

REPORT
OF
THE GOVERNOR OF NEW MEXICO.

SEPTEMBER 15, 1890.

LAND TITLES.

Until the titles to the Spanish and Mexican land grants in the Territory are finally settled, the subject must continue to be of paramount importance and the first to be considered in any statement of the condition or needs of New Mexico.

More than forty years have passed since this Territory was acquired by the United States; for thirty-six years the plan of adjudication contemplated by the act of July 22, 1854, has been in operation, and yet but little, comparatively, has been accomplished toward the settlement of these titles. Down to July 1, 1890, 213 grants have been presented to the surveyor-general for action; in 162 cases he has taken testimony and made reports to the Interior Department. Previous to 1870 Congress acted on 44 of these cases, during the next decade it acted on only 1, and since 1879 it has not attempted to consider any cases whatever. No reasonable man expects that Congress will ever again find time to pass upon the remaining 117 grants, reports upon which have been laid before it during the last twenty-five years, and far less on the unknown number that have never yet been presented to the surveyor-general, and so the preposterous plan of having the National Legislature of sixty millions of people, sitting over 2,000 miles away and overwhelmed with other business, adjudicate questions of title involving a knowledge of foreign law, the examination of scores of manuscript documents, and the careful weighing and comparing of evidence, has so signally failed to accomplish its objects that all must now admit that its day of usefulness is over. Indeed, so fully is this understood in the Territory that during the last year but one new case was filed with the surveyor-general, and that came from an Indian Pueblo.

As long ago as May 29, 1858, the House Committee on Private Land Claims, in reporting in favor of the confirmation of fourteen grants, frankly admitted the utter impracticability of doing justice under the existing law, and based its recommendation on the ground that immediate confirmation, even without proper investigation, was the least of two evils. The report says: (Report No. 457, first session, Thirty-fifth Congress.)

It appears that a number of these claims were before the Committee on Public Lands of the last Congress, but, from some cause, no action was taken thereon by

the committee nor by Congress. Those claims, with others since forwarded by the surveyor-general of the Territory, have received the most careful attention your committee could give them; but, in justice to the committee, I must say this examination has been confined entirely to what seemed to be the principal papers in each case, having no time to scrutinize the evidence and the application as made by the surveyor-general of the Spanish and Mexican laws and usages to each of them in detail. Nor will it ever be in the power, hereafter, of any committee of this House to make such an examination as will be entirely satisfactory, should these claims be allowed to accumulate before Congress. * * *

But for the gross injustice to the people of New Mexico of delaying for an indefinite period action upon their claims, and the certainty that under existing arrangements Congress can never consider them under more favorable circumstances than at this time, your committee would not have been willing to report upon any of these individual claims, for the reason first stated—want of time to examine fully, and the unknown quantity of land claimed by most of the parties.

Soon after the printing of this report, Congress, on December 22, 1858, passed its first confirmatory act by which it confirmed the titles to five grants (Nos. 2, 5, 7, 11, and 13).

The next action was taken June 21, 1860, when thirty-one grants were confirmed at once (Nos. 1, 3, 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38).

The subsequent confirmations were as follows: March 1, 1861, one (No. 43); June 12, 1866, one (No. 40); March 3, 1869, five (Nos. 41, 42, 44, 46, and 47); July 1, 1870, one (No. 48); January 28, 1879, one (No. 64).

So that only eight have been acted on in thirty years, and but one in the last twenty years.

Through all this long period the people of New Mexico have begged for a tribunal which could quickly and justly adjudicate as to these grants. It is not the fault of the Territory or its people that uncertainty of title exists here. If the matter had been left to be settled in the local courts, as similar questions would be adjusted in the older States, no great difficulty would have ensued and titles would have been determined a quarter of a century ago. But the United States chose to claim that all titles were invalid, though they might have existed without dispute for over a hundred years, until they should be submitted to the action of Congress, based on a report to be made by the surveyor-general.

Since the utter inadequacy of this plan has become apparent, it has been generally conceded that another must be devised; but differences of opinion between the two Houses of Congress as to methods of procedure have prevented the adoption of any practical system. The House of Representatives has several times passed a bill for the creation of a commission somewhat similar to that which existed in California, to settle these titles, only to be met by the objections of the Senate, which insists that they should be adjudicated by the existing courts. The people of the Territory, while possessing strong opinions as to the best way of meeting the difficulty, have been so exceedingly desirous of practical relief that they preferred the adoption of any system, however imperfect, to the existence of none at all. During the past year encouraging progress has been made toward the attainment of the desired result, and the adoption of a method of adjudication generally satisfactory to the people.

In this regard we feel under special obligation to the present administration, as the first which has seemed to comprehend the necessities of the situation, and certainly the first which has taken practical steps to meet them.

The President, in the annual message to Congress of December 1,

1889, formally drew the attention of that body to the subject in the following words :

The unsettled state of the title to large bodies of lands in the Territories of New Mexico and Arizona, has greatly retarded the development of these Territories. Provision should be made by law for the prompt trial and final adjustment, before a judicial tribunal or commission, of all claims based upon Mexican grants. It is not just to an intelligent and enterprising people that their peace should be disturbed and their prosperity retarded by these old contentions. I express the hope that the differences of opinion as to the methods may yield to the urgency of the case.

While this recommendation was necessarily brief, it was emphatic and comprehensive; and particularly valuable, as it pointedly alluded to the real cause of the long delay by asking that mere "difference of opinion as to methods may yield to the urgency of the case."

The more extended discussion of this subject in the Report of the Secretary of the Interior, the clearness with which the injustice of the failure of the Government to provide adequate means for adjudication was set forth, and the forcible argument in favor of early action therein contained, could not fail to produce an effect. The whole matter could not be more concisely summed up than in the sentence :

The present system being ineffective and inadequate in my opinion, the object of this communication is to respectfully suggest, if you approve, that you call the attention of Congress specially to the subject, and urge upon it the necessity of further legislation, so that these grants may be disposed of within a reasonable time.

The meeting of Congress was quickly followed by the introduction of bills for the purpose of establishing a land court, by Hon. Antonio Joseph, the Delegate from New Mexico, Hon. James B. McCreary, of Kentucky (H. R. 376, December 18, 1889), and Hon. Charles P. Wickham, of Ohio (H. R. 4613, January 13, 1890), in the House; and by Senator Ransom (December 10, 1889, S. 1042), and Senator Wolcott (December 16, 1889, S. 1321) in the Senate. On April 28, 1890, Mr. Wickham, from the Committee on Private Land Claims of the House, as the result of the deliberations of that committee, reported a bill entitled as follows: "H. R. 9798, a bill to establish a United States land court, and to provide for a judicial investigation and settlement of private land claims in the Territories of Arizona, Utah, Wyoming, and New Mexico, and in the States of Colorado and Nevada," and on the same day Senator Ransom, chairman of the similar committee of the Senate, reported the bill introduced by himself, and amended by the committee, entitled "A bill to establish a United States land court, and to provide for the settlement of private land claims in certain States and Territories" (Senate Bill 1042). While these bills differ in details, and also in some important particulars, still they agree in the general principles involved; and on their passage by the respective Houses of Congress there is little doubt that the differences can be harmonized in a conference committee. The interests of New Mexico so imperatively demand the enactment of some measure of this kind, that the people will be content with the passage of any act which will practically accomplish the result desired. All recognized, however, the danger which lay in the difficulty of obtaining consideration of the bills in time to secure the passage of some measure by both Houses before the close of the session.

Here again the acts of the administration have been most effective and welcome.

On the 1st of July the President sent to Congress a special message on the subject, accompanied by a copy of correspondence between the Department of State and the Mexican Government, and a report from the Secretary of the Interior. The latter embodies a list of the New Mexican

grants reported by the surveyor-general but not acted on by Congress, one hundred and eleven in number, and containing 6,643,938 acres, which are withdrawn from entry until a final decision is rendered as to their title; and the report itself very clearly sets forth the existing situation and the need of speedy relief. "What is most needed," says the report, "is legislation that will put in motion machinery which, within a reasonable time, would settle finally public and private rights growing out of said claims."

The message of the President urges immediate action by Congress, and concludes as follows:

The entire community where these large claims exist, and all of our people are interested in an early and final settlement of them. No greater incubus can rest upon the energies of a people or the development of a new country than that resulting from unsettled land titles. The necessity for legislation is so evident and so urgent that I venture to express the hope that relief will be given at the present session of Congress.

The effect of a special message of this nature could not but be excellent, and we confidently look for the passage of some measure of relief before the expiration of the present Congress.

While on the subject of land titles I may perhaps be permitted to make two suggestions.

(1) If nothing else is done by Congress, much good could be accomplished by a simple limitation of the time in which grants may be presented for confirmation. If this had been done years ago, it would at least have enabled us to know what land is not claimed under any grant, and thus have rendered it perfectly safe for those desiring to settle upon Government lands. At present there is no way of being certain, with regard to any particular piece of land, that some one will not produce a grant covering the tract, perhaps long after a settler has occupied and improved it. On the official maps at the land office it may appear as an unclaimed portion of the public domain: an entry may be made in good faith, and legal residence follow, all to be rendered fruitless by the subsequent appearance of an ancient grant, of the existence of which the occupant had never heard.

It is impossible now to remedy the omissions of the past, but at all events no further delay should take place in the establishment of such a limitation.

(2) As to small holdings. While public attention has been chiefly attracted to the settlement of the title to the large grants made under the Spanish and Mexican Governments, a much larger number of people than those affected by the grant titles are interested in what may be called the "small holdings."

These exceed five thousand in number, and are the property of the farmers and peasantry of the country. The bills before Congress contain provisions as to the title of these small tracts, and properly provide that they shall be settled with as little expense as possible to the occupants. But in two respects these bills are imperfect, both subjects being those as to which one not acquainted with the peculiarities of New Mexican colonization would be likely to err. One is the provision which limits the confirmation of such tracts to those on which the claimant is "residing as his home," and the other that which confines the confirmation to one tract for each claimant.

First. The cultivation in New Mexico is mostly by irrigation and is consequently confined, as a rule, to strips of land along the rivers and limited in width to the distance between the irrigating ditch or acequia and the river itself. Colonization was usually made by a number of families coming at the same time into an unoccupied valley and taking

possession of the land either under grant or by expressed authority of the local Alcalde, or by arrangement among themselves. In either case land was apportioned among the heads of families, each one receiving a certain width of river frontage. We will suppose, for instance, that a valley 5,000 varas in length (somewhat less than 3 miles) was colonized by fifty families. If they received equal portions each would have a frontage width of 100 varas running back to the foot-hills, which are the natural lines of the acequia. But for purposes of protection against the Indians, the houses were usually built at a central point, forming a village or plaza. It will be observed, therefore, that while these little farms have been actually occupied and used in many cases for hundreds of years, yet in numerous instances the owner has not resided on the farm but in the central village a short distance from it. This will show the propriety of striking out the words "residing thereon as his home," as that language would exclude from the benefits of the act a vast number of bona fide owners and occupants who, through their ancestors, have held such farms for generations.

Second. As generations have succeeded each other, these farms have been subdivided between the heirs of the original owners. This subdivision is almost always made by dividing the width, because a piece of land to have value in an irrigated country must extend from the acequia to the river. So supposing that the original owner of a tract of 300 varas in width, left six heirs, each would become the possessor of a strip 50 varas in width, and if one of these heirs in turn left five children each of them would receive a strip only 10 varas in width. By this means many of the present holdings have become exceedingly narrow, and I have recently seen a deed of one only $4\frac{1}{2}$ varas (12 feet) wide, while about 1,500 feet in length. Now, we will suppose that the owner of one of these little strips marries the owner of another similar strip and that they have one child as heir. He would naturally own both pieces and would occupy and cultivate them, although they might be a mile apart. That is the actual condition of things in hundreds of cases. The total area of all the pieces so owned by one person probably would not exceed 5 or 10 acres, but they are separate one from another, and the language of the bill which limits confirmation to one tract would cut off the owner from a part of that to which he has an absolute right.

It may be added that in the opinion of many no patent is necessary to vest a perfect title in the present owners of the tracts. The title which they now have is precisely of the same nature as the ordinary titles to land in New York or New England or any of the older States in which the United States never had any public domain and where consequently titles are not derived from United States patents. They can be traced a sufficient distance to make them good against all the world, and they are absolutely good as against individuals. The only difficulty regarding them is because they are continually menaced by the United States. On the official maps they appear to be Government land, and an unprincipled person can make an entry consequently in the proper land office directly on top of a farm and residence which have been held and occupied for hundreds of years, and through half a dozen generations.

Such a condition of things is palpably unjust and unworthy of the American Government. All that is required, in my judgment, with regard to these small holdings, is that the United States surveyors should delineate them on the official plats as private property, so that they would be distinctly segregated from the public domain, and that the United States would thus renounce all claim to their ownership.

If this is done there will be no difficulty as to the titles as between individuals.

DELEGATION TO WASHINGTON.

So important was the matter of the settlement of land titles considered that on March 6, 1890, the Territorial bureau of immigration unan- imously passed a resolution, looking to the sending to Washington of a delegation of prominent citizens, to urge active action on this subject, and at the same time to endeavor to secure some other necessary legis- lation.

The resolution was as follows:

Resolved, That Governor Prince is hereby earnestly requested to appoint a commit- tee, of which the governor shall be one, to proceed to Washington to urge upon Con- gress the absolute necessity for the immediate settlement of all questions pertaining to land grants and titles in this Territory, also to urge the passage of a bill giving to this Territory immediate titles to sections 16 and 36 of each township, commonly known as school lands, in order that our public school system may have the benefit thereof without delay, and also to townships for university purposes, 30,000 acres for the benefit of the agricultural college of New Mexico, and also 30,000 acres for the school of mines. Also to seek aid from Congress in the matter of building reservoirs and the improvement of irrigating facilities.

Also to present to Congress a petition to set apart as a national park a certain por- tion of this Territory in the Spanish range of the Rocky Mountains upon the upper Pecos River water-shed, said district being in the opinion of this bureau especially suitable, and indeed not surpassed by any district in the West in respect of grand scenery and vast forests.

Under this resolution the following gentlemen were commissioned, and those whose names are marked with asterisks actually proceeded to Washington, the principal body of the Delegation arriving there on April 25, and remaining almost a month.

NAMES OF DELEGATES.

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| *Hon. L. Bradford Prince, governor. | *Col. W. G. Marmon, Laguna. |
| Hon. Edward F. Hobart, surveyor gen-
eral. | *Hon. T. B. Mills, Las Vegas. |
| General E. L. Bartlett, solicitor-general. | Hon. S. B. Newcomb, Las Cruces. |
| *Hon. Trinidad Alarid, Territorial audi-
tor. | Maj. J. H. Purdy, Santa Fé. |
| *Hon. S. B. Axtell, ex-governor and ex-
chief-justice. | A. H. Reynolds, Socorro. |
| Jesse Anthony, Albuquerque. | *J. S. Reynolds, president First National
Bank, Albuquerque. |
| *A. J. Bahney, P. M., Socorro. | Hon. Rafael Romero, ex-speaker house
of representatives. |
| *Ira M. Bond, editor, Albuquerque. | E. H. Salazar, editor Voz del Pueblo. |
| *S. E. Booth, chairman county commis-
sioners, San Miguel County. | Dr. J. J. Shuler, Raton. |
| *A. D. Coon, Socorro. | *Frank W. Smith, Las Cruces. |
| *Geo. H. Cross, news editor New Mexi-
can. | W. G. Simmons, cashier Second Na-
tional Bank, Santa Fé. |
| Richard Dunn, Rociada. | *E. W. Spencer, Albuquerque. |
| Hon. Charles B. Eddy, Eddy. | L. Spiegelberg, president Second Na-
tional Bank, Santa Fé. |
| Col. Max Frost, editor New Mexican. | *Hon. E. S. Stover, Albuquerque. |
| Hon. Nicholas Galles, Hillsboro. | *A. Staab, Santa Fé. |
| *C. H. Gildersleeve, Santa Fé. | L. C. Tetard, Las Vegas. |
| *S. L. Hauck, San Pedro. | *Hon. L. S. Trimble, ex-Member of Con-
gress, Albuquerque. |
| *Hon. W. C. Hazledine, general solicitor
Atlantic and Pacific Railroad. | *Geo. H. Utter, Silver City, |
| *W. H. Kennedy, Cerrillos. | Hon. J. W. D. Veeder, Las Vegas. |
| J. K. Livingstone, general agent N. M.
T. Co. | *John P. Victory, Santa Fé. |
| *J. C. Lea, Roswell. | Hon. W. A. Vincent, ex-chief justice. |
| H. Lindheim, Santa Fé. | Hon. Henry L. Waldo, ex-chief justice. |
| Maj. W. H. H. Llewellyn, Las Cruces. | J. A. Whitmore, editor San Marcial
Reporter. |
| Jas. A. Lockhart, Deming. | *General J. A. Williamson, president
Atlantic and Pacific Railroad. |
| Ferdinand Lowenthal, Albuquerque. | *W. C. Wrigley, district attorney, Ra-
ton. |
| Hon. F. A. Manzonares, ex-Member of
Congress, Las Vegas. | |

The delegation organized by the election of Governor Prince as chairman, and Ira M. Bond and George H. Cross as secretaries, secured regular headquarters at 1112 H street, and proceeded systematically to the discharge of its duties. The following members were added to the delegation by resolution while in Washington: General J. B. Bowman, Col. Thomas Smith, Levi A. Hughes, and George F. Patrick.

The delegates called on the President, every member of the Cabinet, the Assistant Secretary of the Treasury, the Commissioner and Deputy Commissioner of the Land Office, and the Mexican minister; and had specially satisfactory interviews in relation to land-grant titles with the President, Secretary Noble, and Secretary Blaine. They also were accorded hearings by the Senate Committees on Territories, Private Land Claims, and Public Lands, and by the House Committees on Territories, Education, Private Land Claims, and Irrigation. Everywhere the suggestions of the delegation were well received; and it certainly accomplished much good in disseminating correct information as to the condition and wants of New Mexico, and in promoting needful legislation.

STATEHOOD.

In my report of 1889 I alluded to the feeling of disappointment and almost of indignation experienced in New Mexico when four other Territories, several of which were her juniors in age and inferior in other respects, were admitted into the Union in the spring of that year, and she was not included in the number. That feeling has naturally been heightened by the action of the present Congress in admitting in advance of New Mexico two other Territories, each greatly our inferior in population, in wealth, in resources, in productions, in the substantial character of its people, and in nearly every feature necessary to the building up of a prosperous and successful statehood. The injustice of the action is too obvious to require characterization. Meanwhile the people of the Territory have been proceeding in a dignified manner to perfect every preliminary that could possibly be required as a requisite to admission, and to prepare themselves to take a position in the Union corresponding with their history, their character, and their real importance, whenever the time shall arrive, leaving to Congress the responsibility of their deprivation of the rights of self-government.

The constitutional convention provided for by the last legislature met on September 3, 1889, and continued in session until the 21st. It was composed of men of the highest character and ability who patiently devoted their time and talents to the great work intrusted to them without any compensation whatever. The result was worthy of such a body, and reflected honor on the Territory at large, the constitution prepared being without doubt the best one yet formulated in the United States. Wherever it has been read it has elicited the highest praise from all competent authorities. Copies of it were laid before the houses of Congress, and several bills introduced for the admission of the new State, but as yet no definite action has been taken. Meanwhile the convention reconvened on August 18, 1890, continued in session three days, perfected a few sections to which amendments had been suggested during the year, and provided for the submission of the constitution to a vote of the people on October 7, 1890.

POPULATION.

The census taken during the present year has been concluded so far as population is concerned, with the exception of the enumeration of

the Navajo and Apache Indians. The reported result is inserted herein by counties and census districts, and it shows a total population of—

The estimate made by the bureau of immigration in 1889 was 204,090; that of the United States Treasury expert, for 1888, was 183,210, and that which I reported a year ago was 195,500. These estimates were based on the voting population as shown by elections and registrations, and judging by them, the most conservative computation will make the population over 185,000. The total vote at the election of 1880 was 20,397, and the population was then 119,565. In 1888 the vote was 30,510, almost precisely 50 per cent. more than in 1880. Adding the same percentage to the population will show that it amounted to 179,347 in 1888.

The number of votes at successive elections has increased with great regularity. They are as follows:

1874.....	15,781	1882.....	*24,728
1876.....	17,009	1884.....	27,086
1878.....	18,797	1886.....	28,589
1880.....	20,397	1888.....	30,510

The total registered vote in 1888 was 42,871. Of course the ratio of population to voters is less here than in the East, on account of the number of miners and others without families, but on the other hand, it must be remembered that families of Mexican parentage contain on the average more children than ordinary American families, so that the difference in the ratio, when the whole population is considered, is not as great as it might appear at first sight. At all events, no one will consider that four to one is too high a proportion, and that will give a population among those entitled to vote of 171,484, and adding thereto 8,278 Pueblo Indians brings it up to 179,762, almost exactly the number found by the other method as the population in 1888.

From the best sources of information, therefore, I believe that the population of New Mexico, exclusive of tribal Indians, is certainly not less than 180,000 and probably 185,000.

The question naturally arises as to the large discrepancy between these figures and those returned by the census officials. The answer is threefold.

Firstly. In a sparsely settled country like this, where a considerable fraction of the population live at isolated ranches or mining locations, there are always very many who are not enumerated. Few enumerators will travel even two or three miles to enroll a single family, and not unfrequently the homesteads or mines are much more distant than that from other settlements. Lincoln County contains over 26,500 square miles, and exceeds in area the four New England States of New Hampshire, Rhode Island, Connecticut, and Massachusetts, with New Jersey and Delaware added; and this vast extent of country was divided among only eight enumerators. Socorro County, nearly as large, likewise constituted but eight districts.

Second. The peculiar condition of New Mexico as to nationality and language: some communities speaking English and some Spanish, and some being divided in language, presents an unusual difficulty. An English-speaking enumerator would naturally fail to enumerate many of the "Mexican" inhabitants, and a Spanish speaking one many of the "Americans."

Third. It can not be denied that in a considerable number of districts the enumerators were careless and did not seem to appreciate the im-

* Partly estimated on account of votes disallowed by Congress.

portance of obtaining a full record, if that required much trouble. It is difficult in many places in a Territory such as ours to find competent men who are willing to undertake a work which lasts only a month and is not well paid, so that a number who proved inefficient were necessarily appointed for lack of other applicants.

The result was seen in returns manifestly imperfect in many respects, and in an enumeration far from complete. Ordinarily this could not be detected, as there was nothing with which to compare the numbers reported from the different districts. But one instance in which the mistake was obvious will illustrate this carelessness and its results. The enumeration of one of the Pueblo Indian towns was confided to a citizen of the neighborhood, who had held a number of offices and was believed to be thoroughly competent. He returned the number of inhabitants at less than six hundred. If this had been an ordinary district the deficiency would have been unnoticed, and the report accepted as correct, but being a Pueblo town, there was a recent count made by the Indian Agency with which to compare it, and as that showed over nine hundred inhabitants, there was an obvious mistake, and a new enumeration was ordered. This discrepancy in a comparatively compact district shows how largely the population may be understated, and is another proof of the fallacy of the proverb that "figures will not lie."

We may safely say that the population of New Mexico which should appear by the census is not less than 180,000. This does not include the Apache and Navajo Indians. Of the former there are 462 at the Mescalero Agency, and 721 at the Jicarilla Agency, making 1,183 in all. The Navajos are estimated to number 15,000 to 20,000, but as the reservation is partly in New Mexico and partly in Arizona it is impossible to say with accuracy how many are in either Territory. As nearly as can be approximated there are 11,000 of the Navajos in New Mexico, which with the 1,183 Apaches makes 12,183 in all of tribal Indians.

The population by counties, according to the census, is as follows for 1880 and 1890 (exclusive of tribal Indians):

County.	1880.	1890.	County.	1880.	1890.
Bernalillo	17, 225	20, 388	San Miguel.....	20, 638	24, 167
Cofax	3, 398	7, 961	Santa Fé.....	10, 867	13, 392
Doña Ana.....	7, 612	9, 157	Sierra		3, 635
Grant	4, 539	9, 659	Socorro.....	7, 785	9, 575
Lincoln	2, 513	7, 003	Taos	11, 029	9, 863
Mora	9, 751	10, 552	Valencia.....	13, 095	14, 332
Rio Arriba.....	11, 023	11, 502			
San Juan.....		1, 890	Total	119, 475	153, 076

The United States troops included in the above figures are:

Grant County, Fort Bayard	509
Lincoln County, Fort Stanton	191
Mora County, Fort Union	175
Santa Fé, Fort Marcy	106
Valencia County, Fort Wingate.....	480

The Pueblo Indians are as follows:

Bernalillo County, Cochiti, Santo Domingo, San Felipe, Sandia, Santa Ana, Zia, Jemez, and Isleta	3, 478
Rio Arriba County, San Juan.....	406
Santa Fé County, Tesuque, Pojuaque, Nambé, San Ildefonso, and Santa Clara.....	563
Taos County, Taos and Picuris	509
Valencia County, Laguna, Acoma, and Zúñi	3, 322

The population of the principal towns, so far as they can be separated from surrounding precincts, is as follows :

Santa Fé.....	6,038
Albuquerque (new town).....	3,794
Albuquerque (old), Griegos and Candelarias	2,265
East Las Vegas	2,310
Las Vegas (North and South).....	2,383
Las Cruces.....	2,518
Silver City	2,279
Socorro and San Antonio	2,591
Raton and Buena Vista.....	2,106
Fernandez de Taos.....	1,712
Mesilla and Bosque Seco	1,642
Gallup	1,204
Deming	1,181
Pinos Altos	1,013

The following table contains the census returns from each county by census districts.

BERNALILLO COUNTY.

Census district.	Town.	Precinct.	Population.
1.....	Peña Blanca	17	1,051
	Jemez	18	
	Wallace	24	
	Hot Springs.....	29	
2.....	Nacimiento.....	20	2,254
	La Ventana	21	
	Casa Salazar	15	
	Gnadalupe	25	
3.....	San Ignacio	14	1,579
	Algodones	19	
	Bernalillo	1	
4.....	Las Placitas	16	1,622
	Alameda	3	
	Corrales.....	2	
5.....	Ranchos de Albuquerque	4	2,265
	Los Griegos	8	
	Las Candelarias	22	
6.....	Albuquerque (old town)	13	3,794
	Albuquerque (new town)	12	
7.....	do.....	26	
8.....	Barelas	5	2,191
	Ranches de Atrisco	9	
	Atrisco.....	28	
	Los Padillas.....	6	
9.....	Pajarito	11	1,204
	Gallup	27	
10.....	Gallup	30	950
	San Pedro	23	
	San Antonio	7	
	Chilili	10	
	Pueblos of Cochiti, Santo Domingo, San Felipe, Sandia, Isleta, Santa Ana Zia, and Jemez.....		3,478
	Total.....		20,388

COLFAX COUNTY.

11.....	Pena Flor.....	10	1,127
	Poñil Park.....	11	
	Ute Creek	2	
	Elizabethtown	1	
12.....	Black Lake	22	1,049
	Elkins	5	
	Poñil	17	
13.....	Cimarron	3	1,396
	Springer	12	
	Rayada	4	
	Martinez	15	
14.....	Colmar.....	19	1,566
	Blossburg.....	16	
	Cimilorio.....	13	
	Dorsey.....	18	
	Chico Springs.....	9	

GOLFAX COUNTY—Continued.

Census district.	Town.	Pre-cinct.	Popula-tion.
15.....	Raton	6	} 2,106
	Buena Vista	20	
	Folsom	7	
16.....	Dry Cimarron.....	8	} 717
	Clayton	14	
	Carrizo	23	
	Gladstone.....	21	
	Total		7,961

DOÑA AÑA COUNTY.

17.....	Three Rivers	9	} 945
	Tularosa	10	
	Mescalero	23	
18.....	Hilton	17	} 511
	La Luz	14	
19.....	Doña Aña	2	} 2,063
	Rincon	19	
	Colorado	16	
20.....	Las Cruces.....	20	} 2,518
	Las Cruces.....	3	
21.....	Mesilla.....	4	} 1,642
	Mesilla.....	5	
	Basque Seco	6	
22.....	San Miguel	15	} 1,478
	La Mesa	8	
	Chamberino	11	
	La Union	7	
	Linden.....	18	
	Total		9,157

GRANT COUNTY

23.....	Deming	11	} 1,181
	Hachita	10	
24.....	Shakespeare.....	9	} 590
	Lordsburg	20	
	Gold Hill	16	
	Oak Grove	22	
24.....	Malone	14	} 515
	Lower Gila	8	
	Carlisle	19	
26.....	Black Hawk	18	} 594
	Fleming	17	
	Upper Gila	7	
	Pino Cienega	21	
27.....	Pinos Altos	2	1,013
28.....	Silver City	3	2,252
29.....	Central	1	} 476
	Santa Rita	13	
30.....	Mimbres Mill	12	} 1,800
	Georgetown	6	
	San Lorenzo	5	
31.....	San Juan	23	} 693
	Lower Mimbres	4	
	Cook's Peak	15	
	Fort Bayard		
	County jail, Silver City		27
	Total		9,650

LINCOLN COUNTY.

32.....	Lookout	14	} 1,474
	Seven Rivers	5	
	Eddy	18	
33.....	Lower Penasco	15	} 608
	Upper Penasco	9	
	Weed	16	
34.....	Ruidoso	3	} 998
	Picacho	4	
	San Patricio	2	

LINCOLN COUNTY—Continued.

Census district.	Town.	Pre-cinct.	Population.
35.....	Lincoln	1	1,080
	Las Tablas	6	
36.....	Bonito	12	777
	Nogal	11	
37.....	White Oaks.....	8	744
	Red Cloud	13	
38.....	Roswell	7	950
	South Spring River.....	19	
39.....	Upper Pecos	17	181
	Fort Stanton .....			191
	Total		7,003

MORA COUNTY.

40.....	Agua Negra	9	1,522
	San Antonio	2	
41.....	Agua Negra (El Rito)	16	871
	Cebolla (Abuela)	19	
42.....	San José	6	2,060
	Cebolla (El Oro)	23	
43.....	Mora (Cordillera)	21	1,462
	Mora	1	
44.....	Alto (Chapadero)	26	2,060
	Coyote (Turquillo)	22	
45.....	Lucero	10	1,462
	Guadalupe	3	
46.....	Coyote (El Llano)	15	1,462
	La Cueva	5	
47.....	Golondrinas	7	1,462
	Cebolla (Carmen)	20	
48.....	Gascon	29	1,203
	Tiptonville	11	
49.....	Watrons	24	1,203
	Loma Parda	13	
50.....	Cirucla	25	1,760
	Ocate (Naranjas)	27	
51.....	Ocate	8	1,760
	Wagon Mound	12	
52.....	Cherry Valley	4	1,399
	Armenta	14	
53.....	Tequesquite	17	1,399
	Tramperas	18	
54.....	Arroyo de las Yutas	28	175
	Fort Union .....			175
	Total		10,552

RIO ARRIBA COUNTY.

47.....	Tierra Amarilla	17	1,173
	Los Ojos	18	
47a.....	Chama	19	975
	Amargo	21	
48.....	Arboles	22	1,848
	Los Pinos	13	
49.....	Chama (upper)	7	1,848
	Chamita	8	
50.....	Ojo Caliente	9	1,923
	Canjilón	16	
51.....	El Rito	10	1,923
	Petaca	13	
52.....	Vallecitos	14	1,842
	Rio de Chama	3	
53.....	Atiquiu	11	1,842
	Coyote	12	
54.....	Rito Faustin	23	1,867
	Gallinas	24	
55.....	Embudo	1	1,867
	Rio Arriba	2	
56.....	Chimayó	4	1,468
	Truchas	5	
57.....	Quemado	6	406
	Ojo Zarco	25	
	Pueblo of San Juan		406
	Total		11,502

SAN JUAN COUNTY.

Census district.	Town.	Precinct.	Population.
53.....	Pine River.....	1	775
	Aztec.....	2	
	La Plata.....	3	
	Olio.....	4	
54.....	Farmington.....	5	1,115
	Bloomfield.....	6	
	Largo.....	7	
	Total.....			1,890

SAN MIGUEL COUNTY.

55.....	East Las Vegas.....	29	2,310
56.....	South Las Vegas.....	5	2,383
	North Las Vegas.....	26	
	Las Salinas.....	35	
57.....	Hot Springs.....	47	1,395
	Los Vigiles.....	33	
	Upper Las Vegas.....	9	
	Rowe.....	12	
58.....	San José.....	23	1,954
	Pecos.....	8	
	Las Mulas.....	34	
	Las Colonias.....	54	
	San Miguel.....	1	
59.....	El Pueblo.....	32	1,950
	Puertecito.....	31	
	La Cuesta.....	2	
	Bernal.....	40	
60.....	El Cerrito.....	37	973
	San Lorenzo.....	18	
	Las Alameditas.....	52	
	Cañon Largo.....	57	
	Sabinosa.....	22	
	Ute Creek.....	50	
61.....	Ute Creek.....	60	1,406
	Liberty.....	41	
	Endee.....	59	
	San Geronimo.....	17	
62.....	Tecolote.....	4	2,240
	Ojitos Frios.....	44	
	Agua Sarea.....	56	
	Romeroville.....	58	
	Anton Chico.....	3	
63.....	Anton Chico.....	29	1,441
	Plaza del Llano.....	48	
	Rado de Juan Palz.....	46	
64.....	Cabra Springs.....	28	793
	Cañada de Aguilar.....	45	
	Trementina.....	55	
65.....	El Emplazado.....	61	1,478
	Los Alamos.....	7	
	Joya Larga.....	20	
	Sapelló.....	14	
	Manuelitas.....	15	
	Piña Blanca.....	36	
66.....	Rincon.....	13	1,370
	Peñasco Blanco.....	25	
	Cañon de Mannelitas.....	51	
	Despensas.....	30	
67.....	Puerto de Luna.....	42	1,680
	Puerto de Luna.....	17	
	Alamo Gordo.....	53	
	Fort Sumner.....	23	
68.....	La Liendre.....	24	1,704
	Concepcion.....	6	
	Chaperito.....	10	
	Las Torres.....	38	
	Los Fuertes.....	43	
69.....	Los Esteritos.....	49	1,090
	La Junta.....	16	
	Las Colonias.....	19	
	Santa Rosa.....	21	
Total.....			24,167

SANTA FÉ COUNTY.

Census district.	Town.	Pre-cinct.	Popula-tion.
70.....	Chimayó	14	2,185
	Santa Cruz.....	15	
	Española.....	16	
	Pojuaque.....	1	
71.....	Tesuque.....	2	5,856
	Santa Fé.....	3	
72.....	do.....	4	1,305
	Agua Fria.....	5	
78.....	Cienega.....	6	830
	La Bajada.....	18	
	San Ildefonso.....	9	
74.....	Cerrillos.....	7	1,208
	Dolores.....	10	
75.....	Golden.....	11	1,263
	Chillí.....	17	
76.....	Galisteo.....	8	563
	Cañoncito.....	12	
	Glorieta.....	13	
	Pueblos of Tesuque, Pojuaque, Nambé, San Ildefonso, and Santa Clara.....		106
	Fort Marcy, Santa Fé.....		66
	Presbyterian mission school, Santa Fé.....		10
	Deaf and dumb school, Santa Fé.....		10
	Total.....		13,392

SIERRA COUNTY.

77.....	Palomas.....	4	1187
	Engle.....	12	
	Cuchillo Negra.....	5	
	Montecillo.....	8	
78.....	San José.....	7	986
	Lake Valley.....	1	
	Hillsborough.....	2	
79.....	Templar.....	4	928
	Kingston.....	3	
	Tierra Blanca.....	13	
	Hermosa.....	9	
80.....	Chloride.....	11	534
	Fairview.....	10	
	Grafton.....	6	
	Total.....		3635

SOCORRO COUNTY.

81.....	Las Nutrias.....	16	834
	La Vegueta.....	39	
	Ranchos La Joya.....	36	
	La Joya.....	5	
82.....	Buquecito.....	40	1162
	Carthage.....	41	
	San Pedro.....	25	
	Valverde.....	15	
	Paraje.....	9	
83.....	Sabinal.....	4	1759
	San Acacia.....	28	
	Polvadero.....	3	
	Limitar.....	2	
	Escondido.....	30	
84.....	Socorro.....	1	2591
	New Socorro.....	24	
	Luis Lopez.....	21	
	San Antonio.....	7	
85.....	Magdalena.....	12	1018
	Kelly.....	11	
	Smelter.....	33	
	Old San Marcial.....	40	
86.....	New San Marcial.....	13	727
	Santa Recio.....	23	
	Cherryville.....	38	
	Santa Rita.....	31	
87.....	Mangas.....	32	612
	Luna Valley.....	37	
	Tularosa.....	22	
88.....	San Francisco.....	17	872
	Frisco.....	34	
	Negrita.....	42	
	Cooney.....	10	
	Total.....		9575

TAOS COUNTY.

Census district.	Town.	Pre-cinct.	Popula-tion.
89.....	Fernandez de Taos.....	1	1,712
	Placita.....	4	
	Cordovas.....	2	
90.....	jo Caliente.....	14	1,203
	Tres Piedras.....	15	
	Arroyo Seco.....	5	
91.....	Arroyo Hondo.....	6	1,991
	Rio Colorado.....	7	
	Cerro.....	11	
92.....	Castilla (upper).....	12	1,226
	Castilla (lower).....	13	
	Las Ranches.....	3	
93.....	Penasco.....	10	1,805
	El Llano.....	8	
94.....	Chamizal.....	9	1,417
	Pueblos of Taos and Picuris.....		
	Total.....			509
			9,863

VALENCIA COUNTY.

95.....	Tajique.....	14	2,102
	Torreón.....	18	
	Mauzano.....	15	
	Punta de Agua.....	21	
	Cienega.....	16	
96.....	El Pino.....	26	2,730
	Peñalta.....	10	
	Valencia.....	11	
	Tomé.....	12	
	El Cerro.....	22	
97.....	Casa Colorado.....	13	1,140
	Los Lentos.....	9	
	Los Lunas.....	1	
	Los Chares.....	27	
	Belen.....	2	
98.....	Jarales.....	3	1,787
	El Bosque.....	28	
	Los Cerros.....	4	
	El Rito.....	19	
	Cubero.....	5	
99.....	Ceballeta.....	6	1,376
	Juan Tafoya.....	7	
	San José.....	20	
100.....	San Mateo.....	8	1,305
	San Rafael.....	17	
	Ramah.....	25	
	Coolidge.....	23	
	Pueblos of Laguna, Acoma, and Zuni.....		
Fort Wingate.....			480
Total.....			14,332

INSTITUTIONS AND FORTS.

Grant County Jail, Silver City.....	27
Deaf and Dumb School, Santa Fé.....	10
Presby Mission School, Santa Fé.....	66
Fort Wingate.....	480
Fort Union.....	175
Fort Marcy.....	106
Fort Stanton.....	191
Fort Bayard.....	509

INDIANS.

Tribe.	Population.	Tribe.	Population.
Taos.....	409	San Felipe.....	554
Picuries.....	100	Santa Ana.....	253
San Juan.....	406	Zia.....	106
Santa Clara.....	225	Sandia.....	140
San Ildefonso.....	148	Isleta.....	1,059
Pojuaque.....	20	Laguna.....	1,143
Nambe.....	79	Acoma.....	566
Tesuque.....	91	Zuni.....	1,613
Cochiti.....	263		
Jemez.....	428	Total.....	8,278
Santo Domingo.....	670		

THE PUBLIC LANDS.

THE LAND OFFICES.

During the year the two new land offices established by act of Congress, one at Folsom and one at Roswell, have been opened and commenced active operations. This is a great convenience to settlers in the eastern portions of the Territory.

During the year ending June 30, 1890, the entries at the several offices were as follows, it being understood that those at Folsom and Roswell do not represent an entire year:

	Santa Fé.		Las Cruces.		Folsom.		Roswell.	
	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.
Homestead entries.....	174	25,274.27	106	16,393.56	87	13,731.46	56	8,320.00
Pre-emption filings.....	188	26,320.00	190	.....	99	15,840.00	162	23,900.00
Timber-culture entries.....	33	4,785.06	52	7,479.46	34	5,223.84	263	42,014.00
Desert-land entries.....	20	2,969.86	49	.....	6	610.19	111	55,677.79
Coal entries.....	49	7,600.00	3	.....	.....	.....	5	120.00
Mineral entries.....	8	154.52	73	1,285.90	.....	.....	4	60.00
Locations on M. W. Certificates.....	.....	.....	1	160.00	.....	.....	.....	.....
Total.....	472	67,103.71	474	.....	226	35,435.49	601	130,121.79

Making the aggregate for the entire territory as follows:

	Number.	Acres.
Homestead entries.....	423	63,719.29
Pre-emption filings.....	639	.....
Timber-culture entries.....	382	59,532.36
Desert-land entries.....	186	.....
Coal-land entries.....	57	.....
Mineral entries.....	85	1,500.42
Locations on M. W. certificates.....	1	160.00
Total.....	1773	.....

Final action was taken in the following cases:

	Santa Fé.		Las Cruces.		Folsom.		Roswell.	
	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.
Homestead cases.....	72	10,040.99	65	8,636.32	9	1,440.00	17	1,775
Pre-emption cases.....	86	9,025.67	82	9,123.03	60	7,542.97	64	6,987
Timber culture.....	.....	.....	.....	.....	.....	.....	2	320
Desert land.....	2	320.00	23	6,439.71	.....	.....	12	4,230
Coal land.....	2	80.00	.....	.....	.....	.....	.....	.....
Total.....	162	19,466.66	170	24,199.06	69	8,982.97	95	13,312

The aggregate being as follows:

	Number.	Acres.
Homestead cases.....	163	21, 892. 31
Pre-emption filings.....	292	32, 678. 67
Timber culture cases.....	2	320. 00
Desert land cases.....	37	10, 909. 71
Coal land cases.....	2	80. 00
Total.....	496	65, 960. 69

The amount of Government land still unentered in the Santa Fé land office district, this being exclusive of grants, military reservations, and Indian reservations, is as follows:

Surveyed.....	Acres. 10, 923, 189
Unsurveyed.....	3, 755, 520
Total.....	14, 683, 709

In the Las Cruces district the amount is as follows:

Surveyed.....	Acres. 13, 469, 440
Unsurveyed.....	5, 444, 480
Total.....	18, 913, 920

THE PUBLIC SURVEYS.

At the surveyor-general's office the work has been necessarily limited by the insufficiency of the appropriation.

During the fiscal year surveys were approved which in the aggregate amounted to 813 miles, 40 chains, and 63 links, and during the same period work amounting to 585 miles, 1 chain, and 46 links was executed.

All of the work of the year was done on Government land, except 4 miles of surveying. This was on the grant called "La Salina," which was confirmed to the heirs of Henry Volcker by Congress, October 1, 1888 (chapter 1068, Fiftieth Congress, first session). This was not a Spanish or Mexican grant, but a location under a certificate of the Republic of Texas, dated January 5, 1846.

But one petition for the approval of a claim under the act of 1854 was filed during the year, that one being by the Pueblo Indians of Isleta, who claim certain lands outside of the boundaries of their own grant by virtue of a purchase alleged to have been made by them in 1750.

No better evidence could be produced of the desuetude into which the old system of perfecting land titles has fallen, than this fact, that but one claim has been presented within the year.

The number of claims filed to date is two hundred and thirteen, and the number of those reported to Congress is one hundred and sixty-two; in each case exclusive of Pueblo grants. One matter in connection with the settlement of the public domain deserves early attention as its present condition is very detrimental to the Territory. I refer to the survey of townships made fractional by the lines of unconfirmed grants. Much of the best land in New Mexico is immediately adjacent to these grants. Settlements have been made upon it, and the settlers are anxious to make their entries and obtain title under the United

States laws. But by a ruling of the General Land Office no surveys are allowed to be made of townships thus situated. The consequences are unfortunate not only to the settler who can obtain no title, but to the country at large, which is deprived of the cultivation and improvement that would otherwise be made. The existence of large land grants is universally conceded to be a misfortune to the Territory, but that the adjoining land also should be tied up on their account, seems a hardship which should not be imposed. The surveyor-general has earnestly recommended that the prohibition of such surveys should be removed, and I hope that this request may be granted, at least in cases where actual settlers are asking to make entries.

NATIONAL PARK.

The surveyor-general has recommended that a tract on the Upper Pecos, embracing townships 17, 18, 19, and 20 north, of ranges 11, 12, and 13 east, shall be withdrawn from entry in order to be set apart as a national park. Numerous signed petitions have been sent to Congress asking the necessary legislation to obtain this end, and the people of New Mexico are practically a unit in desiring it. The tract described is admirably adapted to the purpose. It is principally composed of mountains intersected by cañons, with the Pecos running southerly through the center. The scenery is magnificent, the climate admirable, the hunting and fishing exceptionally good, and, if looked at from a more practical point of view, the preservation of the timber is essential to the successful irrigation of the fertile lands of the Pecos Valley. I heartily concur in the hope that these townships may be speedily withdrawn from entry, that no damage may be done or new private rights intervene before Congressional action can be had.

TAXABLE PROPERTY.

The total assessed valuation of the property in the Territory in 1887 was \$45,462,459; in 1888 it was \$45,690,723, and in 1889, \$46,041,010.

The assessment for counties for 1889 was as follows:

Bernalillo.....	\$6,169,653.47
Colfax.....	4,454,557.88
Doña Ana.....	3,698,038.18
Grant.....	5,012,750.00
Lincoln.....	3,774,585.00
Mora.....	2,422,312.73
Rio Arriba.....	1,194,780.00
San Juan.....	665,228.79
San Miguel.....	7,680,202.75
Santa Fé.....	3,235,600.00
Sierra.....	2,119,772.68
Socorro.....	3,650,856.08
Taos.....	921,500.00
Valencia.....	1,041,173.25
Total.....	46,041,010.81

The Territorial indebtedness is as follows:

Outstanding warrants.....	\$150,960.94
Capitol building bonds.....	200,000.00
Penitentiary building bonds.....	120,000.00
Capitol contingent bonds.....	50,000.00
Current expense bonds.....	150,000.00
Provisional indebtedness bonds.....	200,000.00
Total.....	870,960.94

The financial condition of New Mexico is remarkably good, owing in large measure to the financial act passed by the last legislature.

The expenses of the Territory during the fortieth fiscal year ending March 3, 1890, were \$149,430.39. The estimated expenses of the present year are \$160,000. The auditor reports that there will be a surplus of over \$40,000 in the treasury at the end of this fiscal year; and this, under the law, will be applied to the liquidation of outstanding warrants. During the past year \$30,000 of penitentiary bonds were redeemed and canceled; \$20,000 in July, 1889, and \$10,000 about six months thereafter. They were bought after ample advertisement in New York, San Francisco, and other cities, but as they bore 7 per cent. interest, had a number of years to run, and were held by very few parties, the Territory could not obtain them at a lower rate than 117. While this was an unpleasantly high price to pay, yet it speaks well for the general credit of New Mexico.

RAILROADS.

Of actual railroad building within New Mexico, there has been very little during the past year. In fact the only piece of road actually constructed is in Colfax County, and designed to connect Trinidad with the extensive lumber region of the Maxwell Grant. It is being constructed by the Denver, Texas and Ft. Worth Railroad, and is a continuation of the road built in 1888 from Trinidad to Martinsen, a distance of 14 miles. The mileage in New Mexico now contracted for, and to be completed before November 1, is about 30 miles.

The road in process of construction southerly from Deming has not progressed since my last report. About 25 miles are graded, but it is awaiting action looking to its extension to the Pacific coast before being put in order for travel.

The most important railroad enterprise of the year is the Pecos Valley Railroad, which starts at Pecos City, in Texas, on the Texas Pacific Railroad, 215 miles east from El Paso, and proceeds thence up the valley of the Pecos River through Eddy and Chavez Counties to Eddy and Roswell. This will be the means of bringing a large population and great prosperity to the Pecos Valley, where the great irrigating enterprises make an enormous production possible as soon as it can find an outlet. This railroad is being very rapidly constructed northward from Pecos City, and is expected to reach Eddy during the year, but as no part of it is as yet built within the borders of New Mexico, it does not add to our present railroad mileage.

The present railway lines in the Territory are the Atchison, Topeka and Santa Fé, the Atlantic and Pacific, the Southern Pacific, the Denver and Rio Grande, the Denver, Texas and Ft. Worth, the Santa Fé Southern, and the Arizona and New Mexico.

The mileage is as follows :

Atchison, Topeka and Santa Fé:	
Main line, north and south (1879-'81).....	503.1
Lamy to Santa Fé (1880).....	18.
Rincon to Deming (1881).....	53.
Dillon to Blossburg (1881).....	5.9
Nutt to Lake Valley (1884).....	13.3
Socorro to Magdalena (1884).....	27.1
Magdalena to Kelly (1885).....	3.9
San Antonio to Carthage (1882).....	9.6
Las Vegas to Hot Springs (1882).....	6.4
Hot Springs westward (1887).....	1.9
Silver City Branch.....	48.

Atlantic and Pacific:			
Main line (1881).....	166.60		
Sidings (188-).....	22.25		
San José Quarry spur (1888).....	3.41		
			192.26
Southern Pacific:			
Rio Grande to Deming (1881).....	73.46		
Deming to Arizona line (1880).....	93.76		
			167.22
Denver and Rio Grande:			
Colorado line to Española (1880).....	85.86		
Between Antonito and Durango (1880).....	69.03		
Tres Piedras lumber branch (1888).....	2.15		
Chama lumber branch (1888).....	3.16		
			160.47
Denver, Texas and Fort Worth, in New Mexico.....	83.30		
Santa Fé Southern, Española to Santa Fé.....	39.00		
Arizona and New Mexico, Lordsburg to Arizona line, about.....	32.00		
Total.....			1,364.45

The business of all the railroads in the Territory makes a gratifying exhibit.

The following statement shows the amount of freight of each class in pounds forwarded during 1889 from the stations of the Southern Pacific Railroad:

	Lordsburg.	Deming.	El Paso.	Other stations.	Total.
Base metal.....	63,145				63,145
Copper.....	11,816,740	218,550			12,035,290
Ores.....	3,050,300	42,230		5,790,430	8,882,960
Concentrations.....	1,627,950				1,627,950
Flour, etc.....		274,850	217,610		492,460
Stone.....				143,350	143,350
Corn.....		553,850	181,110		734,960
Oats.....		433,750	87,045		520,795
Hay.....		20,000	40,000	320,000	380,000
Green fruit.....		41,800			41,800
Ice.....		736,920	260,340		997,260
Cattle and calves.....	2,198,400	742,400	480,000		3,400,800
Horses and mules.....		62,600	140,000		202,600
Sheep and hogs.....	20,000		60,000		80,000
Hides.....	34,090	20,925			55,015
Wool.....	33,040	11,515		3,730	48,285
Vegetables.....		198,500	89,000		287,500
Provisions.....		3,136,560	2,883,395		6,019,955
Manufactured articles.....		2,156,725	1,982,035		4,138,760
Brick.....				1,462,950	1,462,950
Coal.....		11,892,945	2,787,255		14,680,200
Coke.....		935,100	59,443,535		60,378,635
Oils.....		2,727,100	95,700		2,822,800
Machinery.....		1,062,160	618,450		1,680,610
Railroad material.....		5,596,575	300,550		5,897,125
Lumber, etc.....		655,110	4,129,170	300,000	5,084,280
Other merchandise.....	573,830	10,561,785	9,024,310	205,155	20,365,380
Total.....	19,417,495	42,081,950	82,799,505	8,225,615	152,524,565

The following is a statement, in tons, of the goods shipped during the year 1889 from the various stations of the Atlantic and Pacific railroad, also of the amount of goods received from outside of the Territory :

	Shipped.	Received from outside.		Shipped.	Received from outside.
Grain	205.65	90.33	Livestock.....	1,080.51	153.75
Hay and straw.....	272.63	241.45	Lumber.....	1,937.59	2,216.50
Fruit, etc.....	113.07	677.38	Furniture, etc.....	81.35	35.60
Coal.....	60,344.65		Ice.....	150.17	
Cement, stone, etc.....	1,190.68	.63	Wool.....	687.33	143.08
Flour, etc.....	237.29	378.92	Hides, etc.....	179.49	74.28
Meats.....	70.86		Hardware.....	96.65	4.29
Wines and liquors.....	194.98	82.13	Railroad material.....	2,771.30	46.70
Manufactured.....	79.09	5.04	General merchandise...	1,587.00	1,331.93

The amount of certain staple articles brought into New Mexico during the year ending June 30, 1890, over the Atchison, Topeka and Santa Fé Railroad, is as follows :

	Tons.
Flour.....	8,897
Meal.....	143
Wheat.....	409
Corn.....	7,945
Oats.....	3,487
Hay.....	7,904
Fruit.....	204
Vegetables.....	1,491
Canned goods.....	338
Total.....	30,818

CLIMATE AND RAIN-FALL.

As remarked last year, the climate of New Mexico is no doubt the most delightful and healthy in the country. Much has been written on this subject by physicians and others, so that it is not necessary to recapitulate the facts.

The only Signal Office station in the Territory is at Santa Fé. The report of temperature and precipitation of moisture at that station during the past year is as follows :

Month.	Temperature.				Month.	Temperature.			
	Max.	Min.	Mean.	Precipitation.		Max.	Min.	Mean.	Precipitation.
1889.					1890.				
August.....	88	54	70.9	1.43	January.....	58	2	32.2	.42
September.....	83	29	61.	.67	February.....	67	6	36.6	.88
October.....	78	28	52.1	.37	March.....	62	9	42.	.69
November.....	60	13	35.2	.45	April.....	67	17	47.8	2.08
December.....	59	10	39.3	.26	May.....	80	37	59.2	trace
					June.....	86	36	64.7	.13
					July.....	90	48	69.8	2.46

The total precipitation during 1889 was 7.89 inches, being 2 inches more than the average. The month of May of this year was the driest since observations were commenced in 1872, but April was exceptionally wet.

IRRIGATION.

The great importance of this subject to New Mexico has been so fully considered in previous reports that it is unnecessary to dwell upon it now. No subject has been more prominently brought before the people of the United States for the last few years than this general one of irrigation, as affecting the whole country. And this is both natural and proper.

The first settlements in the United States were on the sea-board. The advance into the interior was slow. Gradually population moved up the great rivers—the Connecticut, the Hudson, the Susquehanna, the Potomac, the James, the Savannah—but it was more than a century and a half before the tide of immigration crossed the Alleghanies and began to fill up the valley of the Ohio and its tributaries. Then there was the great Mississippi basin to be occupied, extending from Minnesota to the Gulf, and this, though marvelously rapid, has been the work of years. During all this time the public improvements demanding attention were the enlargement and deepening of harbors, the building of canals, which were practical continuations of the Atlantic rivers, the construction of railroads and the improvement of internal navigation. The land everywhere was fertile and well watered by rain-fall, so that the problem was not how to make it productive but how to convey its produce to a market. But now the conditions have changed. The great proportion of the public domain thus fitted for immediate cultivation has been taken up and occupied. The tide of population has reached the line of the old "American Desert" and of what is now called the "arid region." It is a new experience for the American people, who had almost forgotten that more than half of the agriculture of the world was carried on by irrigation.

Considering all that portion of the country in which the average rain-fall is less than 20 inches annually as "arid," we have an area in which irrigation is required of about 1,000 miles square. Within this vast region the public lands are estimated to contain 1,388,705 square miles or 888,771,348 acres.

The importance of a system of artificial irrigation and water storage, by which a large proportion of this vast area can be rendered valuable, is too evident to require argument. The people of this "arid region" feel that they are as much entitled to national aid in this work as are their fellow citizens in other sections to their appropriations for the improvement of rivers and harbors. The act of October, 1888, however, in so far as it withdrew large portions of the public domain from entry and settlement, was injurious and exceedingly unpopular, and the recent repeal of the obnoxious provisions met a practically universal approval throughout this portion of the country.

In New Mexico the county in which the most progress has been made by regular systems of irrigation is Colfax. The Maxwell Land Grant Company has constructed an elaborate system of ditches and lakes, called the Vermejo Ditch System, as the water is drawn from the Vermejo River. The Springer Land Association purchased from the Grant Company 130,000 acres of land, and to irrigate that has constructed what is known as the Springer Ditch System, the water for which is drawn from the Cimarron River. Both are in active operation and with entirely satisfactory results. The 40 miles of ditches of the Springer system thoroughly irrigates 20,000 acres of land, leaving 110,000 for grazing purposes. About 5,000 acres have been sold to colonists, principally Hollanders and Danes. The company has also started a model farm in order to demonstrate the capacity of the soil

for production, and has forty varieties of crops growing therein at the present time, in great perfection, on land which a year ago was part of a vast cattle range. These irrigated lands are selling for \$17 and \$25 per acre, according to locality, with water certificate attached, that gives with each acre sold a perpetual water right.

The Maxwell Land Grant Company has sold about 15,000 acres under the Vermejo system in small tracts, averaging about 160 acres each, to farmers from the East, who are improving the property very rapidly.

The splendid system of irrigation in the Pecos Valley was described somewhat at large in my report last year. It is proceeding satisfactorily, but will not be in full operation for a few months, owing to the time required for the proper construction of the dams.

The Rio Grande Irrigation and Immigration Company, which has the largest field of any similar organization in the Territory, has been delayed in its work by various causes, but in the early future is expected to bring under cultivation a vast extent of country extending down the Rio Grande Valley from a point near Peña Blanca. The enterprises for irrigating portions of the same valley farther south, embracing the "Jornada" and a large section in the vicinity of Las Cruces and Mesilla, are substantially in the same condition as last year. A large tract of very fertile land, between the mountains and the Rio Grande, and adjoining the Colorado line, is expected to be irrigated in a short time by means of water taken from the Rio Colorado.

That many enterprises of a similar nature are in progress or contemplated will appear from the following list of corporations organized within the last year:

List of irrigation companies filing articles of incorporation since September 1, 1889.

- Valverde Irrigating Ditch Company. Locality: Both sides of the Rio Grande from near Albuquerque to the Texas and Mexico lines.
- The Hagerman Irrigation and Land Company. (Colorado corporation.) Locality: Pecos River.
- Tularosa Irrigation Company. Locality: Doña Ana County.
- The Ouava Canal and Water Storage Company. Locality: Sapelló River, and elsewhere.
- Grand Canal Company. Locality: San Juan County.
- The New Taos Water Supply Company. Locality: Taos County.
- The Mesilla Valley Land and Irrigation Company. Locality: Doña Ana County.
- The Taos and Rio Colorado Irrigation Company. Locality: Taos County.
- Rio Puerco Irrigation and Agricultural Company. Locality: Each side Rio Puerco.
- The Gila Farm Company. Locality: Grant County.
- Hillside Irrigating Ditch Company. Locality: San Juan County.
- The Mound Valley Ditch and Reservoir Company of Lincoln County, N. Mex. Locality: East side Pecos River, Lincoln County.
- The Galisteo Water Company. Locality: From headwaters of Rio Pecos to Albuquerque.
- The Irrigation and Hydraulic Mining Company (United States, America). Locality: Not specified.
- Model Ditch Company of San Juan County, N. Mex. Locality: San Juan River.
- Peñasco Reservoir, Irrigation, and Investment Company. Locality: Lincoln County.
- New Mexico Irrigating Ditch Company. Locality: Canadian River, San Miguel County.
- Lucas Ditch Company. Locality: Lincoln County.
- The Pecos Irrigation and Improvement Company. (Colorado corporation.) Locality: Chaves and Eddy Counties.
- The Guadalupe Valley Reservoir, Irrigating, and Manufacturing Company. Locality: Lincoln and Eddy Counties.
- The Bernalillo County Water and Improvement Company. Locality: Rio Grande, Bernalillo County.
- The Agua Chiquita Reservoir and Irrigating Company. Locality: Agua Chiquita Valley.
- Anton Chico Irrigating Ditch Company. Locality: Pecos River, San Miguel County.

AGRICULTURE AND HORTICULTURE.

The crops of all kinds are fully up to the average and a larger acreage has been planted than during the preceding years. Still with all its advantages of soil, climate, and facilities for irrigation, the Territory is not raising sufficient either of grain or vegetables to supply its own wants and so presents to-day the best field in the whole country for the industrious farmer and market gardener, who will have a home market for their produce at prices which yield a large profit. This subject will be considered more at length under the head of "Undeveloped Resources."

Horticulture is destined, I believe, to be the great industry of the valleys of New Mexico. They seem to be specially made for the fruit-tree and the vine. The fruit produced here is superior to that of any part of the United States, combining the size and beauty of that of California with the high flavor of that of the East. Wherever it has entered a market it commands higher prices than any other.

As this is understood and appreciated, orchards and vineyards are being multiplied. It is estimated that 150,000 fruit trees have been planted in 1889 and 1890. Experiments made in the Mesilla Valley show that the most desirable foreign grapes come to perfection there with ordinary care. Among those succeeding best are the Muscat of Alexandria, Chasselas de Fontainebleau, rose Chasselas, flamed Tokay, rose of Peru, black Burgundy, Malaga, etc.

The following extracts from a letter of Maj. W. H. H. Llewellyn, of Las Cruces, are of interest in this connection, and the suggestion as to the use of almond stocks for budding, in place of ordinary peach stocks, seems of special value in this section where water is so important an element. Major Llewellyn says:

From a practical experience of five years in the Mesilla Valley I have arrived at the conclusion that our soil and climate are best adapted to the successful cultivation of the raisin grape, and that the Muscat of Alexandria and the Malaga are the best varieties for us to plant. There are at present no large vineyards in our section, the largest being only 40 acres, but we have innumerable vineyards of 3, 4, 5, and 10 acres, including all the fine European varieties.

The soil of the Mesilla Valley is also peculiarly well adapted for the raising of apples, prunes, and plums. The French and German prunes, however, do not do as well in our valley as those which have been introduced from California.

I have met with great success in raising almond trees, upon which stock I have grafted the prune, plum, and kindred varieties. The almond is a very rapid, vigorous grower, has a strong center or tap-root, which penetrates deep into the ground, and is different from the plum root, which is straggly, in that it does not require more than half as much water to grow it successfully.

Ordinary foreign grapes, including the Mission grape which has been very largely grown in the Rio Grande Valley for a long period, do well in altitudes not exceeding 6,000 feet, and this year two varieties of Chasselas have fruited admirably at Santa Fé, where the altitude is 7,000 feet.

Every part of New Mexico, except some especially cold localities, is adapted to the cultivation of all American fruits, which is illustrated by the fact that the largest existing orchards are in Colfax County, in the extreme north, where that of M. W. Mills contains over 150 acres, and that of J. B. Dawson over 50, and in Doña Ana County, in the extreme south. San Juan County, in the northwest, bordering on Colorado and Arizona, is rapidly being planted with fruit. According to the estimate of Mr. William Locke, the San Juan member of the bureau of immigration, there are now from 600 to 800 acres in orchards. One single orchard, the "Sunnyside," at Farmington, contains 12,000 trees. The fruit is mostly sent to western Colorado for use in the mining camps.

The apple crop of Edward Miller, near Santa Fé, will reach 150,000 pounds this year.

Mr. A. D. Coon, of Socorro, has tried the experiment of raising fruit trees without irrigation, and the result is of much interest and value. He has now 4,000 apple, 1,000 plum, and other trees, all growing on "first bottom land"—the level above the acequias—without irrigation, and with marked success.

As soon as the orchards now being planted come into bearing, New Mexico will take the first rank as a fruit-growing country.

STOCK-RAISING.

CATTLE.

The depression in this industry, which was alluded to in last year's report, has been succeeded by "better times." Prices have improved and sales have been very large.

The following statement by R. F. Hardy, esq., secretary of the Territorial cattle sanitary board, and editor of the Stock Grower, dated August 23, 1890, gives a concise view of the general situation:

The year 1890 has been variable for the cattle industry in New Mexico. Disastrous droughts prevailed through the early part of the year, and in many sections the loss of stock was heavy. At present the northern half of the Territory has been blessed with good rains, which have assured an abundance of pasture for the coming winter. Stockmen say that the range in the north half of the Territory is better than has been for ten years. In the southern counties of Grant and Doña Ana the rainfall has been plentiful of late, and the range will be good in that section. In the central part of the Territory the rains are reported in "streaks," some sections being favored while others are in very bad condition.

The loss of cattle during the past twelve months has been heavy. The principal cause for loss being the overstocking of the ranges. The spring drought exhausted the "transient" watering places, and brought all stock to the rivers and other permanent waters. The pastures in the vicinity of these watering places were soon consumed and considerable losses ensued. These losses were general and not confined to any one locality.

The market for steers opened early in the spring with a goodly number of buyers in the country. A general improvement in prices was noticed and the stockmen of the southern half of the Territory were enabled to dispose of their steers at better prices than had been obtainable for four years. The more northern stockmen were unable to sell their steers as they could not gather them, owing to the backwardness of the rainy season. Buyers now are taking the surplus stock from the North. The heavy sales of this year will be very beneficial, lightening the range preventing a recurrence of the losses of this spring. New Mexico steers are in good demand throughout the feeding districts on account of their well known freedom from disease and improved breeding. Prices this year have been satisfactory and higher than has been paid for several years. Two hundred and twenty-five thousand steers will be New Mexico's output in 1890. The average price received for this stock, on the range, has been \$9 for yearlings, \$12 for twos, and \$17 for three-year-old steers. The day of the trail is about over and it is safe to say that 95 per cent. of these cattle have been shipped out by rail. No disease of any kind has made its appearance among the cattle of New Mexico this year, and in this respect the record for health for five years has been unbroken. Commissions from other States have investigated the sanitary condition of our stock this year and in each case have returned fully satisfied that New Mexico cattle were as healthy as the best on the globe.

Importations of cattle into the Territory this year to August 1 were 361 head, all of which were fine dairy stock or bulls of high grade, brought in for breeding purposes. New Mexico ranchmen are improving their stock to a profitable degree.

J. E. Saint, of Albuquerque, a member of the cattle sanitary board, says:

I think there has been shipped to Kansas and Nebraska pastures this year nearly 125,000 steers from our Territory. This large shipment was caused by short pastures here and by the success of this method of maturing cattle in the States, which was begun in 1888 and continued in 1889. It was demonstrated that to ship steers direct to market from our short ranges was unprofitable, as the long haul of from 1,000 to 1,200 miles made them wholly unfit for beef and generally undesirable, except for canning purposes, and this grade of cattle brought the lowest prices. So the theory of

shipping the cattle to cheap feed, near market, to mature, was the outgrowth of a necessity.

This year opened very favorably for Western cattle-men, as feed was abundant and cheap in Kansas and Nebraska, and the demand was so great that the price of range steers advanced about 25 per cent. over 1889 prices, with good prospects of further advance. This stimulated heavy shipments of cattle, and for nearly two months the railroads were taxed to their utmost capacity to move the cattle and were frequently two weeks behind their orders for cars. But the long drought and its disastrous effects on crops in the corn States has effectually stopped the demand for feeding steers such as we produce, and the sudden advance of feed caused by crop failures has suspended indefinitely further shipments of cattle. The prospect for the calf crop for this year is good in most localities, and I think I do not overestimate when I say that the increase for 1890 will be fully 50 per cent. of the stock of the Territory of breeding age.

Colonel Dwyer, of Colfax County, an experienced and intelligent observer, writes of other important points relating to this industry as follows:

Six years ago Colfax County was the wealthiest of the counties in range cattle; but, as in all other localities, the owners have so reduced the number of their holdings that to-day there are scarcely one-fourth of the number of cattle that were then in the county.

After years of experience the owners of cattle have demonstrated that the business of cattle-ranging on the open ranges is not profitable, and there is a disposition toward smaller holdings and to confine the cattle in inclosed pastures. Prominent ranchmen express the opinion that 500 cows confined in a pasture will produce more profit than 5,000 on the open ranges. Hereafter many of the large properties will be subdivided and small ranches will be the rule.

The large tracts of land now being improved for cultivation will in a few years make a feeding ground for all the cattle grown in the county. Heretofore all, or nearly all, the cattle raised in the county have been shipped to other feeding grounds, and the prices were determined by the crops raised elsewhere. Cheap or high-priced corn governed the price, but with the certain crop each year produced by our system of irrigation, there being no cause for fear of droughts, a certain and steady price can always be maintained.

Complaints are heard of losses of cattle by theft near the Texas line, and also of similar losses through the depredations of Navajo Indians, outside of their reservation. These Indians, it said, frequently kill cattle upon the range in order to obtain the meat; and often in the most wanton manner destroy a steer simply for a few pounds of beef which they wish for immediate use, leaving the carcass almost intact upon the plain. These Indian depredations ought to be comparatively easy to check by more strictly confining the Indians to the reservation, and by having the agent give special attention to the detection of this kind of depredation and to the punishment of the wrong-doers. I respectfully ask the attention of the Department to this subject, which the ranchmen of Bernalillo and Valencia Counties consider very important.

SHEEP.

No industry in New Mexico is more prosperous at this time than that of sheep raising. Not only has the favorable legislation of Congress enhanced the price of wool to an extent which yields gratifying profits to the owner, but the demand for sheep for mutton has also greatly increased, causing a corresponding advance in prices. Mr. R. F. Hardy says:

This has been a good year for the sheep owners of the Territory. A steady demand for muttons manifested itself early in the year, and buyers from all of the feeding States came to New Mexico in search of stock. Six hundred thousand head, in round numbers, have been sold and driven from the Territory, and before the close of the year the total will reach 750,000.

A remarkable feature of the trade has been the selling of ewes for breeding purposes to the farmers of Kansas, Iowa, Wyoming, and Minnesota. It has been discovered that the New Mexico sheep is unusually hardy and prolific, and for this reason our flocks are purchased as foundations for breeding by the sheep men of the older States.

The prices have been satisfactory, being an average of \$1.50 and \$2 for yearling

and two-year-old wethers of common grade. Ewes have brought from \$2 to \$2.50, according to grade, with lamb thrown in. High grade wethers have brought as much as \$3.10.

The spring wool clip was in round numbers 6,000,000 pounds, and when the fall clip is in the year's production will reach nearly 10,000,000 pounds. The price of wool has ranged from 12 to 18 cents. The quality of the spring clip was excellent and shows much improvement in breeding.

Importations of sheep this year were limited to the bringing in of a considerable number of fine bucks from Vermont, Pennsylvania, Ohio, and other States. Numbers can not be given accurately, but it is evident that our sheep men are progressive and are grading up their flocks with the best blood that money can buy.

The dry spring injured the lambing, and a conservative estimate places the number of lambs saved at 50 per cent. of the ewes. The shortage of mutton throughout the United States has made the flock owners hopeful of the future, and contemplated legislation is expected to improve the price of wool.

Hon. M. T. Otero, of Bernalillo, a very extensive sheep owner, says:

Until two years ago the prospects of profit in sheep-raising appeared so poor that the owners were not encouraged to increase or improve their stock, but since then the advance in wool, and this year the demand for sheep for mutton, has changed the aspect of affairs, and all owners are in good spirits. I believe that at least 300,000 wethers have been sold this year at an average of \$1.50 to \$2. Special care is now being given to this industry, and our sheep are improving in every way, though the severe winters have been a drawback.

Hon. Amado Chavez, of Valencia County, writes:

For the last few years the sheep owners of Bernalillo and Valencia Counties have suffered terrible losses owing to drought in summer and too much snow in winter. Many had become discouraged. The best price they could obtain, up to last fall, for grown wethers, was \$1 per head, and 14 cents per pound for wool. Things look more cheerful now. All the grown wethers in the said counties have been sold during the last three months for \$2 per head. The wool was sold in the spring for 17 and 18 cents per pound. The increase in lambs this spring was 80 per cent. At present the sheep are in splendid condition, and the prospect for the coming winter is very good,

Proceeding from the central counties to those of the northeast, Mr. Luis A. C. de Baca, of Mora County, gives a list of owners in that vicinity with the number of their sheep, amount of wool produced, prices obtained, and in many cases the number of lambs of this year, from which absolute facts a more perfectly accurate idea can be obtained of the condition of the industry in that section than from any generalizations.

Name.	Sheep.	Wool.	Price.	Lambs.
		<i>Pounds.</i>	<i>Cents.</i>	
Juan Rodriguez	5,000	12,000	17	2,000
Rumualdo Gonzales	3,000	10,000	17	1,600
Rumualdo Baca	1,800	5,000	.....	800
Velardo & Gallegos	1,000	3,000	.....	500
Gonzales Brothers	1,800	7,000	.....	1,600
Baca Brothers	15,000	40,000	18	5,000
Lujan & Pinard	27,000	80,000	18	10,000
Sisto Apodaca	2,000	5,000	.....	800
Jose M. Martinez	1,800	6,000	17½	800
John Tixin	5,000	12,000	18	2,000
Pablo Padilla	5,000	15,000	16	.....
Ortega & Romero	1,500	5,000	16	800
Luis F. Garcia	15,000	60,000	.....	7,000
Mr. Holcomb	7,000	32,000	.....	3,000
Abelino Garcia	3,000	15,600	.....	1,500
Telosofo Casados	3,000	12,000	.....	1,900
José L. Garcia	2,000	10,000	18	1,000
Francisco Garcia	2,000	6,000	.....	1,500
Maximo Garcia	2,700	9,000	.....	1,800
Francisco Miera	1,200	4,000	18	600
Leon Shaw	7,000	35,000	.....	4,000
W. Frank	4,000	12,000	.....	2,000
Agapito Padilla	2,000	5,000	.....	900
Guadalupe Lovato	3,000	9,000	.....	1,800
Candido Garcia	4,000	16,000	.....	2,000
Mr. Sulder	7,000	35,000	.....	5,000
Antonio Sanchez	5,000	9,000	.....	1,500
Juan Vigil	7,000	35,000	.....	5,000
Total	142,800	494,000	.....	66,700

All of these sheep are in the neighborhood of Tequesquite and Tramparas, in eastern Mora County, and it appears that the average clip is 3.46 pounds, the average price 17 cents, and the percentage of lambs about 48. Mr. Baca adds that they shipped during the year from Clayton depot at least 2,000,000 pounds of wool.

Proceeding north to Colfax County, which is in the extreme north-east, bordering on Colorado and Texas, Mr. Daniel Troy, a very intelligent and successful sheep owner, writes as to several points of interest as follows:

The history of the industry for this portion of our Territory for the last fifteen years has shown a steady improvement in the care and quality of our sheep, while at the same time the number of sheep raisers has been gradually decreased by the closing out of small owners, augmented by the increased demand for mutton sheep for the last three years.

In proportion to the improvement in the quality of our sheep, so also is our wool improved in quality and average yield per head, so that the decrease in quantity of wool is much less in proportion than is shown in the number of sheep. Improved sheep demand improved care, with expensive improvements for their protection, and fairly paid, clothed, and fed American labor. A decrease in prices for Territory wools can not sustain these conditions long, even though we have the advantage of free grass, a good climate, and every requirement except good protective legislation to foster and protect the industry.

The following table of prices of wool for each month since April, 1884, will be found of interest and value. It was prepared by Hon. F. A. Manzanares from the average prices in actual transactions:

Average price per pound.

	1884.	1885.	1886.	1887.	1888.	1889.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
January	(*) 9 $\frac{1}{2}$	9 $\frac{1}{2}$	14	13	12	15
February	(*) 9 $\frac{1}{2}$	9 $\frac{1}{2}$	14 $\frac{1}{2}$	12	12 $\frac{1}{2}$	14
March	(*) 9	9	11			13
April	9		10 $\frac{1}{2}$		12 $\frac{1}{2}$	14 $\frac{1}{2}$
May	9 $\frac{1}{2}$	9	11 $\frac{1}{2}$	13	12	17
June	10	10 $\frac{1}{2}$	13 $\frac{1}{2}$	15	13 $\frac{1}{2}$	18
July	10 $\frac{1}{2}$	11	16	16	13 $\frac{1}{2}$	18
August	10	11	16 $\frac{1}{2}$	15 $\frac{1}{2}$	13 $\frac{1}{2}$	17
September	10 $\frac{1}{2}$	12 $\frac{1}{2}$	17	14	14	13 $\frac{1}{2}$
October	10 $\frac{1}{2}$	13 $\frac{1}{2}$	16	12 $\frac{1}{2}$	15	14 $\frac{1}{2}$
November	9 $\frac{1}{2}$	15	14	12	16 $\frac{1}{2}$	15
December	9 $\frac{1}{2}$	14	12 $\frac{1}{2}$	12	17 $\frac{1}{2}$	14 $\frac{1}{2}$

* Few transactions.

MINING.

The prospects of the mining industry in New Mexico were never so bright as at present. This is owing to the intelligent and patriotic action of the present Congress. Our principal mineral product is silver, and the great majority of our mines are of low grade, the ore being an argentiferous galena, carrying ten ounces or less of silver to the ton, but being very rich in lead. For several years, during the importation of similar ores from Mexico without the payment of duty, these mines in our Territory were necessarily closed, for it was impossible for us to compete in the production of these galena ores with the cheap peon labor of Mexico while our American miners were receiving from \$2.50 to \$3.50 per day. Perhaps no plainer illustration of the necessity of a proper tariff in order to protect American wages from being reduced to the level of those received by workmen of much lower grade in a foreign land can be suggested than that presented by lead. On one side of the Rio Grande is the intelligent, self-respecting American miner,

accustomed to being well fed, well clothed, and to all the conveniences and many of the luxuries of American life, and with ambition to accumulate and become a mine-owner or otherwise independent himself. On the other side is the unintelligent and unambitious laborer, satisfied with the coarse food and hard living to which he is accustomed, and asking for nothing better. To subject the former to direct competition with the latter is to reduce him to the lower level or drive him to some other business. Of course he accepts the latter alternative, and so our mines have been closed.

But with the protection afforded by the tariff on lead, all this is changed, and the great low grade mines of the Magdalenas, Cerrillos, etc. will soon echo to the sound of the pick, and employ hundreds of well paid miners.

The recent silver legislation has likewise been of vast advantage to New Mexico, and the increase in the value of both silver and lead will create a greatly increased production during the next year.

The total output of the Territory during the year 1889, according to the report of Mr. W. C. Hadley, of Lake Valley, who is a very competent observer, was as follows:

County.	Gold.	Silver.	Lead.	Copper.	Total.
Colfax.....	\$100,000	\$14,000		\$3,500	\$117,500
Mora.....	3,000	16,500	\$2,500	1,200	23,200
Santa Fé.....	37,190	91,225	61,867	537,372	727,654
Bernalillo.....	2,300	1,250		4,950	8,500
Socorro.....	147,500	89,326	129,800		366,626
Sierra.....	113,870	818,684	30,798	13,334	976,686
Lincoln.....	209,769	8,750			218,519
Doña Ana.....	4,956	82,600	70,800		158,356
Grant.....	517,795	768,770	59,074	81,264	1,426,903
Total.....	1,136,320	1,891,105	354,839	641,620	4,023,884

The operations in Colfax County are not different from those of previous years. In Mora County a large copper mining property is being developed with excellent prospects of success. In Taos County the reports are very flattering, but the product is still small.

In Santa Fé, the owners of the Cash Entry, Central, etc., are accumulating what is expected to be the largest and most perfect plant in New Mexico. They have brought to their property a large amount of powerful and expensive machinery, without regard to cost. At present they are sinking a very large perpendicular working-shaft on the Central ground, intended for the use of the entire property.

The Santa Fé Copper Company, owning what is commonly known as the San Pedro mine, 20 miles south of Los Cerrillos, produced in 1889 1,518 long tons of copper matte, which was shipped to New York. The gold contents of the same are not stated, but they were probably not of less value than \$25,000. Owing to some changes in management this property is not being worked to any large extent at the present time. During 1889 the discoveries of silver-bearing lead carbonates near San Pedro attracted large attention. The first mine to show this mineral was called the "Lucky," and was afterwards combined with the "Lincoln" under the name of "Lincoln-Lucky." The product during 1889 was about 4,000 tons, containing \$4,652 of gold, \$77,310 of silver, and \$52,430 of lead; in all, about \$135,000.

In Socorro County the principal producing districts are, that in the Magdalenas, about 30 miles west of the Rio Grande, and that in the

Mogollons, near the Arizona line. In the former the ore is of low grade, containing much lead; in the latter there is much that is very rich. The product of the Magdalena district was very large for a number of years, during which a railroad was built to connect it with the smelter at Socorro, until the introduction of Mexican lead ore, duty free, made it impossible to work the mines at a profit. The district is about 20 miles square, and the ores of such a character that they are usually smelted at about \$5 per ton. The surrounding formation is lime and porphyry. The veins and ore bodies are large, being from 4 to 40 feet wide and carrying a paying grade of ore from the surface to the depth of 500 feet, which is as far as they are explored. The best known producing mines here are the Kelly, the Juanita and the Graphic, but there are twelve or fifteen more of similar character. Some have been steady producers for many years. The average percentage of lead is 25 per cent., with about 8 ounces of silver to the ton. At the present time about 200 tons are being produced per diem, and this is mostly sent to the Socorro smelter. In the Mogollon district, the absence of proper local smelters and the expense and difficulty of transportation to Silver City, a distance of about 80 miles, prevents the using of any but very high grade ores. The Cooney mine produced about \$350,000 and the Peacock about \$80,000, but both are now idle, awaiting some cheaper method of utilizing their ores. Meanwhile, a group of mines on Silver Creek, not far distant, has attracted much attention. A road is now being built by subscription to connect these mines with Silver City. Whenever the building of a railroad makes it possible to mine ores of moderate value in this vicinity, the output from the western part of Socorro County will be very large.

In Sierra County, a new season of prosperity is being enjoyed. During 1889 Lake Valley produced \$285,000; Kingston, \$251,000, and Hermosa, \$112,000 of silver, and Hillsborough \$91,000 of gold. At Chloride an improved concentrator is being erected. The Silver Mining Company of Lake Valley by the latest reports is now the fifth in the list of dividend-paying producers of the precious metals in the entire country.

Lincoln County has very extensive mineral resources, but owing to the great distance of the mining districts from any railroad, only such ores as can be milled near the place of production can be worked at present. The two great producers continue to be the Homestake and the North Homestake at White Oaks. In 1889 these two produced \$168,744 out of the \$218,450, which was the total for the county. The Homestake was discovered in 1879, and in 1880 was purchased by a company which still owns it. It has one shaft 600 feet deep, one 290, one 100, and one 60, with about 3,500 feet of drifts and tunnels. Altogether it has produced about \$325,000. The North Homestake has a depth of about 900 feet, with a body of ore all the distance, varying in size from 5 by 20 feet to 24 by 70 feet. The Homestake works a twenty-stamp mill, and the North Homestake a 4-foot "Huntington."

In the same vicinity are the Lady Godiva and the Little Mac, having from 200 to 300 feet of depth. At Nogal the "American" is being worked and has a fifteen-stamp mill; and at Bonito the "Hopeful" is also in operation with a 4-foot "Huntington."

Wherever the country is penetrated with railroads it has magnificent prospects of mineral riches.

In Doña Ana County the only mines worked were those of argentiferous galena in the Organ Mountains, the Bennett mine being the largest producer. The output for that district for 1889 was about 4,000

tons, containing 70,000 ounces of silver and 1,500,000 pounds of lead. The ores have to be conveyed to Las Cruces in wagons and thence by rail to smelters for reduction.

Grant County was much the largest producer in the Territory in 1889, having an output of over half a million in gold, and three-quarters of a million in silver. The first discovery of the precious metals in the county was in May, 1860, when gold was found at Pinos Altos. About 1870 silver mines near Silver City began to be worked, and from that time the product of both metals has always been considerable, Georgetown being a very steady and reliable camp. Last year the last-mentioned town produced 367,500 ounces of silver, of which the Mimbres Consolidated Company is credited with 230,000. Other large producers were the Mountain Key with \$144,000, the Carlisle \$150,000 (nearly all gold), and the Graphic \$31,000 in silver and lead. Within a short time very rich ore has been discovered in a new locality near Cook's Peak. The Santa Rita copper mine, so celebrated for almost a century, and which is the only mine mentioned by Pike in his passage through the country in 1807, is again being worked to the extent of about 250 tons of copper.

This brief summary does not pretend to refer to a quarter of the mining districts which cover much of New Mexico, from Colorado to Texas, but only to a few important points. There are no less than eighty-five organized mining districts in the Territory, as follows: Elizabethtown, Cimarron, Coyote, Guadalupita, Moreno Valley, Rio Hondo, Copper Mountain, Taos, Picuris, Arroyo Hondo, Petaca, Mora, Mineral City, Gold Hill, Rio de la Vaca, Pecos, Glorieta, Cerillos, San Pedro, Galisteo, Bernalillo, Silver Buttes, Nacimiento, Las Placitas, Tijeras Cañon, Hell Cañon, Mount Taylor, Manzano, La Joya, Ladrones, Spring Hill, Council Rock, Gallinas, Iron Mountain, Pueblo, Magdalena, Socorro, Oscura, Hanson, San Andres, San Cristobal, Apache, Black Range, Cuchilla Negra, Cooney, Caballo, Mountain, Rincon, Jicarilla, White Oaks, Vera Cruz, Nogal, White Mountain, Tula Rosa, Jarilla, San Augustin, Lake Valley, Hillsborough, Animas, Percha, Mimbres, Santa Rita, Lone Mountain, Hanover, Silver Flat, Chloride Flat, Pinos Altos, Burro Mountain, Stein's Peak, Virginia and Shakespeare, Cook's Peak, Victoria, Florida, Tres Hermanos, Carizalillo, Eureka, San Simon, Rio Grande, Rio Colorado, Las Vegas, Mogollon, Capitan, Santa Fé, New Placers, and Old Placers.

The product of gold and silver in New Mexico, since 1881, as reported by the Director of the United States Mint, is as follows:

Year.	Gold.	Silver.	Total.
1882	\$150,000	\$1,800,000	\$1,950,000
1883	280,000	2,845,000	3,125,000
1884	300,000	3,000,000	3,300,000
1885	800,000	3,000,000	3,800,000
1886	400,000	2,300,000	2,700,000
1887	500,000	2,300,000	2,800,000
1888	602,637	1,414,400	2,017,037
1889	1,136,320	1,891,105	3,027,425
Total	4,168,957	18,550,505	22,719,462

This does not give credit to New Mexico for a considerable part of its product. The following table is made up from the reports of Wells, Fargo & Co., and other sources, and is believed by Colonel Mills, who

prepared it for the Treasury Department, to be as nearly accurate as it can be made :

Year.	Gold.	Silver.	Total.
1846-1881	\$10,350,000	\$3,622,000	\$13,972,000
1842	691,000	1,085,000	2,676,000
1843	700,000	3,376,000	4,076,000
1844	709,000	3,700,000	4,409,000
1845	911,000	4,381,000	5,292,000
1846	797,000	5,671,000	6,468,000
1847	617,000	4,275,000	4,892,000
1848	863,000	4,285,000	5,148,000
Total	15,638,000	31,295,000	46,933,000

The only public smelting works in regular operation in New Mexico during 1889 were those at Socorro, belonging to the Rio Grande Smelting Company, and generally known as "Billings' Smelter."

During the year 31,000 tons of ore were treated there, and the product was 14,040 ounces of gold, 1,292,000 ounces of silver, and 5,750 tons of lead. The value of the product of this smelter during the previous years of its existence, from the time of its erection in 1833, was as follows :

Year.	Amount.
1833	\$267,215.26
1834	1,078,266.79
1835	1,417,501.76
1836	1,338,480.16
1837	1,662,479.18
1838	1,900,274.56
Total	7,964,247.71

While I do not propose to allude to the really admirable varieties of building stone found in many sections of the Territory, one recent discovery is of such importance as to call for mention. I refer to the stone which the owners have christened "Ricolite" (or "rich stone") because it is claimed that it is so different in its composition from anything previously discovered that it can not possibly be classed under any existing name. The quarries are in Grant County, southwest of Silver City, and the stone resembles the green marble or verd-antique of Vermont and other localities, but it is claimed that the absence of lime as an important constituent renders it much harder and more durable. The colors are green, yellow, black, and blue, in various shades and combinations, and it is considered specially adapted to interior decoration. The specific gravity is 2.57 or 160 pounds to the cubic foot; and its composition is given as follows: Silica, 43.52 per cent.; aluminum, 16.88 per cent.; magnesia, 23.78 per cent.; water (combined), 11.10 per cent.; lime, 2.22 per cent.; soda and potash, 2.50 per cent.; and a slight trace of iron oxide.

FORESTS AND LUMBER.

On this subject there is no great change to be noted within the year. Rio Arriba County continues to be the largest lumber producing region. On the Tierra Amarilla grant there are three large saw-mills producing about 2,500,000 feet per month, taking the average for the entire year;

at Amargo there are two mills producing about 1,000,000 feet per month; and near Tres Piedras, on the Petaca grant, another mill, with several miles of railroad connecting it with the lumber region, and producing about 1,000,000 feet per month. This region, covered by the Tierra Amarilla, Vallecito, and Petaca grants, is probably the most valuable for its lumber of any section of New Mexico. A portion of the Maxwell grant is covered with very superior timber, and it is to reach this that the Denver and Fort Worth Railroad has been extending its road from Trinidad southwesterly into Colfax County. A new town, called Oatskill, has been established at the present terminus of this road. The Maxwell Land Grant Company has just concluded a contract under which they are to supply 200,000,000 feet of lumber, to be delivered during the next five years.

The west part of Mora County is covered with forests of great value, and several saw mills are kept actively at work in that vicinity. As railroads are multiplied, various localities, now little known, and from which it is impossible to transport heavy freight, will become prominent as lumber producers.

LEGISLATION.

No session of the legislature has been held since the report of last year. The sessions are biennial. The last commenced December 31, 1888, and adjourned February 28, 1889. The next session will open on Monday, December 29, 1890.

SCHOOL LANDS.

There is no change to report regarding these lands. Being reserved from entry, they necessarily remain unoccupied and unused until the admission of New Mexico as a State, or until Congress takes special action in the case. If New Mexico is not to be promptly admitted, we feel that an act should be passed giving us the immediate possession of the school lands, for there is more urgent need of the aid thus afforded during the comparatively poor days of a Territorial existence than when a State has become rich and prosperous.

On May 5, 1890, our Delegate in Congress, Hon. Antonio Joseph, introduced a bill "granting lands to the Territory of New Mexico for common school, university, and for other purposes." This was referred to the Committee on Education, but no further action has been taken.

EDUCATION.

The public schools of New Mexico are gradually improving, and each year's report shows an advance. The system as provided by law is quite good, except that it lacks an executive head, that more strict examinations of teachers should be provided for, and that better provision should be made for building school-houses. The private schools in the Territory are numerous and excellent, and many of them afford free instruction, thus supplementing the public-school system in an important degree. English is taught in a large majority of the schools, and as the desire of every Spanish-speaking New Mexican is that his children should understand English, it would be taught in all if English-speaking teachers could be found for the small salaries which can be paid in remote districts.

The entire lack of a school fund is severely felt, every dollar of ex-

pense having to be met by the current tax. As soon as New Mexico receives its school lands public education can proceed much more satisfactorily.

The following table, although not perfect, is as nearly so as it has been possible to make it from the reports received. The figures for Rio Arriba County are partly estimated :

Public schools.

Counties.	Schools.	Taught in English.	Taught in Spanish.	Taught in both languages.	Public school houses.	Male teachers.	Female teachers.	Pupils enrolled.	Average daily attendance.	Amount of regular taxation.	Amount raised by poll-tax.
Bernalillo	46	4	28	14	.....	40	11	5,592	3,738	\$11,660	\$932
Colfax	35	17	10	8	23	13	17	1,510	979	12,898	.....
Doña Ana	29	21	3	5	5	15	14	627	409	5,030	350
Grant	30	29	.....	1	14	19	31	900	450	14,672	500
Lincoln	35	34	1	.....	27	17	11	760	.....	13,523	1,757
Mora	57	.....	2	55	5	35	22	3,250	1,500	4,711	191
Rio Arriba*	21	.....	.....	.....	.....	13	3	1,000	650	2,940	.....
San Juan	17	13	.....	4	.....	13	9	337	231	2,223	.....
San Miguel	96	13	33	50	24	73	23	5,014	4,183	18,357	799
Santa Fé	26	7	4	15	5	20	9	1,071	794	7,682	733
Sierra	13	7	1	5	3	3	5	528	294	4,820	375
Socorro	50	16	26	8	15	36	17	1,741	1,115	11,499	1,333
Taos	23	3	6	14	1	22	1	1,700	1,125	2,001	480
Valencia	30	.....	25	5	8	30	3	3,022	1,650	6,500	765
Total	508	164	139	184	130	354	176	27,052	17,018	118,516	8,215

*Estimated.

Under the head of public buildings, the three Territorial educational institutions have been referred to. They are the university at Albuquerque, the agricultural college at Las Cruces, and the school of mines at Socorro. The agricultural college is already open and doing a good work in its preparatory department. There is also an orphan's home and industrial school at Santa Fé, sustained by an annual appropriation of \$5,000, and a school for the deaf and dumb at the same place which receives \$1,200 of public funds each year.

The private schools are mostly sustained by religious denominations or societies.

The Christian Brothers (Roman Catholic) carry on St. Michael's College at Santa Fé, besides schools at Las Vegas and Bernalillo. St. Michael's College is a large institution with commodious buildings, and draws scholars from a long distance. It was founded in 1859 and has seventy boarders and one hundred day scholars. The Sisters of Loreto, who should be credited with the establishment of the first girls' school in New Mexico, now have institutions at the following places :

Place.	Teachers.	Girls.	Boys.
Santa Fé	10	250	.....
Taos	4	60	25
Mora	4	80	.....
Las Vegas	6	150	.....
Bernalillo	5	130	.....
Socorro	5	60	40
Las Cruces	6	70	60

The Sisters of Charity conduct the following schools: Albuquerque, old town, School of the Holy Angels; 4 teachers, 130 girls, 80 boys. Albuquerque, new town, St. Vincent Academy; 7 teachers, 200 girls, 60 boys. San Miguel, Sacred Heart School; 4 teachers, 100 girls, 150 boys.

They also have charge of the Orphan Industrial School before referred to; and the Academy in New Albuquerque includes public scholars, paid for by the county.

The Presbyterian Board carries on a large number of schools of which they have furnished the following report:

CLASS I.—*Day-schools for Mexican children.*

No.	Name of school.	Teachers.	Pupils.	Established.	Value of property.
1	Las Cruces.....	1	25	1878-'80	\$1,000
2	Pajarito.....	1	50	1884	1,800
3	Albuquerque.....	1	20	1888	250
4	Corrales.....	1	25	1878	1,500
5	Capulin.....	1	25	1887	2,000
6	Jemez Hot Springs.....	1	24	1881	2,000
7	Santa Fé.....	1	70	1867	1,000
8	Glorieta.....	1	20	1881	200
9	Chaparrito.....	1	50	1889	1,000
10	Raton.....	2	50	1887	1,000
11	Los Alamos.....	1	20	1884	200
12	Golondrinas.....	1	20	1888	250
13	Buena Vista.....	1	30	1888	225
14	Rociado.....	1	15	1887	275
15	Ocaté.....	2	30	1881	1,000
16	Agua Negra.....	1	15	1881	1,000
17	El Rito.....	1	30	1883	1,000
18	Agua de Lobo.....	1	20	1889	250
19	Piado de Taos.....	2	60	1883	250
20	Fernandez de Taos.....	2	66	1873	1,000
21	Ranchos de Taos.....	2	60	1881	1,000
22	Arroyo Seco.....	1	15	1889	250
23	El Llano.....	1	15	1884	250
24	Peñasco.....	1	20	1884	275
25	Embudo.....	1	30	1887	250
Total.....		30	805	1867-'90	19,225

CLASS 2.—*Boarding-schools for Mexican children.*

Name of school.	Teachers.	Pupils.	Established.	Value of property.
Santa Fé.....	6	75	1883	\$20,000
Las Vegas.....	5	70	1884	10,000
Mora.....	4	60	1880	15,000
Total.....	15	205	.....	45,000

CLASS 3.—*Day-schools for Indian children.*

Name.	Teachers.	Pupils.	Established.	Value of property.
Isaleta.....	2	25	1882	\$ 275
Zufi.....	2	20	1877	1,500
Laguna.....	1	40	1876	300
Jemes.....	2	30	1877	2,000
Total.....	7	115	.....	4,075

CLASS 4.—*Boarding-school for Indian children.*

Albuquerque, 10 teachers; 70 pupils; established 1880; value of property, \$15,000.

CLASS 5.—*Pay-school for American children.*

Santa Fé Academy, 3 teachers; 70 pupils; established 1867; value of property, \$300

General summary.—Classes 1 to 5.

Classes.	Schools.	Teachers.	Pupils.	Value of property.
Day-schools for Mexicans	25	30	719	\$19,225
Boarding-schools for Mexicans.....	3	15	205	45,000
Day-schools for Indians.....	4	7	115	4,075
Pay-school for Americans.....	1	3	70	300
Total	33	55	1,109	68,600

The New West Educational Commission has charge of the following institutions:

	Teachers.	Pupils.	Average attendance.
Academies:			
Albuquerque	6	240	150
Las Vegas	6	205	150
Tuition schools:			
Deming	2	59	43
White Oaks.....	1	25	16
Free schools:			
Santa Fé	5	180	135
San Rafael.....	1	45	12
Barelas	1	90	32

There are a number of other academies and schools, sustained by the Methodists and others, of which I have not been able to obtain the statistics in time for this report. But all are doing good work towards the general education of the youth of the Territory.

The following are the Methodist mission schools:

Place.	Scholars.	Place.	Scholars.
Tiptonville	49	Tramperas	25
Pevsita	27	Wagon Mound	26
Doña Ana	30	Albuquerque, old town.....	18
Española	20	Cerro	20
La Joya	16		
Socorro	60	Total	316
Taos.....	25		

INDIANS.

The condition of the Indians in the Territory is practically unchanged within the year.

PUEBLOS.

The Pueblo Indians pursue their peaceful avocations, industriously labor in the field with the reward of abundant harvests, and celebrate their festivals with the ceremonial dances and open-handed hospitality as in the years that have gone before. Living in peace and prosperity lives so supervised by their paternal local governments as to be models of regularity and morality, they would naturally increase in numbers with rapidity were it not for epidemics like small-pox and diphtheria, the latter of which has been especially fatal within the last few years.

Mr. José Segura, the United States agent for these Indians, in answer to a request for information, says:

It is estimated that they cultivate 5,500 acres of land, and will raise this year 30,000 bushels of grain. They own about 3,500 horses and mules, 2,500 cattle, and 20,000 sheep. They receive no annuities nor subsistence, and no aid of any kind from the Government, except a few improved agricultural implements and a very small amount of clothing. They have about 2,050 children of school age, of whom 629 have attended school at schools connected with the agency, about 100 at the Government school at Albuquerque, and 100 at institutions in the East, making 829 in all who received something of an education.

There are twelve schools in the Pueblo villages. At Taos, San Juan, Santo Domingo, Acoma, Laguna (Pojuate), Isleta, and Jemes, there are such schools under charge of the Roman Catholic Bureau. The Presbyterian Board has charge of others at Zuñi, Laguna, Isleta, and Jemes, and there is a Government school at one of the villages of the Pueblos of Laguna. In addition to these there are four industrial boarding-schools, one at Albuquerque, in charge of the Presbyterian Board; one at Bernalillo, and one at Santa Fé, in charge of the Roman Catholic bureau, and the Ramona school at Santa Fé. At some of these the average attendance is quite small, notably so at Acoma and Zuñi, which are most remote pueblos, to which educational ideas have scarcely yet penetrated.

The Government carries on a large industrial (boarding) training school at Albuquerque, which accommodates over two hundred Indian children of various tribes, principally Pueblos, Navajos, and Pimas. This is in charge of Prof. W. B. Creager, as superintendent. Its statistics for the last year are:

Number of teachers and employés.....	28
Male teachers and employés.....	17
Female teachers and employés.....	11
White teachers and employés.....	19
Indian teachers and employés.....	9
Total number of students during year.....	296
Total male students during year.....	218
Total female students during year.....	78
Average attendance.....	164
Number of months school maintained.....	12
Salaries of teachers and employés.....	\$15,505
All other expenses.....	\$13,458
Total expenses.....	\$28,963

The industries taught are carpentry, farming, cooking, baking, shoe and harness making, tailoring, sewing, laundry work, and general housework.

Crops raised were corn, hay, onions, squashes, and melons.

At Santa Fé a similar school is to be opened in the fall in the beautiful building just erected, which is intended to contain one hundred and seventy-five pupils. Prof. S. M. Cart is in charge.

In these schools the children are fed, clothed, educated, and trained in different industrial pursuits.

The Ramona Indian School at Santa Fé is in charge of Prof. Elmore Chase as superintendent. It is a contract school, conducted by the University of New Mexico, the American Missionary Association paying the teachers. The number of children allowed to the school by its contract is thirty-five, and the number of different pupils in attendance during the year was twenty eight. Professor Chase makes some suggestions which are of value and are extracted here as follows:

First. One of the hindrances encountered in the matter of education is that of securing and retaining the children. The present method seems to be an unwise one.

Each school being authorized to visit the same tribe or pueblo, by the time three or four expeditions have each held a council with the Indians, the latter become rather suspicious of the motives of the white man. It is respectfully suggested that a special agent be appointed by the Department of the Interior, whose duty it shall be to secure the children for all the schools, having first ascertained how many children the schools can accommodate, and the number in each tribe or pueblo of school age, and then requiring each to furnish a specified number to such school as may be the choice of the tribe, or he may advise the tribe to patronize. This agent should be a man well known to the Indians, and favorably known; and be his own interpreter.

Inefficiency of the agent is another great hindrance. If he is not interested in his charge, he does little to secure children to be sent to school, or to retain the good done the child after his return to the tribe. Illustration: Four girls were sent home at the expiration of the contract with the parents; two to the Jicarilla Reservation, and two to the Mescalero. The latter were placed in school and encouraged to marry educated Indians by the promise of a good house, well furnished, "like white folks." One was married under Christian rites last July, and the other will be married about Christmas. Of the former, one has died, and the other, it is reported, has turned out badly. There may be some conditions at the agency of the Mescaleros that gave an advantage over the Jicarillas, but the Jicarilla girls were the more promising, and with equally good influences would actually have done the best.

It should be said, in this connection, that the Indian service, so far as this school has any relations with it, is much better now than it has been heretofore.

Second. In the matter of grading pupils, which the Commissioner of Indian Affairs has recommended, there will be found great difficulties. The great difference in tribes makes it impossible for any school to maintain the grade established. The experience of this school is that the Apaches, as a rule, will advance twice as fast as the course marks out. Children of some tribes of the Apaches will master in five months all assigned for a year's work, while the Pueblo will have hard work to complete the work. It seems to be impossible, at the present stage of Indian education, to arrange a system that can be applied to all schools. The different tribes represented in the same school must be free to advance as the ability to do so appears. Repressing Indian youths in their desire to advance in school work is harmful. Uniformity in school work is impossible from the nature of the children in the schools.

Third. It seems to be very clearly demonstrated that schools on the reservation are far less useful in training children than schools so far removed from the reservation that the parent can be present only at long intervals. The child should be entirely removed from the influence and knowledge of the tribe's doings, and placed in schools located in civilized communities, so that all he sees of life is that of a Christian civilization. His church privileges should be those of the white people, and his holidays should be spent in the towns where he sees the business of the country done. Visiting the camp occasionally, and parents visiting the school, should constitute the only intercourse that should exist between the child and the tribe during the period of school life.

The following table gives the population of each pueblo as taken in 1890 by the agency; that reported for the census of 1890, and the number of children of school age :

Name of pueblo.	Population by agency.	Population by census.	Children.
Taos	382	409	67
Picuris	91	100	16
San Juan	374	406	89
Santa Clara	204	225	47
San Ildefonso	151	148	27
Pojuaque	19	20	2
Nambé	86	79	19
Tesuque	132	91	20
Cochiti	285	268	102
Jemez	483	428	184
Santo Domingo	969	670	203
San Felipe	499	554	106
Santa Ana	271	253	79
Zia	110	106	27
Sandia	145	140	36
Isleta	1,007	1,059	221
Laguna	963	1,143	228
Acoma	597	566	154
Zuñi	1,547	1,613	473
Total	8,285	8,278	2,050

NAVAJOES.

There is no material change in this large and comparatively wealthy tribe. The reservation is about equally divided by the boundary line between New Mexico and Arizona, half being in each Territory. Occasionally fears of trouble are occasioned by the selfish foolishness of a few reckless men, who threaten to invade the reservation in search of the "Adams diggings," or some other mythical mine; thus jeopardizing the lives of thousands of innocent persons in their selfish greed for gold. Fortunately, thus far these fears have not been realized. Some months ago a Navajo Indian was killed by a white man in San Juan County, and considerable excitement followed. This subsided, however, when regular legal proceedings were taken against the offender. He will be tried in the district court this fall. The following statement kindly furnished by C. E. Vandever, the Indian agent of the Navajoes, contains many items of interest regarding the tribe.

NAVAJO AGENCY, N. MEX., August 26, 1890.

In my annual report to the Indian Office for 1889 I estimated the Navajo population at 23,000. At that time I had been agent but a few months, my information from personal observation was limited, and I was compelled to rely mainly for my information upon what the Indians themselves told me. Since then I have spent much of my time out on the reservation, in order that I might learn from personal experience the true state of affairs, and how the existing condition of the tribe could best be improved. I have been compelled to change my opinion radically in regard to population. I do not believe that at this time there are to exceed 15,000 Navajos in existence. Last winter there was an epidemic of throat disease (closely resembling diphtheria) among them on the northern portion of the reservation, principally in New Mexico, which carried off 900 persons, mostly children. The number of births last year were about 420, consequently there was a decrease in population of 480. Previous to last year there had been a small increase each year since the time the tribe returned from Fort Sumner, and the same would have been the case last year under ordinary circumstances.

Last spring the Government distributed among the members of the tribe wheat, potatoes, alfalfa, melon and squash seeds to the extent of \$500, which promises well. The crops last year might be estimated as follows:

Wool.....	pounds..	2,070,000	Pelts.....	pounds..	291,000
Corn.....	do.....	1,665,000	Blankets.....	value..	\$39,000
Wheat.....	do.....	500	Piñon nuts.....	pounds..	197,000
Pumpkins.....		1,000,000	Potatoes.....	bushels..	200
Squashes.....		1,000,000	Rye.....	do.....	100
Peaches.....	bushels..	8,000			

Owing to the very limited extent of farming land on the reservation, these Indians have very little inducement to become tillers of the soil, and give nearly all their attention to stock raising. I consider the following a fair estimate of their possessions in animals:

Sheep.....	700,000	Cattle.....	6,000
Goats.....	200,000	Burros.....	1,000
Horses.....	250,000	Mules.....	600

An attempt is being made to decrease the larger number of horses by trading them for cattle, and the disposition to do this is growing steadily. In order to enable them to more readily find a sale for horses, the Department will soon provide them with several fine draft stallions, which will greatly improve the quality of their stock.

During the year there has been a marked improvement in the condition of the tribe. I have distributed among them more than a hundred sets of carpenter's tools and issued nearly 140,000 feet of lumber, sawed by our own machinery on the reservation. The result has been the erection of several hundred small, comfortable homes, all provided with doors and windows furnished by the Government. In addition, quite a number of stone houses have been built during the year, and many will use coal for heating and cooking purposes next winter, the Government having sent me for distribution among them a number of coal-stoves. Along the San Juan, under the supervision of my additional farmer, they are also about to construct irrigation ditches and institute a system for their own use.

In the matter of education, progress has been satisfactory. Our school facilities

have been limited to a building which was intended to accommodate 75 boarders, consequently the number in attendance was necessarily limited. Last September we opened school with an attendance of about 30, which in less than a month ran up to 104. Of this number I took 31 to the Indian Industrial Training School at Grand Junction, Colo., where they are yet. Our school closed in June with an attendance of 84, which would make a total during the year of 115, compared with 23 when I took charge in January, 1889. I am glad to say that our school facilities will soon be largely increased. The walls are now up for a handsome two-story stone building, which can not be surpassed in the Territory and which will accommodate nearly as many as our present quarters. In addition to this, bids are now being advertised for two other fine buildings—one at the agency and the other at Chin-a-lee, about 45 miles northwest.

Mr. Vandever estimates that 11,000 of the Navajos are in New Mexico and the remainder in Arizona.

APACHES.

There are two Apache reservations in New Mexico, the Mescalero Reservation in Lincoln County, with agency at South Fork, and the Jicarilla Reservation in Rio Arriba County, on the border of Colorado, with agency at Dulce. The latter is connected with the Southern Ute agency, and it is the opinion of those who are most familiar with the subject that in the interest of the Indians it ought to be detached from that connection and placed in charge of the Pueblo Indian agent. The reasons for this appear cogent and correct, and I heartily concur in the recommendation that the change be made.

The Mescalero agency is in excellent condition and the Indians are making advances in many ways.

The statistics are as follows:

Mescalero agency.		Jicarilla agency.	
Males	187	Males	355
Females.....	275	Females	366
	<u>462</u>		<u>721</u>

Making the total Apache population, 1,183.

PUBLIC BUILDINGS.

So far as completed Territorial buildings are concerned, the condition is but little changed from that reported last year. They consist simply of the capitol and the penitentiary, both located at Santa Fé. During the year the grounds of the capitol have been much improved. The trees formerly planted are becoming well established, a number of rare and beautiful specimens, mostly of colored foliage or weeping varieties, have been added to the collection, and the grass is becoming lawn-like in its evenness and verdure. The building is a model of taste and elegance, as well as convenience, and reflects great credit on all concerned in its erection.

The five Territorial institutions founded by the last legislature are the University of New Mexico, at Albuquerque; the Agricultural College and Agricultural Station of New Mexico, at Las Cruces; the New Mexico School of Mines, at Socorro; and the New Mexico Insane Asylum, at Las Vegas. Each institution is governed by a board of five trustees, who were appointed on the 1st day of September, 1889, as follows:

Regents of the Agricultural College and Agricultural Station of New Mexico: William L. Rynerson, Numa Raymond, Robert Black, Jayno A. Whitmore, and John R. McFie.

Directors of the New Mexico Insane Asylum: Russell Marcy, Lorenzo Lopez, Benigno Romero, William A. Vincent, and Joseph B. Watrous,

Trustees of the New Mexico School of Mines: Ethan W. Eaton, William T. Thornton, Severo A. Baca, Isaac S. Tiffany, and Walter C. Hadley.

Regents of the University of New Mexico: Mariano S. Otero, Henry L. Waldo, G. W. Meylert, Frank W. Clancy, Elias S. Stover.

A short time ago Mr. Tiffany died, and John W. Terry, of Socorro, was appointed in his place as a trustee of the school of mines.

The university is to receive the proceeds of a tax of two-fifths of a mill on the dollar, and each of the other institutions one-fifth of a mill. This will probably produce in actual collection about \$15,000 annually for the university, and \$7,500 for each of the others. The agricultural college and experiment station at Las Cruces receives in addition to the Territorial money a considerable amount from the United States, which the recent legislation of Congress has largely increased. This is the only one of the institutions which is yet in operation. In order to lose no time in the inauguration of its work, the preparatory department was opened last fall in a rented building at Las Cruces, and on the 9th day of September, 1890, the corner stone of the college building was laid with appropriate exercises, the Masonic grand lodge performing the ceremony, and the governor making an address.

The importance of the experiment station established in connection with this college can scarcely be overestimated. There is no section in which it is more needed or will be more useful. In large portions of the country there is such a similarity of climate and soil, that a multiplication of stations seems unnecessary. That which is true in Massachusetts will be generally correct in Connecticut; results obtained in Ohio will be a safe criterion for Indiana; an experiment made in Georgia will solve the same problem for Alabama. But in this respect New Mexico stands alone. In altitude and general conditions it is so entirely different from the neighboring States of Texas and California, that no observation made in them would be of any service here; and while Colorado is somewhat similar in altitude, yet there is such an entire difference in temperature and length of season, that few adjoining States could be so dissimilar in their productions. The results obtained elsewhere are consequently of no value here, and we need our own experiments and observations as a guide to the agriculture and horticulture of the future.

The regents of the university of Albuquerque have decided on a place for a building, and on the 16th of September, 1890, awarded a contract for its erection, the cost to be somewhat less than \$30,000.

The trustees of the school of mines have been far from idle, and have had plans of the first building to be erected prepared by Messrs. Thayer & Robinson, of New York, and expect to commence operations during the fall.

Toward the actual operations of the New Mexico Insane Asylum, nothing has yet been done except in the collection of information as to the best methods of construction of proper buildings. The trustees have delayed building until the proceeds of two years' taxation shall be in the treasury. Yet this is by far the most necessary of all the institutions established by the last legislature, as at present there is no provision whatever for the care of the insane, and those who are violent have to be confined in the county jails in default of any other place of safety. I have recently made inquiries of the sheriffs in order to ascertain the number thus confined, and also the number of other insane persons in the respective counties so far as their knowl-

edge extends. The replies show that there are seven insane persons imprisoned for lack of other means of safety, and twenty-seven others known to the sheriffs in need of care in an asylum.

The United States building at Santa Fé, the peculiar history of which was narrated in my last report, is now fully completed, finished, and occupied. The court room is used by the district court, and is not easily surpassed for comfort and elegance. The surveyor general, United States marshal, United States collector of internal revenue, United States attorney, register of the land office, and receiver of public moneys, all have their offices in this building. The grounds around have been tastefully inclosed by a fence of stone and iron, and in time will become a beautiful park.

During the year the United States have erected a large and attractive building as an Indian school at Santa Fé, southwest of the city. The structure stands near the center of a plot of 100 acres, which was donated by the citizens of Santa Fé for the purpose. This institution will commence its work in the beginning of October of this year.

The list of creditable modern court-houses in the Territory has received the addition of that of Mora County, built during the year at Mora, a short distance from the old barn-like structure. The new building is one of the finest in New Mexico, being of grey sandstone with brown trimmings, furnished with every modern convenience, and arranged in the most satisfactory manner for the accommodation of the courts, juries, etc., as well as for all the officers of the county. The building is 78.9 by 53, two stories in height, with basement, and surmounted by a tower of an altitude of 95 feet. Adjoining the court house is an admirable jail, 41 by 32, furnished with improved steel cages costing \$8,000. The expense of the whole improvement is about \$80,000.

The erection of the first fully equipped school-house, built without special legislation or private aid, is an event too important to escape attention. It is to be built in a commanding situation in the town of East Las Vegas, with two fronts, one facing Douglas street and the other Main street. The material is native white sandstone, with red sandstone quoins; and the building will be about 64 feet in length by 48 in width, and two stories in height above the basement.

While this school-house will be an excellent thing in itself for Las Vegas, its chief importance comes from the fact that it will serve as an example for all other towns to imitate.

The governor's palace is in much the same condition as last year, except that the additional lapse of time has made the need of repairs more pressing. The secretary of the Territory, who is its custodian, has obtained an appropriation of \$3,000 from Congress for this purpose, and while the sum is considerably less than that which he estimated to be necessary, yet it will do much to preserve this interesting historic edifice in fair condition.

Without disparaging the importance of any of the cherished historical localities of the East, it may be truthfully said that this ancient palace surpasses in historic interest and value any other place or object in the United States. It antedates the settlement of Jamestown by nine years and that of Plymouth by twenty-two, and has stood during the two hundred and ninety-two years since its erection, not as a cold rock or monument, with no claim upon the interest of humanity except the bare fact of its continued existence, but as the living center of everything of historic importance in the Southwest. Through all that

long period, whether under Spanish, Pueblo, Mexican, or American control it has been the seat of power and authority. Whether the ruler was called viceroy, captain-general, political chief, department commander, or governor, and whether he presided over a kingdom, a province, a department, or a Territory, this has been his official residence.

From here Oñate started in 1599 on his adventurous expedition to the Eastern plains; here, seven years later, eight hundred Indians came from far off Quivara to ask aid in their war with the Axtaos; from here, in 1618, Vincente de Saldivar set forth to the Moqui country, only to be turned back by rumors of the giants to be encountered; and from here Peñalosa and his brilliant troop started on the 6th of March, 1662, on their marvelous expedition to the Missouri. In one of its strong rooms the commissary-general of the Inquisition was imprisoned a few years later by the same Peñalosa; within its walls, fortified as for a siege, the bravest of the Spaniards were massed in the revolution of 1680; here, on the 19th of August of that year, was given the order to execute forty-seven Pueblo prisoners in the plaza which faces the building; here, but a day later, was the sad war council held which determined on the evacuation of the city; here was the scene of triumph of the Pueblo chieftans as they ordered the destruction of the Spanish archives and the church ornaments in one grand conflagration; here De Vargas, on September 14, 1692, after the eleven hours' combat of the preceding day, gave thanks to the Virgin Mary, to whose aid he attributed his triumphant capture of the city; here, more than a century later, on March 3, 1807, Lieutenant Pike was brought before Governor Alencaster as an invader of Spanish soil; here, in 1822, the Mexican standard with its eagle and cactus was raised in token that New Mexico was no longer a dependency of Spain; from here, on the 6th of August, 1837, Governor Perez started to subdue the insurrection in the North, only to return two days later and to meet his death on the 9th, near Agua Fria; here, on the succeeding day, José Gonzales, a Pueblo Indian of Taos, was installed as governor of New Mexico, soon after to be executed by order of Armijo; here, in the principal reception-room, on August 12, 1846, Captain Cooke, the American envoy, was received by Governor Armijo and sent back with a message of defiance; and here, five days later, General Kearney formally took possession of the city, and slept, after his long and weary march, on the carpeted earthen floor of the palace.

From every point of view it is the most important historical building in the country, and its ultimate use should be as the home of the wonderfully varied collections of antiquities which New Mexico will furnish.

The easterly end of the building is still appropriately occupied by the Historical Society and the west end by the post-office. The portion which the Interior Department had authorized the secretary of the Territory to assign as quarters for Army officers, but which was never so used except for a short time by one second lieutenant, have been retransferred by the War Department, and the whole structure will soon have the benefit of the repairs previously referred to. The Territorial bureau of immigration has applied for the use of rooms in the palace, adapted to an exhibition of the various products of the Territory, and no better or more appropriate place could be found for the purpose. The historical rooms contain a fine display of mineral specimens from the various sections of New Mexico, and it is desirable that the exhibition of other products should be as near as possible. It is to be hoped that the request can be granted.

UNDEVELOPED RESOURCES.

Under this head, a year ago, I drew attention to the manifold resources of New Mexico, so varied and so abundant that it could be truthfully asserted that no other portion of the United States is so richly endowed by nature. As this seemed such strong language as to savor of exaggeration, I proceeded somewhat in detail to make a comparison, in order to show that the picture was not overdrawn. I showed that the States east of the Mississippi while well equipped in most localities for agricultural and horticultural success by excellence of soil and abundance of humidity, yet as a rule were devoid of mineral resources. Along the Appalachian range there were great deposits of iron, and in certain sections abundance of coal, but of the precious metals the amount even in North Carolina was so small as to be insignificant. Michigan contained magnificent mines of copper, but had no other mineral wealth. Crossing the Mississippi we found in Missouri great masses of lead and zinc, but of more valuable metals she had none. Proceeding westward to the Rocky Mountain region, it is true that Colorado, by her early development excelled us in mineral product, but when we turned to other resources she had nothing to compare with the fertile valleys of our rivers, and in the productions of the field, the market garden, the orchard, and the vineyard, New Mexico was immensely superior. The gainsayer, baffled thus far in finding a land so favored as our own, might then turn to California, and portraying her wonderful advantages insist that at least that State was superior. And at first sight it would almost seem as if this were true. For besides her marvelous record as the land of gold, she possessed the enormous wheat fields of the north and the center, and the magnificent fruit and grape regions of the south. But in these latter respects we are fully her equal, and her mineral is nearly all of one metal. She has not our silver, or lead, or copper, or iron. And beyond all this, the possession in vast and inexhaustible quantities of that great essential article, which is the motive power to set in operation so many branches of business, coal, gives to us the stamp of superiority that can not fail to be recognized.

I then proceeded to enumerate some of the wonderful resources and opportunities of production existing within our borders, for New Mexico is so large in extent that very few are aware of the latent wealth which lies awaiting development within our borders. There are the great pine forests from which, in a single county, over 50,000,000 feet of lumber are even now being produced each year. There are the wonderful wheat lands of the northern valleys which, though used uninterruptedly for over a hundred years without rotation, yet produce crops unsurpassed in India or Russia or our own Northwest. There are the long stretches of valleys bordering all of the great rivers and their tributaries which rival, if they do not excel, the prairie soil of Illinois or Kansas in the luxuriance of their fields of corn. There are the broad acres in alfalfa and other grasses, mere samples of what may be a vastly multiplied reality, producing by their successive crops a much larger weight of hay than can be raised on the same area in any of the most favored grass producing States. Our oats are greatly superior to those grown elsewhere. While those of Kansas average but 27 pounds to the bushel and seldom exceed 30 at the highest, ours, with their plump full kernels, will average 34 and often exceed 40. Our valleys excel in the production of every kind of vegetables except potatoes and they are produced of wonderful excellence on the mountain sides and in all the higher al-

titudes. And as to fruit, this seems to be the spot specially adapted by the hand of the Creator for its perfection. Whether apples or pears, peaches, apricots, or nectarines, plums, cherries, or quinces, all here exhibit their finest points of size, color, and taste, combining the weight and beauty of those of California with the richest flavor of those of the East. I do not recapitulate these things for the glorification of New Mexico, but with a special practical object, and that is to show that while possessing all these natural advantages our people are not using them even to the extent necessary to meet our own requirements. With every opportunity of supplying ourselves with all the staple articles and of exporting them to less favored States, we are not doing so, but are actually importing them in vast quantities from without. From this it follows that there is an extraordinary field here awaiting the industry and energy of those who shall come to occupy it.

The facts are really surprising, and will be presented here with some particularity, in order that they may be fully understood. Our wheat lands are unsurpassed, and more than amply sufficient for all of our home demand. Yet during the last year the Atchison, Topeka, and Santa Fé Railroad alone brought into the Territory 409 tons of wheat, and 8,897 tons of flour. The Atlantic and Pacific Railroad added 379 tons of flour, making 9,276 tons. This does not include that brought by the Southern Pacific Railroad from California, or by the Denver and Rio Grande Railroad and the Denver and Fort Worth Railroad from Colorado, which doubtless brings up the aggregate to 450 tons of wheat and 10,000 of flour. But considering only the imports by the first two railroads, the flour would make 371,040 sacks of 50 pounds each, or 18,552,000 pounds, besides 818,000 pounds of unground wheat.

Corn is the natural product of full three quarters of the Territory. Here it was found growing by Coronado in 1541, in such abundance that the historian of his expedition tells that "the harvest of one year is sufficient for seven; when they begin to sow the fields are still covered with the corn that has not yet been gathered." And here, to-day, it is found not only of marvelous height in the well-watered valleys, but growing in many sections without irrigation at all. Yet we imported over the Atchison, Topeka, and Santa Fé Railroad 7,945 tons, and 90 tons from the west over the Atlantic and Pacific Railroad, making 8,035 tons of which we have accurate figures, besides what came in on the other three railroads, and also in addition to 143 tons of ground meal. Here, then, are over 16,000,000 pounds of corn and meal brought into New Mexico, which no doubt would exceed 20,000,000 if we had the full figures.

I have before alluded to the superior character of our oats, which should cause them to be raised in great quantities for exportation to less favored localities; but, on the contrary, the Atchison, Topeka, and Santa Fé Railroad carried to us, instead of from us, during the last year, not less than 3,487 tons.

And now we come to the article which should be our largest product. I refer to hay. Four crops of alfalfa is the usual yield in our valleys. Its long roots penetrating the soil to a depth where there is always moisture, and its permanence when once established, peculiarly adapt it to our conditions. There is no limit to the amount which can be raised. Every acre of land which is fairly irrigated will produce most abundant crops. We ought to supply a great section of country outside of our boundaries with their hay; and yet last year we imported over the two railroads from which we have returns, 7,904 tons from the east and 241 from the west!

These four articles are those of largest general consumption; but if we carry on the investigation, and look at those which may be considered of minor importance, we will see that the same results are found, of importations when we should not only supply ourselves but export in large quantities.

Everywhere in New Mexico where industry chooses to employ itself in the raising of vegetables, they are produced in great perfection. Everyone employed in their cultivation finds the business profitable, and yet the Santa Fé line alone brought 1,491 tons of vegetables from abroad into the Territory last year, for consumption here.

A still more startling exhibit is that regarding fruit. New Mexico is beyond contradiction the best section in the United States, we might almost say in the world, for both orchards and vineyards. Whenever we send our fruit to markets in which it meets that of California or other States it is greatly preferred, and the New Mexico product, of identical varieties, brings a price from 20 to 40 per cent. higher than that received by its rivals. We ought to export enough fruit to pay for all our imports of every kind, and yet during the last year, the Santa Fé route brought into the Territory 408,000 pound of green fruit and 675,000 pounds of canned goods. This came from the eastward, and the Atlantic and Pacific Railroad more than doubled the importation by bringing no less than 1,354,000 pounds of fruit in various forms from the west. Thus over 2,000,000 pounds of fruit were actually brought into this land of the peach, the apple, and the grape in a single year. The newsboys on the trains which pass directly through the Rio Grande Valley sell the fruit of California and not that of New Mexico to the passengers.

Albuquerque lies in the center of that valley, with large orchards both to the north and south, yet in that city one single firm imported this year no less than 1,400 barrels of apples from the east, and the total amount brought there from beyond the territorial line was 2,500 barrels.

Some of the other unnecessary importations of the Territory can be estimated from the amounts brought into that same city. In a land of pastures and cattle they send money abroad for 280,000 pounds of butter and 40,000 pounds of cheese. In the midst of all that should make the raising of fowls easy and profitable, they imported 54,000 pounds of poultry and 2,880,000 eggs. They bought during the last year 1,500,000 pounds of potatoes, which could easily have been raised in the cañons and on the foot hills. Onions are produced all through the valleys, of great size and perfection, and yet even of these they imported 60,000 pounds. And when it is known that in this one town they bought 132,000 cans of various food products last year one may imagine how many canned goods were consumed in the whole Territory, and wonder why they were not raised and prepared at home. For Albuquerque is no exception among New Mexican towns. At Springer, close to the wheat lands of the Maxwell grant, they used 879,000 pounds of foreign flour, and 900,000 pounds of corn; at Wagon Mound, near the Mora valley, whose wheat fields are wonders of productiveness, the leading dealer imported 286,000 pounds of flour, and writes that "almost every merchant from Las Vegas northerly gets his flour and grain from the east;" and in Las Vegas, the "City of the Meadows," it is estimated that 200 car loads of flour, 100 of corn, and 75 of vegetables are consumed each year. The fact is that every day in the year trains of cars roll into the Territory, through the Raton tunnel and across the Colorado of the West laden with the products of other States, which we are to consume and for

which we are to pay, while every one of them could be produced in great abundance and of better quality by our own people. The sum which we annually pay for the comparatively few articles which I have enumerated amounts to over \$1,200,000.

These would be sad facts if caused by any lack of capacity for production in New Mexico; as it is, they are simply suggestive and instructive ones. And the lesson which they teach is a double one.

Firstly, they should be an inspiration and incentive to our own people to utilize to a far greater extent the resources and advantages which they possess; and secondly, they show by absolute figures that can not lie, that New Mexico presents attractions to the industrious and energetic immigrant which are unknown elsewhere.

The man who goes to Dakota, may raise an abundance of wheat, but there is no local demand for the crop when matured, and in order to find a market he must send it to Chicago or some other center of trade. He is at the mercy of the railroads, for his product has to bear long transportation before it reaches any consumer. The value of the product on the ground is the price in Chicago, less the freight and various charges.

The raiser of corn in Kansas is in a similar plight. There is no home demand for his product. Every one has the same, and all have a surplus. To be turned into money, it also must go to a more eastern market and be governed by prices there. He, as well as his Dakota brother, is at the mercy of those who control transportation, and the value of his corn is the price in the eastern market, less the cost of transportation, the commissions and charges. Many a time, as is well known, corn is so cheap and coal is so high, that its most profitable use is to be burned as fuel. In New Mexico all this is reversed. Here is an actual demand for nearly 20,000,000 pounds of flour, which must be filled from somewhere, and now is supplied from abroad. This demand does not have to be created, nor does it depend on the crops of Russia or India, but it exists right here in New Mexico. The raiser of wheat, therefore, runs no risk. He is sure of a market. And the market is at home. There is no long transportation involved, and so the railroads can not control or overcharge. The price is the price in Minnesota or Dakota, plus the cost of freight from there. The freight should constitute an ample profit.

And so of corn. The market is already here and must be supplied. Over 8,000 tons are necessary for that purpose, and the man who produces up to that amount is sure of a sale, close to his farm, and at the prices in Missouri or Kansas, plus the freight and charges involved in bringing it from there.

These are but examples. The same general facts exist as to the other articles that have been mentioned. In every case there is an actual home market existing in New Mexico, waiting for some one to supply it from our soil, and meanwhile being filled from abroad. All of the products named are among those most successfully raised in the Territory, and the only reason for the shortness of the supply is that no one is taking the trouble to raise them in sufficient quantity. This inadequacy of supply is increased in New Mexico on account of the large mining industry, which employs great numbers of men, who continually consume all kinds of food products while producing none.

Through most of the agricultural sections of the United States the farmer has great difficulty in finding some article which he can raise at a profit and with which the market is not already greatly overstocked; and after a year of toil is liable to find the general supply of his produce

so great and the price consequently so low that he receives little or nothing for his labor and the use of his land. Here the market is ready and ample, and only awaits greater energy on the part of those already here, and the influx of intelligent and industrious producers to supply it. Nowhere is the reward of agricultural and horticultural enterprise so great and so certain.

THE "SUNSHINE STATE."

Some months ago, a Boston publishing house, preparing a geographical work, after asking information on various points connected with New Mexico, inquired as to its "pet name," as, in treating of each State, they had placed in the pictorial headings these familiar names, as "Granite State," "Bay State," "Empire State," etc.

I had to answer that New Mexico was not yet possessed of a "pet name," nor could one be adopted except by common consent; but I ventured to suggest that as it had been called "the land of perpetual sunshine," no more appropriate name could be found than "the Sunshine State." And so, for wider circulation, that may elicit comment and show how fully this meets the general thought, I repeat the suggestion here, for no part of the Union, by its climate and cloudless sky, is so fully entitled to this name of "the Sunshine State."

L. BRADFORD PRINCE,
Governor of New Mexico.