UTAH HISTORICAL QUARTERLY

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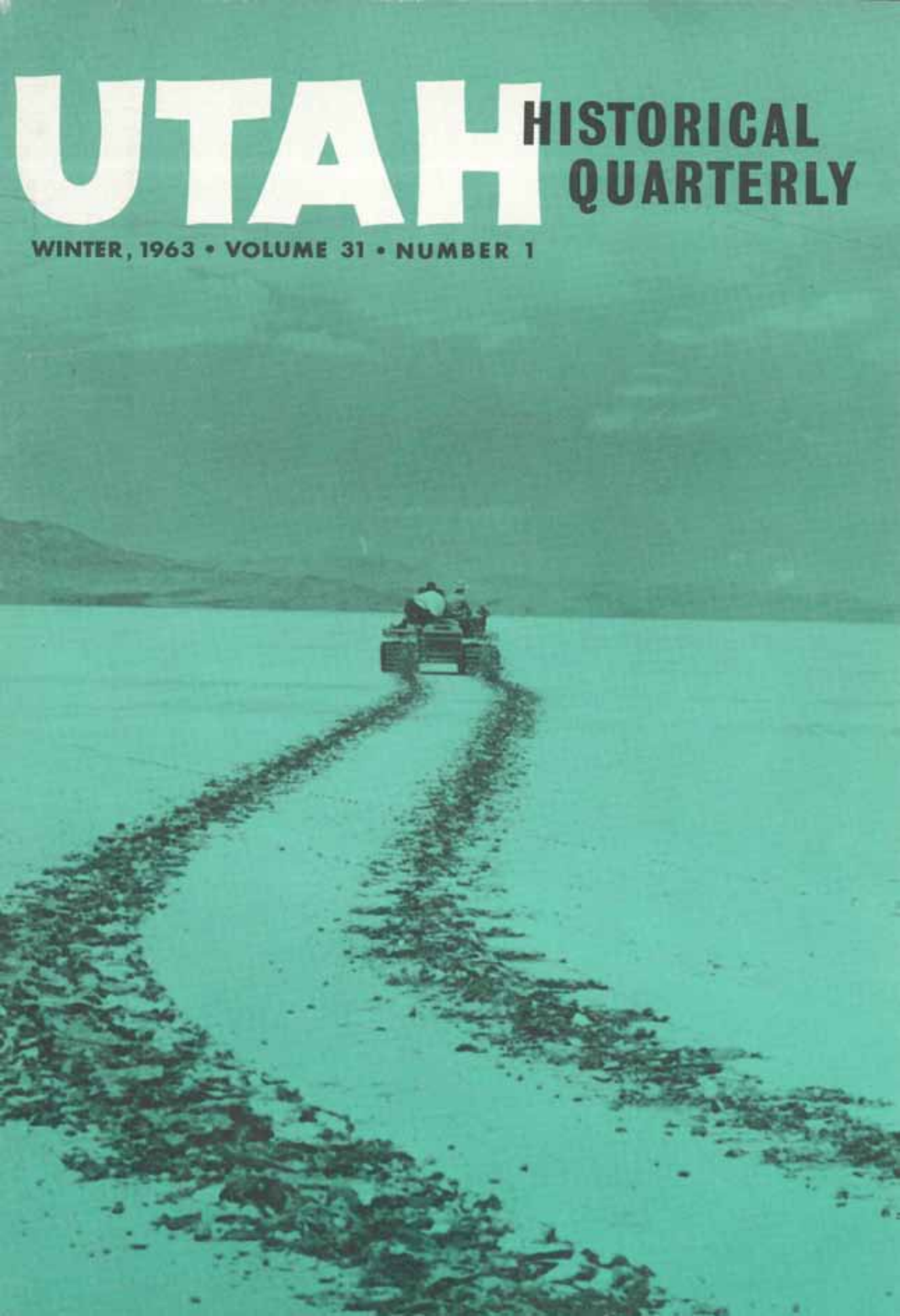

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The Cover

Tracked vehicle following Donner-Reed trail across the Great Salt Desert. COURTESY DAVID W. EVANS & ASSOCIATES

BOOKS REVIEWED

They Kept 'Em Rolling:

THE TOOELE ARMY DEPOT, 1942 - 1962

BY

LEONARD J. ARRINGTON

AND

THOMAS G. ALEXANDER

Since the outbreak of World War II, United States Department of Defense installations in Utah have become increasingly important to the state's economy. These installations (and they do not include the defense-supported missiles industry) employ more than 22,000 persons, have an annual payroll of almost $127 million, and purchase approximately $27 million worth of products annually from Utah businesses. An estimated 8 per cent of all income in Utah is generated directly by these establishments.[1] This is more than the income from Utah's trade, more than the income from all state and local government expenditures, and more than the income from all of Utah's agriculture. If these federal enterprises were suddenly withdrawn from the Utah scene, not only the 22,000 installation employees, but countless others who rely upon their incomes for their livelihood, would be adversely affected.

Dr. Arrington is professor of economics at Utah State University. A graduate of U.S.U., Mr. Alexander is working on a doctorate in history at the University of California, Berkeley. This article was written under a grant from the Utah State University Research Council. The writers are grateful for the suggestions of George W. Diehl, executive administrator; Mrs. Karma C. Woodward, base historian; Marshall A. Grode, public information officer; Orville Mooberry, comptroller; and Mrs. Louise Fitzwater, assistant security control officer, all of Tooele Army Depot; and Gary B. Hansen, a member of the staff of the commanding officer of TAD, 1957–59, and now university research fellow in economics, Utah State University. This article was written early in 1962, before the name of Tooele Ordnance Depot was changed to Tooele Army Depot; therefore, the former name is used throughout. All photographs in the article are courtesy Tooele Army Depot.

[1] Compare 1956 estimates and data in "Defense Industry in Utah," *Utah Economic and Business Review*, XVII (September, 1957), 2–3. Another recent estimate states that defense payrolls, military and civilian, account for 6.7 per cent of Utah's total personal income, *U.S. News & World Report*, February 19, 1962, p. 40.

TABLE 1

DEPARTMENT OF DEFENSE INSTALLATIONS IN UTAH, 1961

(Source: Information Supplied By Each Base)

Installations	*Year Established*	*Average Number Employed*	*Annual Payroll*	*Local Purchases of Goods*
Fort Douglas	1862	509	$ 2,513,645	$ 770,690
Hill Air Force Base	1939	13,381	81,643,978	6,763,000
Utah General Depot	1941	3,033	16,304,194	12,477,022
Dugway Proving Grounds	1942	2,058	10,082,000	4,045,000
Tooele Ordnance Depot	1942	2,395	12,770,498	2,293,526
Clearfield Naval Supply Depot	1942	620	3,300,000	50,000
Supersonic Military Air Research Track (Hurricane Mesa)	1954	44	303,000	180,000
TOTAL		22,040	$126,917,315	$26,579,238

In addition to an abundance of room, a major reason for the establishment of a relatively large number of important defense installations and depots in Utah is the central location of the state in the West. Equidistant from the three major West Coast shipping centers of Seattle, San Francisco, and Los Angeles, and connected with them by transcontinental rail, highway, and air routes, northern Utah is an ideal central distribution point.

ESTABLISHMENT OF THE TOOELE ORDNANCE DEPOT

In 1920, at the end of World War I, the United States Army constructed an arsenal in Ogden as an ammunition depot to store much of the permanent reserve of the Ordnance Department. While the Arsenal soon reverted to an inactive caretaker status, it came to be regarded as a key center of Army supply in the West. Thus, in the buildup of national defense that followed the outbreak of World War II in Europe, the War Department determined to expand the facilities of the Ogden Arsenal. Army investigators found, however, that the possibilities of enlarging the site were severely limited — by the Wasatch Mountains on the east, Great Salt Lake on the west, the city of Ogden on the north, and Salt Lake City on the south. Within this rectangle the Arsenal "was immediately hemmed in by a neighboring airfield, main trunk highways, and fertile farm and orchard lands." The Army's alternative, in the months of feverish expansion after the attack on Pearl Harbor, was "to carry out the long-planned expansion of Ogden" by acquiring a tract of about 25,000 uninhabited acres near the town of Tooele.[2]

[2] Harry C. Thomson and Lida Mayo, *The Ordnance Department: Procurement and Supply, United States Army in World War II* (Washington, 1960), 375–76. The Ogden Arsenal remained throughout World War II one of the largest Army "retail" depots in the West, with a peak employment of more than 6,000 in 1943. In 1954, the Arsenal, which had become known as the Ogden Ordnance Depot, was consoli-

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Army records list several reasons for the location of an Army ordnance depot at Tooele.[3] Tooele's inland location gave it an advantage over such well-established installations as Benicia Arsenal, near San Francisco, which was not further enlarged because of its vulnerability to attack by sea and air. Far away from the West Coast, nestled in a narrow valley between the Stansbury and Onaqui mountains on the west and the Oquirrh Range to the east, Tooele was an ideally defensible site. Moreover, the sandy loam upon which the Depot was to rest was formed geologically in such a way that the soil absorbed shocks — a necessary feature in case of accidental detonation or bombing.[4] Located on the edge of the Great Salt Lake Desert, Tooele also possessed a dry climate, lessening the danger of rust and corrosion to ammunition, artillery pieces, and vehicles in storage. The mean annual precipitation at Tooele is only 8 inches and the relative humidity is generally under 30 per cent, where 40 per cent is considered the maximum for safe storage of ordnance materials.[5]

The land on which the Depot was located lay 4 miles south of the town of Tooele, and was obtained in the spring of 1942 by the United States government acting through the district engineer, at a total cost of $94,221. Of the 24,728 acres designated for the Ordnance Depot, 8,153 acres belonged to the State of Utah. Other lesser owners included Peter and Howard J. Clegg and William H. Bryan, of Tooele; George E. and Edna P. England, of Salt Lake City; and the Grantsville Soil Conservation District.[6] Used primarily for grazing sheep, and in one portion for growing crops, the site was constantly harassed by sand and dust storms. Indeed, "oldtimers" declared that on one day all the topsoil would blow north, and on the next day was all blown back. Even the sagebrush and scrub cedars did not prevent frequent shifting of the land.

By March 23, 1942, Major George A. Howarth, the area engineer and a former Tooele resident, had moved into a small temporary office about one-

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dated with the Tooele Ordnance Depot, and the land was assigned to nearby Hill Air Force Base, *ibid.*, 353, 362, 373, 379–81, 387–91, 461. Also, Constance M. Green, Harry C. Thomson, and Peter C. Roots, *The Ordnance Department: Planning Munitions for War, United States Army in World War II* (Washington, 1955), 38, 60–64.

[2] Mr. Marshall A. Grode, public information officer, Tooele Ordnance Depot, has Historical Reference Files, in which are found some of the quarterly historical reports for the period before 1945, and statements of the mission and accomplishments of the Depot. Mrs. Karma C. Woodward, the base historian, has an Historical Data File with a summary of the Depot accomplishments during World War II; a folder entitled "Depot History, from March 23, 1942 to September 2, 1945" (hereafter referred to as Folder 42–45); and "Tooele Ordnance Depot, Tooele, Utah: Historical Summary for 2 September 1945 to 1 July 1951." The latter is a compilation of historical summaries furnished by each of the divisions at the Depot. Also valuable are the quarterly and semiannual historical reports, which are reasonably complete since 1951. Unless otherwise noted, the writers have based this article on the quarterly and semiannual historical reports and summaries.

[3] "From 1942 to 1947" (Folder 42–45).

[4] "Background of Tooele Ordnance Depot" ([Tooele], n.p., April 19, 1959).

[5] "History of Tooele Ordnance Depot, October 16, 1942," signed by Major E. R. Lower (Folder 42–45). "Tooele Ordnance Depot, Assets as of 31 December 1960," furnished by Mrs. Woodward. "Miscellaneous Record Book E," 311–13, 387–88, 423–29, and "Record Book 3Z," 369–70, 375–80, 412, 492 (County Recorder, Tooele).

fourth mile from the Tooele-Grantsville road. On April 2, he was joined by the first commanding officer, Major Edgar R. Lower, who had been civilian chief clerk of Savanna Ordnance Depot Proving Grounds, Illinois. Within 6 months most of the key personnel, including senior clerks, chief of the mail and records section, fiscal officer, utilities officer, post signal officer, property officer, plant security officer, and executive officer, had arrived. The first officer of the day received his assignment on September 16, 1942, and the base may be said to have commenced its activities on that date. Supplies began to arrive in anticipation of the completion of construction.

Construction in this Sahara of the West was no minor problem. The job was too big for one contractor. Four contractors, Peter Kiewit Sons, of Omaha; Morrison-Knudsen, of Boise; Ford J. Twaits, of Los Angeles; and Griffith Company, of Los Angeles, formed a corporation called Inter-Mountain Contractors and won the prime contract for $26,724,598. As soon as they broke ground in June of 1942, the sand seemed to emerge from the earth like Moses' plague of flies. Dust became so dense that the contractors were forced to shut down operations for several days to prevent head-on collisions, though construction equipment had been operated at midday with all lights burning. At one stage in the construction, a wind of over 80 miles per hour blew 32,000 square feet of roofing from the utility area. Despite these difficulties and war-created shortages of manpower and materials, the contract was completed by January, 1943.[7]

By the end of World War II, the Depot had 902 igloos, including almost 100 which were constructed of reinforced concrete and covered with 2 feet of earth and gravel, for storing high explosives; 12 above-ground magazines for the storage of small arms ammunition; 31 warehouses, each with a capacity ranging from 200 to 500 carloads; a $1 million tank repair shop; and artillery and automotive equipment repair shops. The buildings enclosed 112 acres of floor space, and the storage section covered an area of 8 square miles, divided into 8 blocks 1 square mile each. The administrative area included a hospital, prisoner-of-war camp, 29 barracks for troops, and a 1,080-unit Lanham Housing Project (TOD Park) with a shopping center, post office, and elementary school. All told, the Depot included approximately 60 miles of railroad, 130 miles of road, 30 miles of boundary fence, and 25 miles of protective fence inside the reservation. Construction required almost 300,000 cubic yards of concrete and 40 million board feet of lumber.[8]

[7] The contract called for 2,350,000 square feet of warehouse space, 1,600,000 square feet of storage igloos, 124,000 square feet of storage magazines, and 4,500,000 square feet of gravel-surfaced, open-air storage space.

[8] Letter from Major Myron R. Gillette to Commanding Officer, Baltimore Sub-Office, 2 February 1945, in Historical Reference Files — T.O.D. Missions, Dec. 1942–July 1944, Mr. Grode. Also O. N. Malmquist, "More than $52,000,000 spent on Tooele County War Plants," *The Salt Lake Tribune, The Magazine*, July 11, 1943, p. 4.

During the construction of the Ordnance Depot, the Defense Department also ordered the construction of a storage depot for Chemical Corps toxics on 19,364 acres of land 20 miles south of Tooele in Rush Valley. Named Deseret Chemical Warfare Depot, the storage facility included 140 igloos, 2 magazines, 7 warehouses, 32 toxic sheds, and several transitory storage shelters. Total area of the Tooele and Deseret depots was 44,092 acres.[9]

The Mission of Tooele Ordnance Depot

In the middle of the construction activity, on December 8, 1942, the Army assigned Tooele Ordnance Depot its first mission, which was to store vehicles, small arms, and fire control equipment for export; and overhaul and modify tanks and track vehicles and their armaments. In general the order designated Tooele as a back-up depot for the Stockton Ordnance Depot and Benicia Arsenal, both in California.[10] Later, in July, 1943, Tooele was designated as a reserve storage depot for tank and combat vehicle tools and equipment. Still later, in November, 1943, TOD became the supply center for materiel required by the Ogden Arsenal.[11] Service to the Ogden Arsenal was improved by the establishment of a round-robin shuttle service featuring the use of huge ten-ton trailer vans. As a "wholesale," rather than "retail," depot, TOD was expected to make up the bulk of its shipments in carload lots. Millions of board feet of lumber

[9] "Background of Tooele Ordnance Depot."

[10] "Mission: Tooele Ordnance Depot," in Historical Reference File — T.O.D. Missions . . . , Mr. Grode. The Army maintained the following types of ordnance storage facilities during World War II: ammunition depots, ordnance general supply depots, back-up storage, Army general depots, war aid depots, holding and reconsignment points, and motor bases. The Tooele Ordnance Depot was originally established as an ammunition depot, Thomson and Mayo, *The Ordnance Department*, 384.

[11] As with much of our military terminology, materiel is a French term denoting "the aggregate of things used in carrying on the business."

Storage igloo under construction.

were required for dunnaging, crating, and maintaining the thousands of military items shipped overseas and elsewhere from Tooele.[12]

To complete the mission of rebuilding the vehicles and artillery pieces, the Defense Department ordered Major Lower to establish a maintenance shop. As Major General Levin H. Campbell said on a tour of inspection: "Its strategic position . . . is such that if untoward events should occur on the Pacific Coast, the depot with its Maintenance setup will be invaluable to the operation of our Forces." [13] The repair phase of Depot activity was progressively intensified as TOD was ordered to completely rebuild and overhaul half-tracks, medium tanks, and light tanks — a task which the Depot was often able to accomplish in less than a day. In addition to combat vehicles for the troops, TOD was often asked to prepare tanks and other vehicles for mock battles in connection with War Loan drives and military celebrations in the West.

The Ordnance Department also authorized TOD to rebuild, modify, and reclaim 75 mm. howitzer motor carriages, and artillery pieces including antiaircraft artillery up to 155 mm. Between May and September, 1944, for example, the Maintenance Section overhauled 325 light tanks and fifty 75 mm. howitzer carriages. The Depot later expanded its functions to include the repair of optical instruments (telescopes, height finders, aiming circles, and binoculars) and the reclamation and salvage of useless or obsolete weapons, ammunition, and vehicles.

The assignment of new functions and the consequent expansion of the work force required additional construction. The main entrance and underpass were completed and dedicated on July 14, 1943. New structures included a $110,000 base hospital, a 100,000 gallon water tank, and a coal yard. By the end of the war, an average of more than $800,000 per year was being spent on the repair of buildings.[14]

New responsibilities necessitated the training of new workmen, nearly all of whom were recruited locally, and the reorganization of departments. Nevertheless, even at this early stage, the installation became noted for efficient and economical operation — a factor which led to the assignment of additional responsibilities and eventually to the position of major ordnance supply center in the West.

Depot Activities During World War II

After the Normandy invasion and the raid on Japan, in June, 1944, Depot personnel regularly broke records in attempting to keep supplies rolling to the

[12] Dunnage is loose material, mostly lumber, laid among articles in shipping to prevent damage.

[13] "Second Quarterly Historical Report — 1943," Historical Reference Files, Mr. Grodc.

[14] "Tooele Ordnance Depot" (Folder 42–45).

troops. In a 5-day period in July, some 141 carloads of materiel were shipped from Tooele. By December, the speed in handling materials was over 4 times as great as it had been in the previous year. Only 23 cars stood in the railroad yards longer than 3 days. By September, 1944, the commanding officer announced that TOD would be required to handle some 85,000 tons of materiel per month, as against the 12,000 tons which it had averaged in previous months. This was nearly achieved when 807 carloads of materiel, with an average of 80,000 pounds per carload, came into the Depot the following month. By June, 1945, the Depot was receiving more than 110,000 tons and shipping almost 2,700 tons per month, for a total of more than 112,700 tons.

Although there were difficulties in obtaining parts and equipment, "Yankee ingenuity" solved many problems. The hoists which the Combat Maintenance Section needed for lifting heavy subassemblies were not available, so the section solved the problem by constructing their own. The Motor Transport Section designed a special gauge to test the adjustment on electric brakes and a trailer for transporting electric forklifts in the ammunition area.[15] One employee in Field Service Maintenance, Merrill Johnson, designed a modification of the carriage of a 90 mm. gun, permitting a reduction in the over-all installation time for the carriages from 440 man-hours to 225. A work-simplification survey saved 150,000 man-hours by designing more efficient ways to do particular jobs.

Since not all ammunition, vehicles, and guns could be repaired, the Depot sought the most efficient and economical methods of salvaging obsolete and worn-out materiel. In June, 1943, a furnace was built for popping small arms primers, and this was replaced early in 1944 with a new popping furnace. During the first 3 months of 1944, almost 3,000 tons of small arms brass were demilitarized and made available for salvage. Unfortunately, old brass was not much in demand at the time, and a new storage area had to be constructed. Nevertheless, in the spring of 1944, TOD sold to United States Smelting, Refining, and Mining Company 1,100 tons of surplus tank hulls. Prisoners-of-war were detailed to use acetylene torches to cut the armor plate to prescribed sizes. Eventually, local outlets for both ferrous and nonferrous metals were found. Another major by-product of the salvage operations was wood from the crates and dunnage.

Some of the scrap and salvage was more valuable to the Armed Forces than the income from its sale to TOD. Solder, an item most difficult to obtain during this stage of the war, was used in the manufacture of ammunition box liners. Thus, TOD's Reclamation Branch developed a furnace to melt the solder from

[15] "History of the Tooele Ordnance Depot, April 1, 1943–July 1, 1943," Historical Reference Files, Mr. Grode.

the liners, collect it, and make it available for use. The Depot required that, where feasible, all liners be returned for salvage operations. In addition some ammunition brass was processed, resized, and returned for reloading.

All of the brass did not find its way back to the arms factory, and some of it served a dual purpose. A special shipment of brass was loaded, sent to the Pacific front, fired at the Japanese, returned to Tooele, reclaimed, and sent out again for further use. On October 2, 1944, the officers who sat down to dinner at the officers' club at the Depot were surprised to find near their plates a small card with a metal object attached. These objects, they learned, were pennies which had been minted at San Francisco and Denver with a special shipment of brass from Tooele fired at the enemy in the Pacific.

Throughout the war the necessity of high production and shortage of skilled manpower made it imperative that the administration concern itself with employee morale. The shortage of housing was a constant irritant, as was the lack of transportation and recreational facilities. Inter- and intra-plant bus service was introduced, and when the 30 buses were shipped overseas, makeshift buses were made from semi-trailers. Some of the problems were solved by the TOD Employees Benefit Club, which was organized shortly after the installation opened. Through this club, car pools were organized, meal books were sold, and cash loans were made to the employees. The importance of the Depot's work was brought vividly to the attention of the employees when local theaters showed without charge a series of movies entitled "Why We Fight." This, together with the War Loan drives and awards of ribbons and cash for meritorious service and suggestions, effectively maintained morale. By June, 1944, the Depot reported 100 per cent participation in the Payroll Savings Plan, with an average deduction of more than 16 per cent.

A Civil Service directive which prohibited direct recruitment (in order to avoid competitive bidding for skilled labor) made TOD's problem even more complex, for unlike private industry the enterprise was forced to rely on an outside agency (Civil Service Commission) to supply its personnel. In the spring of 1943, this prohibition was temporarily lifted, and the Depot was able to recruit 60 ungraded workers from New Mexico. This proved to be only a temporary solution because of the unusually high turnover of these workers.

Practically all departments experienced manpower shortages during 1943. The Ammunition Section hired women, although no restrooms had been provided for women and the shortage of transportation facilities was an added inconvenience. Eventually, women were hired to drive most of the buses and taxis; even today women drive all the taxis at TOD.

Solving the Manpower Shortage

In an attempt to correct the shortage of workers in materiel-producing jobs, Washington ordered cuts in administrative personnel, and the Depot sought to hire teachers and students during summer vacations. These measures never really solved the problem, and many shipments were behind schedule. In the fall of 1943, the Depot hired high school students on Saturdays and weekdays from 4 to 8 P.M., to help repair vehicles and crate material for shipment. Early in 1944, the federal manpower authority again granted permission to hire personnel in New Mexico, additional women were hired, and the Depot instituted a comprehensive training program to upgrade the work force. Hundreds of checkers, stenographers, drivers, forklift operators, mechanics, and supervisors learned their jobs through this training.

Also, early in 1944, German (and later Italian) prisoners-of-war were assigned to the Depot. They cut wood and metal for salvage, cleaned and stacked dunnage, worked on vehicle repair and maintenance, drove trucks, and took care of the lawns. While the productivity of the POWs was low because of the lack of incentive, a number of them possessed job specialties which were particularly useful, as for instance the expert typewriter repairman who serviced all Depot typewriters. The prisoners required close supervision and were subject to the rules of the Geneva Convention, which forbade certain types of labor, but humane treatment resulted in satisfactory work output and few complaints. The prisoners were guarded by the Security and Safety sections, which also patrolled and guarded the Depot fences and checked all persons entering and leaving. Besides an M-3 tank, a reconnaissance car, scout car, jeep, and foot guards, the K-9 Corps was used for a short time, but later abandoned because it was difficult to train personnel to work with the dogs.

Probably the most successful recruitment program was among Japanese-Americans. Torn from their West Coast homes and placed in tarpaper-covered barracks in 10 "war relocation centers" in Utah and 6 other states, these industrious "second-class citizens" were permitted to relocate in Tooele and other centers of war production activity. Most of those at Tooele were recruited from the Gila and Colorado River Relocation centers in Arizona and the Heart Mountain Relocation Center in Wyoming. To insure a friendly reception, members of the Personnel Section, together with prominent citizens from Salt Lake City and Tooele, explained to the public the need for their contribution to the war effort. It appears that they were well-integrated into the community, and citizens of Tooele still tell of the diligence and industry of these Americans. By the end of 1944, 300 new families had been added to the original 80, and many of them remained after the war and still live in Tooele.

Data on employment during this early period are difficult to find; they are not available at the Depot for the years before 1945. In March, 1945, there were employed 1,823 civilians; 1,946 American military personnel; 981 prisoners-of-war, of whom 883 could work; and 199 soldiers of an Italian Service Unit, for a total of 4,949 persons. According to other figures, the total number employed at TOD during the war varied from a low of 2,695 (1,400 civilians, 295 servicemen, and 1,000 prisoners-of-war), to a high of 4,856 (2,000 civilians, 1,500 servicemen, and 1,356 prisoners-of-war).[16] Because of this and other defense employment in the area, the population of the city of Tooele rose from 5,000 in 1940 to an estimated 14,000 in 1945.

TABLE 2

CIVILIAN EMPLOYMENT AND EARNINGS AND LOCAL EXPENDITURES OF TOOELE ORDNANCE DEPOT, 1942–1962

(Source: Compiled from historical and financial data furnished by Tooele Ordnance Depot. Employment and payroll do not include military personnel or prisoners-of-war.)

Year	*Average Employment*	*Average Annual Payroll*	*Purchases of Local Goods and Services*
1942–1944	1,400–2,000*	n.a.	n.a.
1945	1,719	n.a.	n.a.
1946	1,000*	n.a.	n.a.
1949	1,565*	$ 4,296,864*	n.a.
1950	2,250*	6,898,500*	$ 2,083,525
1951	5,000*	15,746,640*	2,800,000*
1952	4,950	16,948,800*	2,602,621
1953	4,253	15,034,355*	1,528,060
1954	3,096	12,339,964	1,435,646
1955	2,849	12,281,345	1,323,240
1956	2,526	11,131,369	n.a.
1957	2,412*	10,863,713	n.a.
1958	2,297	11,933,091	1,582,000
1959	2,249	12,215,894	2,060,000
1960	2,148	11,546,312	1,777,034
1961	2,800*	15,000,000*	4,000,000*
1962	3,200*	18,000,000*	12,000,000*

* Estimates
n.a. = not available

In addition to the Ordnance Corps, other military units assigned to the Depot included the Corps of Engineers, which was allocated space in a warehouse for an engineer redistribution center; the Air Force, which used TOD as a

[16] *Deseret News* (Salt Lake City), December 14, 1946; "Background of Tooele Ordnance Depot"; "Tooele Ordnance Depot" (Folder 42–45).

site for training ammunition companies; and the Signal Corps, which had the responsibility of providing communications to the base. One necessary action of the latter was the attachment of a recording device to the telephone system to monitor all outgoing calls. Employees thought twice before calling their wives and girl friends when they knew the message was being recorded.[17]

Various physical difficulties were encountered at the base. In August, 1943, a severe storm flooded the railroad tracks, rendering them impassable for 36 hours, and submerged the floors of 42 igloos. (Culverts were installed under the railroad tracks to prevent such accidents in the future.) Not until personnel at Utah State University anchored down the soil by planting drouth-resistant grasses did the area cease to be troubled by sand and dust storms and shifting of the soil. Soil-building and soil-conserving activities of the Depot included the "planting" of 500 pheasants, and many antelope, deer, and buffalo. By June, 1945, a 15-ton crop of alfalfa was harvested on the formerly barren sand dunes.

As the war pushed on toward completion, TOD processed ever-greater amounts of goods for distribution to the Armed Forces. During 1943, it received and shipped 2,794 carloads of ammunition; 4,268 carloads were handled in 1944; and in 1945, 7,743 carloads had been processed by August. All told, during World War II, TOD received and shipped 40,946 carloads of ammunition supplies and salvage items, including 8,362 carloads for other agencies; and 548 less-than-carload lots. More than 1,625,000 tons of materiel were shipped and received by TOD during World War II.

[17] *Ibid.*

Tank rebuilding area.

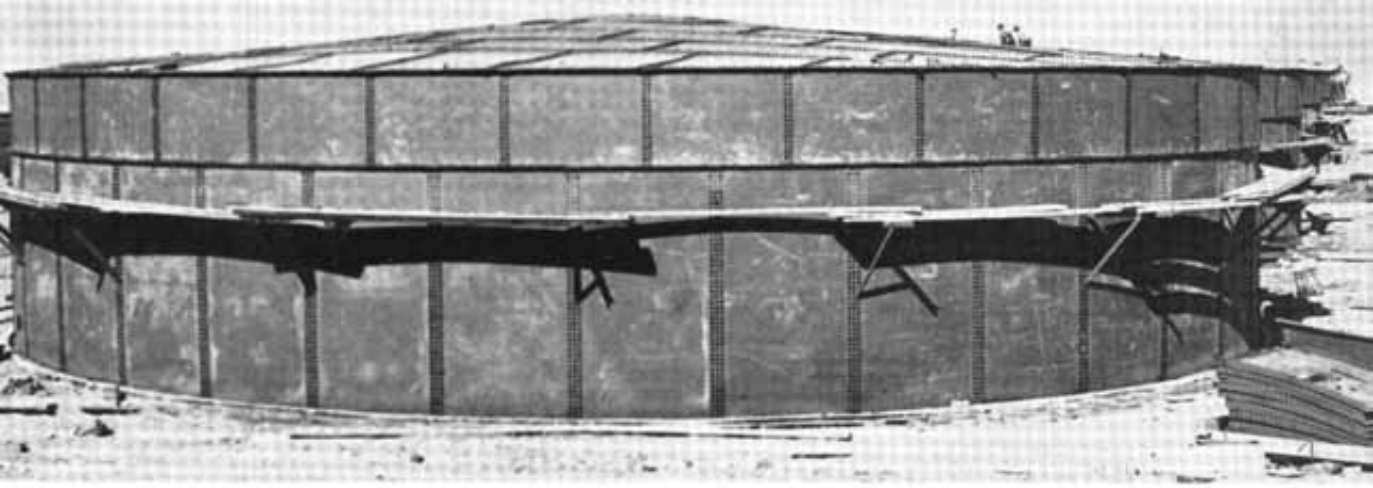
In addition the Depot overhauled 997 major auto vehicles, 1,347 major artillery pieces, and salvaged 896 tanks. Within a period of less than 3 years, the proceeds from the brass salvage of the Depot totaled almost $10 million. Since the goods sold as war surplus brought prices averaging less than 10 per cent of their original cost, the size of the operation is readily appreciated.[18]

The Interwar Period

After victory in Europe was achieved in June, 1945, the amount of materiel processed by the Depot increased because the "big push" to achieve victory in the Pacific Area was more closely related to TOD's functions. When the war with Japan was concluded 2 months later, however, a letdown occurred; everyone wanted to leave his defense job. The war was "won"; there was a universal desire to get the boys home and return to normal.

After World War II, TOD received the assignment, for both the Western United States and the Pacific Theatre, of returning war materiel either to stock or to surplus disposal. Between May 1 and August 31, 1946, TOD processed 4,676 tons of returned materiel, of which only 868 tons were returned to supply channels. During the war the most efficient day of operations had seen 89 carloads received and shipped, but on the single day of September 13, 1945, 107 carloads of materiel were handled. While the receipt of returned materiel rose 20 per cent, the market for salvage was flooded. TOD found it necessary to stockpile supplies for which it had no storage facilities. Sprinkling systems were installed in the warehouses to control fires; workers removed ramps from store-

[18] "Depot Accomplishments, 25 August 1945," Historical Data File, Mrs. Woodward.



Above, the storage "silo" completed and filled with dry nitrogen gas.
Left, tanks being prepared for storage in portable gasoline "silo."

houses to open more space; and there were many suggestions from employees having to do with solving the space problem.[19]

Because the storage facilities were inadequate for the Herculean task, contractors built new storage sites. In November of 1947, they constructed a storage area called the Tank Farm, consisting of 125 portable gasoline tanks with 38-foot and 55-foot diameters. After the tanks were constructed, "the most unique and extraordinary canning project in the country" began. When filled with dry nitrogen gas, the tanks could be used for storing anything from a high-speed tractor to a heavy tank.[20] Another method of storage was called the Strippable Film Project. A web of cellulose tape enclosed the object, and it was sprayed with a plastic material to complete the covering. Into these types of long-term storage the Depot placed 256 gun tractors, 159 tanks, 35 armored cars, and 44 trailers.

Another activity in the first years after the war was the disposal of certain obsolete and unusable buildings. With the removal of the troops, the tent area and recreation buildings were deactivated; the Army took over the TOD Park housing project; and a number of excess buildings were sold or demolished. The 29 prisoner-of-war barracks were sold as war surplus.

During 1946 and 1947, as receipts of salvageable surplus materiel mounted, the administration ordered all small arms and artillery brass sold by negotiated sale. Late in 1945, for example, the Depot was able to negotiate the sale of some 5 million pounds of nonferrous scrap to the International Smelting and Refining Company. The sale price of $330,000 was about one-half of what the scrap would have brought during World War II. In December, 1945, alone, sales of scrap, small arms brass, and boxes totaled $44,262. By 1949, the Salvage Department had reduced the backlog of surplus materiel to the point that operations could be consolidated and restricted to a smaller area. The site of the old pris-

[19] "Historical Summary, 1945–51." Unless otherwise noted, the ensuing information is from this summary or from the quarterly and semiannual historical reports and summaries.

[20] *Deseret News*, December 14, 1946.

oner-of-war compound, with its double-wire enclosure, made an ideal location for this activity.

The enormous amounts of materiel and lack of storage space made it imperative that the unserviceable ammunition be destroyed as quickly as possible. Complaints at the rapid-fire detonations came in thick and heavy from irate citizens of Grantsville and Tooele. Considerately, the Depot moved these operations to Dugway Proving Grounds and Wendover Air Force Base, on the western boundary of Utah, where as much as 150 tons of ammunition were exploded at one time without complaint. The cases of exploded brass were scooped together by a bulldozer and melted down in a furnace. Workmen loaded the residue of different metals on railroad cars for shipment to the smelters until the demand of the latter was saturated. By 1950, TOD had completed the segregation of the ammunition into serviceable and unserviceable ammunition, and 40,000 tons of small arms ammunition were demilitarized.

The costs of storage caused the Depot administration to give more emphasis to the demilitarization of property than to obtaining the maximum from its sale. Thus, there was a contrast between the careful demilitarization of a 20-pound cluster fragmentation bomb and that of a motor gun carriage M-10. From the bombs, employees educted 250,000 tons of TNT, dried it, and packed it for future use. The "new method" of demilitarizing the gun carriages, on the other hand, sounded like something out of a frogman novel: "One mine is placed at each corner inside the chassis; one against the turret and one against the transmission. Simultaneous detonation results in the complete and satisfactory demilitarization of these vehicles." [21] Fortunately, as backlogs were reduced more financially remunerative methods of demilitarization were developed.

With so many items going into storage and being sold, reconditioning and shipping operations were at a high peak. In 1946, more than 44,000 tons of materiel left the Depot, and more than 2,000 came in; during 1947, TOD received 46,962 tons and shipped 30,225 tons. TOD's fully equipped machine shop for the reconditioning of subassemblies such as transmissions and motors included conveyor lines, an air-conditioned paint shop, and a degreasing unit. The Deseret Chemical area also had ammunition reconditioning facilities. Improvements in the shops and facilities included a device to remove the platform from a 90 mm. gun by one man in 6½ minutes, whereas it had originally taken two men 19 minutes to do the job. The Depot also installed a portable machine for testing front axles of 40 mm. guns.

These devices helped alleviate the employee shortage caused by the letdown after V-J Day, but the repatriation of the POWs in 1946 and the mustering out

[21] "Historical Summary, 1945–51," p. 6.

TOD employees removing dry weeds and grass from bomb storage area.

of the soldiers more than offset any advantage which might have been given by reorganization and development of better equipment. Since many of the mill and smelter workers in the area were on strike, they could be used, but when the strike was settled in July, 1946, the labor shortage became more acute. By August, the Depot had found it necessary to employ 51 Mexican nationals during a 30-day lull between the tomato and sugar beet crops. Unsuccessful attempts were also made to get the Department of Agriculture to approve the release of 50 more.

When the immediate postwar missions of storage and salvage had been largely completed, the Depot reduced its work force. Reductions of 225 persons in 1947 and another 400 persons in 1949 were largely accomplished by simply not replacing those who resigned. These contractions left many of the apartments in the war-spawned TOD Park vacant. By June, 1948, when the Department of the Army took control of the facilities from the Federal Public Housing Administration, only 580 of the original 1,080 units were available for occupancy. The Army replaced the wartime plumbing fixtures with standard fixtures and

instituted a regular cleanup garbage service and vermin and rodent control. By 1951, of the more than 4,000 families which had lived in TOD Park, only 70 had lived there for 5 or more years.

The Korean War

On June 25, 1950, communist North Korean troops poured over the 38th parallel into South Korea. While the subsequent American involvement in the war did not alter TOD's formal mission, it changed the major emphasis. Whereas the major mission had been storage and salvage, the items in storage were now uncrated and shipped to the West Coast or to other depots.

Perhaps the most easily appreciated measure of the increased activity during the Korean War was the increase in personnel. In July and August of 1950, there were 1,147 new employees hired at the base, and the influx of personnel during 1951 required the opening of the civilian barracks until, by mid-1951, 335 men lived in 7 barracks. More than 200 of these were Navajo Indians from New Mexico and Arizona. Most of these did not speak English, and often their only contact with the community was through a social worker. Unlike the Japanese-Americans during World War II, the Navajos did not adjust to their new environment rapidly. Many were unused to living in houses with plumbing facilities, and their quarters often suffered from lack of care.

As during World War II, labor shortages once more appeared. Whereas only 1,565 employees passed through the gates each morning in the first quarter of 1950, by the end of 1951 more than 5,000 were employed. The highest employment in Depot history came in January, 1953, when 5,359 civilians worked at TOD. Once more, as in World War II, training programs were instituted. Contracts were signed with the University of Utah, Utah State University, Weber College, Montana State, and Idaho State to train TOD personnel, and interested employees could attend classes ranging from typing to Spanish.

Because of the rapidly expanding labor force, the housing shortage once more became critical. By June, 1952, there were 142 families on the TOD Park waiting list, and if there had been any hope of getting a unit many more would have applied. Some of the employees who had come to Tooele with little or no money or furniture were forced to live in tents or shacks without proper sanitation facilities. When city or county officials took steps to close the hovels in which they lived, the employees and their families had no place to turn. While some houses were "available," they were not occupied because employees lacked the down payment. Builders were afraid to build rental units because of the ephemeral nature of the defense industry. Even in TOD Park, 47 buildings lay vacant because no money was available to renovate them.[22]

[22] "Scams Burst in Little Boom Towns [Part II, Tooele, Utah]," *Business Week*, October 13, 1951, p. 74.

At the height of the Korean War, the rebuilding of major items exceeded the total production for all of the second World War. During 1952, 2,691 artillery pieces were rebuilt compared with 1,347 during World War II; and 4,178 combat and transport vehicles were rebuilt, compared with 1,893 in 1942–45. Production of secondary items was also significant. In 1952, the Secondary Item Repair Shop completed rebuilding of 4,380 engines and 843 transmissions, along with other subassemblies.[23]

TOD's mission had changed from primarily a storage depot to a manufacturing enterprise devoted to producing, rebuilding, and repairing machines of war. Nevertheless, shipping and storing were still important functions. In 1952, TOD received 19,193 tons of ammunition, demilitarized 10,209 tons, and shipped 38,363 tons. When the tanks and guns in the Tank Farm were released for shipment they were found to be in excellent condition. Unfortunately, the small arms ammunition which the Depot had stored outside did not fare as well. The severe winters and sweltering sun had removed the markings from many of the cases, thus complicating the problem of stock control. The tracer ammunition had also suffered deterioration.

Clearing these items from the 63 miles of railroad tracks and shipping them to the front lines required a great amount of rolling stock, the value of which in 1952, was $556,000. This included 3 diesel electric engines, 13 flatcars, 14 boxcars, and 2 tank cars. During the second half of 1952, the Depot yards received 36,030 tons of materiel by rail and shipped 41,263 tons. Just as before, disposal of surplus and obsolete materiel went on. During the first half of 1952, 2,500 tons of scrap were sold for $107,365, and $6,339 worth of old crates and dunnage was sold.

The Depot's stimulus to the local economy is noteworthy, particularly after February, 1950, when TOD began to do its own purchasing of local materials. From February to December, 1950, the Depot purchased $2,083,525 worth of goods and services from local merchants. At first a pickup truck was sent to Salt Lake City to make daily purchases; later, in 1951, a purchasing office with two full-time buyers opened in the city. In the first 6 months of 1951, $1,796,020 worth of supplies was purchased in local markets, and for 1952, the figure was $2,602,621. These purchases, made for reasons of good economics, served also to foster community good will. Purchases of supplies and services on the local market have varied between $1 million and $2 million in the years since 1953.

Although the Tooele facility had originally been designed for temporary service of 5 years, the Korean War and the realities of the Cold War made it necessary to put the older buildings in a better state of repair. Warehouses in the combat storage area were made "permanent" by the addition of asbestos shingles

[23] Totals computed from semiannual historical summaries for 1952.

and siding. In the second half of 1952, more than $572,000 was expended on Depot maintenance and improvement.

Since the Korean War

When the Korean War ended in 1953, the United States was committed to a policy of containing communism. While there were cutbacks in the labor force as the intensity of the war effort subsided, it was clear that the enterprise would not be completely abandoned. During the period of cutback — the Depot had 1,027 fewer employees in June, 1953, than in the preceding January — the Salt Lake employment area registered a labor surplus and workers felt a measure of insecurity. During 1954, the number of employees dropped from 3,482 in January to 3,129 in June and to 2,675 by the end of the year. Even though the employee strength had risen to 3,140 by June, 1955, most of the increase came because of the assimilation in 1955 of the functions of Ogden Arsenal and the combining of the Deseret Chemical Warfare Depot into TOD. (Deseret Chemical was redesignated Deseret Depot Activity.) By December, 1955, the force had again been cut to 2,732, even with the new functions. An important activity of the Depot was the sponsoring of seminars in installation skills. Later in 1958, a center for the summer training of ordnance reserve units was opened and Tooele became an official U.S. Army Ordnance Training Center. Several hundred reservists from many units in the East went to Tooele each summer to work on production lines in on-the-job training programs.

Simultaneous with reductions in staff TOD instituted "Operation Drano" to eliminate excess stocks. Usable materiel was placed in dehumidified storage tanks equipped with doors which could be opened without destroying the doors.

Despite the emphasis on storage, the production of rebuilt items continued. As examples of this activity, the Secondary Item Section completed 219 engines in March, 1953; 483 radio harnesses and 575 radios were rebuilt in the second half of 1954; and there was a continuous output of reconditioned artillery weapons, combat vehicles, and transport vehicles. In 1955, the Depot turned out 38 heavy artillery pieces, 160 ground weapons, and 506 vehicles, while 665 combat vehicles were prepared for service in 1957.[24]

During the Korean War the Tooele installation had made conscientious efforts to introduce concepts and techniques of scientific management and industrial engineering. Cost and performance standards were set up, and a regular management analysis of Depot activities was instituted. One tangible result of this concern was the development in 1957 of IROAN — "Inspect, Repair Only

[24] Computed from semiannual historical summaries for 1955, and the "Second Semiannual Historical Summary, 1956."


TOOELE ORDNANCE DEPOT

As Necessary." Whereas before, the complete disassembly and physical inspection had destroyed many components which might have been reused, a pre-shop inspection and function testing of the vehicles showed which parts needed repair. These tests were followed by repair, inspection, and painting. In a typical 3-month period under the "old" system the Combined Maintenance Division had reconditioned 123 jeeps at a unit cost of $1,179. Using the IROAN method the division was able to process during a similar period 720 jeeps at a unit cost of $765. More than 3,000 jeeps were rebuilt under this arrangement during the first half of 1959. The division used the IROAN method on 169 M-47 tanks during the first half of 1958, and where the unit cost had been $14,233 under the old method, it was reduced to $8,133 with IROAN.

These cost-reducing techniques not only enabled TOD to obtain additional assignments and missions, leading to a permanent expansion in its activities, but the TOD-developed IROAN was officially adopted by the Ordnance Corps nationally, and scores of officials from various installations throughout the country were sent to Tooele to learn the process for use elsewhere.

Other activities at TOD during the years after the Korean War have included the receipt and shipment of ammunition and the destruction of obsolete bombs and ammunition. During the last half of 1954, employees destroyed 80,484 rounds of 57 mm. shells, 190,426 rounds of 75 mm. projectiles, 24,350 rounds of 75 mm. high explosive shells, 6,355 of the 100-pound cluster fragmentation bombs, 515 of the 500-pound cluster bombs, and 85,827 rounds of 37 mm. shot. From these operations 1,260 tons of brass, 15 tons of lead-antimony, and many tons of iron and steel were recovered.

All of this was done with virtually no loss of life. Indeed, the first fatal accident in Depot history occurred in September, 1953, during the feverish post-Korea activity. An operator of a 76 mm. ammunition gauging machine did not notice that one round was already in the gauge. When he attempted to insert a second round the nose of the second hit the primer of the first and the resulting explosion killed 2 operators, injured 15 workers, and precipitated a 3-week shutdown. Because of its excellent safety record over the years, considering the danger involved in its operations, TOD has received the Department of Army Award of Merit, the Certificate of Merit for Safety of the Ordnance Department, and the Federal Safety Council Award of Merit.

Sales of scrap continued to return money to the Depot to help pay for its salvage operations. In the first half of 1954, 9,400 tons of scrap were sold for $372,704; wood sales totaled $21,426; and the value of materiel disposal was $693,184, for a total of more than $1 million. The sale of salvage has averaged between $1,800,000 and $2 million during the years since the end of the Korean conflict.

During the post-Korean period TOD began a new operation which is one of the most interesting and creative on the Depot today. Late in 1954, the Defense Department established at TOD the Office of the Ordnance Ammunition Command, National Field Service. The mission of this division was enlarged in 1956 to include the design, standardization, and manufacture of all ammunition equipment for the entire United States ordnance system. This included designing equipment to maintain, renovate, modify, and demilitarize all types of ammunition. In 1959, this Field Service was redesignated the Ammunition Equipment Division and made a permanent part of TOD. Its operations constitute a major phase of Depot operations today.

An example of the activities of the Ammunition Equipment Division is the development of a method of washing and reclaiming from bombs the explosive "Comp. B" — a mixture of 59 per cent RDX, a British explosive; 40 per cent TNT; and 1 per cent beeswax. It had been generally believed that Comp. B, because of its high density, could not be educted. Using research findings of the Intermountain Research and Engineering Company and the University of Utah, the division developed a large washing and educting system, and the first batch of 2,500 tons of Comp. B returned $200,000 above the cost of research and development. Comp. B is now used widely in strip and hardrock mining.

With the cutbacks in personnel after 1953, the administration took steps to dismantle the substandard TOD Park housing. In 1954, only 484 of the 675 rentable units were in use; and in 1956, only 165 units were occupied. A 1961 order directed that 162 occupied and rehabilitated apartments in TOD Park be removed and sold as surplus by July, 1962. This deadline was extended to 1963 because of the rapid swelling of the work force.[25]

Recent Activities and the Future

Tooele Ordnance Depot has grown and developed through the rapid expansion during World War II and the subsequent contraction — through the Korean War peak and the following curtailment of operations. Since the Korean War, TOD has assimilated Deseret Depot Activity, taken over the functions of the Ogden Arsenal, and become the major ammunition equipment design center for the nation's Ordnance Corps. An announcement in March, 1961, made these functions seem only secondary, for Tooele was destined to become the headquarters for one of the greatest ordnance installations in the world.

Essentially, the announcement dealt with the decision to close down a number of important Army ordnance and supply depots in the West, and to consolidate their functions at TOD.[26] During the first half of 1962, the Tooele Depot

[25] *Deseret News*, February 7, 1962.
[26] *Salt Lake Tribune*, May 11, 1961.

took over distribution of ordnance general supplies for the State of Utah formerly handled by Pueblo Ordnance Depot, Colorado; and the general supply distribution mission for the Sixth U.S. Army in the states of California, Nevada, Washington, Oregon, Montana, and Idaho, plus the overseas customers in Alaska and the islands of the Pacific formerly assigned to Mount Rainier Ordnance Depot and Benicia Arsenal. Additional missions transferred from Benicia Arsenal include rebuilding of tires, guided missiles, and ordnance test equipment and calibration of electronic devices. Many of the civilians employed at Benicia Arsenal and Mount Rainier Depot have been transferred to Tooele; both depots will be completely deactivated in 1964.[27]

It is expected that by 1964, the Tooele Depot will have approximately 4,000 employees, compared with the 2,040 employees at the time the expansion program was announced in the spring of 1961. Although TOD will still not have as many employees as during the Korean War peak, its employment is expected to remain relatively stable at the new high peacetime level. About 1,500, or 80 per cent, of the new employees are expected to be Utah residents.[28]

One-third of TOD's employees now commute from the Salt Lake and Utah county areas, and it is possible that many of those transferred from Benecia and Mount Rainier will prefer a larger urban area to a small community like Tooele. Whatever the impact of TOD's new expansion on the city of Tooele, its influence on the Wasatch Front economy will be undeniable, and the growth of TOD makes it increasingly more important to the defense of the nation.

In any event the Tooele bastion is established as the strategic hub of the United States Army in the West. Beginning in 1962, TOD was one of 3 basic supply centers in the United States designed to service specific geographic areas. TOD's mission now includes the Western United States and the Pacific and Far Eastern areas. With the consolidation of the Army's technical services in 1962, the name of Tooele Ordnance Depot was changed to Tooele Army Depot.

As a part of the consolidation and expansion, TOD acquired a new $1.5 million "brain center," largest of 6 in the nation.[29] Known as the Western Stock Control and Data Processing Center, it processes orders for war materiel and supply requisitions from troops throughout the Western States, Alaska, Hawaii, and Army stations scattered over the Pacific Theatre and in the Far East. Named RAMAC, the electronic brains are the nucleus of the new large office division, staffed by more than 400 persons, inaugurated in January, 1962. The electrical and electronic data processing equipment includes over 50 machines and related equipment, and is provided under a contract with International Business Ma-

[27] Letter from Karma C. Woodward to Leonard J. Arrington, July 17, 1962.

[28] *Salt Lake Tribune*, March 31, April 19, 22, 26, May 3, 20, July 22, November 23, 1961, April 12, 1962; *Deseret News*, November 25, December 16, 1961.

[29] *Deseret News*, January 5, 8, 10, 1962.

chines Corporation. Crammed with millions of facts, descriptions, inventories, and data about TOD's own stocks of munitions, vehicles, and spare parts, and of inventories of arsenals throughout the nation, the center now handles requisitions and issues of defense materiel and supplies at the rate of 65,000 orders per day. Its lightning-rapid action makes possible instantaneous handling.

With the closing of the Naval Supply Depot at Clearfield, Utah, in 1962, TOD's expansion and potential for future growth assumes ever-greater significance. The Defense Department estimates that while the changeover to TOD will cost $13 million it will ultimately save the nation $28 million per year. Moreover, the expansion of Tooele will mean at least a $5 million a year greater expenditure added to the already $20 million which TOD injects into the Utah economy every year — an increase of almost 26 per cent. It is also probable that Utah's spectacular new missiles industry will receive a further shot in the arm by this expansion, as may the rapidly growing local metals industry.

The presence of TOD and other military installations in the state has also given Utah businessmen the "inside track" on bidding for military contracts relating to the manufacture of conventional as well as to missile-age equipment and parts. TOD now maintains four "million dollar boards" filled with invitations to bid on manufacturing jobs for thousands of different types of Army equipment and parts.[30]

Originally established during the early days of World War II as a temporary reserve ammunition depot for the much larger Ogden and Benicia arsenals, the Tooele Ordnance Depot has not only survived the many reductions in such facilities, but has absorbed the workload of these and other once prominent installations to become the major Army ordnance supply center in the West. In this respect the expansion of TOD has paralleled the growth of Ogden's Utah General Depot, which, in like manner, has become the major center for the Quartermaster Corps in serving troops in Western United States, the Pacific Islands, and the Far East. In the case of TOD, there can be no doubt that this position "at the top of the heap" has come because of its good performance — reliability, high productivity, and economy — in handling the many missions assigned to it.

[30] *Ibid.*, October 25, 1961.

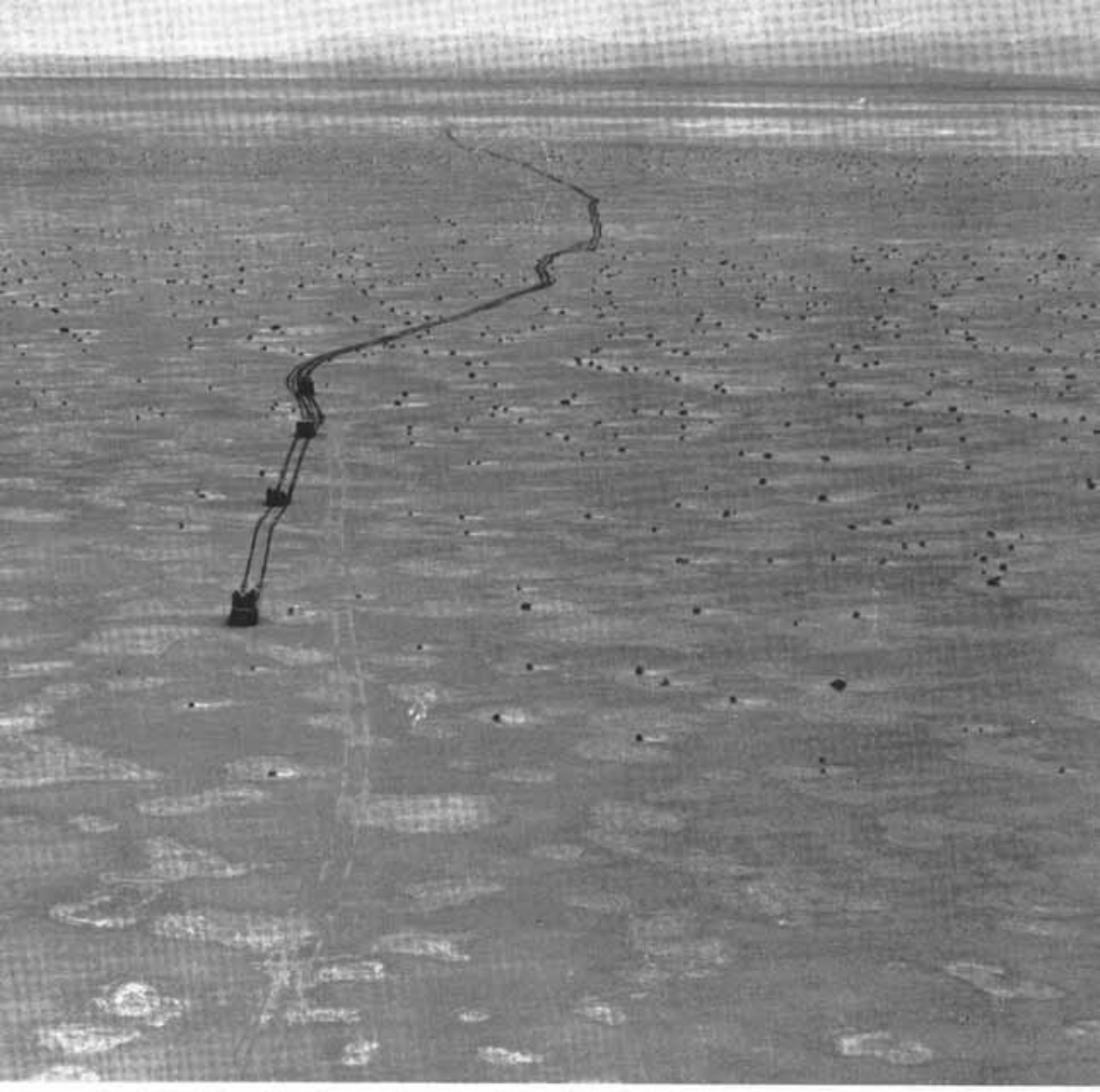
Trackmasters and Spryte traveling west parallel to old pioneer road, the remains of which are still embedded in the mud of the salt flats.

The Last Trek Across The Great Salt Desert

BY HENRY J. WEBB

On August 17, 1962, an expedition (jocularly termed "Expedition Mirage") was conducted across the Great Salt Desert in the wake of the Donner-Reed party. The trail is called the Donner-Reed trail, not because the Donners and the Reeds pioneered the road, but because their unfortunate experiences along it made their names seem paramount to later historians and map makers. Actually the first white men to cross this desert — perhaps the first men of any race,

Dr. Webb is professor of English at the University of Utah. Preliminary investigation of the Great Salt Desert and preparation of the trek map were made possible by a grant from the University of Utah Research Fund. Actual cost of the expedition was absorbed by the Thiokol Chemical Corporation. All photographs in the article are courtesy David W. Evans & Associates.



since its forbidding nature would have discouraged red men from venturing upon it — were members of John Charles Frémont's third expedition. Led by the scouts Kit Carson, Lucien Maxwell, Auguste Archambeau, and Basil Lajeunesse, the Frémont party made the trek from Redlum Spring in the Cedar Mountains to Pilot Springs between October 26 or 27, and October 30, 1845. The following year — on May 28 and 29 — a group led by Lansford W. Hastings and chronicled by James Clyman, made the same journey from west to east. Finally, in the summer and fall of 1846, the Bryant-Russell, the Harlan-Young, the Hoppe, and the Donner-Reed parties all made the "fearful long drive" on

the Hastings Cutoff (as this whole route south of the Fort Hall road came to be called).[1] Some forty-niners traveled the cutoff in their mad rush to get to the gold fields, and numerous eager souls braved it in the early 1850's.[2] Thereafter the road remained unused until modern historians endeavored to unravel the secrets kept so well by salt, sand, and mud.

First thoughts would lead one to believe that, after all these years, the road would have been obliterated; and, indeed, in most places it has either been eroded away, surplanted by modern highways, or completely garbled by the chuck wagons and jeeps of sheepherders and cattlemen. It can, of course, be followed across the Cedar Mountains, for Hastings Pass is still used, albeit infrequently; and there is a short dugway in Grayback that may have been constructed by members of the lead wagons in 1846. But out on the mud flats themselves, for mile after mile, the old road stretches out in unbelievable clarity, not as ruts cut deep by the passage of numerous wagons, but as streaks of black on gray or, in certain places, white on gray — a phenomenon undoubtedly caused by the churning up of different colors of mud and sand with subsequent filling in and flattening out by the action of water which stands on the desert a great portion of each year.

Our expedition of August, 1962, was a successful attempt to follow these streaks from a point several miles north of Knolls, Utah, to Pilot Springs on the Utah-Nevada border. We, of course, were not the first to reconnoiter all or portions of this fascinating road, but we may well have been the last. Since this section of the desert is used as a bombing range, the United States Air Force is reluctant to give persons permission to travel upon it. Among recent attempts to explore the area were those made by Charles Kelly in 1929,[3] Walter M. Stookey in 1936,[4] and the present writer and his colleagues every year since 1956.[5]

This time our vehicles were three Trackmasters and one Spryte provided by the Thiokol Chemical Company.[6] These tracked vehicles were ideal for the trek, for with ease they pulled over sand dunes (which occupy several miles of the desert in the vicinity of Knolls); churned through sticky, gumbo mud; and

[1] A brief but accurate summary of these expeditions, together with portions of available diaries covering events on this road in 1846, may be found in *West from Fort Bridger, Utah Historical Quarterly*, XIX (1951).

[2] See Charles Kelly, "Gold Seekers on the Hastings Cutoff," *U.H.Q.*, XX (January, 1952), 3–30.

[3] Charles Kelly's expedition resulted in his *Salt Desert Trails* (Salt Lake City, 1930).

[4] See Walter M. Stookey, *Fatal Decision* (Salt Lake City, 1950).

[5] The parties included at various times Drs. David E. Miller, C. Gregory Crampton, Joseph Salvatore, Gerard S. Cautero, and others.

[6] The Trackmaster is a vehicle weighing approximately 4,500 pounds but with a pound per square inch ground pressure (when empty) of only .68 to .74, depending on type of cab and equipment. It runs on tank-like tracks, moved by 6:40x15 standard automotive-type tires. The Spryte, a smaller vehicle of the same type as the Trackmaster, weighs 2,600 pounds and has a pound per square inch ground pressure of .63. These pounds per square inch ground pressures are even less than that exerted by a human being.

climbed in and out of the steep ravines which slash through the western slopes of Silver Island.

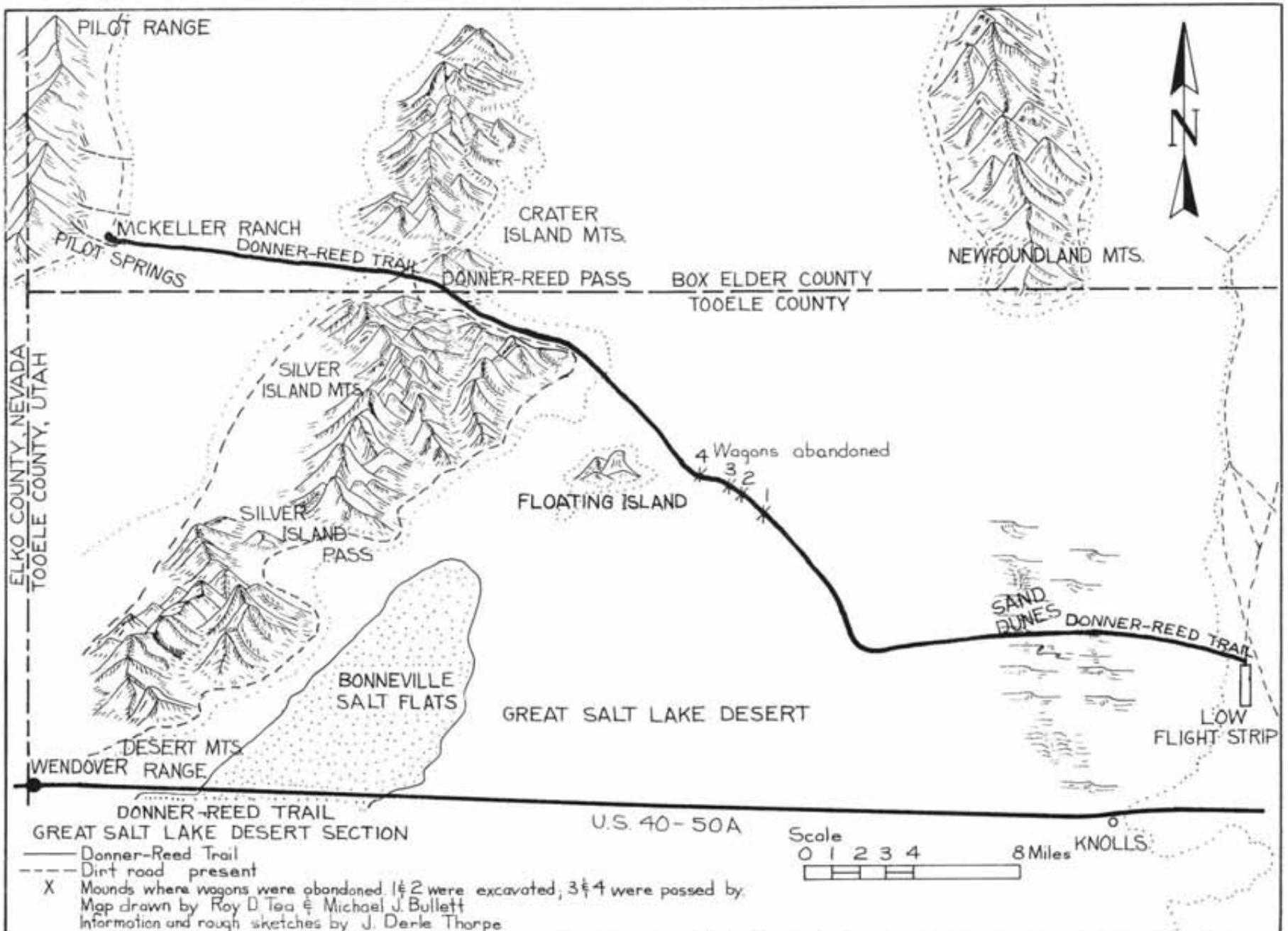
We intercepted the pioneer road at 7.2 miles north of U.S. Highway 40 on a stretch of salt-encrusted mud that bore unmistakable traces of the wheels of prairie schooners. Here the wagons did not follow one after the other so as to produce a single set of tracks, but instead spread out over an area of several yards, testifying to the fact that some of the wagons either traveled abreast or pulled out and around deep and muddy ruts cut by wheels rolling ahead of them. From time to time as we progressed across the desert, we encountered similar multitracked areas, the widest being in the vicinity of Floating Island, not a great distance beyond some abandoned wagons.

Dr. Webb and his colleagues examining the jaw bone of an ox.

We lost the tracks in the dunes, as from previous experience we knew we would, for the shifting sands do not retain impressions which the mud does. But after a brief search, we picked them up again. The tracks were heading, not for Pilot Peak, however, but in a southwesterly direction, for all the world as if the pioneers had changed their minds and wished to use the pass in the vicinity of present-day Wendover. Actually, they were making a wide swing to the southwest, only to turn back toward Pilot Peak after approximately five miles. The reason for this mysterious switch is perhaps not so mysterious after all. Although the diaries do not say so, the summer of 1846 must have been inordinately wet — at least compared with recent summers — for it will be remembered that Edwin Bryant wrote that as he traveled across the flats, the mud "gradually became softer, and our mules sometimes sunk to their knees."[7] Perhaps this southwesterly course was set to avoid extremely mucky areas to the north.[8]

[7] "The Journal of Edwin Bryant, July 17–August 8, 1846," *West From Fort Bridger, U.H.Q.*, XIX, 89.

[8] It must here be pointed out that Charles Kelly insists that the old road after leaving the dunes heads immediately for Pilot Peak. If such a road existed in 1929, it has now been completely wiped out. In none



DONNER-REED TRAIL
GREAT SALT LAKE DESERT SECTION

——— Donner-Reed Trail
– – – – Dirt road present
X Mounds where wagons were abandoned 1 & 2 were excavated; 3 & 4 were passed by.

Map drawn by Roy D Tea & Michael J. Bullett
Information and rough sketches by J. Derle Thorpe

Trackmasters pausing before entering the low dunes just east of Silver Island.

In any event just as the road begins to turn to the northwest, it suddenly divides, one-half of it continuing on toward Wendover for a mile or so before swinging back and joining the other half. Perhaps here again exceptionally muddy conditions caused this diversion.

Since most map makers have not personally investigated this terrain, the peculiar change of directions is not normally recorded; generally the road is depicted as streaking to the northwest as straight as an arrow for Pilot Peak. Interestingly enough, one of the first maps ever published concerning the Hastings Cutoff — T. H. Jefferson's *Map of the Emigrant Road from Independence, Mo., to St. Francisco, California* (New York, 1849) — makes something of the same mistake as its successors and shows the road stretching due west (rather than northwest) from Hastings Pass in the Cedars. This would make the route run south of the present highway rather than north, a condition contrary to fact. Since Jefferson is generally accurate in depicting the route in other areas, one is encouraged to conjecture that he was so preoccupied in getting across the desert that he neglected to make careful observations. His map does at the same time illustrate a sudden shifting to the north just before it reaches Silver Island (called Fire Island by Jefferson) and then takes it west to the "Good water & Grass" and the "Bonark Wells" that nestle beneath Pilot Peak (which Jefferson

of our numerous probes into the desert has this "alternate" route been seen. The route has never been seen either by myself in 1956 or 1957 when I retraced it by jeep, or by Dr. Miller who flew over the area three times in 1957 and 1958, or by the research engineers for the Utah State Road Commission who have been investigating the area during the past three years, or by our expedition in August, 1962. Furthermore, the trail which we followed led us unerringly to the abandoned wagons and thence to Pilot Peak, and no other road cuts into it. One may add to these facts another salient one. When tracing the trail from the opposite direction — that is, from Pilot Peak to the east (which was done part of the way by Dr. Miller and his colleagues by jeep in 1956 and all of the way by Dr. Miller in a plane the following year) — no one was able to discern another road. In other words, the road followed on August 17, 1962, stands by itself, mute evidence of the historical use to which it was put.

forgets to depict altogether). The map accompanying *West from Fort Bridger* corrects some of Jefferson's errors — among the most important is that it shows Pilot Springs is not due west of Hastings Pass and at least starts the pioneers off in the right direction from the Cedar Mountains — yet at the same time it creates some errors of its own, calling Floating Island, Crater Island and depicting the crossing of Silver Island farther south than was actually the case. And, of course, it does not show the great bend in the road toward Wendover.

Dr. David E. Miller and his colleagues first noticed this bend in 1956, but the weather was such that they could not pursue it. The following year, Dr. Gerard S. Cautero and the present writer managed to make the entire long drive by jeep but were unable to clock the actual distance of the bend because our mileage indicator had broken. Nevertheless, from evidence obtained from these and

Group searching a mound at site of an abandoned wagon of some pioneer party.

other trips, Dr. Miller was able to produce a relatively authentic map of the area,[9] although still not giving enough prominence to the bend in question. The 1962 expedition in the Trackmasters and Spryte made it possible for our cartographer — J. Derle Thorpe, research engineer for the Utah State Road Commission — and his associates to construct the accompanying map.

In our progress across the desert, we encountered the ravages which mud, salt, sand, and thirst had made upon wagons and animals. In several spots we found the bones of oxen — perhaps the very ones which James Reed had turned loose to fend for themselves when they became maddened from lack of water — and, in spite of previous incursions upon the flats, we found some artifacts at the site of the abandoned wagons. Four low mounds still exist, and in them and on them, were pieces of metal, wood, and leather straps, all encrusted with salt and sand and most of them ready to disintegrate at the touch of a hand. Most intriguing among our "finds" was a small spoon and a little compass, the latter so corroded as to defy almost all our attempts to open it. Both objects speak eloquently of the heartbreaking necessity for the pioneers to jettison their intimate belongings.

We ended our journey at the Pete McKellar ranch where Pilot Springs still sends up a cool and refreshing flow of water. Although we were not parched as had been those early travelers who had moved with such agonizing slowness along their route, we were able to appreciate the drinks we sipped from the "Bonark Wells." And looking back over the sun-baked desert we had just crossed, we could understand something of the feeling of the pioneers upon finally arriving at this shady oasis.

[9] This map is reproduced in the *Pacific Historical Review*, XXVII (February, 1958), 40.

WILLIAM R. PALMER

COURTESY EUGENE PALMER

BY GUSTIVE O. LARSON

William R. Palmer, businessman, church leader, and civic worker, found time to win state-wide recognition in his hobby of historical research. In addition to searching out and recording early history of southern Utah, he helped *make* history through active participation in business, civic, and church affairs for three-quarters of a century. Born in Cedar City in 1877, he married Kate Vilate Isom in 1901, and they became the parents of five sons and three daughters. Following a mission for the Church of Jesus Christ of Latter-day Saints in the southwestern states from 1897–1900, Dr. Palmer served three years as a bishop, and later as high councilman and stake clerk he officiated over the Parowan Stake for fifteen years. He was then appointed president of the Virgin Valley Welfare Region in 1937.

President Palmer served as cashier of one bank and as director of another in Cedar City. He was secretary and treasurer of both the Iron Springs Sheep Association and Cedar Mercantile and Livestock Company, becoming manager of the latter during 1909–10. He served as Iron County Assessor, and in later years administered federal and state relief in the county. Among his contributions in civic affairs was organization of the first National Red Cross Chapter in Iron

Mr. Larson, a friend and associate of Dr. Palmer, is professor of church history at Brigham Young University.

County in which he acted as chairman for many years. During World War II Dr. Palmer rendered valuable service as Home Service Chairman. He was elected first president of the Zion Park Scout Council. His interest in historical research led him to promote erection of a monument to Father Escalante in Cedar City and to organize and preside over the Old Spanish Trail Association. In this connection he promoted distribution and erection of markers over the entire route of the historical trail from Santa Fe to Los Angeles. He was appointed by Governor George H. Dern to membership on the Board of Control of the Utah State Historical Society where he served for many years. In 1945, Governor Herbert B. Maw appointed him a member of the "This is the Place" Monument Commission.

Dr. Palmer's contacts with the local Indian tribe as a churchman developed into an historical interest in the Utes and Paiutes. His close relationship with and extensive service to the local Paiutes won him the unique honor of being adopted into the tribe along with President A. W. Ivins. His historical research resulted in valuable literary contributions including "Indian Names in Utah Geography," which appeared in the first issue of the *Utah Historical Quarterly* in January, 1928. This was followed in later issues by "Utah Indians Past and Present," "Pahute Indian Homelands," "Pahute Indian Government and Laws," "The Pahute Fire Legend," and "Pahute Indian Medicine." Articles on Spanish mines in Utah, iron manufacturing in Cedar City, and early-day trading in Nevada mining camps were among many contributions on various phases of southern Utah history. Dr. Palmer's rich accumulation of historical material together with a special talent for interpreting and presenting it brought him into state-wide demand as a speaker before educational and civic groups. His popular radio series called "Forgotten Chapters of History," continued over KSUB (Cedar City) for a number of years.

In 1946, Dr. Palmer's *Pahute Indian Legends* was published by Deseret Book Company. It was the product of long and intimate association with his Indian friends who trusted him to present their sacred stories properly to the white man's world. The legends were republished in 1957 by Prentice-Hall, Incorporated, under title of *Why The North Star Stands Still*. This subsequently appeared in a Danish edition.

As a result of his interest and activity in historical research, William R. Palmer was awarded an Honorary Doctorate in Humanities by the Utah State Agricultural College in 1952. He also became officially associated as an historian with both the L.D.S. Church and the state. Part of his research was as a staff member of the L.D.S. Church Historian's Office, and from 1947 to 1949, he microfilmed official records of six Utah counties in the capacity of archivist for the Utah State Historical Society. In 1958, he was given an Award of Merit by

the American Association for State and Local History for "contributing significantly to the understanding and development of local history." Dr. Palmer's rich and busy career came to an end at the age of eighty-three with his death in Cedar City, March 1, 1960.

EARLY MERCHANDISING IN UTAH

BY WILLIAM R. PALMER

In early Utah there was tremendous hunger for goods and no way of supplying very much of what was needed. So far as merchandise was concerned the Great Basin desert was a veritable Sahara without a single oasis. It was a thousand miles back to the Missouri River supply base, and with good luck and good outfits the round trip could be made in six months. California was in point of time one-third nearer, but the stream of church emigration was from the East, and wagons went primarily to bring the perpetual emigration Saints to Zion. [The Perpetual Emigrating Fund Company was founded by an act of the Assembly of the State of Deseret in 1850, to assist Mormon converts to migrate to Utah.] Whatever loading capacity was left after providing for the passengers was filled with such needed goods as were available, but since ten to twelve passengers were assigned to each wagon, the freight-carrying potential was very small. Passengers were supposed to walk if they were well and able-bodied, but their personal effects, one hundred to one hundred and fifty pounds each, must be hauled. So these trains contributed little to the merchandise shortage in Utah. The pioneers were in poverty when they arrived here, and there were no stores at which they could replenish their supplies. Survival in the desolate and impoverished country was possible only through hard work and co-operation with their fellow pioneers.

Occasionally, a few goods filtered through from California, and these were quickly grabbed up. Some itinerant merchant on his way east to visit his old home loaded some work clothing, a few boots and shoes, a little tea, coffee and sugar, to sell to the Mormons as he passed through Utah. These chance pickups

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afforded a little relief, but they were not a drop in the bucket in supplying the goods-starved people.

The little sporadic home stores also added their brave might to the cause. Some energetic family started a little store of such homemade goods as they could get material to work up. One might find there a pair of buckskin pants, two or three straw or cloth hats, knit hose or gloves, and a few small bunches of homespun thread and yarn. Perhaps, too, there would be a few tallow candles and some salt and salaratus which the man of the family harvested from Salt Lake and from alkali beds which studded many parts of the country. Salaratus was the pioneer soda for cooking and for every other soda use.

In 1855, Iron County had three of these little stores — Richard Benson with $200.00 stock, Charles W. Dalton $50.00, and Elija Elmer with $300.00. That was $550.00 worth of homemade merchandise to supply Iron County. We have as many thousand today.

This was the low point in the history of pioneer stores in Iron County. Business had become almost static, and trading potatoes for salaratus and tallow candles stirred no new life in merchandising. If business is to be stimulated, there must be a fluid medium of exchange. In the Great Basin the Saints were very poor. Most of them had come on a Perpetual Emigrating Fund Company loan, and they arrived here with a debt on their heads rather than money in their pockets. There had to be some exchanging around of commodities, but trading potatoes for flour did not stimulate another deal. However, selling flour for a dollar in cash meant another, and another, and another dollar of business almost at once, for the money was fluid. There was little business because there was little money.

Use of postage stamps on mail was not obligatory until 1855. Postage charges were collected on delivery, and they must be paid in cash. A letter to my father from his mother in Wales lay in the post office for six weeks before he could get the $.75 in actual money to redeem it. When a California train came in with a broken wagon, father, the blacksmith, did the repairs and received in payment a $5.00 bill. He went straight for his letter but the postmaster could not change his money. Father could leave the $5.00 and take his letter, his change to be collected when the postmaster could get it, or, the postmaster would hold the letter until father could change his money. Father left the $5.00 and took his letter. After many weeks he accepted a merchandise order on the Deseret Iron Company Store for the $4.25 that was due him. The incident tells a graphic story of the scarcity of money in early Utah. It also tells in large measure why there were no real stores.

In 1853, the Deseret Iron Company opened a store in Cedar City, but it was primarily for the iron workers. The public could deal there only with cash. The

first invoice was for $1,807.28 at Salt Lake City retail prices, to which was to be added "freight and a reasonable handling profit." To a subsequent invoice for $700.00, the following instructions from the company president, Erastus Snow in Salt Lake City, were attached, "Open these goods up first in Parowan and sell them only to cash purchasers. After you have sold what you can there for cash, bring the remainder to Cedar City and offer them there to cash buyers only. When no more cash sales can be made then let the company employees draw the balance on their back wages." The Deseret Iron Company Store was a rocky island in a deep sea of merchandising want. It was not open continuously but only when a shipment of goods came in.

By 1866, Iron County's stocks of goods had climbed to $6,050.00, which included the Desert Iron Company Store.

In 1867, James McGuffy had a stock of $2,000.00 in Parowan, and this pointed up a new system for supplying the southern portion of the territory. McGuffy had brought his goods in from California.

California was a rich market for dairy supplies and all other foods. The gold diggers were hungry, and they had money to buy foods that Iron County had to spare. Ebenezer Hanks loaded his wagon in Parowan with butter, cheese, boxes of eggs, ground cereals, and such other things as he could carry. In Sacramento he sold the merchandise at high prices.

He had taken three yoke of oxen with him. In California he found that oxen were high priced while horses and mules were cheap. In Utah these values were reversed. He traded his three yoke of cattle for six span of horses and mules. Then he bought another wagon and two loads of goods which he and his son brought back to Parowan. The McGuffy stock of $2,000.00 was part of the Hanks cargo.

Back in Utah Hanks traded his twelve horses for twenty-four cattle, hired a man, and loaded his wagons with dairy and farm products. He sold his merchandise again in Sacramento and traded his cattle once more for horses, two for one. Hanks made these trips once a year and in three years became Iron County's richest man. He was worth $4,000.00. The coming of the railroad in 1869 killed his business, and Hanks made no more trips. His merchandise was making a fine community contribution, but his big money came from his livestock trading.

With all of this merchandise hunger it may seem strange that some enterprising man in each settlement did not import some goods and open a store. There were many reasons why this was not feasible. Today a man could send his order for a bill of goods to a wholesaler in St. Louis or New York, and the goods would be shipped to him. They could then be opened up and sold out, and a check mailed to pay the bill. But that was not possible in pioneer days. First,

if the man had the money to buy the goods, there was no safe, dependable mail service to transmit either the order or the money. Next, there was no common carrier such as the railroads, to freight his goods to Utah. Then there was no bank in Utah where money could be deposited and through which bank drafts or checks could be drawn to pay for goods. And even if there had been a bank in Utah where deposits could be made, it would have been of little help for there was no bank clearing house service such as we have. The St. Louis merchant would have to come to Utah to cash his check, or, he must wait a couple of months to get his money through the very uncertain mail service of that day.

So if a man wanted to open a store in southern Utah, he had to go in person to St. Louis (nearly all the goods came from St. Louis) to make his purchase, and in the absence of money to pay for them, he had to take marketable commodities back from here to trade for the goods. Such marketable commodities were about as scarce in Utah as money.

During the Civil War cotton could not be had either here or in St. Louis, and, therefore, it was an item of ready exchange at any eastern point. Brigham Young sent colonies into Utah's Dixie to grow it. This helped greatly for this home-grown cotton sold readily in St. Louis at prices that ranged from $1.25 to $1.90 a pound. If our would-be merchant was able to gather a load of cotton, he could take it back and trade it for any merchandise he wanted. But such a business venture would entail a six-month trip for himself, a wagon, and at least three yoke of oxen. Goods were comparatively cheap in St. Louis at that time, but our merchant could make only one trip a year, and with three yoke of good oxen could bring back only a ton and a half of goods. He could sell it all out in a week, then he would be out of the store business until the next year when he could make another trip. Deep snows in the Rocky Mountains closed the road for half the year. Under these conditions merchandising as a business was out of the question in rural Utah, and people had to rely more and more on their ingenuity with the needle and their industry on the farm to feed and clothe themselves.

The coming of the railroad in 1869 brought tremendous changes in all of this. It provided a common carrier and a reliable and, for that day, fast mail service. On these two legs, business could walk with confidence into every city and hamlet in the West.

The Mormon Church took the initiative in facilitating merchandising in all the settlements in Utah. They organized Zions Cooperative Merchantile Institution (ZCMI), which was to serve as a mother wholesaling store to supply goods to other retail stores throughout the territory. Co-op stores were quickly organized in almost every community, and in this way little dribbles of capital were brought together to buy a stock of goods. Shares of capital stock were sold, and

all the people were encouraged to subscribe for what they could. Many of the subscriptions were as low as $5.00 and $10.00, and $100.00 was about the highest.

Some of the smaller stores copied the name of the mother store. Thus, there was ZCMI of Provo, ZCMI of Kanab, ZCMI of Fillmore, ZCMI of Coalville, etc. There was no connection between them whatever other than debtor and creditor. The parent ZCMI, in Salt Lake City, owned no stock or interest in any of the others.

The effect of these stores on Utah was magical. ZCMI drummers carried samples of their goods and wares into every community. The people of all the settlements were using the same fabrics and wearing the same clothing styles so that when they assembled at conference time in Salt Lake City, they did not look so much like "country rubes." They were no longer dressed in different homespun materials nor in outlandish country styles. It gave Utah more of a cosmopolitan air than any of the other western territories.

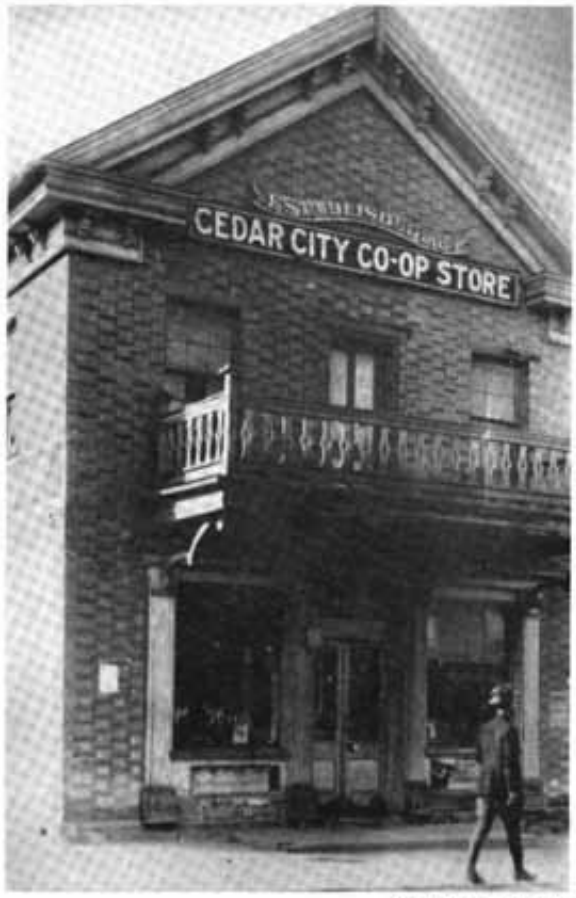
In Parowan commenting on the founding of ZCMI, George A. Smith said, "We have succeeded in organizing a wholesale establishment which will prevent our enemies from further fattening on us." The Gentile merchants, so-called, had been doing just that before the coming of the railroad. They had also co-operated with Utah's infinitesimal Gentile minority in stirring up strife in the East against the Mormons. The retail prices in the Gentile stores were unreasonably high, and much of the goods was not well-chosen for pioneer needs. George A. Smith was encouraging the people to organize their own co-op stores and "keep the Gentile yoke off your necks." It was an effective appeal.

So much for the early merchandising background in general. A look now into the history of one of those old pioneer co-op stores may be of interest.

The coming of the railroad did not solve all the freight problems for southern Utah. It still took a month for ox teams to make the round trip from Cedar City to Salt Lake City and back. This was three times longer than it took to bring the goods from New York to Salt Lake City by rail. The Cedar Co-op called for bids on freighting, and three young men won the contract. They proposed to haul from 1,500 to 2,500 pounds at $.04¾ per pound, be responsible for the goods, and be back to Cedar in thirty days. Terms were one-third cash on delivery and two-thirds in merchandise over the counter. The three boys would go in the same wagon to guard and defend the goods. At that rate the boys would make very low wages for themselves and three yoke of oxen, yet the freight bill from Salt Lake to Cedar City was higher than from New York to Salt Lake City by rail. The Cedar City store was organized in 1869 and was among the earliest crop of co-op stores.

In February, 1870, Utah passed its corporation law, and very soon thereafter the co-op stores were given corporate existence. At the same time many other co-operatives were being incorporated — co-op cattle companies, horse companies, sheep companies, little factories and farms — and by 1874 the United Orders.

Of all of these the co-operative that was nearest to the hearts of the people was the co-op store. It was wonderful after their long famine, to go and see shelves stocked with goods and to be able to replace a broken dish or buy enough calico to make a dress.



COURTESY JOSEPH IBBELL

Cedar City Co-op Store was established in 1869 and was among some of the earliest Utah co-op stores.

The store of which I wish to write was twenty-five years old when I went to work for it, but the operation was much the same as it had been through the years. I went in as head clerk, which meant that I was boss over two girl clerks. Above me was the secretary-treasurer, an old man who had managed the store since its early days. We saw very little of him. He handled the mail at his home and brought the invoices to us all priced out. He also handled the money and paid the bills. I did most of the buying, but the secretary-treasurer reserved to himself the right of veto.

The stock of merchandise was kept pretty complete for that day, but the variety was not as wide as of today. Also, except for canned goods, very few things came packaged. Crackers and some candy came in barrels, and it was hard to keep the mice and the customers out.

The store bought Dixie molasses in forty gallon barrels and kerosene in metal drums. Customers brought all sorts of containers for the molasses — sauce pans, quart cups, beer bottles — fruit jars had not come in yet. Everybody burned coal oil lamps and had a gallon oil can which they brought to refill once

a week. The price was $.25 a gallon. Twenty-five cents a week was pretty cheap lighting; the coal oil lamp was a tremendous step up from tallow candles.

The store sold considerable home cured bacon, hams, and shoulders. It paid $.12 a pound for bacon and shoulders and sold them out at $.14 to $.16 a pound. For good cured hams the store paid $.18 to $.20 — always in other goods — and sold them out whole at $.25 a pound. All of our cheese and butter came from the home dairies. Butter was in two-pound rolls and sold for $.60 a roll. Sheepmen on the mountains exchanged a quarter of mutton for a roll of butter.

The store, in spite of the Word of Wisdom, had a good tobacco trade, especially in chewing tobacco. Plugs of Horseshoe Tobacco were cut into $.10 and $.20 cuts. There were no regular packaged cigarettes, men rolled their own, and the favorite tobacco was Bull Durham in $.15 bags. A few cigars were sold. There was one packaged cigarette, but it was not tobacco filled. They were called cubebs and were recommended for colds in the head or asthma. The kids bought and smoked these on the fourth and twenty-fourth of July. They co-ordinated well in their minds with the firecrackers and cannonading, and they made the kids feel like men.

The co-op stock of canned goods was very light as compared with today's grocery store. The three most active items were canned tomatoes, salmon, and oysters. Most of the tomatoes went out to the shepherds. Fruit jars had not yet come in, so tomatoes and fruits that had to be hauled were bought in cans at the store. Canned salmon was opened as a special dinner dish on occasions for the family. Oysters were sold a dozen cans at a time for the popular oyster stew parties which the young people held every winter.

One of the unusual things the store shipped in once a year was one hundred pounds of finnan haddie for our Scandinavian customers. It was a dried, smoked fish about two feet long which came wired up in unwrapped bundles of about twenty-five pounds each. A bundle was a big armful, and it looked like an armful of stove wood. The fish was hard and as tough as rawhide and had to be chopped up with an ax. It then had to be soaked in lye water for three or four days, and then in successive changes of fresh water for three or four more days to take the lye out. When softened, the fish was cooked and flavored with salt and spices to suit the taste. Our stock came from Sweden, and it was the favorite of all foods for the Scandinavian people here. Our stock was all sold out in a week, and there was no need to re-order for the Swedes and Danes had all laid in a year's supply.

The old co-op store's medicine and drug department was one really to be proud of. We were set up to cure any affliction of the flesh from infancy to old age. The one and only limitation we recognized was "the Lord's own appointed time," which we never tried to transcend, but even here we were able to keep the

people alive up to the last minute before their time ran out. There was no druggist or drugstore in the country and no doctors or doctors' prescriptions. Nor did we need them for the "Old Reliable Co-op" was armed for any malady that might attack. Here is an inventory of our health armory as far as I can remember the stock.

Of the old standbys, the store never ran low on epsom salts, castor oil, senna tea, sulphur, alum, glycerine, sarsaparilla root, bay leaves, catnip, sassafras, asafetida, constipation candy, sen sen for bad breath, and corn remedies for the relief of ladies who wore size three and a half or four shoes on number six or seven feet. It was amazing how many women had bad corns. Small feet were decreed by the style of that day.

As pain soothers the store never ran out of laudanum for the old people, and paragoric and Fletchers Castoria for small children. There was a card that always went with a bottle of Castoria which read:

> When she was a baby they gave her Castoria,
> When she was a child she cried for Castoria,
> When she was a woman she clung to Castoria,
> And when she had children she gave them Castoria.

When a doctor came to Cedar City, he found one old lady who had become a drug addict on the laudanum she was buying regularly at the co-op store. This was all news to the company. The doctor, as city health officer, confiscated our stock of laudanum and gave us a copy of the law which decreed that this and other opiates and habit forming drugs could be sold only by a licensed druggist and on a doctor's prescription. Trouble grew out of this from one of our faithful town nurses who had been using laudanum through the years and resented this interference with her long established practice. She charged that the unscrupulous doctor was using this underhanded method to corner the medical practice and cut out all competition.

One of the medicines of mirth-provoking memory, was asafetida. It was believed to be a disease resistant specific. And in times when measles, mumps, scarletina, and whooping cough were rampant, it was hung around the necks of children to ward off all such diseases. A handful was put in a sack and worn on the chest under the clothing. The warmth of the body generated fumes which the wearer breathed. We did not know then that disease came from living organisms, for germs had not yet been invented. All the children wore their "fettie bags." The fumes in the closely shut up school room were terrible, and no self-respecting germ would remain there if there were any way of escape.

A spring remedy of that day was sulphur and molasses in equal parts. We sold both. "Dosage — one spoonful first thing in the morning for three mornings; discontinue for three mornings; take again for three mornings; rest three

mornings; take again for three mornings — nine doses in all." This was to purify and tone up the blood and put one in the pink of health for the hard summer's work. A good swig of Ayers Sarsaparilla two or three times a day complimented and reinforced the sulphur and molasses. Ayers Sarsaparilla had a hard liquor base, and it pepped up the user almost instantly. It had marvelous spirit-lifting propensities.

There were a variety of patented popular tonics and blood purifiers on the co-op shelves. We had IXL Bitters — a special favorite with the old, run-down tipplers — Ayers Tonic, Dr. Pierces Favorite Prescription, Dr. Williams Pink Pills for Pale People, Hostetters Stomach Bitters, Lydia E. Pinkham's array for all the ladies' troubles, Jamaica Ginger for quick relief for that "all gone run-down feeling," and Vita Ore.

Other precious remedies in our drugs stock were Dr. Janes Worm Remedy, Dispepsia Cure, Winslows Soothing Syrup (almost as good as Castoria), Chamberlains Cough Remedy, Chamberlains Canker Remedy, Halls Croup Remedy, Halls Worm Remedy, Halls Canker Remedy, Graffenburg Pills, Sister Harris' Salve of sixty ingredients with something in it for every infection, Dr. Shores and Shores Catarrh Remedy, perfumes, headache powders, eye water, eye salve, hair oil "stops baldness dead," dandruff cure, sticks of mustache wax, Williams Shaving Soap, and Jamaica Ginger. (This latter was kept with the medicines rather than with the extracts because it gave quick relief from "that tired, run-down feeling.") We had a very convincing demonstration of the potency of Jamaica Ginger in the store's back yard. Minnie, Indian Squint's squaw, took a few drinks and became so exuberant that Squint told her to go home. She refused and in Indian profanity told him to shut his big mouth. Squint rode his horse along side of her and seizing the long braid of hair that hung over her shoulder wrapped it around the horn of the saddle and went dragging her screaming off down the street. The city marshal heard her screams and forced Squint to release her. As soon as she was free, she ran for home as fast as she could go. In those good old days women had to love, honor, and obey their husbands.

The old co-op had also a dry goods department, a shoe department, hat department, clothing department, hardware department, crockery department, machine sheds, granary, and a back yard filled with huge piles of lumber. The company operated a tannery, shoe shop, grist mill, and on the mountain a sawmill. Two lady clerks and myself as chief clerk sold the products of all these enterprises at the store.

Sometimes in my early days, I got these departments mixed with embarrassing results. One day a lady came and asked to see some sheeting. I led her out into the back yard and deep among the stacks of dimension lumber. Out there

she grew alarmed and stopping short asked with evident concern, "What have you brought me out here for?" "You asked to see sheeting didn't you? What dimensions do you want?" I replied. She said, "I want five and a half yards." "We sell lumber by the foot, not by the yard," I explained. "Lumber, you dumbbell," she said. "Who said anything about lumber. It's cloth I want to make sheets." Apologetically I led her back to the store and to the dry goods department. I said, "I don't know this kind of sheeting. You find the cloth, and I will cut off what you want." She found the goods, and I filled her order. That day I learned that there is sheeting and there is sheeting, and the lady learned that too. Today the lumber kind is called sheating but not then.

Our hat department was a field of distinctive merchandise. It was housed upstairs with the men's suits and underwear. We stocked only two styles — fedoras for the old men and "Cedar" hats for the young men. The store bought a dozen or so straw hats every spring, but these were not permitted to depreciate the dignity of the hat department. Straw hats, with the kids' hats were sold downstairs on the dry goods counter and by the girl clerks. There was something sissy anyway about straw hats, and our manly fellows like Tex, Jonah, Squawfoot, and "Yiah," would not deign to look at them.

We bought hats once a year from a hat manufacturer in Salt Lake City. The hat man made one trip a year through the state. I was supposed to buy a year's supply and no more. One year I had five hats left over, and my good boss took me sternly to task about it. He said, "Why don't you learn to buy just what hats you need and not have this capital tied up in surplus stock?" I said, "Albert Nelson and Will Hunter died and that accounts for two hat sales missed. I had no way of knowing they would die, did I?" But my boss said I should anticipate some adverse conditions. "You must learn to buy only what stock you can sell." I answered, "When I get so I can do that, I won't be working for you at $35.00 a month."

When we learned that the hat man was coming, I began to mentally check over our prospective customers. Going up one side of the street and down the other I counted every man in town. I said, "Ike Higbee didn't buy last year, he will want a size 7 black Cedar hat; Lonze bought, he won't want one; 'Yiah' Leigh, yes, 6⅞ black; Dock Adams, yes, 6⅞ light; Frank, no; Queets McConnell, yes, 7 light; Toes, no; Snyder, yes, 7 black." I could remember who had bought a hat within the year, and those who had not were good prospects for next year. I also knew every man's hat size.

We never wrapped hats up when we sold them. The customer put it on top of his old hat and wore it home. Some dashing young dandies wore the two hats around town for a week or more so people would see they had a new one. Having only five hats left over seemed pretty good buying to me, but my good old

boss would rather lose three or four sales than carry a couple of hats over. Yet, Cedar hats and fedoras were as staple as sugar in the bin.

Then one year two new styles intruded into our market. One was a soft brown with a rolled rim and a rounded crown, and the other was the sombrero. Our manager refused to purchase the round "bullet head hats," as he called them, as it would only complicate our stocking problems, and he did not trust my judgment anyway. We had no idea who would buy them. We did buy three sombreros. Now with four styles on the market I could no longer count noses against styles and buy by that rule.

The Sheep Association further complicated our problem by putting a line of hats in their store, and among them were the "bullet heads." Soon the bullet heads we saw on the streets told us how much hat business we were losing, and we expected that we would have many more than five hats on hand at the next stock taking. The roll-rimmed hats, however, proved to be only stylish town hats and were no good for field and range wear. Some of the men who had bought bullet heads at the sheep store came back to us and bought their regular Cedar style which lifted our spirits. This year the manager was not angered by the sight of five hats, but was actually happy to find that we had only eleven on hand.

The dry goods was the awesome department for me. In time I came to know all the goods for I had to unpack, check the invoices, and price everything. But I stayed away from the dry goods counter as much as I could.

Women were much more modest than they are now, and a clerk would never hold a lady's stocking up full length. The clerk laid them folded on the counter, and if the lady wanted to inspect them, she turned them over one fold at a time. Corsets and bustles were strictly "mustent mention ums," still we had to stock them. A lady was either desperate or wanton if she asked a man clerk for either of them. But once in a while it happened. Then I modestly asked the size wanted and led the lady to the obscure corner where these goods were kept. I took down the proper size boxes, laid them on the counter, and then walked away leaving her alone to open the boxes and make her selection. She then wrapped a paper around it and brought it to me to properly wrap and collect for.

But even more ticklish than corsets and bustles was the sale of chambers. Men would never come to buy them, so the women had to. And the girl clerks would never sell them, so I had to. They were kept upstairs in the china department. The lady customer would say to me, "I want to see the china ware." And when we reached the crockery department she would point — never ask — for what she wanted. Then she would turn modestly away and go on examining the rest of the dishes while I wrapped her purchase up. This I did with lots of

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General store operating in Utah near the turn of the century.

paper and twine to conceal its identity, but the package was about as revealing in its shape and proportions as a wrapped, long-handled frying pan. Once in a while some cheerful grandma, who could still speak English, would come and with a broad smile tell me what she wanted, and that was a refreshing experience in my humdrum business day. But time here has wrought a wonderful transformation. The lowly chamber has been hauled out from its humble station in the home and sits now proudly enthroned as the bearer of orchids and roses on the elegant marble mantlepieces of society's rich. Its antique value today is not the six bits I used to charge, but $6.00 to $16.00 according to which society duchess or queen it once served.

Selling shoes to ladies was also a delicate and exacting procedure. Our good manager insisted that ladies should never be embarrassed by foot touching when they bought a pair of shoes. He gave me some strict instructions and a realistic demonstration on how to proceed. We were never supposed to touch a lady's stockinged foot. The lady unbuttoned her shoe, then we took hold of the heel and toe and gently drew it off. The male clerk then held the new shoe open while the lady forced her foot in. In this gallant and romantic way, she tried on shoes until she found the pair she wanted. Then the clerk held the old shoe open for her foot and handed her the button hook so she could button it up while he wrapped her purchase. All the while her long skirts were drawn

snugly over her shins so that not an inch of leg was exposed above the shoe tops.

Then skirts started an upward climb, and the lift was protested every inch of the way. When they reached the point where the wind sometimes exposed a knee, an old English lady in disgust said, "Hi was brought up in my country to hunderstand that knees are honly far usbins to see."

Yet despite all the demands of modesty, women preferred to have men sell them shoes. They thought men knew more about shoes and could pull tighter ones on their dainty feet.

The men had no such modesty scruples. The girls could sell them shoes as well as I could. Once one of the girls mixed the shoes in the boxes and sold a man two right shoes. He wore them a week before his wife discovered that he was wearing two shoes for the same foot. She saw also that they were not the same style. The man, in anger, brought them back. I found the box that had two lefts and sold him that pair at half price which effected peace between us.

In the co-op shop, Brother Adams, the shoemaker, made a style he called "Straights." They could be worn interchangeably, and he advised that they be changed left to right, right to left every other day. He reasoned with logic that in that way the shoes would wear out evenly and last longer. They were a sort of "Wonderful one horse shay" shoes which, when the last hour of wear came, would both drop to dust at the same time. And "Ye Old Co-op" had a monopoly on these, but the store did not push them because advertising with all its present superlatives had not been developed. What an opportunity they missed, and how much the dear public lost.

Dealing all the time with people, the clerks came to know their vagaries. Aunt Manie was one who always expected the clerk "to throw something in." She came early one year to do her Christmas shopping, and I waited on her. On her list was a pound of peanuts. I opened the drawer and there was a big mouse in the bin. I scooped it with the nuts into her sack. She said, "Now what are you going to throw in for a Christmas gift." I said, "I have already thrown something in, you'll find it soon." I expected to have her in my hair any day, but time went on to the end of January before I saw her again. She was back to trade, and at the end as usual, she asked me to throw somthing in. I said, "Aunt Manie, I threw something in the last time we traded, and you have never thanked me for it. It was when you bought some peanuts." "Oh!" she cried, "I never got one of those nuts. I put them in my trunk to keep for Christmas, and when I opened it to get them on Christmas morning a pesky mouse had got in and ate them all. It also ate holes in some of my clothes."

I lacked the courage to confess my sins, but I made the peanuts up in full to Aunt Manie and gave her a sample package of a new tea to pay for her darning. After that Aunt Manie would trade with no other clerk, and I made to her the

only "all eyes open" corset sale I ever made. She had me spread them out on the counter and hold them down securely while she solved the intricacies of the ladigo strap or string system.

Financing many of the little stores for their opening stock was a difficult task, for money was scarce in the little out of the way towns. The hamlet of Hebron down in Washington County, solved their problem in a novel way. The out of the world town was so poor that they had a hard time to find a school teacher. The bishop's daughter, Sis Terry, was pressed into service, and she was to take her pay in milk of which the town had plenty. On Friday morning every child brought a bucket of fresh milk which Sis took home and made into cheese. In the spring the bishop loaded Sis and her cheese into his wagon and went to Salt Lake City. She traded her cheese to ZCMI for goods which were taken back to Hebron to start the co-op store.

In conclusion I have tried to bring an intimate picture of the old co-op stores. Ours was not essentially different from all the others. Market day in the old country homes, from which most of the people had come, had remained through the years of want a fondly cherished memory. If only they could go again to the shop and buy a package of tea or a "penneth worth of lollipops," it would be like a peek into heaven. Now, by putting their $2.00 and $5.00 and $10.00 together, they had won emancipation from merchandising want. The co-op store had goods on its shelves, and the people could look at them even if they had no money to buy. To the goods-starved Saints, Zion was beginning to put on the "Glory of the Lord."

No other thing did so much to lift the spirits and brighten the hopes of the impoverished pioneers as the founding of co-op stores. Now mother could send a dozen eggs to the store and buy a new hair ribbon for Mary's birthday or a peck of grain to exchange for sugar. Soon touches of color began to relieve the drabness of homemade clothing, and style consciousness, so long in eclipse, began to revive and change the decor of the town.

Co-op stores brought not only goods but also markets for many surplus commodities. They became, in effect, produce banks where a sack of grain, a cheese, or a ham could be deposited and drawn against in goods. The store became an assembling pool for little dribbles of eggs, grain, cheese, butter, hams, bacon, and many other things. Here the California emigrant trains that passed through found, ready assembled, the supplies they needed to see them through their journey across the deserts. Co-op stores also filled the peddlers wagons with produce to sell in the Nevada mining camps. Thus, these stores changed the whole rural outlook in Utah, and there was one in every Mormon community.

We have become familiar with chain stores for long strings of them dominate our merchandise field today. Each chain is owned and directed by some private interest which collects and pockets the profits. The co-op stores were as truly a chain, but they had no connecting links other than a common purpose to tie them together. Each store was a totally independent unit doing business for itself and in its own way. Yet the objectives were the same. The key words in every name, co-op store, were the same; they all opened and closed their meetings with prayer; the same goods were stocked in every store; and the same blended smell of dry goods, groceries, bacon, cheese, patent medicines, coal oil and mice exuded from all alike.

Yet, unlike the chains we know, profits were not the primary purpose of the existence of Utah's stores. The coming of the railroad awakened long-smoldering desires in every heart for better standards of living, which only access to goods could fulfill. Our religio-business chain was organized to bring this long-cherished hope to realization.

Co-op stores form a unique and distinctive chapter in Utah history, and the historian will seek in vain for a parallel in all America.

UTAH'S FIRST MEDICAL COLLEGE

BY ROBERT T. DIVETT

For many years the *American Medical Directory* listed among the medical colleges that have existed in the United States the "Medical College of Utah, Morgan City." The section on medical college histories tersely stated that it was founded in 1880, graduated a class in 1882, and was extinct in 1883.[1] Prior to the publication of an earlier paper by the author[2] common knowledge of the Medical College of Utah was limited to mere mention in a master's thesis and two histories of Utah medicine. A search of the *Deseret News* (Salt Lake City) and *The Salt Lake Tribune* for the years 1879 to 1885 failed to reveal any mention of the school. Unfortunately, the files of the newspaper published in Morgan in the 1880's have been destroyed. A search of the University of Utah libraries failed to reveal further information on this medical school which antedated the founding of the University of Utah School of Medicine by some twenty-five years.

The key to the story of the Medical College of Utah was located with the assistance of the Church of Jesus Christ of Latter-day Saints Historian's Office. The "Journal History" of the church revealed a series of articles on the school published in the *Salt Lake Daily Herald* during July and August, 1882. The clippings of these articles in the "Journal History" provided the foundation for further research. Additional information was gained through correspondence and through personal interviews with residents of Morgan, Utah, and Mifflin County, Pennsylvania.

Mr. Divett is librarian of the Library of Medical Sciences at the University of New Mexico. This article is based on one which appeared in the *Bulletin of the Medical Library Association*, XLVIII (January, 1960). All photographs in the article are courtesy the author.

[1] *American Medical Directory* (1st ed. to 20th ed., Chicago, 1906–1958).

[2] Robert T. Divett, "The Medical College of Utah at Morgan," *B.M.L.A.*, XLVIII, 1–10.

In 1879, Dr. Frederick S. Kohler arrived in Morgan City and established the first medical practice in that community. He brought with him the younger of his two sons, Benjamin Rush Kohler. Dr. Kohler was the primary character in the drama of the Medical College of Utah.

Frederick Kohler was born December 18, 1836, in Milroy, Mifflin County, Pennsylvania. He was raised in Milroy, attending the public schools there; then spent one or two years at Dartmouth College, and in 1860, graduated from the Eclectic Medical College of Pennsylvania at Philadelphia.

Dr. Kohler established a medical practice at Reedsville, Mifflin County, Pennsylvania; married Sarah A. Carson; and fathered a son, William H. Kohler, born December 19, 1862. In February, 1862, Dr. Kohler was commissioned an assistant surgeon in the Twenty-First Regiment of Pennsylvania Cavalry. After returning from the Civil War to Reedsville, he fathered a second son, Benjamin Rush Kohler, born September 7, 1865. For twelve years Dr. Kohler practiced medicine in Reedsville, Pennsylvania. His wife, Sarah, died December 11, 1866, leaving him with two young children. He remarried, but in 1872, the marriage was terminated.

When his second marriage ended, Dr. Kohler determined to acquire another medical degree. He left his eldest son with the boy's maternal grandparents in Milroy, and took his youngest son with him to Cincinnati, Ohio. While Dr. Kohler studied at the Medical College in Cincinnati, young Rush was sent across the Ohio River to an academy at Ghent, Kentucky. After his graduation from the Medical College of Ohio in 1873, Dr. Kohler moved first to Mount Sterling, Ohio, for a short time, then established a practice at Vevay, Indiana. Dr. T. J. Griffith, a colleague, later reminisced of him:

> A few words about his personal appearance, a splendid physique, a fine forehead, a strong chin. His profile was somewhat like John Drew's. He possessed wonderful energy, he was a high powered human dynamo. He was genial, even jolly, but he took his work seriously. He never "high-hatted it" and had no use for anyone who did. In his profession he was up to date.[3]

From Vevay Dr. Kohler moved to Morgan, Utah. He was apparently captivated by the beauty of the locale for he extolled it in all the circulars and announcements of his medical school. Although he tested the waters of Como Springs and declared them to be very good for healing through hydrotherapy, it was his successor as the town doctor that named the springs and developed the first resort. Dr. Kohler liked the people, even though they were Mormons and he was a Presbyterian, and this feeling was returned. Within a short time he had a large practice.

[3] T. J. Griffith, "Brief Sketches of Some Old Time Doctors Who Lived in Vevay and Practiced Medicine There More Than Half a Century Ago," *The Vevay Reveille-Enterprise*, September 5, 1929, p. 1, 8.

A few short months after he arrived in Morgan, Dr. Kohler founded Utah's first medical school. In founding the school he was simply following a tradition of his alma mater, for graduates of the Medical College of Ohio had founded many medical institutions. On the other hand Dr. Griffith claimed that Dr. Kohler had been induced by the Mormons to establish the school.[4] At any rate when the school was founded, Dr. Kohler apparently had the support of many of the influential members of the community.

When the school was incorporated under the laws of the Territory of Utah, William M. Parker, bishop of the Morgan Ward of the Church of Jesus Christ of Latter-day Saints, was listed as president, with Dr. Frederick S. Kohler as dean of the faculty. Following is the incorporation agreement as it was later published in the *Salt Lake Daily Herald*.

> Know all men by these present, that we, whose names are hereby affixed, have associated ourselves together for the purpose of establishing in the City of Morgan, Territory of Utah, in accordance with the laws of said Territory an institution with corporate power and collegiate power to confer the degree of doctor of medicine, for the purpose of medical education by providing for courses of lectures and other methods of instruction, have associated ourselves for the period of twenty-five years under the name and style of Medical College of Utah. At a meeting held in the office of the Z.C.M.I. on Saturday, January 31st, 1880 at 2:00 o'clock P.M., all the members were present. Bishop W. M. Parker was elected president and Anthony Peterson, vice president, and James M. Mason was elected secretary. Should a vacancy occur in the board it may be filled by an election of two-thirds of the members, which shall constitute a quorum for the transaction of any business meeting relating to the institution. Done at the City of Morgan, in the County of Morgan, Territory of Utah, this the 31st day of Jan. 1880. Signed W. M. Parker, A. Peterson and J. H. Mason.[5]

Shortly after the organization meeting a circular containing the following statement was issued:

> Bp. W. M. Parker, President — Jas. M. Mason, Vice-Pres.
>
> A. Peterson, Secretary
>
> MEDICAL COLLEGE OF UTAH
>
> Morgan City, Morgan Co., U. T.
>
> The regular lectures in this institution will commence on Wednesday, March 10th, 1880, and will close about the last of June. The second regular course will commence Nov. 1st, 1880, and continue sixteen weeks.
>
> Fees: Matriculation, $5.00. Tickets, term $80.
>
> The graduation fee is twenty-five dollars.
>
> The location is a favorable one in the midst of one of the most beautiful mountain regions on the continent (Weber Station, U.P.R.R.)
>
> For further information apply to
>
> F. S. Kohler, M.D.
> Dean of the Faculty.[6]

[4] *Ibid.*

[5] S. Francis, "The Medical College; a Reliable Statement," *Salt Lake Daily Herald*, August 3, 1882, p. 5.

[6] *Ibid.*

Mr. Samuel Francis, a resident of Morgan, wrote a lengthy letter to the *Salt Lake Daily Herald* about Dr. Kohler and the medical school.[7] This letter, published in August, 1882, stated that about six students attended throughout the first session. The name of only one of these students, Mrs. Emeline Grover Rich, of Bear Lake County, Idaho, was listed in the letter.

Dr. Kohler had a prize student in Emeline Rich. Not only was she an outstanding pupil, but as a wife of an apostle she was one of the select social group of Mormondom. She was the fifth of six wives of Charles Coulson Rich who had led the settlement of the Bear Lake country of Utah and Idaho. Early in her life she had received a patriarchal blessing from Joseph Smith, Sr., father of the prophet, blessing her that she would become a noted nurse and woman physician. She had also been set apart by Brigham Young to administer to the sick and to act as a nurse and midwife. She had thus been practicing the healing arts for many years before she attended the medical college.[8] Shortly before her death, May 4, 1917, she dictated an autobiographical sketch to her son George Q. Rich. In it she said:

> I was called upon a great deal to go out among the sick, there being no doctors or drug stores, and I had very good success. After a little I was called upon to tend the sick both temporally and spiritually and I was set apart for that work. For the first ten years I made no charges but I had so much of this work to do that I finally began to make charges. I had read medicine and from the time I was nine years old had practiced as a nurse and I now went to Morgan and attended a college and after four months received my diploma, my previous work and study being a great help to me here. I had a constant practice for forty years, or until I was seventy years of age, when I quit the work.[9]

Emeline Rich is remembered as a competent healer. A granddaughter of Charles Rich states that she never remembers "Aunt Emeline" using the title, doctor,[10] but a biography of Charles Coulson Rich states that Emeline practiced medicine in Bear Lake country for many years.[11] Another grandchild of Charles Rich, himself a doctor, stated that he did remember when "Aunt Emeline" went to Morgan to the medical school. He claimed that she was a better doctor before she went, however.[12]

Between the first and second sessions of the school, Dr. Kohler returned to Vevay, Indiana, to settle some business. While there he purchased the skeleton of a Kentucky Negro who had been hanged for a "crime common to his race."

[7] *Ibid.*

[8] *Biography of Emeline Grover Rich and Sketches of Her Eight Children* (Privately published, Logan, 1954), 12–16.

[9] The manuscript biographical sketch of Emeline Grover Rich dictated by her to George Q. Rich, is now in the possession of Mrs. Polly R. Griffin, Salt Lake City.

[10] Personal communication between the author and Miss Edith Rich, Salt Lake City.

[11] John Henry Evans, *Charles Coulson Rich, Pioneer Builder of the West* (New York, 1936), 105.

[12] Personal communication between the author and Edward J. Rich, M.D., Ogden.

The skeleton had originally been prepared by another Vevay doctor, Dr. Joseph McCutchen, but was sold to Dr. Kohler by Dr. Griffith who claimed that the skull looked like it belonged to a wildcat.[13]

The second session of the school was delayed until the fall of 1881 and apparently had about the same number of students as the first. The third announcement listed ten matriculants without differentiating between classes. One was from Idaho (Mrs. Rich), six were from Utah (all from Morgan or nearby towns), two from Pennsylvania, and one from Iowa.

The 1882 announcement also listed four graduates: E. Rich, Idaho; J. F. Costello, Pennsylvania; B. Rush Kohler, Pennsylvania; and D. J. McCauley, Iowa. Two of the graduates can be accounted for — Mrs. Rich, whose biographical sketch has been given, and Benjamin Rush Kohler, the young son of Dr. Kohler. In 1883, Benjamin entered the medical department of Western Reserve University at Cleveland, Ohio, whence he graduated with another M.D. degree in February, 1885. From there he returned to Reedsville, Pennsylvania, and practiced as a pediatrician. During World War I Dr. Kohler was commissioned a major in the Army Medical Corps. He died in Reedsville, December 2, 1932.

Dr. Frederick S. Kohler

J. F. Costello and D. J. McCauley cannot be accounted for. No person named D. J. McCauley appeared in either the R. L. Polk Company's *Medical Register and Directory* or the *American Medical Directory* of the late 1800's or early 1900's. One J. F. Costello does appear in these directories, but he is listed as a graduate of the Columbus (Ohio) Medical College of 1880. Mr. Francis claimed that these two persons and one of the faculty listed in the third announcement of the school had never been in Morgan.

The announcement for the third session, to begin August 2, 1882, revealed great plans. It listed a faculty of four: F. S. Kohler as professor of anatomy and surgery and diseases of

[13] Griffith, "Brief Sketches," *Vevay Reveille-Enterprise*.

women and children, in addition to being dean of the faculty; his son B. Rush Kohler, as professor of chemistry and materia medica; a S. W. Howard, M.D., as professor of the practice of medicine and physiology; and Emeline Rich, M.D., as professor of obstetrics.

The third session was never held. In July one of the announcements of the college fell into the hands of the *Salt Lake Daily Herald*. The newspaper reprinted the announcement with a scathing denunciation in which it intimated that the newspaper had investigated the college with the help of the local practitioners of medicine in Salt Lake City.[14] The next day the *Herald* again editorialized against the school.[15] Two days later, in the Sunday edition, the *Herald* published a rebuttal on behalf of the college from a Morgan citizen. The citizen was William B. Parkinson, bishop of the North Morgan Ward. Readers who studied his rebuttal and then looked at the original article could plainly see that he was listed at a matriculant of the Medical College. His rebuttal said, in part:

> In answer to your query of yesterday, viz: "What is it?" in regard to the institution (well known in these parts) "The Medical College of Utah." I must truly say I am surprised at the ignorance manifested on your part in relation to the existence of this institution. If you really were in ignorance about this matter, why did you not apply to the president, secretary, or any of the trustees, who by the way are all bona fide residents, and honorable men in our community, or the matriculants, for information, which would have been given with pleasure? You can rest perfectly at ease. This institution is gotten up for the purpose of educating our people in the profession, thereby preventing so much cutting and quacking as heretofore existed in our country . . . ." [16]

The *Herald* published Bishop Parkinson's letter but retaliated with a scathing editorial twice the length of the letter. It said, in part:

> Bishop W. B. Parkinson, of North Morgan Ward, is given space in this morning's HERALD to say some good things about Dr. Kohler and his "Medical College of Utah," and also to exhibit his want of manners, which latter he does in the coarse and ungentlemanly tone of his communication. . . . We have been expecting some such letter as Bishop Parkinson has written, but did not look for it to come from a bishop, with his full title set out to add to its authoritative character; and layman as the HERALD is it makes bold to suggest that the bishop has blundered this time if never before.[17]

The next Thursday, August 3, 1882, the *Herald* published the lengthy letter of Samuel Francis along with another editorial. It criticized in the editorial the appointment of young Rush Kohler to the faculty. Francis' letter was the coup

[14] "What Is It?" *Daily Herald*, July 27, 1882, p. 4. "Medical College of Utah: Who Ever Heard of the Institution?" *ibid.*, 8.

[15] *Ibid.*, July 28, 1882, p. 4.

[16] W. B. Parkinson, "That Medical College: A Bishop Endorses the Institution," *ibid.*, July 30, 1882, p. 1.

[17] *Ibid.*, 4.

de grace. The session was to have begun the day before, but apparently there were not sufficient students to hold classes.

Dr. Benjamin Rush Kohler

Although the *Herald's* campaign was essentially an attempt to berate the college, it revealed several interesting aspects of the program of the school. First, the course was planned to be essentially a three-year program with allowances for faster graduation for exceptional students. This idea was being used at that date by comparatively few of the better medical schools. Twice-weekly clinics were planned. This also was a notion used only by the more advanced institutions. Nine medical texts were listed in the announcement. Every single text was standard and currently in use in other schools. Mrs. Mary Chadwick, Morgan's self-appointed town historian, interviewed many of the older residents of the community during the 1930's and 1940's. She states that many of the older people remembered Dr. Kohler and his school very well, even though the younger generation had largely forgotten it. The oldsters remembered that Dr. Kohler often took several of his students with him on his visits. The students thus had bedside training, another method of teaching used only by the better medical schools of the 1880's.

In spite of the beauty of Morgan City, it was a poor place to choose for a school of medicine. In retrospect, the choice of Morgan appears to be the greatest mistake of Dr. Kohler. The 1890 census lists Morgan City's population at only 333, and it probably was smaller in 1882. The city had no hospital and not enough patients for school. In spite of the fact that it was on the transcontinental railroad, communication with the rest of the territory and the nation was comparatively difficult.

Readers of the *Salt Lake Daily Herald* undoubtedly thought that the *Herald* had won another victory and eradicated a terrible evil when it published the following editorial on August 26, 1882.

> Dr. Kohler, the head and front of the pretended "Medical College of Utah" at Morgan City has left the country and gone to Denver. His departure was somewhat precipitate, occurring before the HERALD had gotten through talking about him and his college. The doctor was entirely too tenderhearted. If he were engaged in no wrong doing he certainly ought not to have fled when he was mentioned in the paper, and if his college were regular and legitimate he shouldn't have been ashamed of having the world know all about it. There is no disgrace in being principal of a Medical College. When the HERALD exposed the "Medical College of Utah" it had no intention or desire to drive Dr. Kohler out of the territory. Our only purpose was to warn the public, both in Utah and out, against an institution that showed crookedness on its face, and to prevent the sale of bogus diplomas of the Dr. Buchanan order. The doctor having admitted guilt by fleeing and letting his college collapse, we are not sorry that Morgan has lost its doctor and that its medical institution that, according to some of their too enthusiastic dupes, were going to do so much to revolutionize the practice and price of medicine. Morgan may meet [*sic*] a doctor, but the county can afford to get along without a physician who engages in business that cannot be talked about.[18]

The victory was not complete. Dr. Kohler may have gone to Denver in August, 1882, but if he did it was only for a visit. Evidence that he maintained his residence in Morgan is the fact that the R. L. Polk Company, *Medical Register and Directory* of 1885, lists Morgan as his place of abode. In fact he remained in Morgan until July or August of 1887.

Shortly after the Medical College of Utah closed its doors, Bishop Parkinson resigned his position as bishop of the North Morgan Ward and went to Chicago. In 1883, he received his degree as a doctor from Rush Medical College. He later received another medical degree from the University of Louisville and returned to Utah to practice at Logan.

Dr. Kohler continued to teach in Morgan even though the Medical College no longer existed. But now his emphasis was on midwifery and was not aimed at producing doctors. In the years after the college closed he trained more than twenty midwives. Among those he trained as midwives were Cordelia T. Smith, Lisette Ursenbach Compton, and Helen Condie Thackeray. After Utah passed a law requiring licensing and an examination of midwives in 1892, many of these women were licensed as "Obstetricians."

When Dr. Kohler left Utah in 1887, he settled at Nampa, Idaho, where he once again established a medical practice. He later gave a cemetery to the city of Nampa. In 1907, he made a return visit to his native Mifflin County, Pennsylvania. There he met again his eldest son, William, by now also a doctor. They had not seen each other in thirty-five years. He also visited Rush and the grandchildren he had never seen. The lure of the West called him again and he returned to Nampa. There, on January 1, 1908, he died.

[18] *Ibid.*, August 26, 1882, p. 4.

One wonders what would have happened if the *Salt Lake Daily Herald* had left the Medical College of Utah alone. It was not well established and may well have died on the vine. On the other hand it might possibly have brought an effective medical education program to Utah twenty-five years sooner than it actually arrived. The student who reads the files of the *Herald*, only recently made available through microfilming, is impressed with the fact that it was a crusading newspaper, vigorously attacking many institutions. It often reflected the sentiments of the Mormon people, even though it was not officially an organ of the church. In its crusade against the Medical College it may well have been expressing the vestigal bitterness of many members of the church towards medicine. The turn toward acceptance of orthodox medicine had only been made a dozen years before.[19]

[19] See a coming article by the author entitled "Medicine and the Mormons," in the January, 1963, issue of the *Bulletin of the Medical Library Association*.

UTAH'S STRUGGLE FOR STATEHOOD

BY S. GEORGE ELLSWORTH

President Iverson, the Honorable Mr. Toronto, distinguished guests, ladies and gentlemen:

That the beginning of an annual public celebration commemorating the achievement of statehood by Utah should come sixty-seven years after the event suggests to me that there may have been something about the events of those times that some people wanted to forget, and it suggests, too, that enough time has passed that we of this generation can look back upon those times without the feelings of bitterness and sorrow attendant upon the events of the 1880's and 1890's. We have matured a great deal to be able now to celebrate that singular event, and view with pride and appreciation the decisions and actions which made statehood possible.

The achievement of statehood was the most significant event in all Utah's history after that first great decision of courage made during the last week of July 1847 — "This is the place." But the courage necessary and the hardships attendant upon the conquest of the waste places of this land in those first years of permanent settlement were small and few compared to the trials and persecutions and troublous times which preceded the even greater decisions of courage and foresight that made possible the attainment of statehood in Utah.

Utah achieved statehood forty-nine years after the beginning of permanent settlement by the Mormon pioneers, forty-six years after her first application for statehood, and thirty years after her population exceeded 60,000 total, a figure often required by Congress for statehood. She was the forty-fifth state when she might just as well have been the thirty-fifth. Statehood was her rightful honor — on the basis of conquest, settlement, population, production, and loyalty. But Utah — or for that matter, any territory of the United States — could not become a state in the Union until Congress had fully satisfied itself that all local institutions — political, economic, and social — were in harmony with those of the United States at large. The struggle for statehood by Utah or any of the other of her neighbors was a struggle to maintain on the one hand some sem-

Dr. Ellsworth, associate professor of history at Utah State University, presented this address at the Statehood Day celebration, January 4, 1963, at the State Capitol.

blance of local individuality, and on the other to conform to the social, economic, and political norms of American society.

It was not that Utah did not want or seek statehood, for she applied several times and held constitutional conventions on six different occasions — 1849, 1856, 1862, 1872, 1882, 1887 — each on her own initiative without the blessing of Congress, but each attempt failing in turn.

When those first Mormon pioneers entered Utah, they found themselves not unlike the people of the *Mayflower,* alone and without governmental authority they could immediately recognize. Thereupon, they simply established their own institutions of self-government. This government they called the State of Deseret, and for it they wrote a constitution quite typical of those of other American states. But Utah was governed under the State of Deseret only two years (1849–51), for an application to Congress for admission was rejected. And instead Congress created on the 9th of September 1850, the Territory of Utah.

The territorial status — a half-way stage from rule by Congress to self-rule — was a device employed from the first days of our Republic as a schooling in self-government. Under this system Utah sent a delegate to Congress where he had no vote, little or no power, and served mainly as a consultant on territorial affairs. The people elected only town and county officials and a territorial legislature. It was the federal government in Washington that appointed Utah's executive and judicial officers — governor, secretary, judges, and commissioners. These appointees were usually nonresident, politically ambitious persons who wanted to get somewhere else higher on the ladder of political appointment. Few served honorably or with distinction — especially in early Utah — though some were notable for their excellent service and Solomon-like wisdom.

Did the people of Utah (or any other western territory) need such a probationary period, a term of schooling self-government? Were they less able to govern themselves because they had moved West — even though they had participated fully in state government before such a move? The Mormon people above all others needed no such schooling. They had built cities and governed them and maintained their own militia, all in connection with county and state government. They could govern themselves in the best American tradition.

The long delay of statehood for Utah was the direct result of a serious conflict between the differing ways of life of two groups of people in Utah. Honest differences were sincerely held and stoutly defended. Each group considered its own way of life as both permissible and desirable under the concepts of American freedom. It was a struggle for minority rights and for majority rule. The Mormon people constituted in the earliest days nearly one hundred per cent and in the last days of the struggle perhaps eighty per cent of the population. They simply desired the privileges of majority rule in Utah. They had chosen

COURTESY *The Salt Lake Tribune*

Utah Statehood Day celebration, January 4, 1963, State Capitol.

these valleys because they thought no one else would want to live here, that they might be alone, or at least the first settlers. They had sought a place to worship God and establish their religious life in perfect freedom. Here they built the communities we enjoy and established so many of the institutions that have made our commonwealth great.

Yet these very people were a minority group in the United States at large! The non-Mormon population who came to Utah to enjoy her climate, her beauty, and take advantage of the opportunities afforded by her natural wealth and location, found themselves in the minority in Utah, though belonging to the majority group of the United States. To adjust to a minority situation in Utah was almost impossible for many of them. They sought equality of opportunity in making a livelihood. They sought a voice in government. They brought wealth and ideas and were responsible for many progressive developments. But they felt restricted, and they eventually set their task to destroy features of the Mormon system of society in order to guarantee these privileges for themselves. The Mormon system, they contended, was a "menace," a threat to the American way of life. These people had the ears of the nation, and so long as there were variations of consequence between the Utah practices and those of the nation at large, statehood would be withheld until there was a thoroughgoing conformance on the part of the people of Utah.

The struggle for statehood in Utah is one of the tragic chapters in our history and in the history of the nation. It reflects seriously on the American habit of intolerance toward diverse viewpoints and practices, toward deviant groups, and toward minorities.

What were the issues over which these opposing groups were in contest? What were the practices, the institutions over which they disputed?

The conflicts centered chiefly around the fundamental desire on the part of the Mormons for unity and the Gentiles for diversity. The Mormon ideal called for united effort to one ideal goal — the Kingdom of God on earth. Co-operation, a necessity for survival in the first years, was continued as the expression of practical Christianity. The individual Latter-day Saint felt he found highest expression of his energies in dedication to Mormon community goals. The ideal of unity found expression in all aspects of pioneer life — in politics, in economic endeavors, in educational programs, and in others. But the Gentiles stood for diversity as the best expression of American life — political diversity, economic competition, and individualism as opposed to organizational direction and "control."

In politics the Mormon ideal of unity amounted to *de facto* rule of the territory. Nominations of political officers were made from above, and only one set of candidates for the offices was proposed as a slate at an election. Thus there were no political parties in Utah in the usual sense until 1870, when, with the coming of the railroad, a larger Gentile population demanded usual political forms and established the Liberal party. The Mormons responded by organizing the People's party, and therein perpetuated for the most part the early practices. But in a more fundamental sense the conflict in politics in Utah was between the *de jure* government of federal appointees and the *de facto* government of the people of Utah through their church organization, institutions of local government, bishop's and probate courts, and militia. One governor, it is said, irritated at this state of affairs, emphatically declared to Brigham Young that *he* was the governor of the territory. To this Mormon Church President Young is said to have replied, "You may be governor of the territory, but I am governor of the people." The Gentiles wanted diversity in politics, separation of church influence from politics, nomination from below, competition for offices, and open and competitive elections. They complained at the role of Mormon bishop's courts, of the broad jurisdiction of the Mormon-staffed probate courts, and feared the militia (the Nauvoo Legion) as the "military arm" of the Mormon Church!

While the Gentiles held for the principles and practices of their day in the field of economics — rugged individualism, competition, and interdependence with the world — the Mormon pioneers insisted on the right to manage their

own affairs, collectively, for their own purposes. The Saints sought to build a temporal Kingdom of God — consisting of homes, schools, churches, temples, farms, businesses, and communities worthy of their concept of Zion. To accomplish this required central planning and direction, and many dedicated hands working co-operatively together. Resources were marshalled, policies were set against selfish, monopolistic practices. The Saints sought the ideal of self-sufficiency (though they could never really attain it in the area of the world they chose for their Zion), and they sought independence from the world (which they could never really expect, having settled on the very "crossroads of the West").

Education was another area of conflict. Mormon schools of various kinds were set up immediately by the pioneers, and while there were some that gave a broad education, most Utah schools were concerned chiefly with religious instruction in the Mormon faith and the three "R's." Among the first Gentiles to come to Utah were missionaries of various faiths, dedicated to the task of "Christianizing" the Mormons and educating them — a plan considered to be the best way to solve the "Mormon problem." Some excellent schools came to Utah through these able hands and dedicated souls.

Mormon co-operation extended, also, to the area of immigration — the source of the Mormon population in Utah. The Perpetual Emigrating Fund Company, organized in 1849, gave aid to Mormon emigrants from Europe on their promise to pay back into the fund the loaned price of their tickets to Zion. But the antiforeigner sentiments of the late nineteenth century played into the hands of those who wanted to keep down the Mormon population in Utah and America.

Although the fundamental areas of conflict were chiefly in political and economic practices, the sensational, flag-waving issue, the cover-up for the others, was the ready-made issue of the Mormon practice of plural marriage — polygamy. The Saints considered plural marriage a command of God through their prophet, a religious duty and obligation which they defended from the Bible. Even so, the practice among the Mormons was not popular, despite stern preachments of encouragement. As a practice it involved only from ten to fifteen per cent of the married men; and among these men and their wives, it was considered a cross to be borne for religion's sake. The serious Gentile view was that American life was based on the monogamous family, that polygamy was destructive of the family, and that polygamy must be destroyed before it destroyed society.

These were the issues and the views of the contending parties. The whole affair was terribly complicated by intolerance, ignorance, prejudice, hard feelings, misrepresentations, and misunderstandings on all sides.

Despite the impression given of serious conflict over a long period of time, it is most important, for the sake of truth and balance here, to point out that there were long and peaceful associations among most of the people in all the groups in Utah — the Jews, the Catholics, the Protestants, and the Mormons. There were signs of co-operation and friendliness that warm our hearts as we read of them today. There is a strong tradition in our society, coming from this territorial period, for intergroup co-operations and unstinting aid to each other, a tradition that has flowered since statehood. The conflicts recounted here were the province of a comparative few, though, of course, the spirit of the conflict permeated the whole of society.

What were the tactics of the anti-Mormon crusaders? They sought to advertise to the world the "situation" in Utah. They emphasized and repeated stories about the "Mormon problem." They appealed to the reform spirit of the time. They took full advantage of the eager co-operation of national writers, lecturers, suffragettes, evangelists, and politicians for their cause — employing polygamy as a sensational issue. Since Congress had supreme power in the territories, infinitely greater power than in states, it was to the advantage of the crusaders to keep Utah in a territorial status. At the same time appeal was made to Congress to enact legislation aimed at the destruction of the "peculiar" institutions of the Mormons. The laws would be prosecuted through the courts — thus employing the judiciary as a means of moral reform.

The outworking of these themes found expression in a generation of legal contests, of congressional enactments, of prosecutions through the courts, and of test cases sent by the Mormons to the Supreme Court of the United States.

The campaign against the Mormons began most seriously in 1856 when the Republican party in its first national platform wrote a plank pledging to crush in the territories those "twin relics of barbarism — slavery and polygamy." And when the Democratic Southern States seceded from the Union, the Republican-controlled Congress went to work to fulfill the pledge and wrote in 1862 the first Anti-Bigamy Act, aimed at the Mormons. If it did nothing else, it tied the political future of Utah to the issue of polygamy — and Utah's place in the nation would rise or fall on the continuance or disappearance of that practice.

Prosecutions under the 1862 law, however, were few and convictions difficult to obtain. To strengthen the judicial crusade, which began in earnest in 1870, Congress passed the Poland Act in 1874, which deprived Utah's probate courts of original jurisdiction in civil and criminal cases and assigned it to the federal courts in Utah. Under this law federal marshals were able to hand-pick juries in cases trying polygamists! But the crusade was practically halted when the case of George Reynolds was purposely taken through the courts to test the

constitutionality of the 1862 law. The Supreme Court upheld the constitutionality of the Poland Act.

In 1880, George Q. Cannon, former delegate to Congress, a practicing polygamist, and now member of the Mormon Church's First Presidency, was again elected to Congress, but was denied his seat because the election was contested. Besides, could Congress seat a polygamist? The committee on elections waited two years to render a decision, until a new law was on the books.

The new law was the Edmunds Act of 1882. Polygamy was redefined as any unlawful cohabitation, and penalties were set. Polygamists were deprived of the right to vote or hold any political office (thus striking at Cannon). All elective and registration offices in Utah were declared vacant, and there was set up the presidentially appointed Utah Commission to supervise all elections in Utah and prohibit polygamists from voting. Between 1882 and 1884, there were disfranchized in Utah about twelve thousand voters, a figure rather close to the total vote in many elections of the time. Another test case was put through the courts; this time the defendant was Rudger Clawson. But in March of 1885, the decision was handed down — the 1882 Edmunds Act was constitutional!

The church decided to continue the fight by legal means, but all polygamists must go "underground" or risk capture and imprisonment. With Rudger Clawson's scalp under their belts, United States marshals and deputies went on a terrible raid of Mormon communities and homes searching for "cohabs." Well over a thousand convictions were made in the courts in the five years of the "underground" after 1885.

The effects of these raids have never been fully appreciated, nor even told. Words are inadequate to convey the feelings of those times — the hurts to individuals and families, to the church, and to businesses of Gentiles and Mormons alike. Families were torn apart, left to provide as best they could. Women often carried the full load of home and family, and some plural wives were required to go on the "underground" while "first" families carried on as usual. Church leaders, with other polygamists, were hunted like fugitives. Church conferences, when held, frequently met without benefit of the usual leadership. Much church business was disrupted as were communitarian experiments such as the United Orders. Some men died in exile. One polygamist was killed by a marshal. There was no retaliation in kind by Mormons.

All this was not enough! Congress went even further! The Edmunds-Tucker Act of 1887 touched on every one of the issues at contest. It made apparent the fact that Congress aimed not only at the destruction of polygamy and the deprivation of all polygamists of citizen rights, but the destruction of the economic strength of the Mormon Church as well. For the act called for the disincorporation of the church and the escheating of its properties to the United

States government. A case was instituted to test this law. In the meantime prosecutors instituted numerous vexatious suits for church properties, finally taking over the properties but usually without due regard for adequate maintenance or improvement.

All these matters came to a head in the spring and summer of 1890. In May the Supreme Court declared the Edmunds-Tucker Act constitutional. In July Idaho was admitted into the Union with an anti-Mormon test oath law written into its constitution. The law declared that no person who even believed in the practice of polygamy or belonged to an organization that taught it should have the right to vote or hold political office. That law had been contested, too, but upheld as constitutional! And now the Utah Commission recommended that Congress favorably consider a bill that would have applied this law to Utah! All Mormons were thus threatened with disfranchisement, for the sake of the practice of their polygamous brethren. These very real possibilities, coming upon the loss of church properties and the disincorporation of the Mormon Church itself, threatened the eventual extinction of the church and the loss by all its members of political rights. Under such intensive prosecutions, the church could not easily survive as a domestic institution, to say nothing of being able to prosecute effectively a world mission.

Beginning in the fall of 1890, a series of steps was taken, based upon decisions of courage and foresight, designed to keep for the church and its people as much as possible that which was distinctive and fundamental to Mormonism, but to yield to federal demands, to accommodate to American norms, AND TO SURVIVE! Between 1890 and 1894, the steps were taken that made possible statehood for Utah, survival of the Mormon Church, and local self-government in the highest sense possible in the American system.

These were no doubt slow-moving years of difficult adjustment for everyone. Yet from our vantage the events seem to have come in rapid succession. In September of 1890, the Manifesto was issued by President Wilford Woodruff ending polygamy, a decision given (and accepted as a revelation from God) withdrawing the obligation to observe the earlier command to obey the principle of plural-marriage living. In 1890, the territorial legislature passed a law providing for Utah's first free public schools. That same year Mormons and Gentiles worked especially hard for mutual co-operation in chambers of commerce. In the spring and summer of 1891, the people of the territory were divided along national party lines instead of the local parties which flourished on local conflicts. The Mormon people would have voted Democratic, left to themselves; but to bring a near balance of strength between the two national parties in Utah and to eliminate the possible charge of one being a church party, Latter-day Saints were instructed to participate in both parties. In order to effect this divi-

sion, many Mormons were called to be Republicans. In the election of 1892, it was clear there was a two-party system in Utah, and the Utah Commission recommended amnesty to all offending Mormons. On the 4th of January 1893, a presidential pardon was given. Confiscated properties were gradually returned to the church. The People's party had been dissolved in 1891, but by November, 1893, the Liberals had gained enough faith in the integrity of Mormon actions to dissolve their party. With such Gentile action, there was now passed in Congress the Utah Bill, signed July 16, 1894, by President Grover Cleveland as our Enabling Act. For the first time in her history, Utah was *invited* to become a member of the Union, asked to hold a constitutional convention, and write her own constitution and apply for admission! In November of 1894, convention delegates were elected. The Constitutional Convention was held between March 4 and May 18, 1895. On the 5th of November following, the people went to the polls and ratified Utah's Constitution and elected a Congressman, state officers, and members of a state legislature. All this having been done in good order, the Utah Commission certified the results to the President of the United States, and on the 4th of January 1896, President Cleveland proclaimed Utah the forty-fifth state in the Union.

Peace came to Utah. The transition was not easy, nor sudden. And it took years for wounds to heal — some ten, some twenty years. But former enemies turned to the ways of peace and walked arm-in-arm together — for the sake of peace and progress and a future.

All this meant many things to many people. For the church it meant giving up polygamy, economic co-operation on the scale earlier practiced, and political unity and church influence in politics. It meant survival and with that survival an opportunity to tie its relations to the world to effect better its original and more fundamental commitment to evangelizing the world. It meant greatly reducing Mormon economic and social experimentation, avoiding the "peculiarities" typical of the pioneer period, holding a conservative position in imitation of the national norms, and the identification of church interests—politically and economically — with the conservative interests of the nation. The Mormon people gained the privilege of being tolerated and heard. All parties learned the values of patience in understanding the peculiarities of others. Utah became one with the nation, with firm economic, political, and social ties with the nation — sharing in the benefits of American citizenship and in the blessings of America's relations in the world.

Accommodation by the people of Utah to the norms of American society yielded enormous dividends, for they gained self-determination in politics, self-government in the highest sense possible in the American system, and the opportunity for financial growth and development on a scale impossible under the

earlier arrangement. That generation taught us there is no future in extinction, but in survival there are all sorts of possibilities of dealing with the problems of a changing world, that in a changing world, one must change too if one is to live, and move, and have influence. They taught us courage to face the future optimistically and to take steps to insure a greater future for us and our posterity. These things are taught to us out of the experience of Utah's struggle for statehood. Let us be grateful for the pioneer heritage we have received from Mormon and Gentile alike. Let us take renewed faith and courage from those giants who were big enough to accommodate to the world in some things that greater things might come to all.

REVIEWS and PUBLICATIONS

Great Issues Concerning Freedom. Edited and Introduction by WALDEMER P. READ. (Salt Lake City: University of Utah Press, 1962. xi + 138 pp. $2.95 hard cover, $1.95 paper cover)

This volume constitutes the proceedings, on six separate evenings throughout 1961–62, of the ninth annual "Great Issues" series sponsored by the University of Utah Department of Philosophy. The book has an interesting and distinctive personality. The first five sections pose specific, contemporary issues, understandable and readable wherever there is concern for the conditions of freedom, the role of the military, the press, economic power, and education. Some gems of considerable quality are presented for view: Daniel J. Dykstra's answer to "Can we win — what?"; F. D. Wormuth's suggestions about phototropic and thigmotropic man (p. 12); J. H. Adamson's warnings of a vast military and its potential in alliance with "an irrational political Third Estate" (p. 31); A. H. Woodruff's suggestion that "In education we have been unwilling to come to terms with subject matter . . ." (p. 98). Discussions of the press and the national economy can similarly be understood and appreciated as timely contributions, whether read in Bombay, New Haven, or Dallas. The quality is high, ranking with the best in contemporary print.

The referential framework of the sixth and final section contributed by Professor Read himself, "What Freedom Is Found in the Local Culture," will not be as widely understood. (The reference to the "Nauvoo Bell," for example, was completely lost on me until a recent incident explained the time signals used by a Salt Lake City broadcasting station.) This part, unlike volumes which come from Oxford (England, Ohio, or Mississippi) or Cambridge (England or Massachusetts), bears the hallmark of Utah's historic preoccupation with perfectibility and progress, plus the pragmatists' concern to "do something about it." However, this section constitutes rich evidence that the conditions of freedom are met at the University of Utah and environs, perhaps in greater abundance than many other "local cultures." This is especially clear to those who have lived abroad or elsewhere in this country for considerable periods of time. Professor Read speaks his mind, using local references, without the restraint characteristic of some campuses and many public officials. The image (p. 116) of the "young maiden freely going to Sabbath school — her raiment clean and brightly colored, her hair neatly waved . . . the bloom of youth on her cheeks concealed by just the right amount of drugstore luster, and the thoughts she will think that day carried in a manual in her hand," if true to life in Salt Lake City, is superior to run-of-the-mill maidens observable in other raiment, near Bunker Hill and other local cultures. No manuals of any kind appear in their hands.

Professor Read's effort to apply the generalities represented in this volume might well find appropriate place in similar works produced elsewhere.

Some words of Wilford Woodruff in 1888, directed to the "local culture," following corporate dissolution by an act of Congress of the church of which he was president, may be helpful to any unused to such procedure: "Whatever the result to others . . . , to us it cannot be anything but profitable and beneficial, if we receive it in the right spirit and bear it patiently.

One good effect is apparent. The Latter-day Saints are compelled, perhaps to a greater extent than ever before, to think and act for themselves, and not to depend so much upon others to lead them."

G. Homer Durham
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Probing the American West: Papers from the Santa Fe Conference. Edited by K. Ross Toole, Robert M. Utley, John Alexander Carroll, A. R. Mortensen. With an Introduction by Ray A. Billington. (Santa Fe: Museum of New Mexico Press, 1962. viii + 216 + 7 pp. $5.00)

This volume contains nineteen papers delivered at the "Conference on the History of Western America" held at the Museum of New Mexico, in Santa Fe, on October 12–14, 1961, plus a sixteen-page "Introduction" by Ray A. Billington. The Introduction is the key to the nineteen chapters of the book, and without it the significance of the papers would be largely lost. This is because they are so miscellaneous the reader would be perplexed, not only by the wide variety of topics, but also by much of the content of the papers themselves. With the Introduction to clarify the objectives of the conference, each chapter becomes a very worthwhile treatise on a phase of western American history. Professor Billington's Introduction is an essay on western American historiography during the twentieth century, plus a bibliographical consideration of more than a hundred book and learned quarterly titles of importance to the history of western America.

The conference of 1961, as seen by Dr. Billington, is a history-making event in itself, quite apart from the papers which were delivered during the three-day session. In 1929, a "Conference on the History of Western America" convened at Boulder, Colorado. It was the culmination of thirty years of lively interest in western American history which had been sparked by Frederick Jackson Turner's famous essay and its accompanying environmentalism. Then a reaction set in, and for another thirty years "Turnerism" and "environmental determinism" were severely criticized, ridiculed, and by some completely rejected. But by 1960, a number of younger historians of the West decided that it was time to hold another gathering to evaluate the results of research and writing of the previous three decades. This Santa Fe conference received unexpected, enthusiastic support from many scholars. Many of Turner's concepts were found to have weathered the storm of adverse criticism and found to be basically sound. Furthermore, the conference discussions stressed more research in the available archival materials.

Billington summarizes the trends shown in the nineteen papers which make up this book as manifesting four positive, hopeful signs: 1. These historians " . . . showed an increasing tendency to probe fundamental issues and to venture broad interpretations." 2. The contemporary " . . . scholars have been more and more concerned with the usable aspects of the history of the West, and less and less interested in the glamorous but insignificant details." 3. "Today's historians are growing less concerned with traversing well-worn trails than with utilizing untapped sources to shed light on the less-studied aspects of the past." 4. The recent " . . . historical studies generally have tended to emphasize both the structure of western society and the impact of that society on the East and on Europe."

As a result of these new perspectives, Professor Billington predicted that this conference at Santa Fe had started a movement which would become a permanent organization. The second conference was held in October, 1962, at Denver, and the third conference is planned for Salt Lake City the following October.

To those in the area in which the *Utah Historical Quarterly* circulates, the following chapters are challenging, provocative, and point the way toward more accuracy and less emotionalism in writing our his-

tories: Dale L. Morgan, "The Significance and Value of the Overland Journal"; J. S. Holliday, "The California Gold Rush Reconsidered"; Oscar Osburn Winther, "The Persistence of Horse-Drawn Transportation in the Trans-Mississippi West, 1865–1900"; Merrill J. Mattes, "Exploding Fur Trade Fairy Tales"; and Savoie Lottinville, "Unfinished Tasks in Western History."

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Salt Lake L.D.S. Institute of Religion

A Century of Service, 1860–1960, A History of the Utah Education Association. By John Clifton Moffitt. (Salt Lake City: Deseret News Press, 1961. xii + 680 pp. $6.00)

Some histories, like some book reviews, become so burdened with the seeming obligation of relating only the chronological and factually significant that there really is not an average reader to react. Only the scholar and specialized researcher are attracted and held rewardingly to its context. Such a fate, however, does not seem probable for Cliff Moffitt's *A Century of Service.*

One cannot help being impressed by the wealth of detail which Dr. Moffitt has so characteristically compiled, but the reader will be most favorably impressed by several other distinguishing features of this significant contribution to Utah history. It is a presentation that transcends the chronological. It is a story. It has principal characters with whom we in Utah are, have been, or are made to feel well acquainted. It portrays the development of public education in the state with an adept reflection of the pioneer spirit, feeling, and personal vitality that characterized a people determined to establish both a program and a professional organization of quality and high standards. Its central theme of growth through service is well depicted by the scholarly technique and experienced hand of its author.

A Century of Service is not a provincial production. Deftly included in its narrative are the broad state- and nation-wide relationships and concerns involving communities, districts, national organizations, and federal agencies. Interstate and regional influences, too, are shown as contributing in comparison, contrast, and support.

In addition, and perhaps most importantly, the principal purpose of producing this work has been achieved. As a reference and educational source book and a record for Utah educators, this is a gold mine of information. For high school and university students in professional education, future teachers of America, and Student Education Association members, there is not only easy and excellent background reading, but there is motivation and even inspiration for the teaching profession.

Extensively documented, personably presented, chronologically and developmentally well organized, *A Century of Service* impressively meets a great need in the annals of educational and historical literature of Utah.

Lest the author be regarded as guilty of bias, which in a few places is somewhat discernible, it should be noted that probably anyone else who had been as close to his "family" would find it equally difficult to be more objective. Almost a half-century of leadership and participation, together with his indefatigable study and application, have enabled Dr. John Clifton Moffitt to produce for Utah and its outstanding professional organization an excellent portrayal of *A Century of Service.*

Elvert Himes
Utah State University

Ballads and Songs from Utah. Collected and Edited by Lester A. Hubbard. Music Transcription by Kenly W. Whitlock. (Salt Lake City: University of Utah Press, 1961. xxii + 475 pp. $7.50)

Professor Lester Hubbard, long-time student of folklore and balladry as well as of literature, has brought together in attractive format a collection of two hundred and fifty traditional songs and ballads

which were sung by Mormons and others who migrated to Utah between 1847 and 1900. They are from his collection of over a thousand. Two hundred and four of these are songs also to be found in other versions in collections from different parts of the United States. In headnotes to each Hubbard has listed the cross-references to these variants published in such classic ballad collections as those by Francis James Child, Cecil Sharp, and others. Fortunately, the tunes are also provided for most of the items.

Utah versions of well-known folk songs, many of which were derived from England and Scotland, and most of which are widely distributed throughout the United States, will be of value to the student of folk songs in America. The Hubbard collection will help to complete the pattern of their movement, distribution, and popularity. This publication will also be of interest to the student of history or sociology who may wish to relate to more comprehensive studies this musical form of expression of the interests, attitudes, and values of the earlier Mormon society.

But the most important contribution of this book, both to the historian and the ballad scholar, are the forty-six songs which are distinctly Mormon in origin and character. For example, here now is the beautiful and eloquent "Handcart Song" which was once hard to find. Now, thanks to Professor Hubbard, these songs are at last readily accessible, and his headnotes provide valuable background information about them.

Probably for practical reasons, Hubbard has limited this publication to those songs which, for the most part, he has collected himself. One hundred and thirty-four were sung by his mother, Mrs. Sally A. Hubbard, and the others came principally from five or six other singers. He does not claim that this collection is complete or definitive. Obviously, there were more songs than these being sung in Utah during the period studied. And there have probably been more versions of some of them gathered by other collectors than Hubbard has in his own large archives. If these assumptions are valid, one wonders exactly what is meant when, for example, the headnote of "The Golden Vanity" says, "Three good texts and a fragment have been recovered in Utah." Only three? Or about "The Sioux Indians" reference is made to " . . . the three versions recorded in Utah." This reviewer recalls at least two good versions of this song by William Staples, of Kanosh, and Noah E. Stowe, of Fillmore, that were once on file at the University of Utah (catalogued in *Bulletin* Vol. XXXVIII, No. 9, December, 1947); and there are probably other good versions in collections by the Daughters of Utah Pioneers or by Austin and Alta Fife, of Utah State University.

Hubbard appropriately includes a version of "Casey Jones" which contains the Utah accretion of "another papa on the Salt Lake Line"; yet he apparently has not found in Utah a "Sweet Betsy from Pike" containing a stanza especially appropriate to Utah. If this book had been written primarily for the folksong scholar, it would fall somewhat short of all that might be desired. But it should not be criticized for what it does not essay to do. As a carefully selected group of songs from a single large but important collection representing a most significant and distinctive part of American culture, the book is very much worthwhile. Professor Hubbard has, by making these texts available, contributed much toward broadening our knowledge and appreciation of the Utah contribution to American cultural history.

HECTOR LEE
Sonoma State College

The Far West and Rockies: General Analytical Index to the Fifteen Volume Series and Supplement to the Journals of Forty-Niners Salt Lake to Los Angeles. Prepared and Edited with Introductions and Notes by LEROY R. HAFEN and ANN W. HAFEN. (Glendale: The Arthur H. Clark Company, 1961. 360 pp. $25.00)

Volume XV of the *Far West and the Rockies Historical Series, 1820–1875,* brings to a successful conclusion a series of volumes containing important historical literature of great value to the western United States. Dr. and Mrs. Hafen have carved a permanent niche for themselves in the annals of American history through the excellent compilation of facts and writings that have gone into this work.

The final high value of the series lies in the detailed Index contained in Volume XV. The first fourteen volumes contain brief indexes with a notation that a more comprehensive index would be given in the final volume. This has now been realized. The careful, methodical preparation of this Index, its extensiveness and completeness, will be of invaluable assistance to searchers of history. The Index has been well assembled, is easily read, and the brief description with each reference is a great aid in locating the desired entry. The user should be aware of the Index Note on page 136 which explains that certain major subject headings have been adopted, and that any references to these subjects have been grouped under specific general headings, including such subjects as Agriculture, Handcart Companies, Manufacturing, Transportation, etc. The compilation of the Index has been a tremendously time-consuming labor, but without it the main tool for use of this great work would be missing.

Preceding the Index is a descriptive list of the fifteen volumes, followed by a list of maps, portraits, facsimiles, and other illustrations. The gathering together of such material from all fifteen volumes is of further assistance to the searcher, making it much easier to locate a desired map, portrait, or view.

The compilers are also to be commended for their continued research. Having located additional important and informative material, which would add much to Volume II of the series — *Journals of Forty-Niners* — it has been wisely included as part of Volume XV. This material constitutes about one-third of the volume, or 124 pages. The Jacob Gruwell report to Benjamin Hayes, Mr. Shearer's journal, and G. C. Pearson's recollections add to the story of the first wagon train that set out from Utah Valley for southern California in the fall of 1849. The story of the main group of Jefferson Hunt's wagon train is augmented by the contemporary letters of Dr. C. N. Ormsby, Lewis Granger, the Leonard Babcock account, and the letter of W. B. Lorton. The Pomeroy brothers' wagon-train account is supplemented by the addition of the journal of Joseph P. Hamelin, Jr. And to the account of the S. D. Huffaker train are now added the Thomas Kealy letter, R. G. Moody's account, and the journal of Albert K. Thurber.

No doubt, as readers have access to the wealth of material contained in these priceless fifteen volumes, their expanded awareness of its value may bring to light still other accounts which should be put into print for the preservation of our pioneer heritage. It is to be hoped this great work of Dr. and Mrs. Hafen will provide the incentive for further preservation of the story of the Far West and the Rockies.

EARL E. OLSON
Church of Jesus Christ of Latter-day Saints Historian's Library

The Hoskaninni Papers: Mining in Glen Canyon 1897–1902. By ROBERT B. STANTON. Edited by DR. C. GREGORY CRAMPTON and DWIGHT L. SMITH. *Glen Canyon Series* Number 15. Anthropological Papers Number 54. (Salt Lake City: University of Utah Press, 1961. xxiii + 177 pp. $2.75)

Thousands of voyagers through Glen Canyon have passed a large abandoned dredge sitting on its own little island in the Colorado River near Bullfrog Creek, and wondered how it got there, and what it was used for. A few historians knew the answer, but now the story is available to the general public, written by the man who promoted the idea and built the dredge.

Robert B. Stanton was more of a visionary than an engineer. In 1889, he had promoted the idea of building a railroad down the Colorado River and had made a detailed survey. At that time he discovered that the gravels along the river in Glen Canyon contained small quantities of fine gold. In 1898, he conceived the idea of building a dredge to recover this gold on a large scale from the bed of the river as had been tried in California and other localities throughout the West.

Stanton organized the Hoskaninni Mining Company and induced a number of his eastern friends to invest in the project. The first investor and the company's first president was my old friend, Julius F. Stone, of Columbus, Ohio. Stanton ordered a dredge to be built by a firm in Milwaukee, and during its construction he proceeded to locate all the ground in Glen Canyon from Hite to Lee's Ferry. There had been a gold rush to Glen Canyon in the eighties, largely promoted by Cass Hite, but by 1898, all but a few claims had been abandoned.

This day-by-day journal gives the details of Stanton's experiences and his difficulties in transporting the knocked-down dredge to the river over the wildest country outdoors. After it had been reassembled on the river it started operations and was very successful in handling the river gravel. But the returns in gold over a period of several weeks only averaged fifty cents a day, and the whole expensive project had to be abandoned. All the equipment of the Hoskaninni Mining Company was eventually sold for $200, but almost nothing could be salvaged. All that remains of the project is the broken and abandoned dredge in the middle of the river, which will soon be covered by the rising waters of Powell Lake.

Dr. Crampton, has written two other books in the *Glen Canyon Series*. His research has been very extensive and unusually accurate. This present volume would probably not interest the general reader, but would be greatly enjoyed by anyone who is concerned with the history of the Colorado River and particularly Glen Canyon. The photographs taken by Stanton during construction of the dredge are almost worth the price of the book.

CHARLES KELLY
Salt Lake City

My Life on the Range. By JOHN CLAY. Introduction by DONALD R. ORNDUFF. (Norman: University of Oklahoma Press, 1962. xxiii + 372 pp. $5.95)

Mr. John Clay, author of *My Life On the Range,* had many facets. He was an effective writer, an influential cattleman, and financial guardian for many of the big Scottish cattle investors in this country from the 1880's through the early 1900's. He was also one of the most controversial figures of his day.

Arriving in this country from Scotland as a young man in 1874, on "a pleasure trip, yet with an eye to the main chance . . . ," Mr. Clay began to explore the widening possibilities of this new world. After an extensive tour through Canada and the United States, he eventually made his way from Cheyenne to Denver where he had a note of introduction to the firm of Winne and Cooper. The latter partner in the firm, who owned a few head of cattle and later became governor of Colorado, took a warm interest in him. Before Clay got out of Denver, Mr. Cooper had loaded him up with the possibilities of the mountain regions.

After returning to his native Scotland, John Clay was hired by the Scottish American Investment Company to check on some of its cattle holdings in Canada. His success in this job led to his appointment in 1880, by the British government, to go to California to report on agriculture in that state. He was obviously a man of sound judgment and keen business sense as he eventually went on to Montana and Wyoming where he assumed financial guardianship over a number of large ranches during the heyday of the cattle industry there. He was associated with the Swan Cattle Company, of Wyoming, when the disastrous winter of 1886–87 toppled many

a cattle empire. At a time when most of the leading stockgrowers were ready to abandon hope, Mr. Clay fought a winning battle to hold the Wyoming Cattle Growers Association together.

Through his wide and influential association with the cattle business both in America and Scotland, John Clay came to know most of the celebrated cattlemen of his day, including Teddy Roosevelt and a host of others who moved on to take a leading part in our government. In many ways he was also a prophetic cattleman who fought against some of the frustrating government problems that limit our livestock industry today. It is interesting to note his reaction toward the federal range and forest reserves as early as 1917 when he wrote, "We have the forest reserves, in many cases misnomers, for there are no trees on them which are being used to advantage and are made factors of much moment to our livestock industry, but as a general proposition the federal government is against it in the West. There is a cry for more meat, but the West under the incubus of being unable to make use of its vast stretches of semiarid land is like a prostrate giant, paralyzed and unable to rise. The worst of it is there are no signs of betterment."

After the infamous "Johnson County invasion" of 1892, Mr. Clay became a controversial figure. Although at the time he was on a holiday in Europe, he was accused of having planned and instigated the invasion. John Clay returned to Wyoming to stand back of his friends and associates, but in no way did he approve of the open fight between cowboys and cattle owners in Wyoming. He made this clear at the annual meeting of the Wyoming Stock Growers Association, as that organization's president, when he addressed them in Cheyenne on April 4, 1893.

My Life on the Range was published privately by Mr. Clay in 1924, and to a limited extent in the livestock press during the middle 1920's, but until recently it has been out-of-print for many years. Libraries and students of western cattle history will welcome this edition. To most noncow-minded readers, the pages of statistics and minutes of cattle association meetings can be bypassed with a nimble thumb. Although Mr. Clay has a tendency to digress in his story of the range industry, to a great degree digression and wandering are a way of life on the range, and his intimate knowledge of all that went on at the time makes interesting reading.

HOWARD C. PRICE, JR.
Preston Nutter Ranch

The West of the Texas Kid, 1881–1910. Recollections of THOMAS EDGAR CRAWFORD. Edited with an Introduction by JEFF C. DYKES. (Norman: University of Oklahoma Press, 1962. xviii + 200 pp. $2.00)

Thomas Edgar Crawford, whose recollections make up this addition to the Western Frontier Library, is identified as cowboy, gun fighter, rancher, hunter, and miner. Under such various names as "The Texas Kid," "The Montana Kid," "Buckskin," "Ed," and just plain "Kid," he sampled very nearly the whole range of frontier life between 1881 and 1910, meeting a whole gallery of such different westerners as Black Jack Ketchum, Butch Cassidy, Owen Wister, and Charley Russell. He engaged in such excitements as fighting Indians in Jackson Hole, swimming cattle out of the Missouri River in November, and robbing a bank in Utah.

The last adventure has perhaps the greatest interest to students of Utah history, and with similar episodes it poses one of the most interesting critical problems. In 1893 or 94, according to Crawford, three men (Jeff C. Dykes, the editor, believes that the "John" of the trio was Crawford himself) pulled off a "spectacular bank robbery" in "a small town about fifty miles south of Salt Lake City." With over twelve thousand dollars, they managed to escape a posse which closed in on them, although "Joe" was wounded and had to be taken to a Salt Lake hospital. Five weeks later,

still free of the law, Joe and John rode out of town.

According to Crawford, John read an account of the robbery and chase in a Salt Lake paper, but a quick survey of the papers of 1893–94 shows no account of this particular robbery. Was Crawford inaccurate in his memory of dates and places? Or did the robbery not even take place, except in the recollections of the Texas Kid?

Perhaps we have no way of knowing the truth here, or rather perhaps we have no way of knowing what kind of truth Crawford is giving us. If the robbery happened exactly as Crawford tells the story — and further newspaper research may prove this to be the case — then we have the sort of truth most historians are comfortable with, the truth out there in the open air, objective truth as some choose to call it. But if Crawford dreamed the whole thing up without really knowing it or changed the objective facts as they stirred in his excited remembrance, this is a truth too. Even the most honest of men come under the impact of cultural feed-back; that is, their actual experiences sometimes become mixed in memory with a whole stream of imaginative shapes and things from a dozen inexhaustible sources, until what really happened when it happened is not so "true" as it is when remembered a new and, perhaps, more exciting way. The fact that a man does something, say rob a bank, has one importance; the fact that he imaginatively reshapes that something in memory has another importance. Historians must, of course, be concerned with all kinds and dimensions of significance. And gradually they are learning how to be objective about the "subjective" history of legend and myth as well as about the objective history of campsites and trails.

Without knowing anything biographical about Crawford, one can surmise that he was well read in the popular writing about the West. While he is at times convincingly matter-of-fact, as if wholly untouched by literary pressures, as if the facts of his experience have issued immediately into words, for the most part he shapes his recollections in the patterns and style of popular western literature. In short, literary evidence supports the truth of legend here. And to the list of western roles of Thomas Edgar Crawford should at least be added *writer*.

DON D. WALKER
University of Utah

The Indian Traders. By FRANK MCNITT. (Norman: University of Oklahoma Press, 1962. xiv + 393 pp. $5.95)

When I saw the title *The Indian Traders* in the University of Oklahoma Press Catalog, I visualized a work that would deal with the function of trading with the Indians throughout what has become the United States from the Colonial period to the present. Although chronologically Mr. McNitt becomes involved in the exchange between Indian and non-Indian in 1540, geographically his scope is limited to the Southwest. In fact it is largely concerned with Navajo country, and those involved in trading with the Navajo.

It should also be stated that the author is not largely concerned with the role of the trader as a peddler of flour and coffee, but with his role seen in the broadest view: the trader helped mightily in the acculturation process by easing the difficulty of both the Indian and the non-Indian in their attempt to understand each other. Traders in all civilizations involved in a people-to-people relationship have made their contributions as carriers of culture.

As individuals who knew the Indians, they dealt with them better than most non-Indians. The traders were often better equipped to represent the Indians' interests to the government than the agents appointed by the United States. Often this made them a thorn in the side of these agents. The trader tended to know what was going on much better than the agent. He could secure information essential to finding solutions to problems faced by the government in its dealings with the Indians just because the Indians often had

more confidence in the trader than they had in the agent (who may have only arrived on the scene).

Mr. McNitt has discovered and assembled for his readers many useful facts concerning the history of the Navajo Indians particularly. The Hopi, Zuni, Ute, Paiute, and other neighboring tribes can be seen more accurately in terms of their relationships with the Navajo because of the information assembled by the author.

As one who has frequently come across the names of these traders in various Indian research projects, I was most rewarded to find the wealth of information that has been assembled about them personally. This serves to enhance one's understanding of their ability as trader to and mediator for the Indians.

Most readers of Western Americana, and particularly those interested in the Indians of the Southwest, will find *The Indian Traders* a rewarding reading experience. The book itself maintains the standards in workmanship we have come to expect of the University of Oklahoma Press.

S. Lyman Tyler
Brigham Young University

The Hunting of the Buffalo. By E. Douglas Branch. (Lincoln: University of Nebraska Press, 1962. xxxv + 240 pp. $1.40)

This paper-covered book is a large-type edition by the same title of a 1929 book first published by D. Appleton and Company. Probably the reason for a low-cost edition concerning a bit of American history is that the presentation of material in each chapter approaches the storytelling form. This edition carries Branch's biography by J. Frank Dobie.

The history starts with the discovery of the animals on the western plains by the Spaniards; then tells how the huge beasts were killed by the Indians, fur traders, explorers, colonizers, and trigger-happy shooters.

The faults within the narrative are few. Virtually nothing is said about the pursuit of the buffalo by Indian and white man in Montana and west of the Rockies, for which literature was available in 1924. The Index lists only important personages, events, and places.

This reviewer noted only a few instances of possible error, such as the continual burning of forests in Kentucky made the perpetual grasslands (p. 54), or that the Sharp's gun was the most accurate hunting rifle ever made (p. 165).

Nevertheless, these weaknesses matter nothing to those who want an excellent story of the integration of numerous seemingly unrelated events which resulted in the extermination of the free-roaming herds in less than three decades. Although other books tell more about the life, habits, and ecology of the buffalo, none approaches this one in its selection of outstanding events in the march of history and how Indian culture was ruined by the carnage of reckless whites.

This factual story about the unpremeditated annihilation of millions of bison as an act necessary before land settlement is an absorbing tale for biological- or history-loving readers.

George H. Kelker
Utah State University

Outline History of Utah and The Mormons. By Gustive O. Larson. Second Edition. (Salt Lake City: Deseret Book Company, 1961. x + 316 pp. $2.75)

This is the second edition of the *Outline* and Mr. Larson has updated his statistical information and expanded the text. In an encyclopedic survey such as this, both are necessary to maintain usefulness and to keep the work current. It is to the author's credit that he has taken this attitude toward revision and it is hoped that he will continue this policy of making the book a living thing.

Mr. Larson writes in the Preface, "The present volume aims to provide the general reader and student of Utah history with a brief summary of the whole story, supported with ample source references for fur-

ther study of particular phases which challenge his interest. . . . The outline does not pretend to represent original research but rather aims to encourage a source-consciousness relative to readily available materials." Within this limitation the author has accomplished what he set out to do. But it is necessary to keep in mind that such an approach limits the scope and depth of the treatment.

It is equally well for the reader to remember that the research required for writing a book should be of the same degree of thoroughness regardless of the sophistication of the work. The ability to summarize research within limitations is an art itself. Mr. Larson has been able to surmount this problem mainly by relying on the excellent Bibliography at the end of the volume. While there are some footnotes throughout the book and the Bibliography is arranged by chapter, it would be easier to use if specific statements were referenced throughout the text to the appropriate book listed in the Bibliography.

While the *Outline* meets a specific need in the field, there are some criticisms that should be noted. First is the tendency of the author to be redundant. There is virtually the same statement (that a community of 7,000 Gentiles sprang up as a result of Camp Floyd) on pages 92 and 178, to cite one example. There are similar paragraphs throughout the book on the emigration of converts and the colonization of southern Utah. Second, there are inconsistencies; for example, in discussing the advent of the Mormon Battalion on page 50, the author writes: "Finally the Mormon Battalion would march as evidence of the Latter-day Saint loyalty to their country despite their protests against its failure to protect them in their constitutional rights. It was the beginning of new Mormon-Federal relations which were to continue for half a century." Yet, on page 84, when writing of the Harris and Brocchus incident which took place five years later, Mr. Larson claims, "It was the beginning of strained relations which were to test the fiber of the Mormon Kingdom over the next four decades."

These minor faults do not detract materially from using the book, however. It is a book which serves two purposes, first as a reference tool and second as a good introductory text to the history of Utah and the Mormons.

C. R. Burt
Goleta, California

Bigler's Chronicle of the West: The Conquest of California, Discovery of Gold, and Mormon Settlement as Reflected in Henry William Bigler's Diaries. By Erwin G. Gudde. (Berkeley and Los Angeles: University of California Press, 1962. x + 145 pp. $4.95)

Most historians would agree that the years 1846–48 formulated one of the most crucial periods in Western American history. Therefore, the Henry William Bigler pocket diaries, which present an eye witness description of many of the most significant events taking place in California and the West during this period, are an important addition to Western American historiography. Bigler, born in what is now West Virginia and of "Pensylvania Dutch" stock, was an uneducated man who inadvertently took part in the stirring events of the Mexican War and the discovery of gold in California. These events he recorded with honesty, not deviating from the truth for religious or personal reasons. Bigler was a member of the Mormon Battalion when it marched from the Missouri Valley to Los Angeles via Santa Fe. Although this march has been recorded by numerous individuals, the Bigler diaries present a refreshing description of persons, places, and events by an articulate and accurate observer.

Upon being mustered out of the Battalion at Los Angeles, Bigler proceeded northward to Sutter's Fort at the present site of Sacramento where he was engaged by Captain Sutter to aid James Marshall in construction of a sawmill on the banks of the American River. Bigler arrived at a propitious time for he was to be an eye

witness to the discovery of gold in California. Thus the Bigler diaries, which may have been considered only entertaining and somewhat illuminating, achieve exceptional significance for they record the one and only eye witness account of the discovery of gold at Sutter's Mill and the subsequent rush. With the exception of the sketchy diary kept by another Mormon, Azariah Smith, all other accounts of the discovery are based upon recollection or hearsay.

Although the Bigler pocket diaries have been apparently lost, Bigler's activities in the West have been known through the publications of Hubert Howe Bancroft, John S. Hittell, and the *Utah Historical Quarterly*. However, here, for the first time, in *Bigler's Chronicle of the West*, edited by Erwin G. Gudde and published by the University of California Press, are the various versions of the diaries correlated and interpolated to present one of the most fascinating accounts in Western Americana.

Professor Gudde is to be complimented in his treatment of the diaries for he does not allow the enthusiasm of the editor to overpower the original narrative and thus interjects editorial assistance only when necessary. Erwin Gudde's deep knowledge of California place names and his intimate acquaintance with Captain Sutter, as well as the same skill and meticulous care which characterize his other publications, make *Bigler's Chronicle of the West* a welcome addition to Western American historiography.

GLORIA GRIFFEN CLINE
Sacramento State College

Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad. By ROBERT G. ATHEARN. (New Haven and London: Yale University Press, 1962. xv + 395 pp. $10.00)

Rebel of the Rockies is the second volume in the *Yale Western Americana Series*. Author Athearn, professor of history at the University of Colorado, weaves a pattern of railroad history without parallel — a history covering a period of ninety years where crises were more normal than unusual. The account is heavy with meticulous detail, yet it is a vivacious presentation. Dr. Athearn has presented the facts as he has found them, Rio Grande having permitted him access to all records and information and to tell the story in his own inimitable fashion.

This railway of the Rockies had its inception in the mind of General William Jackson Palmer, Civil War veteran. By 1871, the Denver and Rio Grande was a reality operating between Denver and Colorado Springs. Pushing on to Pueblo the following year, this narrow gauge also went west to Canon City. Deterred in his efforts to put his line through to El Paso, Palmer turned west fanning out to capture the mining and agricultural trade. He weathered the Royal Gorge War against the Santa Fe and raced his competitors against great odds for favorable position elsewhere, hopeful that his line may eventually extend westward to connect with Salt Lake City. To further this end construction was started from the western terminus, the road to be known as the Denver and Rio Grande Western Railway, popularly known as the Western. In 1882, it was leased to the D & R G and Palmer became president of both roads. In March, 1883, the two lines were joined near Green River, Utah.

In this race for position, Palmer was forced to use eastern capital, and he subsequently fell victim to an unsympathetic board that preferred to milk the line rather than improve it; he resigned his presidency of the D & R G in August, 1883. Over the years the road continued to improve; and by 1933, with the completion of the Moffat Tunnel and the Dotser Cutoff, it became a direct line between Denver and Salt Lake City. It is today one of the best equipped railroads in the nation. It has survived five receiverships, temporary captivity, and bankruptcy. It has warded off incursions of competitive lines and preserved its independence, a basic concept in Palmer's planning. Although it was subjected to "years of executive incompetency," it has emerged victor because of the brilliant leadership of

such men as Palmer, William G. Evans, William S. Jackson, David H. Moffat, John Evans, Wilson McCarthy, Henry Swan, and Judge J. Foster Symes and has become a connecting link of a direct rail line between Oakland and Chicago. There is in this story a powerful demonstration of vision and tenacity.

The format of the book is attractive. It contains fifty-five illustrations, many of which have never been used before, and twelve maps drawn specifically to show chronological expansion of the railroad. The chapter illustrations are most appropriate. The return to the true style of footnoting and referencing is also commendable.

VIRGIL V. PETERSON
Salt Lake City, Utah

Kit Carson, A Portrait in Courage. By M. MORGAN ESTERGREEN. (Norman: University of Oklahoma Press, 1962. xxiii + 320 pp. $5.95)

Kit Carson never stood taller than five and a half feet nor weighed more than one hundred and forty pounds. Yet, in historical dimensions he was a man of considerable stature. His story is that of a runaway boy who became an American hero, and in a real sense it symbolizes the story of the West. It is no wonder that the world of make-believe discovered him early and embroidered his adventurous life into Hollywood fantasy, for Kit Carson was undoubtedly a colorful and many-sided frontiersman — trapper, trader, scout, buffalo hunter, guide, interpreter, explorer, brigadier general, Indian agent, and Indian fighter. His latest biographer, M. Morgan Estergreen, may not have entirely eliminated the fantasy but has, nevertheless, portrayed each facet of his varied career in a readable and informative narrative.

The author has drawn from many sources, particularly the writings and unpublished notes of the late Blanche C. Grant. In weaving his way through a morass of fact and legend, Mr. Estergreen has relied basically and inevitably on Carson's autobiography, and in the process has recognized and corrected the more evident errors and discrepancies. It is not an exhaustive biography, nor does it purport to be. However, the author has attempted to separate truth from fiction — and there is an abundance of fiction concerning Carson — and does so reasonably well. Footnotes are used sparingly, perhaps too sparingly for some; but there are helpful chapter references, an excellent Bibliography, and an adequate Index.

As the subtitle indicates, the book is a portrait in courage — a trait that is exemplified time and again through the hazards and uncertainties Carson faced. Although the author is sympathetic, he is not adulatory. He lets many of the events speak for themselves. In so doing he leaves a clear impression that Carson was a man of strange contradictions. On the one hand he was an earnest champion of Indian rights and on the other a ruthless and destructive Indian fighter. Some of his battles and skirmishes are among the uglier episodes in frontier history.

This biography reveals careful research, and it gives a clear and realistic picture of a remarkable man. Mr. Estergreen has added significantly to a better understanding and appreciation of Kit Carson.

CONWAY B. SONNE
Palo Alto, California

A Work of Giants: Building the First Transcontinental Railroad. By WESLEY S. GRISWOLD. (New York: McGraw-Hill Company, Inc., 1962. xvi + 367 pp. $6.95)

The strongest features of this book are the intimate accounts of the actual construction work on the Central Pacific and Union Pacific railroads and the superb collection of contemporaneous photographs. The weakest aspects are the accounts of financial and political affairs and the confusion which results from entertwining them with the engineering details in a single, chronological narrative. The strengths outweigh the weaknesses and amply justify the book.

Mr. Griswold, the West Coast editor of *Popular Science Magazine*, seems more interested in his subject as an epic of man against nature than as an example of free-wheeling free enterprise. Whether because nature presented a more formidable aspect to the builders of the Central Pacific, or because the promoters of that road were a bit more fastidious in their business operations than their eastern rivals, or simply because he is an adopted Californian, the author leans toward the Big Four in recounting the hectic competition for mileage and subsidies which began with Lincoln's signing of the Pacific Railroad Act on July 1, 1862, and ended at Promontory Summit, Utah, on May 10, 1869. Though the Preface and contents show Mr. Griswold's awareness that the project had its seamier side, his title squares with the pervading emphasis on effort and accomplishment against heavy odds.

The scheme of the book is to trace the history of the Central Pacific and the Union Pacific in alternating chapters, year by year, from conception and birth until the union at Promontory. This results in confining the Credit Mobilier scandal to a long footnote and omitting any account of the liquidation of the construction companies and the launching of transcontinental railroad operations — nor is there any summing up.

Relying extensively on the papers of key personnel to supplement railroad and government documents, memoirs, monographs, and newspapers, Mr. Griswold brings the reader into close contact with events in Omaha and Cheyenne, Sacramento and Donner Summit. Nobody speaks directly for the Chinese and Irish on the construction gangs, but the book vividly portrays their tasks and the contrasting demeanors with which they approached them. The hopes and frustrations of General Dodge, the Casement brothers, Charles Crocker, and James Strobridge, who had the construction in charge, are threads tying the story together.

The journalistic style adds liveliness to those parts of the story where the locale is west of the Mississippi, but it does not serve so well for events in New York and Washington. The first four chapters are marred by choppy arrangements of political minutiae and by inappropriate flippancy — "After a gust of guffaws, the Senate smacked down the proposed amendment" (p. 47); a bill goes to conference committee before clearing both houses of Congress (p. 73); and a voice vote is called for in the House after the yeas and nays have been recorded (p. 74). Mr. Griswold handles these aspects of his story with neither the confidence nor the effectiveness with which he treats the rest; the actual struggle for funds and favors had the elements of a cliff-hanger, but this account is more perplexing than suspenseful.

There are some factual slips — Californians and Oregonians trail after the Mormons into the West (p. 50); Collis Huntington's first purchase of track for the Central Pacific is seventy miles (p. 26) and fifty miles (p. 81); and Brigham Young has grown two inches (p. 274) since his last biographies were written.

Notes are collected in the back of the book under chapter numbers; the lack of identification with chapter titles or text pages makes use of the notes unhandy. The absence of page references in all citations is a serious omission. The Bibliography is extensive. A Utah reviewer may be pardoned for noting the inclusion of *The Salt Lake Tribune*, which did not begin publication until 1871, and the omission of the *Deseret News* and *Salt Lake Daily Telegraph*, which published letters and news dispatches from the construction camps. The endpapers are useful maps of the Central Pacific and Union Pacific routes.

Mr. Griswold's readers are likely to agree with him and General Sherman that the building of the transcontinental railway was "a work of giants." They are also likely to agree that he has told that story informatively and interestingly.

Richard D. Poll
Brigham Young University

NEW BOOKS & PUBLICATIONS

Bear Lake and Its Future. By WILLIAM F. SIGLER. (Logan: Utah State University, 1962)

Ecological Studies of the Flora and Fauna of Navajo Reservoir Basin, Colorado and New Mexico. By ANGUS M. WOODBURY, SEVILLE FLOWERS, HEBER H. HALL, LOREN D. JENSEN, ARDEN R. GAUFIN, A. DEAN STOCK, WILLIAM S. PETERS, GEORGE EDMUNDS, NOWLAN K. DEAN, CLAYTON M. WHITE, WILLIAM H. BEHLE, and STEPHEN D. DURRANT. (Salt Lake City: University of Utah Press, 1961)

History of Ogden, 1940–1960. Compiled by ELIZABETH TILLOTSON. (Ogden: Ogden City, 1962)

How To Meet the West's Needs for Water and Power. By MICHAEL W. STRAUS. (Washington, D.C.: Public Affairs Institute, 1962)

Jim Bridger: The Saga of a Master Mountaineer and Trailblazer. By J. CECIL ALTER. Reprint. (Norman: University of Oklahoma Press, 1962)

Lost Tribes and Sunken Continents. By ROBERT WAUCHOPE. (Chicago: University of Chicago Press, 1962) [Discusses popular beliefs and the origin of the American Indian]

Materials for the Study of Utah's Counties. By WARD J. ROYLANCE. (Salt Lake City: Author, 1962)

Materials for the Study of Utah's Geography. By WARD J. ROYLANCE. (Salt Lake City: Author, 1962)

Navigable Lakes of the Bonneville Basin: Their Full Potential Under Effective Water Management. By J. R. MAHONEY. (Salt Lake City: University of Utah Press, 1962)

The Navaho. By CLYDE KAY MABEN CLUCKHORN. Reprint. (New York: Doubleday & Co., Inc., 1962)

On the Gleaming Way: Navajos, Eastern Pueblos, Zunis, Hopis, Apaches, and Their Land. By JOHN COLLIER. (Denver: Sage Books, 1962)

Personnel Management in Utah State Government. By OAKLEY GORDON, REED RICHARDSON, and J. D. WILLIAMS. (Salt Lake City: University of Utah Institute of Government, 1962)

The Price of Prejudice; the Japanese-American Relocation Center in Utah during World War II. By LEONARD J. ARRINGTON. (Logan: Utah State University, 1962)

Suicide or Murder. By VARDIS FISHER. (Denver: Alan Swallow, 1962) [Mystery surrounding the strange and tragic death of Meriwether Lewis]

Trail to California: The Overland Journal of Vincent Geiger and Wakeman Bryarly. By VINCENT GEIGER. Reprint. (New Haven: Yale University Press, 1962)

A Report on Politics in Salt Lake City. By DIXIE S. HUEFNER. (Cambridge: Harvard University Press, 1962)

A Survey of Vegetation in the Curecanti Reservoir Basins. By ANGUS WOODBURY, STEPHEN D. DURRANT, and SEVILLE FLOWERS. (Salt Lake City: University of Utah Press, 1962)

Utah Mineral Resources. By STEVEN STUTZ and CLARON E. NELSON. (Salt Lake City: University of Utah Press, 1961)

Utah's Emerging Metropolis, The Wasatch Front. By LEONARD J. ARRINGTON. (Logan: Utah State University, 1962)

Utah's Public Lands — Their Status and Fiscal Significance. By JEWELL G. RASMUSSEN. (Salt Lake City: University of Utah Press, 1962)

ARTICLES OF INTEREST

Agricultural History — XXXVI, October 1962: "The First Homestead," by Charles Plante and Ray H. Mattison, 183–93; "Maryland in the Early Land-Grant College Movement," by Vivian Wiser, 194–99; "Pioneering in Agricultural Education: Cornell University, 1867–1890," by Gould P. Colman, 200–06; "Homestead Centennial Symposium, Lincoln, Nebraska, June 11–14, 1962, A Report of the Proceedings," by Fred W. Kohlmeyer, 222–36.

American Forest — LXVIII, March 1962: "Battle for Logan Canyon," by F. A. Tinker, 32–34.

American Heritage — XIII, October 1962: "The Farm Boy and the Angel [part 1 of a series on the Mormons]," by Carl Carmer, 5ff.

Arizona and the West — III, Winter 1961: "The Nevada Indian Uprising of 1860, As Seen By Private Charles A. Scott," edited and annotated by John M. Ellis and Robert E. Stowers, 355–76 — IV, Spring 1962: "A Dedication to the Memory of John Wesley Powell, 1834–1902," by Wallace Stegner, 1–4; "Origins of the Colorado River, Controversy in Arizona Politics, 1922–23," by Malcolm B. Parsons, 27–44; "The Early Life of Herbert E. Bolton, from random memories of an admiring brother," by Frederick E. Bolton, 65–73.

Brigham Young University Studies — IV, Winter 1962: "Music Education in the Church of Jesus Christ of Latter-day Saints," by Harold Laycock, 107–18; "Mormon Bibliography, 1961," by Ralph Hansen, 133–36.

The Colorado Quarterly — XI, Autumn 1962: "Second-class Saints [the Negro and the Mormon Church]," by Jan Shipps, 183–90.

Desert, Magazine of the Southwest — XXV, September 1962: "Finding the Proverbial Needle on Manly's Trail to Death Valley," by Charles Kelly, 30–34 — October 1962: "To the question asked in our January issue: An answer . . . and a rare photo [Elias B. Woolley, riverrunner]," by P. T. Reilly, 16–17.

El Palacio — LXIX, Autumn 1962: "An Ethnohistoric Reconstruction of Navajo Culture, 1582–1824," by James J. Hester, 130–38.

Explorers Journal — XL, October 1962: "The Land of the Anasazi, My Travels in the Slickrock Country," by Frank E. Masland, Jr., 14–30.

Horizon — V, September 1962: "Child of the Far Frontier," by Wallace Stegner, 94–95.

Idaho Yesterdays — VI, Summer 1962: "From Panning Gold to Nuclear Fission, Idaho's Economic Development, 1860–1960," by Leonard Arrington, 2–10.

The Improvement Era — LXV, October 1962: "Looking Toward the Temple [meaning of the Temple to the Mormon Church — photographs of the St. George Temple, inside and out]," by John A. Widtsoe, 706ff.; "Marion G. Romney," by Harold B. Lee, 713ff.

The Instructor — XCVII, September 1962: "Utah in the Eyes of the Nation," by L. H. Kirkpatrick, 300ff.

Journal of the West — I, October 1962: "Uranium Also Had Its 'Forty-Niners,'" by Herbert H. Lang, 161–69.

Kennescope — September–October 1962: "Coming Soon: Scenic Spectacular, A Desert Waterway [Lake Powell]," 14–15.

Labor History — III, Spring 1962: "Mormonism and the Closed Shop," by J. Kenneth Davies, 169–87.

Mainstream — XV, September 1962: "The Death of Joe Hill," by Zapata Modesto, 3–16.

Michigan History — XLVI, September 1962: "The Making of King Strang: A Re-examination [James Jesse Strang]," by Klaus Hansen, 201–19.

Missouri Historical Review — LVII, October 1962: "The Saints Build A Temple [Reorganized Church of Jesus Christ of Latter Day Saints World Headquarters in Independence, Missouri]," by Roger Yarrington, 79–88.

The Monitor — LVI, November 1962: "Bitten by the Bonneville Bug [racing on the Salt Flats]," by Julian H. Hamilton, 29–33.

Montana, the Magazine of Western History — XII, Autumn 1962: "Freighting Across the Plains, True 1858 experiences of George W. Beehrer from his diary and as related to a friend [story of freighting supplies from Leavenworth, Kansas, to Camp Floyd, Utah]," edited and rewritten by Julie Beehrer Colyer, 2–17; "Monsters of the Judith, Dinosaur Diggings of the West Provided Competitive Arena for Fossil Discovery," by Dan Cushman, 18–36.

National Geographic — CXXII, November 1962: "We Climbed Utah's Skyscraper Rock [Fisher Tower of Utah, Colorado Plateau, seventeen miles northeast of Moab, Utah]," by Huntley Ingalls, 705–21.

National Parks Magazine — XXXVI, September 1962: "The Eyewitnesses [running the Colorado River]," by Al Ball, 4–7.

Nebraska History — XLIII, September 1962: "The Pacific Railroad Act of 1862," by Wallace D. Farnham, 141–67.

Plateau — XXXIV, Summer 1962: "Navajo Status and Leadership in a Modern Mining Situation," by Ralph A. Luebben, 1–14 — Fall 1962: "Steamboating in Glen Canyon of the Colorado River," by Harold S. Colton, 57–59.

Reclamation Era — XLVIII, November 1962: "The Lake Powell Survey Story," by Clyde D. Gessel, 89–91.

Saga, The Magazine for Men — XXV, November 1962: "John Moses Browning, The World's Greatest Gunsmith," by Jack Pearl, 73–84.

The Saturday Evening Post — CCXXXV, September 15, 1962: "Taming the Colorado," by Jack Goodman, 26ff.

Southern California Quarterly — XLIV, June 1962: "John C. Frémont and the Bear Flag Revolution: A Reappraisal," by John A. Hawgood, 67–96.

The Sugar Beet — XIV, Autumn 1962: "Sweet Candy — One of Largest in U.S.," 10ff.

SUP News — IX, September–October 1962: "A Lifetime in the Theatre [David McKenzie]," by Maurine McKenzie Carman, 5; "Lindsay Gardens [condensed from a speech by Mrs. Emma Lindsay Thomas at the Sunrise Services held at the Lindsay Gardens, July 24, 1962]," 17.

Time, The Weekly Newsmagazine — LXXX, October 26, 1962: "Michigan, The Crazy Quilt [George Romney]," 24–25.

True West — X, October 1962: "Blood on the Pony Express Trail," by Raymond W. and Mary L. Settle, 32ff. — December 1962: "Butch Cassidy," by John Carson, 45–46.

The Utah Alumnus — XXXIX, September–October 1962: "The Reed Smoot Diaries, a statesman's priceless papers find a home," by A. F. Cardon, 7–9.

Utah Fish and Game — XVIII, October 1962: "Utah Buffalo," 12–13.

Utah Science — XXIII, September 1962: "The Use and Economic Significance of the National Land Reserve in Utah," by R. D. Nielson, 72–74.

Western Folklore — XXI, October 1962: "Folkways of the Mormons from the Journals of John D. Lee," by Austin E. Fife, 229–46.

Westways — LIV, September 1962: "Sculpture by Erosion [geological curiosity called Waterpocket Fold in southern Utah]," photographs by Josef Muench, 13–14.

NEWS AND COMMENTS

Utah Historical Quarterly

We hope you like the "new look" of the *Quarterly*. After an examination of all the historical journals which come to the Society, we determined that the modern trend was to the larger-size magazine. We did not adopt the largest which employs the double-column layout. Instead, we chose a "middle-size" which permits considerable versatility in make-up. As you will observe we have enlarged the size type for the body of the *Quarterly*. Diaries and extensive source materials may appear in a reduced type-size — similar to that in the old *Quarterly*. And our book reviews, recent publications, and news notes will appear in smaller type on double-column pages. A new feature is being added, a page to permit our readers to express their views on the *Quarterly* or other matters we feel have a broad interest.

New Board Member

After serving for nine years on the Board of Trustees of the Utah State Historical Society, Mr. Nicholas G. Morgan, Sr., retired from the board to devote his energies to the numerous projects he is sponsoring and involved in. Mr. Morgan's interest in the Society, however, has not diminished. He drops around occasionally to see that we are keeping in line. And the staff of the Society welcomes his cheerful and helpful suggestions.

As a replacement for Mr. Morgan, Governor George D. Clyde appointed Dr. S. Lyman Tyler, director of libraries, Brigham Young University. Dr. Tyler's term will expire April 1, 1965.

S. Lyman Tyler was born March 27, 1920, in Altica, Arkansas. During World War II he served in the United States Navy. At the close of the war, he resumed his education at the University of Utah, where he was awarded the B.S. degree in 1949, and the Ph.D. in history in 1951.

Dr. S. Lyman Tyler

Dr. Tyler has won many honors in his relatively short professional career. While at the University of Utah, he was named a research fellow in history, 1949–51. From 1951–52, he was a research fellow for the Social Science Research Council. In 1952, Dr. Tyler was appointed to the history faculty at Brigham Young University; and in 1954, he was named director of libraries at that institution, a position he still holds.

His other current positions include consultant for various Indian claim cases against the U. S. government and director of Institute of American Indian Studies, Brigham Young University. Dr. Tyler makes his home in Orem, Utah. His wife is the former Bessie Marie Rohde. They are the parents of three children, Marie, Michael, and Steven.

The Society is indeed fortunate in obtaining the services of Dr. S. Lyman Tyler on its Board of Trustees. He brings to his position an ideal background in history and library work. Since one of the principal functions of the Historical Society is the maintenance of a research library, Dr. Ty-

ler's knowledge in this area will be of special assistance to us. He has been named chairman of the Library Committee of the board. We welcome him warmly.

Archives Vault

A bit of good news to the officers and staff of the Society was an announcement in November of the Utah State Building Board. This board adopted a program of the Society to place a request for an Archives vault before the 1963 Legislature. The Building Board has given the Society's request a "top priority." This means that the Legislature will have before it a request to build a three-story vault on property to the east of the Mansion. Two floors of the building (the vault space) will be underground, and the ground floor will provide offices, staff work area, and search rooms for the public. The future of the Archives now rests with the Legislature.

To aid in presenting our case to the Legislature, a special committee of lay members was organized. Meetings with the staff and board have resulted in the committee's gaining a good understanding of Society needs and goals. This information the lay members can pass on to legislators in their respective districts. Committee members are: Dr. Leonard J. Arrington, Mr. Clifford L. Ashton, Mr. George S. Ballif, Mrs. Helen H. Brown, Mrs. Mary Cockayne, Mr. Henry Aldous Dixon, and Mr. William Smart.

The untimely death in November of committee member, H. C. McShane, post commander, American Legion, Department of Utah, has deprived the Society of a loyal supporter. His presence will be greatly missed.

Future Events

Events of interest to members are hereby noted. The Utah State Historical Society is co-operating again this year with the University of Utah in sponsoring a summer workshop on Utah history. Last year more than eighty registrants gained considerable knowledge about Utah prior to 1847. This year the theme is the history of the Colorado River Plateau. Professor C. Gregory Crampton is in charge of the program which promises to be a rich, rewarding one. Further information on this program will be given in the *Newsletter*.

The Society is also co-operating with other interested groups in sponsorship of the Western History Association Conference which will be held in Salt Lake City, during the third week of October. The program plans of Chairman A. R. Mortensen are full of exciting interest. It will be a conference that all history devotees will want to attend.

As previously announced in the pages of the *Quarterly*, the Society's annual meeting has been changed from the spring to the fall. This year's meeting is scheduled for September 17. An outside-the-state "name" speaker is being sought, and the program is being enlarged to an all-day event. Morning sessions will be devoted to subjects of local chapter interest, and the afternoon session will be concerned with historical libraries and resource materials.

To replace the spring meeting, the Society is initiating what it hopes will become an annual "trek" to an historic site in the state. The spot selected for this year's tour is "Hole-in-the-Rock" on the Colorado River. Dr. David E. Miller, authority on this tragic colonizing party, has agreed to guide the "trekkers." The tentative dates are May 17–19. Nineteen sixty-three will be the last year this historic spot can be viewed before part of the chasm is covered by the waters of Lake Powell.

Awards

Institutional and individual Utah State Historical Society members were rewarded for their contributions to local history by the American Association for State and Local History at their Buffalo convention in August. Mrs. Juanita Brooks, former board and staff member of the Society, won an Award of Merit for her *John Doyle Lee, Zealot – Pioneer Builder – Scapegoat*. Dr. Frank H. Jonas also won an Award of Merit for his book, *Western Politics*.

The Church of Jesus Christ of Latter-day Saints' restoration of the Beehive House, pioneer home of Brigham Young, won for them the Association's Award of Merit. Efforts to further interest in the Utah State Historical Society and Utah history through a series of programs won for Salt Lake City television station, KCPX, a Certificate of Commendation. The Society extends the winners a hearty congratulation.

Bequests

A note in the Oregon Historical Society *Newsletter* bears repeating here. "You all know we could never function were it not for the sturdy and astonishing support of a few who help us over some really horrifying financial problems. Our Society is rather unique in this regard; particularly, when we consider the fact that not one benefactor of our Society has ever asked a favor in return — only that we all do our daily job well."

While we can make a similar statement for the Utah State Historical Society, we cannot match the follow-up statement of Oregon. For therein are noted bequests left the Oregon Historical Society in sums of $2,000, $10,000, $50,000, and $70,000. What we could do with such beneficences! There are dozens of projects which need doing in Utah, and we would like to do them if only we had the funds. There are, we are positive, dozens of diaries, hundreds of letters, thousands of photographs that need collecting and are worth preserving. An oral history project should be instituted. Daily, in the deaths of "old timers," we are losing a rich source for the study of Utah history. We have in our files many manuscripts which should be microfilmed for preservation. One of our critical needs to make the past *Quarterlies* into a really effective source of information is a cumulative index. All these things await the day when some loyal member cares enough about the Society that he makes a bequest to permit us to meet our obligations. We hope the Society will soon be given this kind of recognition. In the meantime we are grateful for the small contributions that some devoted members make to the Society's Trust Fund. No matter how small they are, we can always find a good use for these contributions.

The Readers' Page

Gentlemen:

At my age, 85, a Life Membership will probably not be good for very long.

However it is my desire to aid an institution such as yours in the city where I was born.

Accordingly I enclose my check in the sum of $100 for a life membership.

Sincerely & cordially
Leon L. Watters
2 East 88th Street, New York 28, N.Y.

Dear Sirs:

I have been interested very much in the study of our history of the early west especially the progress of the city of Salt Lake City and Utah. Always I find in whatever phase of Western History I do research there are the sturdy early Mormon Pioneers. Recently as a collector of Western Americana, I ran on to some Utah Historical Quarterlys just enough to whet my appetite for more. They are marvelous. The old pictures are simply wonderful also. I am wondering if it would be possible to secure a complete run of these and . . . could I as a Californian subscribe to this good magazine. . . .

Sam Orchard
4609 E 61st
Maywood, Cal.

Free Lending Library of Religious Art
35 Ridge Road, New City
Rockland County, New York

. . . May I say that your Quarterly is one of the finest state historical publications I have seen in my research in this project. Each issue is a joy to examine, inviting to look at and rewarding to read.

Sincerely,
Anna Wirtz Domas
Director

UTAH STATE HISTORICAL SOCIETY

Membership in the Utah State Historical Society is open to all individuals and institutions who are interested in Utah history. We invite everyone to join this one official agency of state government charged by law with the collection, preservation, and publication of materials on Utah and related history.

Through the pages of the *Utah Historical Quarterly*, the Society is able to fulfill part of its legal responsibility. Your membership dues provide the means for publication of the *Quarterly*. So, we earnestly encourage present members to interest their friends in joining them in furthering the cause of Utah history. Membership brings with it the *Utah Historical Quarterly*, the bimonthly *Newsletter*, and special prices on publications of the Society.

The different classes of membership are:

Student	$ 2.00
Annual	$ 4.00
Life	$100.00

For those individuals and business firms who wish to support special projects of the Society, they may do so through making tax-exempt donations on the following membership basis:

Sustaining	$ 250.00
Patron	$ 500.00
Benefactor	$1,000.00

Your interest and support are most welcome.

Utah State Historical Society