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The Governors of Colorado—Their Ancestries and Interests

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To date Colorado has had thirty-three governors serving both the Territory and the State. Our first to hold office was Robert W. Steele who was elected to head the locally formed Provisional Territory of Jefferson in 1859. When in 1861 Colorado Territory came into existence by an act of Congress, Governor Steele gave place to Governor Gilpin, who had been appointed by President Lincoln. From then until Colorado became a state in 1876 the office was appointive. John Long Routt, who was the last of the appointees, became the first of those to be elected by the citizens in 1876. In the table on page 99 is given a list of Colorado's governors, their places of birth, etc.

The problem of working out the genealogies of our governors by means of the materials in the Denver Public Library and the State Historical Society has been an interesting one. Correspondence has been resorted to as well, but in some cases only the most meagre information could be secured. The results present the typical picture of the family streams that pour into a pioneer community such as ours was, even in the memory of persons now living. Oddly enough, none of the men who held the highest office in the gift of the state were in any way related to the earlier groups of settlers who entered the area. The permanent settlements of the southern part of the state were mostly Spanish and Mexican. Theirs was the colorful, leisurely life of the rancho. The new influx of immigrants was drawn by love of gold to where the strikes were being made farther north and the seat of the government was moved twice before it was finally and definitely located in Denver.

The new group of settlers was drawn from every section of the eastern half of the United States. From north, east and south the streams of adventurers converged upon the banks of the Missouri River, mostly at the town of Independence, from whence they spread out again, fanwise, across the great western wilderness. As time went on there was a continuous movement west-

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ward and from this movement have been drawn our governors and their wives. Their progenitors represent every class and calling. Few came from homes of affluence, although some were of long and distinguished lineage. What a wealth of enterprise and industry contributed to this typically American but difficult rise from obscurity to prominence through which most of these families passed.

Seven of our governors were sons or grandsons of immigrants from Europe—Carlson, Johnson, Shafroth, Cooper, Morely, Vivian, and McCook. The Carlson and Johnson families came from Sweden; Shafroth's father was a native of Switzerland. The Cooper, Morley and Vivian families were from England and the McCooks from Scotland. The ancestors of all of our other governors were from the British Isles except for the German family of Buchtel. The name Shoup sounds German but all we know of this family is that they came to Colorado from Ohio.

Calling the roll of the states in which our governors were born we find there was one each from Connecticut, Vermont, Kentucky, North Carolina, Georgia, Alabama, Michigan, Missouri, Arkansas, and Kansas. Pennsylvania and Wisconsin have two each, while New York, Illinois, Iowa and Colorado have three each. Ohio might be called the Mother of Colorado Governors, since a total of seven were born there.

Frederick Walter Pitkin was born in Manchester, Connecticut, and came to Colorado directly from that New England state, with a lineage that goes back into England and included a number of distinguished early colonists, Governor William Pyncheon, the Reverend Peter Bulkley, Stephen Hosmer and others of their day while he had a double descent from William Pitkin and Ozias Goodwin, his great grandparents on his father's side having been distantly related. His Revolutionary ancestor was Richard Pitkin of East Hartford, Connecticut. The wife of Governor Hunt was descended from the same Stephen Hosmer mentioned above.

James Hamilton Peabody was born in Topsham, Vermont, a descendant of John Peabody of Duxbury, Massachusetts. He stemmed also from Reginald Foster of Ipswich, Massachusetts, who married into the celebrated Beauchamp family of England. His Revolutionary ancestor was Moses Peabody of Boxford, Massachusetts. Governor Grant's wife was also a descendant of the original John Peabody.

William Gilpin was born on the Brandywine Battlefield in Pennsylvania. His people came from England, where they had been gentlefolk for centuries, the De Gylpins. Albert Washington McIntire was born in Pittsburgh. His grandfather Thomas Mc-

COLORADO'S GOVERNORS

NAME	TERM	PARTY	BIRTHPLACE
JEFFERSON TERRITORY			
Robert W. Steele	1859-1861	Dem.	Ohio
COLORADO TERRITORY (Governors Appointed)			
William Gilpin	1861-1862		Pennsylvania
John Evans	1862-1865		Ohio
Alexander Cummings	1865-1867		New York
Alexander Cameron Hunt	1867-1869		New York
Edward Moody McCook	1869-1873		Ohio
Samuel Hitt Elbert	1873-1874		Ohio
Edward Moody McCook	1874-1875		Ohio
John Long Routt	1875-1876		Kentucky
STATE OF COLORADO (Governors Elected)			
John Long Routt	1876-1879	Rep.	Kentucky
Frederick Walter Pitkin	1879-1883	Rep.	Connecticut
James Benton Grant	1883-1885	Dem.	Alabama
Benjamin Harrison Eaton	1885-1887	Rep.	Ohio
Alva Adams	1887-1889	Dem.	Wisconsin
Job Adams Cooper	1889-1891	Rep.	Illinois
John Long Routt	1891-1893	Rep.	Kentucky
Davis Hanson Waite	1893-1895	Populist	New York
Albert Washington McIntire	1895-1897	Rep.	Pennsylvania
Alva Adams	1897-1899	Dem.	Wisconsin
Charles Spalding Thomas	1899-1901	Dem.	Georgia
James Bradley Orman	1901-1903	Dem.	Iowa
James Hamilton Peabody	1903-1905	Rep.	Vermont
Alva Adams (contested election)	1905	Dem.	Wisconsin
James Hamilton Peabody (23 hours)	1905	Rep.	Vermont
Jesse Fuller McDonald	1905-1907	Rep.	Ohio
Henry Augustus Buchtel	1907-1909	Rep.	Ohio
John Franklin Shafroth	1909-1913	Dem.	Missouri
Elias Milton Ammons	1913-1917	Dem.	North Carolina
George Alfred Carlson	1915-1917	Rep.	Iowa
Julius Caldeen Gunter	1917-1919	Dem.	Arkansas
Oliver Henry Shoup	1919-1923	Rep.	Illinois
William Ellery Sweet	1923-1925	Dem.	Illinois
Clarence Joseph Morley	1925-1927	Rep.	Iowa
William Herbert Adams	1927-1933	Dem.	Wisconsin
Edwin Carl Johnson	1933-1937	Dem.	Kansas
Raymond Herbert Talbot (10 days)	1937	Dem.	Illinois
Teller Ammons	1937-1939	Dem.	Colorado
Ralph Lawrence Carr	1939-1943	Rep.	Colorado
John Charles Vivian	1943-	Rep.	Colorado

Intire served in the War of 1812 and his great-grandfather in the Revolutionary War. Their forebears came from Ireland and Scotland in the 18th century.

Alexander Cummings was born in Williamsport, New York; Davis Hanson Waite in Jamestown; and Alexander Cameron Hunt came from Stephenson County in the same state, but we do not know his actual birthplace although one account says he was born in White Pigeon, Michigan. Governor Waite's paternal ancestors all settled around Watertown, Massachusetts, in the 17th century, one Richard Woodward having been a freeman there in 1635, while his maternal grandfather, Samuel Davis, served in the Revolutionary War from the same state. His maternal grandmother was a Chapin and a descendant also of the celebrated Adams family.

Of the Ohio men, John Evans was born in Waynesville; Edward Moody McCook in Steubenville; Samuel Hitt Elbert in Logan County; Benjamin Harrison Eaton in Coshocton County; Jesse Fuller McDonald in Ashtabula County; Henry Augustus Buchtel at East Liberty, near Akron; and Robert W. Steele near Chillicothe. The latter must not be confused with Robert Wilbur Steele who was Chief Justice of the Supreme Court of Colorado.

Both Governor Eaton and Governor Evans were of Quaker stock, but in the progress westward Quakerism was left behind, although the high principles engendered by the faith were retained. The Evans line goes back to the early 17th century, showing a trek from Ireland to Wales, and on to Pennsylvania in the New World. These wanderings usually indicate a record of religious persecution from which a final escape was made in America. It was a member of this family who invented the screw auger. Governor Eaton's paternal grandfather was a New England sea captain, a romantic but hazardous occupation.

The McCooks were known at the "Fighting McCooks" because, without exception, the men of each generation went into the army. If minstrelsy were in vogue, their deeds would be the theme of many a stirring ballad. Samuel Hitt Elbert came on the father's side from a noted Maryland family of physicians and his grandmother was a Virginian. His Revolutionary ancestor was Dr. Lodman Elbert of Maryland. It is interesting to know that he married a daughter of John Evans, who preceded him in the office of Governor.

Governor McDonald belongs to the McDonald family that came to Maine in the middle of the 18th century. His mother was a Bond, coming down from Thomas Bond of Watertown, Massachusetts, from Nathaniel Biscoe, Roger Fuller, and Sir

Robert Whitney, who married a daughter of the Baskervilles, descendants of William the Conqueror. While ancient ancestry apparently means little in the Colorado of today, it is undeniably interesting to study these old records and it does mean something to have a family continuity and a disposition to keep records and try to emulate past distinctions.

The Buchtels were an interesting family. A brother of the Governor married the daughter of a famous showman, P. T. Barnum, for whom a suburb of our city was named. A relative, John A. Buchtel, founded Buchtel College in Ohio, while the Governor has been recently remembered in Buchtel Boulevard which passes through University Park where he made his home as Chancellor of Denver University. We have been unable to discover anything about the family of Robert W. Steele as a preface to his varied and successful career in Colorado.

Job Adams Cooper was born in Greenville, Bond County, Illinois; Oliver Henry Shoup in the tiny settlement of Boggs Corner in Champaign County; and William Ellery Sweet in Chicago. Governor Shoup's parents were from Ohio but nothing further is known of his ancestry. Governor Sweet's grandfather came to Colorado from Canada by way of Chicago but this family was originally located in Rhode Island. The paternal grandmother, Clarissa Call, had a long New England ancestry. There were a number of original immigrants among her forebears, Thomas Call, Richard Kettell, Ryse Cole, John Tuttle and others. Her Revolutionary ancestors were James and John Masters Call, James Harwood and Francie White, all of New England. Governor Sweet's mother was Emeroy L. Stevens, whose Revolutionary ancestor was John Baxter of Cambridge, Massachusetts, and she too was from Canada. To those who study genealogy it is fascinating to discover how many of the families that emigrated northward during and after the Revolution returned in later generations to the States.

Moving westward we find that from Iowa came James Bradley Orman of Muscatine; Clarence Joseph Morley from the village of Dyersville in Dubuque County; and George Alfred Carlson from Alta, in Buena Vista County. John Franklin Shafroth was born in Fayette, Howard County, Missouri; Julius Caldeen Gunter in Fayetteville, Arkansas; and Edwin Carl Johnson in Scandia, in Republic County, Kansas. Governor Gunter's Revolutionary ancestors were John Gunter of Virginia and Samuel Jackson of North Carolina.

John Long Routt was born in Edyville in Lyon County, Kentucky. Both his grandfather, Daniel Routt, and his father, John Routt served in the War of 1812. His paternal grandmother had a German name, Stigler, and it is possible that the Routts them

selves were of German extraction, although one account states that they were Welsh, but so little has been published on this name that it is possible only to surmise. The mother was of the Haggard family of Kentucky, whose remote ancestors were said to have gone from Denmark to England. Sir Edward Ogard is the first one recorded and he is supposed to have had a castle in Norfolk. It might be that he was among the Danes who invaded England long ago. The grandfather, David Haggard, was a Revolutionary soldier from Virginia.

From North Carolina came Elias Milton Ammons, born near Franklin, in Macon County. His grandfather, Joshua Ammons, was a Baptist minister and his great grandfather was supposed to have served in the Revolutionary War. Charles Spalding Thomas was born in Darien, Georgia, to which his parents had come from Michigan, having started their long journey around the country from their original home in Connecticut, a rather roundabout way of reaching the Governor's chair of a western state. His paternal ancestry cannot be located but his mother was a descendant of John Mallett, a French Huguenot who came to Fairfield, Connecticut, about 1700.

James Benton Grant was born in Russell County, Alabama. His original ancestor came from Scotland to North Carolina in 1746, moving on to Alabama a century later. The impoverishment following the Civil War sent this family to Colorado to the enrichment of themselves and of our state. The Revolutionary ancestor of this family was James Grant of Raleigh, North Carolina.

The Adams brothers, Alva and William Herbert, were born in Blue Mound, Iowa County, Wisconsin. Their father, John Adams, of Kentucky is supposed to be from the famous Adams family of New England. His wife was a Blanchard of New York, daughter of the founder of Blanchardville, Wisconsin.

We have now come to the time when our governors are born in our own state. There have been three of these: Teller Ammons, son of Elias Milton Ammons, the 21st governor, born in Denver and named for Henry M. Teller who was a close family friend; Ralph Lawrence Carr, born in Rosita, Colorado; and John Charles Vivian, born in Golden, which was for a time the capital of the state. The Carr ancestry is interesting in that it shows a change of residence in each generation that is recorded from Pennsylvania to Virginia, to Kentucky, Illinois and Colorado, but the family appears to be established now.

When we examine the achievements of our chief executives they are found to have been, on the whole, men of varied and abundant gifts. We are apt to jump to the conclusion that a man's accomplishments are in proportion to his advantages. This has

not been true in the case of the men who hold our interest in this paper. The spirit that was within them seems to have been the secret of their success as public servants rather than anything in their surroundings. It was true that they made use of obstacles as well as opportunities. Their educational equipment was as varied as their talents. Eighteen of the thirty-three were college and university men.[1] Grant and Gilpin studied abroad and McIntire was a linguist with a knowledge of five tongues. Gilpin was also a West Point man and it was through the records of that institution that his correct birth date was established, all the printed sources having given a wrong one.

Of the others, Elias M. Ammons was a graduate of Denver High School. He served with distinction for years on the Board of the State Agricultural College, and a building in the campus has been named for him in recognition of his services. One of the college men, Evans, helped to found two universities, Northwestern of Illinois and the University of Denver in Colorado, and another, Buchtel, was Chancellor of the latter institution. Besides being the only clergyman who ever became governor of the state he was at one time a missionary to Bulgaria. Twenty-four of the group engaged in political activity more or less lifelong.[2] For others, the governorship was the only excursion into the political field. Fourteen were lawyers, a rather small number since we are inclined to believe that men move normally from the legal profession into politics.[3] Three have held positions outside the United States: McCook as Minister to Hawaii; Cummings as consul in Canada; and Teller Ammons, a Lt. Col. in the United States Army, as Military Governor of Guam.

Fourteen were businessmen with varied interests.[4] Three engaged in freighting,[5] this being mentioned separately since it was so vital in the early life of our settlements, Alva Adams having hauled ties to be used by the first raliroads. Twelve of our governors engaged in some aspect of ranching,[6] one having taken his turn as a cowboy, while four were known definitely, as having been in the cattle business.[7] Reclamation and irrigation claimed the attention of only three—Eaton, Elbert, and Shoup—which

[1]College and University Men: Gilpin, Evans, Elbert, Pitkin, Grant, Cooper, McIntire, Thomas, Buchtel, Shafroth, Carlson, Gunter, Shoup, Sweet, Morley, T. Ammons, Carr, and Vivian.

[2]Political Activity: Gilpin, Evans, Cummings, Hunt, Elbert, McCook, Routt, Pitkin, Eaton, Waite, McIntire, Orman, Peabody, McDonald, Shafroth, E. M. Ammons, Carlson, Gunter, Shoup, Morley, Johnson, T. Ammons, Carr, and Vivian.

[3]Lawyers: Gilpin, Elbert, Pitkin, Waite, Cooper, McIntire, Thomas, Shafroth, Carlson, Gunter, Morley, T. Ammons, Carr, and Vivian.

[4]Business: Evans, Hunt, McCook, Eaton, Cooper, A. Adams, Orman, Peabody, McDonald, Buchtel, Gunter, Shoup, Sweet, and W. H. Adams.

[5]Freighting: A. Adams, Orman, and Johnson.

[6]Ranching: Evans, Elbert, Grant, Eaton, Waite, McIntire, Peabody, McDonald, E. M. Ammons, W. H. Adams, Johnson, and T. Ammons.

[7]Cattle: E. M. Ammons, W. H. Adams, Johnson, and T. Ammons.

seems strange, since irrigation has been one of the fundamental needs of the region.

Nine had something to do with mining[8] and their experience covered every aspect of that industry so important to the West. Grant and McDonald were engineers, while Shoup seems to have been the only governor associated with the oil business. Six were connected with banks,[9] only four taught school,[10] and seven followed some form of journalism,[11] from the reporter's beat to the editorial chair. Gilpin is known to have written books and Vivian composes verses.

Seven were soldiers:[12] Routt was noted for a famous exploit at the siege of Vicksburg and Teller Ammons became Military Governor of Guam during the recent World War. Only one doctor ever became governor here and that was Evans, the man of extraordinary gifts and energy. He founded the State Hospital for the Insane in Indiana before coming to Colorado and was also instrumental in the organization of the Methodist Book Concern, his aim being to bring books closer to the people of the West. The town of Evanston, Illinois, was named for him while Mount Evans was intended to recall his long and honorable career in Colorado.

E. M. Ammons was largely responsible for the Western Live Stock Show, the greatest in the world. Orman helped to get the first horse cars going while Evans pioneered in the electric street railway. McCook worked for Woman's Suffrage, public schools and a modern water system, while Routt was active in the erection of the State Capitol. McCook helped secure recognition of Colorado as a Territory and Gilpin and Evans joined in saving Colorado to the Union during the Civil War, action which had far-reaching consequences, small as the population was at the time. More than one of the early governors found it necessary to negotiate in various ways with the Indians, much skill and knowledge being employed in this field.

Hunt has the distinction of having gone first to California and deserting that land of promise in favor of Colorado. Evans, Hunt and Cooper realized the value of railroads and worked for their construction. Orman was interested in cultural enterprises and organized the Opera House Association. Peabody was one of the outstanding Masons of the whole country. Only four of our governors belonged to this Order of which George Washington was an honored member.

[8]Mining: Steele, McCook, Routt, Pitkin, Grant, Eaton, Orman, McDonald, and Shoup.
[9]Banking: Cooper, Peabody, McDonald, Gunter, Shoup, and Sweet.
[10]School Teacher: Evans, Eaton, Waite, and Johnson.
[11]Journalism: Evans, Cummings, Waite, Morley, E. M. Ammons, Carr, and Vivian.
[12]Soldiers: Gilpin, McCook, Routt, Grant, Cooper, T. Ammons, and Vivian.

The orators were Gilpin, Evans and McCook. Nowadays speechmaking seems to have taken the place of oratory. Sweet made the Y. M. C. A. one of the passions of his life, believing that every man who has secured a competency owes a social debt to his times which he must try to pay in one way or another. Johnson, having served his turn at every kind of hard work is now making a record in the United States Senate. Only one other ex-governor, Shafroth, has won that honor.

Most of the great achievements of the governorship seem to belong to an earlier day. In pioneer times there is a great scope for industry, invention and for the laying of foundations for future growth. There comes a time when the commonwealth seems well furnished with the implements of living and the opportunities not so great. On the other hand, many of the institutions founded in the earlier days are no longer adequate. The ideas that governed the past have not kept pace with the tremendous changes that have taken place in a few short years. This presents as great a challenge to man's abilities as ever the pioneer days did, a challenge which, if recognized and heeded, can make any present day governor as noted for his contributions to his own period as are the achievements of the remarkable men of the past.

The L7 Baggs Ranch

CHARLES WILLIS NEIMAN*

About twenty miles from Saratoga on the North Platte River, near Elk Mountain, Wyoming, William F. Swan founded the L7 Ranch in the fall of 1883. Fort Steele, a cavalry post established by the government to control the Ute Indians, was about twenty-five miles from the ranch headquarters. L. E. Green was the first manager of the L7, and Johnny Wilcox, who had his own ranch in Wyoming, was the foreman. I went to work for the company in 1883, and at that time I believe the company claimed about 8,000 head of cattle.

*This is a personal account dictated by Mr. Neiman to Garnet and Herbert O. Brayer in 1942, and forms part of the collection of L7 ranch papers assembled for Mr. Henry Swan, son of the L7 founder and a member of the Board of Directors of the State Historical Society of Colorado. Charles Neiman, son of a Pennsylvania doctor, was born in Wilksbarre, Pa., on March 24, 1861, and at an early age moved to eastern Kansas. At nineteen young Charles accompanied his father on a visit to the booming silver camp of Leadville but returned reluctantly to continue his education at the Kansas agricultural college. In 1882, with three years of college behind him Neiman returned to Colorado, ultimately drifting to the North Platte ranch country in southern Wyoming where he joined the L7 outfit. After some years as a rancher Neiman was elected sheriff of Routt County, Colorado, serving with distinction for several terms. He married Miss Ruby Carle, daughter of Judge W. W. Carle, pioneer in the Yampa country, and settled at Steamboat Springs and Yampa where he ran his own farm and ranch. Neiman took an active part in the formtion of the Yampa Irrigation District and served as its secretary-treasurer. Mr. and Mrs. Neiman now reside at Manitou. (From the records of the Western Range Cattle Industry Study.)

Cattle were run the year around on the Wyoming ranch. They were driven from Texas to Wyoming and were of the long-horned variety in the first years I worked on the L7—1883-1884. We had better cow horses then than those used on the ranches today. The headquarters consisted of a group of small, dirt-roofed, log buildings, including a log barn. The men slept in wooden bunks, although there were a few bedsteads made out of boards or poles. Slough grass was used as padding for mattresses. Of course the usual cowpuncher's bed was his own blankets—or quilts—and a tarpaulin. Almost all of the furniture for the buildings was homemade. Wood for buildings, furniture and for fuel was cut in the nearby woodlands where there was plenty of pine, cedar and aspen, as well as cottonwood in the bottoms. Coal oil and candles furnished light at night. There was very little fencing, in fact, just around the hay meadow near the headquarters, where from five to seven tons of hay were cut annually. I worked at the L7's Platte River ranch throughout 1883.

In the fall or winter of 1883 the company bought out the Baggs outfit on the Snake River in northern Colorado and Southern Wyoming and about 175 miles from the Platte ranch. Baggs' foreman when the sale was made was Hank Goldenan. In the spring of 1884 Manager Green, upon foreman Wilcox's recommendation, sent Charlie Ivey, a former L7 hand and brother-in-law of Wilcox, to act as foreman of the newly purchased Snake River outfit. At that time I was working on the Platte River ranch for Wilcox. Sometime after Ivey had been sent over to Snake River, Wilcox received a letter from him stating that the roundup would soon start and that he was short of men. Ivey requested Wilcox to send him a couple of men as he was unable to find any available on the Snake River. We had just returned from a twenty-day trip rounding up horses which we had wintered on the big bend of the Muddy Creek (which runs into the Snake River at Baggs). The herd consisted of about four-hundred head of saddle horses which the L7 had purchased from a Texas trail outfit in the fall of 1883. Wilcox told us about Ivey wanting some men and asked for two volunteers to go to the Snake River ranch and help Ivey through the spring roundup and then return to the ranch on the Platte. I volunteered and rode to Baggs and joined the outfit there.

The Snake River headquarters were considerably more improved than the Platte River outfit. Baggs, the former owner, had been a hospitable individual, putting up all who passed the ranch and desired a night's lodging. There were many ranches of that type in the 'eighties; we called them "road ranches." The headquarters buildings at Baggs were also built of logs with dirt roofs. Store furniture purchased at Rawlins gave the Baggs headquarters a comfortable and prosperous appearance. A Concord stage coach drawn by from four to six horses brought daily mail to Baggs from the railroad at Rawlins. Forty-four miles south of Baggs, on the Snake River in Colorado, we had the winter camp. Here was the best winter and summer range I have ever seen in the West. There was little if any fencing on the Snake River outfit when we took it over. There were only two corrals on the entire Snake and Bear River ranges. In 1884 we had to do all our branding without corrals.

When Swan bought out the Baggs ranch there were about 5,000 head of cattle which ranged on the Snake and Bear Rivers. The Baggs brand consisted of two bars saddle branded over the back and on both sides. Ivey was range foreman of the Snake River outfit from 1883 until the spring of 1888. After the disastrous winter of 1884 and 1885 I was so disgusted with Ivey's management that I quit and went to work for the neighboring Leavenworth Cattle Company.

In 1888 manager Green, whom we seldom saw as he stayed in the East for extended periods, suddenly disappeared. It was rumored that he had run away with his brother's wife. Foreman Ivey was discovered to be dishonest and also left the ranch. He was later sent to the penitentiary. When he was released he opened a saloon above the McIntosh store on the Snake River. Ex-Texas gunman Mac Stewart became manager for the two ranches in 1888, and under his administration both ranches were combined into one outfit and I became foreman under Stewart. Six thousand head of cattle from the Wyoming ranch were brought over to the Snake River range. With the Baggs and other cattle we then had about twelve to fifteen thousand head. We branded about 4,300 calves that year.

On the Snake and Bear Rivers, upon and between which the L7 cattle grazed, there were three large outfits, the L7, the Leavenworth Cattle Company (pot hook brand), J. B. Insley, manager, and the Ora Haley Cattle Company (two-bar brand on right hip). These three ranches divided and controlled the vast range—almost all of which was part of the public domain. The L7 home range was on the lower Snake River, that of the Leavenworth outfit was in the upper Snake country and Haley's range was in the Bear River country. Between the three large outfits and a number of small ranchers the range was efficiently controlled. This division of the range was one of convenience, as actually the stock of the three large ranches roamed at will and became quite thoroughly mixed. The theoretical division, however, operated during the joint spring roundup, as the manager of that portion of

the range upon which the roundup was held, was also the manager of the roundup and his outfit retained all mavericks found at the roundup. Thus when the roundup was on the L7 portion of the range, the L7 foreman was in charge of all of the men from his as well as the other ranches, and the L7 took all mavericks gathered by the roundup. The same circumstances held when the roundup was on the Haley or Leavenworth portions of the range.

It is interesting to note the comparison between this system and that then existing in the Wyoming country to the north. Our three major ranches were opposed to stock associations. Haley especially opposed the extension of the strong and powerful stock association of Wyoming. Under the association all mavericks found at the spring roundup were sold to the highest bidder and a "M" was branded on the left jaw after such sale. During the winter the smaller ranchers took all the mavericks they could find. This system naturally led to rustling and numerous cattle wars. Strange thing about this was that the rustlers would steal from the association members and not harm the herds of non-association members living in the same area.

After the cattle had been shipped in the fall it was usual to discharge all but two or three men of the ten or twelve punchers in the outfit. The remaining men would take care of the herds during the winter and the discharged men would head for the cities to spend their money. After the money was gone—and it usually didn't take very long—many of the punchers worked the "grub-route." This consisted of going from ranch to ranch in the cattle country, stopping for a few days at one of the ranches and then moving on again. The cowboys were welcome to stop at any ranch and stay as long as they wanted—at least until time for the next spring roundup when he could again be placed on the payroll. It was not unusual for the men to remain at the ranch where they had been hired, or to return to it after they had disposed of their year's earnings. They were welcome. This, then, was the "grub-route."

The men wore blue-denim overalls and woolen shirts. Two-piece "Canton Flannel" underclothes were worn in winter but were exchanged for cotton in summer. I never saw any "union suits" on the ranches in those days. A "wind-breaker" coat and "Stetson" were as necessary to the cowboy as was his narrow-pointed, high-heeled boots. We bought our boots in Rawlins for five or six dollars a pair, but many punchers had their boots custom built. These cost from $15.00 to $18.00 a pair, but one pair would last a whole year. Leather chaps were used in brush country and most riders were provided with a slicker for use in wet weather. In those days we had men from Texas, California, Idaho, Nevada,

Oregon, Montana, a few from New York and other eastern states. Occasionally a Mexican puncher would drift in with one of the Texas trail outfits. I know of several negroes who became cowboys and, though they were few in number, they made extra good cowhands.

During the early 'eighties a number of Englishmen entered the territory; a number purchased ranches and went into the cattle business. One practice prevalent at the time was soon corrupted in order to take advantage of the unsuspecting English purchasers. We seldom, if ever, made a complete count of the cattle on the ranch. We knew how many we started with, how many we sold, and how many calves we branded at the roundup. Thus by simple arithmetic we knew approximately how many cattle we should have on the ranch. This was called the "book count." In order to compensate for losses we annually deducted ten percent from the "book count" and thus obtained a figure which we adopted as the official tally. The English purchasers at this time were anxious to obtain ranches and offered a flat $50.00 per head for the cattle. The cattle, however, were never actually counted, but were purchased by the Englishmen on "book count." Consequently some unscrupulous owners would keep two sets of books, one for their own record, and the other padded to show a proportionally high number of calf brandings and purchases. The ten percent "winter loss" was shown, but was more than offset by the spurious increases in the calf crop. Horses were never counted when the ranch was sold. They were just turned over to the new owners with the ranch.

Rawlins was the commercial center for the L7 as well as for the numerous other outfits on the White, Green, Snake, Bear and Sweetwater Rivers. Soldiers from Fort Steele, twelve miles away, crowded the streets when on leave. As the division point of the Union Pacific, the town had a large number of railroad men who worked in the large shops that had been built there. The railroad also made Rawlins a shipping center. Huge freight wagons, to which equally large trailers were hitched, were drawn by eight teams—sixteen horses—and hauled hundreds of miles. A single jerk-line served to steer the teams. Rawlins was a typical western railroad town. On one side of the unpaved street, which was alternately dusty and muddy, were the hotels, bars, shops, and the large mercantile house of Hugus and Co. Most of the ranching supplies were purchased from Hugus and Co. In front of the buildings a narrow raised board walk provided some protection from the dirt and mud of the street. Across from the buildings were the depot and tracks of the Union Pacific. The town sported two red-light districts, one in town—a large, two-story, white house

on the main street—and the other on the south side of the tracks and located in a row of ramshackle one-story wooden houses next to a stream which bore an appropriate, though unprintable, name.

Provisions were freighted from Rawlins to Baggs and the "winter camp." Sufficient provisions were bought in the fall, after the cattle were shipped, to last until the following fall. The foreman was responsible for purchasing the supplies. Food was basic on the ranch and the menu was very regular. We purchased flour in hundred-pound sacks, (the sacks were very useful on the ranch), thick slab, salt side bacon (cooked for lard as well as meat), sacks of white (navy) beans, canned corn and tomatoes, twenty-five pound boxes of dried peaches, apples, apricots, prunes, and large cans of baking powder. Coffee was purchased in whole bean form and came in large sacks. The only brands of coffee we knew were Arbuckles and Lyons. We ground the beans in a special coffee grinder which was fastened to the side of the grub wagon.

On roundup we had only one regular meal, breakfast, which was eaten just before dawn. Cook got up at 3:30 A. M. and prepared breakfast. Just before retiring he would grind the coffee beans and place the coffee in the large well-dented and brown-stained pot. When he arose the pot was hung over the fire. We liked our coffee hot—and strong. In dutch ovens and iron kettles suspended from hooks attached to the pot rack, salt side and corn, tomatoes, and beans were cooked. The meal was served in tin plates and tin cups. Cold biscuits and some jam completed the meal. Biscuits were almost always served cold. There was a good reason. Hungry men could devour hot biscuits by the dozens and the time necessary to provide such quantities was prohibitive. After the men were gone from camp the cook usually prepared baking powder biscuits by the "bushel." These were kept in a large tin and served cold at meals. When the supply ran low a new batch was baked. Besides the cook, one other man, the horse-wrangler, was kept at camp. It was part of his job to provide the wood for the cook's fire.

The roundup was our big job. It was started soon after the first of May—after the cattle had shed their hair and you could read their brands, and after the horses had "fleshed up" so they could be ridden. Our grub wagon and bed wagon were essential parts of the roundup. The latter held the bed rolls and all extra equipment needed on the roundup. The "cavvy," which consisted of around one hundred and twenty-five horses—eight or nine mounts to a man—was driven to camp before breakfast by the wrangler. Two ropes tied to the wagon and held at an angle formed the temporary corral in which the horses were held until after breakfast, when the men would drop their rope over the head

of the horse they were going to ride. The various outfits taking part in the roundup camped a quarter to half a mile apart in order that the horses would not get mixed. The foremen of the various outfits would gather with the roundup boss in the evening and lay out the work for the following day. All the outfits would gather after breakfast and the roundup foreman would assign the tasks and the men would scatter to their appointed jobs. Dinner and supper came at irregular intervals, whenever the job was finished, or such portion of it that the man could leave without holding up the work. Some would get lunch at eleven while others would only be able to get away at two or even three in the afternoon. Often at night there were cattle which had to be held in a herd and this necessitated riding all night, two men in four shifts. Our outfit on roundup usually consisted of eight or ten cowpunchers, a cook, day and night horse wranglers and three or four "reps." The "reps" were men from other ranches whose cattle were ranged near enough to occasionally become mixed with our stock. During roundup time each ranch would send "reps," or representatives, to the other roundups nearby to be on the look-out for their stray stock. These men also helped in the roundup and thus additional hands augmented our own men.

Cowpunchers received $40.00 a month and their food, such lodging as was needed, their equipment—except for saddle, bridle and bedroll—and their horses. Some men owned their own horses but used those belonging to the company while at work. A top-hand, and there was at least one in each outfit, received from $50.00 to $60.00 a month. The foreman was paid from $100.00 to $125.00 per month and was responsible to the manager for the operations of the ranch and the execution of the owner's orders.

One roundup incident will bear repeating. Senator H. H. Eddy of Colorado bought a ranch near the Bear River country at Axial Basin and stocked it with about two thousand head of cattle. Eddy liked to put on a show of being an old cowman. He was quite pompous, very vain, and consequently disliked by the men on the ranches. By mistake we branded one of his calves with the L7 brand. The following day Eddy rode up dressed in his beautiful woolly chaps and in an insulting tone demanded to know what I, as foreman of the L7, was going to do about the misbranded calf. His tone and attitude was so provoking that I answered his question by curtly saying, "Not a damn thing!" Eddy sputtered for a moment and then said, "You know that brand is wrong, what are you going to do about it?" "I like it that way," was my answer and I rode off. Eddy was nettled but I gave him no satisfaction. The next morning, however, I had one of the men cut out one of our unbranded calves and we branded

him with Eddy's iron. In order to show that the mistake had been made and rectified we then put a bar brand across the cheek of the misbranded calf and also on the animal we were using to correct the situation. Thus when the calves were weaned we could exchange and everything would be solved. Eddy grunted his satisfaction but implied that the incident shouldn't have happened anyway.

Eddy had the habit of showing up at the ranch during roundup and accompanying the men. He tried to show he was one of them but he picked the wrong way to prove it. On one roundup we noticed that some of the men would hang back when the foreman was assigning the work. Of course the first men assigned would be sent on the longest ride while the later ones drew short rides. A few were thus drawing the "short ride" almost every day, and Mr. Eddy was the most noted offender. As a matter of fact his ride usually ended up by being just from one camp to the next. Willis Rankin, foreman of Haley's, was running the roundup and we both noticed that we had an unusual number of "slackwads," as we commonly called the "short-ride" slackers. Rankin and I decided to fix the "slackwads." Instead of telling off a number of men and assigning them to do a specific job, Rankin called for "seventy-five men" to accompany me. No destination was given and as the others had been assigned other jobs the "slackwads" naturally thought I was going to take the "short-ride." With Eddy at my side—and I kept him there all day—I set out on an unnecessarily long swing. Endeavoring to play out Eddy's horse and thus "set him afoot," I set a terrific pace. But he was well mounted, and though I succeeded in tiring him, he was able to stick it out. Eddy straggled into camp after most of us had arrived. He didn't ride the next day and three days later he packed up and left the roundup.

Cattle were shipped in the fall. We drove them from the winter camp or from Baggs to Rawlins on the Union Pacific. After 1888, however, the cattle were driven to Wolcott, where they were shipped by the newly constructed Denver & Rio Grande Railroad to Omaha, Council Bluffs, and Chicago.

Cattle prices were very high early in the 'eighties. English buyers paid a flat $50.00 a head on "book count." In 1887 and 1888, however, the market dropped and a fat cow brought only $14.00 or $15.00. (The market was much like it was during the years just previous to the outbreak of World War II.) Cattle buyers seldom, if ever, visited the ranches. We consigned shipments to the various commission agents at the market where sales were made. The owner was notified of the price of a sale and he had the right to accept or refuse. If the price was too low at one

market the cattle were shipped to another where the price was higher. One method was to ship cattle to Chicago, but if the markets enroute (Kansas City or Omaha) were good we could take advantage of them, or, if poor, the cattle would continue to the midwestern market.

Our amusements were few. There was no time for amusement during the roundup period. In winter there were dances in town, but our usual diversion was "penny-ante" poker which we played at the ranch.

The winter of 1889 was one of the hardest in the history of the West. A drought had burned most of the forage by July. Fall and winter feed became a problem. The range was heavily overstocked with from twelve to fifteen thousand head of stock in each of the three largest outfits—the L7, the Ora Haley ranch and the Leavenworth Cattle Company—and a number of smaller outfits had above 1,000 head each. The cattle became thin and weak. A number of cattlemen decided to drive the stock to the Red Desert country north of Rawlins. The decision to undertake this program was made by Manager Stewart who acted too late. It was the middle of November before the order to drive was given. Willis Rankin, foreman of the Haley outfit, was the first to start. He drove from the Snake River, pushing the cattle ahead as far as he could each day and then turning them loose. The stragglers and drifters were enormous. It sometimes took until two in the afternoon for the men to get the cattle bunched again in order to continue the drive. Rankin averaged only three miles a day. I went next with the L7 cattle—the Leavenworth Cattle Company was not in favor of the drive but they did send two men with me. I drove the Snake River bottom northward. By the time I had reached Baggs, some forty-four miles north—I had ten thousand bawling cattle, many weak and in no condition to travel, and many with calves. Drifters and stragglers were numerous. The day before Christmas, somewhere between thirty and forty miles north of Rawlins toward the Red Desert, I turned the cattle loose. They just couldn't go any further. Many died on the drive. Many were too weak to complete the trip and dropped back. Many died after we had arrived at our destination. It was the worst slaughter I had ever seen. That summer we had branded between 3,500 and 4,000 head of calves; the following spring only 174 or 175 were branded. I checked this with Stewart myself. The loss of cattle during the winter of 1889 was estimated at 75%! We also lost about two-thirds of the saddle horses.

This loss threw the L7 management into a quandry. Stewart told me that the company didn't know what to do, sell out and quit or restock. He also wanted to cut my salary to $75.00 a month.

I just couldn't see taking the cut unless he also cut his own salary. I resigned. Stewart then hired Kirk Calvert, a local rancher with a few hundred of his own cattle. He took the job for the $75.00 and permission to run his own stock. Stewart then offered me the pick of the "cavvy" (horse herd) if I'd stay and work on the ranch. I told him that I wouldn't consider the proposition as it would be taking advantage of Calvert, who, as foreman, had the right to pass out the horses. I then left the L7, and worked for a short while during 1890 for Barett Littlefield, who had a ranch on the Snake.

Mac Stewart quit as manager of the L7 in 1890 and went to Mexico where he became manager of a silver mine. In a riot Mac killed a Mexican policeman and was sentenced to be shot. He wrote to me and asked for letters and petitions to prove his good character while he was in this part of the country. His case became very famous, especially in Texas where he was so well known. His sentence was finally commuted to life imprisonment, but he was released after serving about ten years. Mac reportedly returned to Texas.

Stewart was succeeded by Dow Doty in 1891. Dow and his brother John owned the Willows Ranch near Rawlins. Dow was just a youngster, and very much of a tenderfoot during the time I was on the L7. He was foreman for the ranch for a short time as the L7 soon went out of business.

While working for Littlefield, after leaving the L7, I took up a piece of land on the Snake River and built a house. My health, however, was not good and I soon turned over my land and house to Littlefield and took a short vacation in Kansas. The following year I returned to Colorado and while living at Steamboat Springs in the fall of 1895 I was elected Sheriff of Routt County. I served until 1899, but was later reelected for an additional six years, thus serving in all ten years as sheriff.

The Quarries of the Castle Rock Area

Mr. and Mrs. James Rose Harvey

To either side of the highway between Sedalia and Palmer Lake stand a number of isolated hills and small mesas, wearing a prominent rock cap. The geological structure of this stone capping gave rise to the quarry industry in Douglas County and has proved a unique and valuable source of revenue.

Geologists tell us that originally the whole floor of the valley between Palmer Lake and Sedalia was covered by a lava flow from

some volcanic fissure, the exact location of which is unknown.[1] In time most of this volcanic covering was removed by erosion, so that now only the remnants remain which cap such promontories as Raspberry Butte, Larkspur Butte, and Dawson Butte.[2] The largest outcropping is five to seven miles southeast of the town of Castle Rock, near the Castle Rock Reservoir. The "Castle Rock" which towers over the town of that name, affords the motorist an excellent view of this lava cap and illustrates how, as the surrounding plain was worn away, this hard covering protected and held fast the earth beneath it until in time a hill was formed rising ever higher as the valley floor was eroded away.

The rhyolite or lava in the flow is a fine grained, light colored fairly hard, rather porous rock with a composition approximately the same as granite. The rhyolite however is much finer grained than granite because it poured from a volcano as a molten lava and spread over the surrounding ground surface in a thin sheet. The rock is light colored, due to the fact that it is made up chiefly of quartz, orthoclase feldspar, and plagioclase feldspar.[3]

For use as a building stone the rock has a pleasing gray to pink color, is readily worked, stands weather well and is exceptionally strong for its weight. When crushed it makes excellent material for road or runway base courses and for concrete aggregate.[4]

The first person to recognize the nature of this rock capping was Silas W. Madge; on his ranch two miles south of Castle Rock stood one of these peculiar isolated buttes. One day, armed with pick and shovel, he climbed to the top of his stony mesa and sank a number of prospect holes through the layer of loose dirt and fine rock which covered the hill. Everywhere, he struck a pinkish gray, hard rock, through which he could not penetrate. Curious as to the nature of this porous stone he pried loose a number of pieces and shipped them into Denver to be assayed. The returned report stated that, although the rock specimens contained no precious metal, still, due to its structure it would make an excellent building stone and, if readily accessible, might be quarried with profit and shipped into Denver, as that city, now rapidly growing, was demanding more and more building material. As early as 1872 Silas Madge started taking out rock from his quarry.

It was a slow process. Before any rock could be cut or moved the top of the butte must be cleared of dirt and loose rock; this work in quarry terminology is called stripping. A road must be

[1]U. S. Geological Survey, Castle Rock Folio No. 198.
[2]*Ibid.*, Geological Map.
[3]Mrs. Ethel F. McCarthy, Chief Clerk, State Bureau of Mines, Denver.
[4]Colorado State School of Mines, *Building Stones of Colorado*, 15.

constructed to the top of the hill which rises five hundred feet above the valley floor. There was no machinery available, so all work had to be performed by hand. All of these things Silas Madge accomplished with the help of a few ranch hands. The Denver and Rio Grande narrow gauge railroad was constructed through the Castle Rock area in 1871, and the railroad map of 1872 shows a small siding named Douglass, located on the main right-of-way.[5] This siding was secured through the influence of Mr. Madge that he might ship out the rock brought down by wagon from his quarry. In 1873, he shipped nearly 1,200,000 pounds of stone.[6] In 1874, the stone shipped from the Douglas siding showed nearly a 500% increase. A side track of 800 feet had been constructed to accommodate the flat cars carrying the Madge building stone.[7]

Each succeeding year in the late seventies showed an increase in the volume of stone removed from the quarry, but it was slow and tedious work, the hauling of the heavy loads of stone to the railroad over a poor dirt road from the top of the mesa proved particularly hazardous. There were no buildings at the quarry, no facilities for handling or boarding a crew of workmen.

In 1880 the town of Douglas was laid out, Mr. Madge built a boarding house and by the late fall of 1881 a spur from the railroad, 2.6 miles in length, was completed to the top of the Madge quarry.[8] A depot was built by the Denver and Rio Grande Railroad,[9] and the town of Douglas assumed quite an industrious appearance. The *Castle Rock Record Journal* of Nov. 9, 1881, carried the following article: "Mr. Madge has his railroad completed and the cars running into the quarry. The quarry is about two miles south of Castle Rock. It is a pretty sight indeed to see the engine steaming about on top of the little mountain five hundred feet above the town.[10]

Others were quick to follow the lead of Silas W. Madge, who has become known as the "Father of the Lava Stone Industry."[11] In the Denver and Rio Grande Railroad Report for the year 1881, there is listed a siding called Girardot; it was so named for the owner of the ranch on which the town of Douglas was located, who opened up a small quarry so near the right of way that no spur from the railroad was required to get out the stone.[12] This

[5]*First Annual Report of the Board of Directors of the Denver and Rio Grande Railroad to the Stockholders.* Map.
[6]*Ibid.*, table of classified tonnage.
[7]*Second Annual Report of the Board of Directors of the Denver and Rio Grande Railroad for the year 1873.*
[8]*Denver and Rio Grande Railroad. Annual Report to the Stockholders for the year 1881*, p. 5.
[9]*Ibid.* 20.
[10]*Castle Rock Record Journal*, State Historical Society Library.
[11]*Ibid.*, March 5, 1897.
[12]*Denver and Rio Grande Railroad. Annual Report to the Stockholders for the year 1881.* p. 42. Table of quarry branches.

quarry operated for a short time only, due to the small extent of the lava rock; it was closed down on July 12, 1882.[13]

There was now a crew of seventy men working at the Madge quarry, under J. M. Larson as foreman. They were a rollicking, rough bunch, mostly Swedes who could speak little English, and their social life centered about the boarding-house, where there seems to have been a rapid overturn in proprietors, waitresses, and cooks until on December 28, 1881, we learn that "P. J. Muzan has rented Madge's boarding house and is setting up first class chuck, all are happy and peace is declared. The boys are all well pleased, especially with the lady who waits on the tables."[14]

The days were long, the work the very heaviest of manual labor. The men were up at five-thirty, breakfast was served at six, and the stone-train pulled out for the quarry with all hands on board, at six-thirty. They made the two mile run back from the quarry to the boarding house for lunch, and were back at work by one o'clock, not to leave the quarry again until six o'clock in the evening. It was pick and shovel work, only hand drills were used; when a hole was drilled to a depth of 20 feet, black powder was poured into it, and set off. The stone masons then set to work squaring off the rock; much of it was shipped rough, also rubble was often included in the car load to be used in "chinking-in." The heavier pieces were loaded by derrick into flat cars and pulled down to the Douglas siding by the stone-train.

There was no water at the quarry; it had to be packed up in barrels from Douglas and grew insipid in the heat of the sun. In summer the heat was terrific. With the thermometer standing at near the hundred mark, working often 10 to 20 feet below the surface of the mesa top, surrounded on all sides by the glaring stone walls of the quarry, the men toiled, and sweated and cussed for $2.50 a day. Even this munificent wage was not long maintained by the company. In October, 1881, the foreman received orders to reduce the wages from $2.50 to $2.00 per day. Thirty men refused to go to work that afternoon.

This left the Madge quarry short-handed until more help could be secured from Denver, the work of getting out the building stone was slowed down greatly, and Mr. Fitzgerald who was running the boarding house was purported to "be feeling quite blue."[15]

Board cost the quarrymen $4.50 per week; this left $7.50 compensation for six days of heavy manual labor. On Saturday night, almost to a man, they donned their Sunday, mail-order suits, and

[13]*Castle Rock Record Journal*, July 12, 1882.
[14]*Ibid.*, Dec. 28, 1881.
[15]*Castle Rock Record Journal*, Oct. 10, 1881.

sallied into Castle Rock, there to part company in short order, with the small remnant of their week's wages.

The town was booming. Almost every issue of the paper stated that "the city was full of people yesterday." The stores remained open in the evenings to accommodate the ranch and quarry trade, and the taverns received their share of business. A news item from the Madge quarry in the Castle Rock newspaper of Oct. 10, 1881, observed: "Many of the men got too much tangle-foot last night and the result was that several got into a fight, and got their time checks this morning. Still business goes on."

In November, 1881, Silas Madge secured the contract to furnish the stone for the New Antlers hotel to be built in Colorado Springs; also for the College, and for Mr. Weitbrec's residence. The hotel alone required nearly a thousand carloads of stone.[16]

On November 23 of this same year the first fatal accident occurred at the quarry. The engine of the construction train was going up to relieve the stone-train which was snowed in at the quarry; it was running backward and Conductor Parrish was standing on the back end of the tender. It struck a flat car covered with snow with such force that the car was thrown up and cut off Mr. Parrish's leg at the knee. The engineer stopped the bleeding as best he could, wrapped the poor fellow in a blanket and left him lying in the snow until he could walk the mile and a half back to Douglas for help. Mr. Parrish died shortly after reaching the hospital.[17]

In the early part of December, 1881, the Colorado Stone Company was organized and filed articles of incorporation with L. Hill, B. Hammar, A. H. Garfield, J. Gurley and M. I. Clifford as directors. The capital was $60,000. The place of business was designated as Castle Rock.

The largest outcropping of lava rock in Douglas county was located on the ranch belonging to Plaesant O'Brien, who had purchased the quarry lands from General Wm. J. Palmer, to add to his pasture acreage.[18] Mr. O'Brien had never worked the quarries. The Colorado Stone Company acquired the lease to this land and began preparations to take out stone.

In the fall of 1881 the Denver and Rio Grande Railroad began laying a spur up Sellers Gulch to the O'Brien quarry.[19] By March, 1882, two miles were completed to the lower camp. Later, the track

[16] *Castle Rock Record Journal*, Nov. 23, 1881.
[17] *Ibid.*
[18] From the Abstract of Title, through the courtesy of Mr. Ed. Seidensticker of Castle Rock, who now holds the abstracts to the old quarry lands.
[19] Mr. Arthur Ridgway, Consulting Engineer of the Denver and Rio Grande Railroad office, Denver.

was extended two miles farther up the gulch, when the upper camp was opened.

With the completion of the spur from the railroad, the Colorado Stone Company was faced with another problem—how to get this rock down from the top of the mesa to the railroad cars. To haul it all down in the flat low-wheeled wagons used in the quarry, was a slow and costly process. The problem finally was solved by the building of an incline tramway to the top of the quarry. A drum was installed in the quarry around which ran a cable, each end of which was attached to a small tram car. The loaded car was started down the incline from the quarry, and this would pull up the empty car attached to the other end of the cable. An offset was provided half way up the incline so that the loaded car going down might pass the empty one coming up.[20] The contract for stripping the entire surface of the stone was let but was not completed until May, 1882, when work began in earnest at the O'Brien quarry. In the meantime, however, as fast as the surface of the rock was cleared quarry men were set to work getting out the stone.

The *Castle Rock Record Journal* was ever a booster for the lava stone industry. In the issue of December 28, 1881, it carried the following criptic remark by the editor. "Stone agents in Denver are quarreling over the recent letting of the contract to furnish stone for the City Hall. Which ever way it terminates, one of the Castle Rock quarries will get it." One did.

On February 1, 1882, a private school was opened at Douglas by Miss Wreck; it consisted of the quarrymen who were working for Mr. Madge, mostly Swedes. She had about twenty pupils and needless to say equal interest was manifested by these "industrious foreigners" in the study of the English language and the pretty school teacher as well.[21]

The first serious accident at the O'Brien quarry occurred in March, 1882. Mr. Bumgardner, a quarryman, was very severly injured by falling stone. He was undermining and struck one blow too many, bringing all the overlying rock crashing down upon him. The same week a "handsome young quarryman, Mr. A. A. Anderson" had his toe pinched off at the Madge quarry and was unable to return to work for a few weeks.[22]

On May 10, tragedy again struck the O'Brien quarry. Two workmen, Thomas W. Carroll and Calvin Brooks, were working side by side at the base of a ledge of rock rising twelve to fifteen feet above them. Loose rubble, broken by a blast, rolled down

[20] *Ibid.*
[21] *Castle Rock Record Journal*, Feb. 1, 1882.
[22] *Ibid.*, March 22, 1882.

upon them. Mr. Brooks had his leg and right wrist broken and was injured internally. Mr. Carroll's back and leg were broken. They were brought into town in the stone train and rushed to Denver. Mr. Brooks died and Mr. Carroll survived, only to be paralyzed for life.[23]

The stone quarries were nearing the height of their production in the summer of 1882. About 100 men were employed in the two quarries and from thirty to forty car loads of building stone were being shipped each day. There was an ever widening demand for the product, cars being billed to Pueblo, Colorado Springs, Denver, Omaha, Cheyenne, and Kansas City. Denver was perhaps the best market, where the stone was popular among building contractors for facades, window sills and trimming, as well as foundations and garden walls.

Misfortune of a different nature overtook the O'Brien crew. They had just returned to work at the quarry Saturday noon when smoke was seen issuing from the boarding house roof. They piled into the tramway car and took a fast ride down the incline, but were able to save only a few tools from the tool shed. The boarding house was a complete loss, most of the men losing everything they possessed, except the clothes they were wearing. The origin of the fire was undetermined but the quarry men were inclined to cast a suspicious eye at the cook who emerged from the building carrying a book and a quilt under his arm. They rather suspected that he was indulging in an afternoon siesta and the fire caught from the chimney.[24]

At Colorado Springs, on June 6, 1883, the Antlers Hotel, built of lava stone from the Madge quarry, was formally opened to the public. "Gobs of wine and numerous tippling visitors were the prime features of the occasion."[25] This hotel was destined to be completely destroyed by fire in 1899.

The Madge quarry suffered another fatal accident on Sept. 19, 1883. The stone train was making its daily trip up from Douglas to the quarry; when it reached the top of the mesa a rail slipped, allowing the track to spread and give way. The entire train and the engine were precipitated over a distance of forty feet. George H. Parks, the engineer, was crushed to death and the engine was half buried in stone.[26]

During the period of 1884 to 1886 very little business was transacted at the quarries. The Madge quarry at Douglas opened up for a short time in the spring of 1885. And in August of the year 1886, the O'Brien quarry secured some business. J. W. Tovey,

[23] *Ibid.*, May 10, 1882.
[24] *Ibid.*, May 23, 1883.
[25] *Ibid.*, June 6, 1883.
[26] *Ibid.*, Sept. 19, 1883.

a Cheyenne contractor, came down with a crew of workmen and took out stone for the construction of a $17,000 church in Cheyenne.[27]

In 1887, Mr. J. M. Curry of Denver leased both the Madge and O'Brien quarry lands. Silas Madge had disposed of his interest in the Douglas quarry to A. H. Garfield in 1883. We now find the quarries referred to in various reports as the A. H. Garfield and the Curry quarries.[28]

Curry seems to have been an enterprising manager. He traveled about the state and secured a number of contracts for the Douglas county building stone. In April, 1887, he had orders for ten car loads a day from the Douglas quarry, and five to seven from the O'Brien quarries.[29] During the month of November of the same year 350 cars of rock were shipped from the two quarries.[30]

The editor of the *Journal* was ever lauding the excellency of lava stone as a building material. Having made the statement, in a previous issue, that the Castle Rock stone was preferred by building contractors to any found in the state, the next issue carried the following item: "The stone in the west wing of the capitol building at Lincoln, Nebraska, is crumbling, and the building is sinking. It is unnecessary to say that the building was *not* constructed of stone from the Castle Rock quarries. It was a Ft. Collins product."[31]

In 1888 and 1889 Castle Rock was booming. The new court house was being constructed of lava stone, and the quarries were getting out on the average 10 to 15 car-loads of rock per day.

In 1889 a new quarry to the west of Castle Rock was opened. Jonathan Thomas of Kansas City owned the land and employed John Larson as foreman. The Atchison, Topeka and Santa Fe railroad constructed a spur 1 mile in length to the foot of the mesa. The new quarry was known as the Santa Fe quarry.[32]

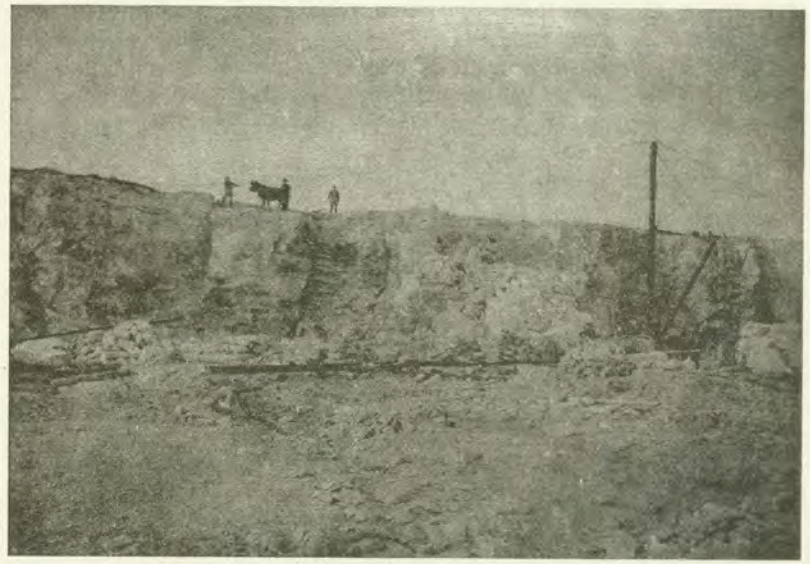
The stone business gave promise of big profit to be made in the coming years. Then came the panic of 1893. The Madge quarry was closed down, not to reopen for six years.[33] J. M. Curry left for Seattle, having sold his interest in the quarries to W. N. Harp, and Mr. Hathaway of Denver.

Through the four years following the panic, only two items concerning the quarries appeared in the *Record Journal*. In 1894, "Mr. Hathaway brought to Castle Rock some gentlemen to view

[27] *Ibid.*, Aug. 25, 1886.
[28] Colorado State School of Mines, *Building Stones of Colorado*, 15.
[29] *Castle Rock Record Journal*, April 6, 1887.
[30] *Ibid.*, Dec. 7, 1887.
[31] *Ibid.*, Feb. 8, 1888.
[32] *Ibid.*, July 16, 1890.
[33] *Ibid.*, April 1, 1891.

the quarries with a view of making a contract to build a $127,000 court house in Kansas County," and in June, 1896, "Mr. Charles Peterson, employed at the O'Brien quarry, was bitten on the finger by a rattlesnake. He came at once to town for medical assistance and a liberal dose of the old-fashioned tanglefoot remedy."

The years 1897 to 1900 saw a boom in the lava stone business. The spurs to the quarries were repaired, and a broad gauge track laid into the Madge quarry in 1899.



SANTA FE QUARRY, WEST OF CASTLE ROCK

On April 16, 1897, "ten flat cars loaded with stone got away from the workmen at the O'Brien quarry and started at a lively jaunt for town. They collided at the lower switch with two other loaded cars, and a promiscuous smash was the result."[34] The Denver and Rio Grande section crew were provided with work for almost two months in removing the wreckage and repairing the track.

Castle Rock finished constructing her new school of lava stone in time for the fall term in 1897, and the St. Elizabeth church in Denver was opened for services Jan. 28, 1898. "The church is built of Castle Rock stone and is one of the handsomest Catholic churches in the state."[35]

[34] *Ibid.*, Aprli 16, 1897.
[35] *Ibid.*, Jan. 28, 1898

In 1900 the shipment of stone from the Hathaway (O'Brien and Madge) quarries was so heavy that the stone train on the Rio Grande branch came out from Denver every day to pick up the loaded flat cars. The total output that year was 1800 cars. The stone averaged $10 a car at the quarry, so that the total revenue to Douglas County was $18,000. The labor was the greatest expense, resulting in a large payroll, most of which found its way into Castle Rock business establishments.[36]

In 1900 the new Santa Fe quarry to the west of town came rapidly to the front and absorbed most of the available lava stone business. The contracts secured by the Madge and O'Brien quarries dwindled until they were forced out of business. In 1902 the Denver and Rio Grande railroad abandoned the spurs to the workings and removed most of the rails,[37] thus writing "finis" to their quarry business in Douglas county.

The story of the Santa Fe quarry is the story of Gus Nelson of Sedalia. He was the last of the quarrymen and closed the era of the lava stone business in Douglas County, begun some thirty years previously by Silas W. Madge.

Gus Nelson was born in Fankenburg, Sweden, in 1861, and came to America in 1881. Three years later he made his way westward to Colorado, where he worked in the smelter at Leadville and helped put through the railroad there. For the next four years he was employed by the Grant Smelter in Denver, where he assisted in building the high smoke stack still standing at the old smelter site.

In 1887 he went to Castle Rock to work in the O'Brien quarry, which Curry was then leasing. When the quarries shut down due to the panic of 1893, Mr. Nelson returned to Denver, where he was married to Betty Johnson the same year. The Nelsons now returned to Castle Rock and started house keeping at the upper O'Brien camp. They remained here for two years. For almost a year Mr. Nelson ran the quarry alone, doing all the work by hand, breaking out the stone, loading it, and hauling it in to the railroad.

Gus Nelson was young and very strong. The old timers at the "Rock" like to tell tales of his immense strength. Mr. Frank Case, now working for the *Record Journal,* related this incident to the writers in August, 1945: "I saw Gus Nelson in town today. His son Frank had to lead him. That wasn't the Gus we knew. Why, often in the winter of '95, when the roads to the upper O'Brien camp were blocked with snow, the town's people would see Gus start out on foot for the five mile tramp home to the quarry, with

[36] *Ibid.*, Dec. 25, 1900.
[37] Mr. C. M. Lightburn, Asst. Chief Engineer, Denver and Rio Grande Railroad.

a quarter of beef or a case of eggs balanced on his shoulder. One day a bunch of men were sitting in front of the general store where a large chunk of rock salt had just been unloaded on the platform. It weighed 500 lbs. The store keeper thought it a huge joke to offer it to anyone who could carry it away. Many tried in turn, but of course none could so much as budge it. Just then Gus Nelson drove up with a team and a light wagon. The store keeper shouted, "Hey, Gus, you can have this chunk of salt for your cattle if you can put it in your wagon." Gus wrapped the lines carefully about the whip-stock, descended slowly from the seat, advanced upon the block of salt, wrapped his great arms about it, and swung it slowly from the platform to the wagon bed, climbed back to the wagon seat and started for home with his prize. That was the Gus Nelson we knew."

In June, 1945, the writers of this article obtained the following interview from Mr. Gus Nelson, prior to his death in September of that year:

"In 1896 Jonathan Thomas came to me at the upper O'Brien camp and asked me to take charge of the Santa Fe quarry, west of Castle Rock. When we moved up to the quarry, where we were to remain for ten years, we found a boarding house, a small office building, a bunk house for the men, and an artesian well. Mrs. Nelson took charge of the boarding house. I started to work that summer with a crew of men, but it was almost impossible to get out much rock, due to the 25 to 50 feet layer of dirt and fine rock covering the stone. I was discouraged and was considering giving up my contract when Jonathan Thomas visited the quarry. He persuaded me to stay, offering to pay me $4.50 wages, as well as anything I might make on contracted stone during the period of time required to strip the outcrop. That was big wages in those days and the wife and I decided to put the whole $4.50 aside each day in a separate fund toward the cattle ranch we hoped some day to own. It took 8 months to complete the stripping.

"We made our living from the boarding house. Most of the time I ran a crew of 12 to 15 men, but sometimes we worked as high as thirty. Mr. Slagel was manager for Mr. Thomas. He had a small office building at the quarry and traveled about the state, soliciting orders for building stone.

"After the stripping was done, we followed the cracks or seams in the lava stone, breaking out the rock with a crow-bar. When this was impossible, a hole was drilled by hand to a depth of 15 or 20 feet. This would take the men on an average of a day and a half. I acted as powder-man most of the time. The hole was filled with black powder and the fuse ignited. The rock blown out in this fashion was then squared off by the stone masons, and

loaded into the tram cars for its trip down from the quarry to the railroad spur, where it was reloaded on the flat cars.

"In the quarry we used a derrick to load the largest pieces of stone. Wherever possible we ran a tram-track over the floor of the quarry to the section in which we were taking out rock. Sometimes we had to use small broad-wheeled carts pulled by mules to reach the more remote corners. The mules were used on top the quarry in the stripping process and in operating the derrick. Most of the stone was shipped in pieces weighing about 100 lbs. and loaded by derrick. We shipped lots of rough stone too, and some rubble.

"When the stone reached its destination it was cut to blocks of the desired size and squared off on five sides by stone masons. The sixth side was left rough and plastered over on the inside of the building. The dressing of the stone at the building site was an art in itself. The best stone-cutters I ever knew were Ramsey Lips and Charlie Herbs of Castle Rock.

"I paid the men two dollars a day. We worked six days a week and they were long days—from seven to seven. The work was hard and it was difficult to get good quarry men. I would go into Denver on Saturday and come back with five or six new hands. They stayed at the boarding house and ate their heads off, over the week-end. On Monday morning we were lucky if even two of them showed up for work at the quarry. They enjoyed a well-fed Sunday and departed by box-car for Denver or Pueblo on Monday. However I had one quarryman who stayed on the job for nine years, and another for eight years.

"At the end of the first year of operation, when I handed a check for $1,000 to Mr. Thomas, he looked at it twice, shook his head sort of doubtfully and said, 'This is the first profit I have ever received from my quarry lands.'

"As for myself, after I paid all wages, settled for the black-powder, etc., I cleared about $500 a year. In the ten years we operated the quarry we saved $4,000.

"When we worked a full crew we took out about six carloads of stone a day. We shipped rock to Colorado Springs, Denver, Nebraska, Pueblo and Kansas City. It was widely used by the railroads for bridges and depots. Denver was our best market.

"In 1906 the stone business was almost finished, due to the wide use of concrete. So we took our $4,000 savings and bought a cattle ranch in Jarre Canyon, just above Sedalia. I operated it for years, making a good living running cattle. My son Harry lives there now but the ranch still provides us with a good income. We have lava rock to thank for the realization of our dreams, a large cattle ranch of our own."

The picture of the quarries would not be complete without the woman's view point. Mrs. Gus Nelson, who is still living in Sedalia, tells us of her life in the boarding house at the Santa Fe quarry:

"I operated the boarding house for ten years. Most of the time I had a helper, but often I did the work alone. We had from 10 to 30 men to feed each day. The men had to be up on the hill at seven o'clock so breakfast must be on time. We got everything ready the night before, set the tables, ground the coffee, and cut the meat so that in the morning all we needed to do was make the oat-meal and stir up the pancakes.

"We set a good table. Mr. Nelson wouldn't stand for anything else; he worked the men hard and said they needed good food and lots of it.

"We baked 20 large loaves of bread every other day. I had a big strong Bohemian woman to help me. We made eight loaves out into the pans and when they were ready to bake, we would make out another pan full.

"For dinner we always started with some kind of soup. The men were very fond of a dried fruit soup, a Swedish dish, made with ground prunes, raisins, tapioca, and sugar. Sometimes we served milk soup made with rice, water, milk, and salt. We had two or three vegetables, bean, peas, tomatoes, and always potatoes. We served two kinds of meat at each meal, except breakfast. For desert there was dried stewed fruit and cake, or else pie. When the manager came, of course we always fixed extra.

"We bought everything wholesale from Denver or Castle Rock. I had a large ice-box outside the door where I could store a quarter of beef or pork. We had our own chickens and milked five cows. Mr. Nelson broke out a piece of land where we raised our own vegetables. The men paid $4.50 a week board. After all bills were paid we showed little or no profit on the boarding house but we had our living from it.

"It wasn't exactly an easy life but I managed, sometimes alone, and I had five small boys. My oldest son, Harry, was born in Denver in 1894, George was born at the upper O'Brien camp and Gus, Carl, and Frank at the Santa Fe quarry. You can do anything if you *plan* your work. I cooked three meals a day for ten or more men, cared for five children under 10 years of age, took care of the garden, milked five cows, and still had time in afternoons to hitch up the horse to the buggy and drive into Castle Rock to shop. Once I had three little fellows sick with typhoid fever, at one time.

"We lived at the quarry for ten years, and it was a welcome relief to move my family of growing boys to the ranch at Sedalia.

"Four of my sons are still living, Carl and Frank live with me in Sedalia, George has been in the hospital since World War One, and Harry, his wife Ellen, and my three grandsons, Gordon, Walter, and Vernon live on the ranch. My grandson, Robert, was killed in the invasion of Leyte."

Mr. Nelson sold his interest in the Santa Fe quarry to Mr. Slagel, who in turn sold to the Hathaway Stone Company in Denver.

The following is a partial list of well known buildings in which the lava stone from Castle Rock was used:

Castle Rock grade school, Court house, and hotel.

Rio Grande Depot at Littleton, Castle Rock, and Colorado Springs.

Old Union Depot in Denver.

St. Elizabeth church in Denver.

Trinity Methodist Episcopal Church in Denver.

Old Republican Building in Denver.

Old Board of Trade Building at 14th and Lawrence Streets, Denver.

Kittredge Block in Denver.

Tabor Grand Opera House, trimmings, in Denver.

King Block in Denver.

Old City Hall in Denver

First Antlers Hotel in Colorado Springs.

Several of the Colorado College buildings in Colorado Springs.

Graystone Hotel, 512 15th Street. (One of the largest and finest at that time.)

Railroad Building, 1515 Larimer Street. (Largest stone building in Denver at the time of its erection.)

Foundation of and wall about the old Tabor Mansion.

River Front Improvement Co., three large stone buildings. (Old castle still stands.)

Windsor Hotel.

Brinton Terrace, foundation and steps.

Arbuckle Business Block, North Denver.

Wolfe Hall.

Arapahoe County Courthouse, Littleton.

Logan House.

George F. Crocker residence.

Charles B. Kountz residence.

Otto Mears residence.

Charles Boetcher residence, foundation and trimmings.

23rd Avenue Presbyterian Church.
South Broadway Christian Church.
Joseph Creswell residence.
Three large mansions on Wolfe Street, between Colfax and Sloan's Lake.
Residence in Platt Park, 1500 So. Logan.
Numerous Capitol Hill residences: on Pennsylvania Street, between 8th Avenue and 13th Avenue alone, are seven large mansions constructed of this quarry stone.

It was used extensively in foundations, window sills, door arches, and garden walls. One has only to drive through the older section of the city today to notice everywhere the part played by the Castle Rock quarries in the building of Denver. And at Castle Rock the old quarry workings are still easily discerned, even the railroad grade of the spurs is still traceable. Mr. Ed. Seidensticker occasionally takes out a few loads of stone when someone desires to build an addition to a residence constructed of this rock. It is rumored that the quarries are to open up again under the management of L. N. Johnson of Denver, who has already contacted the Denver and Rio Grande railroad in regard to moving the rock.

The town of Douglas is now a ghost town, at the O'Brien quarry, only the boarding house remains, and the Santa Fe quarry lies as still as if it had never been invaded by avaricious man.

History of The Mine and Smelter Supply Company

ALBERT E. SEEP*

The Mine and Smelter Supply Company, which celebrated its fiftieth official birthday on April 23, 1945, had as its principal founder a man who has been closely associated with the industrial and mining growth of Colorado and the entire West. "Mine and Smelter" has through the years followed a remarkably consistent course, which has been set by those who were the early-day leaders in the company.

The leading spirit at the time the Company was incorporated, was Mr. Eben Smith, who was born in Erie County, Pennsylvania, in 1831 and at an early age, joined the California gold rush. Later he returned East and in St. Joseph, Missouri, was introduced to Jerome B. Chaffee, a man who was to be his partner in many business ventures in the years to come. It was there that these

*Mr. Seep is Chairman of the Board of Directors of the company about which he writes.—Ed.

two men met parties of returning gold miners from Colorado and learning of the possibilities of the Rocky Mountain Region, they determined to go to the new eldorado. Eben Smith brought one of the first stamp mills across the plains, arriving in Denver on May 26, 1860. This equipment was erected at Lake Gulch in Gilpin County. He lived in Central City for many years but his interests soon expanded all over the state.

By the late 1870s the frontier aspect was disappearing from Colorado and with the growth of towns, cities, railroads and industries, certain men of vision, who laid the foundation of a future state, began to appear. One of the most prominent of these was David H. Moffat, who was associated with Eben Smith for over forty years in many profitable ventures. These men, together with J. B. Chaffee, were the founders of the First National Bank of Denver, the city's largest bank; they started mining on a large scale at the Caribou Mine in Boulder County. When lead carbonates were discovered in Leadville, they were among the first in the field. In 1878 they bought a half interest in the famous Little Pittsburgh Mine and thus became associated with another famous name, that of H. A. W. Tabor. In many of these mining ventures with such well known pioneers, Eben Smith was generally the practical operator of the group, as his responsibility quite often that of being the mine or mill superintendent and D. H. Moffat, especially, depended on Smith's mining judgment.

Eben Smith, some authorities say, as early as 1860, was the only man in Colorado who had experience in the then modern processes of milling for extraction of gold. Few men knew as much of the technical side of ore extraction and fewer still, turned their knowledge to better practical use. Eben Smith played a prominent part in developing several promising gold lodes in Gilpin County; he was a pioneer in the Cripple Creek District; he was one of the builders of the Florence and Cripple Creek Railway; and with Moffat he planned and built the largest and most completely equipped cyanide mill in the world at that time, at the town of Cyanide, near Florence, Colorado. In 1893 he moved his home to Denver. During the financial panic that ensued this same year, there was a general exodus of population from Leadville and among some of the others who moved to Denver, was R. J. Cary.

Several years later, on April 23, 1895, Eben Smith and his son, Frank L. Smith, together with R. J. Cary and his brother, John Cary, and a fifth gentleman, John Y. Oliver, incorporated the Mine and Smelter Supply Company. A predecessor company, the Kennedy Pierce Machinery Company, was bought out about this time and probably its inventory was used as some, if not all, of the merchandise with which to start. This new company ex-

panded rapidly from the beginning, as, at the turn of the century, branch houses were established at Salt Lake City and El Paso. From the beginning, all three houses of the company had three main sales departments, Machinery, Supply and Assay, and then about 1911, Electrical Departments were added, beginning with Denver. In 1898 a separate subsidiary, the Mexico Mine & Smelter Supply Company, was formed, with a large store and warehouse in Mexico City, which remained in business until 1914, when the Madero Revolution at the end of the Diaz regime forced many foreign businesses to close out. Since that time the El Paso Branch has handled much of the Mexican business.

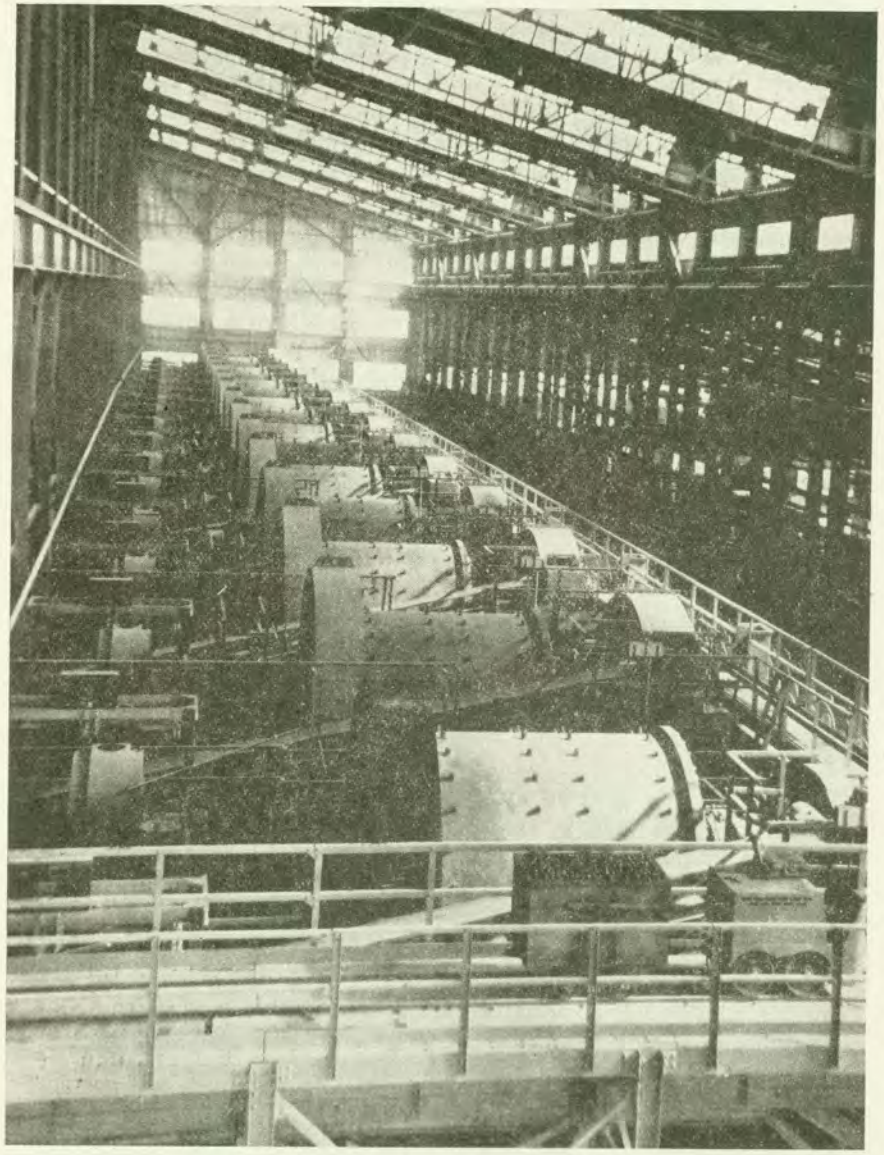
In 1901 Eben Smith and Frank L. Smith sold out their interests to Joseph Seep of Titusville, Pennsylvania, and later, in 1904, the Carys sold out to the same party. The expansion of the Company, which had already begun, was continued, as in 1905 it became a manufacturer when it acquired the manufacturing rights of the well known Wilfley Concentrating Table and the capitalization of the Company was doubled. The inventor of this table, Mr. A. R. Wilfley, then became associated with Mine and Smelter as consulting engineer and as a director until his death in 1927.

The contribution of the Wilfley Table to the mining industry has been of tremendous value. Prior to its invention, the apparatus for recovering mineral values consisted of "roughing jigs" and "bumping tables," by which method only 40 to 50 per cent of the values in ore were recovered. The result of Mr. Wilfley's research work in producing his new concentrating table was to help bring such recoveries up to 75 and 80 per cent. From a small beginning in 1896, at Kokomo, Colorado, where the first tables were made, to a shop at 1837 Larimer Street, Denver, then a much larger plant at 15th and Wewatta Streets, and finally, the present shop next to the company warehouse at 30th and Huron Streets, have been the steps which have marked the growth of this one important item of mining equipment. Through the years over 24,000 tables of all sizes have been built and sold, making thousands of carloads and over 60,000,000 pounds of freight going to every mining camp on the face of the globe. In the year 1910 the milling of large tonnages came into vogue, thus making available much low-grade ore which could not be handled up to that time, and so came into being the large plants treating from 1,000 to 20,000 tons of ore per day and made necessary the installation of thousands of Wilfley Tables. It was then that mining and metallurgical engineers the world over recognized the value of this unique piece of equipment.

Another forward step in the improvement of ore treatment began about 1912, when Frank E. Marcy, Manager of the Salt Lake office of the Company, began developing the idea of improving grinding methods then in use at various mining installations. Typical equipment at that time was coarse crushing equipment followed by rolls, with the grinding done by Chilean or Huntington mills, or, in cases where less coarse grinding was required, by coarse crushing equipment followed by stamp mills. With the exhaustion of high-grade ore deposits as the West became more settled, and the development of mining properties which had complex ores (i. e., many metals in one type of ore), it then became necessary that grinding methods should be improved and a finer grind made possible. The Marcy Ball Mill was developed and several years later the Marcy Rod Mill, which have made the Mine and Smelter name known the world over, particularly among large milling installations where tens of thousands of tons of ore must be ground per day. The facilities of even the latest Wilfley Shop at 30th and Huron Streets in Denver, were not sufficient for the manufcature of these mills, and accordingly, Mine and Smelter eventually became one of the five companies who participate in the manufacturing rights of General Iron Works in Englewood, Colorado, just beyond Denver's southern city limits. Some of the biggest castings ever made at this plant, running as high as 25,000 pounds apiece, have been a part of the largest ball mills ever built—large 10′8″x10′ machines for Phelps Dodge Copper Company in Arizona. The largest rod mills ever made are 9′6″ in diameter and 12′ long, weighing over 170,000 pounds apiece and are for copper ore. A new field, the pulp and paper industry, uses quite a few of these machines as beaters and refiners of wood pulp, at a saving in power and increase in efficinecy over some of their standard equipment. In the one field of ore grinding alone, Mine and Smelter's contribution to the war effort made possible the treatment of almost 200,000 tons of strategic ore a day in the fine grinding of lead, zinc, copper, molybdenum, nickle, etc.

Besides Wilfley Tables, Ball and Rod Mills, some thirty or more manufacturing specialties are being made today by Mine and Smelter, such as hot milling machines, rock bit grinders, density controllers, rubber pinch valves, belt feeders, laboratory crushers, pulverizers, circuitrons, placer equipment, amalgamators, etc., and the latest addition, which is the Massco-Fahrenwald Flotation Machine, is now on the market, with a wholly new principle of mixing ore pulps and air to produce flotation. This principle, covered in patents pending, has great possibilities.

Besides the Manufacturing Division of Mine and Smelter, there is the Industrial Supply or Jobbing Division of the Com-



LARGE MARCY BALL MILL INSTALLATION OF MINE AND SMELTER DOING THE FINAL GRINDING ON LOW GRADE COPPER ORE AT PHELPS DODGE PLANT, MORENCI, ARIZONA.

pany, which accounts for the major portion of the business done by this Company. In three large stores and warehouses, located at Denver, Salt Lake City and El Paso, large stocks are maintained of all types of equipment, which serve not only the mines, but railroads, sugar companies, manufacturing plants, contractors, and practically every type of industry. In addition to the three original departments, Machinery, Mill Supply and Assay (now known as Laboratory-Chemical), there are today electrical, wholesale hardware, contractors' equipment, etc., handled by specialized departments with personnel trained for years in procuring and handling these various items. Hundreds of well known manufacturers are represented through these various lines and large catalogs are printed by the Company and distributed to the trade, which gives them the service and information that is greatly needed by large industrial buyers and also many dealers.

In World War I, and especially in World War II, the Company's function as a distributor played a very important part in the battle of production, which was one of America's most important contributions to such a titanic struggle. Besides this war work, a number of the Company's executives assisted the War Production Board and other agencies on special committees and were most helpful in the tremendous job of organizing American industry for the war effort, so that the necessary metals and supplies could be obtained by the Armed Services and the strategic producers of war equipment.

At the present time the Company employs over three hundred and fifty people, exclusive of the large personnel at the General Iron Works Company of Denver. A large crew of salesmen is maintained, who cover the Rocky Mountain region practically from the Canadian border to southern Mexico.

The executive offices, which were located in New York City for many years, were moved back to Denver in 1929 and these, together with the large office force, are located in the Headquarters Building at Seventeenth and Blake Streets. The management of the company consists of the following: Albert E. Seep, Chairman of the Board of Directors; Oscar H. Johnson, President and Director; Herman F. Seep, Vice President and Director; J. D. Nicholson, General Manager and Director; G. F. Olson, Secretary-Treasurer; H. J. Gundlach, General Purchasing Agent and Director; R. S. Beard, Manager El Paso Branch; and W. J. Berryman, Manager Salt Lake City Branch.

All of the above persons, together with all key personnel, such as department heads, salesmen, office managers, etc., are substantial stockholders in the business.

The name, "Mine and Smelter," is today not descriptive of the business, which is that of a large distributor of industrial equipment and supplies, a wholesaler and a manufacturer of mining and milling machinery specialties. The City of Denver has been known quite often as the greatest mining machinery center in the world, due to the great variety of such equipment that has been designed and manufactured here. Perhaps one of the reasons for this is the fact that Colorado has so many mines that are working on complex ores, presenting a metallurgical problem which is solved by the mining machinery houses located here, who work closely with the State School of Mines at Golden, nearby. The smelting industry in Colorado today, does not compare with such activities some thirty or forty years ago, but Salt Lake City and El Paso, on the other hand, now rank as two of the greatest smelting centers in the country. The Company having its principal stores and offices in these three locations, is in a strategic position to serve not only the western mining industry, but the mining industry the world over through many agents located in foreign lands, such as Australia, South Africa, Canada, South America, Europe, the Orient, etc. World War II has brought with it many fundamental changes, one of which is the possibility of a greater industrialization of the inter-mountain West, and so Mine and Smelter, not only as a mining machinery manufacturer, but as an idustrial supply distributor, is entering the beginning of a new era of expansion and service to this rapidly growing territory.

Recollections of a Civil Engineer in Colorado

DAVID J. MCCANNE

[Editor's note: Mr. McCanne, in his 96th year, now lives in Denver. In 1930 he wrote his recollections. Miss Lois Borland, our Regional Vice President at Gunnison, made a copy of the manuscript and presented it to the State Historical Society. Mr. McCanne has been a prominent figure in the engineering development of Colorado, especially on the Western Slope. The portion of his manuscript detailing his early life and his activities before coming to Colorado are not reproduced here, hence a brief note regarding his background. He was born in a log cabin in Missouri on April 11, 1850. His paternal ancestors came from Ireland in 1752 and located in North Carolina. Mr. McCanne graduated from Christian University, now Culver-Stockton College, at Canton, Missouri, in June, 1871. Most of the succeeding decade he spent in railroad engineering in the Middle West, although in 1881 he took over operation of the Lewis Iron Works, at Grand Tower, Illinois. We take up his story at this point.]

Upon the resignation on January 25, 1881, of Mr. Norton as manager of the iron works, I was installed as his successor and assumed the management of 125 men. This was a heavy responsibility for the young engineer, who had just passed his thirtieth

birthday. An iron furnace, filled with molten metal, is as susceptible to the slightest mistake in its feeding as is an infant. The characteristics of the vapor escaping from the great chimney are the pulse from which we diagnose the interior workings, the prompt treatment of which means the difference between good and bad iron for a day's output. While I was inexperienced in the iron business, I was fortunate in turning out fully as good an average product as Mr. Norton had made.

This was the young engineer's most trying experience in his whole career. A blast furnace at night in hot summer time is bad enough when nothing more serious happens than to have a "sand boil" occur in the casting bed when only by draining the molten iron off in small rivulets that can be broken up after it cools before the whole mass hardens too much to flow and has to be buried, can you escape the loss of tons of molten iron. But when a hole blows out in the furnace near the surface of the molten iron and must be stopped while the blast is maintained in the furnace by streams of water cooling it enough to allow a plug of fire clay to be tamped into the hole while the whole place is like an inferno of liquid fire, is certainly a test (as if by fire) of the engineer's stamina. When I could do nothing but tell the Negroes to "hold it," I would sometimes slip away in the dark and pray while they toiled to hold back the inferno.

WATER AND GAS WORKS IN COLORADO

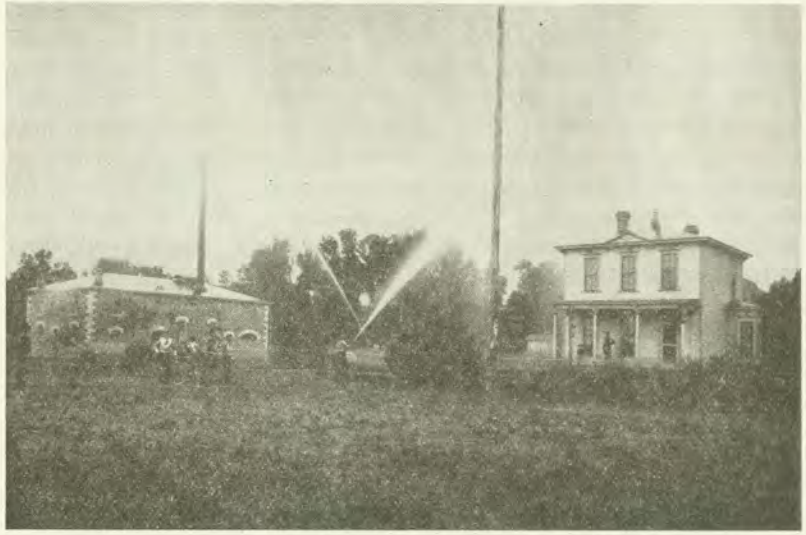
December 20, 1881, Mr. B. W. Lewis of St. Louis, Missouri, offered me the management of the Gunnison Gas and Water Company at Gunnison, Colorado, at a salary of $2,400 and a free house furnished by the company. I accepted on condition that I have a few weeks to make a thorough study of such works and prepare myself for this new line of engineering. I resigned as manager of the Lewis Iron Works, sent Annie with Gerald and Arloa[1] to visit her mother in Canton while she was under the doctor's care for a few weeks; and I put in the time in St. Louis visiting and studying water and gas works, making plans and specifications to fit the conditions at Gunnison.

March 17, 1882, I started for Gunnison, spent a day at Pueblo inspecting works there, and reached Gunnison on March 21 and began to organize a rush campaign, for I had learned that was what pleased Mr. Lewis. I had as much of the work done under contracts as I could economically; but I worked about one hundred men digging the pipe trenches, laying pipe, distributing material, and such other work as could be done by day's work. I started in by paying common laborers $2.00 per day; but they called a strike

[1]His wife, son, and daughter.—Ed.

May 1, demanding $3.00. I had not gotten accustomed to miners' wages, and that seemed very high to me. I compromised by paying them $2.50 per day. I soon learned that I had among the ditch diggers many well-educated men and some college graduates.

I find my record says we commenced laying pipe April 4. I had some of my time-tested men come out from the East to help me out as foremen and skilled workmen. June 27 we had the water works completed and put in operation. August 29 the gas works were completed and put in operation.



GUNNISON WATER WORKS AND MR. McCANNE'S HOUSE, 1883

Considering the materials all had to be shipped from St. Louis and erected in a new town located away over on the Western Slope of the Rocky Mountains, with high wages, this was another piece of record-breaking construction.

I had the superintendent's residence completed by the first of May; and on the fifth of May I was made glad by the arrival of Annie, Arloa, and Gerald, whom I had left in Canton and had not seen for nearly five months. Annie's mother and sister Alice made their home with us, so we were again settled in our home life as well as in big business.

La Veta Hotel

The town of Gunnison, Colorado, at the time we were building these works, had a population of about five thousand, about half of which lived in tents and cheap shacks. The Rio Grande Railway

had built a narrow gauge road through the Grand Canyon and over the Marshall Pass down through Gunnison and was pushing construction through the Black Canyon and on toward Salt Lake, Utah.

The branch from Gunnison to Crested Butte divided the town of Gunnison; and Captain Louden Mullin, who owned lands on the west side, had been, for many months, promoting the growth of the west side by putting all the money he could raise by the sale of lots into buildings to attract business to his side of town. He had been able to keep up a rivalry by building a good school building and a large frame hotel called Mullin House, but now he was determined to put the west side so far ahead that everything would come his way. He had one of the leading architects of Denver make plans and specifications for a fine four-story hotel to be erected on the boulevard of his west side. He had expended about all the money available in excavating the basement covering about a quarter of a block when he called me in to see if I could help him finance the hotel to a finish. He proposed to deed free of incumbrance $250,000 worth of his lots at his selling prices to a hotel company that would complete the hotel and operate it.

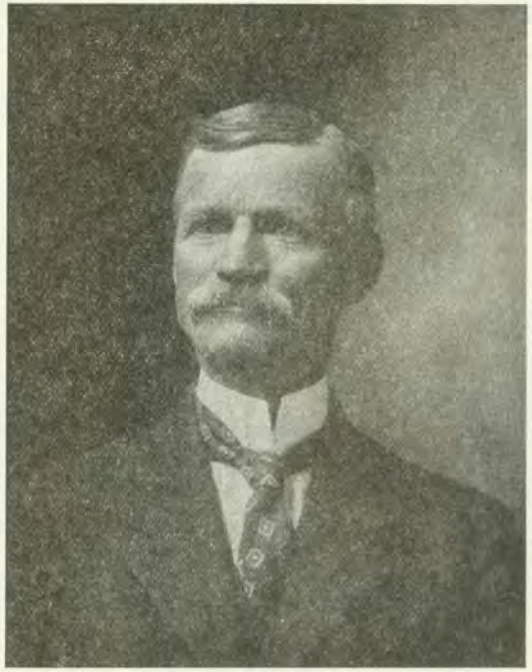
I was getting myself pretty well sold on the future value of Gunnison, so I put the proposition up to Mr. Lewis. He immediately organized the Lewis Hotel Company and made me manager of it with instructions to complete the hotel. I had the building enclosed before freezing weather in the fall of 1882 and had it completed by May 10, 1883. Its cost was over $152,000 besides about $30,000 worth of furniture.

Engineering Problems

The first serious problem I had to overcome was the elimination of mushy ice, otherwise called "anchor ice," that filled the water of the Gunnison River. We brought the water from the river by gravity flow a distance of about half a mile to the pumping well through a 12x20-inch conduit with half-inch mesh wire screen at its inlet. The first real cold spell that made a run of this anchor ice choked the conduit. About half-way down, the conduit passed under a swale in which there was running water. We tapped this stream into the conduit and soon got the choke to moving. As proof of the fact that we must absolutely be *always* ready, we had a small fire just at the time we had our water choked off. We could furnish only one fire stream where we should have been able to furnish half a dozen. The fire was controlled before any serious damage was done, but we must prevent another such obstruction. How shall we do it?

I saw at once that some way must be devised to make the swift current of the river keep the anchor ice from accumulating against

the screen, so I extended the conduit out under the river stream with its head wide enough to put the screen at the side so the water had to enter against the current. As soon as the anchor ice began to pile up against the screen, the current flowing over it washed it away and thus kept the screen practically clear of ice. We had no more trouble with anchor ice.



DAVID J. McCANNE AT SIXTY YEARS OF AGE

Our next problem was to keep the branch pipes leading out to the fire hydrants from freezing up or keep them thawed out when they did freeze. We fitted up a five horse-power vertical boiler mounted on a two-wheel cart with which we put a steam hose down through the valve of the hydrant and pushed it along inside the branch pipe until the water came.

We next began to have six-inch mains freeze up solid under six feet cover. We would heat the frozen ground by driving down a steel bar and put the steam down to thaw out the ground for easy digging. When we got to the main, we would drill an inch and a quarter hole in it and tap it with pipe thread ready for a plug. Then we would run the hose inside in each direction until we reached the water. We devised a nozzle which blew the steam

back against the inside of the pipe and this made the hose crawl along until the nozzle came up to the ice. By the use of this nozzle we could make a hose crawl a hundred feet.

We were among the first water companies to use electric current to thaw out service pipes. This discovery—that a heavy amperage of current under about twenty-five volts would follow the pipe instead of being dissipated through the ground as all electrical engineers had been believing it would—we put into practical use in Gunnison within thirty days after the discovery was made by Professor Woods of Wisconsin University. I had a large transformer rewound for this particular purpose and astonished the citizens whose service pipes had been frozen for weeks by thawing them out in five to twenty minutes each, according to size, as fast as we could hitch on to the faucets, preferably on opposite sides of the street.

Electric Light

As I look back upon our experiences, I wonder how we could have been so slow to see that electric lighting would soon displace gas for illuminating purposes. The arc light was first installed in front of Tony Faust's place in St. Louis in the fall of 1878; but its violet rays gave a ghostly moonlight effect that was not much better than the gas light of that time. Arc lighting was being improved very fast, but little attention was given to Mr. Edison's progress on incandescent lighting. Had we been as alert in reading the signs of the times as we are today, we should have foreseen in Mr. Edison's first display of street lighting at Menlo Park, March 21, 1880, two years prior to our commencing to install gas works in Gunnison, that electricity would soon render the gas obsolete.

We did not even see far enough ahead to wire the big hotel for electric lights. The architects of fine buildings had not at that time begun to provide for electric wiring.

Like many engineers of those days, I was beginning to study electricity as we were reading of the progress being made in this line; and I secured the castings of a small dynamo and with the help of my waterworks engineer, Charles Myers, I built a dynamo of capacity to furnish ten lights of sixteen candle-power each, belted it to a small steam engine in the water works building, and ran wires across the yard to my residence, a distance of about two hundred feet, and lighted my house with it.

The first display of electric lights in Gunnison was in a cantata Annie and I put on at the Academy of Music (the theatre of the town) on June 24, 1891. The cantata was entitled, "A Dream of Fairyland," by Charles Gabriel, in which there were

thirty girls. The good fairies were dressed in white, evil fairies in black and sprites in red costumes.

I advertised that the first electric lights would be displayed in this play. This is how I managed them. I had the stage decorated with paper lilies with a light bulb in their centers. These lamps were wired from the dynamo, which was driven by a water motor in a nearby meat shop, with a switch operated behind the scenes by Annie. Every time the good fairies entered, the lights flashed on and as they left the stage, the lights flashed off. The novelty was a big hit, and the play had to be repeated the next night. I arranged to take my thirty girls and orchestra to Pitkin, Colorado, and repeated the cantata there July 4, 1891.

October, 1894, I installed an eighty horse power Ball engine and a thirty kilowatt Westinghouse pan-cake wound, one phase generator of 1100 volt capacity in the water works building, wired the town for electric lights, and shut down the gas works. This plant soon paid for itself in increased earnings and contiued to give good service and make money as long as I managed the company's business. Its service in thawing frozen pipes has been mentioned.

The Engineer's Mining Failures

Having had some experience in the iron business myself and Mr. Lewis having been for many years engaged in iron mines in Missouri, I was attracted by the big iron deposits in the Cebolla district, about twenty-eight miles southwest of Gunnison, very soon after I arrived; and with Mr. Lewis' approval I bought twenty-three claims (about 230 acres) and had them surveyed, recorded, and assessments worked at a cost of $5976, of which I carried one-fourth of the investment. Mr. Lewis and his associates carried the rest. We kept up the annual assessments for several years on these iron claims. Mr. Lewis spent the last ten years of his life in hard work trying to finance a big iron works to be located in Gunnison; but the antagonism of the Colorado Fuel and Iron Company interests defeated him although his reports by experts were always favorable, and several times his negotiations were practically consummated even to the appointment of the general manager by the capitalists; but at the last minute the opposition would manage to defeat him.

I made a few investments in various kinds of mining projects without success but did not take an active interest in mining until 1885, when I had my attention called to a large acreage of placer ground on Cow Creek, between Montrose and Ouray, Colorado. Pannings of the gravel practically all over the valley showed rich colors of fine gold. All our tests, made by old placer prospectors, seemed to prove the gold was there. The only problem seemed to be the engineering of hydraulics; and this appealed to me, for I knew I could build the canal seven miles long, the flume across a half mile between hills, ninety feet in height, the pipe and hydraulic giant nozzles, and the hydraulic elevator to lift the gravel from bed rock into the sluices.

Louis A. Dunham and Sprigg Shackleford of Gunnison had secured options on the land and had organized the Pericles Placer Mining Company and were hunting for the capital. I put up the propostion to Mr. T. T. Lewis of St. Louis and after inspecting the property he financed it to the extent of $20,000. I put L. R. Fry, a St. Louis man, well-known to Mr. Lewis, in charge of the construction. By the time this money was expended, we had secured the services of two expert placer miners from California. These men made very careful tests of the gravel in various places and were so well assured they could make the property pay that they agreed to risk getting their salaries out of the proceeds of operation. This so inspired the confidence of the stockholders that they all agreed to stand an assessment of their stock to make up an additional $5,000 to hydraulic down to bed rock, install the sluices, and make the first clean-up.

After all this assurance of success we spent our $25,000, and we cleaned up just $36 worth of gold. Charged my loss—about $5,000 to tuition in mine engineering—I pledged myself to keep out of mining.

I suffered a loss of about as much more by investing in Gunnison lots during the time I was so sure we would have the big iron works built there.

Ranch and Cattle Business

After these losses I decided to try an investment that seemed to be safe for others in the Gunnison country, so I bought a hay ranch of 320 acres five miles east of Gunnison. Mounds siding was on my ranch. It had been foreclosed and was offered by one of the big insurance companies at its foreclosure cost—about ten dollars per acre in four annual payments. I paid this out of my savings and also stocked it with cattle. I shipped out from Missouri two carloads of pedigreed bulls and high-grade heifers. Then I bought fifty "VVN" two-year-old cows and some horses and hired a cow-man named Tom Cage, a Texas man, to run the ranch and cattle. As soon as I found Tom was a good man for me, I made a three-year contract with him to give him half the increase of the cattle to care for the ranch. Tom did well for both of us; but he got the Texas fever—to go back, and at the end of his three years he sold out his interest and left me. I had E. K. Berry running

the ranch for several years and had Lon Hartman keep track of the cattle along with his on the range. After I moved my family to Denver in 1892, I continued the management of the water and gas, the electric, and the big hotel for another ten years by making trips once or twice a month and spending a few days at a time reading meters, making collections, and paying the monthly bills.

Gerald, my boy, was now about fourteen years old, and he always wanted to spend his summers on the Gunnison ranch running the hay rake, the mowing machine, and helping with the hay stacking and baling. As he got older, I gave him charge of the keeping of the men's time and acting as assistant manager. This gave him a bent for farming from which his schooling in engineering never weaned him, as will appear later on in this story.

I sold out my cattle to Lon Hartman when the price was very low; but Lon was willing to buy the entire brand, and I could not have done better selling to a man who would have required me to round up every animal he paid for.

I sold out the hay ranch to E. H. McDowell for about twice its cost. I had accumulated about $1,000 worth of mares and colts which I traded to Lou Monson for an eighty acre tract of raw land west of Kirksville, Missouri. I never saw the land, but I sold it a year or two later for $800.

Hotel Management

When we had the hotel finished, Mr. Lewis insisted that it be given another name instead of Lewis Hotel; so it was changed to Le Veta Hotel. The hotel management gave me more trouble than all the properties for which I was responsible.

It was opened April 15, 1884, with N. J. Bliss of Hannibal, Missouri, as manager. Bliss brought out Negro help and soon had the best families of the town and most of the clerks who could afford the rates boarding at the hotel. The Negroes had a quartette of singers, and there was something to attract the people going on nearly every night.

It soon began to be whispered around that there was something wrong about Bliss—that he was inviting young boys to his room. Within twenty-four hours from the first evidence I could get of Bliss' immorality, I discharged him and put Joseph Cuenin, the manager of the Tabor House (the hotel of the East Side) in his place as manager June 2. Cuenin was a good hotel man; and just as I began to feel easy about the operation of the hotel, he was taken ill and died within a few days. We closed the hotel for the winter November 5, 1884, and drained all the water out of the pipes to prevent freezing.

R. Olney from the Oasis Hotel, Greeley, Colorado, managed the hotel the season of 1885. Mr. Olney was an experienced hotel man but he imposed upon us by bringing in too many relatives with free board to visit them. The hotel was closed again during the winter of 1885-86, from October 5 to April 1, 1886, when it was opened again under Mr. Olney's management.

Mr. B. W. Lewis and family arrived in Gunnison May 27, 1886, and took rooms in the hotel. Mr. Lewis lost his fortune speculating in wheat about the first of March, 1885. Fortunately for the family Mrs. Lewis' fortune was not involved; and as it was mostly invested in St. Louis rental property, managed by her relatives, she was able to finish the education of the children. The two younger girls—Amy and Annie—were about ten and twelve years of age; and they were thrilled with the prospect of wild western life. At Mr. Lewis' request I bought little burros and side saddles for them, and they were turned loose to enjoy the wide spaces of the great Gunnison country to their heart's content. Mrs. Lewis was somewhat of an invalid, but she took great interest in the happiness of her children. She shipped out her grand piano and we enjoyed many happy evenings with them.

Mr. Lewis, as I have mentioned before, made heroic efforts to secure the development of the wonderful iron and coal deposits and expended large sums of money patenting the lands but failed to carry out his big plans, although he never gave up in his efforts until his death October 23, 1903.

(To be continued)