

The photographs William Henry Jackson produced during Ferdinand V. Hayden's United States Geological Surveys of the Yellowstone region in 1871 and 1872 are remarkable documents from Yellowstone's historic era of exploration.

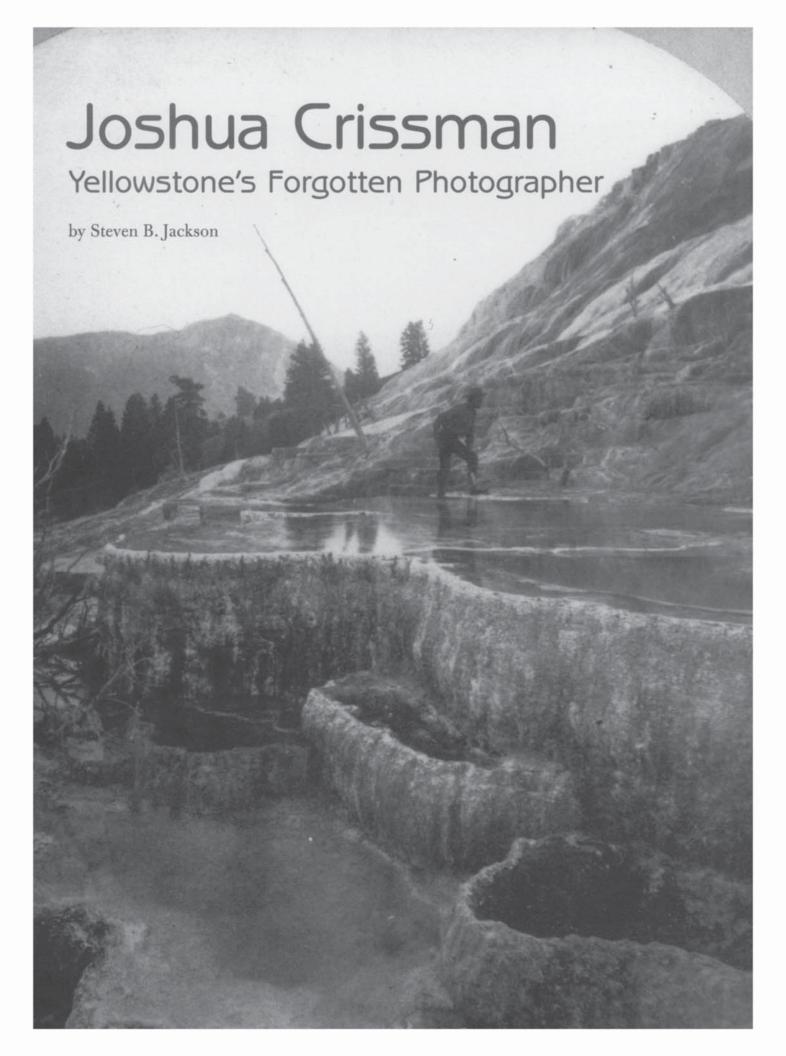
Jackson's photographs provide a record of a place revered for its geologic wonders and natural, unspoiled wildness. They are some of the best expressions of a frontier landscape in the American West. Historians of both Yellowstone and photography have written extensively of the significance of Jackson's photographs, including their influence on the creation of Yellowstone National Park in March 1872.

But Jackson was not the lone photographer in Yellowstone in those years. As Jackson himself acknowledged, two other photographers—Thomas J. Hine of Chicago, Illinois, and Joshua Crissman of Bozeman, Montana Territory—produced images during Hayden's Yellowstone expeditions. Ironically, neither Hine nor Crissman have received the credit Jackson has for their work.

As Jim Brust and Lee Whittlesey explain elsewhere in this issue of the magazine, Thomas Hine and his photographic work suffered a sad fate. Joshua Crissman made similar photographic contributions to early Yellowstone that, like Hine's, have gone unacknowledged. W. H. Jackson speculated in his autobiography that Crissman's work remained unknown because Crissman printed and sold his photographs to a limited local Montana audience. By contrast, Jackson made his photographs popular nationally and internationally through his official connections and shrewd business practices.¹

Indeed, examples of Jackson's Yellowstone photography can be found in numerous public and private collections, while original Crissman photographs of Yellowstone with his Bozeman, Montana, nameplate are rare. Crissman sold an extensive series of his stereo-view negatives to at least three other photographers—W. I. Marshall, E. H. Train, and C. D. Kirkland—who in turn published the series under their names or studio names. Thus, Crissman's Yellowstone views were sold throughout the United States for many years but were credited to others.

Joshua Crissman is yet another forgotten photographer of Yellowstone. His photographs, distributed to a limited Montana audience and often misattributed to the much more famous Hayden survey photographer William Henry Jackson, are rare but not unknown. "Lower Basins, Mammoth Hot Springs" (right, 1872, unidentified man) is an example of a Crissman image credited to Jackson. Crissman compounded his obscurity when in subsequent years he sold many of his stereo-view negatives to at least three other photographers—W. I. Marshall, E. H. Train, and C. D. Kirkland—who published them under their own or their studio names.





Joshua Crissman (below, circa 1880), who moved west in 1868 or 1869, first came to know William Henry Jackson when Jackson and a partner arrived in Corinne, Utah (left, 1869). Crissman generously offered Jackson the use of his darkroom there.

ittle is known about Crissman before he came west in the late 1860s. He was born on July 29, 1833, in Madison, Ohio, to John and Mary Crissman of Pennsylvania, and married Margaritte Elizabeth Stretch on November 16, 1858, in Muscatine, Iowa. The couple had one child, a daughter named Elizabeth. Just when he began his photographic work is unknown, but as a practitioner of the collodion wetplate process he may have begun making photographs during the Civil War or just after.2 Crissman likely began his photographic career in Iowa or Ohio as a portrait photographer, but if so, none of these photographs has been discovered. Crissman apparently came west in 1868 or 1869, following the route of the Union Pacific Railroad. He seems to have set up a portrait studio first in Cheyenne, Wyoming Territory, and then possibly in Ogden, Utah. Whether his wife Margaritte accompanied him or joined him later is unknown, but Crissman, like other early western photographers, stayed in one place only as long as portrait work was plentiful.

The earliest known example of Crissman's photography dates from 1869 in a carte-de-visite portrait of a woman taken in Cheyenne, which has the date 1869 handwritten on the back. That year also offers the earliest known written reference to Joshua Crissman as a practicing photographer. By July 1869, Crissman had moved on to Corinne, Utah, a rough railroad berg newly created along the route of the Union Pacific, for it was there that William Henry Jackson said Crissman loaned Jackson and his partner, Arundel C. Hull, the use of his darkroom. On July 9, 1869, Jackson said, "Crissman (a fellow photographer, whom I was to meet again in

the Yellowstone) was urgent in his invitation to occupy his quarters in carrying on our work, we did so, moving in all our traps and doing our developing in his darkroom. Don't think we could have done anything at all in our tent."³

Little more is known of Crissman's work in Corinne. His arrival there coincided with completion of the transcontinental railroad in May 1869. The town itself was established on March 25 as a terminal base for the Union Pacific and a spur line being built south to Salt Lake City. By the time Jackson met Crissman in July, Crissman had established a studio and darkroom, so Crissman may have been in Corinne as early as May 10, 1869, the date of the official joining of the rails at Promontory, Utah. Other photographers were likely present for that momentous occasion, but only Andrew J. Russell, the official Union Pacific Railroad photographer, Charles Roscoe Savage of Salt Lake City, and Alfred A. Hart, photographing for the Central Pacific Railroad, are known to have photographed the ceremonies.4

William H. Jackson, Time Exposure: The Autobiography of William Henry Jackson (New York, 1940), 202-3.

The collodion wet-plate process, first invented in 1851, had effectively replaced the difficult and more expensive daguerreotype process in the United States by the 1860s.

^{3.} Jackson, Time Exposure, 180.

Charles Edgar Ames, Pioneering the Union Pacific: A Reappraisal of the Builders of the Railroad (New York, 1969), 339.

^{5.} Jackson, Time Exposure, 199.

A. C. Peale, 1871 Diary, U.S. Geological Survey field records, USGS Library, Federal Center, Denver, Colorado (hereafter Peale Diary), copy at the Yellowstone National Park Research Library, Mammoth, Wyoming (hereafter YNP Library).

^{7.} W. H. Jackson, diary no. 5, 1871, pp. 9-10, New York Public Library, New York.

None of Crissman's photographic works displaying his nameplate with Corinne, Utah, on the reverse have been located from this period. Only Jackson notes his presence. Census records from 1870 provide no record of Crissman or his photographic business in Corinne, suggesting that by then he may have moved north to Bozeman, Montana Territory, and thus missed the census. In any event, Crissman had established himself as a Bozeman photographer by summer 1871, when he and Jackson, then one of two official photographers for the Hayden survey, again met.

When the Hayden survey party arrived in Bozeman, having traveled a route north from Corinne to the gold camps at Virginia City, Montana, and then north into the Gallatin Valley, it camped near Fort Ellis. That was on Sunday, July 9, 1871, for A. C. Peale, a geologist for the 1871 survey, noted how they arrived "just as the people were coming from church." Jackson soon discovered Crissman and his Bozeman photographic studio, and sometime during the survey's stay at Fort Ellis, Crissman secured a role as guest photographer on the Hayden survey. Crissman's favor to Jackson two years earlier may have played a role. In any event, Jackson recalled:

There were four of our party making pictures, the two painters, Elliot and Moran, and two photographers. The other photographer was J. Crissman, then of Bozeman, Montana, whom I had met in Utah two summers earlier. Crissman had been taken along as a guest, and made himself fully welcome. A little later I was able to return the courtesies he had

shown me in Corinne, where he let me use his darkroom. When his own camera was blown over into a canyon and destroyed I turned over my old 6-1/2 x 8-1/2 to him for the rest of the trip.5

During their 1871 tour of the park, Jackson and Crissman often shot nearly identical views of the same scenery. In the two stereo views on this page, both titled "Grand Canyon of the Yellowstone," the Jackson image (near right) was taken slightly to the left of the Crissman photo (far right).

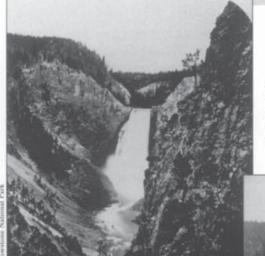
The Hayden party departed Fort Ellis on July 15. Two accounts, Jackson's autobiography and A. C. Peale's diary, mention Crissman making photographs during the expedition. In both cases Crissman was traveling with Jackson and Dixon, Jackson's assistant.6 As a guest photographer, Crissman would have been free to produce and retain his own photographs, but some historians speculate that certain images in the 1871 Yellowstone survey collection may be Crissman's. Although Jackson never confirmed or denied this, a detailed comparison of Crissman and Jackson images from 1871 suggests that Crissman contributed more than companionship and assistance. As Jackson later noted, he had help. "My photographic work naturally kept me separated from the main outfit most of the time during the day," Jackson noted in his diary. "With a pack mule carrying the apparatus and accompanied by two or three companions we made many disgressions [digressions] in search of image material."7

George B. Dixon acted as Jackson's photographic assistant during most of the 1871 survey, and Thomas Moran often accompanied Jackson, but Jackson made no reference to Crissman's activities. Given the difficulties of preparing and processing wet plates, it is probable that Crissman and Jackson collaborated at several locations by photographing side by side, Crissman making stereo-view negatives and Jackson making 8" x 10" views. Several stereo-view images from Jackson's 1871 series that closely or exactly match stereo views Crissman later published suggest a close collaboration between the two photographers. One of these

> images is a distant view of Tower Falls. Jackson's 1871 stereo view (no. 437) is taken from the same location as Crissman's with identical framing. The two stereo views are so similar that the same tripod setting and







Another set of twin views by Crissman and Jackson, both titled "Lower Falls of the Yellowstone," were apparently taken with the same camera after Crissman's equipment had blown over the canyon rim. Jackson's name appears on the photo on the left, and Crissman is credited for the falls image below.

camera may have been used for both exposures. Jackson describes the physical difficulty of photographing Tower Falls in his autobiography. The steepness of the canyon and the problem of getting the coated negatives to the camera position would tend to support the ap-

parent sharing of darkroom tent and camera settings.

A second image-of the Grand Canyon of the Yellowstone where Jackson mentions Crissman's camera being blown over the canyon edge by a sudden gust of wind-shows similar parallels. The camera position in the stereo view (plate no. 447) from the United States Geological Survey (USGS) Library collection is slightly to the left of the Crissman view, suggesting that Jackson took the photograph next to Crissman's camera/tripod set. At this point Jackson and Crissman were working side by side and again possibly sharing Jackson's darkroom tent for coating plates. The striking similarity of exposure and composition at first suggests that one camera was used to expose both plates, but close examination shows that Crissman's view was taken with a stereo camera using a slightly longer focal-length lens than Jackson's, and from a position just to the right of Jackson's. Exact matching of the shadow line on the opposite canyon wall indicates that the two photographs were taken within minutes of each other. It may well have been the last photograph Crissman took before losing his camera to the canyon depths.

A third Crissman view showing the Lower Falls of the Yellowstone River and taken from inside the can-

below (plate no. 239).

vantage point down in the canyon. Only stereo views were taken from this point in 1871, although Jackson later descended to the bottom of the canyon from the east side and made an 8" x 10" plate view of the Lower Falls from There are several possible explanations for why Crissman and Jackson's views are so similar. No 8" x 10" photographs by Crissman from 1871 are known to exist and his need to borrow a camera from Jackson following the loss of his stereo camera suggests that Crissman took only the one stereo camera on the trip. Jackson

yon provides another exact match with a Jackson stereo view (plate no. 439) from the USGS Library collection. Here it is evident that one camera was used to take both views, probably because of

the difficulty in reaching the

saw this loan as a favor returned, but Crissman may have offered or agreed to shoot two copies of each stereo view he made, contributing one copy to the survey series in exchange for the loan of Jackson's camera. It is also possible, although unlikely, that Jackson made additional exposures of some stereo views and shared them with Crissman. In any event, these three images show that, contrary to popular belief, Jackson did not work alone or with only the assistance of Dixon and Moran, but rather that Crissman and Jackson worked together as a team during a portion of the 1871 survey. Crissman continued on with Jackson and the sur-

vey to Yellowstone Lake and the Upper Geyser basins, making stereo views using Jackson's loaned camera. Based on a published catalog of 1871 photographs, Jackson produced only five 8" x 10"s and four stereoview images of the Upper Geyser Basin area, featuring

^{8.} Barlow and Heap, "Report of Reconnaissance of the Basin of the Upper Yellowstone," 30.

^{9.} Peale Diary.

^{10.} Jackson, Time Exposure, 202-3.

the Giant, Grotto, and Castle geysers. Jackson and Crissman gave considerable effort to obtaining "instantaneous" views of the geysers during eruption, a task made difficult by the long exposure times required and uncertainty of each geyser's actions. These efforts may have occupied most of the photographers' time, resulting in Jackson's single 8" x 10" plate view of Grotto Geyser in eruption and an unknown number of stereo views by Crissman. Going by Hayden's and Barlow's written accounts, the two photographers had at least five to six days (August 1–6) for photographing the geyser basins of the Firehole River. The unusually small number of geyser basin images suggests that at this point Crissman was not providing Jackson with additional plates from his stereo work.

According to Captain Barlow's report, Lieutenant Gustavus Doane, dispatched from Fort Ellis, overtook the survey parties in the Upper Geyser Basin on August 7. Doane brought orders for the general military escort's return with the exception of two detachments of six soldiers each.⁸ The Hayden party, including Jackson and Crissman, returned to the Yellowstone Lake camp that same day. The Barlow party returned the following day. Peale noted in his diary on August 8 that Crissman and a number of others had "started back with the pack train."

Thus, according to Peale, Crissman left Jackson's company, returned to Bottler's ranch, and then traveled on to Bozeman with the military escort from Fort Ellis along with several survey members. Dixon, Jackson's assistant, also left for the Bottler ranch with Crissman. Jackson may have sent Dixon back to Bozeman with a load of completed glass negatives, which would have allowed Jackson to lighten his burden considerably. It is also possible that Crissman and Dixon made some early albumen contact prints from expedition negatives using Crissman's Bozeman darkroom. Jackson continued to make photographs in Yellowstone until August 28, when the remainder of the survey headed back to Fort Ellis.

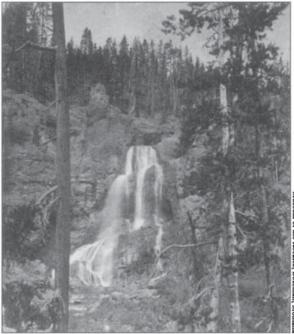
Back in Bozeman, Crissman (and possibly Dixon) set about printing stereo-view negatives for an eager local audience. At last, photographs of the mysterious Yellowstone region could be seen firsthand. Crissman's views from the 1871 Hayden survey were thus the first

Anticipating an eager reception for views of the Yellowstone country from the local populace, Crissman hurried back to Bozeman ahead of Jackson to print the first images of Yellowstone's wonders. At right is Crissman's "Crystal Falls," taken in 1871.

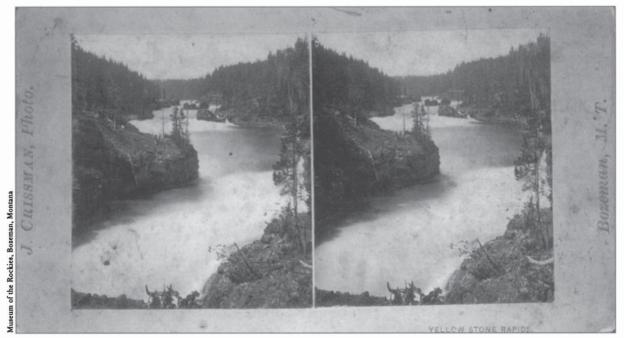
printed and publicly viewed photographs of Yellowstone, something often overlooked. Jackson gave little significance to Crissman's 1871 Yellowstone images, although he acknowledged that fate had intervened in recognition of his work. Much later in life, he wrote that within the next few months in 1871:

I was to begin to taste that little fame which comes to every man who succeeds in doing a thing before someone else. Besides myself, there had been two other photographers in the Yellowstone that season. One of them was Crissman, whose pictures never passed the confines of a purely local market. The second man was the expert T. J. Hine of Chicago, who had been attached to the Barlow-Heap party. Hine got back to Chicago just in time to have every single negative destroyed in the terrible fire of 1871. And so the fact that my pictures were the only ones to be published that year is something for which I have to thank Mrs. O'Leary's cow. 10

Bozeman had been "jumping off" point for two earlier expeditions into the Yellowstone region: the Folsom, Cook, and Peterson trip in 1869; and the Washburn, Langford, Doane expedition in 1870. Thus, the Bozeman population probably knew more about the Yellowstone region in 1871-1872 than any other local populace in the nation. Drawings by Charles Moore and Walter Trumbull in 1870 had provided Bozeman denizens with an intriguing glimpse of the region's wonders, but Crissman's photographs represented the first "believable" views of Yellowstone. While Jackson's photographs helped to convince Washington politicians to create Yellowstone National Park, Crissman's images spurred the interest and plans of private entrepreneurs and tourist expeditions into the region even prior to the park's creation.



fuseum of the Rockies, Bozeman,



When Jackson and Hayden returned to Yellowstone Park in summer 1872, they found Crissman already at work taking photographs. Equipped with two cameras, one a stereo-view apparatus, Crissman photographed the Lower Falls of the Yellowstone, the same area in which he captured the above image, "Yellowstone Rapids," in 1871.

Hayden and Jackson returned in 1872 to what was by then the newly created Yellowstone National Park. They did so with a large new appropriation and a mission to continue scientific study of the region, and, perhaps most important, to begin the process of topographical mapping. The Hayden survey returned to Fort Ellis in mid-July 1872 and there prepared for departure over Trail Creek to the Bottler ranch on the Yellowstone River on July 20. W. H. Jackson was not with the survey at this point because Hayden had elected to split the survey into two groups, directing Jackson's group to photograph the Teton mountains and the region south and west of Yellowstone. This Teton region survey group would enter Yellowstone via the Madison River from the west and rendezvous with Hayden's group in the lower Firehole Basin on August 15.

Crissman must have been encouraged by the success of his 1871 Yellowstone photographs because he had returned to Yellowstone in July, prior to arrival of the Hayden survey party. The Hayden party found Crissman already at work making photographs at Mammoth Hot Springs on July 27. Survey artist W. H. Holmes recalled: "After making a sketch we hurried on among vast ruins where walls and mounds had been built up and left to decay. Among these were still a few springs eking out a sickly existence, but we had to pass over many acres of ruins before we came to the active springs proper." Hayden, he said, left him after a while,

"and I went on with my drawing, attempting some coloring, but found it very difficult to get satisfactory notes. Christman [Crissman] was at work photographing and as I stood before the most perfect Spring, I found myself taken in."

Crissman's photographic travels are better known for 1872 than 1871 because they were noted in three diary accounts. A. C. Peale, the survey's geologist, mentions Crissman eight times in his 1872 writings, providing dates, locations, and some details on party member activities. Holmes mentions Crissman twice in his diaries, and William Blackmore, an Englishman accompanying the survey as a guest, mentions Crissman once.

For his 1872 trip, Crissman was equipped with an 8" x 10" camera and a stereo-view camera. Accompanying Crissman in 1872 were Bozeman residents James Alexander and a Mr. Bingham. After spending several days photographing in the Mammoth Springs and Gardner River areas, Crissman set out for the Grand Canyon and Lower Falls. "We were all up early this morning and soon after breakfast Dr. Hayden, Mr. Blackmore, Holmes, Burck, Greve, John Raymond, Bill Hamilton and Jack Bean started up the East Fork of the Yellowstone [Lamar River] to go to Clarke's Fork. They expect to be back in three days," Peale wrote. "Chrisman [Crissman], Bingham, and Platt started for

W. H. Holmes diary, entry for July 27, 1871, YNP Library.
 A. C. Peale, 1872 diary, entry for July 31, typescript from University of Wyoming by Fritiof Fryxell, July 21-October 24, 1872, p. 10, copy YNP Library (hereafter Peale Diary, Fryxell transcript).

^{13.} William Blackmore, August 4, 1872, personal diaries nos. 6 and 7, copy YNP Library.

^{14.} Peale Diary, Fryxell transcript, August 5, 1872, p. 15.

^{15.} Ibid., August 7, 1872, p. 16.

^{16.} Ibid., pp. 16-17.

^{17.} Ibid., August 10, p. 18.

the Lower Falls. We will join Chrisman [Crissman] at the Lower Falls of the Yellowstone."12

Crissman set up camp on the canyon rim near the Lower Falls until August 4, and spent most of three days photographing the Grand Canyon and Lower and Upper Yellowstone falls. Traveling with Hayden from a camp on Elk Creek, William Blackmore wrote on August 4: "Passed through series of small prairies interspersed with Pines and arrived at 3:30 at Christmans [Crissman's]. Visited Lower Falls. Canyon exquisite." That same day, Crissman moved his camp south to Cascade Creek and there continued to photograph in the falls and canyon areas as well as Crystal Falls. Next day, August 5, Peale noted leaving the Lower Falls of the Yellowstone to hunt for trail. Unsuccessful, he said he and Savage "returned to Crissman's camp. Here we found Crissman and Bingham." 14

On August 7, while camped with the survey party at the camp near Cascade Creek, Peale observed: "Savage, Brown, Gannett and Steve went over to the Falls and Crissman and Bingham went off to photograph, leaving in camp besides us only Platt and George. We are entirely out of fresh meat now and are living on beans, bacon and bread with coffee." Later that day, after collecting geological specimens in the canyon, Peale, Sloane, and Savage returned to find the food situation much improved. "When we got back to camp we found Boteler [sic] had killed 5 elk and brought in a lot of

meat. After supper, Boteler, Savage, Crissman, and Bingham left us for the mud spring."16

What Peale does not mention is that Bottler and the others headed for the mud spring in Hayden Valley to continue the lengthy task of butchering the five elk. Crissman made at least two 8" x 10" negatives and several stereo views of this unusual scene, best known as the image titled "The Successful Hunter" (8" x 10" plate no. 500) in the USGS 1872 series. As Peale described the scene, he found the men "all enjoying roast elk meat under some pine trees. The place looked like a meat market, there was so much meat about. . . . After we had packed the two animals we hung a lot of meat on a pole and then left for camp." 17

On August 12, after at least two excursions to Yellowstone Lake and back to the camp at the Mud Geyser area, the bulk of the survey party, including Crissman, headed west across the divide to the Firehole River drainage and the Upper Geyser Basin. On August 14 the Hayden party, including Peale, Holmes, and others, met up with Jackson and Langford in the geyser basins near Old Faithful. There Jackson and Crissman were reunited.

Just what transpired between the two Yellowstone photographers when they met is unknown. No written account places Jackson and Crissman together on photographic excursions during the seven days the survey explored and documented the Upper and

When Hayden survey members brought down several elk to replenish the group's depleted meat supply in August, Crissman captured the scene in two 8" x 10" images of the subsequent butchering. Said one of the crew: "The place looked like a meat market." Below is one Crissman image, "Successful Hunter" (1872).



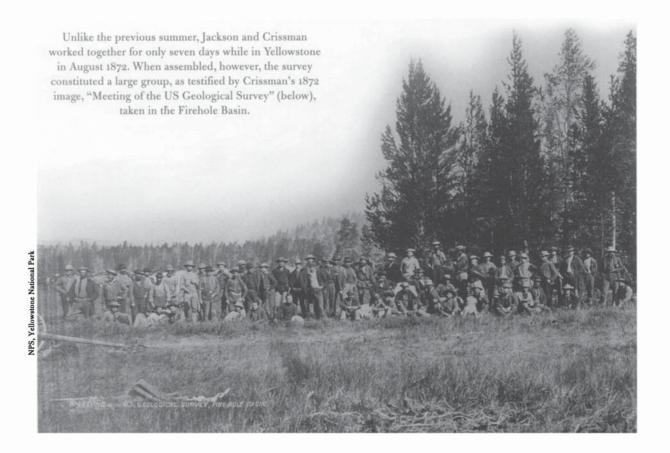
Lower Geyser basins. Judging from the numerous images each photographer produced, both were busy making up for the short time and limited image production of 1871. Both Jackson and Crissman produced several "instantaneous" views of the largest geysers in action, principally using their stereo cameras, and both photographers made successful views of the large springs in the lower Firehole River Valley. With the exception of at least two stereo-view images, there was little duplication of subjects between Jackson's geyser basin views and Crissman's series, suggesting that the two photographers chose to work alone or with their assistants. Jackson brought out his 11" x 14" camera to record four images in the Firehole basins and used this large camera and his 8" x 10" camera to record the complete group portrait of the sixty-two survey members on August 15. William Blackmore's nephew, Sidford Hamp, noted that the large group photograph was taken on August 16, not August 15.18

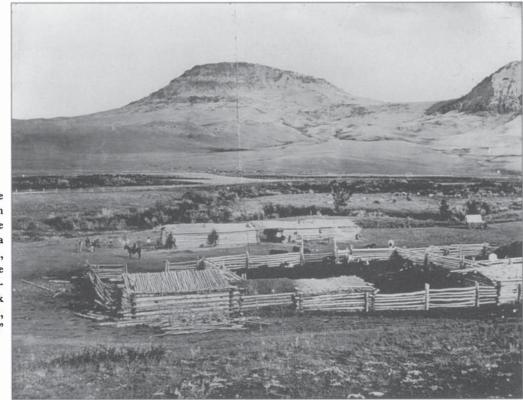
These seven days in the Firehole Geyser Basin represent the only time during 1872 that Jackson and Crissman photographed the same area. On August 20, Hayden's party, along with Peale, Crissman, Bingham, Blackmore, and others, elected to follow the Madison River drainage north and west out of the park to Virginia City and then north to Helena in Montana Territory. The Stevenson, Langford, and Jackson party continued into the park, crossing the divide to Yellowstone Lake, following the route of the Yellowstone River north to Mammoth Springs, and

returning to Fort Ellis via the Bottler ranch. Crissman continued to make 8" x 10" and stereo views of the Firehole cascades, the Madison River canyon, Virginia City mining activities, and various subjects along the route to Helena.

Jackson arrived in Bozeman on September 1 and Hayden returned to Bozeman from Helena on September 11. Sometime following their return to Bozeman, Jackson and Crissman or Hayden and Crissman struck a deal to add twenty-three of Crissman's 8" x 10" views and approximately twenty-three stereo views to Jackson's 1872 USGS series. Crissman probably set about printing his negatives soon after he returned to Bozeman, producing albumen prints for the review of Hayden and possibly Jackson. Of Crissman's twentythree 8" x 10" negatives added to the USGS series, Crissman is only known to have later published the "Successful Hunter" separately. He may have made multiple exposures of this image and had only one negative of each of the other twenty-two 8" x 10" images acquired by the survey.

Documenting which National Archives/USGS 1871 Yellowstone stereo views should be credited to Crissman is difficult. There is no written record and other than a few existing stereo views Crissman published in winter 1871 or spring 1872, there is little to go on. Surviving Crissman prints are uncommon, and his 1871 Yellowstone stereo views are rarer still. Comparative study shows that Jackson and Crissman worked side by side at several locations. At least one Crissman





When Crissman left the
park with the Hayden
survey in August 1872, he
headed north to Virginia
City and Helena,
photographing along the
way. Among the nonYellowstone images he took
in 1872 is the view at right,
titled "Montana Ranch."

stereo view exactly matches Jackson's stereo view, "The Lower Falls of the Yellowstone" (no. 439). As more Crissman Yellowstone images are identified, side-by-side comparison with Jackson's images should provide more information. Nonetheless, Crissman should be recognized at least as having accomplished a series of significant stereo views during the 1871 survey, and further research may document that he contributed a selection of images to the 1871 United States Geological Survey as well.

Unlike 1871, Jackson credited Crissman with contributing twenty-three original 8" x 10" negatives to the 1872 survey. Jackson's 1875 publication of Miscellaneous Publication No. 5, listing the plate numbers and descriptions for each USGS Yellowstone image, credits Crissman for two series of images. 19 According to Jackson, Crissman contributed twelve 8" x 10" views of Mammoth Hot Springs and Gardner River (nos. 450 to 461) and eleven 8" x 10" views ranging from the Madison River, Virginia City mining operations, Helena, and miscellaneous other photographs to the survey (nos. 490 to 500).

Jackson refers to the prior year's descriptive text and his earlier views of the Mammoth terraces and Liberty Cap. Having acquired the series from Crissman, Jackson did not have firsthand knowledge In referring to the second 1872 series, Jackson wrote: "The following views, from 490 to 500, inclusive, were made by J. Chrissman [Crissman], of Bozeman, Mont., who accompanied Professor Hayden's division of the survey, and visited those localities not reached by the photographers of the survey." Here Jackson reminds us that the survey split up again after camping on the Firehole River, with Jackson heading into the park and Crissman accompanying Hayden out of the park along the Madison River to Virginia City and on to Helena.

or field notes for these images, possibly accounting for his brief descriptions of the 1872 Mammoth terraces series. This reference to the 1871 series has caused some historians to believe that Crissman also authored the earlier series, but such is probably not the case. Research of surviving Crissman stereo views from 1871 suggests that he had only a 6" x 8" stereo camera. Jackson loaned Crissman a 6-1/2" x 8-1/2" camera (probably also a stereo camera) after Crissman lost his camera to the canyon. Because the 1871 series that Jackson refers to is all 8" x 10", Jackson is probably the photographer of the 1871 series and only referred to this series for descriptive information, not to identify Crissman as author of the 1871 series. Some stereo views from 1871 are most certainly by Crissman, but probably not any 8" x 10" images.

^{18.} Sidford Hamp, "Exploring the Yellowstone with Hayden, 1872," in *Annals of Wyoming*, ed. Herbert Oliver Brayer, 14 (October 1942), 279.

^{19. &}quot;A series of twelve negatives made by J. Chrissman [Crissman] of Bozeman, Mont. They are fully described in Nos. 214 to 231 of

the 1871 series." W. H. Jackson, Descriptive Catalog of the Photographs of the United States Geological Survey of the Territories, for the Years 1869 to 1875, Inclusive, Miscellaneous Publications-No. 5, 2d ed. (Washington, D.C, 1875), 45.

^{20.} Ibid., 44.



Unfortunately, Jackson does not say which stereo views Crissman contributed, but *Miscellaneous Publication No. 5* lists two series of stereo views that correspond directly with the two 8" x 10" groups by Crissman. The Madison, Virginia City, and Helena photographs, including thirteen stereo views (nos. 612 to 624), were all made by Crissman because Jackson did not accompany the survey to those locations. In addition, several stereo-view images show nearly identical camera positions as the 8" x 10" series, and Crissman published many of these same images with his own Bozeman nameplate.

A corresponding series of ten Mammoth Hot Springs stereo views (nos. 565 to 574) were also very likely Crissman's. Careful study of Jackson's survey travels and the resulting photographs indicates that Jackson may have worked exclusively with the 11" x 14" camera at Mammoth Hot Springs in 1872. This may account for his interest in including Crissman's 8" x 10" and stereo view Mammoth Hot Spring series in the 1872 survey photographs. An unknown individual wearing a distinctive black hat and vest appears in several of Crissman's published 1872 stereo views of the Mammoth terraces. The same individual also appears in at least two of Jackson's 1872 stereo views of Mammoth terraces. Other similarities exist in a few images taken in the Upper and Lower Geyser basins. Jackson's "Crater of the Castle and Hot Spring Basin" (no. 558) and Crissman's "Crystal Spring and Castle Geyser" (no. 81) are nearly identical, and Jackson's series of "Hot Spring Pools of the Upper Basin" (nos. 559-563) and Crissman's "Looking Up the Firehole from Castle Geyser" (no. 82) are also too similar to have been taken separately. If only the ten Mammoth Hot Springs stereo views and thirteen Madison to Helena stereo views are included, Crissman's 1872 photographic contributions to the USGS total forty-six images—twenty-three 8" x 10" plates and twenty-three stereo views.²¹

Most nineteenth-century photographers did not see issues of proper photographic attribution as significant. Ownership of original negatives translated to authorship for most publishers and photographers, and the problem of proper attribution of Crissman's work is not unique to Jackson's Yellowstone images. But given Jackson's printed acknowledgment of Crissman's contribution to the 1872 series, it is curious that these images continue to be attributed to Jackson in both the National Archives and the USGS collections.

In the 1930s, Jackson mysteriously altered his transcript autobiography by erasing his original text in the section referring to Crissman and pasting over the area with a revision. "By the 1930's, standards had so changed that Jackson felt obligated to eradicate the portion of his typescript autobiography that mentioned Crissman's views, erasing the text and then gluing a substitute set of typed lines, concerning another subject, over the original," observed Jackson biographer Peter B. Hales. "The typescript autobiography is in the Manuscripts Collection of the New York Public Library. That this is not a minor inadvertence is made clear by the fact that Jackson used multiple erasures to remove all but the very faintest traces of the underlying materials-a technique he never even approached anywhere else in any document of his."22 For whatever reason, Jackson felt compelled to minimize Crissman's role as photographer during the 1871 and 1872 Yellowstone expeditions. No personal account or diary by Crissman is known to exist, so we may never know the full story.

Crissman returned to Yellowstone during summer months for two years following the Hayden surveys. His photographic efforts seem to have been focused

Crissman contributed at least forty-six 1872 images to the U.S. Geological Survey collection, including views of the Mammoth Hot Springs area. The Crissman image at left, from a stereo view, was later sold and credited to W. I. Marshall, who never photographed in Yellowstone.

^{21.} Ibid., 46-47.

^{22.} Peter B. Hales, William Henry Jackson and the Transformation of the American Landscape (Philadelphia, 1988), 313.

^{23.} Helena Weekly Herald, August 22, 1873.

^{24.} See Bozeman Avant Courier, July 31, 1874.

^{25.} Ibid., September 25, 1874.

on completing his series of stereo views, adding several views of the Firehole geysers and springs, the Mammoth Hot Springs area, and recording events related to the national park's steady flow of tourists. On August 31, 1873, for example, Crissman made a portrait of a large group of Helena "excursionists" in the geyser basins. The group included Montana pioneer Granville Stuart.23 One of Crissman's more interesting views was an image showing the sailboat constructed on the shores of Yellowstone Lake by Captain E. S. Topping to provide transportation and tours of the lake.24 Crissman's photograph recorded the first female passengers to sail in the boat, Sarah Tracy and Sarah Graham, both of Bozeman.

By fall 1874, Crissman had spent four summers photographing in Yellowstone. Observed the Bozeman Avant Courier, "Mr. Crissman, the artist, returned from the National Park Monday evening, having spent the summer in photographing the wonderful features of that country." Crissman, the paper said, "has spent three

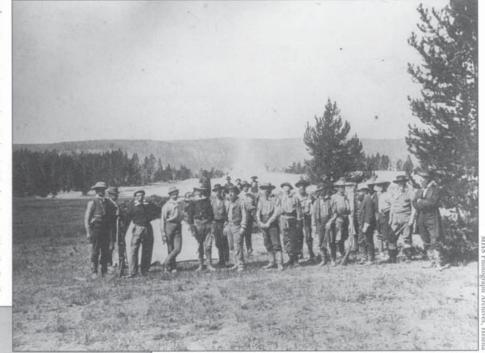
or four summers in the park, and has a magnificent collection of views taken under most favorable circumstances."25

Soon after this notice appeared, Crissman apparently moved from Bozeman. Gallatin County Clerk and Recorder records show that his wife, Margaritte Crissman, sold their property in Bozeman on September 29, 1874. No additional record can be found of the couple other than the newspaper listing for unclaimed letters at the post office.

In addition to Jackson's limited acknowledgment, Crissman's own tendency to sell his Yellowstone photographs to photographers

and publishers led to his work being extensively published and then attributed to others. At least six photographers or publishing companies offered his Yellowstone images, including: W. I. Marshall, C. D. Kirkland, Layton A. Huffman, Gates, E. H. Train, and Lovejov and Foster. Of these, Marshall of Fitchburg, Massachusetts, Train of Helena, and Kirkland of Cheyenne seem to have purchased and published the largest number of Crissman's original Yellowstone images. The large series published by these three individuals suggests that Crissman routinely made multiple exposures of many of his stereo views, allowing him to sell an entire set of negatives to other photographers and publishers.

W. I. Marshall of Fitchburg, Massachusetts, conducted extensive lectures and tours of Yellowstone Park, selling copies of the Crissman stereo views for three dollars each to help promote his business. Crissman sold his negative series to Marshall sometime in early to mid-1875 because Marshall moved



Joshua Crissman continued to photograph in Yellowstone Park during the summer in 1873 and 1874. He made the above portrait of a sizable group of Helena excursionists that included the Montana pioneer Granville Stuart in late August 1873, and he photographed the sailboat Sallie (left) to record the first female passengers, Sarah Tracy and Sarah Graham, both of Bozeman, to sail on Yellowstone Lake in 1874.





When photographers sold all or part of their collections to other photographers, credit for the images also passed to the acquiring photographer. Series lists on the reverse of card mounts like the two above have helped trace the migration of some of Crissman's Yellowstone images (listed above at left) to C. D. Kirkland, a Cheyenne, Wyoming, photographer, whose card mount listing appears above right.

from Virginia City to Fitchburg in 1875 and was selling the Yellowstone Park series published under his name by 1876. This purchase is documented by a series of Crissman Yellowstone stereo views that survive showing "Copyright 1876, W. I. Marshall, Fitchburg" handwritten next to "J. Crissman, Bozeman, Montana." Although Marshall is listed as a photographer in some publications, it is now clear that Marshall was not a photographer himself but rather printed and sold Crissman's images and those of other photographers. The Marshall Yellowstone stereo-view series by Crissman, including 122 images, were published by Marshall in a series of yellow and orange card mounts, a series of Yellowstone photographs that has been recently recognized by historians for its exceptional quality and extensive subjects. Its significance is increased by the fact that some of the stereo-view images were taken by Crissman as early as 1871.

Kirkland was an accomplished and well-known Cheyenne, Wyoming, photographer who also published a list of Yellowstone Park stereo views that matches the original list Joshua Crissman published. Just when Kirkland purchased the stereo-view negatives from Crissman is not known, but Crissman was living in Laramie City, Wyoming, by 1880, and possibly sold his Yellowstone series to Kirkland on a trip into Cheyenne. Like the Marshall series, many of these images are from Crissman's 1871 and 1872 trips to Yellowstone. A recently discovered series of Yellowstone stereo views by E. H. Train of Helena, in the Yellowstone Park museum collections, also match Crissman's original series image for image.

Where Joshua Crissman moved to when he left Bozeman in 1874 or 1875 is not known, but the trail seems to lead to Ogden, Utah. Family cabinet card portraits by Crissman display a studio nameplate of Ogden, Utah, and a rare stereo view from the Yellowstone series with a Joshua Crissman studio nameplate in Ogden, Utah, survives in the Crissman family collection. Other than these few photographs, there are no other records of an Ogden, Utah, photographic studio operated by Crissman. By 1880, Crissman was operating a photography studio in Laramie City where he was recorded by the national census. Few examples of formal portraits by Crissman exist in the Laramie archives, suggesting that he continued to sell his Yellowstone National Park images while doing studio portrait work as he could get it. A series of three stereo

views taken of Laramie City (circa 1880) from atop a downtown building were sold to an unknown buyer at an eBAY on-line auction in 1998.

Joshua Crissman moved again in 1884 or 1885, this time leaving the Rocky Mountain West for Santa Ana, California. Again, he set up a portrait studio and seems to have prospered doing traditional cabinet card portraits for the local population. He was in his early fifties, and this may have been his last portrait business before he retired. Examples of his studio portrait work can be found in local archives, but it is unknown how long he operated the business before he retired. Crissman moved at least once more to Los Angeles prior to his wife's death on May 26, 1920. He was living at 226 North Beaudry Avenue in Los Angeles at the time of his own death on September 18, 1922.

Whatever the course of Joshua Crissman's later life, his early Yellowstone photographs are arguably second only to those of William H. Jackson, and in many instances are the same. Crissman seems to have left no written record, which in turn leaves unanswered many questions about his relationship with Jackson and untold the story of his photographing for four consecutive years in Yellowstone. But Joshua Crissman should not be forgotten. He was a significant photographic pioneer in Yellowstone.

STEVEN B. JACKSON is head of research and collections and curator of art and photography at the Museum of the Rockies, Montana State University, Bozeman.

