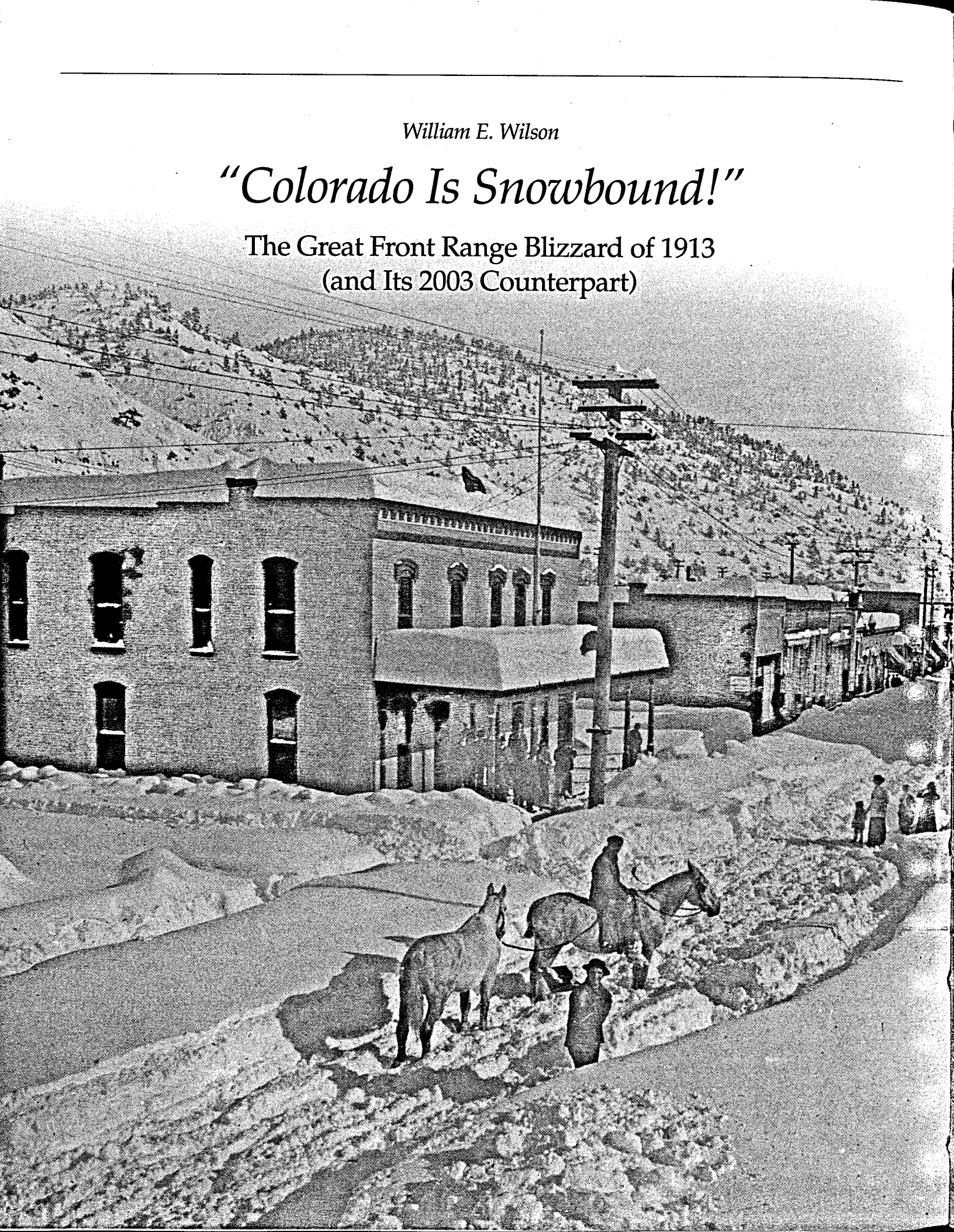
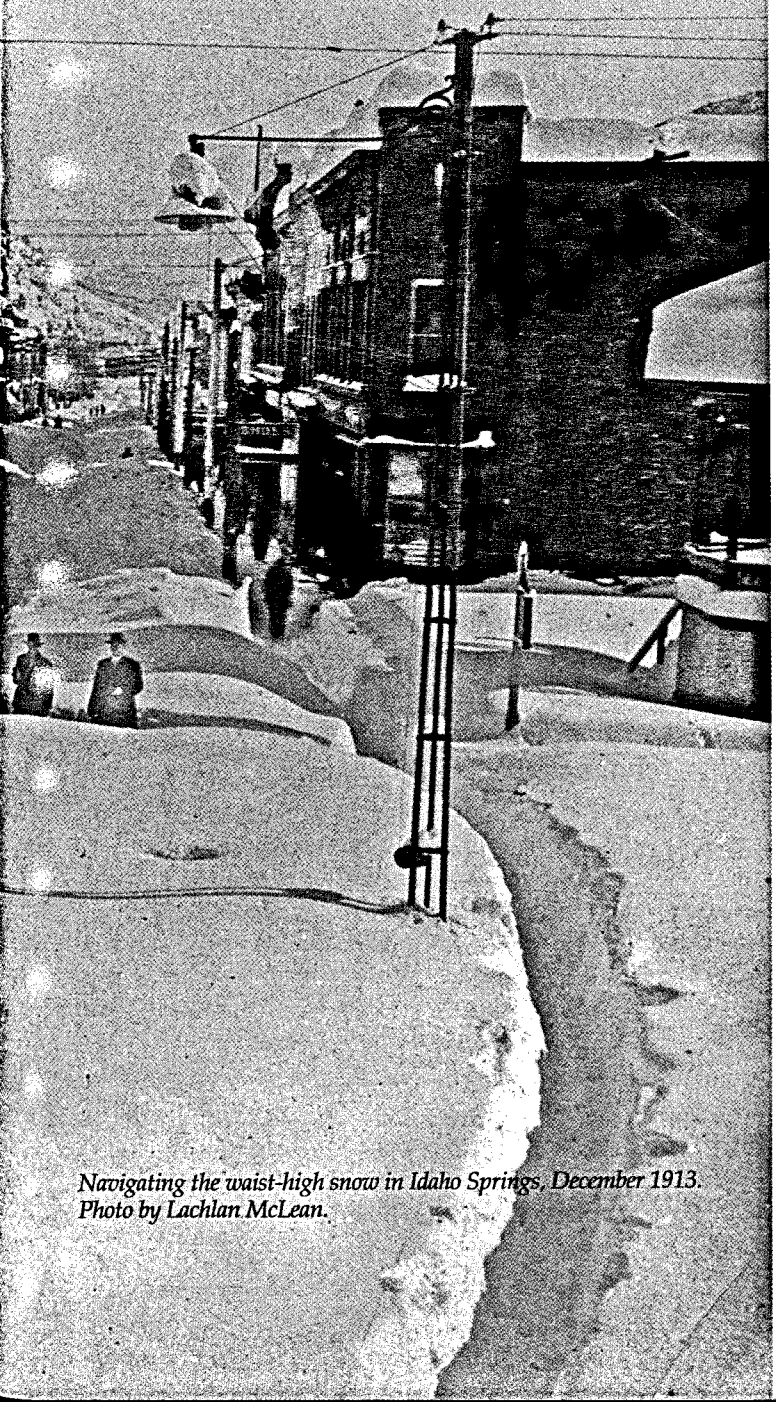
William E. Wilson

"Colorado Is Snowbound!"

The Great Front Range Blizzard of 1913 (and Its 2003 Counterpart)



"Deepest Snow since the Glacial Period" proclaimed the Georgetown Courier *on December 6, 1913. While overlooking the fact that a few thousand years of record are missing from that interval, the statement does have some merit. For most places, the blizzard that struck Colorado's Front Range that first week in December did indeed produce the greatest snow depths in the historical record. Not until March 2003 did any snowstorm even approach it. From Wyoming to New Mexico, snowfall along Colorado's Front Range and adjoining plains reached depths of 40 inches or more. Georgetown took the prize among all reporting stations: 86 inches in five days, 63 inches of it in one twenty-four-hour period.*



Navigating the waist-high snow in Idaho Springs, December 1913. Photo by Lachlan McLean.

The blizzard's hold on the state's residents and visitors lasted long after the actual storm. Transportation came to a standstill, and thousands were stranded at home, at work, or while traveling. Schools and businesses closed, and snow removal became a back-breaking undertaking. Animals—both wildlife and stock—faced fierce conditions. In the mountains, snow slides threatened homes and lives. For some, life began, and for others, life ended during those days of isolation—though fatalities were remarkably few.

In the long term, the storm left abundant moisture on the plains for the following spring's wheat crops. In the longer term, it helped trigger the development of Colorado's ski industry.

This is the story of that remarkable blizzard, a story focusing here on one urban center and one isolated mountain community: Denver and Georgetown. The storm of March 2003 enhanced Coloradans' appreciation of the conditions residents and travelers faced ninety years ago, and it showed them the havoc such a storm could wreak today. The story of any major storm is primarily personal: The extraordinary tales of men and women and families in 1913 appeared in the newspapers of the time, and they linger on in the stories of the living few who remember those bleak but beautiful days of white, wind, and silence.

The Storm

Anticipation

Winter had an ordinary, if early, start. Denver papers reported that the first snow fell in the high country on September 11. Local sages, quoted in *The Denver Post*, commented on the prospect of "much snow during the winter and the early approach of that season." Twelve days later, Denver, Colorado Springs, and nearby mountain towns got their first blanket of snow. Rain or snow fell throughout the state. Cattlemen and sugar-beet farmers welcomed the precipitation, but striking coal miners in Huerfano and Las Animas Counties, west of Trinidad, were no doubt less pleased. That day the strikers and their families were evicted from their company homes, and they hauled their belongings through rain and snow—

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some called it a "mountain blizzard"—to tent camps the union had set up for them near Ludlow and elsewhere.

Typical for Colorado, it was a false start to winter. October was cold, but November brought much warmer-than-average temperatures and frequent precipitation from the mountains westward, but with little snow accumulation. East of the mountains, November was very dry. A late-November storm crossed the state, but it dropped only light precipitation. As a result of the warm November, soils east of the mountains were not yet frozen as December arrived.

Surely Front Range residents could not have anticipated what was in store for them in the next few weeks. In 1913, radio broadcasts of weather reports were nearly a decade away.➧ Residents turned to the newspapers for what little weather coverage they could get. The Denver papers offered daily weather reports—often buried in the back pages among stock market reports—which commonly gave a local forecast and data from the preceding twenty-four hours. They included forecasts for Denver, for Colorado, and for surrounding states, and they listed total precipitation (but not snowfall), temperature, and weather conditions for cities around the country. The *Denver Times* offered a daily "Rocky Mountain Weather Report" that provided data for temperature, humidity, and precipitation (not snowfall), but rarely a forecast.

Forecasts published by the Denver papers did not extend beyond the next day, and even those forecasts did not give probabilities of precipitation or anticipated snow depths. The Weather Bureau produced daily weather maps of the country, but the maps reflected only surface conditions; jet streams and upper-level lows were not yet observable. In 1911, 149 newspapers around the country published these weather maps, but even by 1913 no Colorado papers chose to publish them.

The U.S. Army Signal Service had established a Denver weather station in 1871, so by 1913 the city had amassed more than forty years of historical weather data. In 1913 those data were collected under the auspices of the Weather Bureau, U.S. Department of Agriculture, which had offices on the fourth floor of the Boston Building at Seventeenth and Champa Streets. The weather instruments stood at heights of 119 to172 feet—most likely on the roof of the building.

➧ Station 9XM at the University of Wisconsin in Madison aired the first regularly scheduled weather report on voice radio in 1921. In Denver, a Special Amateur License was issued in 1919 to the Reynolds Radio Company, station 9ZAF (precursor to KLZ, licensed on March 10, 1920; KOA was licensed ten days later). In 1922, KLZ aired weather reports daily at 8:30 A.M. Before radio, farmers could get weather information by telephone.

Evolution of the Storm

In the last two days of November, a storm dropped south into northern Arizona, slowing abruptly to a near standstill. At the same time, lower pressure west of the mountains drew moist central plains air west into Colorado. Clouds lowered and thickened along the Front Range.

The Arizona storm crept southeast toward New Mexico on December 1, producing modest mountain snows in Colorado. Rains spread over parts of eastern Colorado, and wet snows fell at elevations above 5,000 feet. Precipitation increased late in the day east of the mountains and continued on December 2. By December 3, though, precipitation had stopped over much of northern Colorado. The storm seemed to have skirted the state.

Late in the day, cloud bands thickened and snow fell again, first in southern Colorado and then spreading north.

The next day, December 4, the low-pressure area, now in eastern New Mexico, deepened and moved straight north. Heavy rains in Texas caused devastating floods. Meanwhile, high pressure held its ground over the northern plains. As pressure gradients tightened over Colorado, strong northeasterly winds developed across the plains and precipitation increased over most of the state. Rains poured down over eastern Colorado—the heaviest one-day rains ever observed in a winter month. Very heavy snows developed along the Front Range, accompanied by increasingly strong winds. Temperatures, instead of falling as they usually do during storms, rose to near 32 degrees Fahrenheit and stayed there until the storm ceased.

By the morning of December 5, the low-pressure center still hovered over southeastern Colorado, and the storm still raged. It finally turned east, and by Saturday morning, December 6, it was centered over Topeka, Kansas. At last Colorado's "Storm of the Century" came to an end.

As Golden's *Colorado Transcript* quipped, "The storm had its start in central Arizona. It is hoped that Arizona will never again start anything she can't stop."

Summarized from a 1993 article in Colorado Climate *by Nolan Doesken, Colorado Assistant State Climatologist.*

The storm rages in Denver at Sixteenth and Welton Streets. Photo by John R. Henderson.

District forecaster Frederick H. Brandenburg was in charge. Brandenburg had enlisted in the Signal Corps in 1877. He had managed Weather Bureau offices in Colorado since 1882, first in Las Animas, then in Pueblo, and finally in Denver. As one of five district forecasters nationwide, he oversaw operations in Colorado, Utah, New Mexico, and Arizona. At the time of his death in 1920, *The Denver Post* described him as "one of the most widely known meteorologists in America." Ironically, his obituary ran alongside an announcement that a powerful blizzard had struck the state.

In Georgetown, too, observers had acquired years of historical data, though the local weather station had operated only intermittently since its establishment in 1878. The Georgetown station was located "on ground in an open lot" near the town's hydroelectric plant. Georgetown's observer was Harry L. Corbett, an engineer employed by the United Hydroelectric Company. Corbett came to Colorado from Michigan, first living in Idaho Springs and then moving to Georgetown after he married Sarah Rowe from that town. The Corbetts had a thriving family of five children.

Corbett's sole duty as observer was to measure precipitation, which he did at 7 A.M. every day, probably on his way to work at the plant. He apparently made his readings a routine part of his job, for his son, Joseph (born 1903), reported in 2003 that he never even knew his father had been a weather observer. (Joseph did, however, remember the storm of 1913: He and his mother had gone to Denver and were delayed getting back to Georgetown by several days. "By the time we returned to Georgetown," he says, "all the excitement had subsided.")

Harry Corbett was part of a national network of about 4,300 volunteer observers organized and managed by the Weather Bureau. The bureau provided equipment and some basic training. In Colorado, about 150 such observers made

daily weather readings, which they mailed in at the end of each month. The observers came from all walks of life—farmers, homeowners, doctors, and employees of mining, water-supply, and power-plant companies, for example. The same system continues today, with basically the same equipment and procedures, and it still forms the backbone of the National Weather Service's network of reporting stations.

The observers' monthly form contains a "remarks" column in which the observer may comment on any notable weather occurrences. Oddly, that column is blank on Harry Corbett's form for December 1913, as if nothing out of the ordinary had happened in Georgetown. The observer at nearby Idaho Springs had a different view. He wrote, "The snowstorm 3d to 5th was unprecedented in severity here."

Forecasts for that first week of December 1913 were of mixed accuracy. Forecasters predicted conditions for Denver during the first days of the week reasonably well: snow or rain Sunday night or Monday, snow Monday afternoon and night, generally fair on Wednesday, and partly cloudy on Wednesday evening. But they did not foresee a storm on Thursday and Friday. Wednesday's forecast for Thursday was for partly cloudy skies. By Thursday evening, the *Post*, acknowledging that it had been snowing all day, called for "snow this afternoon and tonight" but, unable to believe it could continue another day, forecast "Friday partly cloudy." Finally, in Friday's evening edition, the *Post* had to accept that the storm was still upon the city, and so it took a lighthearted view on its front page:

> GEE! Look What's Comin'
>
> This Being a Little Journey to the Home of the Weather Man.
>
> Snow, and still more snow, likewise more ice in the air, for this afternoon and tonight in Denver.
>
> Cheerful old weather prognosticator that he is, F. H. Brandenburg, district forecaster of snowstorms and such, comes right out in the open and informs the people that the white flakes are to continue to pile up on us, like bad debts, today and tonight.

Georgetown's weekly *Courier* carried no regular weather reports. Its edition of November 29 was too early to anticipate the storm, and by the next week's edition, the storm was over.

Georgetown reported the greatest snowfall of all Front Range communities: 86 inches in all, with 63 inches of it accumulating in a single day at the storm's peak.

Outcome

As Brandenburg forecast, the white flakes did pile up, and in record amounts. Nearly all parts of the state received some snowfall, with the greatest amounts in the foothills and mountains of the Front Range. Many of those areas received 50 inches or more. Amounts from Colorado's reporting stations ranged from zero in Lamar and Sedgwick in far eastern Colorado (which did get heavy rains) to 86 inches in Georgetown. Some stations in the easternmost part of the state, such as Holly and Sterling, had rain early and then snowfall on December 5 and 6 as the storm left the state.

The 1913 storm is remarkable for the time of year in which it occurred. Heavy snow rarely falls in December east of the Colorado mountains—a notable exception being the Christmas Eve blizzard of 1982. Most heavy, wet storms strike in March or April, or in October or November, but not in the mid-winter months. Between 1950 and 2002, Denver's average December snowfall was 7.5 inches and ranged from a trace (2002) to 30.8 inches (1973). In Georgetown, at 8,500 feet elevation, the average December snowfall is only 10.1 inches. Also unusual are the heavy rains that drenched the eastern plains during the December 1913 storm. Overall, December 1913 still stands alone atop the list of wettest winter months for nearly all weather stations east of the Continental Divide.

For the Front Range, the storm's greatest intensity came on December 4 and 5 as the low-pressure center moved north from New Mexico, pumping moisture from the Gulf of Mexico. Notes from the Weather Bureau office in Denver state that "snow fell perhaps as heavily as ever observed [here]." By time the storm ended, Denver had recorded a total of 45.7 inches. In Georgetown, Harry Corbett measured 63 inches in the span of a single day.

Fortunately, temperatures—although slightly below average for the dates—stayed relatively mild for a December storm. Temperatures in Denver were in the 20s during the first days of the month and then hovered around freezing during the most intense part of the storm on the 4th and 5th. The result was a very moist snowfall. Following the storm, low temperatures were in the teens and single digits every night for the rest of the month.

Total precipitation (melted snow plus rainfall) exceeded three inches in most plains and Front Range areas, and in some areas it exceeded five inches. Among all reporting stations, Silver Lake (6.62 inches) and Francis (6.47 inches), both in southwestern Boulder County, got the most total precipitation. Denver received 4.18 inches and Georgetown 4.14 inches, the latter a surprisingly small amount considering the amount of snowfall there.

The storm brought heavy precipitation in other states as well. Northern New Mexico and southern Wyoming experienced snow conditions similar to those of Colorado's Front Range, and in Texas heavy rains during December 1–5 caused extensive flooding in the middle and lower parts of the Brazos River basin.

In Denver, winds were generally light during the first few days of the month, but the afternoon of December 4 brought brisk northerly winds of at least twenty miles per hour that lasted for the remainder of the storm; the peak wind was forty-four miles per hour. As a result, drifts of four to five feet were common in the Denver area, and locals reported drifts as deep as thirty to forty feet in Clear Creek Canyon.

For much of Colorado, little snow fell for the rest of December. Denver got an additional 11.7 inches, but, curiously, Georgetown had only one additional inch. There, the cold weather that followed the storm preserved much of the initial accumulation—at the end of the month, Georgetown still had 14 inches on the ground.

Surviving the Snow Blockade

Newspapers used the term "blockade" to describe the great snow depths that resulted in the complete halt of normal activities in cities, towns, farms, and mountain areas alike. The *News* on December 5 began its front-page lead story with the declaration, "Colorado is snowbound." Nearly every form of transportation came to a complete stop; businesses and schools closed; communications and deliveries were disrupted; and marooned people, livestock, and wildlife faced peril. It was days and in some cases even weeks before a sense of normalcy returned.

Getting Around (or Not!)

In 1913, Coloradans still got from city to city via train, despite the emerging popularity of the automobile. Denver was the hub of lines that reached out like tentacles in all directions. But on Thursday afternoon, December 4, virtually all train traffic came to a complete standstill. The train from Cheyenne due in to Denver at 7:30 P.M. got stranded twenty miles outside the city. Those inbound trains that did make it into Denver arrived several hours late. The last eastbound trains from Union Station left at 3:30 P.M., and all of them stalled a few hours out.

COLO. FRIDAY, DECEMBER 5, 1913.—12 PAGES. PRICE

RST SNOWSTORM RECORDED IN 28 YEARS;
BUT BLIZZARD MEANS MILLIONS IN CRO

MAP SHOWING RAILROAD TIEUP IN COLORADO, the relative locations of the various stranded trains and the directions they were going. The sketch includes the lines of the Union Pacific, the Burlington, the Colorado & Southern, the Rock Island, the Denver & Rio Grande and the Santa Fe.

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DENVER HOTE
FEARING DRI

Workers Marooned
and City Gives
Homeless Throng.

CARS HALT, TRAINS ST

Searching Party Hunts
at Central City—Women
cued From Death Here.

The Storm at a Gla

STERLING
FT. COLLINS
GREELEY
BRUSH
LONGMONT
BOULDER
ROGGEN
HUDSON
DENVER
SILVER PLUME
PALMER LAKE
LIMON
COLO. SPRINGS
CRIPPLE CREEK
PUEBLO

On December 5 the Rocky Mountain News *published the locations of trains that had derailed or been mired in snow as they struggled into and out of Denver. The storm incapacitated more than twenty trains belonging to a half-dozen railroad lines.*

All outbound passenger service was "annulled" that evening. Freight traffic was paralyzed.

On December 5, the *News* reported that more than twenty trains were stranded in the region around Denver; some were derailed, some simply stalled by huge drifts. Most had become stranded toward the south, between Denver and Pueblo, but some were stuck north of the city toward Longmont and Greeley, or northeast toward Sterling.

By Saturday, December 6, the railroads had made progress with the help of rotary plows and the clearing of the Denver yards by hundreds of shovel-wielding men. A few Union Pacific trains made it into Denver from the east, but none from the north or south. All trains of the Burlington, Colorado & Southern (C&S), Denver & Rio Grande, and Santa Fe lines were "annulled until further notice." Progress with the rotary plows was slow and not always successful. A rotary heading south from Cheyenne battled drifts eight to ten feet higher than the plow itself, not arriving at Denver until Monday; another one heading south from Denver could not make its Palmer Lake destination. The snowplow working between South Platte and Waterton encountered thirty-two snow slides—each of which had to be dug out by hand. When it finally reached its destination—a stalled train—the snow was even with the tops of the cars. On the Rock Island line, crews used dynamite to help break the blockade between Colorado Springs and Limon.

When a train stalled near a community or a station, passengers often left and braved the elements on their own. Passengers and crews unable to leave generally kept warm and ate well with food from the dining cars. On a train stalled at Arapahoe, provisions ran low. Conductor Schumaker tramped ten miles to the nearest store and returned with cans of beans and loaves of bread.

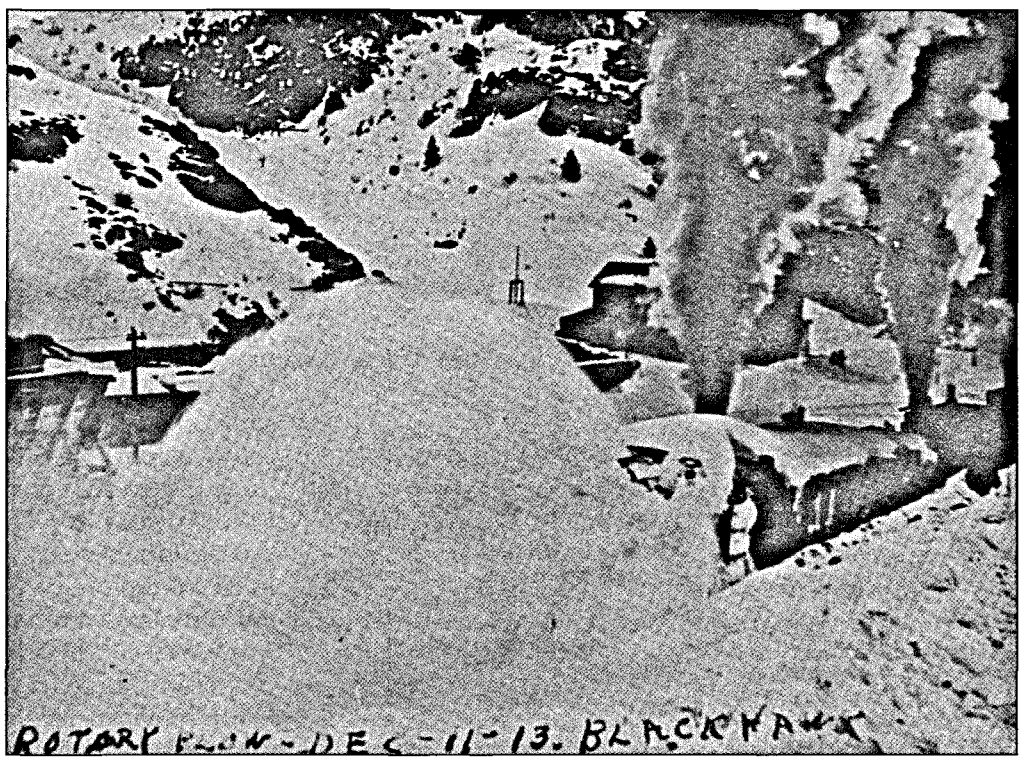
By Tuesday, December 9, all lines but two had reopened. One of those two was the C&S line up the Clear Creek valley. The blockade had literally isolated the towns along the route since the preceding Thursday. Rotary plow 99200 set out from Denver early Monday morning to remedy the situation. (This would remain the only journey a rotary plow ever made over the Clear Creek tracks, for snows were rarely a problem along the route to Georgetown. Locomotives fitted with large steel butterfly plows successfully handled every snowfall before and after 1913.)

Clearing the tracks in Black Hawk just after the storm. Workers no doubt shoveled out Engine 37 in anticipation of the arrival of the Colorado & Southern rotary plow (shown below), which finally struggled up the canyon about four days later.

Even the rotary struggled. Battling deep, hard-packed drifts, it took all day to make it to Golden. By Tuesday evening, the plow had cleared the tracks to Idaho Springs, Black Hawk, and Central City. Finally it reached Georgetown on Wednesday evening, December 10. The *Courier* reported that "a hundred or more citizens congregated at the depot to see the machine bore its way through the snow"—presumably to the sound of great cheering.

The *Courier* continued:

> After cleaning up the side track at the depot, the rotary with three engines pushing started for Silver Plume. Considerable difficulty was encountered when the rotary hit the snow slide from Griffith Mountain, which was not only deep but filled with rocks and stumps. The rotary reached Silver Plume about midnight. Soon after the work train left Georgetown, the passenger train pulled in, the first since Wednesday evening of last week.

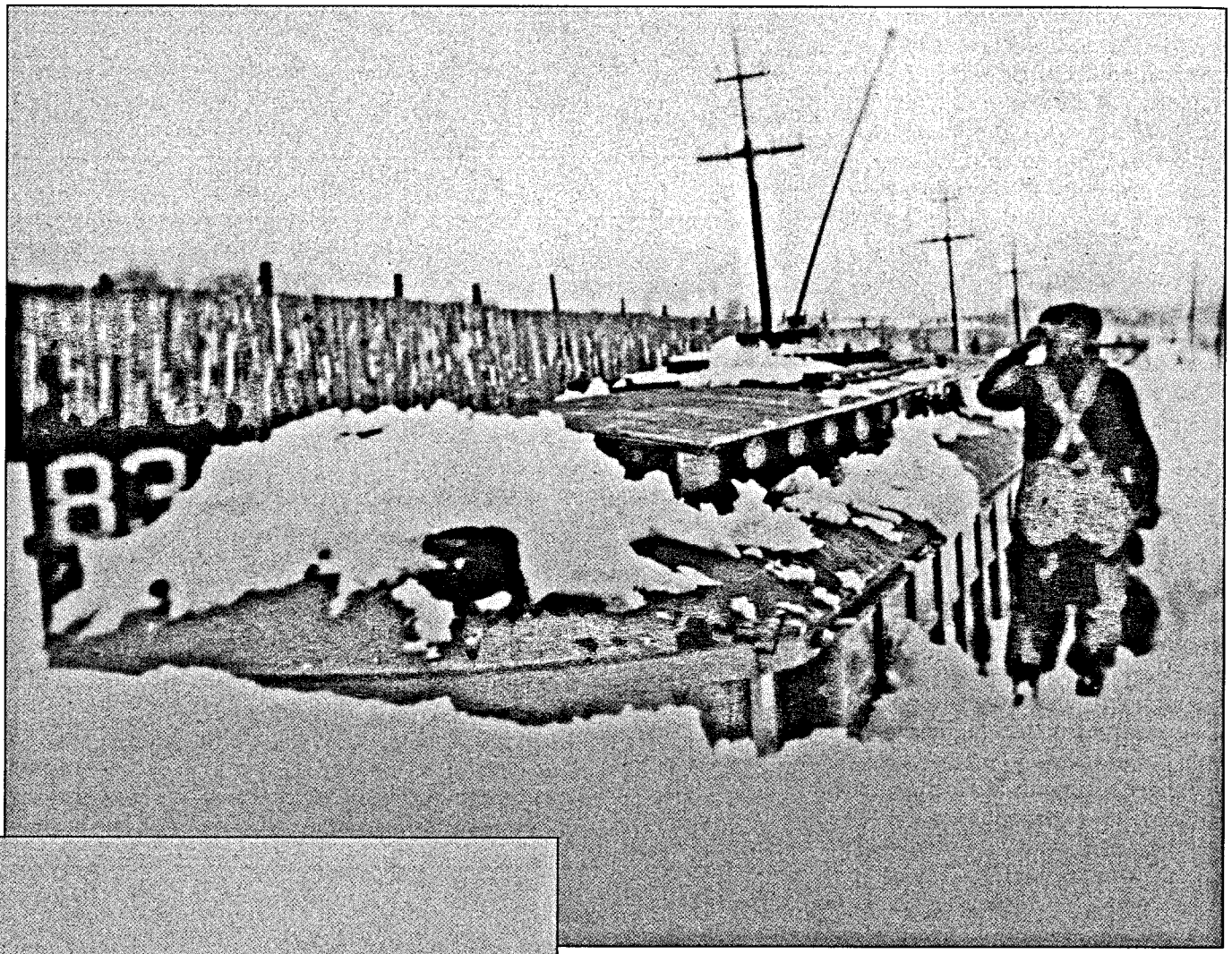


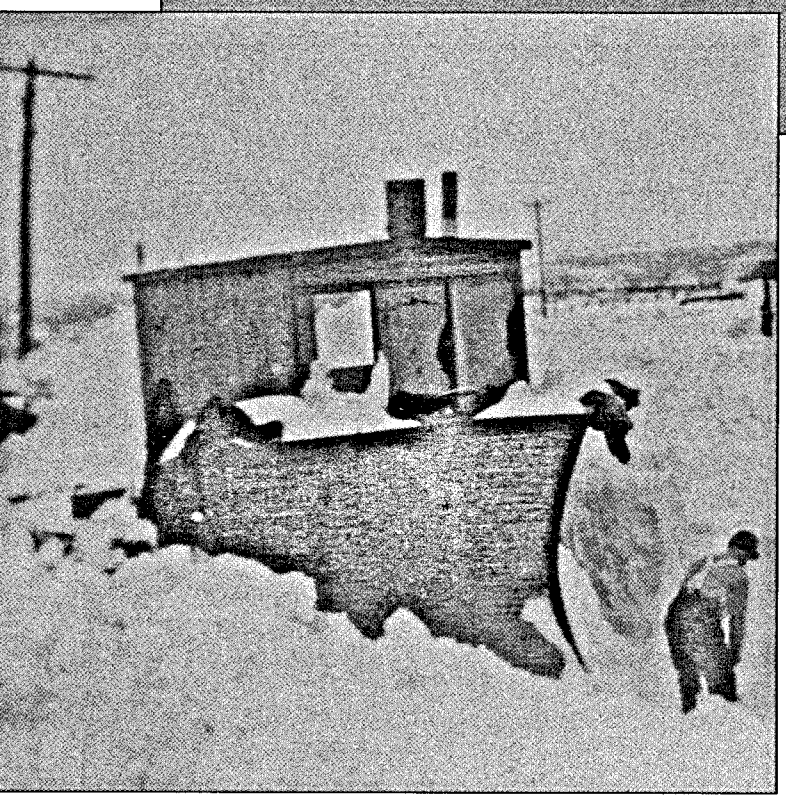
The C&S rotary plow 99200 reportedly blasted into Black Hawk on December 10; this photograph is dated the following day. The plow reconnected Golden, Idaho Springs, Black Hawk, Central City, Georgetown, and Silver Plume to the outside world.

While men and machines tackled the blockade of the railroads, others waged a similar battle to free municipal tramways. These systems were the heart of local public transportation in Denver and other towns along the Front Range corridor, including Cheyenne, Greeley, Fort Collins, Boulder, and Colorado Springs. In Denver, conductors had to abandon an estimated 210 "street cars" (or "cars," to use the parlance of the day—automobile devotees had not yet usurped the term) that first Thursday evening throughout Denver's 200-mile network of tracks. It was the first time in Denver's history that the city had completely closed the tramway system. Also shut down were the Golden Interurban line and the Boulder and Denver electric branch of the C&S.

In recalling the storm five years later in *The Tramway Bulletin*, one tram operator wrote that on Thursday night, "the snow came down in chunks (flakes being a poor description)." More poetically, he added, "The going that night was like a ship forging its way through a storm at sea, with the white-capped waves rolling all over it."

The culprit that Thursday night was initially the slush that formed as the very heavy wet snow accumulated on the warm ground. The Denver City Tramway Company had a fleet of plows that normally handled Denver's snows with

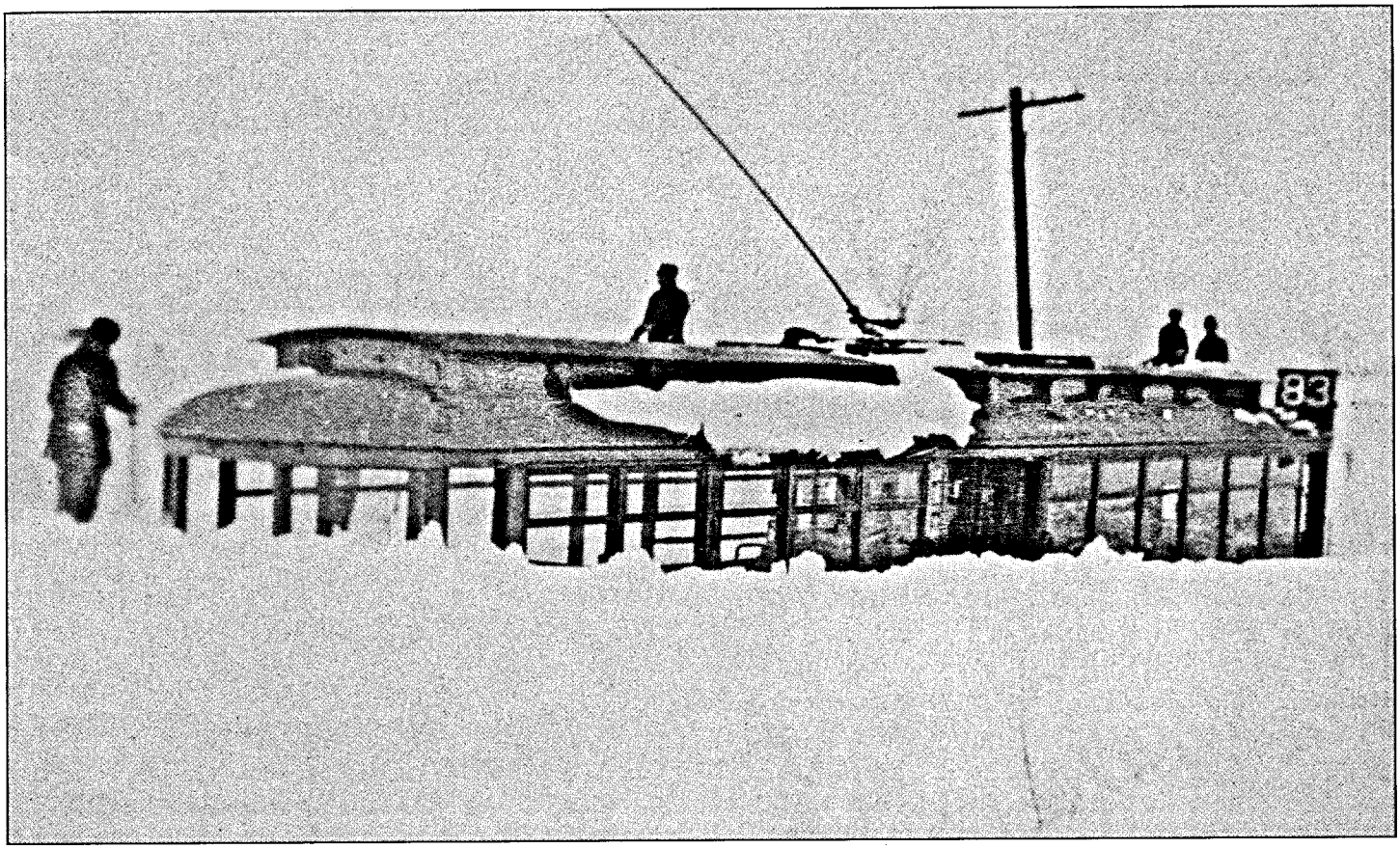




This page and opposite: A rare set of three images in the Colorado Historical Society collection shows the backbreaking task of freeing a Denver tramway car on the 83 line, north of town, with the aid of an old "box plow" (shown at left).

no problem. Included were eight cars equipped with rotary plows and twelve with heavy-duty blade-type plows; in addition, 65 percent of the streetcars carried their own lighter-weight plows. But this time, the combination of snow and slush was too wet and heavy, and the plows and sweepers constantly clogged.

As the temperature dropped that night, the slush turned to an icy mass that covered the tracks beneath the steadily accumulating snow. The next day, the army of 780 men initially employed by the tramway company to clear the tracks was forced to abandon shovels in favor of pickaxes to attack this frozen layer. But as fast as they removed the chunks, the wind-driven snow buried the tracks once again. Complicating matters, bold automobile drivers, seeing a hint of an opening in the snow-clogged streets, maneuvered their



vehicles into the partially cleared paths, dragging with them more snow. One can imagine the choice words the frustrated work crews had for the occupants of those vehicles! Needless to say, the crews made little progress in clearing the tracks during those two days of continuous snowfall.

On Saturday, however, the warm sun softened the snow, and workers could return to using their shovels. The men loaded much of the snow onto flatcars that were then hauled to a bridge over the South Platte River. There, a trolley positioned behind the flatcar pushed a long pole attached to a large wooden scraper. The scraper shoved the snow over the front end of the car and through a hole in the bridge into the river below.

Over the weekend, the tramway company's corps of shovelers swelled to nearly four thousand men, and by Sunday evening they had managed to clear most of the main lines. Hundreds of volunteer shovelers helped clear tracks in the outlying districts. But not until December 11, a week after the initial shutdown, did the city declare the system virtually 100 percent open.

In the course of this Herculean effort, the tramway company acquired two thousand shovels and half as many picks. Shortly afterwards, the company began designing and constructing bigger and sturdier plows to handle future drifts. They would be ready for the next big storm.

The years just before the start of World War I were times of burgeoning automobile popularity. In 1913, Henry Ford introduced the moving assembly line at his Model T plant in Highlands Park, Michigan. That same year, Colorado issued its first license plates—made of porcelain enamel—and Denver had a new Ford assembly plant at Broadway and Kentucky Streets. In fact, the first shipment of automobile parts—forty freight-car loads—arrived in Denver on November 29, a few days before the storm struck. In his biennial report for 1913–14, Colorado Secretary of State Pearce counted 13,624 auto owners and dealers in Colorado. Denver alone had 36 percent of these (just under five thousand); Clear Creek County, including Georgetown and Idaho Springs, had thirty-three autos; and adjoining Gilpin County had two.

Although the state had allocated funds for road improvements as part of the national "Good Roads" movement, Colorado's roads were mostly in poor shape for auto travel. At least one major new road was under construction in 1913—the Lariat Trail, which would connect Idaho Springs and Denver by way of Lookout Mountain and Golden. But by 1914 the state had only 1,192 miles of improved roads, compared to 38,588 miles of unimproved ones. After a mountain snowfall in late November 1913, a Denver Motor Club report in the *Post* described the road to Idaho Springs

In a piece of creative snow removal, tramway workers loaded snow onto flatcars, hauled the cars to a bridge over the South Platte River, and—with the help of a scraper and long pole attached to a trolley—dumped the snow through a hole in the bridge and into the river.

as "muddy," probably not an uncommon condition in those days. Carl Abbott, Stephen J. Leonard, and David McComb, in *Colorado: A History of the Centennial State*, note that "auto tourism as late as 1915 was still a strenuous undertaking, safely attempted only in summer."

Certainly no auto tourism was happening along the Front Range during the first week of December 1913. On Thursday evening, hundreds of motor cars got caught in Denver's heavy snow as drivers tried to make their way home from work. In some cases the snow had piled *into* the autos, and drivers had to shovel them out in order to get at the gears. Although many made it home or nearly home, others had to abandon vehicles or, ironically, have teams of horses haul them home. Taxicab business thrived early that evening, but soon the Denver Omnibus and Cab Company (precursor of the Yellow Cab Company) had to give up. The company estimated that ten thousand people wanted rides home that evening. By Friday, all cab service was completely shut down. On Saturday morning, the company used a huge bobsled, pulled by six horses, in an effort to break trail for its machines. After several hours with only slight progress, they abandoned that effort too. The *Post* reported one auto-pedestrian accident: An "aged" man (age 65) was seriously injured when he was pinned between an auto and a snow bank.

The automobiles had their day, however. Ten days after the storm, several hundred members of the Denver Motor Club, at the request of club president Sommers, set out with their vehicles to pack down the snow in side streets, which so far had been only partially open to traffic.

With all mechanized travel unavailable, various forms of foot and horse travel became the only alternatives, and even those proved a struggle. By 9 P.M. on Thursday, Denver's streets were virtually deserted. The next morning, thousands walked to work, while thousands more stayed home. The *Post* observed that "the only certain means of transportation was a sturdy pair of legs." One young man walked eighty-eight blocks from the College of the Sacred Heart to his home on Gaylord Street. Firemen responded to alarms by fighting their way on foot to the scenes of fires.

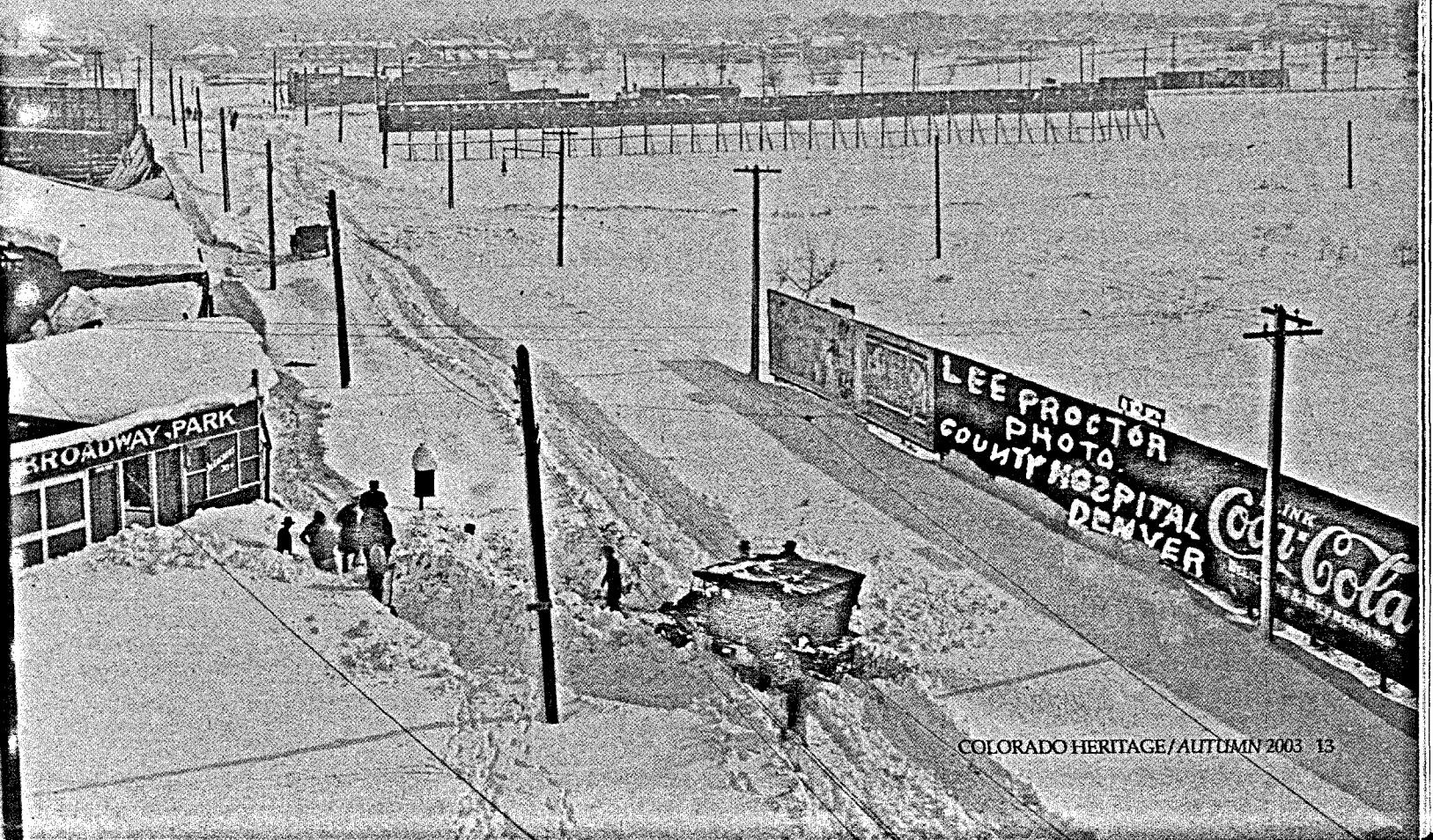
During and immediately after the storm, horse-drawn automobiles became a common sight in Denver, and a few sleighs plied the downtown streets. A tramway employee on horseback searched for buried streetcars. After observing

these scenes, an amused *Post* reporter concluded that "the horseless age is yet far off!"

Skis and snowshoes were the order of the day, too. Skiing was a growing social activity but had yet to become an organized recreational sport. Following the storm, carpenters in Golden constructed makeshift skis and sold them for a dollar a pair. In Denver, skiing parties were all the rage at the Denver Country Club and on Capitol Hill. Leading the parties was Carl Howelson, "a clever Norwegian who imports and makes skis, and who, having sold out his entire stock since the big storm, is looking forward to a busy winter teaching Denverites the sport of his own country."

In the mountains, snowshoeing and skiing served a more utilitarian purpose, namely to get from place to place. They were the only apparent means of transportation between Silver Plume and Georgetown in the days after the storm. The first to make the trek was Arthur L. Carnahan, manager of the Terrible-Dunderberg mines in Silver Plume. The *Courier* noted that Carnahan, having had "considerable experience in the deep snows of Michigan, improvised a pair of snow shoes out of barrel staves and broke the trail from Silver Plume to Georgetown Sunday." The next day, "J. B. Ballantine came down from the Plume . . . on skis . . . . Mr. Ballantine is at home on skis, having spent winters in

Below: Most likely from an upper-floor window across the street, photographer Lee Proctor took this picture of a car trying to maneuver alongside the old Broadway ballpark in Denver. Proctor scrawled his name directly onto the picture, taking advantage of a dark section of billboard in the image.



Norway while constructing an Edison mill for an iron mine. Ski-running was a weekly pastime with him then." But Ballantine was not averse to having a little fun on skis. "Ski'ing has become a pastime during the holidays amongst the more daring spirits at Silver Plume, led by J. B. Ballantine, who first took up the sport some time ago in Norway . . . ."

Probably the most remarkable journey on snowshoes and skis was the seventy-mile trek made by A. D. Lukens and R. A. Roberts from high up in the Platte Canyon to their homes in Overland Park, as reported by the *Post*:

> The two men were cutting mine props above Shawnee, far up Platte canon, when the snow came. Their cabin was snowed in and it was necessary to tunnel to get water. After being housed in for three weeks, the longing to spend Christmas at home overcame their fear of hardship, and they started for Denver, although they had three weeks' rations in their cabin.
>
> Neither had ever used snowshoes or skis, but they made large snowshoes for the journey from Shawnee point, at timberline, to Shawnee, and started out over eight feet of snow. The snowshoes soon became useless, and then they made skis, nine feet in length, and continued their journey. They made the first four miles in thirteen minutes, and the seventy into Denver in twenty-two hours of actual traveling.

Staying in Touch (or Not!)

The mighty Front Range snows disrupted the web of daily activities that keeps families and communities connected. Schools, mines, and businesses closed; funerals were postponed; family members were separated; delivery of mail, milk, groceries, and coal was delayed; and meetings, concerts, and social gatherings were cancelled.

In Denver, teachers sent students home at 1 P.M. on Thursday with the declaration that the schools would remain closed "until safety reigns." On Saturday, school superintendent W. H. Smiley boldly announced that most schools would reopen on Monday. He had to backtrack on Sunday evening, stating that in fact no schools would open on Monday due to the "uncertainty of street car services, danger from snow slides and falling chimneys and roofs of buildings and lack of fuel." Most Denver schools did open in the next few days, but on December 11, twelve still remained closed because of insufficient "improvement in the condition of streets and car service."

Maintaining communication became a priority but could not always be accomplished. The Mountain States Telegraph and Telephone Company reported that Denver's telegraph service was irregular or suspended, but the company did manage to maintain phone service in that city. The principal challenge was the overload of calls that poured into the five exchanges as workers and families throughout the city tried to make connections. From Thursday night through Friday night, the company arranged for housing and meals for three hundred to five hundred day-shift and night-shift operators at hotels, boarding houses, and private homes. Employees of some of the large stores enjoyed the same kind of hospitality, courtesy of their employers—Daniels & Fisher, Denver Dry Goods, Joslin's, Golden Eagle, and A. T. Lewis, among others. Many other workers spent one or more nights at their stores or company offices.

Three employees stand outside the Denver Fire Clay Company at Seventeenth and Champa. Lacking alternatives, many workers simply stayed at their places of employment until they could return home.

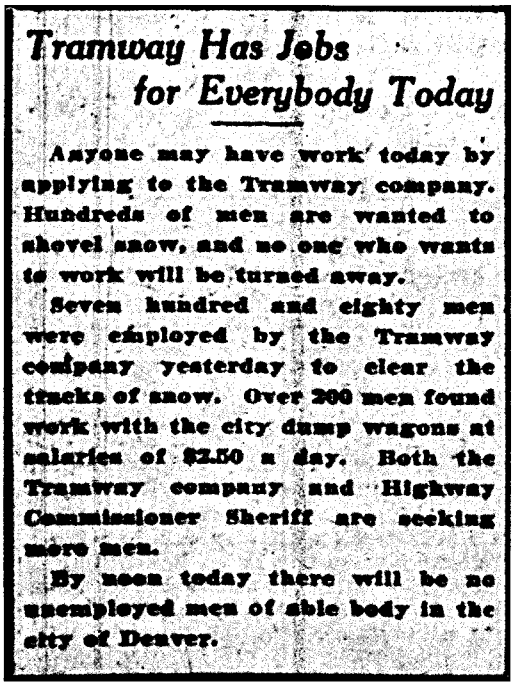
In all directions from Denver, however, the storm interrupted phone service. Lines came down in Fort Collins, Greeley, Cripple Creek (where service was "crippled," as the *Post* cleverly expressed it), southern Wyoming, and Raton, New Mexico, among other places. Many ranch lines were cut off. The *Post* reported that the downed cable lines over Argentine pass made communication impossible between Denver and Georgetown.

Denver's daily newspapers managed to produce full editions without interruption, even at the height of the storm. But with communications "impossible," the *Georgetown Courier*'s news coverage on December 6 was somewhat sparse. Editor and publisher J. S. Randall announced on the front page, "Our inside pages are as bleak, barren, and snow-white as the hills between Georgetown and Denver—all because of the snow blockade." Indeed, the two inside pages of the four-page edition were completely blank.

The *Longmont Call* managed to keep publishing despite the lack of power to the town of six thousand. For a while, the *Call* printed its papers with the help of a gasoline engine hauled on a sled from the Longmont Produce Exchange Company. In most outlying communities, however, residents remained starved for news. In Golden, two enterprising brothers skied into Denver and came back with frozen feet and a hundred Sunday newspapers. They made this ambitious excursion, as the *Colorado Transcript* put it, at a time when the average Golden lad "didn't know a ski from a dinosaurus." The boys readily sold the papers to eager residents.

Poor communications between towns led to the spreading of rumors and outright misinformation. In the December 13 edition of the *Courier*, Editor Randall took a jab at the *Post*, which, he claimed, "with its usual veracity, stated that Georgetown had been wiped off the map by a snowslide, many citizens killed and those that were not killed were starving to death." Randall could himself be accused of stretching the truth, for no such article appears in any *Post* edition of the previous week. The paper did, however, report on December 7 that two miners who had been caught in a snow slide had been found safe, and that other slides in Georgetown had done considerable damage to a few houses. On December 9, the *Post* also reported some distress elsewhere in Clear Creek County:

Idaho Springs reports a scarcity of meats, provisions and fuel. If conditions are not relieved by Wednesday it is feared the public schools will have to close. Clear Creek is on a rampage in some districts and some farms have been flooded. It has been a week since mail has arrived at Clear Creek and Gilpin county points.



Tramway Has Jobs for Everybody Today

Anyone may have work today by applying to the Tramway company. Hundreds of men are wanted to shovel snow, and no one who wants to work will be turned away.

Seven hundred and eighty men were employed by the Tramway company yesterday to clear the tracks of snow. Over 200 men found work with the city dump wagons at salaries of $2.50 a day. Both the Tramway company and Highway Commissioner Sheriff are seeking more men.

By noon today there will be no unemployed men of able body in the city of Denver.

From the Rocky Mountain News *of Friday, December 5, 1913.*

If the snow blockade really had isolated Georgetown for weeks or months, its 950 residents (as of the 1910 census) could have taken comfort in knowing that help was available from within the town. As the *Courier* noted with pride,

> Snow blockades, washouts and other disasters that tend to cut Georgetown off from the outside world always find our enterprising merchants Kneisel and Anderson ready to meet the emergency. They state that they had enough of the necessaries of life to carry the town three months when the blockade came.

Indeed, the Georgetown store, known to generations of Coloradans and today still owned and operated by the Anderson family, was the lifeblood of the community. In 1913, it advertised "Groceries of every description." Although it did carry a multitude of products, it probably could not match in variety the stock of Cahill and Wells in Cheyenne County. That store's ad in the 1913 local high school yearbook boasted: "Headquarters for Candy, Hay, Underwear, Corsets, Oats, Molasses, Gum, Shirts, Eggs, Ice Cream, Straw Hats, Automobiles." Bring on the snow blockade!

Clearing the Decks

As it does today, snow removal posed a major challenge. Motorized dump trucks and plows did exist but apparently not in Colorado. Instead, the approach was to hire armies of men, give them shovels, and enlist the services of hundreds of teams and wagons to haul the snow away. Meanwhile, citizens worked diligently to clear their neighborhoods. In most communities, ordinances required that property owners clear their sidewalks within a certain time or face the risk of fines. In Denver, Mayor James M. Perkins called attention to the municipal code that required the clearing of sidewalks, proclaiming that each citizen thus

A Central City businessman surveys his work. Photo by Harry H. Lake.

had an opportunity to "show his patriotism and his desire for the city's good."

By Sunday, December 7, Denver had a brigade of eight to nine hundred men and three hundred teams working to clear the streets. The going wage was a respectable $2.50 per day (the equivalent of about forty-five dollars in 2003); the staff of the city auditor paid each man at the end of the day. Not all shovelers got paid: Fifteen prisoners from the county jail were set to work clearing the sidewalks around their building.

City crews worked in cooperation with the tramway company crews. They hauled snow to the South Platte River, vacant lots, and the site of the Civic Center. At the Civic Center, a mountain of snow grew as the days wore on. Remnants of the pile reportedly lasted until the following summer. In fact, to this day the story persists that the public was invited to a "shovel party" on July 4, 1914, to spread the remaining snow to help speed melting. Supposedly, even children came with toy shovels and pails. However, the Denver newspapers of July 3–5 make no mention of such a snow-shoveling party. Rather, on July 3 the *News* did announce that patches of snow still lingered "in the cool shadows of the Twentieth street viaduct" and that those who had bet that the December snows would last until the Fourth of July were "now preparing to collect."

Following the storm, men attempted to wash out Denver's street gutters with hoses attached to hydrants, but this approach failed because the catch basins were unable to handle the extra flow of water. Another handicap was the scarcity of shovels; by Sunday, citizens, government agencies, and businesses had exhausted all retail and wholesale supplies in Denver.

Neighborhoods organized their own crews, and civic groups pitched in. Sunday school students from Montview Presbyterian Church—250 strong—instead of holding class on Sunday morning laughed and sang and shoveled under the guidance of the Rev. F. W. Evans. On Tuesday, December 9, the Denver City Council called on citizens to devote the next day to cleaning walks and streets. City officials expected an army of fifty thousand citizen shovelers to turn out. Evidently, the effort was a success, for on Wednesday Denverites cleared two hundred miles of city sidewalks. By that date, wagons could maneuver successfully in almost all parts of the city.

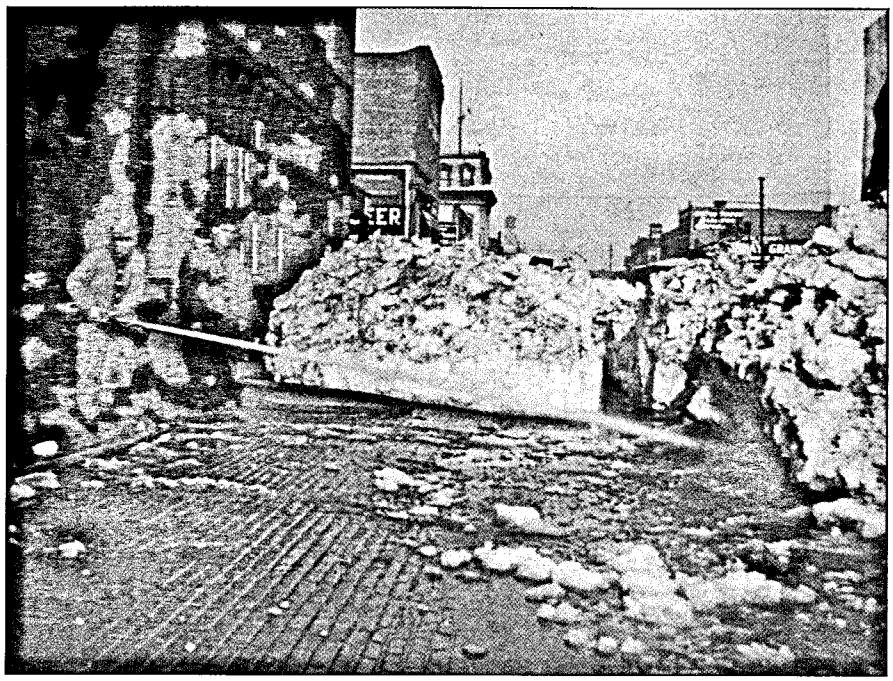
Clearing the business district was itself a massive job. When the effort was complete, the highway commissioner's office estimated that teams had removed *seventy-two thousand* wagonloads of snow from downtown Denver; they calculated this figure on the basis of an average of five hundred loads per city block.

Similar efforts, at varying scales, occurred up and down the Front Range. In Colorado Springs, piles of snow reached eight to ten feet high along the margins of the streets, where shovelers had removed it from the sidewalks and off the streetcar tracks. The city employed every available man to remove snow from the business center. In Pueblo, the business streets were passable by Sunday, largely through the successful use of fire hoses. In Greeley, businessmen frantically shoveled daily to restore normal business conditions.

Georgetown's town ordinance called for property owners to remove snow from sidewalks within twenty-four hours of the end of any snowstorm. Failure to do so could result in a fine not less than three dollars or more than fifty dollars. The Board of Selectmen passed this ordinance prior to 1890, and it is still in effect; even the limits of the fines remain unchanged.

By Friday, December 5, all was not going smoothly in the streets of Georgetown. The *Courier* reported:

> Friday afternoon the creek became clogged with snow just below the Santiago Mill, which sent a stream over the bank and down through the snow toward the Hotel De Paris. A force of men went to work in the water and slush in the creek, but before they could cut a passage through for the stream, the slush was several inches deep in front of the hotel.



At one point in the storm's aftermath, Denver firemen used hoses to clear away the snow. The additional mess they created was great enough that they abandoned the tactic shortly thereafter.

At their meeting the next day, the Board of Selectmen took the situation under consideration:

> Chairman Stewart of the Committee on Streets, Alleys, and Bridges stated that on account of the unusual heavy fall of snow that the Board should take some action towards opening the streets, roads and sidewalks in the City Limits.

After some discussion, the board empowered the committee to "hire men and trams and break roads and shovel sidewalks." A week later, the *Courier* reported, "Most of the streets have been opened to travel of some sort this week, but it will be many months before bare ground is again in sight."

The Board of Selectmen scheduled a regular meeting for January 1, 1914. The only thing more remarkable than a meeting on New Year's Day is that two members and the clerk actually showed up. But because no quorum was present, they postponed the meeting until the next day. At that meeting, the board authorized payment of bills for the month of December. The bills included $78.75 for hiring sixteen men for shoveling at the rate of $2.50 per day; $4.50 for a team and chain from H. Holcombe's livery; and $12.50 for a "Nelson and Pearson team." Total cost for snow removal: $95.75.

Guido Haefeli photographed his girlfriend, Viola, as she gazed from the mountain of snow piled high in Denver's Civic Center. The two later married, and Viola donated Guido's snowstorm photos to the Colorado Historical Society in 1968.

Fearful Times

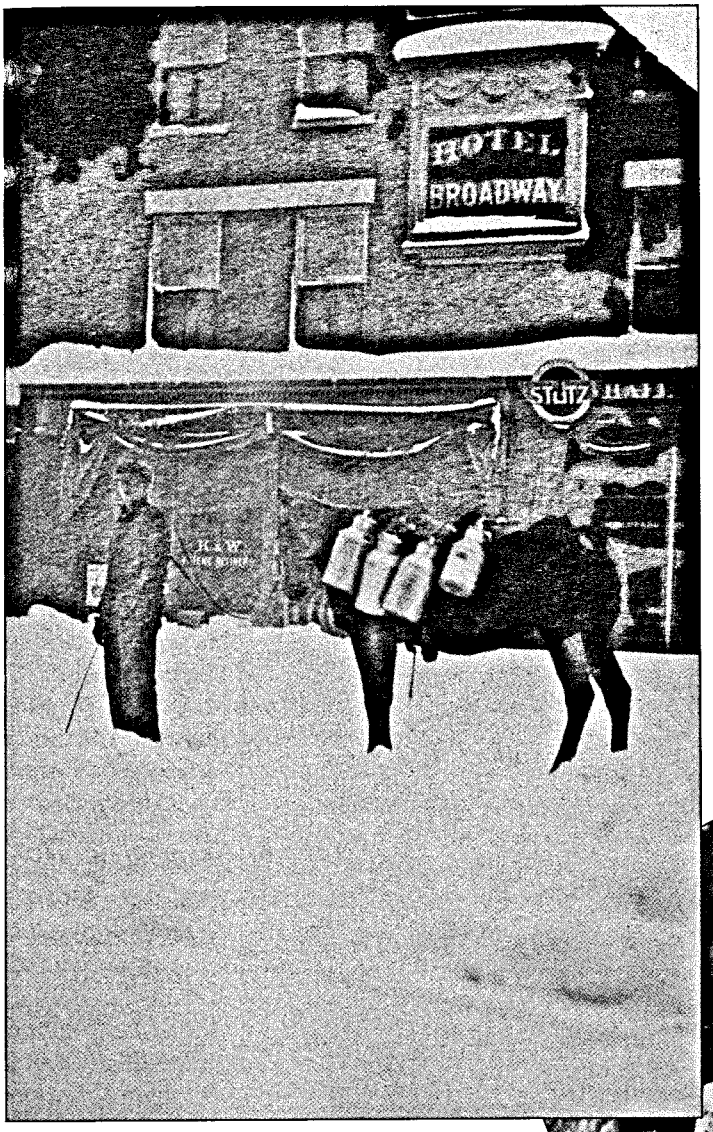
The deep, wet snow and high winds brought with them danger, damage, and even death. Tales were told of heroic rescues of marooned individuals or groups; exhausted homeward-bound pedestrians got caught in deep drifts; roofs and buildings collapsed; snow slides threatened mountain homes and residents; the threat of crime and fire was ever present; shortages of food and fuel grew as time passed; and the deep snows put livestock and wildlife at risk. Only the absence of bitter cold temperatures helped keep the death toll down. Nonetheless, deaths were a tragic and inevitable result of the storm.

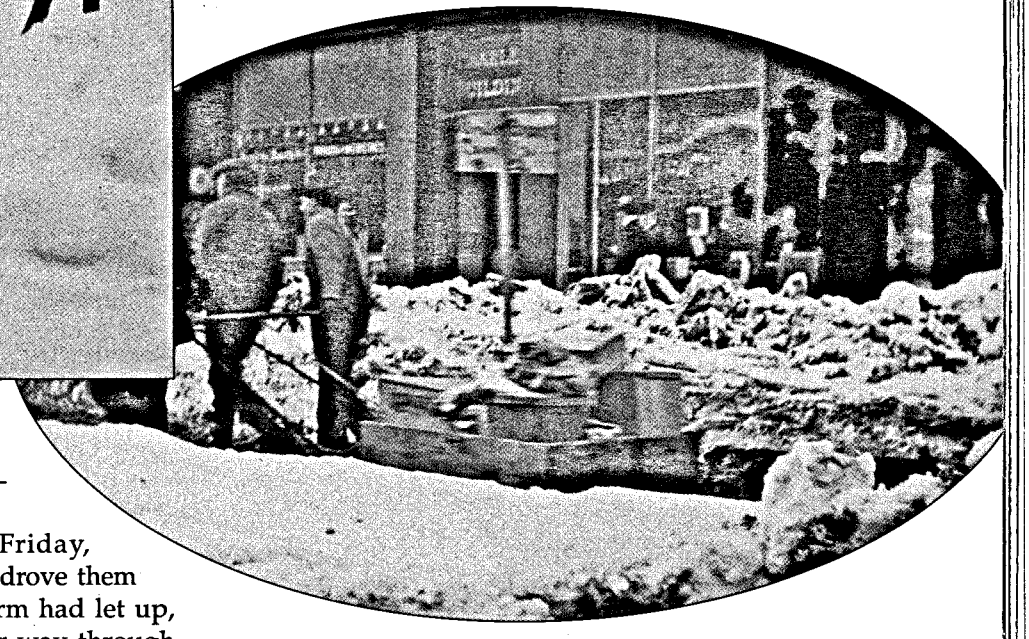
Early on, the press ran reports of people missing in the storm. Many were later found to have taken shelter; they had simply been unable to make contact with friends and family. A tragic exception was George Buzbee, a seventy-seven-year-old driver of the mail stage from South Platte to West Creek. Buzbee set out on December 3 to deliver the mail to Deckers and West Creek and never returned home; searchers found his frozen body ten days later. A dairyman from the Golden area also got lost in the storm when his wagon overturned. He apparently began following the fence toward his home but, like Buzbee, never made it. For three weeks, search parties looked in vain for him. In January they finally found his frozen body, still buried in a drift 150 feet from home.

Another casualty was Thomas Jones, a homesteader who lived on his ranch between Eldorado Springs and Marshall. The *Boulder Camera* reported that Jones died of exposure near his cabin. In 1998, his two granddaughters, Ruth Barber Marymee and Merle Barber Garrett—ages seven and three at the time of the storm—recalled that their grandfather's frozen body was found upright in the Marshall Ditch.

In Gilpin County six men set out during the height of the storm to rescue a miner who had failed to return home. When they finally found him in a cabin at Lake View, the miner was in serious condition from exposure. The men brought him out, returning to Central City at 2 A.M. Friday morning, themselves suffering from exposure after digging through snow four to five feet deep.

In other cases, stranded groups set out on their own to find safety and shelter. One such group was the Lariat Trail road construction crew atop Lookout Mountain. Just as the storm hit, the crew had run out of feed for its more than two dozen workhorses. According to one account, the men set





With roads impassible and people in need of food and supplies, Denver delivery services resorted to creative means of getting around. Photos by Guido Haefeli.

those who were marooned. In one case, two hundred volunteers managed to reach nine tourists stranded at the Mont Rose Inn in the Loveland Canyon, on the Estes Park Road. The tourists had been marooned for a week and their rations were nearly exhausted. To reach them, the rescuers dug through snowdrifts ten to twenty feet deep for a distance of more than three miles.

Even in Denver and its suburbs, many families were snowbound in their own homes and unable to get food or fuel. One dairyman from Golden did manage to make deliveries to his most critical customers—babies, children, and the sick—by hauling a load of milk to them on a hand-drawn sleigh. In Denver, supplies were available but delivery was often not an option. Grocery stores reopened shortly after the storm ended and even stayed open on Sunday, December 7, but grocers were unable to make deliveries to residents for several more days. The *Post* opened its coal yards to the public on Sunday, making coal available for $3.55 a ton to anyone who could come and haul it away.

After two weeks, many suburban Denver residents still could not get coal delivered to their homes. Snow still choked outlying residential streets and alleys, and, more importantly, the city still employed two hundred teamsters to haul snow from the central parts of town, thus making their wagons unavailable for hauling coal. As household coal bins emptied, a mid-winter heating crisis loomed. Recognizing the emergency, the city commissioners agreed to suspend snow-hauling operations on Saturday and Sunday, December 20 and 21, and urged the teamsters to use their wagons to haul coal during those two days; about 150 responded, much to the relief of a grateful and shivering populace.

out for Golden with their horses on Friday, December 5, but the intensity of the storm drove them back. On Saturday morning, after the storm had let up, sixteen men armed with shovels dug their way through drifts as high as fifteen feet and finally made it to town with their horses after twelve hours of struggle. The *Transcript* reported that the men "waded, plunged and fell down the mountains and arrived here at seven in the evening, having been thirteen hours making the trip." The only mishap was that one horse fell off the grade, "tumbling 200 yards down the mountainside, before he landed in a bank deep enough to halt him. The horse was dug out, fortunately not much worse for his misstep."

As the days wore on, it became ever more critical to reach

Someone—perhaps the unidentified woman in the picture—kept a tiny, handmade scrapbook of images such as this one, nearly all depicting the same woman in the snow outside this home, all carefully pasted onto scraps of black paper. Today the book is in the Colorado Historical Society collection.

In the isolated mountain towns, stocks of provisions often dwindled or ran out before residents could breach the blockade. Central City's three markets completely sold out of eggs, butter, and meat by December 9. On the other hand, many rural families fared relatively well. Chris Dawson, a fourteen-year-old who lived near Sugarloaf, recalled in a 1986 interview that mountain families generally kept well stocked with provisions and they had cows, chickens, and "plenty of spices."

Even pedestrians moving about the streets of cities and towns were subject to dangers. In two separate instances during the storm on Thursday evening, Denver patrolmen came across women caught in deep drifts alongside sidewalks. Both women were unconscious, but the patrolmen revived them and took them to a shelter for the night. On Saturday night, two young Denver women trying to walk home from work through the deep snow fell exhausted into drifts and were rescued by two men who happened by on skis.

Snow sliding off roofs onto the ground below posed a more widespread hazard to pedestrians. Denver's Mayor Perkins cautioned pedestrians to watch out for these urban snow slides, and he urged owners of buildings to clear their roofs to prevent collapses and unexpected sliding snow.

Despite precautions, throughout the region collapsing roofs caused the greatest damage resulting from the storm. Structures of all types and sizes gave way to the heavy, wet snow. The *News* reported the collapse of nine buildings in Denver, with one hundred more candidates. The downed buildings included the Calvary Baptist Church, which was under construction; the Colorado Motor Company building; a shed at the yards of the Leyden Coal Company; a large warehouse of the Colorado Machinery and Supply Company; and three new shops. Some occupants suffered injuries, but most escaped unharmed. When the coal-yard shed collapsed, two men were buried under tons of debris, but survived uninjured. The night watchman at the motor-car company, also unharmed, slept through a roof collapse and was still asleep when police found him. Some of the autos on display did not fare so well—they were "mangled" by the falling roof.

In Colorado Springs, the heavy snow crushed the Colorado Midland bandstand, a familiar landmark to tourists of the time. The roof of the Antlers Hotel livery collapsed and buried twenty-six horses, all of whom survived. The roof of the livery in Golden also collapsed, smashing hacks and buggies. The heavy snow did extensive damage to the buildings of the Golden Pressed Brick Company, and their clay pits filled with snow. In Cheyenne, a portion of a depot collapsed. In Cripple Creek, wind was the culprit: It blew out the display windows of two dry goods stores and ripped the roofs off other buildings.

In contrast, Georgetown structures appear to have escaped much damage. The only story of storm damage the *Courier* could muster was about a near-miss: "Snow was piled up so deep on H. Holcombe's livery stable that the roof began to sag, and it was only by diligent work that serious damage was avoided."

But Georgetown and other mountain towns did not escape another major hazard, that of snow slides. A snow slide killed a miner in Silverton. Slides also tumbled down Sherman Mountain, Republican Mountain, and Griffith Mountain in the Georgetown–Silver Plume area. In Silver Plume, the slide from Sherman Mountain carried three buildings off their foundations. A woman and her three children occupied one of the buildings, but rescuers took them out uninjured. The *Courier* provided the details of the damage wrought by the Griffith Mountain slide:

> The snowslide from Griffith Mountain last week, after filling the deep railroad cut, shot across and broke through a window at the home of H. Nash, filling rooms with two or three feet of snow and covered the roof of a part of the building to a depth of three feet. The railroad cut back of the house probably saved it from being crushed or swept from the foundation. The slide also took a shot at the home of Henry Kneisel, breaking the bathroom window and filling the room with snow. Mr. Nash lost his chicken house and about a dozen chickens, others being dug out alive. Mrs. Parker's chicken house was partly wrecked and the kitchen of her home was well nigh demolished.

Unfortunately, Henry Kneisel, of Kneisel and Anderson fame, and Harry Nash were twice-bit by the Griffith Mountain slide. When the rotary plow finally made it to Georgetown on December 10 and started working its way up to Silver Plume, it had to clear the snow slide in the cut behind the Kneisel and Nash houses. As described by the *Courier*:

> The reflex from the Griffith mountain snowslide hit Henry Kneisel harder than the slide itself. When the rotary snow plow got at work to the cut back of Mr. Kneisel's house, it sent a stream of packed snow, rock and chopped wood through eight lights of glass, each 20 x 32 inches and filled three rooms with a conglomeration that kept Mr. Kneisel at work for several hours. Harry Nash, who had just succeeded in removing the snow that the slide left on his house and in his yard, was again deluged with snow and his home buried three feet deep in packed snow that cracked the plastering overhead and broke out a window and filled a room three or four feet deep.

At the peak of the storm, many expressed concern over the threat of crime, given the inability of police to respond

effectively. Remarkably, few crimes occurred—partly because criminals, like everyone else, were not very mobile, and partly because many proprietors stayed in their shops overnight. An exception was a burglary reported by the *News*:

> Taking advantage of the storm and the handicap to police vigilance, thieves broke in a display window of the Keenan Sample Jewelry company's store, sixteenth and California, Thursday night and carried off $600 worth of diamonds.
>
> The theft was not reported to the police until the store opened at 9 o'clock yesterday morning.

Fire posed a grave threat as well. The *News* noted that a large blaze could "peril the city" because only the lightest fire-fighting equipment was able to make it through the snowbound streets. In one case, fire chief John Healy and his crew became stuck in the snow banks; the men had to slog on foot to the scene and literally kick out the fire. A quick-thinking homeowner—told by the fire operator that fire-fighting equipment could not possibly reach his home—hauled snow from his yard to put out a small household fire.

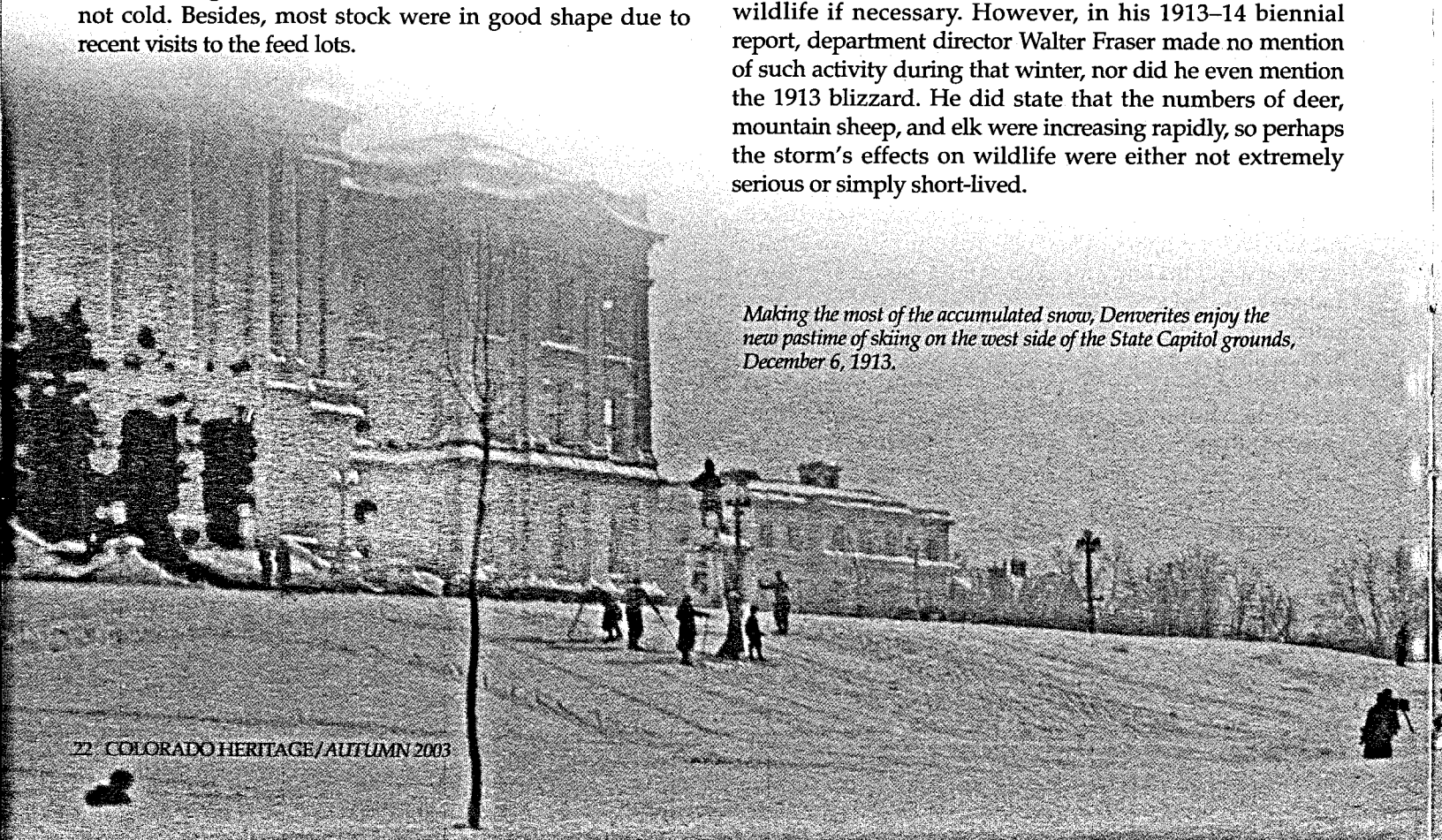
Humans were not the only ones to suffer during the storm; livestock and wildlife struggled to survive in the deep snows. Reports of livestock losses were mixed. Early reports expressed concern about potential large-scale losses, but later reports assured readers that stock were faring well. Livestock could go two to three days without food, ranchers knew, as long as water was available and the weather was not cold. Besides, most stock were in good shape due to recent visits to the feed lots.

Still, during the week after the storm, reports of losses filtered in. South and east of Colorado Springs, they proved to be heavy, with entire herds having perished. Farmers and stockmen finally making their way into Longmont on skis and snowshoes reported that hundreds of calves had died. Many of the ranchers tried to force their cattle through the snow as a means of breaking a road over which to haul feed. Some farm families undertook heroic efforts to keep their sheep alive—digging them out and keeping them moving so they didn't bog down, panic, and die.

The deep snow particularly imperiled stock in mountain areas. Near Idaho Springs, three hundred head of cattle were in danger of perishing, and farmers could not get to them to feed them. According to a Forest Service report, five horses died out of a range herd of twenty-two near Ward, and Enos Mills in Estes Park lost four horses.

Reports on the status of wildlife were also mixed. Bird lovers urged city dwellers to remember to feed the birds. North of Denver, a ditch superintendent found scores of pheasants, quail, and other game birds dead of starvation. Deer reportedly approached homes seeking food. A forest ranger in Allenspark "located a herd of six deer, including bucks, does, and fawns, which were utterly exhausted by their vain search for food, and were so near starvation that they did not avoid attempts on the part of the rangers to help them." In contrast, forest rangers reported that elk in Estes Park were in good condition.

The Colorado legislature in 1909 gave the State Department of Game and Fish the authority to winter-feed wildlife if necessary. However, in his 1913–14 biennial report, department director Walter Fraser made no mention of such activity during that winter, nor did he even mention the 1913 blizzard. He did state that the numbers of deer, mountain sheep, and elk were increasing rapidly, so perhaps the storm's effects on wildlife were either not extremely serious or simply short-lived.



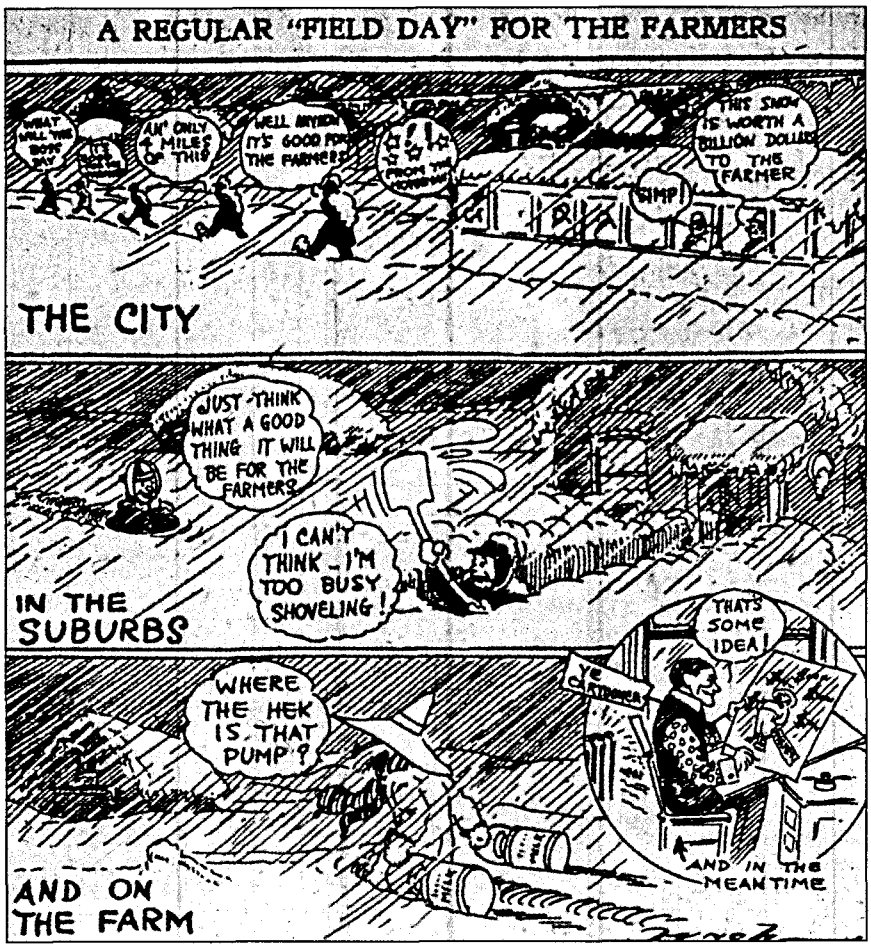
Making the most of the accumulated snow, Denverites enjoy the new pastime of skiing on the west side of the State Capitol grounds, December 6, 1913.

Jolly Good Times

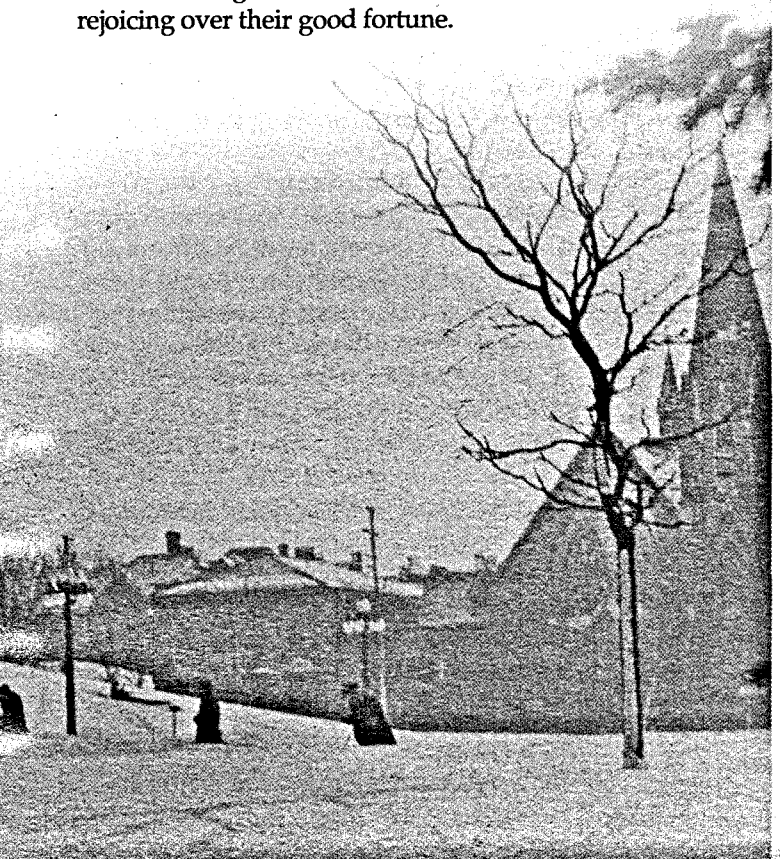
The storm was not all about hazards and hardship. When temporary disruptions occur, they can create a bonding among strangers, an lifting of the human spirit, and expressions of good cheer, cooperation, and support. To a great extent, this was the case with the blizzard of 1913. In Denver and the Front Range, a decided atmosphere of light-heartedness prevailed—"everybody jollifies," the *Post* proclaimed.

Rejoicing came early in the week, after the first round of snow had fallen. After three months of dry weather, people regarded the precipitation as a bonanza for farmers. The snow cover would hold the winter-wheat seed in place and provide moisture for the parched and as-yet-unfrozen soil. Plus, the heavy mountain snows would make for a plentiful irrigation supply next year. Indeed, the farmers were jubilant with the fall of the "white wealth," and agriculturists predicted a bumper crop of winter wheat for 1914.

As the week wore on and the snow piled up, city dwellers, suburbanites, and mountain dwellers, all struggling to cope with the snow blockade, could take solace in saying, "At least this is good for the farmers!" But, as a *News* cartoon shows, the farmers themselves were also struggling and were more concerned about meeting their immediate needs than in rejoicing over their good fortune.



A Rocky Mountain News *cartoonist reflects on the ironic situation of the farmer, who was grateful for the moisture yet even more isolated than the city dweller or suburbanite. The cartoonist even takes a jab at himself, comfortably cartooning in his heated office.*



Meanwhile, "levity galore" prevailed in the hotels of Denver. On Thursday evening at the Shirley Hotel, the young women telephone operators "took possession of the banquet hall and turned it into a ballroom, where they held an impromptu dance." The hundreds of men and women clerks from the dry goods stores, marooned for four days downtown, had a "jolly good time" despite the lack of night clothes, shaving gear, and laundry facilities. "When everyone is in the same situation," said one, "a little hardship like that is just a lark."

The *News* reported "an epidemic of sleighing parties." Those who joined the skiing outings at the Country Club and on Capitol Hill were full of merrymaking. The new sport of "automobile skiing" was also proving to be great fun. And passengers on delayed trains reported, upon disembarking, that everyone had had a "splendid time."

The *Post* dwelled on this theme throughout. On Friday, after the first day of heavy snow, the paper proclaimed there was no suffering, no loss, and no cold, so "why be peevish?" Even after reports of hardship filtered in, the *Post* referred to

A rotund snowman stands outside the Tabor Grand Opera House in Denver. The adjoining sign titles the scene "December Morn."

montage of headlines from eastern newspapers, all describing the Colorado storm as if the state had been wiped off the map. It was boosterism at its most blatant. The crowning blow came on December 10, when the *Post* added a postscript to its mantra: ""Tis a privilege to live in Colorado, where no one fears a snowstorm and blizzards are unknown."

workers who "hurried here and there, hustling, bustling, whistling, singing—and all happy." Everyone exhibited a "spirit of assistance and of gladness and happiness and friendly feeling," and there was "not one who grumbled." In the flowery language of the times, the *Post* babbled on:

> Beneficent, Bountiful, Colorado—What a snowstorm you are giving us! And what untold wealth you are scattering over mountain, valley and plain, and beloved state what a fascinating, emotional and flirtatious creature you are, after all! But for your extremes of sunshine and snowstorm, we love you all the better, because gracious and thoughtful mother that you are—you are as generous as you are beautiful. Storms that would devastate other sections and other countries, hold nothing but benefits for YOUR children, who are even now laughing, playing and joking about your latest prank, for behind your serious look, we see your sweet smile of generous gifts and prosperous season, laughing rivers full to the brim, and shining lakes and reservoirs to gladden and make fruitful our lands.
>
> So we salute you with reverence and love and good cheer and thankfulness and happiness.

Almost daily the *Post* repeated the mantra, ""Tis a privilege to live in Colorado!" It spoke scornfully of a November storm of similar magnitude in Cleveland, which locals there viewed as a "catastrophe," as compared to the mere "inconvenience" the Colorado storm posed. The paper printed a

The Stories People Tell

During and after the storm, the local newspapers printed dramatic accounts of rescues, survival, and hardship. But other stories remained untold: stories of how ordinary people coped and what they saw or experienced. Over the years, letters, diaries, family stories, and now interviews have revealed more intimate tales of the storm. Few witnesses remain who recall the storm directly. But some of them, and the families of others who experienced the storm, have shared their stories. Some of their accounts have never been published. Here are a few.

Letter. In 1994, Neil Hamilton forwarded to Nolan Doesken, Colorado Climate Center, a letter Neil received from his mother, Ruth, in December 1963. In 1913, the Hamilton family lived on a sugar-beet farm southeast of Loveland; Neil was two years old. Ruth's father, G. A. Hamilton ("Father Hamilton" in the letter), had homesteaded farms near Loveland as early as 1882. Ruth sent the letter to her children to document her family's story of the blizzard of 1913:

This weather through November, 1963, has been more like the Indian Summer days of October than days approaching the winter season. It turned my mind back to fifty years ago, the year of the "Big Snow." Such a storm I have never seen again, but it could happen. We were living across the road from Neil's home, in the little square house on Wayne's place. We had two brothers working

for us, last name George, who had a homestead over around Pawnee Buttes near Sligo.

Beet harvest had just been finished. We used wagons and horses then. The horses were full-blooded Suffolks, imported by Father Hamilton from England. All were in prime condition, they had worked hard, been well fed and grained during the beet harvest. Before they were turned out in the fields for winter, Father Hamilton sent four wagons and teams to the coal mines for our winter's supply. Alex, the two George boys, and Garney went to the coal mines on November 30. It took a whole day to make the trip by wagon and get loaded. The next day they started home. Neil was a little boy and Wayne was lacking just a few days of being one year old. The men at the mines started home early, which was most fortunate, for it turned cold and snow began to fall. We had a little Holstein calf tied to one of the black locust trees, just a few steps west of the house. I had a time getting that calf into the barn, but I pushed and wrestled him in. The boys were too small to help.

By four o'clock that afternoon we were all worried. Father Hamilton went out on the store porch about every half hour to scan the road to the south with his field glasses. About eight o'clock here they came—it is a wonder they made it. Three wagons pulled up in the big barnyard and one down in our yard. Men and horses were exhausted. Horses without the staying qualities of those Suffolks would never have made it. When the wagons stopped, the horses stood trembling and had to be literally beaten to get them to move to the barns for shelter. Bits were frozen in their mouths. How silently animals suffer!

It snowed all day the next day—there was a good forty inches on the level. Men on horseback, neighbors helping each other, lined up single file to try to break a path to get into the roads and fields to open up hay stacks so that animals could get food. We had a big rangy mare named Matchett, who stood high and long-legged, the snow scraped her belly. She was put in front of the line to make the first break in the snow, for the other horses to follow. It was all the horses could do, they were almost exhausted just trying to break a path. I remember watching from the window and seeing the line stop every ten yards or so to let the horses rest . . . .

The roads weren't opened for ten days or two weeks. Men put ropes around their chests and pulled sleds up to Myron's store to get a sack of coal or a sack of groceries, and pulled the sled home again. The stock of groceries at the store and the four loads of coal were a godsend to dozens of families. There was no mail for at least ten days. In a couple more days the weather cleared up, but the winter was cold and the snow stayed on until spring; it melted slowly. One of the George boys went hunting most every day—over the snow. We had a row of eight or nine dressed jackrabbits and cottontails hanging on the north side of the house, all the time—and we ate them, too. I have had a great admiration and respect for jackrabbit pie ever since.

I don't remember any Christmas that year, no one could get any place. It was six weeks, well into January before I got into town. Even that late the drifts along the sides of the roads were four and five feet high, as high as the fences. It was like driving between barricades, almost. A car would have been more useless than a tricycle. No wonder man still has an inborn affection for horses. When I did get to Loveland, I heard some women bewailing the fact that they "couldn't even get their groceries delivered." Such a hardship that must have been!

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Family story. Karin Bond of Denver shared a story that her parents have passed down. Karin's mother, Georgia Anderson, was thirteen at the time of the storm. She lived with her parents, her younger brother, Karl, and her five-year-old sister, Helene, on the 400 block of Ogden Street in Denver. After the storm, the children's father dug a tunnel to the house next door so that young Helene could visit her playmate there. He made crude skis from boards, and the two older children explored the neighborhood on top of the snow while their sister crawled beneath the surface in her private tunnel.

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Diary. Lillian Rachofsky lived in Denver. She was probably a teenager at the time, and she kept a diary. Her entries suggest that she was more interested in the attention of young men than in the weather, but the storm does rate a comment or two:

Mon. December 1.

Snowed awfully hard. We stayed home all afternoon. I sewed on my hat. Sam Harrison phoned and asked me to go to the Orpheus. [The] bill was pretty good and I had a very pleasant evening. He had his machine and I enjoyed the ride in spite of the cold. . . .

Tues. December 2.

Downtown in aft. with Elsie. Went to two picture-shows. Murray over in eve.

Wed. December 3.

Downtown for a while in aft. Then went to Caroline's dancing. . . . Letter from Murray.

Thurs. December 4.

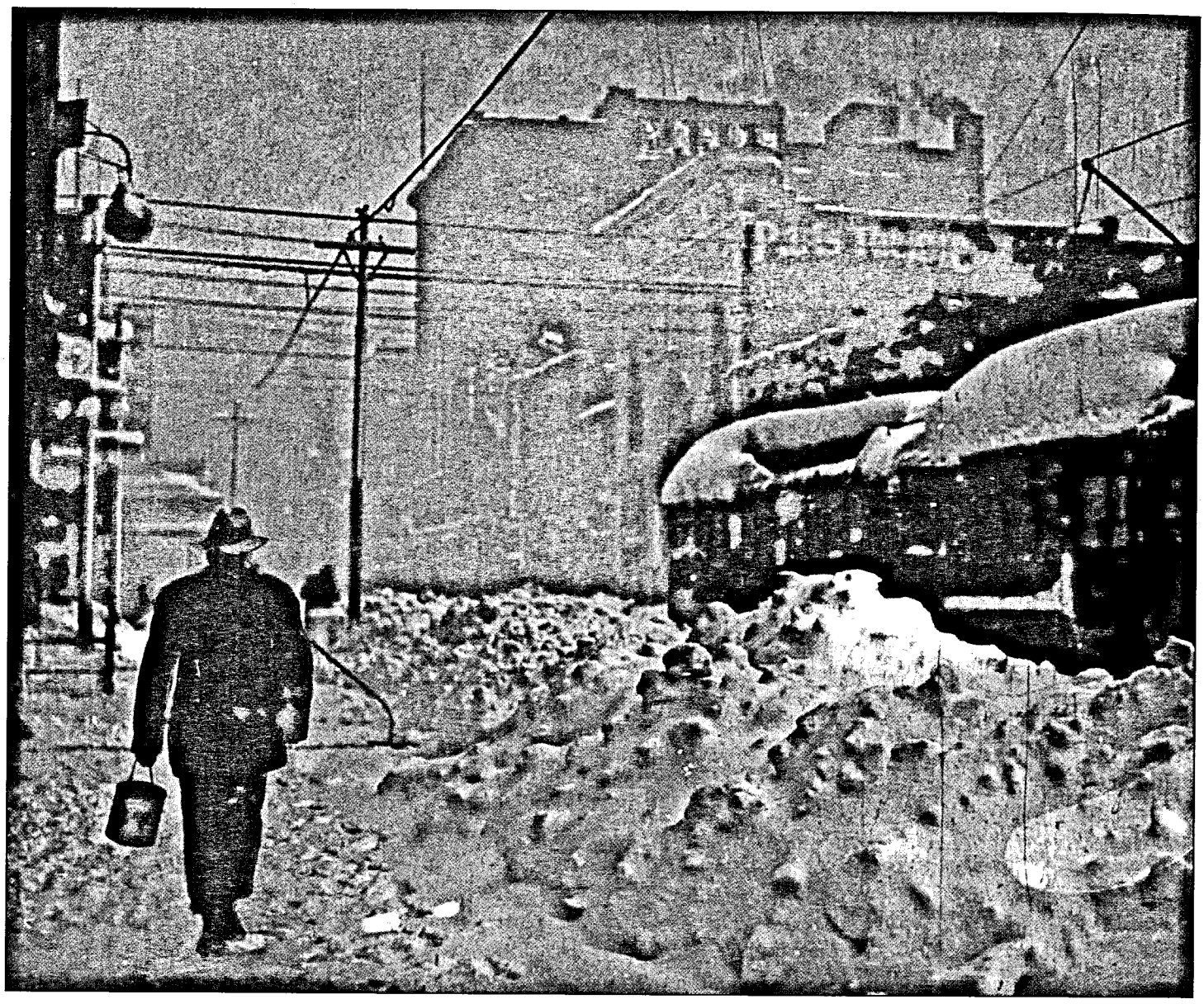
Terrible storm. Was to go to the Broadway with Murray but the street-cars weren't running. He ordered a taxi but it came late so we couldn't go. Home in the eve. Went to bed early.

Fri. December 5.

Still storming terribly. I've never seen anything like this. There are about two feet of snow now. No cars are running, not even vehicles of any kind and you can't even get provisions. The lights are out all over town. Sewed all afternoon. Murray and Edwin braved the storm and came over to see us in the eve.

Sat. December 6.

Marvin phoned. He had just gotten in. Was snowed in 57 hours near Brush, Colo. Wanted to see me in aft. but I couldn't see him.



A bleak and chilly scene in downtown Denver.

Went to see "The Lure" with Murray. Liked it very much. We walked downtown and back as the cars aren't running. It's a sight to see the hundreds of people walking to and from town. Postponed our Tango Class on account of weather. Murray and Edwin here for supper and eve. Marvin phoned and I wanted to see [him], and I felt peeved 'cause I couldn't. Murray got peeved also.

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Diary. In 1880, twenty-two-year-old Herbert Alonzo Howe became Denver University's first astronomy professor. He served as dean of the College of Liberal Arts from 1892 to 1926, at which time he was also director of the Chamberlin Observatory. In 1880 he began keeping a journal of his daily activities, a habit he kept up for forty years. His grandson donated the twenty-two-volume collection in 1998 to the university's Penrose Library.

Monday December 1st, 1913.

Awoke to find a snowstorm raging, which lasted all day. The chapel service was omitted on account of it. . . .

Tuesday December 2, 1913.

Found the snow six or eight inches deep on the level, and drifted in places to a foot or more. Had a hard time before breakfast working the snow plow. . . .

Wed. December 3, 1913.

Three or four inches of snow fell last night, so that the snow on the walks seemed about one foot deep. . . .

Thursday December 4, 1913.

It snowed fiercely all day, the snow being one of the largest falls ever seen here. The cars stopped running to University Park about three P.M. We called off recitations in the afternoon. . . .

When I came home I started about 530. I think it took about 20 minutes to get home. In some places drifts were three feet or more in depth. . . .

Friday December 5t 1913.

It snowed all day long till about 7 P.M. There was much wind at times but it was not cold. Grandpa has never seen the snow so deep out here, nor have I. It is in one place on a level with our back fence. North of the house is a drift about 4&1/2 to 5 feet high. The few who venture out are on improvised skis. We spent much of the day making skis. Grandpa ventured to the Post Office in the day, having great difficulty in getting there. When he wanted to come back in evening he could not come without rude skis which Warren took to him. Ernest enjoys going about on them. I went to the observatory early in the morning, but did not venture away from the premises the rest of the day. Traffic is completely tied up in town. No cars are running. Hubert Shattuck is unable to get home from his office; he tried to get home last night but failed. . . .

Saturday December 6, 1913.

Made new skis for Warren. So there are three good pairs now about the premises. I shoveled some paths in the back yard where the snow was in places 4 feet deep. I also shoveled a good deal on the front walk, helping to make a certain path through the snow. The sun shone brightly practically all day. The snow seemed to be pretty heavy. Uncle Bert reached his home, having had to walk on skis from about 1st Avenue. I fell asleep in my chair several times in the day, when I was writing or reading. . . .

Sunday December 7th, 1913.

At about 7 o'clock the thermometer was 12 degrees above zero, but it got much warmer during the day. People in the Park got around on skis, whole families going about on them. I stayed at home all day, not going off the premises. The sun shone all day, but did not make much impression on the snow. Several of the Park people turned out under Mr. Shumway's direction and with shovels and a team broke a sort of passage down Evans Avenue to Pearl. Before night, Broadway cars were out to Mississippi but no University Park cars have gone on to 1st Avenue yet. People can go on skis down Evans to Broadway and then walk to town on a pathway in the street beaten down by traffic. . . .

Monday December 8th, 1913.

Warren and Robert Sherer went to town about the middle of the forenoon to carry the mail from University Park and to bring back the first class mail which has been accumulating in the Post Office in Denver since last Thursday. They went on skis down to Pearl or thereabouts where the walks were cleared so that they could walk to Broadway, having left their skis at the Pearl Market. A Broadway car took them to town. They came back with one of the larger size mail sacks (50 to 75 pounds, Warren thinks) after four P.M. I spent a large part of the day shoveling paths. Several men worked all the forenoon trying to make Warren Avenue usable for teams but no team used it. I made a trip to the University on skis, to wind up the program clock. . . .

Tuesday December 9th, 1913

. . . . Men are at work trying to clear this end of the University Park car line of snow. The Pearl Street cars got through to Jewell [Avenue] during the day. . . .

Wednesday December 10th, 1913.

Another bright day. The sun does not seem to make much impression on the snow. But yet there is evidence of slight melting. The first car on the University Park track came through late in the afternoon. All day today, as yesterday, the telephone was ringing, on account of inquiries as to whether school would start tomorrow. They were answered in the affirmative. . . .

Thursday December 11th, 1913.

School reopened after the storm, with 1/2 to two-thirds of the students in attendance. Cars running often, but not entirely regularly because hindered by teams on the track. . . . Sixteen sacks of mail came out to the university Post Office, on account of the congestion caused by the recent storm.

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Family story. Claudia Kniffin shared these family anecdotes:

My mother, Loraine Barteldes (1926–97) used to tell me stories about her father, Elmer Loraine Kelly (1900–79), and that storm. Elmer, the eldest of several children, lived in Colorado Springs with his family at the time. My mother told me that he went to school on his horse . . . and couldn't get home. He found a small

Two boys enjoy the snow on a farm at today's Commerce City.

cabin and broke into it and spent the next two or three days inside it with his horse. His mother didn't know if he were dead or alive. He was able to return home after the weather cleared.

My father, Frederick W. Barteldes, who was born in 1922 and grew up on a farm in Littleton, says he can remember looking at a picture in the barbershop when he was a child. The picture showed men standing on a pile of snow a few feet high. The snow had been piled there after the storm—probably into huge piles. The picture was supposedly dated May 1914, showing that there was so much snow piled up that it still hadn't all melted by May.

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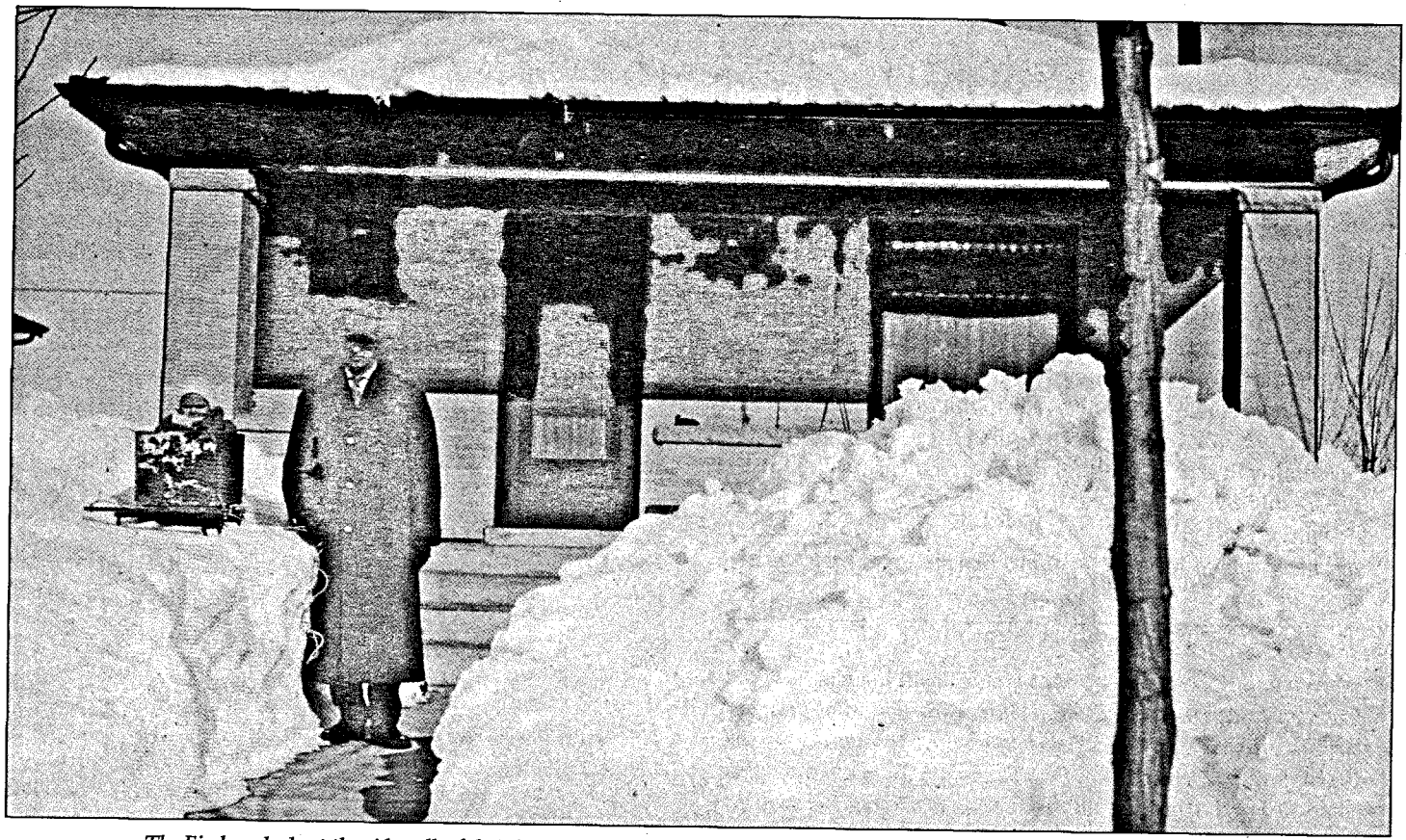
Family story. In 1913, Paul Griffith was a thirteen-year-old schoolboy living on his family's farm near the new town of Milliken. Seventy-three years later, he wrote his recollections of "The Big Snow of 1913" for the *Longmont Sunday Times Call*. An excerpt shows his inventiveness in fashioning skis for the occasion:

Even before the storm, I had been thinking about a ski-making project, following instructions in a wonderful book titled "Camp and Trail Methods," by E. Kreps. I already had the wood for three pairs set aside in our shop. As soon as possible after the storm I made the skis, carefully following Mr. Kreps' instructions to the letter. First I beveled the tops. Beginning slightly ahead of center, I gradually sloped the thickness down from one inch to slightly more than a half-inch. The next step was to make a deep groove in the middle of the underside. So far, so good, but how was I going to curve up the front ends of the skis? I solved that problem by bringing a wash boiler of water to the bunk house and placing it on the old cook stove. I got a good fire going and kept it blazing all day. The ends of the skis were stuck into the water and kept there until the wood was quite pliable. At that point, I stuck the heated ends of the skis between the steps of the stepladder and gradually pulled until there was a fine upward curve. I roped them in place and left them there all night. Next morning I looked at the skis with great pride and satisfaction. They were finished except for some leather loops for the toes of our shoes to stick through. I also rubbed a bar of soap on the underside of the skis.

Now that I had skis, I had to learn to use them. At first, I practiced on a glistening area west of the haystack. It took some doing and several spills in the snow before I was able to propel myself forward. When I could, I ventured out over the road, onto our neighbor's land, and then kept going until I reached town.

Milliken, I discovered was a ghost town. The only person on the



The Firebaughs kept the sidewalk of their house on West Thirty-Ninth Avenue in Denver well shoveled. In fact, they kept a path shoveled all the way to the streetcar line so the doctor could get to their house, as Mrs. Firebaugh was expecting a baby any day. She gave birth to a son, Philip, on December 6. Pictured here are Philip's uncle and older brother the day after Philip was born.

job was the telephone operator who lived above the office. No businessman had yet been able to get from his home to his store. All over town I saw the heads and shoulders of men digging out in front of their homes.

The day school opened, my brother, sister and I arrived on our new skis. We followed this slick mode of travel as long as the snow lasted and enjoyed being the envy of our friends.

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Interview. Ninety-six-year-old Elizabeth "Liz" Hammer Benatti lives in Alamosa and remembers the blizzard well. The Hammer family homesteaded in Colorado in 1910, when Elizabeth was three. Their ranch was seventeen miles east of Colorado Springs. Liz later taught in Fairplay and became superintendent of schools in Fountain; she is saving most of her stories for a book she is writing, but she did share one of her recollections. During the storm two sheep herders were driving sixteen thousand head of sheep to "Blackie's Sheep Camp." The men became lost and then saw the lights in her family's ranch house. Her family took the men in and sheltered them until they could safely move on.

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Family story. Lillie Swanson Singelstad, 93, lives in Windsor. Her sister was born at home on December 13, 1913, when Lillie was three years old. The Swanson farm was five miles due north of Windsor. Dr. Haskell, the new doctor in Windsor, somehow made it through the deep snow to the farm and delivered his first baby that day.

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Family story. William Autrey relates that his mother as a child lived on a farm five miles north of Lafayette, and on each school day she walked three miles to the Lafayette school. After the storm, she walked to school on the deep hard-crusted snow, right over the fences.

Aftermath

Storms come and go, and even for the big ones their hardships and joys become dim memories. But the effects of the blizzard of 1913 lasted longer than most, and some of its effects linger to this day.

The storm added abundant moisture to the nearly three hundred thousand acres of winter wheat harvested in the spring of 1914, but the forecasted bumper crop did not come to pass. The wheat production that spring was indeed greater than that of the preceding year (which was an off year), but much less than it was the following year. In fact, the 1914 yield of 21.5 bushels per acre was just slightly above average for the period.

Today's Colorado ski industry can trace at least some of its roots to the heavy snows of December 1913. Prior to that, skiing was still in its infancy as an organized sport. Carl Howelson, the Norwegian leader of the merry ski parties in Denver after the storm, had been instrumental in promoting recreational skiing. In 1911 Howelson and a companion had skied from Rollins Pass down into Hot Sulphur Springs, where they found a winter carnival in progress. They hastily improvised a small jumping ramp, and Howelson promptly astonished the crowd by flying seventy-nine feet through the air. The carnival organizers were impressed, and the next year the town hosted the first official winter sports carnival in Colorado that included a ski-jumping tournament. In 1913, Howelson visited Steamboat Springs and helped organize that town's first Winter Carnival, held on February 12, 1914. The next year, locals contoured a new jumping hill in Steamboat Springs under Howelson's watchful eye, and in his honor they christened it "Howelson Hill," the name it bears to this day.

Thirty-year-old George Cranmer was among the interested observers of Howelson's ski parties on Capitol Hill in Denver in the days following the 1913 storm. After talking to the participants and learning about their equipment, Cranmer was inspired to take up the sport. Later, as manager of Denver's parks system, he became the moving force behind the purchase and development of the Winter Park ski area, which was dedicated in 1940.

Following the big December snows, the Denver Press Club sponsored Denver's first-ever ski-jumping tournament, as entertainment for stock-show guests. The skiers competed at Inspiration Point in northwest Denver on January 18, 1914. According to the *Post*, "thousands of people thronged to Inspiration point." Carl Howelson awed the crowd with a jump of thirty feet. At a banquet that evening, participants organized the Denver–Rocky Mountain Ski Club, and they formulated plans for an international tournament. Over the years, Denver's marginal snow conditions led the club to move its venue to Genesee, in the foothills west of town, where it dedicated new facilities in February 1920.

Repeat Performance

The Storm of March 2003

As a climatologist, Nolan Doesken's perspective on meteorological matters is longer-range than it is for most weather buffs. In 1993, while observing the eightieth anniversary of the 1913 storm, Doesken noted confidently that "the chances are a storm similar to the Great Blizzard of 1913 can and will happen again." He anticipated that the impact of such a storm would be much greater and costlier in today's busy world, one that is so dependent on sometimes fragile infrastructures and intricate technology.

In early March 2003, Georgetown's town administrator, Paul McKenna, fielded the question of how the town would cope with a storm like the one that hit the area in 1913. Pondering the town's limited resources—finances, staff, and equipment—he shook his head and said, "It would take a community effort!" Two weeks later, hypothesis became reality as a major spring storm that nearly matched the blizzard of 1913 pounded Front Range communities.

The two storms had much in common. Both came in phases and lasted several days. The main phase of each storm resulted from a deep low-pressure area, either stationary or very slow moving, favorably positioned to pump great volumes of moisture from the Gulf of Mexico up against the Front Range. Temperatures were moderate; some wind was associated with each storm, though rates varied greatly from place to place. Both storms have been popularly called "blizzards," though technically neither one qualifies because of the moderate temperatures and, in some cases, calm winds. In Georgetown, for example, nearly calm conditions persisted throughout the 2003 storm.

The 2003 storm confined itself to a smaller area than the one in 1913, although the "bull's-eye" of each was similar: Jefferson, Clear Creek, Gilpin, and western Boulder Counties. In 2003, snowfall greater than 40 inches fell mostly in the north-central mountains along and east of the Continental Divide, principally from the Palmer Divide in Douglas County northwest through Jefferson, northern Park, Clear Creek, Gilpin, western Boulder, and central Larimer Counties, and north into Wyoming. No snow fell in the easternmost row of counties in Colorado, nor in the westernmost parts of the state. Generally, snowfall totals in the towns along the base of the Front Range were less in 2003 than in 1913.

In 2003, Georgetown lost its snowfall crown to the weather station in Rollinsville, in Gilpin County, where 87.5 inches was recorded. (The Rollinsville station did not exist in 1913.) Denver officially had 31.8 inches at Stapleton, nearly 14 inches less than in 1913, but still enough to make it the second-greatest snowstorm on record for that city. Georgetown's total for March 17–20, 2003, was 66.9 inches, but as the upslope storm moved out on the 20th, another storm immediately moved in from the west. This one dumped an additional 10.0 inches on the town by the next day. Still, the total snowfall from the 2003 system was about nine inches less than the one in 1913.

The two storms, separated by ninety years, came at different seasons, resulting in different aftereffects. The 1913 storm hit at the beginning of winter, and persistent cold caused the snow to linger well into the next year. In March 2003, springlike conditions followed the storm, so in Denver the snow cover diminished to a trace in a week. In Georgetown, about three thousand feet higher than Denver, much of the snow melted early, but with the cooler weather and additional snowfall the snow lasted into mid-April.

Unlike in 1913, weather forecasts gave ample warning of an impending storm. Television weather forecasters announced the potential for such a storm a week in advance, and more than day ahead of the storm the National Weather Service and others forecast the likelihood of several feet of accumulation. Many people adjusted their plans to accommodate this outlook. The accuracy and widespread publicity

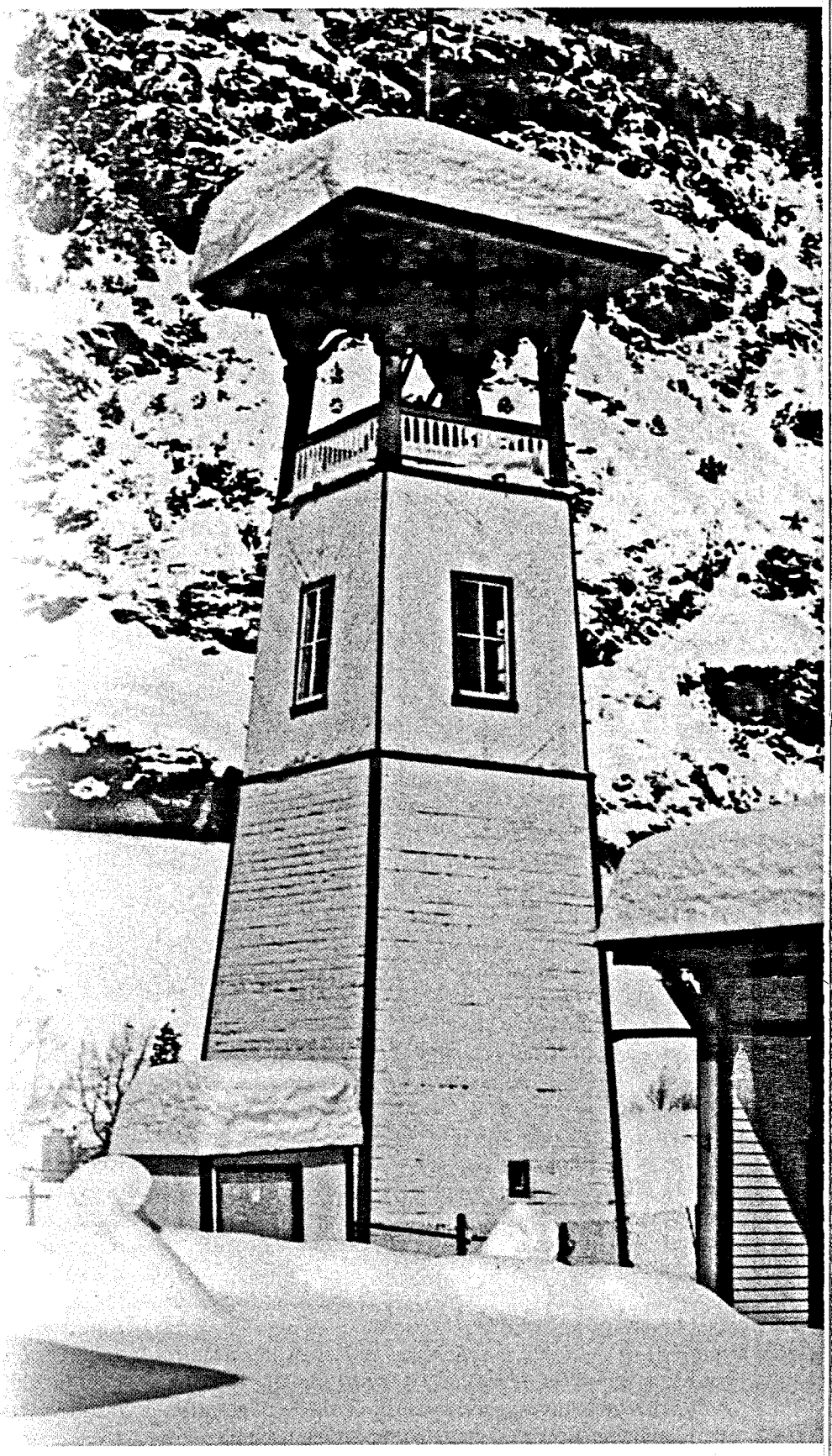
Above: Extracting a car at St. Marys, March 2003.

of the forecasts probably helped keep the death toll down. Only those who were skeptical, uninformed, or with inflexible plans were likely to get caught unprepared.

In many ways the adverse impacts of the two storms were similar: transportation was snarled, power and communications interrupted, closures widespread, deliveries halted, snow removal a headache, thousands marooned, extensive damage endured, and mountain avalanches abundant. Over the intervening ninety years, however, urbanization had spread unabated along the Front Range corridor, and mountain populations had grown enormously, with many people choosing to live in backcountry areas. Thus, the numbers of people and structures affected and the costs associated with the storm were greatly magnified in scale. Denver's Mayor Wellington Webb called it "the storm of the century, a backbreaker, a record breaker, a roof breaker." Although the impacts were greater in 2003, in many cases the responses were prompter and more efficient. As a result, loss of life was not noticeably greater than in 1913.

As in 1913, transportation came to a virtual standstill. Interstate highways and airports—symbols of our most sophisticated modes of modern transportation—shut down for two or more days. At Denver International Airport, four thousand travelers were stranded. In a touch of irony, at least one Colorado resident, facing the prospect of days of delay in Chicago when his flight to Denver was canceled, took the California Zephyr to the Colorado capital and remarked afterward what a delightful, relaxing, on-time train trip it was.

Probably even more so than in 1913, people during and immediately after the 2003 storm resorted to skiing and snowshoeing as modes of transportation. In places like Evergreen, where so many live in remote locations with long driveways or access roads, these tools of travel proved especially useful. As before, skiers made their way down from Silver Plume to Georgetown—only this time they traversed the deserted Interstate 70.



In 2003, the roofs of Georgetown's nineteenth-century buildings fared remarkably well, having already survived the 1913 storm. Shown is the Alpine Hose firehouse on Fifth Street. Photo by William E. Wilson.

The 2003 storm brought widespread power outages. Reports indicate that 140,000 customers statewide lost their electricity. In rural areas, a loss of power meant not only no lights and no heat but also no water, because household well pumps could not operate. Cell phones often came to the rescue when regular phone service ceased or was otherwise unavailable; many stranded motorists could contact family and emergency personnel from their vehicles. Many travelers stranded in motels or private homes could continue to conduct business using cell phones and laptop computers. But even cell-phone technology did not always work: The Loveland ski area had to shut down when an avalanche knocked out its power, its phones, and the power to a nearby cell-phone tower. Although the ski lifts could have operated on backup generators, managers closed the area because the staff had no means of communicating with the outside world in case of emergency.

Snow removal was still a major effort, even with powerful equipment. In Denver, crews worked diligently to clear fifty thousand lane miles. They hauled snow from downtown in huge tandem trucks to parking lots, such as those at Invesco Field at Mile High. Environmental concerns ruled out water bodies as suitable dumping sites, and crews avoided grassy areas such as Civic Center Park and boulevard medians in order to prevent further damage to drought-stressed grass. In rural Jefferson County, crews worked in twelve-hour shifts around the clock to punch at least one lane through 1,700 miles of roads. In Georgetown, small truck-mounted plows proved inadequate to deal with the deep snow, so the town hired a contractor to bring in front-end loaders and dump trucks.

The cost of the 1913 blizzard is unknown, but the cost of the 2003 storm is considered the greatest ever incurred from a winter storm in Colorado.

In many towns, homeowners hired contractors or enterprising workers to clear driveways and excavate buried automobiles. The going rate for a laborer with shovel was fifteen dollars an hour—double the rate that prevailed in 1913, even at adjusted figures. As before, most citizens shoveled their own sidewalks. The mountain town of Rollinsville adopted the motto of "shovel and drink, shovel and drink." Although this approach stands in marked contrast to the "shovel and sing" approach of the 1913 Presbyterian Sunday school class in Denver, the results in terms of snow removal were probably comparable.

Rescues of marooned skiers, travelers, and householders happened more efficiently and quicker in 2003. Instead of crews laboriously shoveling their way to those who were stranded, snowmobiles, snowcats, and even helicopters provided the 2003 means of rescue. At a highway patrolman's invitation, a snowmobiler checked on motorists caught on Interstate 25; a Georgetown resident used his 1969 Tucker snowcat to rescue an individual trapped in Ute Creek Canyon; and when provisions ran low at Eldora Mountain Resort, a military helicopter brought food and supplies to 250 stranded skiers.

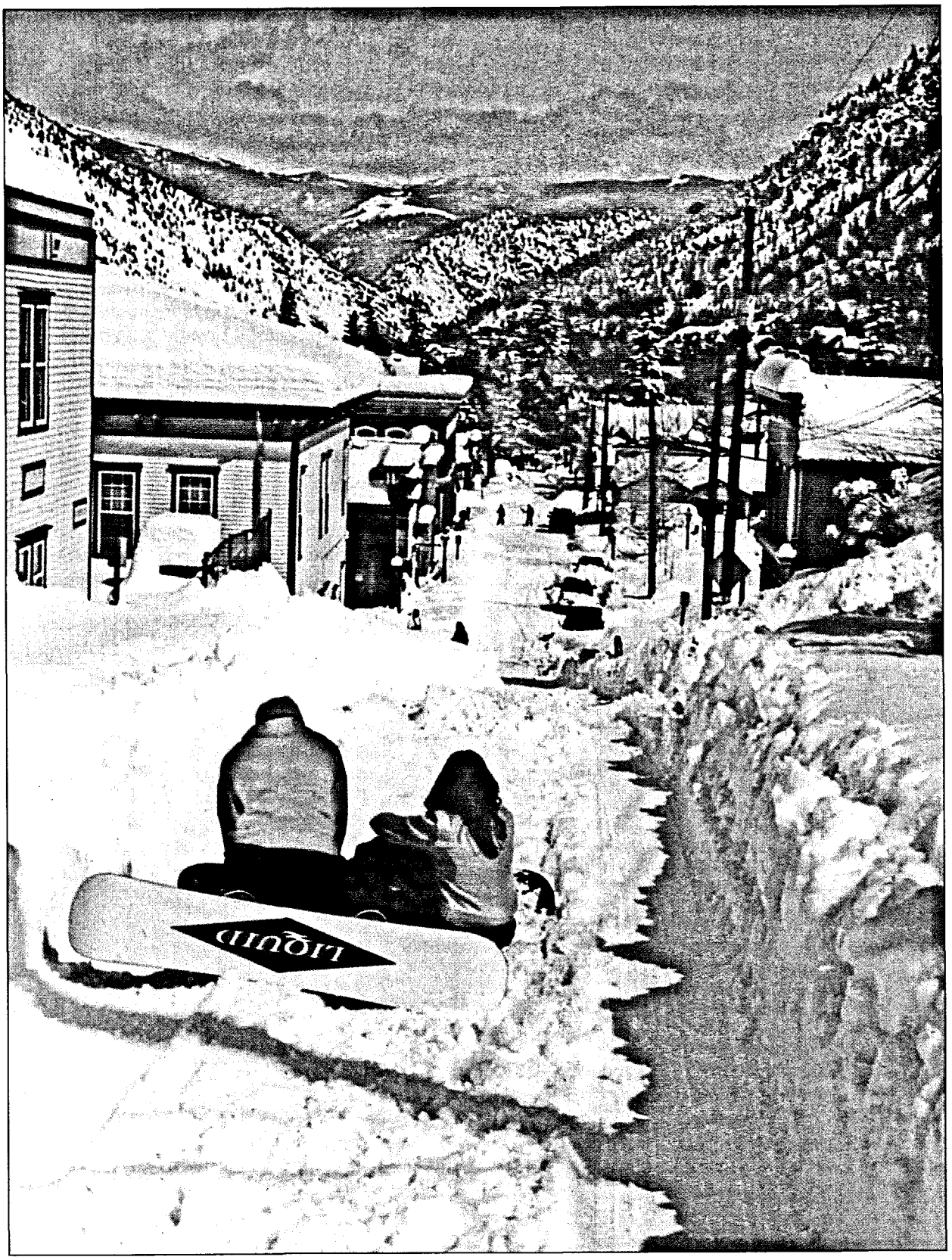
Just as in 1913, many isolated residents survived a week or so holed up in their homes. At one point, Jefferson County sought help clearing roads to reach an estimated fifty to seventy thousand stranded residents, but every available piece of equipment in the region was already in use. Travelers along closed I-70 sought refuge in shelters set up in Georgetown, Empire, and Idaho Springs. Many locals took strangers into their homes for one or two nights until the interstate reopened.

Despite improved building codes, in Denver and elsewhere roofs and walls collapsed under the weight of the snow. (As Doesken notes, "design and reality do not always match.") At one point after the storm, damage was reported in at least 258 structures in Denver. Failures occurred in old buildings, such as the one that housed a popular dance club and other businesses at 1082 Broadway; a resident in the top-floor apartment suffered injuries as the roof came crashing in. Modern structures, too, such as the new Magness Arena at Denver University, gave way. Types of structures unknown in 1913, such as carports, gasoline-station canopies, airport hangars, and supermarkets became victims of the storm. Diligent owners and occupants, like their counterparts in 1913, shoveled snow from rooftops to prevent additional collapses. Here, too, modern technology stepped in: Workers cleared snow from the roof of Buckley's Store in Silver Plume using not shovels but a snow blower.

In Georgetown, the already-decrepit Centennial Mill building underwent further collapse, but otherwise no major damage was reported. Apparently most of the two hundred nineteenth-century buildings in town, having survived the 1913 blizzard, could also withstand the weight of the 2003 snow.

About ninety avalanches swept the I-70 corridor west of Georgetown. Highway crews induced many of these as part of avalanche-control efforts. Some avalanches followed new chutes and brought down great volumes of snow, trees, and rocks onto the interstate. Natural and manmade slides and the subsequent cleanup operations were largely responsible for interstate closures. One death resulted from an avalanche triggered by backcountry skiers between Arapahoe Basin and Keystone.

One 2003 impact that the 1913 newspapers did not mention was the damage to trees in Denver. The tree give-away programs of Mayor Robert W. Speer in the early 1900s



Two youngsters get ready to snowboard down Taos Street in March 2003—recalling the resourceful many who strapped on homemade skis ninety years earlier. Photo by William E. Wilson.

had done much to beautify Denver. Nonetheless, in 1913 trees in the city were many fewer and less mature than in 2003, and thus tree damage from the blizzard was not widespread. But the 2003 storm damaged an estimated one-third of Denver's one million trees. Broken branches and felled trees caused further damage by knocking out power lines, smashing cars, and puncturing roofs.

The overall cost of the 1913 blizzard is unknown, but the cost of the 2003 storm is considered the greatest ever incurred from a winter storm in Colorado. Amounts are staggering: By April, insurance claims alone approached $100 million, and the costs to the uninsured, to businesses, and for rescues would add greatly to that amount. Snow removal cost counties and cities more than $8 million, and the Colorado Department of Transportation estimated its costs for snow removal at $6 million. In Georgetown, snow-removal costs reached $78,000—a far cry from the ninety-five dollars paid out in 1913!

As before, not all impacts of the 2003 storm were adverse. Good times, good cheer, and a spirit of neighborliness abounded. Volunteers delivered meals to the elderly. Adults and kids frolicked in the snow. And whether skiing down the interstate, snowboarding down Taos Street in Georgetown, being pulled on a sled, or visiting with neighbors and strangers, all marveled at the wondrous beauty and drama of the snowfall. Neighbors helped each other dig out and loaned out snow shovels, tow lines, and snowshoes. Everyone had a tale to tell. Once again, "jollity" prevailed.

As in 1913, all rejoiced at the abundant moisture. Once again, agriculturists forecast a bumper crop of winter wheat for the spring. In mid-May, the U.S. Department of Agriculture anticipated that the 2003 Colorado crop would reach 66 million bushels from the 2.2 million acres under cultivation, or thirty bushels per acre. In fact, the 2.2 million acres produced 77 million bushels, more than double the 36.3 million bushels produced in 2002, a drought-ravaged year. The harvest in 2003 averaged thirty-five bushels per acre. In a reflection of how the Colorado wheat industry has expanded in the last ninety years, even in the wet spring of 2003 farmers *abandoned* more acres (400,000) than they harvested in 1914 (300,000).

However, in 2003 the public's focus was more on the mountain snowpack and overall water supply than it was on irrigation supplies and crop yields. Surely this storm would make a dent in the multi-year drought that had plagued the region! In another drought-related benefit, experts forecast that the moisture would promote stability and recovery of the massive Hayman Fire burn area southwest of Denver: The slow-melting snowpack would reduce erosion potential, and the added moisture would replenish soils and enhance plant growth, further stabilizing the loose sediment. Others predicted that the moisture would help delay the wildfire season by a month or more, compared to the previous year.⊶

And, of course, the ski areas benefited greatly by the added mantle of "white gold" that graced their slopes—that is, once the power company restored the electricity and highway officials reopened the interstate.

The blizzard of 1913 is unique in the annals of documented snowstorms in the Front Range of Colorado: No storm has matched the combination of great snow depths, widespread extent, and long duration. The stories tell of good times and bad, but overall the people of Colorado suffered remarkably little, and in most areas normal activities resumed in the span of days or weeks.

The storm of March 2003 nearly equaled that of 1913 and offered a glimpse into what it must have been like to experience that extraordinary blizzard of ninety years earlier. Each storm may also have served as a welcome if temporary distraction for some, for in both 1913 and 2003 war clouds loomed as threateningly as storm clouds.

Coloradans should take the lessons of the storms seriously, because the next great storm may not be so kind. And such a storm is bound to come, whether it be next year or in the next century. In the meantime, take the *Post*'s 1913 mantra to heart: "'Tis a privilege to live in Colorado!"—blizzards or no!

⊶ Indeed, due to various factors the 2003 wildfire season was much less severe than the disastrous fire season of 2002.

For Further Reading

The best sources for accounts of the 1913 blizzard are the reports that appeared in the Front Range newspapers in December 1913. Nolan Doesken provides a climatologist's perspective in his article, "The Extraordinary Colorado Snowstorm of December 1913," *Colorado Climate* 17, no. 3 (1993). For the 2003 storm, newspaper reports, television newscasts, and personal observations served as the principal sources.

The Colorado Historical Society and the Western History/Genealogy Department of the Denver Public Library hold extensive collections of photographs of the 1913 storm. Collections exist in other libraries and museums, such as the Golden Public Library, Boulder Carnegie Library, Morrison Heritage Museum, and Colorado Railroad Museum. Photographs appear in various publications, including David S. Digerness's *The Mineral Belt, Vol. III: Georgetown—Mining—Colorado Central Railroad* (Silverton: Sundance Publications, Ltd., 1982); the Historical Society of Idaho Springs, *History of Clear Creek County* (Denver: Specialty Publishing, Inc., 1986); "And Still It Snows," in the winter 1992 *Colorado Heritage*, which contains brief articles about the early years of the twentieth century; and C. W. Hauck's *Colorado Rail Annual No. 10: Narrow Gauge to Central and Silver Plume* (Golden: Colorado Railroad Museum, 1972). A booklet, *That Snow Storm: Its Flakes, Its Flurries, Its Freaks*, by W. E. Heatley, first published in 1914 (Denver: The Williamson-Haffner Co.), includes brief text and a collection of titled photographs.

Weather data for both storms are available from the Colorado Climate Center, Fort Collins, and the National Weather Service, Boulder. The author is particularly grateful to Nolan Doesken, Assistant State Climatologist, for his support and encouragement of this project; for his invaluable assistance in providing snowfall and other weather data; and for his solicitation of the public for letters, diaries, and other personal reminiscences of the 1913 storm. The author also thanks the many individuals who told their stories through family documents or photographs or directly from personal experiences. ■

December 1913: Everyone's a comedian.