WHEN Jefferson Davis was secretary of war he inaugurated an interesting and important experiment for the purpose of determining whether camels could be used for transportation purposes in the United States. Never before or since that decade preceding the Civil War has the government been confronted with such serious problems as were caused by the territorial expansion of the late forties, and of these not the least serious were the difficulties of communication and of transportation on the far western frontiers. Even before the annexation of Texas, New Mexico and California it had been a difficult task to administer government on the outer frontier; after the Mexican war the troubles were multiplied. Immense territories had been added, the frontier was more than doubled in length and was more exposed and dangerous; much of the unsettled region was mountainous, or was dry and without grass and water for pack animals and cavalry horses. The settlements on the Pacific coast also had a frontier—an eastern frontier which had to be guarded as well as the western frontier on the other side of the mountains. And for political and military reasons it was necessary that communications between California and the rest of the United States be made shorter and safer. The experiences of the army officers, especially those of the Quartermaster’s Department, during the Mexican war caused them to turn serious attention to the question of transportation. On account of the rough or desert character of much of the country it was not possible to make much use of horses and packmules. Railroads, it was thought, would not for years traverse any of this country, and would never open up all of it. A formidable danger to frontier settlements, to small army garrisons and camps, and to communication of any kind, lay in the attacks of the hostile Indians of this region who, on their swift ponies, could make sudden raids and escape capture by the foot soldiers or the small bodies of cavalry.¹

That the camel would suit such conditions was the belief of several army officers and particularly of Jefferson Davis, who when a young man had served in the army on the western frontier and later had commanded a regiment in the war with Mexico. The camel could travel faster than a horse and carry heavier loads over rougher ground, could go without water for days at a time and could live upon the poorest

¹ See Reports of Secretary of War, 1853-7.
forage. It could also endure better than the horse or mule the extremes of heat and cold in this western region. The experience of other peoples had proved the value of the camel. In northern Africa and over the greater part of Asia the animal had always been the beast of burden—the most important agent of transportation. In climate and physical geography our western frontiers were similar to the regions which were the home of the camel.

Camels had been used in America, but not in large numbers. The Spaniards had imported them into Cuba and South America for use in transporting ore from the mines to the coast, but this experiment had not been a success. In 1701 some camels were brought to Virginia, but nothing more is known of them. In Jamaica, where the English tried them, the "chigger" or "chiqua," an insect which infested the feet of the negroes, got into the feet of the camels, rendering them unserviceable. The proposal to substitute camels for mules, horses and oxen in transporting supplies for the army was first made by Major George Hampton Crossman, a graduate of West Point, who was Zachary Taylor's quartermaster in the Seminole war. The difficulty of transporting supplies in Florida caused him to suggest that camels be introduced and used for that purpose. He made a study of the subject, and twenty years later was considered one of the authorities concerning camels.

Prominent among the officers who took an interest in the matter was Major Henry Constantine Wayne, a Georgian, who during and after the Mexican war, served in the Quartermaster's Department. He, with Senator Jefferson Davis, late colonel of the Mississippi Rifles, made extensive studies in regard to the different breeds of the animal, its habitat, the proper care of it, and its adaptability to the arid plains of Texas, New Mexico and California. Wayne, in 1818, made a formal recommendation to the War Department that camels be imported for experimental purposes, and Davis, who was on the military affairs committee, undertook to get an appropriation. In March, 1851, he proposed to insert in the army appropriation bill an amendment providing the sum of $30,000 for the purchase of fifty camels, the hire of ten Arabs, and other expenses. In support of his measure he made a speech reviewing the history of the camel as a servant of man and explaining the need for the animals in the west. There they would be valuable, he said, not only because of their burden-bearing capacity and their ability to live long without water and to eat scraggy bushes, but because of their greater speed. The dromedaries, or swift camels, could be used to mount cavalry and could carry small cannon, as had been done in Persia and in Egypt. Senator Ewing at first objected that the climate in the mountainous parts of the west was too cold for

the animal, but Davis convinced him that camels were useful in parts of Asia where the extremes of heat and cold were greater than in the west. Senator Rantoul objected that the proposition was extravagant and others that it was ludicrous. The appropriation was not made.5

A year later, when Davis had returned to Mississippi, Bissell, of Illinois, introduced into the House a bill carrying a $20,000 appropriation for the purchase of camels. Both Evans, of Maine, and Shields, of Ohio, who supported the measure, spoke of it as originating with Davis. The remarks made show that the War Department had considered the matter carefully and favored the measure. The house passed the camel bill but it was lost in the senate.4

By this time the public was becoming familiar with the proposal to import camels and numerous suggestions were made to the government. John Russell Bartlett, the author and ethnologist, who for three years (1850–1853) had worked on the southwestern boundary, was of the opinion that camels should be used in that region. George Robins Gliddon, the archeologist, who had lived in Egypt for twenty-three years, wrote a memorial to congress declaring that the project was feasible. Another eminent person, who was exerting himself to get the government to make the experiment, was George Perkins Marsh, the philologist and diplomat, who had lived in the Levant and who was acquainted with the camel in Turkey and Italy. To help the cause he delivered a lecture in 1854 at the Smithsonian Institution and also wrote a little book which was published in 1856: "The Camel, his Organization, Habits and Uses, considered with reference to his Introduction into the United States."56 The general interest in the camel project caused the organization of "The American Camel Company," of New York, which proposed to import burden camels for use in the west. About 1857 the company landed one shipment in Texas, but nothing is known of further activities.

In 1853 Jefferson Davis returned to Washington as secretary of war and at once took up the question of importing and experimenting with camels. He had already made extensive researches into the history and habits of the camel when a member of the senate committee on military affairs. Now Major Wayne, of the Quartermaster's Department, and Lieutenant Beale and Captain Adams, of the Fort Yuma post, were directed to prepare information with reference to the use of camels on the western deserts. In his report at the end of the year8

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7 Cong. Globe, 32 Cong., 1 Sess., August 28, 1852.
Davis made a strong recommendation to Congress in favor of an experiment. He went into details about the great extent of newly acquired territory, its lack of navigable streams and of good roads, and the absence of grass and water for long distances. With horses, mules and oxen long circuitous routes had to be followed; the cost of transportation alone in this region was for one year nearly half a million dollars; and Indians made attacks and escaped because they could not be followed into the deserts and mountains; moreover, the Pacific coast, 120 days distant, was defenseless and for that reason quicker and better transportation must be provided.

Congress refused to make the desired appropriation and in December, 1854, Davis renewed his request for money to make the experiment. When the army appropriation bill was reported it carried no appropriation for the purchase of camels, but Senator Shields of Illinois and some western representative secured the amount of $30,000 for this purpose. The bill became a law on March 3, 1855, and Davis at once proceeded to send for the animals.

The camels could be procured only from the Levant. The mission to the Orient was first offered to Major Crossman, who nearly twenty years before had first suggested the use of camels. He declined, and Davis sent Major Wayne and Lieutenant David D. Porter of the Navy. Wayne was to go to England and France to secure further information about the camel, and Porter was to take the storeship Supply to the Mediterranean and meet Wayne at Spezia. Davis furnished Wayne with a digest of all that was known about the camel and his letters of instruction show that the secretary possessed full knowledge of the subject.

Wayne visited first the Zoological Gardens in England and reported that camels had been reared there under such conditions that he was certain of success in the United States. Next he went to Paris to consult with the French officers who had made use of camels in Algeria. From the information secured he decided that the African camel would not succeed in America as well as the Asiatic. He adopted the following classification: The Bactrian was the large two-humped animal, the Arabian the one-humped, and the "dromedary" was merely a swift Arabian, not a burden camel. These were points then confused by naturalists.

Meanwhile Lieutenant Porter had gone ahead and inspected at Pisa the camel herd of the Duke of Tuscany. These were descendants from Egyptian stock and had been used in Italy for two hundred years. There were 250 of them, Porter wrote, and they performed the work of 1,000 horses—some of them carrying as much as 1,200 pounds at a load; but he considered them overworked and badly cared for.¹

¹ See Marsh, chap. 17.
After Wayne and Porter met at Spezzia they decided to get a camel at once in order to study its habits and to learn the proper treatment. They went in the Supply to Tunis, where Mohammed Bey gave them two animals which they hoisted on board, and proceeded to the Asiatic coasts, studying on the way the habits, ailments and care of the animals. Their observations were carefully reduced to writing and sent to Davis. The first stop after leaving Tunis was made at Smyrna, where they found fine burden camels, but no dromedaries such as Davis was anxious to get for chasing the Indians; at Salonica, the next stop, there were no camels—from both places the dromedaries had been taken for use in the Crimean war then going on. Davis had instructed Wayne and Porter to go to Persia to see about the Bactrians of that region, but at Salonica they found that the roads were closed by snow—it was now December—and that the country was in an unsettled condition. So after sending circulars to the English-speaking missionaries, consuls and business men in the Levant requesting information, the two officers sailed to Constantinople and thence went to the Crimea to see what was being done there with the camels. Wayne reported that the Bactrians seemed to be of little use because they were slow and because of their two humps, which made it difficult to fasten on the loads. But the one-humped Arabians were valuable; 3,000 were already in the Crimea and more were to be imported for the next campaign. The English officers who had used them in India were enthusiastic.

At Constantinople Wayne was disappointed in not getting a supply of both kinds of animals. All there were worthless or had the “itch.” The Sultan sent far into the interior for good ones to give them, but Wayne, anxious to go to Egypt, did not wait for them to be brought to Constantinople.

The Supply sailed to Egypt and while Wayne went to Cairo to get permission to export dromedaries Porter remained at Alexandria looking over the market and making a lengthy report to Secretary Davis. He was now an enthusiast on the subject of camels. “I hope to see the day,” he wrote, “when every Southern planter will be using the animal extensively.” The education of Wayne and Porter progressed rapidly. They were soon expert camel traders. Animals at first palmed off on them as good they were now able to pronounce worthless. These they got rid of—two, for instance, they sold to a butcher in Constantinople for $44. Porter said “the good condition of these camels recommended them to a butcher of Constantinople, who bought them for purposes known only to himself.” The natives now could not impose upon the ignorance of the American officers.

An amusing incident happened in Egypt. Wayne found it difficult to get permission to carry camels out of the country. He wanted twenty dromedaries; but could get permission to carry out only two. After protest this number was increased to four and later to five. Some-
what disgusted, Wayne started to leave Egypt, but the viceroy notified him that he would present six camels to the United States government. After delay the animals came. Porter after looking at them wrote an indignant letter refusing to accept the gift. They were "worthless and diseased," he said, and "I can not conscientiously receive them." The attempt of the Egyptian officials, he said "fraudulently to force a present on us" was a "discourtesy" to the United States which he would not tolerate. The viceroy laid the blame upon his servants and finally six good dromedaries were secured. Only three others were taken on board here, and the Supply sailed for Smyrna to complete the cargo.

The loading of the camels was done under Porter's supervision. Before leaving the United States he had prepared a "camel deck" or stable on the lower deck and had cut through the upper deck to secure a constant supply of fresh air for the animals. To get them on board he constructed a long flat-bottomed boat which could be run ashore. On this was a strong car with wheels which could be pulled out on land to receive the camels who often had to be dragged into it, and then the car was rolled back on the boat. From the boat the car holding the camel was hoisted into the ship and let down to the "camel deck."

While in Alexandria waiting for the viceroy to act, Mr. G. H. Heap, an American who had lived in Tunis and who accompanied the expedition, was sent on ahead to purchase other camels and equipments. When the Supply reached Smyrna, on January 30, 1856, Heap had the camels, saddles and other supplies ready. They were taken on board and on February 15 the Supply was turned toward America. The cargo consisted of thirty-three camels: nine dromedaries (Arabians) from Egypt; twenty Arabian burden camels; one young Arabian camel; two Bactrian (two humped) males; one Booghandee or Tuliu, the offspring of a Bactrian male and an Arabian female, having one hump.

Before leaving Smyrna the females that were not already with young were covered by the males, since it was the rutting season, and it was desired to increase the herd as fast as possible. To take care of them four Americans, two Turks and three Arabs were brought along—all under the supervision of Albert Ray, an army wagon master.

During the return trip, which lasted three months, the weather was rough. Wayne and Porter had been requested by Davis to stop at the Canaries to see the camels there, but they were prevented by heavy winds. Wayne occupied himself in writing a long report to the secretary of war and in translating French works relating to camels. He wrote Davis that the information furnished by the letter had been generally accurate. The report gave a detailed history of the camel, an

*See Leonard, p. 13.
account of the different breeds, their habits and usefulness, the nature of their diseases, the location of the best stock, the cost, the proper food and the methods of transportation. One of the papers translated was by Linant Bey, a French engineer in the Egyptian service, on "The Egyptian Dromedary"; one by General J. L. Carbuccia on "The Use of the Camel in Algiers." A paper by Colonel F. Columbari entitled "The Zemboureks, or the Dromedary Field Artillery of the Persian Army," had been translated and illustrated by Wayne in 1854.

During the voyage the animals were under the direct supervision of Lieutenant Porter, who interested himself in the minutest details. On the camel deck he posted detailed regulations to be followed in the care of the camels. A "journal of the camel deck" was kept, and in it every day wagon master Ray made note of every item of interest concerning the animals, their ailments, feed, appetites, when they were rubbed, curried, oiled, salted, etc. Some of the names are given: Said, Ayesha, Gourmal, Ibrim, etc. The first young camel born on board the ship was dubbed "Uncle Sam" and was trained by one of the Turks as a Pehlevan, or wrestler. Four of the grown camels were Pehlevans. Camel fighting was as much an oriental amusement as horse racing was a Kentucky sport, and Porter thought that the Americans might in time come to like camel contests.

When the weather was stormy and the ship unsteady there was danger of the animals falling on the smooth deck and injuring themselves. To prevent this Porter fashioned a sort of harness for each one and in rough weather made them kneel and strapped them to the deck. Once they were so strapped down for seventy-two hours.

During the voyage six calves were born. Of these only two lived; the others were probably killed by the ministrations of a quack Turkish camel doctor on board. Porter took care of the young camels as if they had been children, and gravely wrote to Davis about their diet, appetite, health, etc. Soon he was a better camel doctor than the Turk and the latter was superseded. To the secretary of war Porter sent some of the Turk's prescriptions: For a cold give the camel a piece of cheese; for swollen legs, tea and gunpowder; cauterize frequently for skin diseases; and for other complaints tickle the camel's nose with a chameleon's tail, or boil a young sheep in molasses and administer half of the mixture while hot. No wonder Porter was certain that Americans could manage camels better than the Asiatics.

At Kingston, Jamaica, a stop was made and great numbers of visitors came on board to see the camels—in one day 4,000 came. But here the camels suffered so much from heat that departure was hastened.

On April 29, 1856, the store ship reached Pass Cavallo, off Indiana, where, it was planned, the camels were to be landed. But the sea was so rough that the transfer to lighters could not be made. Porter then sailed to the Balize, the southwestern mouth of the Mississippi
River, and there on May 10 he transferred his cargo to the steamer *Fashion* under Major Wayne. Four days later Wayne landed the cargo at Powder Point, three miles below Indianola. The animals were in good condition notwithstanding the long confinement—one of them had been on board nine months. “On being landed, and feeling once again the solid earth beneath them,” Porter wrote, “they became excited to an almost uncontrollable degree, rearing, kicking, crying out, breaking halters, tearing up pickets, and by other fantastic tricks demonstrating their enjoyment of the ‘liberty of the soil.’ Some of the males becoming even pugnacious in their excitement, were with difficulty restrained from attacking each other.” The Texans were greatly interested in the camels and Porter wrote later to Davis that “perhaps the love of amusements may render the importation of camels in Texas popular if their utility does not recommend them.” He meant that the Texans might possibly take to camel fighting.\(^{10}\)

Less than one-third of the appropriation had been expended and Davis determined to send at once for a second cargo of camels. Wayne was again offered command of the vessel, but he preferred to remain in Texas to conduct the experiment. Major Crossman also declined to go. Finally Porter and Heap were sent. Before leaving Porter carried to Davis the “Camel Deck Journal,” his letters rejecting the camels offered by the viceroy of Egypt, and some drawings of camels in harness made by Mr. Heap. Porter arrived at Smyrna in November, 1856, where he found that Heap, who had gone on ahead, had collected a number of young camels. The six dromedaries presented by the Sultan had been sent to Smyrna and these with the others were taken on board. On November 14 the *Supply* again set sail for Texas. On board were forty-four animals: Two Bactrian males; three Arabian males; one Tuilu, cross-bred, male; one Tuilu, cross-bred, female; thirty-seven Arabian females.

The second voyage homeward lasted eighty-eight days and was rougher than the first. For thirteen days at one time the camels were strapped to the deck. But only three died during this voyage and Porter turned over to Captain Van Bockelen, quartermaster at Indianola, forty-one animals in good condition. There were now seventy in the herd, five of the first number having died since reaching Texas.

Meanwhile, during the summer of 1856, Wayne had been testing the value of the camel as a burden bearer. Certain of success, he wanted to breed camels until the herd was large, but Davis wanted to ascertain first whether they would be useful. For a few days the animals rested at Indianola. The Texans refused to believe in their burden bearing capacity, so one day Major Wayne had two bales of hay, weighing 314 pounds each, loaded on one of the males; the spectators were sure that

he could not rise; Wayne then put two more bales on, making 1,256 pounds in all. The camel rose easily and walked off. Wayne wrote to Davis that it quite convinced the skeptical and that it caused a Texan poet to break into verse in the *Indianola Bulletin*. Later Miss Mary A. Shirkey, of Victoria, Texas, knitted from camel's hair a pair of socks for President Pierce. Major Wayne forwarded them through the secretary of war.11

During the latter part of May the camels were marched by easy stages to San Antonio where they were kept nearly a month and then removed to Val Verde (Green Valley)—a military post sixty miles southwest of San Antonio. Here at Camp Verde, as it was called, the permanent camel post was located. In September Wayne sent camels and horses to San Antonio for supplies. The camels easily brought 600 pounds each; six of them carrying as much as twelve horses could haul in wagons and in forty-two hours less time; the camels made the sixty miles in two days and six hours, while the horses required over four days. Later tests, made in November and December, 1856, showed that camels could easily climb mountain trails where wagons could not go, and that on muddy roads over which horses could not draw wagons, the camels traveled without fatigue. Only on slippery slopes were they troubled, and at the crossing of streams. Not being accustomed to fording, they had to be driven in by throwing water in their faces. At the end of 1856 Davis reported that in his opinion the experiment was a success.12

Davis left the War Department in March, 1857, and was succeeded by John B. Floyd. Wayne was transferred to Washington and the camels were left under the supervision of Captain J. N. Palmer, at Campe Verde. In 1858 the "Société imperiale Zoologique d'acclimatation" of Paris, awarded to Major Wayne a first class gold medal for the successful introduction and acclimation of the camel in the United States. Secretary Floyd was convinced of the usefulness of camels on the western plains, and in his second report, December, 1858, he recommended that 1,000 be purchased. This recommendation was repeated in 1859 and in 1860, but Congress paid no attention to the matter.13

After 1857 some of the camels were sent to the army posts at El Paso and Bowie. They were disliked by the army hostlers; the Arabian and Turkish caretakers were regarded with contempt, and it was difficult to get the American hostlers and wagon masters to help in the experiments. The horses objected to the smell of the camels when stabled or picketed near them and the hostlers sometimes turned the camels loose to get rid of them. However, during the four years before

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the outbreak of the civil war some interesting and successful attempts were made to use the "ship of the desert" for military transportation purposes. The first lengthy expedition was made by Lieutenant Edward F. Beale, who on September 1 set out to make a wagon road from Fort Defiance, New Mexico, to California. Camels, as well as mules, were used by the road-making party. The work lasted forty-eight days. Beale reported that the camels had been subjected to the severest tests and had failed in no instance; that they even learned to swim rivers. Beale considered that one of them was worth four good mules. From 1857 to 1861 Beale with twenty camels was occupied in exploring the unknown regions of the southwest. He found that the camels could do successfully all that was required of them. By 1861 his herd of twenty had increased to twenty-eight.14

Other trials of the camels were made in 1859 by Major D. H. Vinton, who used twenty-four of them in carrying burdens for a surveying party.15 From May to August, 1859, Lieutenant Edward L. Hartz was in charge of the camel herd. Hartz sent to the War Department a full journal of an exploring expedition in which camels and mules were used. His verdict was not quite so enthusiastic as those of Wayne and Beale, but he pronounced the experiment a success. The camels were inferior to mules, he said, on slippery surfaces; they were not as good climbers as mules, but they were much swifter on level, rocky or sandy ground; it was difficult to keep the loads on the camels and frequent stops had to be made to replace the saddles, which could not be properly fastened by inexperienced packers. It was his belief that the female camel was better than the male; that the camels really preferred bushes, dry shrubs and grasses to grazing grasses; that they could go without water for more than two days and not suffer. All in all, he concluded, the camel was much superior to the mule.16

The success of the War Department tests caused other importations. In 1858 a British vessel brought over two cargoes of camels for a Mrs. Watson, who lived near Houston, Texas. Arab caretakers were employed and F. R. Lubbock, later governor of Texas, was put in charge of them. He says that they were healthy, and useful, but that they created too much sensation when they went into Houston or traveled about the country.17

There is a tradition that ten animals were brought to New York in 1857; of these two survived and were sent to Nevada, where by 1875 their offspring numbered ninety-five.18

In 1861 a San Francisco company imported twenty Bactrians (two-

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18 Leonard, pp. 14, 123.
humped) camels from the highlands of Asia for use in transporting salt from Esmeralda County, Nevada, to the Washoe Silver Mill, a distance of two hundred miles. The discovery of a nearer supply of salt left the camels without regular occupation. Some were used near Virginia City as late as 1876 to carry cordwood.19

When the civil war began the government camels were scattered. Some were at Camp Verde, Lieutenant Beale’s herd of twenty-eight was in California, and others at various posts in Texas. Beale, whom in 1861 Lincoln had appointed surveyor-general of California, proposed to Stanton that the government animals, which were scattered about in California doing nothing, should be turned over to him for use in carrying supplies and in making explorations. His request was not granted. In 1863 an attempt was made to use the camels in carrying the mails between New Mexico and California, but the officers in charge of the mails, knowing nothing of camels, objected and they were not used. In 1864 the herd, now numbering thirty-five, was sold to Samuel McLaughlin, who disposed of them later to circuses and zoological gardens.20

The herds at Camp Verde and other places in Texas were constantly used by the army quartermasters up to 1861. The ugly animals were well known sights in the towns near Camp Verde and between San Antonio and the gulf coast. But horses were often frightened by them and people began to regard them as a nuisance; Brownsville had an ordinance forbidding them on the streets. When the United States forces were withdrawn from Texas in 1861, the camels fell into the hands of the Confederates who made little use of them and spent little care upon them. They were turned loose to graze and some wandered away. Three of them were caught in Arkansas by union forces and in 1863 they were sold in Iowa at auction. Others found their way into Mexico. A few were used by the Confederate Post Office Department. At the close of the civil war the animals at the Camp Verde station, numbering sixty-six, were advertised for sale. Only three bids were received, one for $5 each, one for $10 each, and one for $31 each. So on March 8, 1866, the quartermaster in New Orleans sold to Colonel Bethel Coopwood the camels then in Texas. Colonel Coopwood carried them to Mexico and disposed of them to traveling circuses.

The stray camels were heard from occasionally—stampeding horses and ravaging fields. The Indians killed and ate some. The Navajos, it is said, once tied a Mexican shepherd to a camel’s back and turned the animal loose. During the seventies soldiers in the southwest reported seeing strange camels.21 Colonel Philip Reade writes that in July, 1875, he saw a herd of wild camels near Oatman’s Flat, on the

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21 Taylor-Trotwood Magazine, June, 1897.
Gila River. One of the government camels was living a few years ago in the public parks of the City of Mexico.

The attempt to make use of camels might have succeeded under different conditions. Davis, the strongest advocate of the use of the camel, went out of the war office just as the experiment promised success. Major Wayne, who alone of army officers had full theoretical and practical knowledge of camels, was transferred to office work at Washington, and Beale, who later accumulated considerable experience, was not encouraged by the War Department officials. The army teamsters and most of the officers outside of the Quartermaster’s Department, took no interest in the matter and some opposed the experiment; the members of Congress were too deeply engaged in sectional controversies to care much about transportation problems in New Mexico. The Civil War afterward occupied the attention of those in authority while the herds were neglected, and the fact that Jefferson Davis had inaugurated the experiment was, in the opinion of many, enough to condemn it. After the war the rapid development of railroads solved many of the problems that seemed so serious in the fifties.

And yet had Wayne, Beale and Hartz been given ten years of favorable conditions, it is probable that camels would now be used as beasts of burden in some parts of the south and west, for conditions still exist in that section under which the camel would be useful.

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