

Photographic Archaeology at the Empire Ranch: A Study in Evolution and Influence of the House Corral

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The historical record of the Empire Ranch, 45 miles Southeast of Tucson, Arizona, emerges from far more than its manuscripts, business ledgers, and correspondence. Patterns of life at this Territorial-era cattle operation can be deduced from careful comparison of its collection of photographs. These images captured change in the spatial organization of the corral and ranch house that occurred over a span of 80 years. What changed and why leads to a much richer comprehension than what the written record alone can provide. Those physical changes, in turn, provide a basis from which to trace evolving social relationships between owners, employees, and those involved in the rich history of this ranch. These changes also reflect the evolving context of frontier life as institutions like the railroad, the mining industry, and economic conditions altered how life transpired at the Empire. With the headquarters as our prism, we see how those catalysts and maturing human needs moved this ranch from an isolated, adobe outpost to the multi-state, cattle breeding operation it became in the twentieth century.

Introduction

The historic Empire Ranch lands and its headquarters lie in the center of the Cienega Valley, one of the last well-watered areas in southern Arizona. The history of the cattle industry in southeast Arizona dates back 430 years when Jesuit priest, Eusebio Francisco Kino, brought into the region livestock that later produced the first permanent herds. Conflict with the Chiricahua Apache retarded growth of the industry until the late 1800s. The Empire Ranch, established in 1871, weathered turbulent periods of threat, drought, and depression through careful planning, savvy business decisions, and adaptive management of its grasslands. Under Walter Vail, Frank Boice, and their families, the Ranch became one of the largest and most successful cattle enterprises in the Southwest.

Today, the Bureau of Land Management (BLM) manages the heart of the Empire landscape as the Las Cienegas National Conservation Area. Rancher Ian Tomlinson leases those grasslands continuing the 140-year long tradition of sustainable cattle ranching in the Cienega Valley. The BLM also collaborates with the non-profit Empire Ranch Foundation (ERF) to preserve and maintain the historic buildings at the ranch headquarters. ERF offers public tours of and education about the Ranch and maintains a remarkable collection of maps, letters, photographs, and oral interviews that relate to the history of the Empire, its ranching families, and the larger Cienega Valley landscape. This archive is unique in its size and variety of materials, timespan of coverage, and accessibility. Few, if any, ranches in the Southwest are so well documented. These records are a veritable treasure trove for students and scholars interested in the evolution of the cattle ranching industry in southern Arizona and the Southwest.

Like many long-surviving historic sites, the Empire Ranch Headquarters today is a rabbit warren in which buildings and structures of differing ages and materials have been imposed and connected with little obvious sequence or logic. The spatial organization of the headquarters is difficult for docents to explain and for visitors to interpret. Why was this fence line here? Why did this building stop there? The key to unravelling the layers of building changes was to recognize the one central original structure that is no longer present. That structure is the original 100' x 100' adobe corral (Figure 1). The corral, attached to the original ranch building at its rear corners, was designed to create a secure and defensible space against Apache raids. From its construction circa 1871, the adobe corral played an integral role in

directing the lives of Empire Ranch families and employees. The corral was the central hub of the activities and day-to-day operations of the ranch. It exerted a powerful influence in the placement of new structures, and family and employee movement through ranch spaces. It still does so today.

Fences, corrals, and walls are built to keep things or people out *or* to keep them in. Gates and doors in those boundaries suggest who or what is transiting and where they are going. From that architectural information, we can investigate each builder's intent and how the needs of Empire inhabitants changed with time. Materials, placement, design, and timing are all clues that help us understand those historic needs and intent.

Evidence for this analysis comes in the form of historic documents and images, and the modern structures. ERF oral histories enlarge our general understanding of specific events and the timing of change at the Ranch. Family photographs, even those without specific dates, provide approximate measurements, materials information, a sequence of development, and periods of presence and absence. They illustrate the evolving spatial organization of buildings and structures. That organization, in turn, can suggest how inhabitants moved through and used those spaces.

This research covers the time-period of 1876 to 1955 from the Empire's transitions from original owner, E. N. Fish, to Walter Vail and early business partners, Herbert Hislop and John Harvey, through son Banning Vail's management and, finally, to Frank and Mary Boice's ownership.¹ Six phases of change in the house corral and associated buildings have been identified that cover this 80-year period (Figure 2).² Subsequent figures contain key photographs that illustrate the evolution of the structural components and support the sequence in which those changes occurred.

Phase 1 – 1876

In the summer of 1876, Walter Vail and Herbert Hislop purchased from Tucson merchant, E. N. Fish, a 160-acre homestead. The purchase included a building, probably constructed four or five years earlier. The building was located on a small rise adjacent to the Empire Gulch and Spring; it was surrounded with an unobstructed, 360-degree view of the Cienega Valley grasslands. Designed in traditional Sonoran style and constructed of adobe, the four-room building supported a flat, mud-covered roof. The four rooms were separated into two halves by an 18' wide and 60' long zaguán or entrance corridor (Figure 3, Image A). The zaguán was an entrance feature of traditional Spanish and later Mexican architecture. Typically large enough for carriages to pass through into an inner courtyard, riders and passengers could access internal living and working quarters in safety. Like many Sonoran haciendas, the Empire Ranch zaguán was secured with massive doors. Two rooms were living quarters for Vail and Hislop and their hired men; one was a storeroom for tools, equipment, and other supplies; the last operated as the

¹ No definitive information regarding the builder of the original adobe four-room structure and its corral has been found. E. N. Fish was likely to be the first Anglo-American owner, who with his brother-in-law, William Wakefield, filed for proof in 1876 on the homestead claim in Section 18, Township 19 South, Range 17 East that included the Empire Ranch, Empire Gulch and Spring, and the 160 surrounding acres; These drawings are based on 1994 architectural plans by Barbara Zook who illustrated the evolution of buildings at the ranch house. See plans D200-002, D200-003, D200-005, and D200-009. ERF Archive.

² These drawings have been modified by the author to include information about the corral and its surrounding structures. Note that the exact areas and location of historic structures and spaces no longer extant are not known precisely; they are educated guesstimates using Empire Ranch Foundation archival materials. No extensive subsurface archeological investigations have yet occurred at the Ranch that might corroborate this research.

kitchen. Attached to the building on its south side was a 100' x 100' adobe corral; its walls were eight feet in height.³

No photographs from this time document the building and corral. However, a sketch with dimensions and written description exists in a letter that Hislop wrote to his sister in November of that year (Figure 3, Images B, C). His sketch showed the layout and purpose of the two pairs of rooms (now numbered 1, 3, 4, and 6) on either side of the zaguán. He also included information regarding functions within the corral: a storage area for hay and a stable. In his letter, Hislop described the logic of the building and corral arrangement.

*“. . . there are 4 rooms in the house two bedrooms, kitchen and store-room at the back of the house is the corral for corralling the cattle in, the reason it is put at the back of the house is on account of the Indians so as one can keep their cattle safe at night, as that is rather a favorite time for the Indians to run off with stock . . .”*⁴

This corral arrangement with its single, gated entrance through the main ranch house provided protection for Empire livestock from night-raiding Chiricahua Apaches.

While a 100' x 100' adobe corral is substantial in size, it clearly limited the numbers of livestock that could be safely contained within. This protection measure would have been useful while Vail and Hislop owned perhaps a couple hundred animals. In later years, as the size of their cattle and horse herds grew, the partners would bring in only valuable animals or those needed for the following morning's activities; the rest would fend for themselves in nearby pastures.⁵

Hislop's drawing strongly suggested that the adobe corral had internal divisions. Some form of fencing separated horses held in the Stable from the long-horned cattle. Later, Walter Vail, his son Banning, and the Boice family used the Stable to hold personal horses and breeding stallions. Another internal fence would have been essential to keep livestock from consuming the stored hay.⁶

Phase 2 – 1879

Vail and Hislop took on John Harvey as a third partner at the end of 1876. The pair needed more hands to manage cattle operations and more money to fund growing operations and investments. The three partners continued to purchase cattle – 800 in 1877. They also retained all calves in order to grow their herd as rapidly as possible. That plan, however, left the partners with little income. In March 1878, Hislop had had enough of Arizona and ranching; he sold his share of the business to Vail and departed for England. The Empire Ranch was now supporting 1500 head of cattle and the four-room house was no longer adequate to meet the needs of the growing operations. A building expansion was essential.

³ Janet Ann Stewart, *Arizona Ranch Houses, Southern Territorial Styles, 1867-1900* (Tucson, Ariz. 1974), 2-3; Trent E Sanford, *The Architecture of the Southwest* (Tucson, Ariz., 1950), 126-127; See photographs A530-05 and A536-151. ERF.

⁴ Today, the immediate ranch environment contains 30 rooms and spaces. Each is assigned a number in order to eliminate ambiguity and confusion. See ERF image D200-002 for the full layout and numbering system of all of the ranch house rooms; Herbert R. Hislop and Bernard L. Fontana, *An Englishman's Arizona. Ranching Letters of Herbert Hislop, 1876-1878* (Tucson, Ariz. 1965), 46.

⁵ The night horse would be kept in the corral overnight and employed early the next morning to retrieve other pastured horses involved in that day's activities. Laura Soulliere Harrison and Paul J. Neidinger, "Heart of the Empire. Historic Structures Report" ((Draft) vol. 1, 1992), 15, 29.

⁶ Laura "Dusty" Vail Ingram, interview by Laura Soulliere Harrison, February 28, 1993, 27-28; Steve Boice, interview, October 23, 1991, 78-79. ERF; See Stewart, *Arizona Ranch Houses*, 37. Henry Hooker of the Sierra Bonita Ranch in neighboring Cochise County stored his cut hay within the walls of his house corral much as the Empire Ranch did.

Yet without the sale of cattle, the partners were short of cash. Vail and Harvey had intended to build their addition from adobes already constructed on site but heavy rains in August 1878 ruined those first bricks. In late 1878 or early 1879, they tried again.⁷

The threat of Apache attack was still very real and Vail and Harvey chose to build the Rear Addition inside the protective walls of the corral.⁸ This four-room, 50+ foot-long, adobe addition incorporated the west wall of the corral (Figure 4, Images A, B). Whether Vail and Harvey utilized the original adobe bricks of the corral in the addition's construction or replaced them with new ones has not yet been determined. Today, the Rear Addition supports two external doors on its west side; those doors were not part of the 1879 construction (Image A). In a later, less hazardous era, the Vails enlarged the original windows as doors (Image B). The Rear Addition contained a kitchen, living spaces for a bookkeeper and cook, and an office for ranch business. A fifth room (17), the family kitchen, was added at its south end after 1881.⁹

This building addition is the first example of what became a long-term pattern by Empire owners as they introduced new structures into the corral and divided its 100' x 100' interior space for other uses. Vail and Harvey stopped short of extending the Rear Addition down the full length of the west wall. That decision suggests that the Stable, as seen in Hislop's illustration, still occupied the southwest corner. In the absence of further photographic evidence, the configuration of the Stable or hay storage area within the corral in 1879 is speculative.

We also do not know if any additional opening had yet been made in the corral wall or if humans and livestock still used the zaguán. By the end of 1879, Vail and Harvey owned 2200 head of cattle. Clearly, they could not shelter all livestock within the corral each night. More likely, they sequestered only the most valuable stock – bulls and prime horses.¹⁰

Phase 3 – 1880-1882

This decade opened with momentous social and economic change, and financial growth at the Empire Ranch. Southern Pacific completed its railroad line through Arizona in 1880 providing access to new cattle markets across the country. The Railroad also brought new equipment and building supplies including dimensioned lumber to the Territory.¹¹ Empire cattle operations and land acquisitions throughout the Cienega Valley expanded significantly. Construction around and within the adobe corral enlarged the living and working capacity at the headquarters.

In 1881, both Vail and Harvey married. In anticipation of his future bride's arrival, John Harvey constructed the three-room (20, 22, and 23), adobe Victorian Addition, probably between 1880 and the spring of 1881 (Figure 5, Image A). Like the Rear Addition, the new living quarters incorporated another portion of the western wall of the adobe corral. Harvey appended this structure, however, outside of the corral. Constructing the Victorian Addition within the corral would have severely restricted its working area. Its placement does suggest that Harvey was now less concerned about external threats

⁷ Dowell, "History of the Empire Ranch" (MS thesis, University of Arizona, 1978), 10-11. ERF. This copy is a retyped version of Dowell's original thesis; Walter L Vail to Edward Vail, August 30, 1878. ERF.

⁸ Teresita Majewski, Scott O'Mack, Eric J. Means, and Matthew A. Sterner with contributions by Melvyn Green and Bob Vint, "Adaptive Reuse Plan for the Empire Ranch Headquarters," Statistical Research Inc. Technical Report 03-64, June 11, 2004, D2. ERF.

⁹ Photograph A450-1 shows that Room 17 was added after the completion of the Victorian Addition in 1881. ERF.

¹⁰ Dowell, "History of the Empire Ranch," 12. ERF.

¹¹ Six sawmills operated in the mountains near Tucson producing lumber for houses and mines during this era. Nonetheless, the additional of building supplies brought by Southern Pacific Railroad accelerated the transition from Sonoran flat roofs to gable roofs on many homes. See Stewart, *Arizona Ranch Houses*, 5-6.

than he had been in earlier years. Nevertheless, quick access from the Victorian Addition into the more protected interior of corral would have been essential. The door in Room 23 would have likely been the main point of egress. Despite John's labors, Mrs. Harvey did not appreciate the splendor of her new Victorian Addition.¹²

Walter Vail married his long-time sweetheart, Margaret Newhall, that summer. Margaret brought to their marriage a dowry of \$10,000. With that money, Walter purchased the Victorian Addition, its contents, and Harvey's share of the ranch. Harvey and his new wife departed in August 1881, leaving Walter and Margaret Vail as the sole owners of the Empire.¹³

The construction of the Victorian Addition marked an important social change in the ranch community. It represented the first social and physical separation between the owners and Empire employees. Now, Ranch owners and their families inhabited the west side of the headquarters; employees lived and worked on the east side. This physical and social separation may have been driven by the impending arrival of women. Perhaps Harvey and Vail felt the need to "protect" their wives from the hired ranch hands and the working environment or, at least, to create a more refined environment that gave their wives a measure of privacy heretofore unavailable to the all-male inhabitants of the Empire. This social stratification as well as the separation of living from working environments continued for the next 95 years through the Boice family's use of the ranch.¹⁴

Like the owners' living quarters, employee housing needed expansion. But unlike the Victorian Addition, these new adobe structures were built inside the corral. A separate room (8) for the ranch foreman was added at the south end of Room 6 and living quarters and storage area (16, 18) for the family (as opposed to the employee) cook were constructed as a detached unit East of the Rear Addition and South of the Foreman's Quarters. Both structures probably were added after the construction of the Victorian Addition. The Cook's wing was likely built coincident with the addition of the family kitchen (Room 17). The matching dimensions of the Cook's Wing with Rooms 14 and 17 across the zaguán suggest an intent to build units providing support and storage for the family kitchen operations.

We have no information or evidence suggesting that these separate facilities for cooks, bookkeepers, and foremen either created a social stratification among Empire employees or that their intended purpose was purely a functional separation of activities.

A low adobe wall with gate spanned the Cook's Wing and Foreman's Quarters (Figure 5, Image B). Together, the two quarters and wall extended the zaguán and created an open, uncovered corridor further separating the family environment on the west side from the working environment in the corral on the east. This low wall became a holding place for saddles. Image B also suggests that the adobe

¹² "May We Introduce ... Mrs. John Harvey." <https://www.empireranchfoundation.org/wp-content/uploads/2013/08/Aug2010.pdf>; Structural evidence suggests that the original building had two rooms (22, 23) with Room 20 added almost immediately following initial completion. Rooms 22 and 23 were initially built with flat roofs. When Room 20 was added, all three rooms were covered with gable roofs. The Adobe Hay Barn was also constructed during this early period with a gable roof. Eric Means, personal communication, March 22, 2018; Majewski et al, "Adaptive Reuse Plan for the Empire Ranch Headquarters," D2; Harrison and Neidinger noted that Walter Vail had stated in 1878 that Fort Huachuca had recently been established a permanent military base to in order to provide some measure of safety for miners and ranchers in the valley. Harrison and Neidinger, "Heart of the Empire," 18. ERF.

¹³ Mrs. Harvey apparently disliked the Empire Ranch environment enough to convince John to abandon their new house and his partnership at the ranch. Walter L. Vail to Margaret N. Vail, August 5, 1881. ERF.

¹⁴ "Empire Ranch Landscape. Historic American Landscape Survey," 2016, 5-6. Library of Congress (hereinafter LOC). <https://cdn.loc.gov/master/pnp/habs/haer/az/az0600/az0666/data/az0666data.pdf>; Annie Helmericks Louder, interview by Alison Bunting, July 21, 2001, 30-31. ERF.

corral with its enclosed environment and adjacent Stable was also utilized as a horse-and-rider staging area.

Image A presents the earliest full-length view of the east side of the adobe corral. Outside of the corral on its northeast corner, Vail built the Carpenter's Shop to support expansion efforts at the headquarters. The Shop was the last adobe structure integrated into the house corral. Hay was still stored in the house corral in this 1881-2 photograph, despite the new storage area of the Adobe Hay Barn. The hay pile was clearly contained by some wall or fence on its north end. Behind the hay pile near the southwest corner of the corral and in shadow was the Stable for Vail's horses. The primary entrance into the adobe corral for livestock was no longer through the zaguán but through the newly opened gate on the corral's north wall. A picket fence enclosed the north end of the ranch house and the zaguán. Its presence further confirms the exclusion of livestock from the old entrance; the zaguán was now for human use only (see also Figure 4, Image A).¹⁵

Phase 4 – 1885-1893

The Empire Ranch had achieved considerable economic success by the start of this period. Walter Vail through strategic land claims and purchases gained control of most of the grasslands and waters of the Cienega Valley. He continued that strategy of purchasing and leasing grasslands throughout southern Arizona into the next century. An integral part of his financial success was the discovery of the Total Wreck Mine in the lower part of the Valley and development of its silver ore. The mine and its town site generated significant income that was later redirected into the ongoing Ranch expansion and cattle operations. Six of Margaret and Walter's seven children had been born by the end of this phase; the need for more Vail family space was acute. Likewise, the ranch operations demanded more full-time hands and more living space for those employees.¹⁶

The middle of the decade saw a major upgrade to many of the buildings and structures around the corral. Gable roofs covered the original four-room building, the Rear Addition, the Cook's Wing. Even the Stable was protected under a raised roof and wood shingles (Figure 6, Images A, B, C).

An 1886 photograph presents the first good illustration of the Stable (Image A). It occupied the southwest corner of the corral (yellow arrow) extending northward to the Rear Addition and eastward along most of the south wall of the adobe corral. The Cook's Wing helped to define the northern boundary of the Stable. The Wing's southeast corner became the western anchor for the post-and-rail fence that contained Vail horses. In 1887, the hay pile still occupied the southeast corner. It is likely that Stable's post-and-rail fence also defined the north boundary of the hay pile. A gate providing access between the Stable and the larger adobe corral must have been present but no definitive information has been found.¹⁷

¹⁵ Indeed, Carpenter's Shop may have been the last adobe structure built in the Headquarters area. The one possible exception might have been the Hired Man's House. However, knowledge of the Hired Man's House origins is limited to a photograph taken prior 1900. The picket fence North of the Ranch House and outside the zaguán is visible at the right hand edge of Image A. Laura "Dusty" Vail Ingram, Walter Vail's granddaughter, spoke of roller-skating in the zaguán as a child. Laura "Dusty" Vail Ingram, interview by L.S. Harrison, 37.

¹⁶ Dowell, "History of the Empire Ranch," 23-25; "Empire Ranch Landscape;" Dowell, "History of the Empire Ranch," 13-22; Gregory Dowell, "The Total Wreck and the Empire Ranch." Presentation given at the Empire Ranch, November 29, 2018.

¹⁷ Image A, taken from the roof of the Carpenter's Shop, shows an Empire roundup crew preparing for an early morning departure; Photograph A431-1, ERF, taken at about the same time as Image A, shows that the Stable did not extend eastward the entire length of the adobe corral but stopped short of the southeast corner. The gray arrow in Image A marks the inner bend of the Stable roofline; Margaret Vail, following the May 3, 1887 earthquake,

From the southwest corner of the Cook's Wing, a narrow wall with door spanned the short distance to the southeast corner of the Rear Addition (Image B, orange arrow). This wall separated the horse-occupied Stable from the human-occupied zaguán. The door would have provided access from the zaguán to Room 23 of the Victorian Addition (see Phase 3 plan in Figure 5). A corresponding gate or door through the south side of the corral and Stable probably allowed access to the Adobe Hay Barn area.

In 1887, Margaret Vail bore her third child, Mary; the need for more bedrooms beyond those in the Victorian Addition became obvious. The Vails acquired a two-room, wood-frame building – possibly moving it from the dying mining community of Total Wreck – and installed it in the southwest corner of the corral sometime between 1887 and 1889. The Children's Addition (Rooms 25, 27) was the last building introduced inside the corral; it was also the first of many wooden structures added to the Empire Headquarters. Its insertion eliminated the west half of the Stable (Image C). Because the length of the Addition did not reach the south end of Room 17, a closet (Room 24) was built to span the space between the two buildings. Image C, when compared with Image A, illustrated the shortened Stable with its discernable, new west end. That end did not connect with the Children's Additions. Indeed, that west end suggested that a walkway or corridor divided the Stable from the Children's Addition. We do not know if a wall or fence restricted horses in the Stable from the human space of that walkway.¹⁸

After the deportation of the Chiricahua Apache to Florida in 1886, no serious physical threat remained for Empire inhabitants. Nonetheless, ready access from the Children's Addition into the corral was important for ease and convenience of movement. A door on the east side of Room 27, now boarded up, was that early entrance point during Phases 4 and 5. The chimney (Image C) with its fireplace on the east side of Room 25 were removed sometime after 1923 and a new, more convenient entrance became available.¹⁹

The old adobe short wall (Image A, green arrow) between the Cook's Wing and the Foreman's Quarters was rebuilt as a wooden wall (Image C, purple arrow); its gate now opened next to the Cook's Wing. In addition to excluding livestock from the extended zaguán, this wall continued to function as a saddle rack until the 1970s. The Cook's Wing saddle rack adjacent to its east wall was built between 1886 and 1890.²⁰

Phase 5 – 1893-1905

During Phase 5, ranch development shifted from the west to the east side of the corral as more structures supporting working operations were added. This phase represents the second major period of development at the Headquarters. The stack of loose hay was relocated to the Adobe Hay Barn.²¹ With the exception of its northeast wall, the corral was almost completely engulfed by structures and

described in a letter to her mother how the hay pile in the corral “danced” as the ground shook. Harrison and Neidinger. “Heart of the Empire,” 26.

¹⁸ It is likely that the Vails built and owned most of the wooden buildings at the Total Wreck townsite. Gregory Dowell, “The Total Wreck and the Empire Ranch.” Presentation given at the Empire Ranch, November 29, 2018; Laura “Dusty” Vail Ingram, interview by Harrison, 36; National Register of Historic Places Documentation Update for the Empire Ranch Historic Site. (Draft) 2018. Sec. 7, pp. 9 and Sec. 8, pp. 30; Dowell. “History of the Empire Ranch,” 21-22; Image C shows the participants of the 1890 cattle drive from the Empire Ranch to California. The group departed in early January 1890. See Edward Vail and Alison Bunting, *Diary of a Desert Trail: 1890 Cattle Drive from Arizona to California* (Tucson, Ariz., 2016).

¹⁹ The Children's Addition's chimney was still visible in Figure 9, Image A, photograph A144-1, dated 1923. ERF.

²⁰ Photograph B300-108, 1968, shows the same wall in use. ERF.

²¹ The stack of loose hay was relocated to the Adobe Hay Barn or other storage structures. Two unknown, barn-like structures in Image C may have received extra hay. Another alternative may have been the South Barn; its date of construction is uncertain.

buildings. Most of these were built of wood. The house corral during this phase had become the “catch-all” for ranch structures and activities that benefitted from proximity.

Phase 5 images exemplify a rich subset of the ERF photograph archive. Harry Heffner, who began his cowboy career at the Empire Ranch in 1893 and later became ranch manager from 1900 to 1905, took most of them. His photographs documented the lives and activities of employees and their families during the time when the Vails had departed for California and left the day-to-day operations to others.²² These images were mostly “snap-shots,” not the formal, arranged photographs of earlier phases. They are also valuable because they illustrated the ranch from a greater variety of locations and aspects than those taken by the owners.

The Bunkhouse provided additional housing for fulltime and temporary, roundup cowboys. Already in existence when Heffner arrived at the Empire in 1893, the Bunkhouse was approximately 40 feet in length and probably sheltered numerous young, single men.²³ A simple wood board-and-batten structure, it was built above the Carpenter’s Shop outside the northeast corner of the corral (Figure 7, Images A and B). Like many of the other buildings associated with the corral, the Bunkhouse/Carpenter’s Shop had adopted the corral as part of its footprint. The original Shop (without Bunkhouse) had been built of adobe (See Figure 5, Image A). During Phase 5, the adobe portion of the Shop was replaced with wooden boards that sheathed mesquite posts supporting the Bunkhouse above.

Image B showed the northwest corner of the Bunkhouse/Carpenter’s Shop as one anchor for the north corral wall; the other was the southeast corner of Room 6. The 30-year old adobe corral wall was eroding to the point of instability. Within five years, post-and-rail fencing replaced the entire north adobe wall. The main gate remained in the same location in the post-and-rail fence.²⁴

In Image B, Heffner intended to photograph some of the Empire cowboys and their children at the corral. However, his image recorded other important elements as well. Married employees with family resided outside and North of the corral in the Hired Man’s House, visible in the background of his snap shot (green arrow). The origin of the Hired Man’s House has long been uncertain and Heffner’s photograph fortuitously confirmed its early existence.

Figure 7, Image C illustrated the linear array of structures outside of the corral’s east wall and documented the extent to which these exterior additions replaced the rapidly dwindling adobe wall. With the construction of the Bunkhouse/Carpenter’s Shop and its multiple lean-tos, the Cowboy’s Outhouse, the Farrier’s Shop, and finally the Slaughterhouse marking the southeast corner, only one small piece of the east wall of the adobe corral remained (Image A).

Phase 5 – 1893-1905 (continued)

The south and southeast portions of the house corral supported functional structures that served ranching activities. A critical member of ranch operations, the Farrier shod hundreds of horses and mules used by Empire’s cowboys and owners. The Farrier’s Shop was built sometime after Heffner’s arrival at the ranch (Figure 8, Images A and B, and also Figure 7, Image C).²⁵ Like the Bunkhouse, the west wall of the wooden Farrier’s Shop replaced the original adobe material of the corral; these structures continued to define the open spaces within the corral in lieu of the adobe wall. The Farrier’s

²² Walter Vail and his family moved to Los Angeles in 1896 to oversee their growing land and cattle management activities and real estate acquisitions in California.

²³ Harry L Heffner to Mary Boice, February 5, 1954. ERF; See also Photograph A536-(8), 1904. ERF.

²⁴ Ibid.

²⁵ Heffner’s earlier photographs, A536-153 and A536-150, showed the east corral wall without the Farrier’s Shop. ERF.

Shop's northwest corner became the anchor for the new post-and-rail fence. The west wall of the Shop steadied the old East-West Stable fence that attached to the Cook's Wing (yellow arrows in Images A, B).

The Shop was a tall, well-lit structure with two windows and an east-side door. On the west side, the Farrier had access to a small, enclosed area, a subunit of the Stable corral, for shoeing livestock (Image A). This fenced area had probably retained the early hay pile. A snubbing post was installed in the center of this small corral during the Banning Vail era when the space was also used for training young horses.²⁶

The Farrier's Shop stood adjacent to the Slaughterhouse, another wooden structure built slightly earlier (See Figure 7, Image C). Livestock carcasses were dressed at this building; the meat was later stored in the cooler in the zaguán.²⁷ The west face of the wooden Slaughterhouse replaced the adobe wall in the southeast corner of the corral and, like the Bunkhouse and Farrier's Shop, became part of the corral's east boundary.

By the end of Phase 5, building exteriors and post-and-rail fences had replaced almost all of the original 100' x 100' adobe wall. The south wall of the Stable where the Vails kept their personal horses and stallions probably contained the last existing portion. Figure 8, Image C, taken around 1900, clearly illustrated the presence of adobe bricks in this last portion. A gate in the middle of the Stable's south wall allowed access between the Stable and the outer Adobe Hay Barn area. That opening is in the same location in the modern Stone Corral.²⁸

Another opening between the southeast corner of the Children's Addition and the west end of the Stable is apparent in Image C. Its presence was marked by a wooden walkway (green arrow) leading to the southern outhouse or privy. A picket fence enclosed the privy and small garden and kept livestock out of the Vails' family area.²⁹ The location of this outhouse suggests that it was intended primarily for use by the Vail family.

Siting an outhouse had multiple, often conflicting requirements. A privy needed reasonably easy access, i.e. not too far from everyday work and living spaces. For general inhabitant happiness, it needed to be downwind of most prevailing breezes. For those reasons, the Empire Ranch privies were located outside but close to the corral and generally East and South of the nearby living quarters. The cowboys' outhouse was situated South of the Bunkhouse and East of the house corral (Figure 8, Images B and D). Ranch employees would have accessed it by exiting the main gate and circling around the Bunkhouse (or, as in the case of the young woman in Image D, exiting the corral *over* the post-and-rail fence for a more direct route).

Phase 6 – 1910-1955

Phase 6 marks the third and last period of major change to the Headquarters and adobe corral. When Walter Vail and his family relocated to Los Angeles, the Empire became a satellite operation to the multiple land and cattle businesses beyond southeastern Arizona run by Vail and his partner, Carroll Gates. The Empire Ranch continued to function as a breeder operation; yearlings were shipped to grasslands in California, Texas, Oklahoma and Kansas for finishing. Following Walter Vail's death in 1906,

²⁶ Laura "Dusty" Vail Ingram, interview by Harrison, 4. ERF.

²⁷ A hoist for lifting slaughtered animals was visible East of the building. See also other photographs: A535-003, A536-150, and A536-153. ERF; Harrison and Neidinger, "Heart of the Empire," 36. ERF.

²⁸ The gate is also visible in photograph A536-153. ERF.

²⁹ In later years, Laura Perry Vail and Mary Boice develop this west side area into a beautiful, lush oasis in the midst of the high desert grassland; See A300-87 and B206-023. ERF; "Empire Ranch Landscape" 4, 16. LOC.

son Banning returned to Arizona to manage the breeder operation at Empire Ranch for the family.³⁰ Banning expanded the headquarters, adding numerous structures in the modernization of the Ranch. Equipment and vehicle storage and shoeing operations shifted to the South Barn; equipment repair to the Mechanics Shop. Trucks and automobiles had become an essential transport tool for the ranch (Figure 9, Image A).

That modernization was imposed by a major fire that consumed much of the working side of the Ranch in May, 1910.³¹ With the exception of the Farrier's Shop, the fire destroyed all of the wooden structures including the Bunkhouse/Carpenter's Shop, Slaughterhouse, and two storage barns (see Figure 7, Image C). None of these were rebuilt. The fire also severely damaged the Cooks Wing, Stable and Adobe Hay Barn. Family buildings on the west side were unaffected. All livestock were outside of the working area in pastures.

The extensive damage initiated major upgrades and material changes to the Headquarters. On almost all buildings, corrugated iron replaced the old wooden shingles roofs (Figure 9, Images A, B, and C).³² All exposed adobe structures were plastered with cement.³³ The adobe Stable, the last component of the original corral, was dismantled and any surviving adobe bricks were likely reused to repair damaged walls of the Adobe Hay Barn. The post-and-rail fences of the house corral and its inner divisions were rebuilt in their original locations. The Stable was reconstructed with stone and cement mortar (Figure 9, Image B). The use of stone as a building material for above-ground structures was, and still is, unique at the ranch. Beyond issues of durability, the reasons why Banning chose to rebuild with stone instead of wood, as he did with the Feed Shed and South Barn, are unknown.³⁴

Image B shows that the Stone Corral connected to the Children's Addition, extending further West than the old Stable wall. This extension appears to have closed the earlier direct access to the south-side outhouse.

The Stone Corral continued to house Vail stallions. That function did not change until the 1940s when the structure was repurposed as the Boices' woodcutting shop. A concrete base for the Boice chop saw still marks that historic use. The west half of the Cook's Wing-to-Tack Room fence was removed to provide easier access to the woodcutting machinery (Figure 9, Image C).³⁵

Another exception to building clearances was the Farrier's Shop. Frank and Mary Boice later turned the board-and-batten structure into their Tack Room. In 1928, the Empire Ranch was sold to the Boice family and most of the major changes around the house corral had finished. Today, the cattle loading chute built by the Boice family in 1955 occupies the site where the Slaughterhouse once stood. Perhaps

³⁰ Dowell, "History of the Empire Ranch" 37-50. ERF; Walter Vail was struck by a streetcar in Los Angeles and died shortly thereafter on December 2, 1906.

³¹ "Fire Devastates the Empire Ranch." Arizona Daily Star, May 12, 1910; "Big Fire May Have Been an Incendiary One." Arizona Daily Star, May 13, 1910.

³² Initial exceptions to this reroofing were the historic four-room building (1, 3, 4, 6) and the Farrier's Shop (later Tack Room).

³³ Images taken by Tom Turner in 1910 confirm many of these changes around the Headquarters. Only the adobe of the Hired Man's House remained uncovered.

³⁴ Photographs donated by descendants of Tom Turner, Foreman at the Empire Ranch between 1909 and 1911, document that replacement. ERF.

³⁵ See photograph B405-116. ERF.

Frank Boice, who was interested in preserving the historic components, was reluctant to modify the working parts of the corral area in absence of any significant need.³⁶

Modernization of human needs was slower in coming. The first interior bathroom for the Vail family was installed at the west end of Room 22 shortly after Banning Vail's marriage to Laura Ingram in 1913. The bathroom in the Children's Addition, built inside Room 25, probably arrived soon thereafter. The Vail outhouse, South of the Children's Addition, however, was still in place in 1921 (Figure 9, Image B). The Cowboy Outhouse on the east side of the corral was relocated before 1923 North of the corral and East of Room 6 – perhaps for ease of access (Image A, arrow). Gerald Korte, a cowboy who worked for the Boice family, stated that the privy had later returned to its earlier location on the north side of the Tack Room by the late 1940s. Interior bathrooms for ranch hands (inside Rooms 6 and 8) were not added until 1948.³⁷

The house corral area continued as the prime staging area for horses and riders. By the early 1920s, two low roof structures had been added inside the corral: one on the east wall of the Cook's Wing and the other above the low wall south of the Foreman's Quarters. The roofs provided protection from sun and rain for saddles and tack hung on the racks (Image C). Like many of the other buildings at the Ranch headquarters at this time, these structures were roofed with corrugated iron panels. Sometime in the 1970s, John Donaldson tore down the low wooden wall and its roof on the east side of the zaguán.³⁸

Reprise

Reasons for effecting change are rarely recorded in historic documents. That information is lost as individuals and decades pass away. This essay attempts to reconstruct how, when, and why those changes to the Empire Ranch's inner Headquarters occurred. Family expansion, and growth and modernization of ranching operations have been the main drivers of change at the corral. With few exceptions, the majority of those changes occurred before the transition from Vail to Boice ownership.

What's left? None of the original adobe corral remains – that we know of. It is possible that some portions of the corral's west wall were incorporated in the west wall of the Rear Addition or into the east side of the Victorian Addition's Room 23 before they were covered up.

That's OK though. The ghost of Hislop's adobe corral is still present at the Empire Ranch and still contributing to the historic environment of the headquarters, even when we can no longer see or touch it (Figure 10). The adobe wall is still felt in the post-and-rail fencing in the north and east sides of the corral. It lives in the walls of the Stone Corral, and the Victorian, Children's and Rear Additions that mark its original footprint. Its purpose is still recognized as one enters the zaguán and senses security in that inner courtyard environment.³⁹

The evolution from a 100' x 100' adobe-walled area to multiple smaller spaces and different building materials is our record of the changing needs and values throughout the history of the ranch. What

³⁶ Laura "Dusty" Vail, interview by Harrison, 4. ERF. Some information suggests that a fire of date unknown, perhaps a result of Farrier operations, might have caused the clearing of structures on the east side of the corral; National Register Update, Empire Ranch Historic Site, Sec. 7, pp. 6, 13. ERF; Gerald Korte, interview by Scott O'Mack, Matthew Sterner, and Leslie Schupp, in Majewski et al. "Adaptive Reuse Plan for the Empire Ranch Headquarters" B-6. ERF.

³⁷ See photograph by Robert Forbes PC48 #18581, May 1915, AHS and ERF; see also photographs A300-044 and B300-035. ERF; Gerald Korte by O'Mack et al., B-7. ERF.

³⁸ Harrison and Neidinger. "Heart of the Empire," 39-40. ERF.

³⁹ 2015 aerial image from Pima Association of Governments; Individual components of the post-and-rail fencing have been replaced over time. Their collective footprint remains the same as the original adobe wall.

began as a livestock refuge from the Chiricahua Apache evolved into living and working quarters for family and employees and staging area for horses and riders.

The corral defined the placement and arrangement of the working ranch structures on the east side and the family environment and buildings on the west. The zaguán enhanced that original east-west dividing line in the ranch headquarters. These two halves, one social and one operational, remained firmly separate but closely linked by access points that evolved with each new set of structures and purposes. Individual buildings defined and separated spaces. The Empire buildings both reflected and cemented social conditions and societal standings. Structures, in their turn, became the anchors and boundaries for second and third generations of internal and external fences.

Photographic Archaeology

Finally, we should ask: Does this methodology of Photographic Archaeology actually succeed? It's not perfect. Like much historical research, this methodology is dependent upon multiple lines of evidence, each of which holds some degree of uncertainty.

Photographs present one perspective; they show us that which the camera holder deemed interesting or important at the time. We have many images of riders and horses in the corral near the zaguán and saddle racks; yet only a handful include a view of the Stable. Thus, we have little information about its structure, size, and relationship with nearby features. We are left to make educated guesses regarding its use, history of alterations, and influence on ranch operations, daily living activities, and human movement. On the other hand, the photograph of the little girl on horseback, the primary subject of her mother's focus, documents so much more, revealing information to later viewers that the author probably never noticed. Harry Heffner, as he recorded his compatriots in front of the corral's main gate before 1900, inadvertently confirmed the existence of the Hired Man's House, later believed to date from the following decade.

Dates associated with photographs are always open to question. Many in the archive are assigned as ranges: "the 1920s" or "circa 1900." Children and grandchildren handed down these metadata long after the image was recorded or the artist passed away. But the sheer volume of images in the ERF archive (774 in the Vail collection and 599 covering the Boice era) offers a counterweight to this dating uncertainty. Age of children, size of vegetation, presence of known individuals, and telltale structural change can be compared amongst multiple images or from specified dates such as those found in family letters. Taken together, these nodes of information create a larger Empire Ranch timeline against which each new image can be juxtaposed and calibrated.

Oral histories provide corroborative data. They record valuable event information and, sometimes, explanations of change. That information should be applied cautiously, of course. Memories, often many decades old, are colored by personal experiences and can become fallible over time. Yet that perspective provides a depth of understanding and color for the details of life, activities, and patterns of use that cannot be acquired from any other primary source. Interviews taped at the Empire Ranch stimulated questions and answers about specific physical structures and spatial organization. They recorded important information that otherwise might not have been revealed in another venue.

This research leans heavily on the larger contextual framework of the history of cattle ranching in the Southwest but more specifically on the history of the Empire Ranch as a business during the Vail era. Greg Dowell assembled the sequence of events and business decisions that Walter Vail and his partners made during the first 30 years of the Empire Ranch. Many of those events parallel the evolution of change at the ranch headquarters and around the house corral. After the last family building had been added inside the corral, Walter Vail shifted his business focus and, ultimately his family, to Los Angeles

in the 1890s. Under the guidance of Ranch foremen in charge of day-to-day operations, structural development was redirected to the east side of the corral to support the employees and their daily activities. Without Dowell's previous analysis, the origins of that phase of the building program would have been less recognizable.

The information contained in Empire Ranch Foundation archive tells the story of this evolving 140-year old ranch: its successes and failures, its economic and social challenges, and the lives of these ranching families. Many of those stages were mirrored in the expansion and change of buildings and satellite structures at the ranch headquarters. Today, the historic pattern of development and its logic of spatial organization are not as obvious as they once were. The purpose for the separation between the Stone Corral and the south end of the zaguán is no longer readily discernable. Room functions have changed or passed into history. Interior fence lines have been eliminated. Construction materials have been covered up; passageways have changed. The ranch headquarters no longer supports cattle operations and no one lives in the buildings. Instead, tourists and schoolchildren wander tentatively through the rooms and outdoor spaces noting details but unable to read the larger evolutionary history of the ranch.

With the assembly of this story line, we now have a better understanding of how Empire families and employees lived and worked at the ranch. This is by no means the last of the narratives that could blossom from the Empire Ranch Foundation archive; the headquarters and its surrounding landscape are still rich with unanswered questions waiting for the next photographic archaeologist.