soon after leaving Kansas City the interpreter told me that the chiefs wanted to speak to me. They commenced the conversation by saying that they saw now that they were mistaken. They had supposed there were no white people in that part of the country. Their ancestors told them that they had been all over that country and that there were no white people there. This accounts in a most natural way for the theory prevalent among the Navajoes up to this time that they were more numerous than the whites and could whip them in war. It was only natural that those ignorant people should believe their parents until convinced to the contrary by their own observation.

Recommendations.—The purchase of a liberal amount of seeds, wagons, plows, and fence wire; the employment of at least eight additional farmers next season, to enable the Indians to start after the development of the water; the Government control of trading stores; the purchase of Navajoe blankets for all Indian schools, to give the Navajoes a profitable market for their wool, and the erection and maintenance of two sawmills, on the northeastern and northwestern portions of the reservation, are the recommendations for the general good of the people; and it is earnestly recommended that the boarding school at this agency be put on a footing with non-reservation schools and given such equipment and attractions as will make it the

pride of the children and their parents. If this is done promptly there will soon be an attendance of over 1,000 pupils.

The time will soon come when this tribe, which is rapidly increasing, must spread out more and more among the whites. The people are now showing a strong inclination to have their children prepared for this time, and the Government must be responsible if they are not met and encouraged.

I desire to urge upon the Department that the farmers appointed to aid the Indians upon this reservation should be men not only familiar with general agriculture, but also with irrigation, the climate and soil, and the Indians themselves.

I desire to call the special attention of the Department to the statements of Lieut. Plummer as to the progress made in the development of water upon this reservation. The failure to press the enterprise vigorously can only result in the wasting of the appropriation made for this purpose, to the injury of the Indians and the surrounding settlers. I desire to renew the suggestion made in my former report that immediate steps be taken to develop, at the earliest possible moment, the water supply on the reservation. From information received from the agent, and from other reliable sources, I very greatly fear that as now managed the Indians will reap but little benefit from this appropriation, and that it will be injudiciously expended without materially improving or developing the water supply so necessary for their maintenance and support. I would suggest that a change be made in the superintendent in charge of this work.

WHISKY TRAFFIC.

The traffic in whisky, which has been the cause of so much poverty among the Navajoes and has led to so much crime in the past, has during the past year largely decreased. It is known, however, that in several localities in the vicinity of this reservation there are small communities which derive their means of support almost entirely from this source. The most rigid effort ought to be taken by the Department to see that persons engaged in this business be brought to justice and the traffic ended.

PUBLIC SCHOOLS.

I am happy to report that the condition of the public schools of the Territory is one of increased prosperity. Since my last report the number of teachers has increased; their efficiency has become greater, and the course and methods of instruction have been greatly improved. One of the means by which the usefulness of the corps of teachers has been widened has been the holding of four normal schools during July and August, 1894, under the auspices of the Territorial board of education. These schools were held at Chama, Los Lunas, Mora, and Roswell. They were well attended and ably conducted.

The following table, compiled from the reports of the various county school superintendents July 1, 1894, is submitted for information:

County.	No. school districts.	Teachers.			Enrollment.			Average daily attendance.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Bernalillo.....	51	34	41	75	1,758	1,359	3,117	1,116	949	2,065
Chaves.....	4	3	5	8	103	100	203	61	59	120
Colfax.....	30	20	22	42	806	728	1,534	538	520	1,058
Donna Ana.....	31	11	19	30	.....	.....	1,185	.....	.....	834
Eddy.....	12	9	8	17	273	332	605	205.	276	481
Grant.....	37	11	31	42	824	647	1,471	510.2	424.4	934.6
Guadalupe.....	18	10	3	13	291	182	473	229	136	365
Lincoln.....	42	3	4	7	105	70	175	53	36	89
Mora.....	35	18	5	23	672	458	1,130	498	337	835
Rio Arriba.....	40	36	5	41	1,467	796	2,263	978	379	1,357
San Juan.....	22	12	7	19	317	192	509	295	220	515
San Miguel.....	69	49	36	85	2,234	1,516	3,750	1,643	1,137	2,780
Santa Fe.....	29	24	13	37	701	438	1,139	708	492	1,200
Sierra.....	12	10	6	16	357	279	636	189	142	331
Socorro.....	49	34	15	49	1,288	899	2,187	756	563	1,319
Taos.....	28	27	5	32	880	438	1,318	691	337	1,028
Union.....	17	.....	.....	19	.....	.....	.....	.....	.....	.....
Valencia.....	37	15	2	17	587	323	910	315	137	452
Total.....	553	326	227	572	12,663	8,757	22,605	8,785.2	5,944.4	15,736.6

County.	Number of scholars between 5 and 20 years.			Number of schools.	Average number months taught.	Value of property of private institutions.	Receipts.	
	Male.	Female.	Total.				Balance for 1893.	From county school fund.
Bernalillo.....	3,038	2,612	5,650	55	5	\$357,400	\$13,608.68	\$5,866.22
Chaves.....	252	200	452	7	5	.....	227.35	6,322.18
Colfax.....	1,483	1,364	2,847	31	4½	.....	.....	.....
Donna Ana.....	.....	.....	3,115	23	5	.....	5,001.85	2,632.20
Eddy.....	468	430	898	11	5½	.....	11,090.07	17,802.53
Grant.....	1,507	1,278	2,985	49	3½	34,850	1,878.05	9,684.68
Guadalupe.....	751	621	1,372	13	2	.....	1,567.96	.....
Lincoln.....	887	1,034	1,921	7	4½	.....	1,188.81	2,357.58
Mora.....	1,459	1,271	2,730	23	3	.....	1,855.07	238.06
Rio Arriba.....	1,834	1,645	3,479	39	6	.....	4,153.10	6,267.76
San Juan.....	393	264	657	17	3½	.....	536.73	.....
San Miguel.....	3,430	2,805	6,235	79	3½	93,500	5,786.65	3,883.60
Santa Fe.....	1,757	1,523	3,280	31	4	.....	4,199.39	2,908.38
Sierra.....	529	437	966	15	3½	.....	1,547.81	2,697.60
Socorro.....	1,934	1,531	3,465	47	3½	41,500	7,236.11	3,366.04
Taos.....	1,601	1,262	2,863	31	6	.....	3,207.54	3,657.73
Union.....	.....	.....	900	.....	.....	.....	.....	5,500.00
Valencia.....	1,028	746	1,774	14	5½	.....	2,643.54	2,100.00
Total.....	22,351	19,328	45,389	492	4	.....	65,778.71	75,279.56

County.	Receipts.		Expenditures.				
	Poll tax, fines, etc.	Total.	Teachers' wages.	Rent, fuel, etc.	School houses and grounds.	On hand.	Total.
Bernalillo.....	\$3,973.35	\$23,448.25	\$13,960.33	\$3,258.13	\$654.09	\$5,503.10	\$23,375.65
Chaves.....	.....	6,599.53	1,922.50	455.89	2,869.29	1,351.85	6,599.53
Colfax.....	.....	.....	.....	.....	.....	.....	.....
Donna Ana.....	4,229.21	11,864.26	6,741.80	980.50	785.37	3,256.37	11,764.26
Eddy.....	.....	28,892.60	4,936.25	797.26	9,279.65	13,879.54	28,892.70
Grant.....	9,276.67	20,839.40	14,914.00	2,458.43	1,150.24	3,848.79	22,371.46
Guadalupe.....	790.00	2,357.96	1,184.77	287.12	152.66	733.41	2,357.96
Lincoln.....	2,114.49	5,660.88	3,507.63	116.32	68.70	1,468.23	5,160.88
Mora.....	1,806.30	3,899.43	2,468.88	146.52	105.70	1,178.23	3,899.43
Rio Arriba.....	1,562.18	11,983.04	3,536.90	1,093.58	21.40	7,332.16	11,984.04
San Juan.....	1,539.33	2,076.06	1,107.68	125.73	148.90	513.65	1,895.96
San Miguel.....	8,331.81	18,007.06	12,414.16	997.15	2,881.66	1,709.19	18,002.16
Santa Fe.....	7,323.11	14,424.88	3,400.88	509.37	.....	10,504.64	14,424.89
Sierra.....	3,065.50	7,310.91	4,951.00	1,055.53	522.50	981.88	7,310.91
Socorro.....	5,203.93	15,806.08	10,741.90	2,647.36	481.60	3,195.71	17,066.57
Taos.....	1,504.14	8,369.41	4,044.00	1,250.98	620.06	2,454.43	8,369.41
Union.....	.....	5,500.00	.....	.....	.....	.....	.....
Valencia.....	218.15	5,461.66	2,236.08	267.55	.....	2,858.06	5,461.66
Total.....	51,438.17	192,496.44	92,068.76	19,457.52	19,541.76	60,869.46	188,937.50

TERRITORIAL INSTITUTIONS.

The Territorial institutions are all in a more or less flourishing condition.

The agricultural college situated at Las Cruces, and the university situated at Albuquerque, are both well attended and being successfully conducted; the enrollment for the former for the current year is already 114. The school of mines at Socorro, owing to the small appropriation, has not been so successful as had been hoped. The drawback which has led to this condition will, I hope, be remedied in the near future.

The last legislature provided for the establishment of normal schools at Las Vegas and Silver City; at the former point the building is now in course of construction, and will be opened during the coming year. At Silver City the corner stone of the building was laid September 14, 1894. This building is to cost \$10,800, the ground having been donated by the municipal authorities of Silver City. The building is to be completed by February 1, 1895; meanwhile the normal school is being held in rented quarters, having opened its first session September 3, under very flattering auspices, with 57 applicants for admission and 2 professors.

The asylum for the deaf and dumb and blind, situated at Santa Fe, is being well conducted. From the report of Mr. Lars M. Larson, the superintendent, made to me August 15, 1894, I quote as follows:

This institute was fully organized by having two educational departments, one for the deaf and the other for the blind. Its first term commenced in September last, and had continued in its session for forty weeks. There have been 24 pupils in attendance at various times since its establishment. During the past year there were 10 deaf pupils and 6 blind ones in attendance. There are other mute and blind children living in different parts of this Territory desiring to come to the institute to receive an education, but they are unable to do so because they have no means to clothe themselves to come to school and to pay for their transportation from their distant homes. There has been great progress in the school work during the past year; the pupils have been making excellent progress in their studies, and great improvement in written language and reading English. The course of common-school study has been pursued here with good results. The methods of instruction employed here are the same as in the States. The sign language is used as a means of imparting knowledge. The health of the pupils has been uniformly good; no sickness has occurred in the institute during the past scholastic year.

The present building, which I erected and paid for out of my own means, was sold, with nearly 6 acres of land attached to it, to the Territory for the use of the institute; many substantial improvements have been made about the buildings during the past year, and good things for various uses in the school were secured for the institute, thus making it an excellent, comfortable, pleasant, and home-like boarding school of learning. This institute has a well-selected library for the benefit of the pupils. No trades are taught in the institute at present. One hundred and fifty shade and fruit trees and berry plants, cuttings of vines, etc., have been set out and kept growing. I think the culture of fruit and all kinds of gardening should be taught in this institute.

According to reports from the public schools throughout the Territory, there are now 56 deaf youths and 26 blind children growing up in ignorance and needing education sorely. They are clearly entitled to be educated on an equal footing with those who are not afflicted. Their education is especially difficult. They can not be taught well in public schools, and there must be a special school established for their benefit. This institute is not considered as an asylum nor a public charity, but a school to educate the deaf and the blind for their future usefulness, independence, and citizenship.

We never liked the present title given this institute by the last legislature, and want it changed to a more appropriate name. It means a charitable institution, to care for and feed unfortunate persons for nothing; our institution is not such an asylum in any sense.

An appropriation of \$5,000 a year was granted to this institution by our last legislature for its full maintenance. This institute will reopen next month with an

increasing number of scholars, and the outlook for the coming term seems to be more promising than ever before.

The New Mexico Military Institute, situated at Roswell, has done excellent work during the past year. The report of the superintendent, Col. J. E. Edgington, for the year ending May 18, 1894, under date of July 27, 1894, is submitted below for information:

School opened September 5, 1893, with an attendance of 47. During the year we enrolled 54. We had a most successful year's work, with a faculty of 7. In the institute we taught military tactics, athletics, Spanish, Latin, Greek, and the usual branches taught in a school of this character. Interest in the course of study increased to the last, culminating with a successful commencement, which closed with field day sports, military exercises, and awarding of prizes. We had as equipments 40 Springfield rifles, with belts, bayonets, etc. We taught nine months, giving ten days holiday at Christmas.

The insane asylum at Las Vegas has been conducted with care and ability and is one of the most useful of our public institutions. Below is a report from Mr. G. A. Rothgeb, secretary and treasurer of the institution, made to the board of directors, for the time between the organization of the board, March 18, 1890, and March 31, 1894:

AMOUNTS RECEIVED.

From Territorial treasurer up to March 31, 1894.....	\$56, 850. 00
From sundry persons on account of pensioners.....	426. 50
Total received.....	57, 276. 50

AMOUNTS DISBURSED.

Building and improvements.....	\$40, 084. 10
Furniture.....	2, 017. 20
Incidental expenses.....	4, 529. 79
Salary.....	4, 605. 53
Provisions and supplies.....	4, 384. 52
Drugs, etc.....	234. 80
Stationery, etc.....	202. 60
Sundry expenses of pensioners.....	260. 30
Balance on hand (treasurer).....	957. 66
Total disbursed.....	57, 276. 50

The New Mexico penitentiary, under its efficient superintendent, Mr. E. H. Bergmann, has been conducted upon a plan of strict discipline, accompanied by a due regard for the health and reformation of the individual prisoner. The following report is submitted by the superintendent for the period from July 1, 1893, to June 30, 1894:

On July 1, 1893, there were in confinement.....	146
From that date to June 30, 1894, we received, from the following counties, viz: Bernalillo, 14; Chaves, 1; Colfax, 5; Donna Ana, 5; Eddy, 2; Grant, 6; Lincoln, 5; Mora, 2; Socorro, 9; San Miguel, 25; Santa Fe, 7; San Juan, 1.....	82
Total.....	228
Discharged by expiration of term.....	65
Pardoned.....	9
	74

Leaving in prison on June 30, 1894..... 154

Escaped, 4; all recaptured.

Of the number received during the year, 71 were white males; 3 colored males; 4 Indian males; and 4 white females. Of these 76 were committed on first sentence, and 6 on second sentence.

The largest number in prison during the year was 156, and smallest 113, making a daily average of 130 convicts.

Discipline.—The prison discipline could not be any better. Rules and necessary regulations are strictly enforced and without degrading the convicts. The severest punishment resorted to in this prison is by confinement in the "dark cell" on bread and water diet. In a few cases convicts have been adorned with a ball and chain. This last mode of punishment has been for attempts to escape; but in one instance it became necessary on account of incorrigibility.

The greater number of the convicts are well behaved; and kind, humane treatment is all that has been required to keep up a high standard of prison discipline.

I am gratified in stating to your excellency that all officers and employes have never forgotten the injunction to treat all convicts kindly, and under no circumstances to allow themselves to use harsh, much less profane, language. All of our endeavors have been directed to make the inmates of the penitentiary better, if possible, and not worse.

Moral and religious.—Divine services are conducted in the penitentiary chapel every Sunday afternoon by Rev. W. Williams and other Protestant ministers of the gospel, and on the third Sunday of each month the Rev. J. H. Defouri, chaplain of the penitentiary, hears confessions and conducts Roman Catholic services. A Sabbath school, conducted under the auspices of Rev. W. Williams, has been established also, and a male choir of many voices has been encouraged to practice every Sunday morning. All of the divine services, Sabbath school, and singing class are eagerly attended, and much enjoyed by the convicts.

Sanitary.—The sanitary condition of the penitentiary has been excellent, and if owing in no small degree to general cleanliness, good ventilation, purification of the drinking water, a sufficiency of wholesome and nutritious food, and ample physical exercise. I am happy to state that no deaths have occurred in this prison since October, 1892.

Employment.—The principal avocations of the prison during the past year have been as follows, viz: Tailoring, shoemaking, blacksmithing, carpentering, and masonry. All articles manufactured were exclusively for the use of the penitentiary. The greater number of the convicts were employed, during the season, in brick-making. Outside of the enormous loss sustained by heavy rains, 1,250,000 good merchantable bricks have been manufactured; and 1,555 feet, 18 feet high above foundation, and 2½ feet wide, of solid brick wall; four watchtowers, 30 feet high; and an arched gateway with watchtower were erected. In the construction of this wall, etc., 1,168,587 brick nearly 1,000,000 pounds of lime, and 1,437³/₃₃ perches of rock were used, limestone and rock being quarried by convict labor. In fact, all improvements made during the year were made by convicts, and not one cent has been expended for skilled labor or mechanical assistance.

Improvements.—There have been many and very valuable improvements added to the prison within the past year. They are permanent, and were much needed. In order to form an adequate idea of the magnitude of these improvements and their value, I subjoin a list of the most important ones and their respective values. They are as follows, viz:

1,555 running feet of brick wall, 4 watchtowers, or 1,168,587 brick, at \$10 per 1,000, laid in the wall	\$11,685.87
1,437 ³ / ₃₃ perches of stone foundation, at \$2.50 per perch	3,692.50
550,000 common brick on hand, at \$5 per 1,000	2,750.00
New hospital building	7,326.18
New laundry, including plumber's work	175.00
New bathroom	500.00
New icehouse	162.00
New hogpen	250.00
Arched gateway and electrical appliances, etc	500.00
700 feet 10-inch sewer pipe (500 feet laid down)	500.00
2,200 fire brick, at \$35 per 1,000	77.00
New iron bunks for cell house	120.00
Furniture for the use of prison	115.00
Renovation of boiler and boiler house and steam pipes	400.00
Machinery for pressing sewer pipe	350.00
Renovation of main building, calcimining, painting, and plumbing	250.00
Pottery kiln for burning sewer pipe	300.00
Hotbeds, water piping for irrigation	125.00
All other improvements during the year	500.00
Total	29,778.55

Earnings.—The earnings of the penitentiary for the term above mentioned amount, in the aggregate, to \$5,676.55, of which \$4,247.10 are still due from the U. S. Govern-

ment. This amount of \$5,676.55 consists of earnings proper, the principal source of which is the support of United States prisoners, and does not include labor done by the penitentiary on its own account, in making improvements or otherwise.

The cost of guarding prisoners has been 29 cents per man per day, the cost of convicts' subsistence 12 cents, and the cost of clothing 2 cents. The convicts have been well fed and clothed.

PRIVATE SCHOOLS.

Prof. Elmore Chase resigned the superintendency of the Ramona Indian school a few days after submitting the following report. Gen. Edward Hobart has been selected to fill the vacancy. His report bears date of September 5, 1894, and is for the fiscal year ending June 30, 1894, as follows:

The original contract for the school was for 50 pupils, but was subsequently enlarged to 65 on the recommendation of the Pueblo Indian agent, because of the great number of applications for admission to this school on the part of the Indians themselves. Twice under the supplementary contract the school overflowed the contract number, and was relieved once by permission from the Indian Office by turning the excess over to the U. S. school in this city (Santa Fe). The fact that the Indians themselves seek to place their children in school shows their rapid progress in the matter of education. The only limit to the growth of the school is room for the accommodation of the pupils. From the fact that the Indians, particularly the Pueblo Indians, are becoming more and more interested in schools, this school has made some larger plans for the necessary industrial training. Considerable outlay has been made for irrigation, fruit-raising, farming, poultry-raising and brick-making by the boys. In addition to the regular housework for the girls, such as washing, ironing, making and mending garments, some steps have been taken for the manufacture of wool by hand, but lack of funds has delayed the completion of the plans.

I desire to call special attention to the health of the pupils during the year. This year 75 pupils have been enrolled, and there has been no sickness. This has always been the case regarding the health of the school.

The two Indian schools in the vicinity of Santa Fe—the Government school under Col. Thomas M. Jones, superintendent and special disbursing agent, and the Ramona school, under the direction of the board of trustees of the university, have both enjoyed a good degree of prosperity. I submit below a report from Col. Jones, under date of September 10, 1894:

As supervisor of education I relieved the former superintendent of this school on November 1, last, and found no Indian pupils here, they having been distributed to the various schools in the service previous to my arrival; my work for several months was simply to take charge of the property and to get the buildings in good order, and to make such improvements as were necessary, under the approval of the Department, and to make this a normal school, but for good reasons this latter idea was abandoned, and it was decided to make it an Indian industrial training school with a normal school class attachment.

The 1st of July last I accepted the superintendency of the school, and during my administration the largest number of scholars in attendance at any one time has been but 40, and they have been only for a time in school session, having been principally engaged in industrial work, building inclosures, putting in water pipes, cleaning and improving grounds and buildings, and in making a vegetable garden, from which they have received some very delightful additions to their table fare.

The buildings, I am glad to report, are now clean and in perfect order for the reception of scholars to the extent of their capacity; there is an ample supply of water for domestic purposes, security from fire, and irrigating 10 acres of land; and after quite a long experience in the Indian service, I can truthfully state that when heating and electric-light plants are granted me, I know of no school in the service better equipped for good work than this one.

Hence I have every reason to hope for a successful result, provided I can induce the Indians to give me my complement of pupils, which they appear slow in doing, probably on account of the right given them by Congress not to send their children unless with their free consent.

I acknowledge the kindness and interest that the good people of Santa Fe have shown me in my work regardless of party lines, and with a continuance of their encouragement and good will, together with the same kind attention I have pleasure in stating I have received from the Indian office and the superintendent of schools, I

hope the Territory of New Mexico will yet be proud of the work done within its borders at this school; I promise, in any event, to devote my utmost efforts in that direction.

A comparison of the figures set forth in the foregoing tables with those embodied in my former report will give some insight into the progress of education. The amount invested in school property is being greatly increased from year to year, and the general equipments for inculcating knowledge are being vastly improved. At Clayton, in Union County, a contract for a school building to cost \$8,500 has recently been let, and another small town in the same county has voted a large sum in bonds for schoolhouse additions and improvements. I mention these instances as giving some intimation of the awakening interest in the cause of education now characterizing our whole people, and I hazard nothing in saying that another year will show still greater progress made in this most important direction.

In connection with the subject of education, I desire to call attention to the work which is being done by the private and religious educational institutions of the Territory. I am unable to add anything to the facts stated in my former report as to the work of the Catholic Church in this direction, as I have not been furnished the necessary information by the authorities. I am convinced, however, from personal observation in many portions of the Territory, that the work of the past is being carried forward with even greater energy and zeal, and the number brought within the educational influences of their institutions is continually increasing.

The work of the Methodist Episcopal Church is under the superintendence of Mr. Thomas Harwood. The following is a report of the school work in New Mexico of that church: Number of schools, 8; number of teachers, 12; number of scholars, 300; value of school property, \$15,000; volumes in the library, 620. -

The schools are situated as follows:

(1) The Biblical school, in the college building in Albuquerque, 10 boys. Object, education and training for Spanish missionary work. This is a kind of an industrial school; typewriting, type-setting, and printing of a Spanish paper, tracts, and Sunday-school literature being the principal industries. The young men made favorable progress in English and Spanish. There are 3 teachers in this school.

(2) The mission school, in the same building, with 59 boys and girls enrolled; 2 teachers in this department. This school is under the direction of the Woman's Home Mission Board of the Methodist Episcopal Church.

(3) The Las Cruces mission school, with 55 pupils, girls and boys.

(4) At Martinez. This school has about 25 scholars.

(5) At Frampton; there are 24 scholars.

(6) Mission school at Wagon Mound, with 22 scholars.

(7) School at Dulce, on the Apache Reservation, with some 40 students at different times; among them are both Indians and Mexicans. This is an industrial school, with property worth \$1,500.

(8) The Las Vegas industrial mission, with 65 scholars. The policy of this church is not to open mission schools where there are good public schools taught by competent teachers. Attendance at the public schools, whether they are taught by Protestants or Catholics, is encouraged.

PRESBYTERIAN SCHOOLS.

The Presbyterian Church has for many years been carrying on an educational work in this Territory. I can not speak too highly of their

schools or the influence of them upon the communities in which they are situated. The following is a tabulated statement of the present educational work of that church in this Territory:

BOARDING SCHOOLS.

Name of school.	Number of teachers.	Pupils.			Annual expense.
		Boys.	Girls.	Total.	
Santa Fe boarding school for girls	7	.....	65	65	\$4,600
Las Vegas boarding and day school, boys and girls	7	85	8	93	2,500
Zuñi day and boarding school	4	.....	.....	48	775
Total	18	.....	.....	206	7,875

* At Zuñi only one meal (at noon) is given at the school. The other meals are taken by the children at their homes.

DAY SCHOOLS.

Name of school.	Number of teachers.	Number of pupils.	Annual expenses.
Arroyo Seco	1	27	\$50
Upper Arroyo Seco	1	37	50
Buena Vista	2	68	75
Canyon Bonito	1	40	25
Chaperito	1	34	25
Corrales	1	51	25
El Rito	1	46	50
Embudo	1	60	25
Jemes Hot Springs	1	36	150
La Costilla	2	58	25
Las Cruces	2	81	300
Los Lentos	1	40	30
Ocate	1	40	30
Mora	1	42	30
Pajarito	1	60	50
Penasco	1	87	65
Las Placitas	1	24	100
Raton	2	125	40
Rociada	1	36	20
Santa Fe (day)	1	30	25
Taos	1	50	30
El Prado de Taos	1	91	100
El Rancho de Taos	2	136	85
Jemes Pueblo	2	76	30
Laguna Pueblo	2	35	65
Total (25 day schools)	32	1,409	1,500

SUMMARY.

Total boarding and day schools	28
Total teachers	50
Total pupils	1,615
Annual running expenses	\$9,375
Total salaries	\$25,000
Total value of buildings	\$52,750

UNITED STATES CRIMINAL BUSINESS.

For the fiscal year ending June 30, 1894.

	Internal revenue.	Post-Office.	Elections.	Miscellaneous.	Total.
Number of criminal cases terminated	6	9	6	223	244
Convictions	1	3	1	79	84
Acquittals	1	2	4	49	56
Nolle prossed, discontinued, etc	4	4	1	95	104
Number pending July 1, 1894	9	49	30	216	304

Number pending July 1, 1894: Customs, 1; pension laws, 23; embezzlement, 12.

Criminal and civil business—Territorial.

County.	Convicted.	Dismissed or nol- prossed.	Acquitted.	Total dis- posed of.	Civil suits disposed of.
Bernalillo	17		6	23	
Chaves	3	4		7	15
Colfax	32		20	52	96
Donna Ana	24	55	22	101	104
Eddy	4		3	7	41
Grant	69	39	3	111	296
Guadalupe					2
Lincoln	11	5	4	20	45
Mora	6		7	13	3
San Miguel	37		11		103
Sierra	4	5	1	10	63
Socorro	7		4	11	112
Taos	2			2	
Union					3
Valencia	1		2	3	

MINING.

Mining in New Mexico has suffered largely from the depression of the past season, and especially from the depreciation in the price of silver and lead, the two minerals most largely produced. Notwithstanding this, mining in New Mexico never had a brighter prospect, owing to the recent discovery and development of new mining districts rich in gold, silver, and copper. There are four districts where active work has largely increased, resulting in an output of paying mineral in large quantities; they are at Hillsboro, Pinos Altos, White Oaks, and in the Organ Mountains. The first three are gold camps, the last is silver; these are now productive because of their richness, and the fact that development has so far progressed that the recent downfall of silver could not affect them severely. In Sierra County, however, there are twenty rich camps besides Hillsboro, but these are now practically idle. It may be mentioned of this county that at Kingston \$6,500,000 of silver has been mined during the past fifteen years. At Lake Valley, in the "Bridal Chamber," over \$3,500,000 of the native metal was taken out of one pocket. It seems to our people that only the most short-sighted policy can dictate the legislation that has stopped so great a production of wealth. New Mexico, under favorable auspices, could annually pour \$20,000,000 to \$30,000,000 of treasure into the lap of the United States; and should silver be remonetized at the old ratio of 16 to 1, and accepted as the money of the civilized world, this result could be readily obtained. The growing demand for a more expanded currency could be materially supplied from the mines of New Mexico, and while enriching herself would afford employment for thousands of the idle and stimulate every branch of trade. Some remedial legislation should be had favoring the mining industry, and as the representative of this community I urge upon Congress some action in this regard.

THE MORENO VALLEY.

In the northern portion of the Territory there is considerable prospecting being done on the Maxwell Grant. Since January of the current year thirty-four locations have been made by prospectors on the land of that company. The regulations imposed by the corporation are practically those of the United States, except that any locator is obliged to run his first end line within 50 feet of his discovery shaft. The locator is allowed 1,500 feet along the lode in either direction he

chooses, but the company reserves the right to the first extension nearest the discovery shaft. Considering that the Maxwell Land Grant Company, under a confirmation by Congress, owns all this mineral, the terms are very liberal. The company is also only too willing to advance capital to work any good discovery. This disposition on the part of this company is an index of the general desire of people here to encourage prospecting. The Moreno Valley, which lies on this grant, has been a steady producer for more than a generation. The Aztec gold mine is the oldest and best known mine in this section, and is still a large producer. This shows the permanence of the mineral veins. This mine has several times changed hands, and has always paid its owners a handsome net profit. Besides the lodes, there are rich placers scattered along all the creeks.

COCHITI.

Public interest is largely concentrated on the newly discovered gold fields of this wonderful region. Much has been written about it, and in the flood of misinformation many false impressions of this region have gone abroad. It would be hard to exaggerate the facts, but as many of the persons reporting about this district were poorly adapted to the work they undertook, I have taken pains, by personal examination of the ground and careful inquiry, to familiarize myself with the situation. The following is a carefully considered report of the country and its resources:

The Cochiti mines lie on the eastern slope of the Jemez Mountains, in a sierra, now commonly termed the Cochiti Mountains. They take their name from the pueblos of Quarez Indians that are found among them. These mines are about 30 miles due west of Santa Fe and about 60 miles north of Albuquerque. The point of present development is in the heart of an igneous formation 20 miles wide and about 40 miles long. They are found at the point where the eastern limb of the Rockies begins to break down into the plains of the Rio Grande. Approaching the country from Santa Fe, a number of sierras rise height over height to an altitude of 10,000 feet. They run south in almost parallel lines, and gradually sink into a series of isolated table mountains. The sides of these plateaux are abrupt and craggy, but the tops are as level as a table; then these cease, and the wide Rio Grande Valley spreads away to the southeast and east. The whole of this formation is eruptive, gray porphyry, laminated with red iron stains, forms perfect contacts, with bluish porphyry dikes. These latter are shot through with the yellow pyrites of iron almost as thick as the notes in a sunbeam. That is the first characteristic of the country rock that will strike the prospector; almost entire absence of any other rock will be remarked. Except in a limited area just north and contiguous to the mines now known is a belt of country covered with a deep rock formed of volcanic ash. This formation is level and covers considerable space. Large pieces of pumice stone are found in this formation. Before the mineral districts proper is reached the porphyry is shot full of euclase, but this feature is lost as soon as the quartz veins are struck.

At Bland City, a camp in Pinos Canyon, gold and silver are found. It is hard to give an accurate description of this immense mineral outcrop. Beginning right under this volcanic ash cap, the porphyry is riven with great wedges of white marble inoculated with a grayish blue mineral stain. Gold Hill, the mountain on which this crop is most appar-

ent, is between Peno and Collo canyons. These great ledges or reefs of quartz can be traced from the canyon bed to the top of the mountain, a distance of about 900 feet. The quartz is about 20 to 40 feet, from one porphyry wall to the other. It is all mineralized and runs from \$40 to \$500 in gold and silver. The veins have been traced in a southerly direction for about 5 miles. A conservative estimate can, therefore, be made of the mineral in sight. The miners say that the mineral belt extends north and south about 5 miles and east and west about a mile or a mile and a half. Into these great veins flow dozens of rich feeders, along the extent of which many good mines are located.

As to whether these are true fissure veins or not, I can only call attention to the facts above stated. The porphyry contacts seem ideal, and the quartz runs up between the walls in a beautiful outcrop. The veins cut the canyon from side to side, and on the canyon floor yield as favorable assays as in the hillsides. Many good miners have been astonished at these gigantic fissures, and have promptly pronounced them merely "blow-outs." This is not the time or the place to discuss either belief; the apparent facts are as stated. There is no purpose to advertise any of these properties; therefore all names are omitted. It is sufficient to say that no ore has been shipped from the camp that has not been worth over \$100 per ton, except one carload, and that was because much of the porphyry was sacked with the quartz. That shipment ran only \$32, but the same mine afterwards and before shipped ore on which the smelters returned over \$200 to the ton. The most exaggeration has been concerning the men in the camp. It is safe to say that the whole number who visited this region did not exceed 8,000 persons, and that at no time was there over half that number in the hills.

The present population will fall short of 2,000 persons. The reasons of this were twofold. First, the mineral wealth was known among a few for several months before the knowledge reached the outside world, and these lucky ones had located the best mines. The second reason was that the ground was plastered over by four alleged Spanish grants, the holders of which were making the most strenuous and ingenious efforts to cover the mineral lands. Men did not care to buy a lawsuit, even with a mine, in this rich country. Happily, however, the land court has unanimously decided that this region is not covered by any of these grants. Only one of the cases has been appealed, and both the United States and the claimants recognize the public policy of an immediate settlement of this dispute; therefore, with all due deference, I suggest that in a matter of so great importance this case be advanced on the docket so that a decision on the merits of the claim be had as soon as possible. The important matter is that title to this tract should be vested somewhere, either in the United States or in the claimants; in either event something definite can be done and this great wealth opened to the country. Enthusiasm may possibly have colored some of the statements herein, but on careful consideration I can not see where I would change a word except to amplify and more fully detail the facts. The above will be sufficient to inform your Department of one of the most important mineral discoveries on this continent.

The recorded locations in the small mineral belt above described are upward of 300, while there are over 2,000 locations that have not yet been placed on file. This is sufficient showing to establish the value of the camps. There are at least a score of mines now known, the wealth of which will run into the millions. There is vast public neces-

sity, therefore, that all question of title should be definitely settled once for all. This is of importance not only to New Mexico, but to the people of the whole country. The opinion of good miners is that mines of high grade will be developed throughout all the regions described. There are splendid contacts that in another country would be carefully prospected, and as soon as this question of title is settled will receive attention. All the work done has been on the big quartz ledges, and little or no development has been devoted to the places where the rich mineral does not crop out. Six months after settlement of the title there will 10,000 persons permanently settled in the Cochiti country.

In my last report I gave a description of some of the many deposits of industrial mineral and of the gems and precious stones found in various localities in this Territory. The following I consider of sufficient importance to repeat here.

KAOLIN AND FIRE CLAYS.

These valuable minerals have been found in considerable quantities in several places in the Territory. The most notable deposit of fire clay worked to any considerable extent is situated near Socorro, in Socorro County. There has been a recent discovery of a large deposit of kaolin and fire clays in the suburbs of Santa Fe of superior quality. Efforts are now being made to utilize these clays at the Territorial prison. In the immediate vicinity there is also found a considerable bed of graphite, and it is hoped that in the near future it will be extensively worked.

ALUM.

A large deposit of alum has been opened on the Gila River. It is reported to be of great commercial value, and is now being worked to some extent. With proper railroad facilities these alum beds and the beds of gypsum and soda, heretofore referred to, would become the most productive properties in the Territory.

PRECIOUS STONES.

In describing the mineral resources of New Mexico, the native precious stones are worthy of mention, as they are steadily rising in popular estimation and production.

Traditionally this Territory has been noted as having produced some remarkable gems, and recent developments are proving the older records to have been correct. It is only recently that scientific research and skilled labor have been directed to this purpose. The result is a steady increase of expert prospecting and labor in development, which, though only fairly begun, has resulted in finding many varieties of precious and semiprecious stones.

The estimated production and value of gems up to the year 1890 can be found in the census reports of that year. It is worthy of remark that the amount and the value thereof are understated, the facilities for correct and full information being limited.

Since that time the annual product has more than doubled, and is still increasing. Diligent prospecting has revealed new deposits, and the industry bids fair, at present, to become a large item in the economic resources of the Territory.

The gems found in New Mexico, in the order of their value, are emeralds, there being one now cut in Santa Fe, which weighs 1 karat, and is of fine quality. Many other smaller ones have been found, although no expert search has been made for them thus far. A very recent find, next in value, is a gem resembling the ruby in respect of color, brilliancy, and hardness. Of these, quantities are found frequently associated with peridots and garnets, but differing from the latter in being harder and of a different specific gravity and form of crystallization. The range of color is from a light rose or pink to that of a bright red garnet. Though no very large ones have been found, yet gems cut from those found have sold at \$20 to \$50 each, while their numbers and merits have made them a decided acquisition to the list of precious stones of New Mexico, which must, when more widely known, create for them a large demand.

The turquoise deposits of the Territory are too well known to require an extended description. It is only necessary to state that while some of these gems have been famed in Europe for centuries, yet in the United States they have never met the appreciation their merits and rank as gems deserve until the last few years; now they are in great demand, having been pronounced by experts equal, if not superior, to the Persian turquoise. There are single gems from Santa Fe County, now in New York, held as high as \$4,000, and some in Santa Fe of nearly equal size and quality.

This sudden appreciation has given a stimulus to further research, resulting in finding large turquoise deposits near Silver City, in the Hatchitas and Cow Spring mountains of great merit. One of the new discoveries is phenomenally large, considering quantity of production, size, and color of stones found in it.

In addition to the above-named are found native euclase; the so-called Montana sapphires, garnets, milk and fire opals, peridots, a great variety of fine agates, besides petrified woods, fit for inlaying, mosaic work, or jewelry. Gold and silver quartz valuable for fine work in jewelry are produced from various mines.

IRRIGATION AND AGRICULTURE.

Without irrigation agriculture may be said to be a failure in New Mexico. In isolated instances crops may be raised without irrigation, but even then they are subjected to the stresses of weather, just as in the East. Our scientific farmers claim that the only proper agriculture is by the artificial application of water: and they say that, given almost perpetual sunshine and a water right from a good ditch, they can discount any Eastern farmer. The cost of irrigation is about \$10 per acre—first charge for a perpetual water right—and from \$1 to \$1.50 per annum thereafter. Looked at as a mere insurance of the crop, the cost is only nominal. The dry statistics on this subject have been so often given that it is needless to repeat them here.

The physical aspects of New Mexico may, however, well be described: Five great districts, separated one from the other by distinct boundaries, make up the Territory of New Mexico. The San Juan Valley and the Miembres Basin on the west, the Canadian and Pecos valleys on the east, are widely separated by the great Rio Grande Valley, which occupies the central portions of New Mexico. They are each separated from this great valley by tremendous mountain chains. They afford relatively different fields of labor.

THE SAN JUAN.

The great San Juan Valley is unique in the arid region, inasmuch as it has more water than there is land to apply it on. It occupies the extreme northwest portion of the Territory, possesses a salubrious climate, fertile soil, and the elevation varies from 6,000 to 4,000 feet. Some of the very best land is embraced in the Navajo Reservation. It is useless to the Indians, and should be opened to the uses of modern civilization. I produce in full two reports I have received from that country. They treat of other matters than agriculture, but the life of this Territory so depends on the success of its irrigated farms that I have not seen sufficient reason to separate them.

REPORT OF HERBERT O. WILLIS.

The year ending June 30, 1894, has been one of the hardest in the annals of our country, and yet, in looking over the Territory and Colorado, we can note with pardonable pride a comparative growth in numbers, development, and prosperity at once gratifying and marked. The population of the county will not fall short of 3,250 souls. The principal increase has been among the Americans; in fact, there has been a decrease of Mexicans of nearly 5 per cent per annum for the last five years. There is now in operation over 425 miles of irrigating ditches, and new ones are constantly adding to this mileage. There is no lack of water in the Animas or San Juan rivers; the La Plata River has been nearly dry since June 1. The present acreage under ditch will not exceed 150,000 acres, and this can be increased fivefold at a cost of \$7.50 per acre or less. There is no fruit grown in the West that is better flavored, larger in size, or freer from defect than that grown in San Juan County. The year 1893 produced about 1,250,000 pounds of fruit, the greater part of which was marketed in Durango and adjacent mountain towns. A few carloads were shipped into Colorado, but failed to yield a profit to the shippers. Some also found its way to Gallup. The price realized netted the producers about 2 to 2½ cents per pound. This year, owing to the heavy freeze in April and May and the hailstorm in June, nearly the entire fruit crop of the county was destroyed. Some favored localities will raise about one-third of a crop of apples and peaches. Taking it throughout the county, a careful estimate places the amount of fruit that will be raised this year at 250,000 pounds. A large number of fine young orchards are continually coming into bearing, and new ones are being constantly set out. With favorable conditions next year the county will produce over 2,000,000 pounds. The quantity of alfalfa that will be cut this year will be close to 45,000 tons. This is principally used at home. Wheat, corn, barley, and oats grow heavily and abundantly here, while all kinds of vegetables thrive.

San Juan County is shipping out more pork than she is bringing in and will continue to do so. This year there will be about 10,000 pounds of honey shipped out, a marked increase over other years. Poultry, eggs, and butter form an industry confined largely to the women, but exceeding in the magnitude of its sales even the alfalfa crop of our county. As to the natural resources, San Juan County is particularly and abundantly blessed. The entire western side of our county from the La Plata River is one enormous coal field. It covers an area of 15 by 25 miles in extent—all over which croppings of a fine bituminous coal are found. In the banks of Stevens, Mitchell, Coolidge, Firebough, and Miller, about 1,500 tons of coal have been taken the past year, entirely for home and domestic uses. A fine quality of building lime is made near Fruitland. Potter's clay is also found near Fruitland in large quantities and of an excellent quality. A fine quality of hard sandstone building rock is found throughout the entire county. Placer mining on the San Juan River has clearly shown that with machinery it will pay well; locations have been made in the vicinity of Jewett by Colorado miners that will be worked this year. Stock-growing has steadily retrograded on the range, until to-day, it is very doubtful if there are 2,000 head of range cattle in the county. On the other hand, great attention is being paid by our farmers to dairy stock, and some very fine specimens of Jersey, Holstein, and Shorthorns are to be met with. These same remarks will apply to horses.

Our school average throughout the entire county is about four months; the attendance is increasing. An annual levy of 5 mills is cheerfully made by each district; arrangements are about completed to start an academy in Farmington this year. The Farmington school had an attendance last year of nearly 100 scholars. All through our county new buildings of adobe and brick, nicely furnished, have

clearly shown that hard times are not felt with us. In Aztec, quite a number of brick buildings, as well as frame, have been put up, while at Fruitland, building has been steadily kept up, but it is in Farmington that the real progress is apparent. Last year two brickkilns yielded about 175,000 brick; this year one kiln has turned off 150,000 brick; that is all engaged, and two other kilns are molding and preparing to fire up later in the season. These facts, more than words, demonstrate the steady growth of our county. Near Farmington, at a depth of 350 feet, a strong flow of natural gas has been struck that comes bubbling up through 340 feet of water, and at the surface furnishes a light equal to about 50-candle power. In this same well there are good indications of oil, a test having been made showing petroleum.

The wealth of San Juan County as returned by our assessment roll is shown to be \$656,799.85. This no doubt will be materially lowered by our board of equalization, but it is our firm belief that notwithstanding the depreciated conditions of property everywhere the above figures are too low, and at least 25 per cent should be added to the assessed value in order to reach a true valuation of our property.

NOTE.—I neglected to say that in fruit, 1893 was an off year, and fell a long way short of a full crop.

REPORT OF L. R. E. PAULIN.

The stock-raising interests have dwindled to a small proportion of their prosperity of ten years ago, but in a greater degree have been developed the agricultural and horticultural with their attendant changes of character of population and mode of life. Immigration is steady, and mostly of a good class of settlers coming from the trans-Missouri States and from those parts of Colorado where the altitude restricts horticulture within narrowest margin. Estimated immigration, 450 to 600 capita.

Alfalfa-growing attracts farmers equally with fruit culture, and although the average in fruit and hay increase annually, the market grows likewise. Fruit last year going by carload lots, especially winter apples, into Pueblo and Denver, and beef cattle being driven into our alfalfa farms from central New Mexico.

There were no new irrigation works constructed last year, those systems already constructed settling up, and yet not over 30 per cent of land now under operating ditches is in actual cultivation. Our people, therefore, eagerly anticipate Statehood as promotive of immigration and leading to investment of capital, particularly in railroad construction, connecting this section with the now remote markets of New Mexico. The removal of the Southern Utes, granting to them certain townships in the extreme northwest portion of this county, meets with decided opposition. The Navajo Indians are exceedingly poor, owing to drought and low price of wool reducing their wealth to a dangerous point for the benefit of their white neighbors. Military agents at these Indian reservations are much preferred to the old system, and much praise is due Lieut. Plummer for his personal activity and masterly handling of the Indians. The punishment of the Indian murderer, Nez la Nez, now in the Territorial prison, has been a good lesson, tending to implant in the minds of the Indians respect for civil authorities.

THE CANADIAN VALLEY.

This great region draws directly into the Mississippi system. It includes the counties of Colfax, Mora, Union, and San Miguel. The possibilities of a diversified life are very great. The table-lands shimmer with gramma grass like the hayfields of the East. The fact that hard times and overstocked ranges leave decimated the cattle herds makes this grass very valuable. If properly used it would afford sustenance to thousands of beef cattle. To do this, however, there must be some method by which the thrifty stockman may have his improvements secured from destruction by his lazy or greedy competitor. In other words, the open-range business is a failure, because no man will improve ground by opening water holes, storing water, or any other way, if his shiftless neighbor has the right to run his herd at will over the same ground. The interloper would destroy in a week the labor of months. Some method should be devised whereby the grazing lands in such counties as these can be utilized. A good system of leases, not too long, at a fair rental seems to be the most feasible plan.

Following is the valuable report of Mr. M. P. Pels, manager of the Maxwell grant property. It goes into different matters, but as the basis of value on this grant is the 100,000 acres of reclaimed land it has to offer the public, I have seen fit not to separate the report into fragments.

IRRIGATING SYSTEMS.

No additions have been made to the systems, but a number of industrious parties from the Eastern States have located under these systems, and the crops have been satisfactory. Owing to an abundance of rain, all of our reservoirs have been and are full, and the growing crops look exceedingly promising. The New Mexico markets afford ample opportunity to sell crop products favorably, and it is a fact worth noticing, that last year some 500,000 pounds of oats were shipped from our ditch systems to Albuquerque and other Southern points. Hailstorms in the beginning of June have injured the fruit crop, which will be light.

Owing to the low prices for beef, not many are being fed on alfalfa; but on the other hand, this product is largely used for hog-raising, which industry, on account of the absence of hog cholera, proves to be exceedingly valuable and profitable, and the time is not far distant when the northern portion of this Territory alone will be able to supply the southern portion of New Mexico and the old Mexico markets with hogs, or pork, at such points as are now supplied by Kansas City.

The protracted financial and political disturbances have of course interfered with more extensive sales of land, but we confidently look for better results as soon as the country at large will have become more prosperous.

The adverse influences have also led to a virtual cessation of building, and, consequently, caused a much decreased demand for lumber. Our sawmills on Red River, not finding a regular sale for all the lumber they can manufacture, are now only operating to supply special orders, but, at the same time, a large number of ties and piling for the use of railroads have been manufactured, and I am glad to say the charcoal ovens have increased their output and shipments to Denver, recently, to a considerable extent.

CATTLE.

The open-range cattle business has not been very satisfactory, since the stealing of cattle goes on more boldly and openly than ever before, and seems to have become a general practice, encouraged by the fact that witnesses are difficult to produce. Our general tendency is, therefore, to sell cattle off in order to make place for less risky industries. The abundant rains of last fall were very beneficial to the range, which has shown more luxuriant grass this year than for many years past.

COAL.

The Blossburg mines were visited in the beginning of May by a few delegates who advised the miners to strike in sympathy with their Eastern brethren. This was done at a time when the demand for coal was very slack, and, as summer advances, this demand has not improved, so that it is doubtful when the mines will reopen.

The strike has now lasted since the 7th day of May, and the miners acknowledge that they have no grievance at all against the Raton Coal and Coke Company; in fact, they received 20 cents more per ton of coal mined than was received anywhere by miners in Colorado. The mine is dry, with good air. At all times when the output had to be reduced, the company discharged single men and kept the married men in their employ. Wages, I am informed, are on an average from \$4 to \$4.25 per day.

The cement works, near Springer, have been idle several months on account of lack of demand for cement.

The roads and bridges are in excellent condition in this country, thanks to the good judgment and liberality of the board of county commissioners, who have always made the necessary appropriations for improvements of roads, or for building new roads, and also for repairing and replacing such bridges as were damaged or washed away by the floods.

A telephone system, covering 160 miles, with 17 stations, runs through the entire Maxwell grant, connecting the gold mines, at an elevation of over 10,000 feet, with the different towns, the ditch systems, timber belt, and other important points. The central office of this system is at Cimarron, in the centre of the Maxwell grant.

In compliance with an act of the legislature, passed a few years ago, more than 160 signboards were placed at all road crossings on the Maxwell grant, and have been greatly appreciated by the traveling public. These signs are made of heavy iron and show in plain characters the different directions and distances in miles.

Recently the Postal Telegraph Cable Company built its line, running in the direction of Mojave, through the Maxwell grant, and at the moment of writing this they have nearly reached the southern boundary of the estate.

TOWNS OF THE MAXWELL GRANT.

The demand for town lots in Raton has been constantly growing until the recent railroad strike, which has checked the progress. A new addition has, however, been surveyed and laid out recently in East Raton.

At Blossburg a new Methodist and a new Catholic church have been built. At Catskill a fire destroyed recently a block and a half of buildings. A church was also recently built there by the W. C. T. U.

Schools are flourishing everywhere and the number of pupils is increasing considerably. A \$10,000 schoolhouse was dedicated at Springer last year. At Maxwell City the foundation is being laid for a \$3,000 schoolhouse, which will be a credit to that growing town; and other schoolhouses are in the course of construction near Cimarron, in Ponil Park.

A law was passed by the last legislature directing that a branch of the agricultural college should be established between Glorietta and the Colorado boundary. The Maxwell grant offered to donate 100 acres of land under our vermejo ditch system, near Maxwell City, and also other inducements, but I have not been informed if this or any other locality has been selected for this purpose.

Peace and order have prevailed in Colfax County, and our criminal docket, no doubt, compares favorably with other parts of New Mexico. Since your excellency has displayed considerable energy in prosecuting murderers and other criminals, I feel confident that, assisted by the efficient work done by the chief justice, Hon. Thomas Smith, this will wipe out to a large extent the lawless and orderless element in this Territory, and reduce crime to a minimum.

THE PECOS VALLEY.

There has been more improvement effected in this region during the past few years than in any other portion of the West. This is a startling statement, but the figures are more so. A careful compilation shows the result of four years' work as follows:

A summary of the above information will show that there have been constructed up to date—

	Miles.
Total length main canals.....	121
Necessary main laterals	273
Farm or sublaterals.....	900
Total	1,294
	Gallons.
Capacity of completed reservoirs	7,000,000,000
Capacity of projected reservoirs.....	6,000,000,000
Total storage	13,000,000,000

Upward of half a million shade trees have been planted on streets and roadsides; a desert has been reclaimed, and a busy community settled permanently in comfortable homes. About \$4,000,000 of corporate capital has been invested, and a much greater sum in the improvement of homesteads, the stocking of farms and ranches. I will let the people tell their own story, however.

REPORT OF J. M. HAWKINS.

In the irrigated portion of the southeastern portion of the Territory, which includes the counties of Chaves and Eddy, there has been very marked progress in the past year. Here prevails a great system for the storing of flood waters that are precipitated during the rainy season. This system, which has been established by the Pecos Irrigation and Improvement Company, a corporation, has been well nigh completed this year so far as present operations are concerned, and now embraces 1,200 miles of main canals and laterals, which receive their supply of water from a series of storage reservoirs. One of these just put in service is worthy of note as an indication of the importance of agriculture in the Territory, and is the largest irrigation reservoir on this continent. Its storage capacity is 138,000 acre feet body of water,

submerging 1,300 acres to a depth of 50 feet in some portions. With the exception of a similar reservoir on the river Periar, in India, with a capacity of 160,000 acre feet, there is nowhere the equal of this irrigation lake, which stores 6,000,000,000 cubic feet of water. The supply for this and other reservoirs is obtained by damming the Pecos River, an unceasing stream fed by the snows of the Rocky Mountains and innumerable springs that gush forth from the limestone bed of the stream. By this method the rains and snow of a great watershed are also utilized, restrained from running to waste, and ready when needed in the dry season. These works, together with the railroads and incidental improvements, have cost \$3,000,000, counting the expenditures of the corporation alone. They have made available to farmers half a million acres of land that but for the way being provided to supply water would not have been claimed from the Government by settlers. The immediate result has been the building up of two comparatively new and populous counties, now well supplied with civic institutions, public buildings, schools, churches, prosperous towns, and progressive communities, having railroad facilities, telephone and telegraph lines through this limestone valley, that is 200 miles long and of an average width of 10 miles.

The plan of centralization prevails in this section, settlement in communities being encouraged, so that settlers escape isolation, and farm life is furnished with social features. There are good public schools in all precincts of these two counties, some having school buildings that would do credit to large towns, while at Eddy and Roswell there are graded schools and buildings costing from \$5,000 to \$10,000, and at the latter place is located the New Mexico Military Institute, a Territorial school offering excellent advantages.

In this valley ideal conditions for fruit-growing and modern farming of an extensive character are rapidly being developed by hundreds of active workers, many of whom possess ample wealth and have become residents here because of the climatic advantages, and many others of moderate means have settled here because they recognize the peculiar advantages of irrigation. Not a small proportion of the residents have been attracted to the country because of the tonic effect of its dry and sunny atmosphere upon pulmonary and kindred complaints. Unimproved lands that were worthless before the establishment of the irrigation system are already, when supplied with water, rated at from \$25 to \$50 per acre, and form a material addition to the wealth of the Territory, the assessed value from the two counties footing up over \$3,000,000, exclusive of canals and railroads. At present the railroad, which had halted in the middle of the valley, pending development sufficient to warrant an extension, is under construction to the upper end of the district, which it will reach in time to haul the farm and orchard products of this year to market.

While the general business stagnation has retarded immigration to the irrigated section this year, the preparation of the country for the great movement expected to result from discontent in the older agricultural States goes on. The acreage of hay, grain, and fruits has been greatly increased this season, successful methods of handling soil and water learned, and discoveries made as to the products best adapted to the soil and climate. Over \$100,000 worth of fine cattle and horses have been imported from Eastern breeding establishments; a few model stock farms have been created, and a live-stock industry of a high grade is well started. Alfalfa, a superior species of clover hay, is already an article of commerce; large shipments are now being made to the South and the West Indies. Arrangements through gulf ports are also in progress. This season marks the beginning of a new feature of the cattle industry, viz, the fattening for market of range cattle in the alfalfa fields of irrigated farms, thereby making a market for both beef and hay. A specialty is also being made of the raising of fine hogs for Western packing houses, the forage and grain of the country affording cheap food for swine.

In the settlement where farming has already been inaugurated nearly 100,000 acres of land have been purchased by settlers, and fully 40,000 acres put under cultivation, mainly in hay, grain, and orchard products. Particular attention is being given to the planting of forest trees along the streets and highways, the shade trees already growing being sufficient to beautify nearly 200 miles of avenue. The adaptability of soil and climate for sugar beets is well proved, and the erection of sugar manufactories, creameries, cheese factories, and other industries is in view. Successful experiments have resulted from the irrigation and cultivation of canaigre, a wild tuber that is invaluable to the tanning industry and that has already been used extensively in Europe, the wild growth of the Southwest being shipped to the extent of many carloads. The demand is so great and the price so profitable that the existing wild supply will soon be exhausted. Cultivation has demonstrated that an annual crop of heavier growth than found in the unwatered desert may be produced, and considerable acreage will be planted before the close of the year. At present the dried roots are exported, but in time factories to extract the acid will be built, and canaigre become the principal source for the supply of the tanneries of the world, other sources already being on the decline.

This irrigated region possesses little mineral wealth capable of use at present, but is destined to supply the mining and arid regions of the Southwest with grain grapes, wine, fruit, meats, vegetables, and dairy products. This season newly settled lands have sent carloads of grapes to Eastern markets, while peaches, apples, vegetables, melons, and other products in smaller quantities have been absorbed by home and neighboring markets.

A rapid and substantial development along the lines indicated the expenditure of millions of dollars upon a system that looks to the future only for profitable returns; the certainty that a great trunk line of railway from the gulf will use this fertile Nile-like valley as a natural route to Colorado and California; the indomitable system used by the American and English settlers who form almost the entire population of the valley, all serve as a guarantee of permanent improvement of the country and indicate that when other portions of the Territory shall, by the aid of private capital or assistance from the Government, be fully developed New Mexico will be one of the wealthiest countries in agricultural resources, as she is now in mineral properties.

REPORT OF GRANVILLE A. RICHARDSON.

I do not suppose that we have anything especially new not already within your knowledge in this county in the way of enterprises and development, with the exception of the building of the Pecos Valley Railroad from the town of Eddy, in the county of Eddy, to the town of Roswell, in the county of Chaves, running up from the Pecos Valley from south to north a distance of 8 miles. Construction began upon this road in April of this year, and the grade from Eddy to Roswell will be ready for the rails within fifteen days. The track is laid for 25 miles, and is being rapidly pushed along the entire line; expected to be completed to the town of Roswell, with trains operating thereover, by the middle of September. This is an important enterprise, not only to southeastern New Mexico, but to the whole Territory.

One large and important enterprise, partially completed, which will be of enormous benefit to this portion of the Territory of New Mexico, and especially to the agricultural interests, is the completion of the reservoir system upon the Rio Hondo, in this county, 12 miles west of the town of Roswell. I believe that this is the best reservoir proposition in the Territory of New Mexico. I think the Hondo water is the very best that can be had for irrigating purposes, and that the land in front of the reservoir, on which the water will be applied, is the finest body of land to be found in any country—in amount about 60,000 acres of the very best loam, very deep, no alkali, and covered with rich, heavy gramma grass. This is the best undeveloped agricultural region to be developed by irrigation that there is in the West. There may be large single enterprises, but no better. The agricultural development in Chaves County has increased in the last year 30 per cent.

The Pecos Irrigation and Improvement Company's canals and reservoirs in Chaves and Eddy counties, of which you have a complete knowledge, it is not necessary for me to refer to in this letter, except possibly to call your attention to the fact of the completion of the late reservoir at Seven Rivers in Eddy County by the completion of the dam across the natural channel of the Pecos River, of which you have doubtless had information from this section of the Territory.

There are no mining enterprises in this portion of New Mexico. The educational interests and facilities for education have advanced materially in Chaves County. We have a public school building and a public school in every school district in the county. There is at this time in reach of every child in the county of Chaves a good public school as the result of the school bill passed by the legislature in 1891. A two-months' normal institute has just been closed at this place under the control and charge of Mrs. W. L. Jackson, of Silver City, N. Mex. This normal institute was an entire success in imparting aids and methods to those engaged in public instruction in this and adjoining counties. There is throughout this section of the Territory a decided increase of facilities and of interest in educational matters.

CANAIGRE.

In my previous report I called attention to the new tanning agent, canaigre, that grows wild on our mesas. I have caused careful inquiry to be made, and from among the great mass of data at hand produce one report, because of the difficulties and dangers that surround the experiment.

Mr. Moore Young, of Eddy, gives his own experience in reference to the cultivation of canaigre:

About the middle of August, last year, I planted for Mr. Hagerman a patch of about 25 acres, using wild tubers as seed. Part of the patch was planted with every kind of tubers dug up—old and young; the balance with picked-over seed, mostly one year old. The latter plan proved the necessity for only planting young tubers for seed. I planted in rows from 3 to 4 feet apart, and the tubers from 1 to 2 feet apart in the row, and from 4 to 8 inches deep, according to the soil being heavy or light. The result proved to me that 2 feet apart is better than closer planting. The ground was well flooded and plowed and harrowed before planting; but, unfortunately for the experiment, on account of the dam going out I could not force the growth in the fall by irrigation, and consequently the new tubers did not make any growth to speak of until after March, when, by right, they ought to have had their full growth and reached the stage of laying up tannin. They reached full size in July, and, from fair samples dug in August from all over the patch, the new growth was from two to six tubers, weighing from 2 to 6 pounds to the hill, or, to the acre planted 2 to 3 feet, of over 14 tons. From time of planting to August 1, I irrigated the whole patch three times, and, besides, we had two heavy rains, which virtually made five irrigations. I cultivated after each irrigation and rain. Four different pieces I irrigated oftener than this, by way of experiment, but could not see any benefit, and concluded three irrigations are as good as ten for size of root, and better for tannic acid strength. When dug as above, in August, the tubers were deficient in tannin, but we hope to gain, by remaining in the ground until the end of October, enough extra to make it pay to dig them.

This is, however, the doubtful point, whether enough tannic acid can be stored in the tubes of one year's growth. I fully believe if the water supply had not been cut off, and a four months' growth lost thereby, the desired result would have been reached. Even if the tubers must be left in the ground two seasons, however, there is still encouragement enough in it as a paying crop. I have kept a careful note of the expense of cultivation, and at the low rate of \$16 per ton paid for green roots there will be a net profit per acre of from \$40 to \$50. This year, wild growth, by samples dug of evidently the same age from a single tuber seed, does not compare at all in weight to that cultivated, nor does the wild at one year old beat the cultivated in tannin. Therefore, on a fair trial, when water is procurable in the fall and winter (the growing season), I have no doubt cultivation and irrigation will not only raise a big crop of roots but also surpass the wild of the same age in strength of tannin.

It is established by other experiments that under circumstances such as Mr. Young sets forth the roots will not only grow larger but the tannic contents of the tuber will be greater cultivated than wild. Care must be taken, however, that the irrigation is not too great. A little too much water on any crop is a dangerous thing. The irrigation should be only sufficient to start the growth in the fall and very scanty in the rainy months. The latest price quoted for this root is \$50 per ton, dried. Three tons of green make one of dried roots. The average crop under favorable circumstances is about 20 tons. It is an indigenous plant of the arid region, needs little water, and is a veritable home-maker, if its culture were only scientifically studied. Thousands of acres for which enough water for other crops is not available could be cultivated with this plant.

THE RIO GRANDE VALLEY.

This great valley has been so often and so thoroughly described that little need be said of its features. There is one topic that is peculiarly timely, and that is the responsibility of the United States to see that the waters of interstate and international streams are equitably distributed. The National Irrigation Congress meets at Albuquerque in September, 1895, and this will be the principal subject of discussion. The chief of engineers of the Mexican Government will be present, with his staff, to assist in the discussion. I respectfully suggest that if your Department has any force that could be spared for such work, or any data available, that steps be taken to put accurate information of the facts before the congress. It would seem that some of the

hydrographic officers of your Department might properly be detailed to this region to study the physical data that must be known before we can intelligibly discuss such a question. This valley is one of the most important in the world; it is as rich as the Nile Valley; its products took many of the world's prizes at the Columbian Exposition, notably those for wheat and apples. In support of the assertion that the soil of this valley is the richest in the world, I again quote from the publication of our bureau of immigration. The facts stated, although startling, are true.

At Cebolleta, on the south side of the San Mateo Mountains, 1 almud of corn (about one-fifth of a bushel) yields a harvest of 100 fanegas (a fanega is $2\frac{1}{2}$ bushels), a return of 250 bushels of corn from a sowing of one fifth of a bushel of grain.

Wheat yields proportionately. On one ranch in the neighborhood of San Mateo, from 1 fanega, or $2\frac{1}{2}$ bushels of seed wheat, 80 fanegas, or 200 bushels, have been harvested. As sown here, this would be at the rate of about 50 bushels per acre. All other crops give proportionate returns. Harvests, even less than the average of the neighborhood, are from 10 to 20 per cent better than the rest of the world. The oats that took the second World's Fair prize for quality, was raised near Belen, in this county (Valencia), and the same took the first prize for wheat.

Farther down the river is the Mesilla, from which I have a detailed report, as follows:

REPORT OF F. C. BARKER.

Although no exact figures are available, yet it is quite certain that the population of this county is steadily increasing, as many settlers have come in during the past year who have purchased land, principally with the intention of planting it in fruit trees.

Taxable property.—In a general way I may say that the taxable property in this county is greater than it was a year ago. Quite a number of new houses have been built and are in course of construction, and much of the land has been improved.

Commerce.—We have undoubtedly felt the effects of the financial depression, but so far as I can judge in a far less degree than most other parts of the country.

Stock-raising.—The cattle and sheep on the open ranges have done better the last year than for some time past; many train-loads of cattle were shipped out.

Education.—Our facilities here are excellent, and the native Mexicans largely avail themselves of the schools, where all are taught in English.

Mining.—During the past year several gold mines have been opened up in the Organ Mountains, and expensive machinery erected on some of them.

Labor supply.—We have an abundant supply of labor. The native Mexicans earn 75 cents and board themselves, while others earn \$25 per month and their board.

Agriculture.—The experiments at the agricultural college have shown that this country is admirably adapted to the raising of the finest quality of wheat, barley, oats, and corn. The first premium on wheat at the World's Fair was taken on wheat raised at Belen, in Valencia County, this Territory; the first premium on oats was grain raised at the college farm at Las Cruces. The native Mexicans have long cultivated both wheat and corn, raising both crops on the same land in one year, and repeating this year after year without using any fertilizer beyond that contained in the Rio Grande water used in irrigation.

Irrigation.—Some 10,000 acres are already under irrigation, but, with a dam and reservoir to save the winter streams of the Rio Grande River, at least 100,000 acres might be irrigated, and land that is not worth to-day a dollar per acre might in a few years be converted into orchards worth over \$500 per acre. Several prominent engineers have surveyed the river and have located suitable sites for such dams and reservoirs, and their estimates show that the work could be constructed at a cost that would make the enterprise most profitable to investors. It is confidently believed that when the present financial straits on our Eastern capitalists are reduced they may turn their attention to this enterprise.

Underdeveloped resources.—The facilities with which alfalfa and corn can be raised in this valley offer a good opening for the establishment of dairy industries, as undoubtedly butter could be produced as cheaply here as in Kansas, where large quantities are yearly imported into the Territory.

Horticulture.—The great future of this valley is in its fruit orchards and vineyards. The grapes are not to be surpassed in quality in any part of the world, and the apples and peaches are now being shipped out by the carload. Most of the orchards have been planted quite recently, and last year was, we might say, the first year that any great extent of orchard land came into bearing, and over 1,000,000

pounds of fruit, principally peaches, apples, and grapes, were shipped out of the valley. It is believed that this quantity will be considerably increased this year. Many of the orchards last year realized \$600 per acre for their fruit. The fruit industry of this Territory, particularly this valley, is capable of very great development, and with an improved water supply there will be no difficulty in raising and selling \$20,000,000 of fruit every year from the Mesilla Valley.

THE MIMBRES BASIN.

This sink or basin of the Mimbres is remarkable. In New Mexico it comprises the northern half of a remarkable valley, the center of which is Lake Palomas, in Mexico. From all sides the waters flow toward this lake, and the strange thing is that they preserve their freshness. Indeed, the lake is largely fed from fresh-water springs in its bottom; so powerful are these, that the surface over the larger ones is noticeably disturbed. The drainage from the continental divide goes into this lake. At Deming an effort has been made, that certainly promises success, to bring to the surface sufficient of the water seeping toward this lake to make a large area fertile. As yet it has not passed beyond the experimental stage, but good engineers predict a certain success, and attention is thus briefly called to its merits.

W. T. THORNTON,
Governor of New Mexico.

OCTOBER 1, 1894.