THE COLORADO MAGAZINE

Published bi-monthly by

The State Historical Society of Colorado

VOL. XII

Denver, Colorado, May, 1935

No.3

The First Decade of Public Schools at Central City

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The men who feverishly prospected and panned gold in Gregory and neighboring gulches in the summer of 1859 had little concern for the establishment there of facilities for education, for they intended to stay only until they had obtained riches, and besides, they did not have their families with them. After an interval of three years conditions had changed. The extraction of gold had become systematized and the earlier camps were becoming welldefined cities with women and children included among their residents. Then the tendency of migrating Americans to carry their institutions with them found expression, and public schools were established. Ten years later the completion of the railroad as far as Black Hawk, a mile from Central City, and a combination of other local developments effected the emergence of this cluster of mining cities from frontier conditions.² In that decade, from 1862 to 1872, the public schools at Central City had made remarkable progress. Fortunately a local continuing newspaper, the Tri-Weekly Miners Register, had been founded prior to the opening of the free schools.³ Its appearance in July, 1862, is significant because it then served as a convenient organ for the consolidation of local opinion in favor of public education and because it now provides valuable historical material concerning the schools it promoted.

The story of public schools at Central City begins properly with an account of the private schools that came into existence there before there were other educational facilities and that served to call attention to a growing need. The Catholic Church was operating a private school in the fall of 1862 with M. J. Donnelly as instructor,

^{*}Mr. Perrigo, Fellow in the History Department at the University of Colorado, contributed an article on "The First Two Decades of Central City Theatricals," to the Colorado Magazine of July, 1934.—Ed.

^{&#}x27;Nevada, Central City, Mountain City, and B'ack Hawk.

"Central City had incorporated Mountain City in 1864. By 1872 Central had a population near 2,500, its society was highly organized, and its substantial buildings included three church structures, the four-story Teller House, several business blocks, and a number of brick and stone residences.

buildings included three church structures, the four-story Teller House, several business blocks, and a number of brick and stone residences.

The first ten volumes of this newspaper are preserved in the Library of the State Historical Society at Denver. Although the publication appeared under three names within this decade, it was in reality one newspaper and is continued today as the Weekly Register-Call, edited by G. M. Laird since 1878. Since the editions from 1862 to 1872 will be cited frequently in subsequent footnotes, the names of the paper will be abbreviated as follows:

The Weekly Minure Register (1869-1862) The Merchant Call of the paper will be abbreviated as follows:

Tri-Weekly Miners Register (1862-1863), T. M. R. Daily Miners Register (1863-1868), D. M. R. Daily Central City Register (1868-1876), D. C. C. R.

and children of non-Catholic families were admitted.4 At the same time Miss Ellen F. Kendall was teaching a group which met at her father's home, but this school was closed when Miss Kendall was employed as a teacher at the public school in December.5 The fact that the free schools did not make progress rapidly for a few years may have been either the cause or the effect of continued competition with the Catholic school6 and with the later ones opened by other churches. The Episcopalian school offered instruction for \$12 a term (12 weeks) in 1863.7 It continued to flourish throughout the sixties; for instance, in 1868 it employed two teachers and had about 30 pupils enrolled.8 But as time passed, the tuition rates were reduced and finally in 1871 the basement room of the Episcopal Church was rented to accommodate the overflow from the public school.9 In 1871 the Baptists undertook the promotion of a school but it seems to have been short-lived, 10 and in 1871 the editor of the Register could announce that the private schools had been supplanted by the public.11

After the organization of Colorado Territory the legislature had outlined an educational system in its act to establish common schools, approved in November, 1861.12 District Number 2 in Denver was the first to take advantage of the provisions of this law and opened a public school there on December 1, 1862.13 In the meantime the people of Central City were working rapidly toward a similar end. D. C. Collier moved his law office from Denver to Central in July of that year and immediately began to write articles for the Register on community affairs.14 In October he protested that Colorado had been four years a Territory and that there was not then a public school in it. Of course, the Territory had not been legally organized for four years, but Collier's zeal won him the

14 Legal card in T. M. R., July 30, 1862.

election as Gilpin County's Superintendent of Schools.15 He then divided the county into five districts and called a meeting to organize the first district, which included Central City and Gregory Gulch. 16 There the electors named H. A. Johnson president of the board of directors, A. Jacobs, treasurer, and Harry Robinson secretary.17 This board immediately approved a district tax levy and advertised for two teachers "well qualified and of good moral character.'18 J. T. Campbell and Miss Kendall were selected and after examination by the county superintendent opened school in Lawrence Hall on Monday, December 15.19 Columbus Nuckolls, then secretary, advised the pupils to "bring such books as you have until some series is adopted." The principal, J. T. Campbell, also started a night school for adults.20

When the next school year started Campbell was returned as principal; but after a temporary shut-down in April of 1864 the board appointed a lady principal and explained that "the scholars are not large here so it is a good policy."21 That summer the mayor of Central City married the new principal, so a man was employed for the position in November, 1864.22 In that year Central had become an incorporated city, and in March of 1865 the council passed an ordinance establishing a city school system.23 There was to be forty weeks of school each year, divided into three terms, with full reports properly rendered by the teachers. A board of five members was named by the council and in May the new board drew up its rules for the administration of the school.24 The daily sessions were to be from 9 to 12 A. M. and from 1 to 3 P. M. The school was divided into primary, grammar, and high school grades, with certificates of promotion from one "department" to the next. In the primary division reading, spelling, and the rudiments of arithmetic, geography and grammar were to be taught. The grammar department should offer reading, spelling, arithmetic, geography, English grammar, complete United States history, and penmanship, and should have weekly exercises in declamation and composition. In the high school there was to be "such of the higher English and classical studies as may be provided for by the appointment of instructors." The school was supposed to be open to all children between the ages of five and twenty-one residing in

^{*}Locals, T. M. R., Oct. 8, 1862.

*H. M. Hale, Education in Colorado (Denver; News, 1885), 22.

*Prof. Murphy's Catholic school and night school, notice, D. M. R., Sept. 5, 1864.

*Mrs. Granger, teacher, locals, T. M. R., Aug. 13, 1863.

*Interview, March 28, 1935, with B. E. Seymour (of Denver) who attended the Episcopal school in 1867-1868 and praises the high grade of instruction

the Episcopal school in 1867-1868 and praises the high grade of instruction given there by Miss King.

*Rev. A. B. Jennings, teacher, locals, D. M. R., Sept. 8, 1866; children must not be "kept out to run errands or do chores," and school hours "by Hense's time," Rev. Jennings, locals, 4b4d., April 2, 1867; also, locals, 4b4d., June 30, 1867, and D. C. C. R., March 20, 1869. Taken over by city schools, locals, 4b4d., Sept.

<sup>12, 1871.

10</sup>Miss Jenny Snyder, teacher, \$5-\$8 a term, locals, ibid., March 24, 1870.

11Locals, ibid., Oct. 6, 1871; also, no private schools reported by county superintendent H. M. Hale in 1872, Territorial Superintendent, First Biennial Report (Central City: Collier, 1872), 43. However there was a large Catholic school at Central City after the building of the Academy there in 1875.

12Laws of Colorado, 1881 (Denver: Republican and Herald, 1861), 154-165. Copied after an Illinois statute, Hale, Educ. in Colo., 12. Some revisions made in 1868, Revised Statutes of Colorado, 1868 (Central City: Collier, 1868), 573-585.

14Hale, Educ. in Colo., 21; Smiley, J. C., History of Denver (Denver: Williamson, 1903), 736. The citizens of Boulder had built the first schoolhouse in the territory in 1860, but it was not converted into a public school until 1863, ibid., and D. E. Clark, Colorado Schools in Territorial Days (Boulder: Univ. of Colo., Thesis, 1915), 25.

¹⁸Directory, *ibid.*, Oct. 13, 1862. He received 1378 votes to a total of 44 for his two opponents. An Old Timer, "The Man of the Mountains" (an unpublished biography of D. C. Collier, now in University of Colorado Historical

¹⁴Notice, T. M. R., Oct. 13, 1862; notice, ibid., Oct. 24, 1862. ¹⁴Locals, ibid., Oct. 27, 1862. ¹⁵Ibid.; and locals, ibid., Nov. 3, 1862.

Notice, ibid., Dec. 12, 1862.
 Locals, ibid., Dec. 26, 1862.
 Locals, D. M. R., Dec. 5, 1863; notice, ibid., April 2, 1864; locals, ibid., May

^{**}Locals, ibid., Aug. 14, 1864; J. L. Schellenger, previously principal at Black Hawk, was employed, locals, ibid., Nov. 20, 1864.

**Locals, ibid., March 12, 1864; ordinance, ibid., March 22, 1865.

**Notice, ibid., May 9, 1865.

the city, and no pupil should be "suspended except for improper conduct or habitual tardiness or absence." The board caused a better partition to be erected between the two rooms in Lawrence Hall so that one room was "not bothered by the noise of the other."25

In those days school was in session from December through the summer months, with examinations and closing exercises in August.26 The forenoon of the final day was devoted to the examinations and the afternoon to "declamations, compositions, and reading interspersed with singing." The teachers read their term reports, and the prizes offered by the board were presented to pupils having commendable records. The public was invited to attend both sessions. In August, 1865, the subjects of recitations and declamations were "School," "The Burial of the Drummer Boy," "American Boy," "The Tragedy," "Perseverance," "Our President," "Taxes," and "No Surrender." The prizes, consisting of a photograph album, a writing case, two silver-plated cups, a portfolio, and two volumes of poems, were all awarded to girls. That fall school opened in September instead of December,28 and in the next or winter term high school instruction began, as several pupils were "ready to advance." The winter term was then designated the "third term." and closing exercises were held in the Montana Theatre "at 73/4 o'clock'' on the evening of March 30;30 but it was not until 1869 that the summer term was started in March so that the vacation fell in July, August, and September.31

Much of the progress that was made in the early development of Central City's educational facilities may be attributed to D. C. Collier, who was county superintendent until 1867.32 He not only persevered in the performance of his official duties but since he had bought a share in the Register in 1863 he was also able to wield an editorial pen diligently in an effort to popularize local public education. He was possessed of a conviction that "children [had] as much right to an education as to the air they breathe[d]." He

believed that the study of Latin and Greek were "favorable to an aesthetic culture" but not "good for every position in life." Instead, "everything should be done with an aim." Locally, there was too much contracting the schools to "the lowest bidders" and that was hardly the way to get teachers with "morals, knowledge and adaption." 35

Collier's official connection with the local schools was renewed when he was named chairman of the city school board in 1868.36 In that capacity and as superintendent he struggled with the problems and controversies that arose in this formative period. Administering school finances was one of the problems. The school laws provided that the local tax was to be assessed by the district board with the approval of the county commissioners and collected by the county collector for a commission of one per cent. 37 In 1862 one mill was levied in the first district of Gilpin County and the next year 21/2 mills.38 At that time the school tax was effectively collected, and the first year's funds were expended for two teachers employed at \$50 and \$80 a month, for rent at \$14 a month, for 31 seats and some desks at \$124, and for fuel, paper, and advertising to the amount of \$78.45.39 The next year, 1864, the levy was raised to 3 mills, one-half for similar expenses and one-half for the building of a small schoolhouse in the third ward.40 Later, during the post-war mining depression, the taxes were not easily collected; for example, in 1869 the anticipated total was over \$5,000, but only about half of it was collected that year and \$1,000 of the remainder was still outstanding in 1871.41 Besides, the school funds had become involved in local politics with the result that fraud and misappropriation were rumored and the school board was blaming its shortage of funds on the failure of local Democratic officials to surrender \$1,500 due them. 42 Furthermore, the fact that sections 16 and 36 of the public lands had been set aside for school purposes produced only worry instead of revenue, as the superintendent did not know what to do with this mountain land nor how to prevent trespassing upon it.43

Faced with the problem of finding means to produce immediate revenue for schools the legislature in 1862 at the suggestion of Governor Evans had enacted a law providing that each third claim on newly discovered lodes should be reserved for schools and leased

[&]quot;"Thanks to the school board, Rev. Vincent and Marsh and Messrs. Teller, Kip and Beach," locals, ibid., July 19, 1865. Even so, the new partition did not reach the ceiling and was not a very effective barrier; interview, March 28, 1935, with E. D. Morgan (Central City) who attended the school from 1868 to 1870 in the old hall that stood on the ground where the Teller House is now located. 26 Locals, D. M. R., May 15 and Aug. 15, 1865.

²⁷Locals, ibid., Aug. 18, 1865.

^{*}D. F. Richardson, principal, locals, ibid., Sept. 22, 1865. M. A. Arnold followed him in 1866, but Richardson, said then to be "the best teacher that ever taught here," returned in 1867, locals, ibid., Aug. 10, 1866, and June 30 and Sept.

²⁰ Locals, ibid., Dec. 30, 1865.

[&]quot;Locals, D. C. C. R., March 31, 1993.

"D. C. Collier, a native of Ohio, came to Denver in 1858 to practice law, served as county attorney there, and took an active part in community organization. Then at Central City he was the first county superintendent of schools, edited the Register from 1863 to 1873, was chairman of the city school board in 1869, was at various times city alderman, judge, and health officer, and in 1874 served as chairman of a committee that supervised the rebuilding of the city after a destructive fire. He moved to San Diego, California, in 1884. Anonymous manuscript, "Man of the Mountains" (Univ. of Colo. Hist, Coll.).

"Editorial, D. M. R., Feb. 22, 1864.

³⁰ Ibid.; and locals, ibid., March 28, 1865. "Locals, D. C. C. R., March 31, 1869.

^{**}Editorial, ibid., July 29, 1864.

**Editorial, ibid., Feb. 24, 1865.

**With D. M. Richards, Richard Harvey, C. M. Weston, and L. C. Tolles as members, proclamation, D. C. C. R., Aug. 19, 1868.

**Laws of Colorado, 1861, 163; Revised Statutes of Colorado, 1868; 576, meeting proceedings, T. M. R., Oct. 27, 1862; editorial, Did., Nov. 10, 1862.

**Levied \$2,349 and \$201 not raised, school report, T. M. R., May 23, 1863.

**School meeting, D. M. R., May 2, 1864.

**Glipin County Superintendent, Record Book (1868-1875), 40-49.

**Editorial, D. C. C. R., Nov. 4, 1869; Supt., Record Book, 133; Hale, Educ, in Colo., 21.

Colo., 21.
**Organic Act, Laws of Colo., 1861, 30; correspondence, Supt., Record Book, 137.

or sold by the county superintendent.44 The fund was to be administered by the territorial superintendent. This added to the responsibilities of these officials out of proportion to the returns it yielded. True, the claims were faithfully set apart on the books of the Gilpin County recorder 45 and the superintendent's means of enforcing the act were improved by the supplementary legislation of 1866;46 yet the law was evaded and was the cause of considerable local controversy. In 1864 a citizen complained about the regular school levies because he understood that mining claims had been set aside to support the schools, and he questioned whether the revenues were being spent honestly.47 Then miners began to "jump" the school claims, saying that the authorities had no right to hold them. Collier threatened to sue anyone who jumped such claims and tried to locate responsibility for the rumor that violations would be overlooked.48 In 1866 the county commissioners authorized him to offer the school claims for sale, and he "did a big business" for a few days.49 Later he was charged with pocketing the proceeds, but in defense he referred to the House Journal, which showed that he had paid the territorial treasurer \$4,815 derived from the sale of claims. It should be added here that the treasurer, who was supposed to invest these moneys and apportion the interest, spent about half of it.50 By 1869 there remained only \$3,000 of the total paid in previously by Clear Creek and Gilpin counties, and the treasurer decided that the interest was not worth distributing. 51 The sale of claims was continued in Gilpin County, and by 1870 over 200 more had been marketed at prices ranging from \$5 to \$250.52 After the county superintendent had deducted his fee of \$2 to \$11 for each sale, he held about \$1,500, which he turned over to the county general fund in 1872 as directed by the territorial superintendent. 53

Another problem of school administration arose from the demands of minority groups in Central City. In 1864 the colored people objected to paying the school tax since they were not legal voters and their children were not at the time admitted to the public schools.54 Collier explained that it was a matter of jurisdiction within each school district and assured them that as soon as there were enough of their children to justify it a school for them would be established. 55 These people then tried a petition to the legis-

lature for an act requiring the local schools to admit their children, but without success.⁵⁶ In 1866 a separate school was conducted for a while by Principal Arnold, who reported an enrollment of twelve. 57 Finally, in 1869 the colored children were admitted to the public schools, largely through the efforts of their attorneys, Johnson and Teller, who demanded admission on the basis of the Civil Rights Act of Congress and the equality of treatment granted by the local coach line since 1865.58 While the Negroes were striving for equality in the schools the German element in Central was demanding favored treatment. By a Territorial law of 1868, if there were twenty-five German pupils in a district their parents might petition the local board for a separate school wherein both German and English languages should be taught. 59 The Germans of Central established their own private school, and in 1868, when the Democrats were in control locally, this school was subsidized by the city to the extent of \$165 for monthly salaries without even the formality of due application for a separate school. 60 Later Collier objected and apparently satisfied the German group by arranging for the public schools to teach their language. 61

In the meantime the principalship of the city schools had been assumed by H. M. Hale, who not only collaborated with Collier in a campaign for a suitable building but also by his capable administration brought the local schools to their early excellence by the end of this first decade. 62 The schoolroom environment in which Hale worked from 1868 to 1870 was a serious handicap, but the new principal was undaunted by obstacles and both taught and administered a good school. 93 The old hall that was used for a schoolroom was on the main floor of a frame building, and the second floor was occupied by a saloon and gambling hall. The two schoolrooms, separated by a frail partition, were crowded and noisy, yet in them the pupils received instruction that they long remembered. They sat two in a seat while studying and on long benches at the front of the room for recitations. There were ten grades in the school then, and the ninth and tenth included high school subjects

[&]quot;Laws of Colorado, 1862, 95, 96.

"Gilpin County Lode Books, treasurer's office.

"Revised Statutes of Colorado, 1888, 585, 586.

"Communication, D. M. R., Aug. 5, 1864.

"Editorials, D. M. R., Feb. 22, 1864, and March 27 and 30, 1865.

"Locals, D. C. C. R., March 26, 1869; Colorado Territory, House Journal, 1868.

(Central City: Collier, 1868), 32.

Central City; Collier, 1868), 32.

Clark, Colo. Schools, 31-41; Hale, Educ. in Colo., 13.

Supt., Record Book, 30-37.

Memorandum of H. M. Hale, then superintendent, ibid., 97.

Communication, D. M. R., Aug. 4, 1864.

Clocals, ibid. When there were 15 colored pupils in a district a separate school might be started at the discretion of the local board, Revised Statutes of Colo. 1885 580. Colo., 1868, 580.

 ⁵⁶Communication, D. M. R., Feb. 5, 1865.
 ⁵⁷School report, *ibid.*, Oct. 7, 1866.
 ⁵⁸Locals, D. C. C. R., Jan. 14, 1869.

⁵⁰ Revised Statutes of Colo., 1868, 580 60 Editorial, D. C. C. R., Jan. 14, 1869.

⁶¹Editorial, D. C. C. R., Jan. 14, 1869.
⁶¹Locals, *ibid.*, Feb. 6, 1870.
⁶²Horace M. Hale, a native of New Hampshire and a graduate of Union College at Schenectady, N. Y., had taught in New York State and Tennessee and had studied law at Detroit. In 1863 he moved to Central City, where he worked in Teller's law office and then tried the mining and freighting businesses. In 1868 he was employed as the local school principal and he held that position with one intermission until 1887. At Central he also served for a while as county superintendent, mayor of the city, and manager of the Opera House. He was the last territorial superintendent of public instruction from 1876 to 1877 was the last territorial superintendent of public instruction from 1876 to 1877, was president of the State University from 1887 to 1892, and then retired to live at Denver. W. N. Byers, Encyclopedia of Biography of Colorado (Chicago: Century, 1901), 467-469.

⁶²This description of the school is a condensation of an interview, March 28, 1935, with E. D. Morgan (Central City).

without being specifically called a high school.64 "Daddy Hale," as he was respectfully nicknamed by his pupils, had firm convictions concerning educational methods; he tried to apply those ideas in his own schools while writing them for the aid and inspiration of other teachers in the Territory. He believed that the primary instructors should receive the higher pay, that each county should have its teachers' institute, and that teachers should seek the sympathetic cooperation of parents.65 Concerning discipline he wrote in one of his reports, after discussing corporal punishment, the self-reporting system, the merit and demerit plan, and discipline grading, that no plan was the only one. He advised the employment of means best suited to the locality and individual case, and added: "keep good order! by mild means if possible; but keep good order!" Though of diminutive stature himself, he sometimes applied the hickory rod with effect on husky sons of miners; even so, during his



PUBLIC SCHOOL BUILDING, CENTRAL CITY, (Completed, 1870)

(Reproduced from the First Biennial Report of the Superintendent of Public Instruction of Colorado Territory, 1871.)

first years at Central his entire room would occasionally break from his control and then he would call in Collier to help him restore order 66

By 1869 the school was larger than the rooms provided could accommodate, and the remarkable feature of this expansion was the fact that throughout this period attendance had been merely a matter of parental will. In 1863 there had been 201 children of school age in the first district, but the average attendance had been only 40.67 To 1866 normal attendance had remained below 100.68 and the conflicts of the years 1867 and 1868 had hindered further growth. In those years two rival schools had existed, sponsored by the two city governments that had been set up as a result of alleged fraud and irregularities in the election of 1867.69 By 1869 the elimination of that controversy and the good work of Hale and the other teachers in the one legitimate school had encouraged better attendance, so the average rose to 130 out of 277 of eligible age. That increase, along with the fact that the school building was an "old shackling affair" with low ceilings and a shaky floor and cost \$75 a month in rent, made the need for better facilities apparent.71 In March, 1869, the city council decided to submit a proposed \$15,000 bond issue for a building to the vote of the townsmen.72 The bonds were approved73 but could not be marketed at once because the state of school finances did not inspire confidence. Teachers were being paid with discountable warrants and the reduced salaries offered was making it difficult to keep teachers from seeking more remunerative employment.74 So the bonds went begging for a while, in spite of the fact that they sold for 95 cents on the dollar and paid 15 per cent. interest when the banks were paying only 6 per cent.75 Work on the proposed building was thus delayed until the spring of 1870, and then the erection of the stone structure was rushed in order to complete it for occupation that fall.76 Central's school building, opened on Oct. 24, 1870, was the best that had been erected in the Territory to that time and cost nearly \$25,-000, furnished.77 Its four rooms were finished with white plaster and

⁶⁴Morgan thought that the instruction was about like that given in secondary schools today, but in 1869 and 1870 the county superintendent wrote that there was no high school in Central; Sup't., Record Book, 126-128. If this unassuming attempt of Hale is not recognized as a valid claim for the existence of a high school, then Boulder had the first secondary school and Denver the second, with graduating classes in 1876 and 1877, respectively; H. M. Barrett, "Education in Colorado," Colorado: Short Studies of Its Past and Present (Boulder: Univ. of

^{**}Report of H. M. Hale in Terr. Sup't., First Biennial Report, 101-104. Hale's suggestion of higher pay for primary teachers than for those of the upper grades should be weighed against his own threat to resign in 1869 if his salary were not increased from \$150 to \$175, while at the time the other teachers received from \$60 to \$80 a month; locals, D. C. C. R., Dec. 29, 1869, and Feb. 6, 1870; entry of Oct. 1, 1868, Sup't., Record Book.

^{**}Interview, March 26, 1935, with Ernest Morris (Denver), who from 1885 to 1887 attended the school administered by Hale; also, E. D. Morgan on the

[&]quot;Editorials, T. M. R., May 23, 1863, and D. M. R., Oct. 3, 1863.
"School reports, ibid., July 7, 1864, and June 7, 1865; locals, ibid., Aug. 28,

[&]quot;Hale was in charge of one school and Schellenger of the other, H. M. Hale, "Comprehensive History of Central City Schools," Colorado School Journal, reviewed in Daily Register-Call, May 12, 1885.

Viewed in Daily Register-Call, May 12, 1885.

**School report, D. C. C. R., June 5, 1869.

**Locals, D. M. R., Dec. 21, 1866; locals, D. C. C. R., Dec. 3, 1868; Terr. Sup't.,

**First Biennial Report, 94.

**Editorial, D. C. C. R., Mar. 25, 1869.

**Locals, ibid., April 4, 1869;

**Locals, ibid., Dec. 29, 1869; ibid., Feb. 6, 1870; ibid., Oct. 28, 1871; also,

see the discussion of school finances, above.

**Placals, ibid. Aug. 1 1869 and Feb. 26, 1870.

⁷⁸Locals, *ibid.*, Aug. 1, 1869, and Feb. 26, 1870. ⁷⁸Locals, *ibid.*, Aug. 1, 1869; April 12 and June 14, 1870. ⁷⁸Described in editorial, *ibid.*, Oct. 25, 1870, and Terr. Sup't., First Biennial Report, frontispiece and 94.

oak wainscoting and were equipped with Chicago-made cherry and iron furniture. When the new 400 pound bell in the tower rang on the first day, the 213 pupils that appeared almost filled the rooms, which were planned to accommodate 240.

The opening of school in the stone building was the climax in the early development of public schools at Central City. In that year ten per cent. of the total Gilpin County population attended school, which was near the twelve per cent, average of the United States as a whole.78 And at Central the enrollment continued to increase and included 310 of the 344 eligible in the spring of 1871.79 That fall there were 20 in the "freshman class," and the primary department was so large that one section was transferred to the schoolroom in the Episcopal Church.80 Hale's agitation for compulsory attendance was then hardly necessary, since there were "but few in town of school age who [did] not attend." 181

The record of activities from 1870 to 1872 reveals an occasional change in teachers, 82 the presentation of pleasing public exercises at the school or theatre, 83 the purchase of a new "Chamber, 71/2 octave piano" for the school,84 and agitation for a uniform series of textbooks and a "teachers' Institute like Boulder's." There are also some interesting sidelights, such as the court sentence requiring two boys to go to school as a penalty for stealing a dirk-knife and a revolver, 86 the revelation that "the algebra class had advanced to equations of the second degree and knew thoroughly what they had gone over," and the authorization by the board "to purchase philosophical and astronomical apparatus to the amount of \$100, [and] also to procure charts, from which to teach music." In those years teachers from far and near applied for positions in Central's schools. While there was employment for only ten or twelve in Gilpin County. 89 thirty-two were examined and licensed in 1871 and 1872 and they gave former addresses in fourteen States and Canada. 90 The local superintendent wrote some that it was no use coming as there were more applicants than vacancies, 91 and in one of those letters he warned that "How long after coming here and becoming acquainted you would remain a school 'mam,' is a serious thing to take into consideration as they are in demand for higher positions, [and] I will leave you to conjecture the nature of the other positions." Then he added that the school boards contemplated requiring each lady teacher to give bond to stay a year, as many resigned "for frivolous reasons."

In conclusion, the strides made by these mountain pioneers in a decade seem remarkable. Free schools were founded as soon as they were needed; for a few years progress was slow because of the obstacles to be overcome and the problems to be resolved, but as the town began to emerge from frontier conditions local leadership became more effective and the citizens more responsive. Energetic devotion to the task in the closing years of the decade produced almost immediately a school that would compare favorably with most of those then existing in the older cities of the East. Well could Hale commend the spirit of liberality and enterprise that prevailed in the mining communities of Colorado.93

⁷⁵U. S., Ninth Census, I, 395, 403. Substantial buildings had by then been erected at Black Hawk and Nevada, too; Terr. Sup't., First Biennial Report, 95.

75Editorial, D. C. C. R., May 7, 1871.

85Locals, ibid., Sept. 12, 1871.

85Locals, ibid., May 7, 1871; locals, ibid., Jan. 13, 1872.

85Locals, ibid., March 26, 1871; communication, ibid., April 22, 1871; locals, ibid., oct. 28, and Dec. 22 and 29, 1871.

85Locals, ibid., March 7, 1871.

85Editorial, ibid., March 7, 1871.

85Editorials, ibid., Mar. 2, 1870, and May 7, 1871.

85Locals, ibid., Nov. 19, 1870.

85Locals, ibid., Sept. 12, 1871.

85Locals, ibid., Sept. 12, 1871.

85Cocals, ibid., Sept. 12, 1871.

86Cocals, ibid., Sept. 12, 1871.

²¹ Copies of correspondence, ibid., 126-136.

²²J. Mills to Miss F. L. Ayres, Akron, Ohio, ibid., 129-130. ³²Terr. Sup't., First Biennial Report, 95.

Pioneering on the Big Thompson and in Estes Park

A. E. SPRAGUE

Without going into the migrations of my ancestors, from the landing of Francis Sprague from the "Good Ship Ann" at Plymouth in July, 1623, and their more than 240 years of pioneering from the Atlantic Ocean to the Rocky Mountains, always in the van, I will skip it all, though of much interest to me, and begin this sketch at the ninth generation.

My father, Thomas Sprague, came to the Pike's Peak Region in the spring of 1860 from Iowa, going to the mines at and around Central City and Black Hawk. He prospected for a time, but finding it took more money than he had, he spent most of the three years

there working in the mills. In the winter of 1863-4 he returned to Illinois for his family. My mother, sister Arah, brother Fred and myself, had gone from Iowa to Illinois to be with relatives, after knowing that my father would remain for some time in the Pike's Peak Country.

After paying as much as a dollar per pound for both potatoes and flour, he thought there was more to be made in raising things on the land than could be mined from it, so he purchased a squatter's right to a claim on Big Thompson Creek, which proved to be equally in Weld and Larimer Counties.

Skipping the time spent in a Prairie Schooner crossing the Plains—motive power, one yoke of oxen and one of cows—from May 9th to July 24, 1864, when we arrived at our new home, which is a story by itself, I will confine this sketch to our new home, new neighbors, and our early days in Colorado Territory (still known as Pike's Peak, back in America).

I was born at Dundee, Illinois, in March, 1850; so on our arrival at our log cabin home I was past fourteen. That cabin was a rough pine and cottonwood affair, with one room, about 16x20 feet, one rough pine door, a one-sash window, and a dirt roof. The floor of the cabin was of rough pine boards, which must have been put down green, and was found to be badly cupped, when the dirt that had been leached through the roof by the heavy rains and melting snow earlier in the season had been shoveled from it. The roof having been constructed with wide boards, thatched with a good thick layer of hay before the dirt was added, prevented all the dirt from being on the floor when we arrived. The house had not been occupied since the summer before, so the accumulation of dirt was all there when we arrived. But the place was home, and thanks to a pioneer mother, of pioneer stock, it was soon made to look like a pioneer home.

When we had moved in from the covered wagon we found we had for neighbors two families, G. S. Hill and a family named Monroe, and single men "Batches," the three Brush brothers, John, Will, and Jud, and B. F. Johnson, who soon formed a partnership with Mr. Hill—Hill & Johnson—all of these living "down the Creek." For four miles "up the Creek," when we arrived, all our neighbors were bachelors. Beginning with our nearest—all but the surname of some forgotten—were Walker, Prager, Foster, Frank Gard, T. H. Johnson, John Hahn and Bill Bean, all helping to make pioneer history. Bill Bean, Frank Gard and John Brush found pioneer girls and were married before the long winter of 1864-5.

By the time we were settled in the cabin it was almost having time. Two Samuels brothers had cut the hay in the fall of 1863, and put in some crops in 1864, this for looking after the place and keeping it from being jumped. All we could look forward to was a good hay market to keep us through the months until we could raise other crops. While looking forward to this harvest, getting our scythes and rakes ready, as there was no mowing machine in the neighborhood, the Indian scare of that summer came.

Riders came from the Platte warning all settlers along the streams to flee to a place where they could protect themselves, as the Indians were planning a raid to massacre and lay waste the settlements. We received word about noon and into the covered wagon all our goods had to be piled again and at 4 P. M. we, with our neighbors, were on our way. My father, thinking if the Indian



BIG THOMPSON POST OFFICE, 1864.
Residence of J. E. Washburn, located one mile south of present Loveland, Colorado.

troubles continued he could secure work in the mines where he was known, to support his family through the winter, went to Central City. On our arrival, after several days travel, we learned the Indians had changed their plans, as the settlers had been warned they would confine their depredations to the overland travel. We also learned that the Government Surveyors were at work subdividing the land in our region and the squatter had better be on their claims to prevent trouble. So back we went to our cabin and the hay field. The grasshoppers rained down the afternoon of our arrival at Golden City on our return, and the next day, with a light wind from the north and the hoppers flying low with it looking for something green to eat, it was impossible to travel against the flight.

The locust pest of those early days, if the true history should be told, has so many unbelievable stories that it is too long for this sketch.

That winter of 1864-5 was a hard one for us as well as for many of the pioneer families. Denver was our nearest market. Once when my father took a load of hay to that market and to buy supplies, there was no sugar or tea in that town. Later when we sent for the missing articles there was no sugar. By that time I had gone without sugar in my coffee so long I found I liked it better without the sugar and have not used it in that drink since. The snow was deep on the plains and had driven the big game to the mountains. The jack rabbits were scarce and wild, so to get a little meat I had to chase them all over the place.

Schooling for us children was a serious question for our father to solve. My schooling for four years had been a "catch-as-catch-can," as I had been on a farm with an uncle who thought a boy big enough to take a man's place would learn more working on a farm than by going to school. In a way he was right; I learned so much about farming I wanted to get as far away from a harrow, plow, or cow barn as possible. I did study my Ray's Arithmetic and read Shakespeare, Dickens, and all the trashy novels of the day; so good so far.

In the summer of 1866 we learned that a School District had been formed six miles west of us, at the lower overland crossing of the Thompson. This, I think, was the first public school in Larimer county. A man by the name of Samuel Stevens had taken up a place near this school and my father arranged with him to help build a house on his claim for the privilege of living there during the school terms; Stevens to make his home with us. After his proving up on the claim, he wished to move to other parts and my father bought the place and we made it our permanent home. That first public school building was made of pine logs. The one room, some 16 or 20 by 24 feet, had a clay and board roof, which kept the floor dry most of the time. Desks, benches and furniture were made of pine boards, by home talent.

Our first teacher was Miss Sarah Milner, from St. Vrains Creek, who taught, with only very short vacations, for two years. There were no grades, from a, b, c's to any study one wished to take up; it was go as you please and as fast as you could. Some of the pioneer families sending children to that first school and who have a place in the history of Colorado, were: W. B. Osborn, J. E. Washburn, J. J. Ryan, Thomas Sprague, the Bartholfs, Chubbuck and others. At the end of two years we graduated from that old log building to a new frame building and to another teacher, a Mrs. Lamson from New York. Of a class of eight graduating from that old log building, three are still living: my sister Arah S. Chapman,

Mrs. Winona Washburn Taylor and myself; also our teacher, Mrs. Sarah Smith.

As I grew older the lure of the mountains became stronger. We young people of the Thompson Valley all had Indian ponies to ride, and at every opportunity we rode to the hills. In the summer of 1868 with two schoolmates, blanket and supplies for ten days behind our saddles—we counted on fish and small game as a large addition to those supplies—we started for the snowbanks on the divide, that we looked longingly toward on hot summer days. There was no trail farther than the foot-hills that we knew anything about. We spent so much time looking for a possible trail that we failed to reach the snow banks; but we did discover Estes Park. We were just as much pleased to make this discovery for ourselves, if we did have to follow the cart tracks of some other white man to do so. It was a surprise to us and a discovery we were not looking for.

After entering the Park we followed the cart trail until, at a brook at the foot of a hill, we were surprised again to see a long, low log cabin and across the stream, two men setting posts. What a shame; they were making the first marks of civilization that were to mar the natural beauty of the Park. The two men proved to be Griff Evans—the first permanent settler after Joel Estes left—and James Nugent (Rocky Mountain Jim). They were rather gruff until they learned we did not know where we were and were not looking for land or a place to live. They knew but little about the region, knew of no trail or way to reach the main divide. They told us the top of Longs Peak had never been seen, and they doubted whether it would ever be climbed. As we now know, the Powell party made the ascent that month, August, 1868. We camped one night in the Park, passed through the north end, to the North Fork, and made our way out home down that stream.

My next trip to the Park was in 1872, with a party for an outing. We took in the region and made our first visit to a snow bank in summer. We saw no one except those at the Evans home on that trip.

In 1874, with Alson Chapman—who later married my sister—I made a pack trip to the Park. Our object was the ascent of Longs Peak, which we accomplished on July 24th. This is a good place to say that I made many trips to the top of Longs with friends and as guide for parties. I made the climb for the last time on July 24, 1924, just 50 years after my first trip, making the entire distance on foot from my home. I suppose my last time to see the top of Longs Peak was three years ago, when I had a birds-eye view from a plane, some 700 feet above its top, just at sunset.

The first Park tragedy was about the time we were on that trip; the shooting of Mountain Jim by Griff Evans, which later

caused his death. From all these trips, when I thought of a home of my own, I could not get the thoughts of Estes Park out of my mind. So in May, 1875, a schoolmate, Clarence Chubbock, and I laid claim to Willow Park—now known as Moraine Park. This was on the 9th of May, the anniversary of my start for Pikes Peak in 1864. Clarence was murdered at a round-up in June, which made a change in my plans. My father helped me build my claim cabin, roof of peat this time, so that if too much water fell it would come through clear and pure.

Together with the following pioneer settlers, W. H. Ferguson, W. E. James, A. Q. MacGregor, John Hupp and the guide Henry (Hank) Farrar, we fought the Earl of Dunraven (The English Co.), who in every annoying way tried to drive us from the Park, as we spoiled his plans of making a private hunting preserve for himself and his sporting friends. The Earl of Dunraven's efforts to secure the whole Estes Park region, and fence it against all but his friends, is too long a story to be given here. Descendents of all the pioneers named above are still interested and living in the Park, except Henry Farrar. We think it a good place to spend our old age.

When I came to the Territory of Colorado, at the age of fourteen, I knew what I wanted to make of myself—either a Civil Engineer or a Lawyer. At that time there was no college in the Territory and I thought college training would be necessary to fit myself for the Law (I was mistaken, I could have made the Law as well as Engineering), but I thought I could, by study and practice, become an Engineer; so I stuck to my Ray's Arithmetic and mathematics. I took up the higher branches of mathematics with both Miss Milner and Mrs. Lamson; neither having gone that far in those studies we worked together. My efforts were not in vain, for I did make an Engineer of myself. One job I had is historical; under J. H. Collins, as assistant engineer, I had charge of the party and made the first preliminary survey of the Dotsero Cutoff in 1884, for the Union Pacific.

I am one of the pioneer settlers of Estes Park, where I have been interested since the spring of 1875. My attraction for the Rocky Mountains began when I first saw the tip of Longs Peak from our camp on the plains in 1864. As boy and man, my home has been in Larimer County, on either the main stream or the headwaters of Big Thompson Creek. For the last sixty years I have been here in Estes Park, near the foot of Longs Peak. To this place I brought my bride in December, 1888.

The Uintah Railway

W. L. RADER*

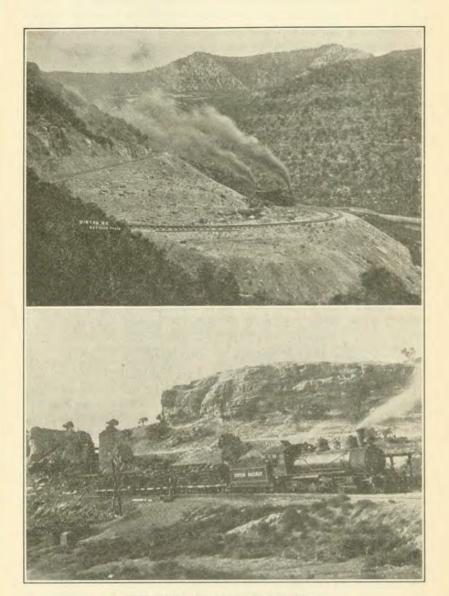
The Uintah Railway is a line of three-feet gauge, extending in a northerly direction from Mack, Colorado, a point on the Denver and Rio Grande Western Railroad, to Watson and Rainbow, Utah, a distance of 63 and 70 miles respectively. The road was built from Mack to Dragon in approximately two years, 1903-1905, by the Barber Asphalt Company, C. O. Baxter engineer in charge. It was extended from Dragon to Watson, including the Rainbow Branch, in 1911.

The road was built to transport a form of asphalt, commercially known as "gilsonite," mined in the vicinity of the Uintah Mountains in Utah. Gilsonite is extensively used in making paints, varnishes and insulating material and in prepared roofings and floor coverings. It is sent to various parts of the United States and to practically every foreign country. It is a hydro-carbon in character, brittle in structure, intensely black and of the specific gravity of water. In the United States its occurrence is confined almost entirely to the Uintah Basin.

The annual traffic of the road is approximately two thousand carloads, three-fourths of which are gilsonite. About twenty tons of gilsonite are loaded on each car. The mallet locomotives can haul eight carloads of gilsonite up a five per cent grade, the shay locomotives haul four carloads.

The chief problem in building the Uintah Railway was to cross the Roan, or Book Plateau, a high ridge separating the valley of the Colorado River on the south, in which Mack is situated, and the Uintah Basin lying to the north. This ridge is crossed at Baxter Pass at a maximum elevation of 8437 feet above sea level, or about 3900 feet above Mack. From Mack to Atchee, Colorado, where the shops of the railway are situated, the distance is 28.3 miles and the rise in elevation 1884 feet. The steepest grade on this section of the line is 2.90 per cent. From Atchee to Baxter Pass, Colorado, at the summit, a distance of 5.9 miles, the total rise is 2012 feet and the grade for the greater part of the distance is 7.5 per cent. The line descends thence to Wendella, Colorado, a distance of 6.7 miles, on an almost continuous grade of 5.0 per cent. Continuing from Wendella to Watson, 62.8 miles from Mack, the grade is descending, and varies between the limits of 1.10 and 3.34 per cent.

In twelve miles, which stretch includes the steepest grades on the line, there are 233 curves, varying from 4 to 66 degrees. The grades are compensated, and on the 66 degree curves the rails are



VIEWS ON THE UINTAH RAILWAY

Upper: Two Shay Locomotives with Freight Trains on 7½ per cent grade rounding Moro Castle Curve (66 degrees), sharpest on the line.

Lower: Uintah Railway Train loading Gilsonite Asphaltum at Mine (Note perpendicular vein cut through the mountain. Depth of vein unknown).

^{*}Mr. Rader is General Manager of the Uintah Railway Company, with headquarters at Mack, Colorado.

spread \(\gamma_8 \) inch. The greater part of the line is laid with rails weighing 60 pounds to the yard.

The Uintah Railway is a common carrier, handling both freight and passenger traffic. Representatives of the Interstate Commerce Commission, who visited the property in July, 1924, pronounced it the most difficult operating proposition they had ever seen. The motive power, previous to July, 1926, consisted of six geared and seven direct connected locomotives. Of the latter, two are of the 0-6-2 type with side tanks and were used chiefly in passenger service; while three are of the Consolidation (2-8-0) type and two of the Mikado (2-8-2) type, for freight service. The geared locomotives handle freight traffic over the steep grades between Atchee and Wendella, while the Consolidation and Mikado type locomotives handle these trains on the lighter grades. Each passenger locomotive can haul one coach, weighing 35 tons, over the 7½ per cent grade without assistance.

In July, 1926, the Baldwin Locomotive Works delivered to the Uintah Railway a high pressure articulated locomotive of the 2-6-6-2 type, which represented a great increase in hauling capacity over any locomotive previously used on the line. Since that time another locomotive of this type was purchased by the Uintah Railway. These locomotives develop a tractive force of 42,100 pounds; and with 194,500 pounds on driving wheels, the ratio of adhesion is 4.62. The average load per driving axle is approximately 32,400 pounds; and 82 per cent of the total weight, including the supply of fuel and water, is carried on the drivers.

In view of the excessive curvature on the line, the design of the running gear of these locomotives was given most careful consideration. The arrangement of the frames is in all respects similar to that used on Baldwin Mallet compound locomotives. The radius bar connecting the front and rear frame is attached to the former by a horizontal pin, and at its rear end has a ball-jointed connection with a vertical pin which is seated in the back cylinder saddle. This construction provides ample flexibility in both a horizontal and vertical direction.

Between Atchee and Wendella, which includes the steepest grades on the line, these locomotives handle as much tonnage per train as two of the geared locomotives, and make the run in a little more than half the time.

The tracks of the Uintah Railway are kept open for business throughout the entire season in spite of the heavy snows which are encountered on the steepest grades. The track and equipment are maintained in first class condition and every precaution is taken to insure safety. To anyone not used to mountain railroading a trip over the Uintah Railway is a most unusual experience, and one long to be remembered.

The origin of the names along the railway are as follows: Mack was named for John M. Mack, former President of the Barber Asphalt Company; Atchee was named for a Ute Indian chief; Baxter Pass was named for C. O. Baxter, the engineer who built the road; Dragon and Rainbow were named for gilsonite mines; and Watson was named for the engineer who constructed the extension from Dragon to Watson.

Making an Arrest in the San Luis Valley

FRANK A. HYATT*

In the late '70s and the early '80s the San Luis Valley was a rather tough place and full of murderers and cattle thieves and as I was under-sheriff for 22 years and marshal of Alamosa for 3 years, I was kept busy making arrests.

Adee & Durkee had a big cattle ranch twenty-two miles northeast of Alamosa. They sent four or five of the cowboys about two miles from the ranch house to build a fence between their ranch and the Cutter ranch. Cutter was a notorious "bad man" from Texas, so he got his Winchester and fired a few shots at them. They went back to the ranch house and reported and would not attempt to build the fence.

Then Durkee and Mr. James, his foreman, came to Alamosa to see if I would go after him. I asked them if they had seen the sheriff of Costilla county as it was in that county that it happened. They said they had but that he did not care to go after him. I told them to get a warrant and I would go. So we all went over to Albert B. Sanford's ranch across the river. Bert issued the warrant and gave it to me. Sanford was a newly elected Justice of the Peace. After dark I went to Myron Wilkin's livery stable and got a team and buggy, then I got Sam Morris, who was a gambler, a good driver and a brave boy to drive me over to the ranch.

It was a very dark summer night. We got to the ranch about eleven o'clock at night and Mrs. Clayton got us a good supper and we went to bed. Mr. James, the foreman, came to our room after we had gone to bed and told me that Cutter would shoot me on sight and asked me if I wanted some of the cowboys to go with me. I told him I preferred going alone and try to get him without any shooting, that I had a good driver and that was all I wanted; but

^{*}Mr. Hyatt was one of the best known and most successful peace officers in southern Colorado thirty to fifty years ago. He lives in San Bernardino, California, today. Recently he wrote this story at the solicitation of the State Historical Society and has promised us accounts of other experiences and events.—Ed.

I told him he might send one of the boys to show me the cabin. I told James to have my horses fed before daylight. Also to get us up before daylight. He got us up early and we started for the Cutter ranch. He sent a young fellow along to show me the cabin.

When we got about 200 vards from the cabin, he stopped us and told me that after we passed a bunch of bushes just ahead we could see the cabin. He was very much excited and I told him to go back to the ranch. I got out of the buggy and walked down past the trees and saw the cabin. The door was open and no fence and an open field between us and the cabin. I got in the buggy and told Sam to drive very fast and stop so I could step out of the buggy into the house. Sam was a good driver and stopped the buggy so I could step in the door. I stepped in and found Cutter and his mother, an elderly lady, at breakfast. I asked him if he was Mr. Cutter and he said yes. I told him I had a warrant for him, he was smiling all the time and said "I wish you would read it." I had it handy and threw it on the table and said "You can read it yourself." He read it and said, "I'll get my coat," as he looked up on the wall where his belt and guns were hanging over his coat. I said, "You can get in the buggy and I will bring you your coat." He kept on smiling, but went out where his horse was hitched by the house, with the saddle and bridle on, he said, "I guess I will ride my horse to town." I told him to get in the buggy and lead the horse. He got in and I got his coat and hung his guns and belt up. His mother never spoke a word.

We went to town and to Judge Sanford's court. Cutter had two lawyers and I had the District Attorney. I called the court to order and the Judge looked at me as if not knowing what to do next, so he adjourned the court for fifteen minutes and came over to consult with me. Charlie Johnson made some bad break and the court fined him five dollars and he paid it. Cutter was bound over to keep the peace and was a good citizen after that. He told me if he had seen me before I got there I never would have got him.

Sam never asked any questions about the case until we got out on the road and then he said, "Who are you after, Frank?" I told him I didn't know but to light a match. He lit a match and I looked at my warrant and told him the man's name was Cutter and in a joking way he said, "Is Shooter out there too, if he is I am going back." I told him that from what I had heard he was a Cutter and a Shooter too.

Albert B. Sanford is now associated with the State Historical Society of Colorado, located in Denver.

Colorado as Seen by a Visitor of 1880

DIARY OF REZIN H. CONSTANT*

[In the year 1880, Dr. H. R. Riddle of Mechanicsburg, Sangamon County, Illinois, moved with his family—Rush and Fannie of the narrative, and four children, Earl, Mabel, Willie, and Grace—to Denver, Colorado, and were accompanied by Rezin H. Constant of Riverton, Illinois, father of Mrs. Riddle. Riverton is seven miles east of Springfield, the home of Abraham Lincoln, who was a personal friend of Mr. Constant. Mr. Constant kept a diary from the day they left Springfield, June 21, to their return, August 25 of the same year. After leaving Springfield the family visited relatives in Kansas until July 13, when we take up the story. The diary is faithfully reproduced. Lila Pickrell Routt, wife of Governor Routt of Colorado, was a half sister of Dr. Riddle.]

Tuesday, July 13th. Left Ottawa, 8 A. M., arrived at Pueblo Wednesday, July 14, 2 P. M. on A. T. S. F. Found a washout near Pueblo on a stream called Fountain, had to transfer. Thence took train for Denver on Denver and Rio Grand. Fetched up at another washout on this Narrow Gauge Rail R. A number of teams were in waiting to make a transfer; we did not succeed in getting on any waggon; stayed on train till night waiting for teams to return to take the balance of Passengers but waited in vain for them to return. Train backed down to Pueblo, arriving about dark. We took lodging at Victoria Hotel, took breakfast and dinner Thursday, July 15th. Took train again for Denver at 2 P. M., arriving there at 10:30 P. M. Found carriage at Depot waiting to take us to Ex. Gov. John L. Routt's House.

I have been around Denver City some since I came, and am surprised at its magnificence. Costly very Costly buildings going up in every direction. The great Chain of Rocky Mts. looms up to the Clouds South & West of Denver with their snow capped Peaks which look magnificent in the morning sunlight.

Denver is the most substantial built City, and Costiliest, I ever saw, of its size; contains 36,000 inhabitants. Watered from Platt River, elevation, 5,224 feet above sea level.

The scenery on the Denver and Rio Grand R. R. is grand and sublime, especially at Colo. Springs, Pikes Peak being in full view, capped with clouds when we passed the Springs Station. Manitou, 3 miles from the Station is in the midst of the Mountains and is the great place of attraction.

^{*}This interesting diary was submitted by Mrs. Mabel R. Carlock of Urbana, Illinois, who is a granddaughter of Mr. Constant. The diarist, a Kentuckian by birth, was a surveyor by profession and this probably accounts for his penetrating observations. He was a large land owner in Kansas.—Ed.

There are the most exquisitely beautiful lawns in Denver I ever saw; great varieties of Roses now 19th of July in full bloom; Fuchias, in short, every desirable flower in the very zenith of their pristine glory.

Buildings of the most elaborate style. Senator Hill's Mansion on the corner of 14th and Welton Streets is a model at a cost of \$40,000.00. Gov. J. L. Routt's mansion diagonally across from Sen. Hill's cost him \$30,000, & he has been offered \$45,000 for it. A Mr. Tabor is building an opera estimated to cost half a million.



RESIDENCE OF GOV. JOHN L. ROUTT IN 1880 AT FOURTEENTH AND WELTON STREETS, DENVER.

The number of fine carriages, fine rigs of every description, excels anything of the kind I ever saw in any City. Pleasure seekers are here from everywhere and pleasure they will have at any cost.

Yesterday eve. we got moved, July 20th. Found house very finely furnished of which the family has free use for one month. Those who occupied it before having gone to the Mountains until their own house is ready finished to be occupied by them when they return.

Today I enjoyed an extensive drive to the highlands across the Platt from which Point we look down upon the great City of Denver with its immense wealth. The Tabor Block, 7 stories high, the finest thing I have yet seen in the City.

July 22nd. Went on excursion to Idaho Springs through Clear Creek Canon, left Denver 8:30 A. M., arrived at Springs noon, distant from Denver 39 miles. Returning to Denver, passed through Town of Golden 16 miles from Denver at the foot of the mountains, thence through the Canon to the Springs. The scenery through this Canon is grand, sublime, while at the same time it is awful. To think that a R. Road could be built at all through such a place looks beyond the ken of human ingenuity.

One continuous serpentine course of 25 miles following the course of the Creek, crossing the same some dozen times, winding around huge Boulders, running under Cliffs, shutting out the light of the sun, thence again going through the same ordeal again; and on, on, until we arrive at the Springs, a rather nice little Town, strung out in a narrow valley, say 200 yards wide between the mountains.

Mining is carried on to a considerable extent in this Canon. Mostly Sluice Mining. On our return trip to Denver, it was near 6 or P. M. when we left Idaho with Breaks on and steam all off. For 25 miles we sped down through the Canon at a rate that made my head giddy, often dodging for fear of coming in contact with some huge Boulder on some short curve, of which there were hundreds.

To describe the Rocky Mountains such as looms up from this Canon is entirely beyond my ability with the pen to do. To be known and appreciated they must be seen. I think all or nearly so of those Mountain R. R. are narrow gauge, built at an immense cost, 10 cents per mile passage fare is I believe common....

July 25th. Sunday morning. Sitting on the veranda, No. 312 Welton St. between 13th & 14th Streets, fronting Southwest. Across Welton St. are to be seen the residences of Ex. Gov. J. L. Routt as also the residence of a gentleman connected with the original construction of the Water works. This last named residence, Mr. Archer's, far surpasses Gov. Routt's, being built of very fine Mountain Granite, varigated colors, 3 stories & Attic with veranda in front and along side. The windows are French Style divided by an Iron Column into 4 flights, each flight containing 2 panes about 2 by 3 feet. Thus each window has 4 panes 2x3 feet. A substantial Stone wall surrounds the lot 4 feet high & ground of Lot raised level with wall. Most beautiful Lawn. Flowers this morning dazzle my eyes. Roses, Dahlias, Pinks, Geraniums, Pansies, and a multitude of others, all in the Zenith of their glory in full bloom. This property I suppose could not have cost less than \$50,000.

Opposite us the side walk is laid in Diamond Shape Slabs of verrigated Mountain Marble, equally as fine as the Marble floors in Capitol, Springfield, (Illinois). There are miles of such side walks in Denver. Rush's Office is about 3 blocks from his residence with Dr. Bancroft, 16th Street.

July 26th. Monday morning. Clear and cool enough to wear 2 coats. The atmosphere is so dry here that perspiration is very slight, can wear under clothing much longer without being soiled than at home. With Rush yesterday evening took an extensive drive around the City, passed the Windsor Hotel which throws the Leland (Springfield, Illinois), so far in the shade that there is no comparison. Drove out towards the foot Hills. Saw very fine gardens and Parks. One in particular had very fine Statuary finely terraced on a long slope. Saw many very fine residences.

Just now the Carrier is passing under whip and spur, stops just long enough to pull from his sack the paper, gives it a twist, and slings it into the yard, gives his Pony a cut, and away he goes.

July 28th. Visited the celebrated Manitou Springs on yester-day, 27th. Elevation 6,800 feet. Manitou is a great Mountain Resort for invalids; five Springs medically speaking, situated at the foot of Pikes Peak. Elevation (Pikes Peak) 14,336 feet. Here are to be found invalids in all stages of Disease, deaths are frequent. Some appear mere Skelitons, others greatly benefitted.

The first Excursion from Denver passed over the new extension from the Sps. to Manitou on yesterday & I had the pleasure of being one of the party. Had my Photograph taken twice in the crowd at Manitou. Drank of the Soda Water so strong as to almost strangle upon swallowing first draught. Here are to be found the fashionable elite, from all parts of the civilized world.

Many are here in this secluded place to while away the time, spend money in sightseeing. Some no doubt are here to restore diseased minds as well as physical Constitutions. I think Manitou, like many other places in Colorado, is greatly overestimated; seemingly, to my mind the scenery in this secluded Mountain resort would soon become monotonous, lose its attractiveness, and lead to despondency, especially to those used to thronged business centers common to places East.

I think there is the least sociability in Denver of any place or city I ever saw, and the most aristocratic of all Cities I have ever been in. The lack of sociability, I presume, in one sense is to be accounted for in that there are more strange visitors here than are common to almost any other place in the U. S. Property is held very high here. I think much higher than the future Outlook would seem to justify. In my opinion a downward crash awaits Denver in the near future. I wish in this opinion it may turn out that I have been mistaken.

What I have seen of Colorado amounts to but little from an agricultural point of view. Yesterday, 27th of July, I traveled 80

miles. Of that distance 52 miles lies along Cherry and Plum Creeks, at the Base of the Rocky Mts., tributaries of South Platt. The other streams south of the Divide fall into the Arkansas, the Mountain R. Roads always following some Mounain Stream as a necessity. Now, all Country along those streams for 80 miles, and I presume I saw the best of it, add it all together & I would not give one township in Sangamon Co., Ill., for the whole territory traversed. Sure, and if we had 1 square mile of such as I could select, set down in Sangamon Co., it would do away with all wooden pavements in Springfield and all thrownup earth embankments on our public highways, for we would have stone enough and some to spare to do it all. The finest building stone I ever saw on the Continent is here in those Mountains, inexhaustible, which gives to Denver preeminence in that respect. . . .

A great many strangers are arriving on every train. The City is literally full of Sight Seers, and fortune hunters; many seeking employment, a great many more than can obtain it. Although building is in excess of anything I ever saw, yet labor is in excess of the demand. . . .

Denver is finely shaded, almost entirely cottonwood; this being native along the Platt, is easily obtained. Some Soft Maple and a little of other kinds. The Lawns are ornamented with beautiful ever Gs. common only to the Rocky mountains. The ring of the Mason's Trowel and the Carpenter's saw and hammer is being heard in every direction, every kind of business seems to be brisk.

A great many of the newcomers, perhaps a thousand, are camping in tents along the Platt, West of the City. They seem to have Waggons and teams. I suppose they have been seeking locations around through the country. Many pleasure seekers hire their outfits here or at Manitou and remain during the hot weather. The nights in Denver are very cool and comfortable. Vegetation is much later here than east. Oats just headed out, Wheat looks green as if it would not be ripe before some time in August. Some of it looks pretty well, but mostly too thin.

July 29th. Spent most of forenoon at Doct Bancroft's Office. Have not met very many persons in Denver from Ill., seem to be more from New England Sts. than from other parts. Chinamen abound on every Street. Laundry—Lee Whang, and Whang Lee, or something similar are to be seen at almost every turn. Their Cues done up under the Hat, and uniformly Wooden Shoes on their feet. . . .

Fannie pays \$2.00 per day for her washing, pretty high I think. Rush says whenever his practice fails to clear him of all expense, he will pull out from Denver as he is determined to make no break on what he brought here. Every kind of provisions is high, mostly

from Kan., considerable from California, in shape of Fruits. Apples 4 lbs. for 25 cts. Flour, \$3.50 pr. 100 lbs. Dry goods seem to be little higher than in Ill.

July 30th. Walked down 3 or 4 blocks to foot Bridge on Cherry Creek, met a man originally from Penn. but has been in the Mountains since 1862. He is just of my opinion in regard to property in Denver, that in the near future, a great reaction is almost certain to come. Property is entirely too high to be maintained. Too much money is being expended in City property in proportion to the future outlook in a business point of view. The man referred to stated that from \$1 to \$1.50 can be washed in Gold per day in Cherry Creek or Platt right in the City of Denver, but laborers can get \$2.00 per day on improvements going on in the City and the labor more pleasant than washing out Gold dust.

Mining is similar in some respects to other stock in trade with this difference, a much greater fluctuation in prices continually prevalent. In a conversation yesterday with A. I. Hobbs, Christian preacher, he told me he had some idea of investing in a mine at Boulder. I have seen nothing yet that I would risk money in with the expectation of making money out of any such risk.

Some idea of the business of Denver will appear from the No. of Express waggons continually running, all numbered. I have noticed the numbers from 1 to 40, how many more I do not know. The ringing of Factory Whistles in early morning is almost continuous for about 1 hour after which the busy bustle of this wealthy City of Golden Dreams begins and continues until the darkness puts a stop to it. Evening pleasure parties, driving, is carried on to a great excess. Denver is noted for fine horses and expensive rigs.

Four miles from Den. is the pioneer ranche of the country. The land which it embraces was taken up in the spring of 1859 by Mr. Rufus Clark-"Potato Clark," from the fact that Mr. Clark was the first person to raise a crop of potatoes. He sold most of 1st. erop at prices ranging from 20 to 35 cts. pr. lb.

August 1st. . . . Denver has many fine brick business blocks, a United States Mint, 20 church edifices or places where regular public worship is held, eight banks, 5 street car lines. The city is provided with water by the Holly System & a canal 15 miles long which conducts the water from Platt Canyon to the Southwest over the high prairie to a reservoir above the City from which a portion of it is made to flow through the streets of City and Parks and grounds of many of the Citizens. Denver is well supplied with Seminaries, schools, gas works, &c.

August 2nd. Clear & pleasantly cool, 9 oc. A. M. Clouds banking up on the range indicating more rain, which has been the case almost every day since our arrival in Denver. The country along up Clear Creek from Denver to Golden is farmed to considerable extent, but to say that it compares as to profitable farming to the poorest part of Ill, is out of the question. The water tax by way of irrigation will most certainly get away to a great extent with all profits.

Take from Colorado the mining interest and nothing is left. The tourist comes here, spends the money he brings, and then wants to go back far worse than he ever wanted to come here. The Denver Papers are filled with the most extravagant reports of great mines and wonderful prospects, but in 99 out of every 100, it is like Milk Sickness, found by experience to be a little farther on.

I find by consulting with men of long experience in mining that it is better in 19 out of 20 cases to never attempt developing or working a newly discovered mine, but to sell at once. Some have made money in this way whilst very few have made anything by developing and working a Mine. Sluice Mining in some places pays very well, in others hard earned Gold.

August 3rd. Took an extensive walk. Am more and more convinced that Denver is a Myth, that the vast amount of money being at present expended cannot seemingly be justifiable whilst there is nothing but the mining interest to back it up, and that, as it were, a Lottery.

No person can conceive of the immense amount of building going on up here unless seeing it. Yesterday I rode with Rush, I suppose 10 miles in the City, he collecting his monthly bills. Went some distance out of the City in the vicinity of the Brick yards. Such quantities of brick as I saw! If I could accurately describe it would seem fabulous, as also the quantity of stone on every Street. The click of the Stone Cutters' chisels are heard in every direction. Two story buildings of stone and brick are begun and reared up in a few days. Nothing that I ever saw begins to compare with it.

Denver runs 18 Sprinkling Tanks, 18 barrels capacity. Each fill and empty 20 times pr. day on the Streets, thus we have 5,480 barrels water poured on the Streets pr. day.

Some time ago I spoke of the number of express wagons running as indicating the immense business of Denver and that I had seen Nos. 1 to 40-today I saw No. 141. How high those Nos. go I do not know. This P. M., in company with Mr. Barney, took a look through Senator Hill's new mansion, Cor. of Welton & 14th Strs. Took an hour and a half steady walking to pass through all the apartments. This house, beyond all peradventure, is the finest & most elaborate workmanship of any private mansion that I ever passed through; built of stone, Bk. and Iron covered with Slate. Windows, French Plate Glass, two panes to each window, will cost

\$35,000—will cost \$20,000 to furnish it if done in proportion, making \$55,000. It will be ready for ocupancy about 1st Sept. They have 3 children.

As I am told, the wealth of Denver is seemingly just enormous. Gov. Routt's carriage and pair of horses cost him \$3,000.

One great beauty of Denver is the Streets. They are naturally paved, being a mixture of coarse sand and gravel, requiring steady sprinkling to keep it compact, hence the great amt. of water used daily for that purpose. About 1½ hour before sundown carriage and buggy driving begins. 14th and Welton Sts. seem to take the lead. This driving is kept up until darkness puts a stop to it.

August 4th. Today P. T. Barnum's great Show commences to exhibit in Denver, 4th., 5th., & 6th. I suppose it will be a big thing as Barnum always aims to excel. Tickets \$1.00. The Rail Rds. carry Pasengers at ½ fare. I suppose the City will be full of sight seers.

August 5th. Rode out with Mr. Barney to the Boston & Colorado Smelting Works, 2 ms. North of Denver. Those works are under the direction of Hon. Senator Hill of Denver, whose Palatial residence has been already noted. They are of immense magnitude at a cost of \$250,000, employ 160 men, have milled out over \$2.000,000 since Feb. last. I am unable to give more than a very imperfect description of what I saw.

First, had to go to the Superintendent, Hon. A. Olcott, and obtain a written permit to pass through the Works. To begin with, two R. Road tracks pass entirely through the main building, perhaps 100 yds. in length, one wide, the other narrow gauge. The ore from the different mines in various localities in the Range are shipped immediately into the works. There is a wide platform on each side of the R. R. track for the purpose of receiving the ore, which is largely shipped in bulk, in pieces from several pounds weight down to penny weights or even dust, but a very large amount is received in strong sacks that hold probably something over a peck by measure. The ore is dumped out on the platform. It is then wheeled to the crushers, put through No. 1-2 and perhaps 3 before being subjected to the furnaces to be smelted, by which process the metal is separated from the dross called Slag, which is of no value. It is now in a very uncomely shape, being in great, rather flat, uneven cakes; looks very black; looks like anything else than a substance having mettle in it.

Those cakes are cooled, sledged in pieces and again reduced to dust. It then goes through another process of Iron and Acid seemingly a washing process after which it goes through furnaces called the baking or roasting process, and then lastly through the final process by which the pure metal is finally run out into bricks and bars. I saw one bar of Gold worth \$28,000.

All ores brought into the works are Assayed and are paid for according to what they will pan out to the ton. I saw them testing some ore that had a large percentage of galena or lead in it. If upon trial this ore had above a certain percentage of lead they would refuse to buy it, as no use is made of the surplus lead at those works. It all goes out in the Slag and no account is taken of it.

The buildings are of Stone covered with Iron, of the most substantial construction. Saw a great many samples of ore from various Mines, immense quantities of it, thousands of tons, most of it had gone through the 1st. process and much of it through the 2nd. I saw a large quantity of ore that Assayed \$11,000 to the ton, and they had ore in the works that Assayed \$5.00 to the pound, \$100,000 to the ton. The ore that Assayed \$11,000 to the ton was from the Forrest Queen.

Since I have seen the vastness of those works it has worked a considerable change in my conclusion in regard to the vast expenditure of Capital expended in Denver. They are building an immense Union R. R. Depot extending clear across 2 Blocks from 16th to 18th Streets, crossing, and blocking 17th St. This immense structure being built of Stone is at the foot of those Streets near the Platt. An immense building is being erected and well along, at the foot of 16th for heating the City by Steam.

August 8th... This morning Rush showed me a plan for a new house to be built in Mechanicsburg. I have thought for some time that they wouldn't stay here, rents, and living, is too enormously high for any person to live in Denver, unless they are doing something by way of profits corresponding. If the mines continue to produce as in the last few years Denver will continue to increase in wealth and population. In the last decade She claims over 600 per cent. If in the next She gains any where near that, her wealth will be almost fabulous.

Tomorrow the great Turnverein of the Firemen of the various Cities and towns of Colorado—quite a preparation has been going of for some days on West 14th Street. The exhibition is to commence 9:30 Oc. A. M. tomorrow morning. What it will be I am at a loss to know exactly. I see a vast number of premiums are to be awarded for best performance. Today I see uniformed Companies, some from Leadville, most beautifully uniformed. I suppose from the extensive preparation that the exhibition will be very interesting.

August 10th. Nice and clear this morning. Went down on 14th St. to witness the great performance of the Fire Companies as announced on yesterday. Found it nothing but a foot race after all. They had 1,000 feet measured off as a race track. One Company ran at a time starting by a signal given, running, each Company

drawing their Hook and Ladder wagon through the 1,000 foot track, erecting a Ladder and one man ascending to the top round in so many seconds. I stayed until I saw 2 Companies run. The first, from Georgetown, beyond Idaho, made the run in 261/4 seconds. Large premiums are given to those making the fastest or quickest time. I suppose there was 10,000 people on the ground to see the performance. Those Firemen looked more like Circus Showmen than otherwise; very thinly clad, and tight fitting suits, temporary paper caps, shoes very light. Nails in toes of soles looked to be half an inch long, I suppose to keep them from slipping.

August 11th. Fire Com. still on the rampage, contending I suppose for premiums. Weather hot in the sun, but comfortable in the shade. This morning visited some fine free museums where almost every kind of specimen of birds, reptiles, & beasts, and animals common to Colorado, including a great many specimens of ores from the various mines.

August 12th. Spent most of the forenoon sight seeing down town. Took a pretty thorough look at the Tabor Blk. on West 16th street. This building has the most massive Iron Front I ever saw. 5 columns massed together making a projection of some 4 feet to the front. If I mistake not there are 5 pairs of those Mamouth columns dividing the front openings, equal, then between there are lighter columns, dividing the openings again equally. I think the building fronts about 100 feet on side walk. Above and resting on those front Iron Columns are 4 massive Stone stories of the most elaborate workmanship. Looks as though it was intended to last for all time to come. This house is but one of hundreds here that have immense, fabulous sums of money invested in them,

The business operations transacted in one day in Denver, I verily believe would excel all the business transacted in the City of Springfield, Ill., for 2 weeks; the major part, either directly or indirectly connected with the Mining operations of the Mountain regions. How long this state of things will continue depends upon how long the precious metals continue to pan out as they have been doing. Now, since the Utes have signed the Treaty, there is likely to be a regular rush for that part of Colorado that was held by the Indians.

August 13th. Took a long walk this A. M. Met a Mr. Alkire. who came to Denver 8 years ago from Menard Co., Ill. He was for some time engaged in the Sheep busines, but subsequently in a Spice Mill in Denver. I think he owns considerable property here. He seems to have great confidence that the Boom will continue in Denver; that the production from the mines is only just begun, and very probably that is so. If it should turn out so, She is destined to be the Golden Star of the great West. Without a doubt She will be a great magnificent City. The start is largely in that direction already. She has now 1/2 dozen Hotels or more that far excel the Leland in extent, as also in Architecture. And the 100 or more business Blocks will compare with Chicago or any other City that I have seen.

This P. M. walked some 3 miles. Passed through 2 free museums, saw many rare things—some very fine Parrots. One I spoke to, called it Polly, he in turn very politely said, "How are you, Governor?" Quite a compliment for the first time the gentleman ever saw me. Of course I at least in some degree, appreciated his extra politeness. Another curious sight was a pair of Champanzee Monkies, diminutive in size, not larger than a kitten half grown. They asked for a pair \$25.00.

One thing in Denver is quite common, and that is they exactly know how to charge for every thing they have for sale. The most exorbitant prices are asked for their goods, especially anything that is a little rare, and all that is picked up in the Mts. is so considered, irrespective of value. Much of it is very trashy, and if I was to find much of just such in the Mts., I would not pick it up or be encumbered with it.

Some talk of Fannie and I going either to Boulder or Black Hawk tomorrow.

August 14th. Left Denver 8 Oc. A. M. for Black Hawk and Central City on North Clear Creek over one of the narrow gauge branches of the Central Pacific R. Road. Those places are old and great mining Camps. My trip up South Clear Creek to Idaho has already been described, but this trip excels in interest by far any that I have taken. The Mountain scenery is grand as any I have seen. Those places are about 40 miles from Denver, both situated in a narrow gulch in the Mts., the sides of which are completely bored, honey combed, as it were, mining for Gold, as that is the principal ore taken from those mines. There are 500 Stamps running steadily in the vicinity of those two towns. I was in two of those Mills, one running 125 Stamps, the other 50.

This is a fork of the same R. Road running to Idaho Springs and Georgetown. The forks is at the forks of Clear Creek about 8 miles from Golden, which is at the Mouth of the Canyon. The R. Road from the junction running up north Clear Creek runs to Black Hawk & Central City, those two towns being almost connected together-1 mile apart by land, but 31/2 miles by R. Road. The R. R. takes a zigzag course on the Mountain to reach Central City from Black Hawk. Just above the Depot in B. H. the R. R. makes a short curve to the left up a grade on the side of the Mountain, a run of perhaps a quarter of a mile or more, then, curve again, but this time to the right, rising all the time at a fearful rate on the steep side

of the Mountain; all the time in broadside view of Black Hawk away down, down, in the bottom of the Gulch below, making the people look like pigmies. I was in an open car, called here an excursion car, built expressly for Mt. tourists. Those cars or coaches are covered and have a linen awning rolled up the same as curtains to a carriage. In case of storm can be let down.

Now I must go back to our arrival in Central City, for we got there, if we did climb the mountain. Over 300 feet above Black Hawk, 31/8 miles all the way up looking right down on the top of B. H. nestling right in the sides of the Mts. Well, when I got off the cars at Central I could hardly find a foot hold at the head of R. R. and Gulch. We now had down grade to B. Hawk of course. A pretty good side walk-only one St. all the way down, not room for any more. I concluded to foot it down. Began to rain about the time I started down. I felt the need of breaks, something to keep me from going too fast, but after stopping a time or two out of the rain I got down to B. H.

The sight of the mills is grand. The one running 125 Stamps requires 4 engines and an overshot water power running a wheel about 16 feet in diameter. The ore is shovelled into a hopper, which conveys it into the Iron trough on, or in which, the Stamps come down with seeming great force. A sluice of water all the time pouring into the trough and at the same time escaping through outlets above the bottom, leaving the pure metal at the bottom, while the tailings is carried over with the escaped water.

The water has a Bluish color and so colors the water in the Creek for a long distance down. The tailings, or refuse, contains about 11/2 ounce Gold to the ton. The Chinese are working this refuse in long sluice Flumes along the Creek below. Chinese Mining Camps are plenty for some distance below Black Hawk. It was at this Mining Camp where Senator Hill first started his Smelting works, and afterwards removed them to Denver on account of room and better facilities for being reached by all Rocky Mt. R. Roads. . . .

Since we arrived in Colo., July 15th, I have done all my R. Road traveling on the Narrow Gague, amounting to near 500 miles travel. I have become so used to the gague it would seem rather strange to travel on Common Gague. To see the little dumpy engine with her little narrow, low-wheeled cars twisting & coiling along through those narrow passes, climbing up the Mountains, and plunging into those narrow gorges, seemingly, it is only the narrow gague that can do the twisting, coiling and climbing necessary to be done to scale the Peaks of those unrivaled monsters of the Rocky Mountain range. Altitude of Central City 8,300 feet; Black Hawk 7,975; difference between Central City and Black Hawk in altitude 325 feet. Distance from Central City to B. Hawk, one mile, hence this 325 feet is overcome by the cars in 31/8 miles of travel on the same side of the Mountain.

We see the Mts. at a great distance, many miles before we reach Pueblo, crossing the Desert Plains on the A. T. S. F. R. R. I call it the Desert for it is nothing else for 400 ms., say from Dodge City, Kan., almost to Colorado Springs. The first 200 from Dodge City saw a good many cattle & quite a good many sheep; further west less and less, until they just simply petered out, as also the grass, of course.

That country is fit for nothing but Prairie Dogs, Sage and Cactus, and I think never will be. To look at the grass here in Colorado, I mean the native grass, it has no resemblance to the native Prairie grass of Ill. or Eastern Kan. It looks as though stock would most certainly starve because of the small quantity they seem to get; besides; at 9 or 10 years old a cow would so wear out her teeth that she would die prematurely of starvation, grapling among the gravel stones for the short, and scanty grass.

Blue grass grows well here in Denver under daily irrigation. I find that water for irrigation on farms, say within two or three miles of the Riv. costs from \$1.50 to \$2.00 per acre. Without the water, nothing, literally nothing, can be raised. Further off it costs more—until finally the tax cannot be afforded and make a living above it. Such is farming in Colorado.

This is no fanciful figure. I know whereof I speak. I speak of that part claimed to be and called farm land. As to the mountain part, no one would be silly enough to call that farm land, for in truth, it is nothing but a mass of rocks valuable only for the mineral that is in them, and from the best data, founded upon the most reliable information that I have been able to gather since my sojourn in Colorado, it costs on an average \$3.00 to get \$1.00 out of the mines. Not a very profitable showing, I should think. . . .

August 17th. Gen. U. S. Grant & Suite arrived in Denver from Manitou at 5 Oc. P. M., yesterday. On his arrival at Denver & Rio Grande Depot a Salute was fired. Then the eschort was formed to accompany him to the Glenarm on 15th Street, where he is a Guest, ready to receive his numerous friends.

The Eschort was grand and imposing. 1st., in front, was the Denver Police in their full uniform, all Mounted; then the Soldiers. finely uniformed; then the Batteries with their field pieces of Cannon. Then the General mounted on an Iron Grey, with an eschort on either side. Then Carriages with notables, as Gov. Pitkin, Ex. Gov. J. L. Routt, and many others, then a multitude of the citizens of Denver in carriages, which altogether was about as grand and imposing a display of honor as I ever witnessed. The reception

and musick was kept up until a late hour at the Glenarm, which is one Block and a half from our residence.

I went to bed early, but could not sleep until the Band ceased at a late hour. Call after call was made for the Gen. to come out on the Balcony to make a speech. His reply was, he could not make a speech, but here are others that can, especially the Hon. Ex. Gov. J. L. Routt, for he loves to talk.

Through the politeness of Mr. L. Barney this morning, I was furnished with the early and late history of Denver, 1880. First newspapers published in Denver: News, daily & weekly; Tribune, daily & weekly; Republican, daily & weekly; Times, daily & weekly; Colorado Farmer, weekly; Colorado Journal, weekly; Colorado Post, weekly; Herald, weekly; Presbyterian, monthly; Financial, weekly. No., 10 papers published in Denver. Hon. F. W. Pitkin is the present Gov. of Colorado.

August 19th. This morning I will try to correct the separating process of working Gold ore. See above.

Instead of the sluice of water coming out higher, or above the bottom of the trough, the sluice simply runs over Copper plates amalgamated with quick silver, which catches the Gold dust in the sluice over those plates, which is scraped off and the quick silver is retorted and used again, and again, whilst the Gold is put into sacks, drained, ready to be taken through the Smelting process to obtain the pure metal. . . .

August 24th. 5 Oc. A. M. Cool and pleasant. Expect to start for home this morning at 7:50 by Denver & Rio Grande.