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**American camp culture: A history of recreational vehicle  
development and leisure camping in the United States,  
1890 - 1960**

by

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A dissertation submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of  
DOCTOR OF PHILOSOPHY

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Every time a man sees something new in the world, he finds something new in himself. What a man thinks of the trees and birds, of the sea and mountains and the whole panorama of the summer spectacle, is an exposition of himself. What you see reveals you. We do not so much interpret nature -- for nature needs but little interpretation -- we interpret ourselves.

William Chalmers Covert,  
*Wild Woods and Waterways* (1914), p. 241.

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## INTRODUCTION

Whether taking a short jaunt around the region or an extended outing across the nation, Americans have traveled for much of their national history. Where migration and commerce facilitated much of the American mobility, travel for leisure purposes and recreation remained primarily confined to local or regional excursions until the latter half of the nineteenth century. The earliest tourists in America traveled by foot, horses, or steamship. By mid-century, railroads served as the primary form of transportation to many leisure-oriented destinations. When touring the sites, individuals traveled by carriage or on horseback until the automobile took on that role. Unlike the railroads, automobiles provided individuals with choices rather than set schedules, established routes, and limited alternatives. Seeking to understand the way Americans fostered recreational vehicle development in relation to automobile travel, this study focuses on the social needs and cultural desires of autocampers and the technological solutions to the problems presented by those perceptions. In that light, this is more than a history of recreational vehicles in the United States; it is an examination of ideas and beliefs and the outcome of those thoughts. The concern of this investigation is with the intellectual context of technology and culture, with how new objects are interpreted and integrated into the fabric of American culture and social life. By examining the changing role of camp equipment, especially camp vehicles, we can distinguish how the social needs and cultural desires of Americans directed technological change in the autocamping industry. This study deals with the period, roughly 1890 to 1960, when leisure camping and recreational vehicles were in their formative years.



when American popular culture publications celebrated recreational vehicle travel, and when recreational vehicle manufacturing matured into a billion-dollar industry. What began with a few manufacturers supplying tents and camp paraphernalia, within fifty-odd years developed into a dynamic industry producing an array of products for a diverse American market.

## **DISSERTATION ORGANIZATION**

Lacking ancient ruins or majestic cathedrals to point to as symbols of their culture and civilization, Americans pointed instead to the sublime, pastoral landscape with its unique and abundant natural wonders. Against this introduction of ideas and culture, the earliest notions of camping are examined to reveal how changes in the ideas of camping effected changes in the camp equipment industry. The first chapter, then, recounts the roots of recreational camping and America's relation to the pastoral landscape to show that as "the art of camping" became more popular, and accessible, equipment manufacturers and suppliers worked to advance new ideas and solutions to camping problems.

Building upon these notions of the sublime landscape and America's pristine wilderness, Chapter Two examines how the earliest notions of leisure camping evolved. This chapter attempts to explain the impetus or drive behind the early campers as well as document how they went camping. The art of "woodcraft" is discussed to show how the earliest, most primitive forms of camping evolved as well as show how these more primitive methods posed challenges to the more inexperienced campers. As more Americans took to camping, the basics of woodcraft came to be replaced, or at least supplemented, by more modern means. The canvas tent, for instance, replaced the lean-to or bark shanty. The development of early camp equipment suppliers and manufacturers as well as the role of the railroads is discussed to introduce the ways and means most Americans employed to go

camping around the turn of the century.

Chapter Three continues the examination to reveal how, as accessibility to the American landscape increased, the changing needs and desires of individual campers influenced changes in recreational camping technologies. The role of the automobile is introduced and emphasized to demonstrate the distinct changes that occurred in camping once increased individual mobility via the automobile came to the fore. Accompanying the dramatic growth in autocamping, manufacturers and suppliers likewise expanded to meet the needs of a growing commercial market.

In Chapter Four, the role of the automobile is further developed to show how the young camping industry responded to the social needs and desires of the camping public. Desires for better accommodations and improved designs are illustrated through the introduction of new technologies. Manufacturers responded to customer desires for quarters that did not leave them sleeping on the ground or that placed campers at nature's mercy. The chapter includes the 1918 model of aircraft designer Glenn Hammond Curtiss, the first solid-body trailer coach. Other designs of the period include tent- or camp-trailers and the earliest auto-conversions. These notions are continued in Chapter Five with a discussion of the development of the trailer coach industry in the Thirties. The earliest methods of mass production and the role of suppliers are documented to demonstrate the dramatic growth of the industry. Mass production and other early means of manufacturing also provided a framework for later production techniques and technological advances. Moreover, while some businesses grew and prospered in the Thirties, older notions of camping began to fade, and manufacturers supplying those goods disappeared themselves or altered their manufacturing to meet the latest needs and desires of American campers.

Chapter Six examines the role of select engineers and modern designers in establishing the trailer coach industry and advancing new ideas. While the role of aircraft technology is introduced with Glenn Curtiss in Chapter Four, this chapter further documents the influence of aeronautical engineering and technological transfer on the trailer coach industry. The work of William Hawley Bowlus proved most significant in these developments. Bowlus used his years of experience in the aircraft industry to design and build the earliest streamlined aluminum trailer coach. His relationship with Wally Byam of Airstream is also recounted. Essentially, the Bowlus design offered Byam his prototype and the foundation of his internationally known Airstream travel trailer. While some designs were influenced by the whims and desires of engineers, many responded to the changing social needs and cultural desires of recreational vehicle users and the larger American public.

Chapter Six continues this examination of changing needs and desires to show how throughout the 1930s the American public sought to identify the trailer coach as more than just a recreational vehicle. Its use as a more permanent form of shelter, a house trailer, offers contrasts to traditional recreational uses. Subsequent social, cultural, corporate, and economic perspectives afford a broad, yet defined perspective of changes in the use of trailer coaches. Not everyone welcomed or accepted the trailer coach as a form of housing. Identifying several specific markets for recreational vehicle technologies, this chapter also looks at how the industry responded to these distinct markets and their specific technological needs. Similarly, examples of various manufacturers demonstrate the diversity within the industry prior to America's entry into World War II.

Chapter Seven examines the role of the trailer coach industry during the years surrounding the war. This study demonstrates how the demands of war transformed the

travel trailer into a more permanent form of shelter -- the house trailer. The ways the general public challenged, yet accepted the trailer coach as a form of housing are also examined. Changes demanded by users serve to document technological advances made by the industry. The role of the U.S. Government is also documented to demonstrate its influence and impact on the industry. The role of the trailer coach as an alternative form of housing and the eventual permanence of that role are discussed in relation to the expansion of the house trailer industry.

Following the war, the trailer coach industry responded to change by targeting its products toward more permanent users. In that regard, Chapter Eight examines the role of the industry and its relation to consumers in post-World War II America. While recreational vehicles are the focus of this study, the role of the trailer coach as housing altered perceptions of the technology and, likewise, altered the technology itself. Still, some manufacturers continued their focus on recreational use, advancing new ideas and technologies toward that end. As the industry focus changed, by 1954 the trailer coach industry had split into two separate industrial pursuits, recreational vehicles and mobile homes. Chapter Eight uses the popular film *The Long, Long Trailer* (1954, MGM) to further illustrate the trailer coach industry split into two distinct industries. Differences between the two technologies proved so apparent by 1954 that the comedy of the film rested upon this factor. This chapter concludes by showing how the R.V. industry continued to expand economically and technologically in the late Fifties and Sixties, offering new and advanced technologies to American campers. In that light, the last chapter also demonstrates how successive generations of American campers have come to appreciate, define, and relate to the unique American landscape.

## LITERATURE REVIEW

The history of American camp culture has been documented by a diverse group of scholars and approaches. Whereas some authors examine recreational camping and vehicles within transportation histories, others prefer to contemplate camping from a leisure or recreational history perspective. Others examine the notion of camping itself within an environmental or physical geography framework. Still others focus on economic or business history or write narratives from firsthand experience. Biographical accounts also proliferate. While these accounts contributed to the study at hand, primary- source materials available in the form of corporate literature, advertising, correspondence, and business records proved most relevant to this study. Firsthand accounts in then- contemporary serials contributed significantly as did analysis of existing historical objects.

Because this study seeks to uncover the ideas and beliefs behind twentieth-century camp technology and culture and subsequent changes in those ideas, an examination of previously held beliefs and ideas is in order. A valuable contribution to the appreciation of the natural landscape and tourism in America is *Sacred Places: American Tourist Attractions in the Nineteenth Century* (1989), by John F. Sears. The author places the roots of tourism in late eighteenth-century England, noting that the wealthy "were seized by a mania for traveling in search of picturesque and sublime scenery." Sears also notes that not until the 1830s did tourism take hold in America. The author points out that "tourism requires a population with money and leisure to travel, an adequate means of transportation, and conditions of reasonable safety and comfort at the places people go to visit." Where Sears and others have followed this premise, elaborating upon railroad tourism in nineteenth- and twentieth-century America, this study seeks to carry the premise forward, focusing primarily

on the next stage of tourism, automobile touring and camping.<sup>1</sup>

Some authors investigating American perceptions of the landscape and the role of the environment approach the subject from a cultural or intellectual perspective. For these authors, the sublime experience was intimately connected to how Americans defined their nation and, thus, their own identity. Several more recent texts approach the notion of the landscape and the sublime from other perspectives. Despite their approach, these authors each turn to a specific grouping of more "classic" histories to develop their respective theses. This examination is equally indebted to these notable scholars for their analysis of the American landscape, the sublime, and the role of Americans and their technologies. Howard Segal's text *Future Imperfect: The Mixed Blessings of Technology in America* (1994) brings together many of these authors in its examination of American culture and technological progress.

Segal addresses the notion of America as an object of utopian hopes, maintaining that what "made America a potential utopia was its alleged status as a tabula rasa on which a new society could be imprinted and its possession of enough natural resources to provide material plenty for all." Segal notes that Europeans and Americans alike, from the seventeenth century on, believed "that the sheer possession of abundant natural resources guaranteed that America would become an advanced society, perhaps a utopia." Still, the author maintains that "the *potentiality* rather than reality of America as a utopia must be emphasized." Viewing America's natural resources and the wealth derived from those resources as finite, Segal notes that Americans before the mid-nineteenth century "conceived of America as at

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<sup>1</sup> Sears, *Sacred Places: American Tourist Attractions in the Nineteenth Century* (New York, Oxford University Press, 1989), p. 3.

best a *potential* utopia, but hardly a probable or an existing one." <sup>2</sup>

Segal notes in the opening of his second chapter texts which use "literary and historical materials to define and explore the 'meaning' of the 'American experience'." These texts are also useful to this study and include Henry Nash Smith's *Virgin Land* (1950), R.W. B. Lewis' *The American Adam* (1955), Vernon Louis Parrington's *Main Currents in American Thought* (1930), John William Ward's *Andrew Jackson: Symbol for an Age* (1955), and Leo Marx's *The Machine in the Garden* (1964). Segal's second chapter, *The "Middle Landscape": A Critique, a Revision, and an Appreciation*, is an examination of *The Machine in the Garden* (1964). Segal addresses the relationships between nature and technology, acknowledging examples of "numerous actual attempts -- not merely technological utopian visions -- to preserve, enlarge, and refine what Leo Marx aptly calls the middle landscape. By this, Marx means a reconciliation between technology and the pastoral." Segal states his "concern" is not to examine Marx's "grandest claim" that the pastoral ideal embodies the meaning of America -- "a claim scarcely provable, for it is metaphysical." Rather, he aims to evaluate Marx's argument "that the pastoral ideal has long best characterized the meaning of America for many Americans." <sup>3</sup>

Defining a cultural symbol as "an image that conveys a special meaning . . . to a large number of those who share the culture," Leo Marx argues that the chief cultural symbol of the pastoral ideal has been "the machine in the garden," the machine representing industrialization, and the garden equated with pastoral America. Thus, the machine in the

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<sup>2</sup> Segal, *Future Imperfect: The Mixed Blessings of Technology in America* (Amherst, The University of Massachusetts Press, 1994), p. 4.

<sup>3</sup> *Ibid.*, p. 7, 14.

garden represented the intrusion of industrialism on rural America. In his examination of responses to that intrusion, Marx seeks to understand how people responded to the reality that their garden was being intruded upon by the machine. Marx set as his primary goal the understanding of the reactions of those who redefined their responses to meet the changing circumstances. Segal points out that "the new cultural symbol embodying their redefinition was what Marx calls the middle landscape . . . a new distinctively American, post-romantic, industrial version of the pastoral design."<sup>4</sup>

Segal explains that the middle landscape "differed from the traditional pastoral not in fusing nature and civilization but in fusing them in new ways and in response to a new condition: widespread industrialism." In this process of accommodation, "the middle landscape transformed nature and civilization alike." Whereas Henry Nash Smith saw Americans transforming the wild heartland into a new Garden (a garden without machines), Marx, Segal notes differed from his mentor by seeing that the type of garden America desired "not only varied over time but gradually made room for the machine." According to Marx, after 1860 the dream of the middle landscape became more distant. For Marx, industrialization, immigration, and urbanization posed real threats to the real landscape. Thus, Marx concluded that, after 1860, "the middle landscape was no longer a realistic social and cultural ideal but a cheap rhetorical device masking a painfully different reality."<sup>5</sup>

Whereas Marx maintained that "the middle landscape had passed from the American scene" in the mid-nineteenth century, Segal contends that "neither the yearning for the

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<sup>4</sup> *Ibid.*, p. 14-15; Marx, *Machine in the Garden Technology and the Pastoral Ideal in America* (New York, Oxford University Press, 1964) p. 4-5, 32.

<sup>5</sup> Segal, *Future Imperfect*, p. 15, 16.



middle landscape nor the striving to realize it has ceased. Only the form in which it could be realized has changed." This conclusion is very important to this study, for the recreational vehicle serves as a means to an end -- the recreational vehicle has served, and continues to serve, as a way for many Americans to try to reconcile nature and technology --to reconcile the machine and the garden. As Howard Segal affirms, "the persistent quest for the middle landscape has been no forlorn exercise in nostalgia but a quite realistic and deliberate effort to reconcile phenomena -- country and city, machine and garden -- that we too often teach and are taught are irreconcilable." This study supports Segal's claim that "Americans' quest for the middle landscape continues today." <sup>6</sup>

The contents of the paragraph above resonate throughout the aforementioned texts. As Marx and Segal show, the "new middle landscape" underwent several periods of redefining. The relationships of the natural landscape to Americans of the early and mid-nineteenth century are also treated extensively by Somkin and Lewis. Specifically, these authors address the notion of "Providence" in one form or another. Whether discussing America as a potential utopia or as a tabula rasa, each of these authors treats the ideas of America as a land of potential and the American as a new human. The common thread which binds this fabric of American history is the landscape -- the pastoral, the sublime, the natural environment. Although perceptions change and history is revised, the base of these ideas rests on the vast, unique American landscape. Twentieth-century American camp culture is equally bound to these notions of the pastoral. In attempting to understand the roots of recreational camping and the reasons Americans spent their vacation time

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<sup>6</sup> *Ibid.*, p. 24.

autocamping, we should not overlook the role of the American landscape.

Vacation travel is a topic covered in Earl Pomeroy's *In Search of the Golden West: The Tourist in Western America* (1957). Pomeroy's text holds great value in its thorough examination of the American West. The author notes his purpose to consider "what the West has meant to tourists and to those who set out to attract tourists." Though Pomeroy's treatment of autocamping is not extensive, his greatest contribution rests in his far-reaching examination of "people and their ideas." In short, Pomeroy presents the reader with his view of what the West really was, what it represented to tourists, and what it meant to those who lived there -- three distinct realities.

For this study, Pomeroy's treatment of Western tourism from the 1880s to the 1910s is most relevant. The author points out that by the 1890s "the whole character of tourism in Western America, so recently established, was clearly in flux." Against a backdrop of railroad hotels, Pullman Palace car accommodations and exquisite resorts for the wealthy, Pomeroy describes the "new interests in the outdoors and in the West" which accompanied "changes in transportation and in the national economy." Pomeroy writes that the automobile "has been a major factor in a reorientation of tourists' activities and interests that goes beyond mere convenience and cheapness of access, and that long preceded the day when automobile travel meant immunity from delays, jolts, and dust." His analysis is supported by participant accounts which display a belief that the automobile had "revolutionized the average American's vacation" and, in turn, "brought about a renaissance of the outdoors." Still, Pomeroy's idea of "a renaissance of the outdoors" is misleading. Renaissance implies a rebirth or reawakening. While the statistical number of autocampers suggests a growing devotion to the outdoors and recreational travel, Pomeroy's own account

of railroad tourism proves that a reverence for the natural or sublime already existed within American culture. As the following text demonstrates, the automobile only furthered the growth and development of this reverence.<sup>7</sup>

Other authors have dealt with both the influence campers have had on the environment and the role nature has played in fostering growth in camping or outing experiences. Peter Schmitt's *Back to Nature: The Arcadian Myth in Urban America* (1969), for instance, examines the relevance nature has had to American history. Schmitt looks at the "urban sprawl" and the social and cultural notions it encompassed. Specifically, he looks at how "the modern metropolis not only refashioned the physical environment of townspeople and reshaped their institutional life, but also profoundly altered the way in which they perceived the natural world outside the city." As a "refuge" from the hectic urban lifestyle "there developed a 'back to nature' movement." Schmitt explains the various avenues this movement took in the late-nineteenth and early-twentieth century. These notions included nature photography, novels, children's literature, nature tramping or hiking, camping and touring, city parks, and even house designs that included the popular renovated farmhouse, estates with landscaped gardens, and California bungalows with merely a sleeping porch. For the most part, the back-to-nature movement did not imply returning to the wild landscapes of the nation. Rather, it implied various ways to have nature molded to conform to prevailing romantic notions of what nature should be. In short, the back-to-nature movement could more accurately be described as bringing nature to the urban

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<sup>7</sup> Pomeroy, *In Search of the Golden West. The Tourist in Western America* (New York, Alfred A. Knopf, 1957), p. 145, 146.

lifestyle. In that light, the recreational vehicle came to serve as a means of taking the urban lifestyle to nature's arena.<sup>8</sup>

Schmitt shows that in the early twentieth century the "back to nature" movement, initially a preoccupation with the more affluent, "shifted from being a luxury of the rich to a preoccupation of an urban middle-class." A similar conclusion is formed by Alfred Runte in his books *National Parks: The American Experience* (1979) and *Trains of Discovery: Western Railroads and the National Parks* (1984). Runte's examination of autocamping similarly presents a picture of urban and industrial growth as factors strongly influencing the development of camping technologies. This "increasing appreciation of nature," leads the author to examine the origins of camping, in which he concludes that wealthy Americans were the primary impetus behind the growing camp facilities and related equipment market. For this study, both Schmitt's and Runte's works provide valuable background information.

Hans Huth, in *Nature and the American* (1990), similarly traced the origins of automobile touring and camping to wealthier Americans. Like Schmitt and Runte, the author describes the influence the automobile has had on the environment and also the changes the notions of "camping out" underwent with the increasing availability of automobiles and related services -- roads, service stations, tourist attractions. Huth concludes correctly that as automobiles became more affordable, more Americans tried autocamping. The role of the automobile in people's getting back to nature has been documented by a number of scholars. As noted, much of this history is intertwined with larger analysis of the automobile itself.

One historian who addresses autocamping is Warren J. Belasco. In *The Automobile*

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<sup>8</sup> Schmitt, *Back To Nature* (New York, Oxford University Press, 1969), p. vii-ix.

*and American Culture* (1983), edited by David L. Lewis and Laurence Goldstein, Belasco briefly accounts for autocamping in the chapter "Commercialized Nostalgia: The Origins of the Roadside Strip." This condensed version is drawn from the author's expanded analysis, *Americans on the Road: From Autocamp to Motel, 1910 - 1945* (1979). Belasco examines roadside services that developed adjacent to autocamping -- the motel specifically. Belasco argues that autocamping, "an inexpensive, individualistic sport with rebellious antiestablishment implications, evolved into the motel." This examination, however, will explain the differences between autocamping and touring. If in fact the two were the same, then we would certainly have seen more recreational vehicles parked in motel parking lots.

Belasco separates his history of autocamping into four stages: (1) Vagabonding or Gypsying, (2) Municipal Camps, (3) Pay Camps, and (4) Cabins. If we recognize where the author intends to lead the reader, his categorization is acceptable. Belasco opens his treatment noting that autocamping, until about 1920, remained "an entirely uncommercial, spontaneous activity." This position, however, fails to recognize the prosperous camp equipment industry and commercialized tourist attractions which already existed in this nation decades before the arrival of the automobile. A perusal of contemporary literature aptly portrays the extent to which manufacturers of the time sought to promote their goods. Belasco, however, does not elaborate upon camp equipment manufacturers. Moreover, while some autocampers could act "spontaneously," most of them considered their trip in depth and planned accordingly. Certainly the lack of facilities and an infrastructure still in its infancy did not encourage spontaneity as much as it did precautions.

Arguing that the novelty and adventure of touring have "long since been lost,"

Belasco fails to recognize the sense of adventure experienced by motoring Americans every

day. One could argue that the novelty and adventure of autocamping have changed over time, but to assert that it no longer exists is wrong. Moreover, the author mistakenly contends that autocamping changed from a "romantic retreat" into "the tourist camp or motel." Autocamping as a term indicates the action of camping with the use of an automobile. For Belasco, the notion implies a place or location rather than an action -- a noun rather than a verb. While this approach adequately leads the author toward a history of the roadside motel as a place, it does not account for the action of camping, the mode of travel, or the underlying reasons for going in the first place. For this investigation, the methods and the means are both examined. Belasco concludes his preface noting his frustration and sense of unfulfilled satisfaction in his task. He writes that "maybe motorists took the wrong path." Perhaps the author took the wrong path. By taking the "romance" out of the camping experience, Belasco discounts what is, perhaps, the main impetus behind the whole outing experience -- a getaway to the sublime American landscape. Autocamping and auto-touring existed as two distinct activities.<sup>9</sup>

Several titles offer broad examinations of recreational vehicles and the camping phenomenon. Bernard Mergen's *Recreational Vehicles and Travel: A Resource Guide* (1985) offers numerous sources regarding recreational vehicles. As the title suggests, Mergen's text is a resource guide and therefore contains a variety of materials. For Mergen, recreational vehicles include not only campers but everything from snowmobiles to rowboats. The author includes automobiles, campers, and trailers in chapter four. Regarding

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<sup>9</sup> Warren J. Belasco, *Americans on the Road: From Autocamp to Motel, 1910 - 1945* (Baltimore, Johns Hopkins Press, 1979), p. ix.

the history of trailer coaches, Mergen states that the accepted "standard history of trailers" is Carlton Edwards' *Homes for Travel and Living* (1977). Although Edwards offers valuable information on the trailer coach industry, equipment, trade associations, publications, and his bibliography is extensive, as Mergen points out, it is "not a scholarly work." Despite obvious weaknesses such as lack of narrative and proper source citations, Edwards offers technical details on recreational vehicle technology not found elsewhere. For that, this author is indebted.

Similar to Carlton Edwards' broader portrayal of the industry, *The Development of the Trailer Coach Industry* (1953), an unpublished dissertation by Taylor W. Meloan, offers another account of the trailer industry evolution from producing travel trailers to manufacturing mobile homes. Meloan details "the manufacturing, marketing, financing, and legislative problems facing the industry" although he limits his dissertation study primarily to "production of trailer coaches in the Middle West." While Meloan offers valuable information on marketing, financing, and legislative aspects, his seven-page history of the "Inception and Early Growth of the Industry" is not entirely accurate or insightful. Unfortunately, like many others, Meloan cites Elon Jessup's *Motor Camping Book* (1921) to note the development of the tent-trailer in 1921. Jessup, a former editor of *Outdoor* magazine, published several texts offering advice on autocamping. Still, Jessup, and those who wrongly cite him, needed only consult *For Downer* or *Popular Mechanics*, among others, to know that at least ten manufacturers produced camp-trailers before 1921. In a similar vein, Meloan mistakenly maintains that Arthur Sherman's trailer coach, the Covered Wagon, was an improvement over his "commercially produced tent trailer." Evidence clearly shows that Sherman never built folding camp trailers. As this study also indicates, it was Sherman's

disgust with the camp-trailer setup and takedown procedures that led him to design and build his first trailer coach in 1928. Another weakness of the author is source citations -- a December 1940, *Business Week* article as the source of 1941 statistics, for example.<sup>10</sup>

Meloan is also mistaken in his belief that the Conestoga wagon was the first mobile home in the United States. While the mythical or symbolic connection to the Conestoga wagon is appealing, it is not as historically accurate as many Americans wish or perceive it to be. These two technologies were very different. One was used primarily to transport settlers and possessions to a new geographical environment, while the other carried specific goods for camping and touring purposes or, later, served as a home. The major connection between the Conestoga wagon and the trailer coach rested in the notion that the former served as a cultural symbol for users of the latter.

Several authors have attempted to portray the social and cultural life surrounding trailer coach technology specifically. Although useful to this study, not all are entirely accurate. Carlton Edwards more accurately accounted for the split in the trailer coach industry and the Trailer Coach Manufacturers Association (T.C.M.A.) in 1952, not 1963, as Allan Wallis states. The split actually occurred in October 1953. In *Wheel Estate* (1991), Wallis includes some technical details, but, like other narratives, the prominent theme is of the trailer coach as a flexible low-cost alternative to conventional housing. The roots of recreational camping remain obscure. David Thornburgh's *Gallopings Bungalows* (1991) similarly examines the role of the trailer coach as housing. Although the trailer coach did come to be used as a home, a mobile home, by focusing on this point, both authors have

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<sup>10</sup> Taylor W. Meloan, *The Development of the Trailer Coach Industry* (unpublished dissertation, Indiana University, 1953), p. 8. Copy found in the holdings of the RV/MH Hall of Fame and Library, Elkhart, Indiana.



failed to examine the role of the trailer coach as a recreational vehicle. Thornburgh's title is misleading for just that reason: The "galloping bungalow" galloped its way right into a trailer park never to gallop again. Moreover, Wallis's title *Wheel Estate* suggests a parcel of property, or real estate, upon which the trailer coach becomes a permanent fixture. Still, as a personal narrative, Thornburgh's work offers an interesting view of what *home* life in a trailer was like.

In examining the trailer coach as a form of housing, both Wallis and Thornburgh overlook numerous industry developments which occurred in the travel-trailer sector. Although Wallis provides an adequate account of the manufacturing process at Sherman's Covered Wagon plant, his perspective is slanted by his approach to the problem. Wallis interprets the trailer coach as a trailer *home* and not a *travel* trailer. The Covered Wagon trailer coaches were, foremost, travel trailers. Thornburgh's approach follows this same avenue. Intent on bridling his galloping bungalow, Thornburgh wrongly concludes that in the period 1935 - 1948 trailers changed very little.

One account that briefly notes changes in trailer coach technology is Donald O. Cowgill's *Mobile Homes: A Study of Trailer Life* (1941). Cowgill's narrative notes in three pages the development of tent-trailers and trailer coaches between 1921 and 1941. Cowgill is another of several authors who inaccurately cites Elon Jessup as the primary source of information regarding camp-trailers. While Cowgill's dissertation offers the reader a whiggish interpretation, the bibliography contains an extensive list of early serial articles related to autocamping and the trailer coach. Also noteworthy is his firsthand account of the meeting between the Tin Can Tourists of the World, Inc., and the Automobile Tourists Association during the Summer of 1939.

Kay Peterson's *Home Is Where You Park It* (1977) is another personal narrative of living in a travel trailer. Her history of the trailer coach is covered in eight short paragraphs, and her position that wartime conditions "led to the beginning of a new life-style" is mistaken. "The twentieth-century nomad in a modern RV home" existed at least a decade before World War II. Although the conditions changed, the basic premise remained the same. Peterson is correct, however, in alluding to the changes generated by wartime conditions, a point developed in chapters six and seven of this study.

Although primarily an economic analysis of the industry from 1950 to 1980, Arthur D. Bernhardt's *Building Tomorrow: The Mobile/Manufactured Housing Industry* (1980) offers some insight into the trailer coach industry of the 1930s and 1940s. His historical background of industry production and distribution systems presents the reader with an accurate but scant account of industry involvement. Though his account of the establishment of the "trailer park system" is much too brief, Bernhardt accurately depicts the 1950s division of the industry into two distinct elements manufacturing two distinct lines of products -- the mobile/manufactured home industry, and the travel trailer or recreational vehicle industry. Circumstances leading up to this split in the industry have yet to be accounted for and are developed in chapter eight.

By 1938, the camp-trailer, the trailer coach, the auto-conversion, and the fifth-wheel trailer had each emerged as specific types of recreational vehicles. The next type, the pickup camper, is described by John Gartner in *All About Pickup Campers, Van Conversions and Motor Homes* (1969). Gartner, like Edwards, presents Walt King as the individual who first built and sold pickup campers in the late Forties. Noteworthy, Gartner's fifth chapter, "How They Are Built," provides a technical examination of the manufacturing process. Other

accounts of manufacturing processes are found in the biographies of Glenn Hammond Curtiss and William Bushnell Stout.

Cecil R. Roseberry's *Glenn Curtiss: Pioneer of Flight* (1972) has served as the background history to the Motor Bungalow and the Curtiss Aerocar, the two trailer coaches designed and built by Curtiss. A more recent article by Roger White, "Planes, Trailers and Automobiles: The Land Yachts of Glenn Curtiss," offers a more contextual approach to understanding Curtiss and his inventions. Although White documents the developments of these trailers, he does not examine these developments within a social or cultural framework in relation to other recreational vehicles. Rather, he explains the Motor Bungalow (1919) and the Curtiss Aerocar (1928) in relation to other Curtiss inventions. Though not an improper frame of reference, it omits the ambience or social milieu in which the "Rolls Royce of trailer coaches," the Aerocar, existed. Still, White's technical details are well researched and have contributed significantly to this study.<sup>11</sup>

William B. Stout's autobiography, *So Away I Went* (1951), provides the reader with specific details on the original "expansible trailer" developed by Stout in 1937. The expandable trailer was manufactured as wartime housing after Stout licensed the coach to Palace Trailer Coach Company, of Flint, Michigan. Other than Carlton Edwards, few authors have noted Stout's development of the expansible trailer or the numerous alterations made to his design during World War II. Equally lacking are examinations of the social changes which resulted from using trailer coaches as wartime and postwar housing. Similarly, few authors have noted the Travelodge trailer coach produced by the automobile

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<sup>11</sup> Roger White, "Planes, Trailers and Automobiles: The Land Yachts of Glenn Curtiss," *American Quarterly*, vol. 32, no. 3, January 1994, p. 31-47.

firm Pierce-Arrow. For basics on the Pierce-Arrow trailer coach, Marc Ralston's *Pierce-Arrow* (1980) and Brooks T. Brierley's *There Is No Mistaking A Pierce-Arrow* (1986) offer the most thorough accounts.

In a similar vein, Michael A. Rockland's *Homes on Wheels* (1980) provides one of the most complete examinations of Wally Byam's Airstream travel trailer. Still, much of that history remains unwritten. Even Wally Byam's *Trailer Travel, Here and Abroad* (1960) fails to provide any historical context to the development of the streamlined, aluminum-skinned Airstream trailer. Unfortunately, Rockland also fails to document any of Byam's contemporary cousins. Instead his narrative examines the role of recreational vehicles in 1970s America which, predictably, ends with the chapter, "Homes on Wheels: The Future."

Wally Byam opens *Trailer Travel Here and Abroad* by identifying his text as a biography of trailer travel that "is necessarily, the biography of trailer travelers -- in this instance the Caravanners." In that regard, Byam offers a personal account of the many international "caravans" he and other Airstream owners enjoyed. In his second chapter, "Trailers Yesterday and Today," Byam offers a vague historical context written more to herald his own arrival on the "trailer scene" than to provide any historical detail. For instance, Byam's historical approach opens with, "the first trailer I ever saw," in the early twenties, was a camp-trailer. Byam's whiggish approach further contends that the camp trailer was "superseded by an even more radical innovation - a box which literally rested upon the axle and contained a bed you could crawl into." Again, the author notes his personal experience in that "the first trailer I built for myself was of this type." Although no details are provided, this author fails to understand how a box on an axle with a bed is more radical than a camp trailer that unfolded into a complete camp outfit – two beds, a cook-stove, an

icebox, and food and clothes lockers.<sup>12</sup>

According to Byam, progression of trailer technology was steady -- "canvas tent, of course gave way to plywood . . . later the plywood to masonite; then masonite to metal." The author, however, is mistaken on both accounts. The argument that follows will clearly show that camp-trailers flourished into the thirties, until trailer coaches came into dominant use. Secondly, canvas did not "give way" in so much as other technological solutions emerged. The use of canvas for roof and wall coverings on trailer coaches persisted into the Forties, and the canvas tent, of course, remains a viable camping technology. Despite his work's lack of footnotes, bibliography, and historical documentation, Byam does present an interesting social account of the Caravanners' travels. The Airstream historians who write about their roots with Wally Byam, their various outings, and their beliefs about the roots of Airstream do deserve praise for their efforts. The lack of evidence to support a variety of claims, however, cannot stand as history. Some details may never be known for sure regarding Byam's use of aluminum and his ultimate well-known design. Primary source materials regarding Byam's early trailers remain to be found, if they even exists. This quandary is detailed further in chapter six.

Whereas each of the above-mentioned authors have examined some individual facet of American camp culture or camp technology, this study focuses on the social needs and cultural desires of American autocampers and the technological solutions to the problems presented by those perceptions. This examination also benefitted from those sources noted in the bibliography. In the examination of American camp culture, the one element which

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<sup>12</sup> Byam, *Trailer Travel Here and Abroad: The New Way to Adventurous Living* (New York, McKay, 1960), p. 160.

continuously binds ideas and perceptions proves to be the unique American landscape. In remaining true to themselves and their national identity, Americans set aside natural areas to remind themselves and others of the roots of American national identity: to remind us all with the best means possible of what it meant to be an American, what is uniquely American, and what role the sublime American landscape plays in these notions. For this study, the role of nature and the sublime serve as a background to the cultural craze with camping. In understanding the ideas and notions surrounding the American landscape and its relationship to the sublime, one can better understand the roots of recreational camping in America. Camping or getting away serves as a means for many Americans to continue to identify, and revise, the meanings of America and American. Recreational camping and the RV itself serve as cultural elements or symbols even today. For many, they identify not only a means to a symbolic American experience; they also serve as a democratic expression of freedom and all that it entails.<sup>13</sup> Whereas some might argue that a history of recreational vehicles should begin with the English caravans of the late-nineteenth century, this study discounts that influence. Rather, this study seeks to show that American camp culture was, and remains, an American experience rooted in various ideals and perceptions advanced in America from the time of our forefathers up through today. While some ideas may be rooted in European thought, the outcome of those ideas in America presents an altered or redefined perception. An examination of those perceptions is the task at hand.

As America expanded, forming its current continental borders, thousands of settlers

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<sup>13</sup> While the term "democratic freedoms" is certainly subjective, this author contends that RV's serve as a democratic expression of freedom in that anyone can go camping today. Whether at a free or cheap campsite and a "garage sale find" for equipment, or as a member of the exclusive RV'ers clubs and associations, or even the wealthy with units ranging upwards of \$250,000. -- each serve as an expression of democracy. Coupled with the freedom of movement afforded American motorists, one need only pack up and go.

ventured to explore the vast land and establish their historical roots, and in turn establish a piece of America's cultural identity. While the point of this investigation is not to examine westward migration, the cultural notions contained within this phenomenon continue to influence Americans even today. Whether venturing on foot, voyaging on a keelboat, or using animal power, many Americans heard the call to "go West," and it instilled in them a sense of nomadism. The urge to pack up and go greatly contributed to settlement of the United States and the expansion of democracy. As the young nation grew and expanded its borders, many Americans saw "the West" as a continuation of commonly held beliefs of America as a tabula rasa or a potential utopia. Indeed, many viewed themselves as active participants in forming the character and myths, of not only the American West, but the larger identity of *America* and *American*. In essence, then, the automobile, recreational vehicles, and American camp culture continue to serve as means to an end: the means by which thousands of Americans identify themselves, interpret their national heritage, and enjoy the beauty of the American landscape.

# CHAPTER 1

## THE ROOTS OF RECREATIONAL TRAVEL IN AMERICA

Give me light, the fields, the mountain side,  
The song of birds, the memories that cling,  
To journeys where sweet nature's secrets hide.<sup>14</sup>

America is unique. Even before this great land became a nation, many individuals set out to explore its natural wealth and beauty. America was considered the "New World." Americans of the late-18th and 19th century believed in that notion, even if they had to modify the idea to fit the vision they had of themselves. Americans identified their nation as a tabula rasa – an Edenic paradise unspoiled by overpopulation and the depletion of natural resources, open and airy rather than choking from hasty industrialization and dense urbanization.<sup>15</sup>

As historian Howard Segal suggests, America was viewed as a potential utopia, a tabula rasa upon which a new nation could be imprinted. The notions of *potentiality* and

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<sup>14</sup> Quote by John F. Smith, as found in "Birchmont: A Camp for Adults," ca. 1915, Elizabeth Barret Browning quote, Smithsonian Institution, National Museum of American History (hereafter cited as SI/NMAH). Warshaw Collection, Camping, folder 15, Camps (Accession, NMAH 60).

<sup>15</sup> Fred Somkin, *Unquiet Eagle, Memory and Desire in the Idea of American Freedom, 1815-1860*, (Ithaca, Cornell University Press, 1967); R.W.B. Lewis, *The American Adam: Innocence, Tragedy and Tradition in the Nineteenth Century*, (Chicago, University of Chicago Press, 1955); Marx, *The Machine in the Garden*; Segal, *Future Imperfect*.



*uplifting* America fit squarely in a discussion of the relationships between nature and technology and are illustrated by historians Fred Somkin and Richard Warrington Baldwin Lewis in a variety of ways. Both authors specifically refer to George Bancroft's *History of the United States*, a ten-volume work written between 1834 and 1876, to support their respective points.

Lewis regards Bancroft's work as "less a history than a myth of origins."

Subsequently, he describes Bancroft's history as "thematic, not inclusive . . . it is not an account but a celebration of its subject: How Providence, as Bancroft said in the Introduction, 'conducted the country to its present happiness and glory'." Lewis elaborates further that Bancroft's *History* functioned as a "positive demonstration that the New World was the victorious climax of the long and painful effort to start afresh." For Lewis, the main character in this play of Providence proved to be his title character, the *American Adam*.<sup>16</sup>

In *The American Adam* (1955), R.W.B. Lewis states his intention "to disentangle from the writings and pronouncements of the day the emergent American myth and the dialogue in which it was formed. The American myth, unlike the Roman [the *Aeneid*], was not fashioned ultimately by a single man of genius. It was and it has remained a collective affair; it must be pieced together." Illustrating differences between the Roman myth and the American, Lewis argues that "the American myth saw life and history as just beginning. It described the world as starting up again under fresh initiative, in a divinely granted second chance for the human race, after the first chance had been so disastrously fumbled in the

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<sup>16</sup> Lewis, *The American Adam*, p. 165.

darkening Old World. It introduced a new kind of hero, the heroic embodiment of a new set of ideal human attributes." <sup>17</sup>

Lewis writes that American culture "yielded up its own special and identifying myth" -- the myth of Adam -- to accommodate the conditions of a new world, a new history, a new Eden. Seeing America as a new Eden, the American Adam symbolized innocence, Adam before the fall. America had no past; therefore, only the present and the future mattered. Along with this sense of enormous possibility -- *potential* -- Americans recognized their *duty* or *obligation* to rid their new Eden of outside influence. Specifically, Americans sought to rid themselves of Old World ideals, European-style institutions, social practices, literature, and religious doctrines. According to Lewis, this "purgative action" preceded Adam, for Adam could not go into a new Eden if it was tainted by Old World cultural baggage, at least according to the myth. What Americans sought to establish was their own identity in relation to, and as influenced by, their own natural surroundings, the landscape of the *New World*.

Addressing the notion of "potentiality" in *Unquiet Eagle*, Somkin writes that "whatever its varying formulations the idea of an American destiny has been perhaps the central focus of American self-consciousness." Continuing, the author writes that from roughly 1815 to 1862, "America was engaged in a quest for a definition of self that would give meaning to the American past, present, and future. The questions 'What is America?' and 'Who are the Americans?' had been asked before, but not with particular urgency." For Somkin, the return visit of Revolutionary War hero Lafayette, in 1824 - 1825, served as a "grand opportunity" for such reorientation and assessment. He expresses this point in his

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<sup>17</sup> Lewis, *The American Adam*, p. 4.

introduction, where he notes that "with the passing of the Revolutionary generation . . . it remained for a generation of Americans born free to discover for themselves in a shifting environment what it meant to be an American and what the destiny of America was."<sup>18</sup>

In studying these ideas and attitudes, Somkin notes the works of those who preceded him. Specifically, he writes that there is now (1967) "convincing evidence of widespread nostalgia and regret for the past. Somewhere in this period, it is now fairly clear a great American body lies buried, whether it is Parrington's agrarian democracy, an Edenic forest paradise, or simply an Adamic condition of moral innocence." As these authors have so admirably explained, Americans from the early-nineteenth to the early-twentieth century viewed the relationship between *nature* and the *American* differently. In attempting to understand this relationship, Americans formed a myth of an Edenic America -- an America innocent of corruption, overpopulation, industrialization, and urbanization. Still, Americans also had to deal with the changing reality of America's *potential*. In turn, this produced a reconceptualization of the Adamic myth, a redefinition of the middle landscape. At other times, it meant disillusionment and a sense of betrayal. To wit, Europeans questioned America's Adamic myth, citing prosperity from technology and natural resources as evidence to the contrary. To maintain, untarnished, their American myth, Americans countered the European position, arguing it was destiny and Providence that led America down such a prosperous path. That America was prosperous only proved their providential pronouncements.<sup>19</sup>

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<sup>18</sup> Somkin, *Unquiet Eagle*, p. 3.

<sup>19</sup> *Ibid.*, p. 3-4.

That reality did not resemble the myth is a point addressed by many of the authors cited. For Somkin, it is the body that lies buried, while Marx notes his interest in the consciousness of dissonance. Lewis, on the other hand, offers more contemporary evidence to track the myth itself. Still, as Somkin aptly concludes, "an ever-growing prosperity forced Americans to consider the relationship between material progress and America's spiritual duty to remain true to itself." In short, the myth had to be reconsidered. For Marx, this reconsideration translates into a transition from the pastoral to the new middle landscape. For this study, Marx's new middle landscape serves as a frame of reference. The history of American camp culture and camp technology clearly demonstrates how the ideas of the sublime pastoral landscape accommodated changes in technology, technology which came to be associated with the heart of the middle landscape. Though it need not be said, recreational vehicles serve as a means for Americans to carry the "necessities" of urban America into the natural landscape. In that sense, the middle landscape accommodated the industrial.<sup>20</sup>

As Leo Marx notes in the opening paragraph of *The Machine in the Garden*, "[t]he pastoral ideal has been used to define the meaning of America ever since the age of discovery, and it has not yet lost its hold upon the native imagination. The reason is clear

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<sup>20</sup> While the goal of this study is not to specifically address environmental considerations, accepting the notion of RV's serving as a means of bringing the machine into the garden could irritate some readers. Initially, two arguments come to the fore: Whereas environmentalists or those respectful of preserving nature might argue that RV's hamper the environment with things like extra roads and paved campsites, fewer branches overhanging routes, sewage disposal areas and the like, others could argue that the use of RV's rather than other means preserves nature because individuals are not cutting limbs for tent poles and pine boughs for bedding, not to mention the number of fires not being built because of propane stoves and built-in microwave ovens. This author will not choose sides. When I was a child, my family vacationed with a 30' Coachman fifth-wheel; as an adult, I camp with a tent. Still, as a creature of comfort, I believe that an RV is in my future. To those who enjoy their comfort-on-wheels I would only say this: Go because you enjoy it, but don't forget your heritage. Remember what makes Americans unique, the American landscape. Truly, there is no other like it, and we must all act responsibly to ensure that future generations have the same opportunity for this uniquely American sublime experience. Whether or not Americans continue to derive some identity from the landscape remains to be seen, and for another historian to document.

enough. The ruling motive of the good shepherd, leading figure of the classic Virgilian mode, was to withdraw from the great world and begin a new life in a fresh, green landscape. And now here was a virgin continent!" Similarly, in *Sacred Places*, John Sears notes that Americans sought their national "identity in their relationship to the land they had settled." Sears develops the notion further, pointing out that tourism provided "a means of defining America as a place and taking pride in the special features of its landscape." Americans turned to the landscape for a variety of reasons, but one primary reason rested in the fact that Americans did not have ancient ruins or majestic cathedrals to point to as symbols of their culture and civilization. Instead, Americans pointed to the sublime, pastoral landscape with its unique and abundant natural wonders. In the preface to *Wilderness and the American Mind*, Roderick Nash summarizes this notion, writing, "wilderness was the basic ingredient of American civilization. From the raw materials of the physical wilderness Americans built civilization; with the idea or symbol of wilderness they sought to give that civilization identity and meaning." <sup>21</sup>

Around the same time the Colonies began their fight for independence, tourism began to take hold in Europe, and especially in England. "Stimulated by the popularity of landscape gardening and painting, and by the publication of a series of widely read essays on the sublime, the beautiful, and the picturesque, well-to-do English people were seized by a mania for traveling in search of picturesque and sublime scenery." Edmund Burke's *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, published in 1757, probably stimulated the most interest in England, Europe, and the colonies. In

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<sup>21</sup> Marx, *Machine in the Garden*, p. 3; Sears, *Sacred Places*, p. 4-5; Roderick Nash, *Wilderness and the American Mind* (New Haven, Yale University Press, 1973, Revised edition), p. xv.

America, as in Europe, appreciation and enthusiasm for wilderness, based in the sublime, found its beginnings "among writers, artists, scientists, vacationers, gentlemen -- people, in short, who did not face wilderness from the pioneer's perspective."<sup>22</sup>

Early accounts of America's natural landscape, like those of Thomas Jefferson in *Notes on the State of Virginia* (1787), perceived the landscape primarily from the perspective of natural science. Still, as the works of a gentleman naturalist, Jefferson's writings also reflected his familiarity with the notions of the sublime and picturesque. In *Notes*, Jefferson combined these notions to defend the American environment, among other things, against charges that it was inferior to that of Europe. From that perspective, *Notes on the State of Virginia* served as Jefferson's answer that America "was second to none where nature was concerned." Not only had Jefferson refuted charges of inferiority; he continued his interests in the American landscape, spending hours examining the maps, notes, and specimens from the Lewis and Clark expedition.<sup>23</sup>

American interest and pride grew with every successive voyage or expedition undertaken to chart and explore the vast American landscape. This appreciation appeared in many forms and appealed to American sentiment. Artists like Thomas Cole and Frederic Church captured these inspiring images while writers like William Byrd II, Henry David Thoreau, and James Fenimore Cooper painted mental images expressed through words.

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<sup>22</sup> Nash, *Wilderness and the American Mind*, p. 45, 51; See especially chapter three, The Romantic Wilderness, where Nash accurately argues that "In the sixteenth and seventeenth centuries, Europeans laid the intellectual foundations for a favorable attitude" toward the wilderness. Further, "the concept of the sublime and picturesque led the way by enlisting aesthetics in wild country's behalf," and as such, these "ideas fed the Romantic movement which had far-reaching implications for wilderness."

<sup>23</sup> *Ibid.*, p. 68.

Images of Niagara Falls and descriptions like Jefferson's of Virginia's Natural Bridge presented Americans with the earliest glimpses of their natural wonders.

Among the most popular sites, Niagara Falls had attracted Americans since the earliest years of the nineteenth century. Eastern beaches also proved attractive early on, principally due to their proximity. Other areas as well, like the White Mountains of Vermont, the Adirondacks, the Pocono Mountains of Pennsylvania, and the Chesapeake Bay area, held a uniquely sublime experience for those who ventured there. Certainly, "America had begun to discover nature well before the Civil War, through Thoreau and his collaborators." Moreover, Western history is replete with accounts of how "the earliest Westerners amused themselves on local camping trips," often to the coast to pick berries or "to fish and eat rock oysters. Before there were roads they went on horseback, later by wagons."<sup>24</sup>

Among the most notable and documented routes, horse and wagon trails ran between Yosemite Valley and the Mariposa Grove of Giant Sequoias, and the surrounding towns. *Bancroft's Tourists' Guide Around the Bay. (South) Yosemite*, published in San Francisco in 1871, was advertised as a "pocket guide to Yosemite Valley and the Big Trees." The "pocket guide" not only included railroad and stage routes among its two-hundred fifty-six pages; it also included another fifty-six pages of advertisements for railroads, hotels, and private homes with rooms for rent. Another guide which first appeared around 1868, *Croft's Trans-Continental Tourist's Guide*, included a map of the Valley in addition to specifics on "routes." Enticing the traveler to explore the Yosemite Valley, Croft wrote of the "*majesty*

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<sup>24</sup> Earl Pomeroy, *In Search of the Golden West*, p. 40-1.

! *enchanting ! awe inspiring ! indescribable !*" sublime wonders which awaited the curious traveler. Similarly, Bancroft opened his text writing, "You are going to Yosemite. Of course you are. What else did you come to California for? The idea of a man in his right mind, having the slightest love of beauty, grandeur and sublimity, coming to California and *not* going to Yosemite. Preposterous, incredible, impossible." John Conway's *Tourists' Guide From The Yosemite Valley to Eagle Peak, for the Spring and Summer of 1879*, approached the "routes" subject in similar fashion, advertising the "sublimest pictures" and the "feeling of awe and bewilderment [that] pervades you," before writing of the long routes necessary to gain access to the Valley. The stage route from Modesto followed the Tuolumme River to Chinese Camp, and on through Sonora and Murphy's Camp to the Big Trees of Calaveras Grove, for a total of seventy-one miles. The route from Modesto to Chinese Camp and straight on to Coulterville covered fifty-six miles. If one traveled to Yosemite from Merced via Snelling, the distance was ninety-two miles. Either way, the horse, stage, or wagon trip to the Yosemite Valley proved an extended outing. Unfortunately, without diaries or such, there is no way of determining how many people camped out in the Valley instead of staying in lodges or inns nearby. We do know, however, that travel to the area continued to grow.<sup>25</sup>

Probably the second-most popular destination in the later-nineteenth century, Yellowstone National Park, placed under Federal protection in 1872, developed extensive horse and wagon routes. Crofutt's and Bancroft's later guides both detailed the early

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<sup>25</sup> *Bancroft's Tourists' Guide Around the Bay, (South) Yosemite* (San Francisco, A.L. Bancroft & Co., 1871), Huntington Library; *Crofutt's Trans-Continental Tourist's Guide* (New York, George A. Crofutt, Publisher, 1872), Dibner Library, Smithsonian Institution National Museum of American History; John Conway of Cold Spring House, Chowchilla, Mariposa, and Yosemite Road, Mariposa County, California, *Tourists' Guide From The Yosemite Valley to Eagle Peak, for the Spring and Summer of 1879* (San Francisco, Spaulding, Barto & Co., Printers, 1879) Huntington Library, Accession, 441289.



Yellowstone routes. *The Official Guide To The Yellowstone National Park: A Manual For Tourists*, published in 1888, offered tourists the "Grand Tour of the Park" in eighty-five pages. In addition to offering the "History and Exploration" of the Park, *The Official Guide* provided specific routes and "distances between points of interest." Although established in 1872, the Park road system developed slowly through the rough, mountainous terrain. Despite problems with the original plans, construction materials, leadership, and federal oversight and funding, the Yellowstone road system covered almost four-hundred miles by the turn of the century. Much of this construction is documented in *Yellowstone National Park, Historical & Descriptive*, written by the gentleman in charge of the road system from 1899 to 1906, General Hiram Martin Chittenden, who deserves credit for having "laid out and constructed much of the highway system."<sup>26</sup>

Essential to tourism and "seeing the sights," the earliest Yellowstone roads connected with the Northern Pacific Railway branch line at Gardiner Gateway, Yellowstone's northern entrance, and with the Union Pacific spur line near the west entrance. Touring the Park in the mid-1880s, tourists had several choices in travel arrangements, accommodations, and "tour packages." Northern Pacific offered "a string of hostelryes as early as 1886," and, between 1889 and 1891, the railroad constructed the exquisite Yellowstone Lake Hotel. Railroad tour packages included a carriage or stage tour between the major sites. For those who desired something different, whether that meant cheaper, available for a longer duration,

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<sup>26</sup> Ibid., Crofutt's *Guide* for 1872 notes the Union Pacific route through Helena, Montana and the nearby, "Great National Park" at which time, no "roads" existed. Hiram Martin Chittenden, *Yellowstone National Park, Historical & Descriptive* (Stanford, Stanford University Press, 1949; Originally published, New York, The Baker and Taylor Company, 1895; Revised ed., 1903); Also see the five maps illustrating road construction for the years 1883, 1886, 1892, 1903 and 1905, in, Aubrey L. Haines, *The Yellowstone Story: A History of Our First National Park* (Yellowstone Library and Museum Association, Yellowstone National Park, Wyoming, in cooperation with Colorado Associated University Press, 1977), p. 214.

or more primitive, the Wylie Permanent Camping Company, and later the Shaw & Powell Camping Company, offered an alternative to the hotel or railroad package.<sup>27</sup>

William Wallace Wylie established the Wylie Permanent Camping Company around 1883. As early as 1881, Wylie guided tourists through the Park in a wagon. Chittenden noted that by 1883, the Bozeman, Montana, school superintendent had established himself offering "ten-day tours in portable camps. Later he made these camps 'permanent' in location." Wylie offered "hotels under canvas" where individuals could stay as long as they pleased during the season. Advertising his "hotels" as "permanent camps of airy, sanitary tent-cottages, floored, dry, and provided with stoves for chilly weather," by 1915, Wylie had established a chain of nine permanent camps and lunch stations, operated in conjunction with its own stage line. The Shaw & Powell Camping Company operated a similar camp and stage-line business which opened in 1913. By May 1919, when John R. Eustis, Director of the Independent Motor Service, published his *Independent* article "Gipsying De Luxe," Yellowstone National Park had "six hundred tents, with board floors" to accommodate visitors. From all accounts, and notably Wylie's expansion, the idea of camping in a tent appealed to many tourists, especially those who could not afford the expensive hotels. Wylie went on to establish similar camps at the North Rim of the Grand Canyon and in Zion National Park before his death on February 7, 1930.

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<sup>27</sup> Runte, *National Parks: The American Experience* (Lincoln, University of Nebraska Press, 1987), p. 94; Judith L. Meyer, *The Spirit of Yellowstone: The Cultural Evolution of a National Park* (New York, Rowman & Littlefield Publishers, Inc., 1996), p. 78-9; Chittenden, *Yellowstone National Park*, 111-113; Union Pacific Railroad Company, "California and the Expositions, 1915, Yellowstone National Park, How to Go and What to See" (Panama-Pacific International Exposition exhibit brochure, 1915), p. 12, 53, 59. Copy, Accession No. 372859, Huntington Library.

While they proved the necessary means of transportation to the national parks for the majority of tourists, the railroads could not monopolize tourism completely. Despite the new hotels of the 1890's or the Santa Fe Railway's beautiful El Tovar, built at the Grand Canyon in 1905, or even the popular and majestic Old Faithful Inn, built during the winter of 1903-1904, not all tourists desired, or could afford, such luxurious lodgings. By the 1890s, in fact, there appeared to be a backlash against the overpriced, etiquette-stricken hotels and expensive railroad tour packages.<sup>28</sup>

During "the twenty years or so after the rate wars of 1886-7," the railroads realized the lucrative market of selling tourism and travel on a large scale. Furthermore, "each decade saw thousands more Americans with vacation time and vacation money, and with a disposition to spend time and money away from home." Although the Pullman Palace-car continued to serve the affluent, by 1890 the tourist-car made "pleasure-travel possible and reasonably comfortable for many who could not afford first-class fare and could not stand the bare wooden benches of the earlier second-class sleepers." Soon after the railroad touring-car appeared, so did the automobile. Like the Pullman Palace-car, the earliest automobile travelers were wealthy enough to afford not only the transportation costs but also the time and additional expenditures such as food, lodging, appropriate attire, and of course, extra money for postcards and those trinkets of Americana. Still, railroads served as an initial instrument of intrusion into the pastoral by carrying tourists to and from their vacation destinations. As the September 1891, *Nation* article "Changes in Summer Migration" noted,

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<sup>28</sup> Haines, *The Yellowstone Story*, v.2, p. 134; Chittenden, *Yellowstone National Park*, p. 113; Union Pacific Railroad Co., "California and the Expositions," p. 59; John R. Eustis, "Gipsying De Luxe," *The Independent*, May 3, 1919, p. 184; Pomeroy, *In Search of the Golden West*, p. 164.

"summer migration is seeking the rural quietudes." The article further noted changes in tourist demographics in that "great resorts are becoming the summer homes of the class, while the remote places are sought for by the mass." By the 1890s, Americans had a growing appetite for camping and the natural environment. As early literature illustrated, women joined men in camping in the wilderness and breaking the mold of etiquette and conformity. This hunger was fed, in part, by a group of writers who not only told campers where to go and how to get there, but also how to camp to get the most enjoyment from the experience. Additionally, the mental images of earlier art and literature continued to inspire Americans to experience for themselves, firsthand, the splendor of America's natural beauty. As cultural historian Earl Pomeroy noted, "Appreciation of the wilderness by the early years of the (twentieth) century was more than a mood; it was becoming a movement, which was to have its spokesmen and its literature; it was on the way to becoming institutionalized." Changes in transportation technology also contributed to changes in turn-of-the-century American camp culture.<sup>29</sup>

The fact that President Theodore Roosevelt was an advocate of the outdoors also helped in its promotion. The President not only valued physical exercise; he understood the benefits of camping in the wilderness. In *Camping & Tramping With Roosevelt*, John Burroughs recounted a 1905 excursion through the Yosemite Valley, Glacier, and Yellowstone National Parks. Burroughs' narrative of Roosevelt camping in Montana recounted the President's reverence for nature and the value of physical exercise. Waking up

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<sup>29</sup> Pomeroy, *In Search of the Golden West*, p. 122, 123, 115, 146, 152; "Changes in Summer Migration," *Nation*, Vol. 53 (September 17, 1891), p. 210-11; See also, James J. Fink, *The Car Culture* (Cambridge, The MIT Press, 1975), p. 156. For more specific references to women and camping see pages 72-74 and note 68.

early one morning, Burroughs found Roosevelt anxious. The President wanted "to go alone into the wilderness." After convincing his party of his desire for solitude, and reassuring them of his safety, he departed, alone. Returning around five o'clock in the afternoon, Roosevelt related his experience to the party that "night, sitting before the big camp fire." Enjoying the solitude of his sublime experience, Roosevelt had lunched with a herd of Elk, watched and listened to birds, and tramped "about eighteen miles through a very rough country." Burroughs' account of the experience excited Americans.<sup>30</sup>

Roosevelt's advocacy of camping and enjoying the American landscape did not end with written accounts of his outings. As President, Roosevelt was the first with authority under the Antiquities Act of 1906, to designate and protect a site of "national importance" to America's cultural identity. Though the Act stemmed from a primary concern over Native American archaeological sites in the Southwest, by 1908, Roosevelt had designated seventeen sites as important to American culture and identity.

Whereas some writers recounted experiences of camping in the wilderness, others fictionalized accounts to appeal to a younger audience. Whether through an account of a favorite American President, the popular writings of John Muir or John Burroughs, a "how to" book by an advocate, a popular periodical, or children's fiction, in the early years of the Twentieth century, American camp culture had found "many collaborators at the pen and on the platform."<sup>31</sup>

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<sup>30</sup> John Burroughs, *Camping & Tramping With Roosevelt* (Boston and New York, Houghton, Mifflin and Company, 1907), p. 32-3.

<sup>31</sup> Pomeroy, *In Search of the Golden West*, p. 15

## CHAPTER 2

### GETTING AWAY FROM IT ALL -- "ROUGHING IT" OR, CAMPING BEFORE CARS

"The instinct for a free life in the open is as natural and wholesome as the gratification of hunger and thirst and love."<sup>32</sup>

Throughout the last quarter of the nineteenth century, a variety of Americans took to the open air to rejuvenate their health, to get away from the urban lifestyle, and to simply enjoy the natural landscape. Writings of the period reveal a few common reasons individuals went camping. In his 1888 text, *Woodcraft*, Nessmuk (a.k.a. George Washington Sears) viewed the times as "an age of hurry and worry." Believing America to be "an overworked nation," Nessmuk pointed to the "stress of business" as the reason many Americans needed "to recover health" through camping. Similarly, in his 1903 text, *The Complete Camper's Manual: How To Camp Out, What To Do*, Francis H. Buzzacott advocated "the economical, health-giving, enjoyable vacation" away "from the conventionalities of the . . . city life" as a "positive and natural change." The author also warned campers to stay away from "the summer resort with its hampering rules of etiquette." Writing that "your system craves a change in the manners of living," Buzzacott believed it necessary to "lay aside the restrictions of a city life and home" while enjoying the outdoors. In *Wild Woods and Waterways*, author William Chalmers Covert advocated a similar approach -- camping as a

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<sup>32</sup> Horace Kephart, *Camping and Woodcraft*, (New York, The Macmillan Publishing Co., Inc., 1917), p. 18.

recreational activity. He believed that "play" balanced work and that camping in the wilderness served to "insulate the tired worker" and place the camper "in a realm that makes for utmost liberty of body and soul." Traveling to the wilderness functioned not as an escape mechanism so much as it implied deeper contemplation of life's experiences. Covert recalled that, "Out in the woods our minds go back to the bedlam of noises we have left behind us. These ungrateful sounds that rise out of the coarse, dirty, mechanical world of commerce shorten men's lives. It cannot be otherwise [noises] . . . are wearying to an almost fatal degree. We can never tell how unbroken and burdening is the tension of . . . the busy world until we have come into the serene silence of the woods." Horace Kephart, well known among his contemporary campers, also saw camping as an escape "from every worldly care." Kephart further noted in his 1906 text, *Camping and Woodcraft*, that "the charm of nomadic life is its freedom from care, its unrestrained liberty of action and the proud self-reliance of one who is absolutely his own master." Whatever their reasons for going, many would have agreed with Kephart's belief that the main reason for going camping rested in the "love of nature for her own sake."<sup>33</sup>

How one perceived nature and what one hoped to gain from an "outing" experience served to separate or categorize these turn-of-the-century campers. Some campers hoped to actively experience nature firsthand, while others preferred planned outings and scheduled tours. The former relied on their own skill and expertise, while the latter found professional outfitters and guides who not only told them what equipment to buy and how to use it, but

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<sup>33</sup> Nessmuk [George Washington Sears], *Woodcraft* (New York, Forest and Stream Publishing Co., 1895), p. 1-2; Francis H. Buzzacott, *The Complete Campers Manual: How To Camp Out, What To Do* (Chicago, Francis H. Buzzacott, 1903) p. 112-13; Kephart, *Camping and Woodcraft*, p. p. 20-21, 26; William Chalmers Covert, *Wild Woods and Waterways* (Philadelphia, The Westminster Press, 1914), p. 12, 39. Text copy provided by the Bentley Historical Library, University of Michigan.

where to go as well. Kephart viewed this type of outing as "touring, not campaigning." Furthermore, he saw no rewards in this kind of camping where "professional guides and packers . . . do all the hard work [and] men who know nothing of woodcraft [get] little practical knowledge of the wilderness." A similar point had been made over twenty-five years earlier in *Camps and Tramps in the Adirondacks*, by A. Judd Northrup. "Where to go and how to go into the Adirondacks," Northrup wrote, "depends principally upon whether you go as a *tourist* or as a *sportsman*, -- whether you wish to journey, or to camp. As a tourist, you should select some of the easier routes. As a sportsman, seeking the wilderness for the fishing and hunting, the requirements are very different." Northrup warned prospective campers that being unprepared could be catastrophic because the Adirondacks were "still almost an unbroken wilderness" in 1880. Also familiar with the wildness and seclusion of the Adirondacks and the Great Smokies of Western North Carolina, Kephart firmly believed that "whoever takes to the woods and the waters for recreation" should be prepared to care for themselves, just in case "disaster" strikes and the outfit is destroyed, or worse, "one is lost and alone." Similar opinions appeared in the writings of Nessmuk, Francis Buzzacott, Bernard Mason, Stewart Edward White and other experienced campers.<sup>34</sup>

These writers did not condemn outfitters as much as they scorned the guides and "professionals" who solely possessed the knowledge and skills necessary to a successful outing. To better inform these "tourists" and encourage independent camping, authors like

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<sup>34</sup> Kephart, *Camping and Woodcraft*, p. 23-4; Northrup, *Camps and Tramps in the Adirondacks*, and Grayling, *Fishing in Northern Michigan: A Record of Summer Vacations in the Wilderness*, (New York, Davis, Bardeen & Co., Publishers, 1880), p. 271-2, 269. Text copy provided by the Bentley Historical Library, University of Michigan.



Nessmuk and Buzzacott aimed to teach novices "the art of camping" and the essential woodcraft skills.

Early campers often traveled by foot or on horseback. This form of camping preceded the days when railroads carried tourists and their gear directly to attractions, or close enough for carriages and wagons to cart passengers and belongings to the final destination. Before trains carried campers, Americans had relied on canals and steamships to cover long distances before continuing by horse or on foot. Even in the early years when railroads carried passengers and equipment to their getting-off point, the majority of these early campers had to go by horse and pack mule to experience the true wild landscapes. As such, camping equipment and necessities were limited by the carrying capacity of the horse. Those who ventured by foot carried even less.<sup>35</sup>

Campers who preferred only the bare essentials of equipment were viewed as "roughing it." As new technologies developed and access to better means of transportation increased, so did the amount of equipment one could carry and still be perceived as "roughing it." For campers of the later nineteenth century, the notion implied carrying only those items necessary for survival in the wilderness and surviving by one's own skill at "woodcraft."

Woodcraft described the knowledge one had in regard to living in the woods and surviving by one's skill, knowledge of natural science, sense of direction, and basic instincts. Horace Kephart believed that woodcraft held "the key to Nature's storehouse." In both his

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<sup>35</sup> For a good discussion of early (18th/19th c.) touring, traveling and camping in America see, Hans Huth, *Nature and the American, Three Centuries of Changing Attitudes* (Lincoln, University of Nebraska Press, 1990), especially chapter five, "The Poetry of Traveling," and chapter seven, "Summer Migration."

1906, *Book of Camping and Woodcraft*, and the revised and enlarged 1917 version, *Camping and Woodcraft*, the "Dean of American Campers" maintained that each camper should know the following:

How to outfit, how to select and make a camp, how to wield an axe and make proper fires, how to cook, wash, mend, how to travel without losing his course, or what to do when he has lost it; how to trail, hunt, shoot, fish, dress game, manage boat or canoe, and how to extemporize such makeshifts as may be needed in wilderness faring. And he should know these things as he does the way to his mouth. Then is he truly a woodsman.<sup>36</sup>

A variety of early scholarship outlined the specific equipment necessary for those who wanted to "rough it." While most agreed on the basics -- shelter, bedding, food provisions, shoes, and clothes, most agreement ended there. Whereas some authors recommended using a wall tent, others specifically stressed *not* using a wall tent. Similarly, some campers swore by their woolen clothing while others swore at it. While most writers agreed on the basics, each also included one or two items that his "wisdom" dictated. Several authors of the period stand out as "recommended" due to their experience and expertise and their advice and suggestions reflected this. In short, these authors each advocated "roughing it" as little as possible. Nessmuk wrote that he disliked the phrase, arguing that "we get it rough enough at home (and at) work;" therefore, one should "make it as smooth, as restful and pleasurable as you can." Francis Buzzacott agreed and advocated "roughing it as little as possible . . . for there is no more need of such . . . ancient methods."

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<sup>36</sup> Kephart, *Camping and Woodcraft*, p. 24; Jim Casada, *Ibid.*, (Knoxville, The University of Tennessee Press, Facsimile Edition, 1988), p. xii.

For Buzzacott there was a "commonsense medium between roughing it versus smoothing it."

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Francis Buzzacott opened his *Complete Campers Manual* noting his participation in the British South African Expedition of 1878-9, the Antarctic Expedition of 1879-81, the Voyage to the Arctic from 1882-5, United States Government service from 1885 to 1893, and the Spanish American War campaign of 1898. His text appeared five years later in 1903. Considering his two decades of expedition and military experience, Buzzacott understandably recommended those products used by the government, especially those things he had experience using.

George Washington Sears, better known as Nessmuk, had "more than fifty years of devotion to woodcraft" when Forest and Stream Publishing Company of New York first published *Woodcraft* in 1888. By 1895, the original text was in its eleventh edition. Its popularity, perhaps, rested in the tone of the text. Nessmuk pointed to the wealthy and those with too much time as specifically not his audience. Instead, he wrote for "those of the world's workers who go, or would like to go, every summer to the woods" and camp comfortably. To ensure "pleasant days and peaceful nights," Nessmuk recommended the minimum of gear, telling prospective campers to avoid the "temptation to buy this or that bit of indispensable camp-kit [and going] handicapped with a load fit for a pack-mule. This is how not to do it." Nessmuk advocated instead that campers "go light, the lighter the better."<sup>38</sup>

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<sup>37</sup> Nessmuk, *Woodcraft*, p. 18-19; Kephart, *Camping and Woodcraft*, p. 40-41; Buzzacott, *The Complete Campers Manual*, p. 40-1.

<sup>38</sup> Nessmuk, *Woodcraft*, p. 3, 19, 4.

With more than fifty years of experience, Nessmuk had witnessed many changes in camping and related equipment. As such, his text included only one short section on how to construct a shelter from materials found in nature -- the "Indian Camp." Similarly, writing in 1881 of the log "home" shanty, the bark shanty, a Hemlock lean-to, and similar "shanties," W. Hamilton Gibson's *Camp Life in the Woods and the Tricks of Trapping and Trap Making*, also noted that tents proved "valuable acquisitions" to the camper's outfit. Northrup had noted the previous year in *Camps and Tramps in the Adirondacks*, that for camping, rather than a bark shanty, a tent proved warmer, cleaner, and permitted campers to move from place to place more freely. By the last quarter of the nineteenth century, canvas shelters had become a mainstay in camp equipment, replacing the shelter built in the woods from local, natural materials. Similarly, technological advances in equipment and materials slowly came to replace much of the knowledge associated with woodcraft.<sup>39</sup>

Several of these early authors understood, witnessed, and actually contributed to the demise of woodcraft. Authors like Nessmuk and Buzzacott embraced advances in camp technologies brought on by social, cultural, environmental and technological changes, as beneficial to American camp culture despite the loss of related skill and knowledge. The axiom of "going light" fit squarely into these changing times as camp equipment became more efficient, light weight, compact, and portable. Nessmuk related technological advances into his views on camp equipment. Writing of camps as "one of the most important adjuncts of woodcraft," Nessmuk informed the reader on "how to make them" while he stressed the

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<sup>39</sup> W. Hamilton Gibson, *Camp Life in the Woods and the Tricks of Trapping and Trap Making* (New York, Harper & Brothers Publishers, 1881), p. 242-7. Copy found in Smithsonian Institution Library, Museum of Natural History; A. Judd Northrup, *Camps and Tramps in the Adirondacks*, p. 273.

"essentials of dryness, lightness, portability, cheapness" and the ease of erecting a portable shelter, or tent. The author recommended the "shanty tent" as "perhaps the best" camp he had ever tried. Furthermore, Nessmuk noted his thirty-year-old "disgust" with "the clumsy, awkward, comfortless affairs" on the market and especially the "worse" type camps, the A and wall tents.<sup>40</sup>

While Nessmuk's experience with the wall tent dated back to the Civil War era, fifty years later it proved a most popular model. George E. Walsh, writing in 1908, considered the wall tent "the most suitable for camping purposes." Walsh also pointed out that the U.S. Army used "this type." Francis Buzzacott proved a more vocal advocate of the wall tent, writing of his numerous military or exploratory expeditions. Too., Buzzacott's *Complete Campers Manual* included drawings of the "most modern tent made," the Officer's wall tent with fly.<sup>41</sup>

Like Nessmuk and others, Buzzacott pointed to advances in camping-related equipment as a great benefit to the "art." Opening part two of his text with "The Twentieth Century Camping Outfit," Buzzacott noted that "as time and things change and improve, so have camping outfits. Luxuries of a decade ago (seeming impossibilities) are only common necessities today." Writing of those who went camping in the 1880s, Buzzacott pointed out that they went with a "feeling that 'roughing it' was a necessary part of camp life. Addressing the issue of new equipment, the author saw no need for roughing it; "there is no more need of

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<sup>40</sup> Nessmuk, *Woodcraft*, p. 25-6, 31, 36.

<sup>41</sup> Nessmuk, *Woodcraft*, p. 36; George E. Walsh, "Outfitting the Camper and Hunter," *Independent*, vol. 65, August 20, 1908, p. 425; Buzzacott, *The Complete Campers Manual*, p. 39.

such old flint and steel, ancient methods." Buzzacott believed "smoothing it" a more proper term.<sup>42</sup>

Although each author wrote "from experience," an examination of their accounts reveal distinctions in styles and changes which occurred in equipment and the American camping experience around the turn of the century. Whereas "roughing it" denoted "knapsacking" to campers of the later nineteenth century, those roughing it via horseback subscribed to an alternate definition. As means of transportation changed and more Americans took to camping, the variety and amount of "necessary" equipment also changed. By the mid-1910s, knapsackers were seen as "primitive" and "roughing it" denoted as traveling via automobile with only "the bare essentials." Within another decade, those not camping with a trailer coach, auto-conversion, or camp-trailer were viewed as roughing it. As more people took up "the art of camping," equipment manufacturers and suppliers worked to advance new ideas and solutions to camping problems. One of the main problems addressed was the size and weight of camp equipment.

A variety of manufacturers offered equipment for these early campers. Not only did manufacturers fulfill the campers' needs; they also supplied a variety of other goods, depending upon their specialty. Firms like the United States Tent & Awning Company of Chicago, established in the 1870s, provided a variety of canvas goods for campers. In addition to camp gear like bedrolls, tents, and ditty bags, the U.S. Tent & Awning Company

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<sup>42</sup> Buzzacott, *The Complete Campers Manual*, p. 40.

also manufactured bleacher-seat covers, Merry-Go-Round and Motordrome tops, as well as high-dive and wading tanks.<sup>43</sup>

George B. Carpenter & Company of Chicago, established in 1840, advertised a line of canvas goods including yacht sails, tents, flags, awnings, rainproof covers, and various tarpaulins. With camping growing in popularity, George B. Carpenter & Company expanded its line of goods to answer the demand. By the turn of the century, the firm had expanded its line of camping goods, offering, among other items, Gold Medal brand camp and lawn furniture, Wilson's Kamp Kook's kits as well as "20-Gauge Sheet Steel" camp stoves.

Established around 1892, the Gold Medal Camp Furniture Manufacturing Company of Racine, Wisconsin, also offered numerous items in its catalogs, including "portable houses," canvas top tables, stools, cots, folding chairs, and other portable furniture. The Gold Medal firm manufactured an array of items and most notably held large government contracts to supply the military and other agencies with goods. As Francis Buzzacott noted, Gold Medal products actually served as the government "standard" by which other firms' products were tested. Francis Buzzacott endorsed a variety of goods within his writings, but Gold Medal Camp Furniture Company garnered the most praise and recommendation. Not only did Gold Medal manufacture nearby in Racine, Wisconsin, but Buzzacott's military service and related experiences using Gold Medal-brand furniture also contributed to his hearty endorsements of the "U.S. Government supplier." These hearty endorsements paid dividends in 1903. Although the initial "Buzzacott, Complete Camp Outfitter" business operated out of Chicago, sometime between 1901 and 1903, Buzzacott entered into a "co-

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<sup>43</sup> "United States Tent & Awning Co., Catalogue 29T," circa 1928; United States Tent & Awning Co., Flyer, circa 1875; Henry Ford Museum & Greenfield Village, hereafter cited as, HFM/GV.

partnership" with the Gold Medal Camp Furniture Manufacturing Company. Buzzacott's advertisement for 1903, ultimately his last, noted offices in both Chicago and Racine. Later that same year, Gold Medal purchased all of Buzzacott's "stock consisting of tents, camp outfits and equipments" as well as all unsold copies of his "three books."<sup>44</sup>

The "complete camp outfitter," Buzzacott, had offered a 118-page catalog in 1903 that included a variety of tents, tent carpets made of "heavy tan or khaki canvas," roll-up canvas ditty bags, hammocks, and other canvas "sleeping outfits" including Buzzacott's patented model, the Camp Combination. Buzzacott heartily recommended tan, khaki, or other neutral colors, noting problems with red, white, and striped fabrics. Specifically, Buzzacott pointed out that bright colors or bold patterns attracted "mosquitoes and other pests" while more neutral colors did not. Similar claims appeared in the writings of Nessmuk and others.<sup>45</sup>

Buzzacott's *Manual* not only informed campers of "how to camp out, what to do;" it also included camping equipment "recommended" by the author. As one might expect, Buzzacott's own patented "Camp Combination (Five in One)" received extensive attention and recommendation. (See Appendix, Figure 1) Buzzacott advertised the "Camp Combination" as a camp bed, mattress, and blanket, as a sleeping bag, as a hammock, as a shelter-tent, and as a canvas roll-up safety carry-all and pack. The author noted its extensive use by "military officers for campaign work in the field, and by cattlemen." Horace Kephart

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<sup>44</sup> *Ibid.*, p. 46; Advertisement inside the rear cover of *The Complete Campers Manual*. The date when Gold Medal started in business, estimated at 1892, is derived from the 1925 company advertisement, "Touring Comfort," where the firm notes "33 years" of business success. Pamphlet in author's collection.

<sup>45</sup> *Ibid.*, p. 78-9; Nessmuk, *Woodcraft*, p. 4.



also thought "a good deal of" Buzzacott's Camp Combination, writing of it in his 1917 text. In comparison to other "bed rolls," Buzzacott's model proved a better design of good quality materials.<sup>46</sup>

Quality of materials and sturdy construction made Gold Medal Camp Furniture the brand "officially adopted by the United States Government," and "used in immense quantities" by "the entire military and naval forces of the United States." Buzzacott noted that only Gold Medal brand camp furniture met "every requirement of camp uses: viz., Comfort - Rigidity - Strength - Lightness - Portability." The author further noted that "out of 27 different patterns and makes submitted by all the leading manufacturers of the U.S.," only the Gold Medal brand "was adopted" by the Government. Its construction and durability proved "superior to anything of its kind submitted" for testing. By 1903, Gold Medal furniture had won fourteen gold medals in various competitions.<sup>47</sup>

All Gold Medal camp furniture was constructed of "carefully selected, air dried, Rock Elm, free from any flaws." Additionally, the duck or canvas used proved durable. The standard canvas used, "No. 8 or 17 ounce, United States Army woven, Khaki color, double filling," proved capable of withstanding "a test of 170 lbs. to the inch of fabric." Gold Medal advertised that their camp cot or bed (6' 6" long x 2' 4" wide), could "support over half a ton," guaranteed. One method the Government employed to test the cots, according to Buzzacott, consisted of dropping "a bag of sand weighing 235 pounds" from a height of "three or four

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<sup>46</sup> *Ibid.*, p. 41-43; Kephart, *Camping and Woodcraft*, p. 137.

<sup>47</sup> Buzzacott, *The Complete Campers Manual*, p. 44; Fourteen awards noted and pictured in Buzzacott, *Ibid.*, p. 119. Unfortunately, the drawing depicting the medals is not detailed enough to determine where and when each was awarded. No other details regarding these medals have been found.

feet over a stretched or open cot." To support the weight and hold the furniture secure, Gold Medal employed hard rolled "steel joints or plates," double- or cross-riveted to prevent splitting. Buzzacott pointed out that "hundreds of thousands" of the Gold Medal-brand camp cots "were issued to the military forces of the United States Government." Similarly, the United States Medical Department consumed numerous "folding bath tubs" made of "heavy, thick canvas duck - rubberized, smooth and soft in the interior." The Gold Medal brand camp furniture proved popular for decades and often appeared in the early 1900s store catalogs, such as Abercrombie & Fitch, or The Charles William Stores, Inc., of New York. In addition to tenting outfits, many of these same stores offered bulk canvas, duck, and tarpaulins for those who desired to make their own tents.<sup>48</sup>

Numerous smaller firms manufactured and sold tents and camping-related equipment. While the A.S. Comstock Company, of Evanston, Illinois, for instance, advertised its 1892, "No. 2 Protean Tent" as superior, similar claims appeared in advertisements for the contemporary Baxter Camping Outfits, of Frankfort, Kentucky. Although Francis Buzzacott had patented his Camp Combination (Five in One) by 1905, similar items appeared as "E.A. Barrett's Patent Combination Cot Bed," and as the F.J. Burch & Company's "Combination Bed Sheet, Tent & Sleeping Bag." Burch received his patent in December 1907. Known as the "The Tent & Awning Makers," the F.J. Burch & Company, of Pueblo, Colorado, published a 1908 catalog that boasted that its product was "in use by the United State Forest Department" and endorsed by Frost & Richard, "licensed guides for Yellowstone Park and

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<sup>48</sup> *Ibid.*, p. 44-51; "Abercrombie & Fitch Co., New York," advertisement pamphlet dated 1913, HFM/GV; "Automobile Supplies, The Charles William Stores Inc., New York, Spring & Summer 1922." Copy found at Lost Highways (Private Collection), Philadelphia, Pennsylvania.

the surrounding big game country." The Burch "Combination" measured seven-foot wide by seventeen, nineteen or twenty feet long, and came in choice of ten-, twelve-, fourteen-, sixteen-, eighteen-, or twenty-ounce Duck.<sup>49</sup>

Firms like the United States Tent & Awning Company, of Chicago, advertised tents for all occasions in its catalogs of the 1870s, 1880s, and 1890s. Others, such as George B. Carpenter & Company, advertised only those models useful for camping. It followed then that certain makes and models replaced others which no longer met the needs of the consuming public. For instance, whereas most suppliers offered the wall, wedge, and Amazon tents, the Palmetto, oblong, and garden tents fell out of favor and rarely appeared in advertisements after 1905. Likewise, the popularity of Amazon tents fell off around 1915, when auto-tents, similar in size and shape, gained favor with many autocampers. Still, some campers merely carried a canvas tarpaulin which hung on a rope strung between two trees with the sides pulled out and staked. Ultimately, choice of shelter depended upon expense and experience.

Camp shelters of the late-nineteenth century varied from bark-shanties and tarpaulins, to three-story Victorian-style "cottages" on an Adirondack or Lake Michigan lakeshore. These notions of camping carried over into the twentieth century and coupled with technological advances in camping, autocamping, and recreational vehicle technologies to produce a variety of new or better forms of camping shelters. The topic of camp shelters appeared in virtually every late-nineteenth and early-twentieth century text related to

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<sup>49</sup> "A.S. Comstock Protean Tent," ca. 1892 (SI/NMAH, Warshaw Collection); "Baxter Camping Outfits," ca. 1900, (SI/NMAH, Warshaw Collection); Francis Buzzacott, *The Complete Campers Manual* (1903) and Buzzacott, advertisement and price list, 1905 (HFM/GV); "E.A. Barrett's Patent Combination Cot Bed," ca. 1900 (SI/NMAH, Warshaw Collection); "F.J. Burch & Co.," 1908 (SI/NMAH, Item # 23079).

camping. Differences in the types of tents emphasized varied depending on the author's topic. For instance, in *Camp Life in the Woods and the Tricks of Trapping and Trap Making*, W. Hamilton Gibson highlighted the "Home Shanty" for the professional trapper, essentially a small log cabin, as the book's choice of main form of shelter. The bark shanty and several tents also received attention. In a similar vein, Daniel Carter Beard's *The American Boys Handy Book*, published in 1882 and reprinted in 1890, included the chapter, "How to Camp Out Without a Tent." Beard hoped to encourage his readers to take up the challenge to camp using the skills of woodcraft. Still, the chapter which detailed the "rustic cottage" made from thatched hemlock branches concluded with Beard pointing out that tents proved "very handy and comfortable, and if obtainable should by all means be used." Buzzacott also appeared as an advocate of tenting. His two-page discussion of natural shelters provided scant details on "Improvised Camp Shelters." In *Camping Crafts*, Bernard S. Mason offered four chapters devoted to shelters alone, including a lean-to, the bark shanty, bark Wigwams, the permanent Tomahawk shelter, the brush den, and the Indian bark kennel, as well as tents of lightweight materials and instructions for making your own tarpaulin tent. Essentially, these natural or brush shelters employed forked branches and flexible saplings to support larger overlapping branches, preferably hemlock, which served as "shingling."<sup>50</sup>

Mason opened his section on "Tents for the Trail" pointing out that "the perfect tent for all purposes does not exist." The requirements of campers depended in large part on

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<sup>50</sup> Gibson, *Camp Life in the Woods and the Tricks of Trapping and Trap Making* (New York, Harper & Brothers Publishers, 1881), p. 242-51, as found in the Library of Congress; Daniel Carter Beard, *The American Boys Handy Book: What to do and How to do it* (New York, Charles Scribner's Sons, 1882, reprinted 1890), p. 148, 160; Bernard S. Mason, *Camping Crafts* (containing, *Camping Crafts*, *Woodcraft*, and *Crafts of the Woods*), 1973 edition (originally published in 1916 ), (Cranbury, New Jersey, A.S. Barnes and Co., Inc., 1973), p. 3-73, both texts found in the SI/NMAH Library; Buzzacott, *The Complete Camper's Manual*, p. 76-7.

where and how they planned to camp. Mason described the basics as shelter from rain, protection from mosquitoes and other insect pests, warmth, and something easy to haul and pack. Most authors addressing the shelter needs of early campers agreed that lightweight tent material proved the only way to go if one traveled by foot, on horseback, by canoe, or into the "general wilderness." Although balloon silk proved a popular fabric for lightweight tents, Mason pointed out that other lightweight fabrics included tanalite, Egyptian cloth, aberlite, kiro, and tano. Mason believed tanalite the lightest and strongest of the fabrics. Like others, Mason suggested that while better materials proved more expensive, they also proved more durable and in the long run a better investment.<sup>51</sup>

Whereas other camping authors described shelters in relation to where and how one expected to camp, Mason organized his text on tents according to weather conditions. In short, *Camping Crafts* recommended an open or "shanty-tent" for cold nights and a closed tent on warm nights. "A curious fact," Mason wrote that on cold nights one needed an open tent with a front awning or flap to catch and reflect inward the heat of the fire. A closed tent in cold weather, according to Mason, seemed as "damp and cold as a morgue on a chilly night." Similarly, an open tent in warm weather invited insects whereas a closed tent did not. Nessmuk preferred the open front of the shanty-tent over all others, as did others who enjoyed the wide-open spaces and night air. For warm weather camping, Mason preferred the Explorer's Tent. The sewn-in ground cloth and screen or "bobbinet" door with a zipper opening made the Explorer's tent "absolutely pest-proof." The model came in three styles according to size - the One Man Tent, the Ideal Cruiser Tent, and the Explorer's Tent proper.

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<sup>51</sup> Mason, *Camping Crafts*, p. 3-11.

Mason liked the Explorer's tent because of its efficient pattern and design. He wrote that the design conserved material and weight by sloping down at the foot or rear of the tent, where height served no purpose. Moreover, Mason saw fit to remind campers that tents designed as "sleeping shelters" did not require "room to walk about."<sup>52</sup>

In cold-weather camping, the campfire served to center the camp. Tents generally encircled the fire, close by but at a safe distance. The preferred tent in cold weather had an open front and a sloping shed roof which reflected the heat down onto the blankets. The front extension of the shanty- or shed-tent constituted a door when dropped and tied shut. Opened, the awning reflected the heat and provided shade during the day. Mason noted that each, the "open-sided canvas lean-to," the Baker Tent, and the shed-roof tent were, in essence, "half of a wall tent." Although Mason preferred the Baker tent made of tanalite, he also offered readers a cheaper homemade alternative. The tarpaulin tent, essentially a 10 x 14 sheet of canvas, produced three different styles of tent according to its arrangement or set up. Though the canvas had grommets sewed in at specific places, Mason advised readers to reinforce the fabric with fabric tape sewed along the lines noted in his diagram. The diagram represented a 10 x 14 rectangle with a triangle in the center that shared its baseline, about one-third the length of the whole, with a slightly longer base-line of the pentagon. (See Appendix, Figure 2) Arranged according to Mason's directions, the tarpaulin tent produced a lean-to or Baker style tent, a miners tent, or a wedge tent. Additionally, the large, square piece of canvas often doubled as a ground-cloth or as a means of wrapping the outfit.<sup>53</sup>

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<sup>52</sup> *Ibid.*, p. 12; Nessmuk, *Woodcraft*, p. 32-6.

<sup>53</sup> *Ibid.*, p. 15-17.

To further benefit the campers who preferred to make their own tent, Mason offered advice on how to waterproof and dye the material. Other authors like Nessmuk, Kephart, and White offered similar advice in addition to help with fire-proofing. Besides ready-made waterproofing mixtures offered for sale by camp outfitters, campers could also choose between the chemical, or alum process, and the paraffin process. Each method held advantages over the other. The chemical process coated the threads of the fabric so that it shed water provided it had enough slope for the rain to run off. Where water collected, some seepage occurred. This process added nothing to the weight or pliability of the cloth and actually made it stronger and more durable as well as immune to mildew. The paraffin method coated the entire surface of the fabric and made it "completely watertight." Paraffin, however, not only increased the weight of the fabric; it also made it less flexible. Moreover, paraffin-coated canvas did not "breathe" because the air could not pass through it. For these three reasons, most experienced campers did not recommend paraffin waterproofing. Kephart offered advice on oiled cloth and celluloid coating as additional means to waterproof a shelter and as an alternative to paraffin.<sup>54</sup>

Another reason campers avoided paraffin waterproofing rested in the fact that the required solution proved highly flammable. Unless campers wanted to apply the paraffin by hand and iron their canvas three times following the "rubbing method," they had to use the paraffin-soaking method. With this method, a large quantity of turpentine was needed to completely cover the cloth. Into the turpentine, the preparer shaved paraffin in the proportion of about one pound to the gallon. The vessel holding the mixture required heating

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<sup>54</sup> *Ibid.*, p. 17-19; Nessmuk, *Woodcraft*, p. 38; Kephart, *Camping and Woodcraft*, p. 72-5.

to melt the paraffin. Some authors recommended using an old pot over an outdoor fire to lessen the fire danger. Once the paraffin dissolved, one rapidly applied the hot mixture to the erect tent using a paintbrush. Considering the dangers of hot wax and an inflammable solution, Mason advised those who did it themselves to avoid the paraffin method. Less troublesome and actually more advantageous, the alum method of waterproofing a fabric endured as the custom or typical procedure.

In the early twentieth century, the majority of waterproof tents sold in department stores and by specialty outfitters had been treated by the alum or chemical process if they were not made of duck. A rather simple process, the alum-and-sugar-of-lead treatment involved a simple soak-and-dry approach. The mixture consisted of a ratio of one-fourth pound of alum to each gallon of hot water, and the fabric remained completely submerged in it for several hours or overnight. Removed and wrung out, the fabric was then transferred to another vessel containing the sugar-of-lead solution mixed to the same ratio as the alum, one-fourth pound per gallon of hot water. Mason advised that the second soaking last as long as the first. After the elapsed time, the preparer wrung out the fabric and hung it to dry. Both Buzzacott and Mason advised the use of soft water or rain water, free from lime, and reminded readers that sugar-of-lead was a poison. Not only did manufacturers' catalogs proclaim their tents as waterproof; they also boasted that the alum tended to fireproof the fabric. Gibson made a similar claim in his 1881 text, *Camp Life in the Woods*, as did several other authors. Francis Buzzacott pointed out in 1903, that the British Government employed the sugar-of-lead "method of water and fire proofing tents." Kephart advised readers that if



they did not want to waterproof their tent, they needed to cover it with a tent fly. Similarly, Buzzacott strongly advocated the use of a tent fly.<sup>55</sup>

Horace Kephart first wrote of camping in a series of *Field & Stream* articles published between 1904 and 1906. Much of that same wisdom appeared in the pages of his 1906 text, *Book of Camping and Woodcraft: A Guidebook for Those Who Travel in the Wilderness*. The revised edition, *Camping and Woodcraft*, appeared in 1916, and included an eloquent dedication to Kephart's mentor, the late George Washington Sears, "best known by his Indian-given title of Nessmuk." The first volume of the 1916 compilation, "Camping," included one-hundred ten illustrations among its twenty-three chapters.<sup>56</sup>

In his second chapter, "Outfitting," Kephart offered advice similar to Nessmuk's. Although Gibson preferred the newer, lightweight fabrics, Kephart thought of such purchases as "extravagant." Kephart pointed out that although "all" campers "would like silk tents, air mattresses, fiber packing cases and all that sort of thing," the costs of these added up quickly and proved unnecessary. Kephart openly expressed his animosity towards campers who unwittingly or carelessly spent "thirty-five dollars for a thing to sleep in" or "thirty dollars for pots and pans to cook with" when they decided to "play hobo." Kephart believed that "playing hobo" corrupted the "sylvan sport." Like his mentor, Kephart valued "woodcraft." Both authors believed that even if the camper failed in elements of woodcraft, he still gained "an honest pride" in his own resourcefulness, a sense of reserve force, self-reliance, and self-confidence. Likewise, Daniel Carter Beard hoped young campers experienced both success

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<sup>55</sup> Mason, *Camping Crafts*, p. 18-20; Gibson, *Camp Life in the Woods*, p. 247; Kephart, *Camping and Woodcraft*, volume one, "Camping," p. 32; Buzzacott, *The Complete Camper's Manual*, p. 66, 64.

<sup>56</sup> Kephart, *Camping and Woodcraft*, Preface.

and failure to induce personal growth and self-reliance. From this intellectual base, both Kephart and Nessmuk advocated camping with only the essential equipment.<sup>57</sup>

In his discussion of shelters -- fixed camps, shifting camps, light tents, and camp making, Kephart focused on tents and specific models for specific camps. Although Nessmuk did not like the wall tent, Kephart saw it as the best cloth shelter for a fixed camp. Kephart, like Nessmuk and other authors on camping, defined a fixed or stationary camp as a camp "fixed in one place for a considerable time." A fixed camp permitted the use of "heavy and bulky equipment" such as a wall tent. A shifting camp necessitated light weight and portability. Kephart suggested a light tent for small parties, for camping in rough country, and for those who traveled by foot, pack animal or canoe. Moreover., with shifting camps, the party spent more time outdoors and did not need the space of a large tent. Other advice for shifting camps included recommendations to carry a waterproof tent rather than both a tent and fly. Additional differences between the fixed camp and the shifting camp concerned related camp equipment, a topic covered elsewhere in this text.<sup>58</sup>

The broad term or notion of a shifting camp included practically every camping outfit other than those seen as long-term, fixed, or stationary. As Kephart noted, these included camps in rough territory, small camp parties, temporary camps, and those traveling by foot, animal, or canoe, and, later, automobiles. In his fifth chapter, "Tents for Shifting Camps," Kephart pointed out that "transportation" proved the key factor in determining shelter and

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<sup>57</sup> *Ibid.*, p. 24; Beard, *The American Boys Handy Book*, p. xv-xvii.

<sup>58</sup> *Ibid.*, p. 29, 68; Mason, *Camping Crafts*, discussed shifting camps and fixed camps in chapters one and four respectively; White, *Camp and Trail*, covered shelters in chapter five, "Camp Outfit," and chapters on horse and canoe outfits, nine and eleven respectively.

equipment for a camping venture. Wherever transportation seemed difficult or the camp continued to move, Kephart saw it as "imperative" that the tent and equipment pack compactly, rig easily, carry lightly, and provide for the basic needs and desires of the camper. A common factor addressed by authors of the period held that *where* one went camping determined the necessary equipment. If one planned an outing through a forest area or "well wooded country, no [tent] poles or stakes" proved necessary since the landscape offered substitutes. Some tents hung between trees by ropes, a real convenience in a shifting camp.<sup>59</sup>

The real convenience to the growing sport of camping proved to be the use of lightweight materials in the construction of shelters. Whereas numerous authors wrote about canvas, and stores and suppliers both advertised it widely, Kephart pointed out that inexperienced campers often got confused over terminology. One of the better fabrics for lightweight tents appeared as "balloon silk." Numerous authors wrote of its benefits as a lightweight material. Still, Kephart alone pointed out that the term constituted a trade name and "an absurdity." He thought the name absurd, considering it did not have a "thread of silk in it, and the only ballooning" occurred when a wind got under it. Often balloon silk still required waterproofing. Real silk, on the other hand, did not. "Lightest of all rain-proof materials, strongest for its weight, and, of course, most expensive," silk proved "the toughest of all fibers." The closeness of its weave provided its water resistance. Regardless, Kephart believed it "unsuitable for any but special tents made for pedestrians."<sup>60</sup>

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<sup>59</sup> Kephart, *Camping and Woodcraft*, p. 68.

<sup>60</sup> *Ibid.*, p. 69, 71.

While some tent outfits and tent materials held advantages over others, many campers initially considered "transportation" when making their choice. Additionally,, the choice between a fixed or shifting camp received due attention. Many of the aforementioned shelters found room in the automobile as more and more Americans loaded their camp equipment and headed for the American landscape. Still, once automobiles began to become popular, again, camping technologies changed to meet new circumstances and a new, growing demand – the needs of the autocamper.

## CHAPTER 3

### "FORDING ACROSS AMERICA" – AUTOCAMPING AND AFFORDABLE OUTINGS

Free is the bird in the air, And the fish where the river flows;  
Free is the deer in the wood, And the gipsy wherever he goes.  
Hurrah! And the gipsy wherever he goes.<sup>61</sup>

With the arrival of the automobile around the turn of the century, the internal-combustion engine soon replaced railroads and animals as the main form of personal transportation. The preceding verse embodied the attitude of the average American autocamper in those early years when automobiles were becoming more widely available. While the automobile offered freedom of movement, Henry Ford deserves much of the credit for democratizing motoring itself.<sup>62</sup> Affordable automobiles and the expansion of roads, albeit rough roads, offered Americans a new means to satisfy their nomadic curiosities.

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<sup>61</sup> Kephart, *Camping and Woodcraft*, p. 22.

<sup>62</sup> Although Henry Ford's start in automobile manufacturing proved precarious, the early history of the man and automobiles is deservedly overshadowed by his remarkable success in the first quarter of the Twentieth century. Numerous authors have described *Ford* history but general consensus maintains that Henry Ford's mass production techniques and resulting lowering product cost most dramatically influenced the popularization and affordability of automobiles in the United States. In addition, Ford was directly involved in establishing the Lincoln Highway, America's first transcontinental highway. For more specific details see: James J. Fink, *America Adopts the Automobile, 1895-1910* (Cambridge: M.I.T. Press, 1970); John B. Rae, *The American Automobile* (Chicago: University of Chicago Press, 1965); Stephen Meyer III, *The Five Dollar Day* (Albany: State University of New York Press, 1981); Keith Sward, *The Legend of Henry Ford* (New York: Rinehart, 1948); Allan Nevins, *Ford, the Times, the Man, the Company* (New York: Charles Scribner's Sons, 1954), and Alan I Marcus, *Technology in America: A Brief History*, chapters five and six.

Thousands of Americans found themselves on the road. This "back to nature" craze persisted and grew throughout the early twentieth century as more Americans sought escape from the urban sprawl and systematic lifestyle in the tranquility of the natural landscape. Although the "automobile eventually moved more tourists . . . and carried them further afield, at first it was a rich tourists' amusement rather than a major means of transportation." Prior to this, those touring America took advantage of the plush accommodations of a Pullman Palace car, sometimes on a prearranged railroad tour, or they went by non-mechanical means. With the automobile affording freedom of movement, the set schedules and programs of the railroad had less appeal. For instance, in 1915, those who arrived via rail to tour Yellowstone National Park totaled 44,477 as compared to only 7,418 who arrived by auto. By 1930, these figures were inverted, when only 26,845 people used the rail entrances into Yellowstone in contrast to the 194,771 who entered by private automobile.<sup>63</sup>

The railroads continued to promote tourist-car and vacation packages into the twentieth century. By 1906, the special "convention and exposition round-trip rates" had been "merged into regular summer tourist fares" to attract less affluent travelers. Despite the lower fares of trains, automobiles edged past them in volume of tourist traffic during the 1910s as cheaper automobiles multiplied. As early as 1918, railroads had begun to "cut service on shortlines to vacation resorts" surrendering to automobile traffic. United States involvement in World War I was also detrimental to the railroads, since they "did not restore full normal service after the First World War until 1921 and 1922 (in some parts of the West,

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<sup>63</sup> Pomeroy, *In Search of the Golden West*, p. 125; Alfred Runte, *Trains of Discovery: Western Railroads and the National Parks* (Flagstaff, Arizona, Northland Press, 1984), p. 32.

1925)." By that time, "summer traffic went by automobile rather than by train," and as falling revenues demonstrated, it never returned. The growth of automobile vacations paralleled the growth of automobile purchases. "The automobile represented a democratization of vacation travel." Not only did the average American have more time and money to spend vacationing; one "could buy gasoline to carry his whole family from his own front door for what he alone would have to pay to ride the train." The automobile quickly became a major factor in the "reorientation of tourists' activities and interests" that went "beyond mere convenience and cheapness of access, and that long preceded the day when automobile travel meant immunity from delays, jolts, and dust." Coupled with the fact that highways led tourists into the outdoors, whereas railroads merely skirted most locations, the revolution in transportation brought on by the automobile consequently changed the character of American camp culture. Subsequently, the touring fad also prompted changes in the automobile industry.<sup>64</sup>

In the March 1, 1902, *Scientific American* article "A Practical Automobile Touring Outfit," the author pointed out that touring had become a favorite pastime and that "extended touring" especially proved "more fascinating." Although many authors of the period referred to these outings as "touring," in many instances they wrote of touring with camping supplies and equipment. As such, touring via automobile, with overnight stays made in hotels, and touring with camping supplies, sleeping "under the stars," often fell under the same heading of *touring*. Similarly, the notion of being an automobile "gypsy" or "nomad" applied to both groups of tourists as evidenced in many of these same writings. Despite differences in the

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<sup>64</sup> Pomeroy, *In Search of the Golden West*, p. 123, 128, 129-30, 146.

notion of touring, by 1902, automobile manufacturers recognized "the demand for improved touring type" vehicles. *Scientific American* noted that the 1902 touring cars appeared "decidedly superior" to the earlier models. To build a better touring vehicle, designers lowered the body, lengthened the wheel base, and replaced high wheels with "stouter and smaller wheels." The resulting design afforded more space for the feet, a softer seat, better placement of hand controls, a bigger fuel tank, and increased storage capacity for luggage and supplies -- everything the motoring tourist desired. The earliest accounts of "automobiling" made clear the need and desire for additional passenger, storage, and fuel capacity.<sup>65</sup>

On May 20, 1901, Alexander Winton departed San Francisco on a coast-to-coast expedition. President of the Winton Motor Carriage Company, of Cleveland, Winton hoped to test his automobile as well as enjoy the cross-country trip. Although Winton's expedition ended ten days later in the "quick-sand" of the Nevada desert, the account of his excursion also documented the hardships of early auto-touring. Charles B. Shanks accompanied Winton and published his account in the August 3, 1901, *Scientific American Supplement*. In the opening paragraph of "Automobiling in the West," Shanks noted that the "expedition failed" not because of mechanical or human error, but because of the "utter absence of roads." The photographs that accompanied Shanks' article showed "roads" strewn with rocks and another covered with about nine inches of mud. Accordingly, autocampers carried not only a generous amount of camping supplies but also the "essential" automobile equipment necessary for long-distance travel. Items usually included spare tires, tubes, and patch kits:

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<sup>65</sup> Hrolf Wisby, "A Practical Automobile Touring Outfit," *Scientific American* (v. 86), March 1, 1902, p. 134.



extra gasoline, oil, and water; spare tools; a block and tackle assembly or tow lines; and even spare parts such as carburetors and a battery or two. Though similarly prepared for mishaps, Winton had no choice but to abandon his excursion when his automobile bogged down in the sand.<sup>66</sup>

Limited space in the automobile and lack of decent roads both contributed to early tourists utilizing hotels rather than camping. Still, some Americans believed that following set routes to arrive at hotels by an appointed time proved comparable to riding the train. Accordingly, the number of Americans autocamping continued to grow well into the second quarter of the twentieth century. Americans not only enjoyed their new- found motoring independence, but they enjoyed exploring their nation. In the April 1905, *Country Life in America* article "The Automobile Camper," author Hrolf Wisby pointed out that while touring seemed an "ordinary" experience, autocamping constituted "an entirely new feature of the sport." The author maintained that few knew "how to do it -- how to pitch camp with an automobile and be comfortable." A similar conclusion appeared three years later in another *Country Life* article. Both men, however, drew on their "experiences" and offered advice on how to enjoy the "new sport."<sup>67</sup>

Although woodcraft contributed to the ambience of camping by setting a mood of ruggedness and self-reliance, the act of camping existed as a sport for both sexes. While some female authors took a submissive approach to camping, writing that when a woman

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<sup>66</sup> Charles B. Shanks, "Automobiling In The West," *Scientific American Supplement*, No. 1335, August 3, 1901, p. 21398-9; Dr. W.A. Clarke, "Automobiling in the Yosemite Valley," *Overland Monthly* (2nd Series, Volume 40), August 1902, p. 104-10.

<sup>67</sup> Hrolf Wisby, "The Automobile Camper," *Country Life in America*, April 1905, p. 696-702; George Gladden, "An Automobile Prairie Schooner," *Country Life*, June 1908, p. 176-7.

camped with men "she must play his game or stay at home," other women did not succumb to such gender barriers. For instance, in the June 1910, *Country Life in America* article "Camping for Women," Mrs. Larz Anderson recommended camping as an alternative to the summer resort. She further advised her female readers that they should "begin near home," camp out "just for a day, and with no men in the party," to determine whether or not they liked it. Anderson warned her readers that the "dainty and delicate had better not go camping." Moreover, since camping required tent setup, fire building, and the like, Anderson advised that "no lazy person should go camping." Similar sentiment appeared in a June 1911, article by Mrs. A. Sherman Hitchcock, of Providence, Rhode Island. Having camped since 1905, Hitchcock noted that the ideal "motor vacation" provided an opportunity to lead "the simple life as much as possible" and to "get away" from standards of decorum and rules of etiquette. To "lead a free and independent existence" Hitchcock advised a camping outfit rather than a hotel. Despite the opportunities to enjoy the outdoors, when women camped with men, for the most part, they continued their social role as homemaker. As Mary Roberts Rinehart observed, the "difference between the men I have camped with and myself, generally speaking, has been this; they have called it sport; I have known it was work."<sup>68</sup>

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<sup>68</sup> Elizabeth C. White, "A Woman in the Party," *Country Life in America* (September 1916), p. 23; Mrs. Larz Anderson, "Camping for Women," *Country Life in America* (June 1910), p. 140; Mrs. A. Sherman Hitchcock, "My Vacation in a Motor Car," *Suburban Life* (June 1911), p. 395; Virginia Schartf, *Taking the Wheel: Women and the Coming of the Motor Age* (New York, The Free Press, a division of Macmillan Inc., 1991), p. 138. Also see, Laura Miller, "Duffel for Women," *Outing*, September 1916, p. 592; Marion Randall Parsons, "A Woman's Tramping Trip Through Yosemite," *Overland*, November 1915, p. 421; Myra Emmons, "The Adventures of a Woman Who Hunts Big Game in the West," *American Homes and Gardens*, December 1905, p. 400; Harvey Whipple, "When the Women Went Along," *Country Life*, June 1919, p. 55; "Camping for Women," *Country Life in America*, June 1910, p. 176.

Another author who wrote from experience, Mrs. M.G. Baker, claimed that she and her family had "lived in a tent for seven summers," beginning in 1903. Published in June 1910, the *Country Life* article "Camping For The Entire Family," pointed out that camping proved a comfortable, pleasant, and "most economical way of spending a summer." Baker further noted her trips lasted from four to nine weeks, and the party varied from her and her husband alone to three adults and three children. Addressing the hesitant mother, Mrs. Baker informed readers that she had taken her three children camping since they were between four and eighteen months old, and that they had all "been in a tent every summer since." Furthermore, Baker claimed that the children had "profited by the outdoor life," each one being "well and sturdy." It appears the Bakers never pondered staying at a hotel.<sup>69</sup>

The basic argument between autocamping and hotels appeared in the June 1905 article "Comfortable Camping vs. Boarding-Houses." The author opened his argument noting that while "roughing it" appealed to many, it proved "by no means necessary." The article offered advice on setting up camp, procuring essential equipment, and making the "tent absolutely comfortable." Like Nessmuk, the author did not appreciate the standard wall tent, though he thought it could be modified to meet his needs. Regardless of the choice of tent, the *Country Life* article concluded that camping proved "far better" than having to tolerate "uncomfortable and often unclean beds, stuffy rooms and poor food."<sup>70</sup>

To ensure a comfortable camp, most authors considered camp site selection the most important factor. While Nessmuk, Buzzacott, and Gibson each considered site selection in

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<sup>69</sup> M.G. Baker, "Camping For The Entire Family," *Country Life in America*, June 1910, p. 286.

<sup>70</sup> A. Radclyffe Dugmore, "Comfortable Camping vs. Boarding-Houses," *Country Life in America*, June 1905, p. 241-2.

their respective guides, Mrs. Baker's article, "Camping For The Entire Family," offered not only a mother's perspective, but advice on how to organize and manage the family camping experience. In choosing a site, Baker pointed out that a wooded strip of land near a good sandy beach on the edge of a lake or river satisfied the needs of her camping party. The preferred beach provided a clear, wide, gently sloping stretch of playground for the children and a vantage point from which mother could observe without the diversion of "constant watching." A cleared, level area near the tent served as a kitchen. The trees nearby provided firewood, shade, and a place for the Baker's to "hang" their tent. For many early campers, a rope tied between two trees often served as a ridge-pole to support the tent. This system worked well for campers in wooded areas. In *Camps and Tramps in the Adirondacks*, Northrup recommended that the camper sew a rope through the top of the tent and "dispense with the annoyance and burden of tent-poles." The Baker's agreed as the accompanying photographs indicated.<sup>71</sup>

Setting up camp, whether for a night or for a month, experienced campers followed a set routine or ritual. Clearing the site for the tent and then pitching the tent often proved the first order of business. Setting up beds, cots, or bedrolls followed, as did placement of the storage trunks in specific areas or tents. In essence, unpacking occurred only as items were needed. When a party of adults camped, specific assigned duties eliminated redundancy and altercations. Kephart and others recommended that party members alternate between duties

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<sup>71</sup> M.G. Baker, "Camping For The Entire Family," *Country Life in America*, June 1910, p. 286; Northrup, *Camps and Tramps in the Adirondacks*, p. 271-2; Also see Stewart Edward White, *The Outdoor Omnibus, The Forest* (New York: Grosset & Dunlap, 1903), p. 40.

such as setting up the tent(s), gathering firewood, fetching water, and cooking meals. The Bakers followed a similarly systematic method when setting up camp.<sup>72</sup>

In his 1903 text *The Forest*, Stewart Edward White wrote of camping with efficiency and following a set routine. White believed that if the campers, when establishing camp, could not "move directly and swiftly and certainly along the line of least resistance in everything" required, then they acted inefficiently and lacked total enjoyment. As Mrs. Baker pointed to in her article, the camping routine began at home with the preparing and packing of the gear for the trip. To alleviate the "forlorn hunt" for missing articles, Baker grouped her equipment and packed accordingly. She found it most "wise" to "pack one nightgown for each person in with the bedding" as it always seemed "the missing article." Like White and others, Baker advised campers not to unpack everything. Rather, in a well organized camp, one could find what one needed, when one needed it. Kephart, among others, pointed out that "novices" strew things about in camp while good campers had "a place for everything and everything was in its place."<sup>73</sup>

While many authors of the period agreed that autocamping offered freedom or independence from the overpriced, substandard hotel or boarding-house lodgings, they also advocated various means to alleviate the primitive character of camping with an automobile. Among the earliest auto-tents, the automobile "Prairie Schooner" tent attached to the rear of the automobile and stretched to over thirteen feet long. The tent had a sewn-in floor. The

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<sup>72</sup> Baker, "Camping For The Entire Family," p. 286; Kephart, *Camping and Woodcraft*, p. 28. See also, Kephart's advice on "System in Camping" in chapter twelve, "Camp Making," p. 217.

<sup>73</sup> Stewart Edward White, *The Forest* (New York, The Outlook Company, 1903), p. 49; Baker, "Camping For The Entire Family," p. 286-7; Kephart, *Camping and Woodcraft*, p. 218.

Prairie Schooner itself, however, also proved a novel idea. One of the earliest camp-cars or auto-conversions, was conceived in 1908, by Roy A. Faye of Boston, who redesigned and rebuilt his automobile to "be a dry-land yacht." Stripping the auto down to the chassis, Faye began by attaching four heavy iron rods to serve as bracing and to keep the inside from spreading. Sleeping bunks attached to each side and folded down for use. Additional bunks, also twenty-four inches wide and seventy-eight inches long, attached to the same bracing at a height of thirty inches above the lower bunks. The body and frame of the unit, made of hickory strips placed nine inches apart up the sides to the top berth, proved strong, though not heavy. Weatherproof black canvas stretched over the four iron rods to cover the top, and half-inch wood strips attached to the hickory ribs to cover the sides. The rear of the "Prairie Schooner" had storage compartments on both sides, accessible from both inside and out. To provide for electrical uses, ignition, and lighting the car, Faye installed "a number of storage and dry batteries" beneath the driver's seat and a small dynamo to generate electricity for storage. Built-in provision boxes, a tool storage space, and an ice-box that pulled out like a drawer completed the outfit. When Faye attached his tent to the unit, it measured twenty-seven and one-half feet long. Faye, among others, understood Francis Buzzacott's axiom of roughing it, smoothly.<sup>74</sup>

Although a few individuals tinkered with the automobile superstructure to develop camp bodies, the majority of early autocampers used tents. A variety of firms offered tents and camping equipment, some specifically for autocampers. The 1905 Abercrombie & Fitch catalog, for instance, included a large selection of camp clothing and other manufactured

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<sup>74</sup> George Lorando Lawson, "An Automobile Prairie Schooner," *Country Life*, June 1908, p. 176-7.

camp items. George B. Carpenter & Company, of Chicago, offered an extensive amount of camping goods, including forty-three sizes of tents in five different fabrics as well as Gold Medal-brand camp furniture, in its 1908 catalog. While the Gold Medal Camp Furniture Manufacturing Company did not supply tents, as noted previously, its camp furniture proved reasonably priced, compact, and reliable. Although Gold Medal expanded its selection of furniture, including their "Junior" line for children, its basic goods -- chairs, tables, and cots - - with the exception of colors, remained virtually unchanged, as documented throughout their catalogs.<sup>75</sup>

Other changes in camping equipment occurred as the result of autocampers' needs for lightweight, compact camping gear. Unless one planned to stay in a permanent camp, camp-grates and gasoline stoves replaced the bulky, heavy iron stoves. Still, some firms like George B. Carpenter & Company, of Chicago, offered models that maintained the appearance of the "ol' cook stove" by reducing the stove size and weight and collapsing the smoke-stack so that it could be stored in the oven and telescoped open as needed. The "Sportsman's Delight," for instance, resembled the "Sportsman's Friend" or the "Little Pet" models advertised in the Carpenter catalog for 1908. Still, the larger Sportsman's Delight weighed fifty pounds, and only the legs detached for packing. The other two models "folded ready for traveling," including the stove pipe which came in six fifteen- inch lengths and telescoped for easy packing. Still, the names of these stoves proved deceptive in that the "Sportsman's Friend" and the "Little Pet" weighed forty-two and twenty-five pounds.

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<sup>75</sup> "Abercrombie & Fitch," New York, 1905 catalog, HFM/GV; George B. Carpenter & Co., Chicago, 1908 catalog, SI/NMAH; Gold Medal Camp Furniture Manufacturing Co., Racine, Wisconsin, catalogs, 1893, 1894, 1904, 1920, 1928, HFM/GV; *Ibid.*, catalog, 1925, authors collection.

respectively. For more permanent camps, the stove also served as "tent heater." Still, the "20-Gauge Sheet Steel" stoves proved impractical to autocampers or the shifting camp. Wilson's Kamp Kook's Kit appeared in the Carpenter catalog for 1908, as well as in later Abercrombie & Fitch catalogs as an alternative to the heavy steel stoves. Wilson's kit contained twenty-one pieces of cooking equipment, including the fire grate, the camp broiler, utensils, coffee pot, pans with lids, a can opener, salt and pepper boxes, and two cookbooks. The kit packed into a case and weighed only fifteen pounds. Besides their lighter weight and size, Wilson's cooking kits appealed to campers because of the efficiency they offered with smaller items fitting within the larger items and all items contained within one carrying case.

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Although some firms altered their goods to make them more efficient or self-contained, others approached the problem of durable, lightweight cooking gear from another perspective. During these early years of autocamping, aluminum slowly gained popularity with campers. While some ridiculed its tendency to burn food or cause it to stick, many advocates promoted its light weight as well as its multiple uses. By the early 1920s, aluminum fold-down stoves replaced many of the heavier iron stoves. Numerous accounts printed in periodicals of the time pointed to aluminum cooking equipment as the preferred choice. The caption beneath a photograph in the *Country Life* article by Mrs. Baker, "Camping for the Entire Family," pointed to convenience in that the "aluminum baker" folded flat for packing. Other camping equipment that underwent change included cooking utensils, dishes, and pans.

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<sup>76</sup> "George B. Carpenter & Company, Makers of Tents, Flags & Awnings, Rainproof Covers, Camp Furniture, Yacht Sails," 202-208 S. Water St., Chicago, 1908 catalog, p. 86, SI/NMAH.



Although some authors recommended taking your plated silverware with you, "no need to rough it and deprive oneself," experienced campers did not advocate carrying iron skillets, heavy cookware, or dishes for that matter. Still, many camp-cooks insisted on at least one iron skillet, especially useful for cooking breakfast and fried foods. Aluminum proved popular due to its light weight and subsequent manufacturing into numerous articles - pans, utensils, flatware, skillets, coffee pots. "Wearever" brand aluminum cookware appeared in numerous magazines and camping-related journals. Other alternatives included tin or enameled ware. Although tin goods proved inexpensive, they also rusted faster or burnt over an open flame. Enameled ware chipped easily. Although aluminum seemed "ideal" to some campers, in the early years of the twentieth century aluminum goods proved "very expensive." Still, Buzzacott and others considered it "well worth its price" if campers needed to travel light or continuously pack and unpack their gear.<sup>77</sup>

Another particular hardship campers experienced involved overnight accommodations. While a network of automobile services did develop, the formative years of the 1900s afforded little for the autocamper. For tourists, hotel accommodations often dictated the route and length of the day's travel. Autocampers' overnight stays often took place in a schoolyard or farmer's field. Canvas tents or the car itself served as the shelter. While the automobile offered freedom of movement, it also implied hardships inherent in its use. Early autocampers quickly learned the true meaning behind the nineteenth century term "roughing it." Where roads did not exist, some early motorists ventured nonetheless. Other roads followed previously established wagon or carriage routes as was much the case in the

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<sup>77</sup> M.G. Baker, "Camping For The Entire Family," *Country Life in America*, June 1910, p. 288; Buzzacott, *The Complete Campers Manual*, p. 90.

national parks. Moreover, fuel and service stations appeared only after routes became established. Where "roughing it" in the nineteenth century implied camping with only the essentials at some remote location arrived at by foot, animal, or canoe, the first autocampers found their experiences equally rough. Additionally,, many of the "headaches" stemmed from problems with the automobile, not the actual camping. Still, in the earliest years of autocamping, the automobile often served as the camp shelter, and these arrangements quickly proved uncomfortable and insufficient.

Two predominant methods of sleeping in the automobile had emerged by 1910. One method involved manipulating the front seats so that they folded down flat. Several authors described the necessary procedures in their magazine articles. Essentially the back of the front seats folded back and locked into place, providing a reasonably large enough space for the camper to stretch out and sleep. Adding cushions and bedding increased the amount of comfort. Harry H. Dunn described the procedures he used in his July 1909, *Suburban Life* article, "Living in an Automobile." Dunn first modified his automobile by installing a bench seat rather than the more popular single seats. The seat folded back far enough to reach the rear area, and folding legs supported the seat-back. Mrs. Dunn added "luxuriously upholstered cushions" which provided "as comfortable a bed as one could well desire." Another means of converting the car seats into a bed appeared in *The Fordowner* for June 1914.<sup>78</sup>

The article "Ford Camping Outfit" provided a detailed account of how Charles H. Sebree, of Caldwell, Idaho, modified his "Universal Car" (the Ford Model T) to facilitate use

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<sup>78</sup> Harry H. Dunn, "Living in an Automobile," *Suburban Life*, Vol. 9, No. 1; July 1909), p. 19.

of the "car as sleeping quarters and camp, with all the comforts of a Pullman berth or a ship's stateroom." Instead of hinging the back of the front seat, Sebree simply removed it and "stowed it under the car" when making camp. Two iron brackets, three feet long, extended from the bottom of the front seat up to the dash, where they fastened. The front seat cushions spread atop the supports provided the base for the mattress, which rested atop the entire unit. Camping with only his wife, Sebree found plenty of space for storing the mattress and bedding in the rear seat. The notion of a fold-down or convertible seat proved one idea which carried forth throughout the history of recreational vehicles and, later, automobiles.<sup>79</sup>

The other means of sleeping in the automobile utilized the front seats but in a different manner. Several firms supplied "sleepers" or "car beds" as a viable sleeping arrangement. The Universal Car Bed appeared in a number of catalogs and the various writings of autocampers, as did the A.B.C. Sleeper. Although no brand name or specific details appeared in *The Fordowner* article "Round the Ford Camp Fire," a photograph and caption described one of the earliest examples of a frame bed which stretched above the seats. Advertisements for the Universal Car Bed provided a more detailed account of the "sagless bed." Tension proved the basic principle behind the sagless bed. The frame of the bed, a "select hard wood pole," hung from ropes suspended from the split windshield frame. The other end stretched across the inside rear area of the auto. The "bed mat," made of specially woven heavy canvas of olive drab color provided a sleeping area forty-six inches wide by eighty-four inches long. Advertising the bed as compact, Universal also boasted a

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<sup>79</sup> "Ford Camping Outfit," *The Fordowner* (Vol. 1, No. 3, June 1914), p. 26.

child could put it up. Still, the Universal Car Bed only worked with a split-windshield touring car. Equally limited in use, the A.B.C. Sleeper fit only the Ford Touring car.<sup>80</sup>

Patented January 21, 1919, by the Auto Bed Manufacturing Company, of Kansas City, Missouri, the A.B.C. Sleeper provided "a real spring cushion bed for two adults." Resting atop and supported by the seats of the automobile, the A.B.C. Sleeper also used tension for support. (See Appendix, Figure 3) Advertised as the "Keenest Kamps In Kreation," the unit folded into a carrying case four-and-one-half inches by thirty inches and weighed only seven and one-half pounds. When Ford bodies changed in 1922, minor modifications in the A.B.C. Sleeper followed. Instead of fitting only Ford touring cars, the new modified Utility Sleeper fit other small touring cars such as the Overland 4 and the Chevrolet 490.

Although these automobile "beds" offered shelter from the weather, they proved troublesome and uncomfortable. While setup may have been easy enough for a child, the sleeping arrangements also best suited children. Both the Sleeper and the Car Bed rested above the seats and offered little room between the sleeping campers and the roof of the automobile. The A.B.C. Sleeper advertisements specifically noted that it could "be used with [the] top up or down." An earlier model, the 1916 McMillin Auto Bed, fit the Ford and the Chevrolet 490, as well as Dodge, Buick, Overland, Studebaker, and Maxwell. Made by the Auto Bed Company of Bellingham, Washington, the McMillin Auto Bed weighed thirteen pounds and also used ropes and iron rods to suspend the unit above the car seats. Although

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<sup>80</sup> "Round the Ford Camp Fire," *The Fordowner*, Vol. 2, No. 5, February 1915, p. 13-15; Casey Khayyam, *Autolog: The Book of Touring Information*, (Auto Bed Manufacturing Co., Kansas City, Mo., 1920, p. 5. SI/NMAH, Transportation Division files; "Spotlight Turned on Refined Motor Camping," Auto Bed Manufacturing Co., Kansas City, Mo., 1922, p. 34-5. Trade Catalog, TC PB Dublervis, ABC Mfg. Co., 1922, HFM/GV, Accession 91.315.143.

the bed was made of strong ten-ounce canvas, some campers disapproved of attaching it directly "to the hood-framework by means of hooks and screw-eyes." Campers found these models limited, more expensive, and a less convenient alternative to other commercially available goods. Other brands included the Burch Pueblo Auto Bed, the Des Moines, the Spokane, the Red Seal Auto Bed, and the Moto-Bed.<sup>81</sup>

The combination tent and bed provided two camp essentials in one unit. As early as April 1915, the L.F. Schilling Company, of St. Joseph, Missouri, advertised "Schilling's Auto-Camp" as necessary to "know the full joy of auto camping." An auto-tent equipped with a "comfortable bed," the unit fit only the rear platform of the Ford or Maxwell Runabout. L.F. Schilling Company offered an expanded line of goods and its "Curtiss Bed" appeared in a variety of advertisements and in the writings of campers. The *Outing* article "The Open Road" included a photograph of the Curtiss bed set up. The Curtiss Bed attached to the running board of the automobile and included a "khaki cover" which attached to the roof above the door. The unit included a mattress and blankets. The bed had an iron metal frame with corner posts and mid-section supports. A thin metal frame extended up from the foot of the bed and served as support for the draping khaki cover. When folded up and closed, the Curtiss bed remained attached to the running board. The Gold Medal Camp Furniture catalogs of the 1910s also featured several brand-name cots or beds which attached to an automobile. Gold Medal adapted its camp furniture to include canvas covers similar to other models. These tent-bed combinations proved quite popular among autocampers. Frank

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<sup>81</sup> Ibid., "McMillin Auto Bed," Auto Bed Company trade catalog, ca. 1917, HFM/GV, Accession 88.327.2.

Brimmer, an early camper and writer, believed there existed no other piece of "equipment more distinctly built for the sole purpose of autocamping than the tent-bed combination."<sup>82</sup>

The J.H. Wittman Manufacturing Company, of Kansas City, Missouri, offered a running board bed which operated on a different principle. Rather than a frame with legs, the "Wittman Limousine Camp" bed rested atop one leg centered under the unit. The leg extended out two to four inches from the running board and extended down to the ground. On this leg and also attached to the end of the bed, a metal arm joined the leg and served as the second element necessary to the "automatic tension" principle behind the bed's operation. The canvas cover or base included two guy ropes which extended from the corners of the bed to two stakes, similar to a tent. Additionally,, the canvas cover that attached to the car and draped over the bed included guy ropes stretching to the same aforementioned stakes. The Wittmann Limousine Camp differed from other contemporary units. Wittmann sold its bed as part of its various "camps." The Limousine Camp consisted of the bed, matt, ropes, stakes, and carrying case. The tent came in a choice of five sizes and two materials. The Wittmann Wander Camps offered campers similar choices. Wittmann's advantage appeared in its flexibility of meeting the campers' needs. Whereas some campers required one or two single beds, others needed only one two-person unit. Wittmann recommended two Quad Camps for the party of eight. The Quad camp included four double beds and tents which enclosed the entire length of the automobile on both sides. The July 1917 "Limousine Camp" advertisement included a photograph of the unit set up, with one of the bundles stored

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<sup>82</sup> "Joys Of Auto Camping" *The Fordowner*, April 1915, advertisement, p. 69; E.W. Bowne, "The Open Road," *Outing*, Vol. 68, September 1916, p.684; Brimmer, *Autocamping* Cincinnati, Stewart Kidd Company, Publishers, 1923, p. 62.

on the running board. Wittmann noted its Quad camp package weighed only sixty pounds. The advertisement also pointed out that the "fabric castle" included "restful beds, not cots, but BEDS, unexcelled by most luxurious springs, feathers, hair or air." The auto-tent included in the "camp" came in choice of six-ounce Duck or balloon silk. Other brands included the Rush Outing Outfit, the Double Tentobed, the Berg Jiffy Auto Tent, the Dav-O-Tent Beds, and the Stoll Combination Bed and Tent, very similar to the Schilling model.<sup>83</sup>

A more popular camp shelter which underwent numerous modifications in the early years of autocamping, the auto-tent (or auto tent) proved a popular form of shelter by the mid-1910s. A number of models appeared in trade catalogs and periodicals. These models fit some automobiles specifically while most modifications occurred in response to desires for larger or more convenient accommodations. Most auto-tents attached directly to the side of the automobile and resembled a shed roof tent sloping away from the auto. Others extended from the rear of the car but lacked direct access to the automobile. Another option employed an Amazon tent with the front flap or extra tent fly attached to the auto. In this manner, a free-standing tent utilized the automobile rather than tent stakes and ropes. Similarly, one model of auto-tent used ropes attached to the steering wheel and the wheels on one side of the car as an alternative to staking. Another brand, the Des Moines auto-tent, included an Amazon-style tent with a fly that *completely* enclosed the automobile, on all sides. One writer commented that unless one looked closely, one would not have known that there was a car under the Des Moines tent. Using the automobile as a fourth wall proved a valuable feature, permitting access between the tent and interior of the automobile. Other

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<sup>83</sup> "Wittmann Mfg. Co. Limousine Camp," Trade catalog, H.A. Clark collection, Accession 92.150, Trailers, Miscellaneous, M-119, HFM/GV; Brimmer, *Autocamping*, p. 68-72.

important features campers considered when choosing a tent for camping included whether or not the tent had a floor, the size of the camping party, the intended use of the tent area (cooking/dining, sleeping, storage, etc.), the extent of setup procedures, the quality of materials, and the anticipated environmental conditions, including insects and other pests.

A number of firms offered auto-tents. Camp suppliers, manufacturers, and other firms each offered a variation on the common model which attached to the side of the automobile. The Mound City Duck and Rubber Company, of St. Louis, Missouri, specialized in tents, tarpaulins, wagon covers, awnings, and similar canvas and rubber goods. The company catalog and price sheet, dated May 1, 1922, included the original Mound City Auto Tent, available in three sizes, and the Mound City Auto Tent, styles number one and two, also available in three sizes. Whereas the original model attached to the side of the car, both styles number one and two functioned independently or attached to the automobile. Style number two included an additional awning which stood alone, attached to the car, or could "be thrown over top" of the automobile. Other advancements in Mound City tents appeared in these same ads. The original auto-tent came in one color, khaki, and did not have a tent floor. The other two styles came in khaki or olive drab. The firm also offered sewn-in floors as an option. Like many contemporary firms, Mound City Duck and Rubber Company, in addition to promoting its own goods, also advertised and sold Gold Medal camp furniture.<sup>84</sup>

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<sup>84</sup> "Mound City Duck and Rubber Co., Manufacturers of Tents, Wagon Covers, Awnings, Etc., 832-834 North Broadway, Saint Louis, U.S.A.." Trade Catalog and enclosed price sheet, dated May 1, 1922, p. 6b, 7, authors personal collection.



While larger firms like Mound City Duck and Rubber Company advertised Gold Medal brand items, smaller businesses similarly boasted the quality of the Gold Medal brand. For instance, the Albany Hardware & Iron Company, of Albany, New York, printed a variety of advertisements depicting the camp furniture in use. The Albany Hardware & Iron Company pamphlet for 1920, "Comfort Guide for Sportsmen. Campers, Tourists," also included special Gold Medal-brand Amazon tents, auto-tents and the Gold Medal motto, "Best for the Camp - Bears the Gold Medal Stamp." Not everyone could afford or even acquire the popular Gold Medal-brand items. To fill this gap or to simply offer an alternative item, other firms built and supplied their own version of camp furniture, supplies, and camp shelters. While Gold Medal garnered praise from suppliers and campers alike, many of the items marketed under other names appeared as cheap and less durable, and were duly scorned. Still, a number of firms offered less expensive, reliable goods for the growing number of middle-class campers.<sup>85</sup>

The George B. Carpenter & Company, of Chicago manufactured and sold canvas stores, including camping-related items. By 1920, Carpenter boasted a thousand-page illustrated catalog full of canvas, camping, and sporting goods. Catalogs for 1908 and 1914 reflected how Carpenter & Company expanded its line of goods to meet growing desires and demands. The 1914 Carpenter catalog demonstrated just how desirable it was to get back to nature as well as the extent to which one could equip for the outing. Additionally, the Carpenter catalog demonstrated the social stratification which existed among campers. While Carpenter offered basic canvas bedrolls, it also offered cots with down-filled

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<sup>85</sup> "Comfort Guide for Sportsmen, Campers, Tourists," Albany Hardware & Iron Company, Albany, New York, Trade Pamphlet, 1920, HFM/GV, Accession 86.3.33.

mattresses and pillows. After all, not all campers desired the elaborate bathing tubs or special Adirondack-type furniture. Cooking gear possibilities included a grill for over a fire pit, a collapsible two-burner gasoline stove, or a six-hundred-pound iron "camp stove."

Carpenter offered a variety of tents and shelters that appealed to campers of all incomes.

Models included anything from the standard wall tent that measured from five feet by seven feet, to the largest wall tent, which measured nineteen by thirty-five feet. The "oblong round end tents" ranged from thirteen by twenty-one feet up to fifty-two feet by eighty feet. The largest "Camping Tent" measured sixteen feet, six inches by thirty feet long.<sup>86</sup>

For extended stays or the permanent camp, Carpenter offered other shelters. The "Carpenter Portable Cottage Tent" or the "La Pointe Portable House Kit," however, attracted only the more affluent. When a Ford Model T cost around \$500, the \$1396 Carpenter price tag attracted few campers. As early as 1908, the Close-To-Nature Company of Colfax, Iowa, offered "canvas houses, wooden cottages" and an extensive choice of "tourist tents, camp tents, tourists supplies, camp furniture, camp supplies [and] outing equipment." W.H. Monroe founded the firm with "the express purpose" of manufacturing his "own inventions." The firm advertised its canvas house and folding bungalow as ideal for the tourist camp. The smallest unit weighed 170 pounds, 210 pounds in the crate, which proved feasible for permanent camps only. Still, as a "luxury on your lawn" or as "housing for tuberculosis patients" the unit proved sturdy, easy to assemble, well ventilated, and even anchored so as to "not blow away." By 1920, the firm offered the canvas house and the folding bungalow as

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<sup>86</sup> "George B. Carpenter & Company, Chicago," Trade Catalog, 1920, HFM/GV: "Tents, Camp Equipment & Furniture," George B. Carpenter & Co., Trade Catalog #24237, 1914, SI/NMAH, Library; "George B. Carpenter & Co., Makers of Tents, Flags & Awnings, Rainproof Covers, Camp Furniture, Yacht Sails," Trade Catalog, 1908, SI/NMAH, Library.

well as "cottages," including the Colonial, Virginian, Resorter, Badger, Gopher, Forester, Wolverine, and Tourist models. These models offered tourists a sense of camping while maintaining "privacy, comfort, and livability." By adding electric lights and situating the cottages "here and there," the Great Lake Way Clubs of Michigan claimed the cottages provided an "invigorating" camping experience. The firm's auto-tents, however, provided a more flexible alternative when camping.<sup>87</sup>

Abercrombie & Fitch Company of New York, also offered tourists and campers a wide array of supplies. In its February 1913 catalog, Abercrombie & Fitch denoted six "varieties of camping." As one might expect, Abercrombie & Fitch offered "sporting equipment" for all six methods. The first method, the permanent camp, described a method whereby the camp remained in one spot for the duration of the outing. Abercrombie & Fitch prescribed the "Wall or Family Compartment Tent" which, when equipped with "all sorts of camp furniture, chairs, hammocks, etc.," made "almost a permanent home." The firm grouped the other five varieties of camping as "the Nomadic or Traveling Camp." These five included canoe, pack horse, tramping, forest cruising and automobile camping. Dividing the five according "to the means of travel," the firm maintained that "road tramping" differed from "forest cruising" because in "the big timber" one needed different shoes and other supplies. Abercrombie & Fitch understood the limitations transportation placed on campers and the amount of equipment. In short, as recreational camping grew in popularity, suppliers and manufacturers tried to meet the changing needs and desires through technological advances in camping equipment. As more and more Americans "expressed an abiding love

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<sup>87</sup> "Close-To-Nature," Trade Catalog, ca. 1920, SI/NMAH, Library.

of and reverence for nature," manufacturers of outdoors and camping equipment likewise expressed an interest in catering to the growing needs and desires of autocampers.<sup>88</sup>

Carnie-Goudie Manufacturing Company, of Kansas City, Missouri, emerged as one firm that targeted the middle-class and more modest autocampers. The firm manufactured and sold their own line of C-G tents, auto tents, touring tents, and even canvas "take down houses." Carnie-Goudie advertised its goods as "cheap and serviceable," aiming to meet the "demand for a low priced Auto Tent - one that" provided "good satisfactory service" yet "at a cheap price." When compared to then-contemporary prices, Carnie-Goudie goods sold at fifty to eighty per cent less than others.

Jones & Van Doran Incorporated established itself at 800 Eighth Avenue, New York City, in 1918, and advertised itself exclusively as "Motor Camping Outfitters." Its advertisements appeared in the form of "Campolog," a detailed catalog describing the intended use of each item. The catalog stated the firm's "aim" to outfit motor campers with the equipment that best suited their needs. As such, Jones & Van Doran did not sell "complete outfits" maintaining a "policy" of "a thorough analysis of each piece of equipment from the standpoint of [its] Service" to the camping party. In contrast, The Charles William Stores Inc., also of New York City, listed its camping goods and outfits as part of its regular catalogs, such as their "Spring & Summer 1922, Automobile Supplies."

Whereas some firms like Carpenter, Carnie-Goudie, Jones & Van Doran, and even Abercrombie & Fitch offered a wide range of goods and prices, some firms specialized their offerings even more. The Gotham Sporting Goods Company of New York, for instance,

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<sup>88</sup> "From One Sportsman To Another," Abercrombie & Fitch Company, New York, Trade Catalog, February 13, 1913, SI/NMAH, Library (C688.76085 A126 1913); Alan I Marcus, *Technology In America*, p. 194.

boasted that it served "the cycle trade" since 1911, with quality "merchandise bought from reliable manufacturers," including camping equipment. The firm's 1921 "Motorcycle Supplies" catalog pointed out that "to complete the sport of riding motorcycles, camping equipment" proved "necessary." The firm recommended the Ideal Motorcycle Touring Tent and the Johnson waterproof sleeping bag as a compact outfit. The motorcycle camping package weighed between thirteen and twenty pounds, depending on size of equipment chosen. Of course, Gotham Sporting Goods also offered the necessary "panniers and carryall" in addition to other useful camping supplies.<sup>89</sup>

As these sorted examples demonstrate, autocamping grew into a popular pastime throughout the first two decades of the twentieth century. Manufacturers and suppliers of camping equipment subsequently grew to meet the needs and desires of American campers. Numerous authors in the first quarter of the century wrote of camping as an "institution," "a popular sport," or even a "cultural phenomenon." These writings appeared in a few accounts written prior to 1910; however, the general feeling that camping represented an American institution grew much more rapidly following World War I. Among the earliest mentions of the institutionalized pastime, the *Countryside Magazine* article "The Fine Art of Motor-Touring" opened by noting that "the automobile touring season of 1916" was expected "to break all records by a very wide margin." Furthermore, the article pointed out that autocamping properly deserved "the adjective popular." Again, the author equated motor touring with autocamping. Pointing out that one did not want to have one's movements

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<sup>89</sup> "Carnie-Goudie Mfg. Co., Kansas City," Trade Catalog, ca. 1920. Lost Highways; "Campolog - Motor Campers' Book, 1927," Jones & Van Doran Inc., Motor Camping Outfitters," SI/NMAH, Library; "Motorcycle Supplies," Gotham Sporting Goods Company, Incorporated, New York, New York, 1921, p. 63, 66, HFM/GV, Accession 92.150.

"regulated" by hotels, the bulk of the article detailed available equipment and supplies useful to "motor camping." Additionally, author Alexander Johnston noted the plight of hotels, arguing that this "condition" had been "widely realized as evidenced by the great variety of devices intended for the use of the motor camper." The author reasoned that "there must have been a general and distinct call for material of this sort, to attract the attention of the number of manufacturers who" offered such goods. Johnston concluded that the "motor tourist" who carried "an adequate camping outfit [had] achieved the ultimate degree of travel freedom." Similar articles noting the growth of camping and useful equipment included "The Open Road," "Nomadic Motoring," and "Gipsying De Luxe."<sup>90</sup>

One of the earliest texts on the subject, Frank E. Brimmer's *Autocamping*, opened with the chapter "Autocamping Independence." A prominent contributor to leading outdoor magazines, Brimmer made a name for himself writing of hunting and fishing excursions for magazines such as *Field and Stream*, *Outdoor Life*, *Outdoor Recreation*, *The Country Gentleman*, and *The Farm Journal*. After leaving his faculty position at "an Eastern university," Brimmer and his family embarked on a number of autocamping excursions. Brimmer wrote that he felt compelled to follow his dreams and to write "about the things nearest his heart." The accounts of his family camping trips appeared in *Popular Science Monthly*, *The Outlook*, *Outing*, *Motor*, *Motor Life*, *Motor News*, *The Woman's Home Companion*, and *The American Boy*. He even served as managing editor of *Outdoor Recreation* and as "autocamping editor of *Outdoor Life*." Brimmer published his

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<sup>90</sup> Alexander Johnston, "The Fine Art of Motor-Touring," *Countryside Magazine*, August 1916, p. 66-8; "The Open Road," *Outing*, September 1916, p. 678-88; "Nomadic Motoring," *Independent*, June 1, 1918; "Gipsying De Luxe," *Independent*, May 1919.

accumulated knowledge in two very similar texts, both published in 1923. Published by The Macmillan Company of New York, *Motor Campcraft* appeared in April. The Stewart Kidd Company version, *Autocamping*, not only had more illustrations; it also contained more detailed information. Noteworthy, Brimmer dedicated *Autocamping* to his six-month-old daughter Gloria Bess, "likely the youngest of all autocampers."<sup>91</sup>

Brimmer opened *Autocamping* by pointing out that the lure of autocamping was "not a transient pastime or a by-product of the world war, but a vocational institution that [had] come to stay." The author further pointed out that with the growth of the automotive industry, many Americans had become "unconscious gypsies, victims of the *wanderlust*." In 1921, Elon Jessup, Associate Editor of *Outing* magazine, published *The Motor Camping Book*. Jessup opened his first chapter, "Why We Motor Camp," by pointing to the "romance" and lure of the "gypsy" life as the primary reason for going camping. Similarly, John Cuthbert Long and John D. Long noted in *Motor Camping* that "in the United States a new and increasing way of satisfying the desire for recreation and adventure had swept over the country." The authors all agreed that motor camping had "become a leading national pastime."<sup>92</sup>

The notions of vagabonds, gypsies, and wanderlust also appeared as popular themes for authors of children's fiction. For instance, Katherine Stokes wrote early of the new sport in her 1914 text, *The Motor Maids at Sunrise Camp*. Helen Louise Thorndyke placed her

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<sup>91</sup> "Motor Campers Manual," The Coleman Lamp Company (1926), p. 3; Frank E. Brimmer, *Autocamping* (Cincinnati, Stewart Kidd Co., 1923), p. 7; Brimmer, *Motor Campcraft* (New York, The Macmillan Co., 1923).

<sup>92</sup> Brimmer, *Autocamping* (Cincinnati, Stewart Kidd Company, Publishers, 1923), p. 15-16; John C., and John D. Long, *Motor Camping* (New York, Dodd, Mead and Company, Inc., 1923), p. 1; Elon Jessup, *The Motor Camping Book* (New York, G.P. Putnam's Sons, 1921), p. 1-2.

popular character in a tent at Camp Snapdragon in the story *Honey Bunch: Her First Days In Camp*. The character again camped in a tent in the 1926 story *Honey Bunch: Her First Auto Tour*. The popular series by Laura Lee Hope included the camping-trip story with *Bunny Brown and His Sister Sue on an Auto Tour* (1917), as did her earlier series highlighted by *The Bobbsey Twins Camping Out*. Another series that appealed to children, the Tom Swift series by Victor Appleton, published its camping adventure around 1929, with *Tom Swift and His House on Wheels*. Although many of these stories appeared sanitized of camping and wilderness hardships, nonetheless, they introduced numerous youths to the adventure of autocamping and the growing American pastime.<sup>93</sup>

While some authors wrote of autocamping in texts like *Motor Camping*, *Autocamping*, *The Motor Camping Book*, and *Motor Campcraft*, and other authors focused on juvenile readers, other individuals stood out in the contemporary magazine and journal articles as advocates of the sport. Among the most noteworthy, Henry Ford not only enjoyed numerous local excursions, but he and his companions, the "Vagabonds," utilized custom-built Ford conversions on their many camping trips. Despite their nickname, Ford's companions were well known and included Thomas Edison, Harvey Firestone, and John Burroughs. These four men took frequent camping trips during the late-1910s and early-1920s. These trips lasted from several days to several weeks. One particular trip demonstrated just how popular autocamping had become. In 1921, Henry and Clara Ford

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<sup>93</sup> Katherine Stokes, *The Motor Maids at Sunrise Camp* (New York, Hurst & Co., 1914); Helen Louise Thorndyke, *Honey Bunch: Her First Auto Tour*, (New York, Grosset & Dunlap Publishers, 1926); Laura Lee Hope, *Bunny Brown and His Sister Sue on an Auto Tour* (New York, Grosset & Dunlap Publishers, 1917); Laura Lee Hope, *The Bobbsey Twins Camping Out*; Victor Appleton, *Tom Swift and His House on Wheels* (New York, Grosset & Dunlap, c. 1929). For more details on childrens fiction and its relation to camping and the environment see, Schmitt, *Back to Nature*, chapter eleven.



entertained President and Mrs. Warren G. Harding in a tent while on a camping trip.

Numerous photographs document this and other experiences and provide a glimpse of what camping meant to early campers like Henry Ford and the "Vagabonds." Noteworthy is the fact that when the group went camping, John Burroughs preferred placing his tent away from all of the others. He commented that it provided him with a deeper appreciation for nature. In turn, Ford not only encouraged others to take up autocamping; he also inspired *The Fordowner* magazine to recommend that Ford automobile dealerships provide free maps and guides to prospective buyers.<sup>94</sup>

*The Fordowner* was first published in April 1914, and within two months its editors had issued "the call of touring." In addition to the "call," the June issue included two related articles: one listing items to check before "Touring With the Ford," the other, how to alter the automobile body to build the "Ford Camping Outfit." As subscriptions to *Fordowner* increased, so did the number of readers' contributions documenting their Ford camping and touring experiences. For those Ford owners hesitant to heed the call, the editors prefaced the January 1915 article "Ford Camp Touring" with the following advisement: "Read this even if you have never toured, and don't intend to; you may change your mind, for 'Ford Camp Touring' is going to become one of the most popular American sports. This is prophecy." Future issues continued to note the "growing interest" in autocamping and the "fever" or

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<sup>94</sup> A variety of texts and photographic evidence document the camping trips of Henry Ford and the Vagabonds. Too, personal accounts appear in a variety of places including the manuscript collection of the Henry Ford Museum. See especially, Reference Photofile (#1660) photo/negatives: P.34.12.21; P.34.69.21; P.189.5394. Notable texts include: John Burroughs, *Selections from the Writings of John Burroughs*, "In the Catskills" (New York, Houghton Mifflin Co., 1910), found at the Huntington Library; Burroughs, *That Pastoral Paradise - Kadiak* (Berkeley, California, The Elkus Press, 1945), Huntington Library, Accession 264428; Burroughs, *Our Vacation Days of 1918* (Bound scrapbook with photographs of Ford, Burroughs, Edison and Firestone), Huntington Library.

"bug" which contributed to the motor camper "exodus" of the prewar years. As more Americans took to autocamping, future issues recounted their experiences as evidence of the prophecy being fulfilled.<sup>95</sup>

Recounting the experiences of her husband, cat, dog, and herself, Anna Spencer Twitchell's wrote the articles "The Log of the Liliput," and "More Adventures of the Liliput," which informed *Fordowner* readers of several camping tours her group had made. Between the first of June and August 28, 1914, the Twitchells ventured from Pike's Peak, Colorado, to Los Angeles, California, via Salt Lake City, Reno, Lake Tahoe, and Sacramento. While the first article detailed the trip, the roads traveled and hazards encountered, the author also attempted to depict the scenic American landscape, which she concluded was "a beauty hard to describe." Although words could not describe the "exquisite scenery," the author did not spare her emotions when she compared her automobile trip to that of the train: "As for sight-seeing from the windows of a hot, grimy Pullman, one of a hot, grimy assortment of humanity, irritable and perspiring, never again!" Similar sentiment appeared in the chronicles of other campers who preferred the automobile to the train.<sup>96</sup>

After the "Log of the Liliput" appeared, *Fordowner* editors received numerous requests "for further details" on camp equipment and usage. To answer the questions first-hand, the magazine sponsored a couple to write about their experiences. In a series of ten articles published between August 1915 and May 1916, Mr. and Mrs. J. Constantine Hillman

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<sup>95</sup> "The Call of Touring," *The Fordowner*, V. 1, No. 3, June 1914, p. 1; "Touring With the Ford," *Ibid.*, p. 22; "Ford Camping Outfit," *Ibid.*, p. 27; "Ford Camp Touring," *The Fordowner*, V. 2, No. 4, January 1915, p. 1; "Touring Days Here," *The Fordowner*, June 1916; "Touring Fever," *The Fordowner*, May 1917.

<sup>96</sup> Anna Spencer Twitchell, "The Log of the Liliput," *The Fordowner*, V. 3, No. 2, May 1915, p. 44; Twitchell, "More Adventures of the Liliput," *Ibid.*, V. 3, No. 4, July 1915, p. 16.

documented their experiences at "Cross Country Fording." The Hillman's dubbed their Ford the "Hannah Maria," and every month for almost a year the couple's latest adventure appeared in the pages of *The Fordowner*, enticing others to attempt autocamping. Beginning in Pasadena, California, in August, the Hillmans had retraced the route of the Liliput back to Colorado by the time "Cross Country Fording --- IV" appeared in the November issue. While the Hillman articles described the route, road conditions, and scenery, they also served as a valuable tool in analyzing camp culture, equipment, and related episodes.<sup>97</sup>

The Hillmans carried their equipment in the rear seat of the automobile. Since the Hillmans required provisions and equipment for only two adults, the weight and bulk of the their camping outfit proved quite modest, with the rear area comfortably accommodating the load. The typical equipment included a wall tent of average size, a folding camp stove, folding camp chairs and cots, an ice-box, and a homemade carrying case for provisions, utensils, and cooking gear. Although the Hillmans do not provide detailed specifications on equipment, their stories tell a tale of motoring independence and freedom from the constraints of railroad timetables and resort etiquette. Additionally, the "Cross Country Fording" series depicted the relaxed, almost negligent, custom of campers being permitted to camp wherever they chose. It ought not surprise that in the earliest years of autocamping, with so few roads and even fewer provisions available, autocampers enjoyed the liberty to go where they liked and to set up camp in like fashion. Recounting a camping trip to the giant

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<sup>97</sup> Twitchell, "More Adventures of the Liliput," *The Fordowner*, V. 3, No. 4, July 1915, p. 16; J. Constantine Hillman, "Cross Country Fording," *The Fordowner*, V. 3, No. 5, August 1915 through, *The Fordowner*, V. 5, No.2, May 1916.

Sequoia's in northern California, J. Constantine Hillman, in his article "A Motor Camp Among Giants," illustrated the permissiveness of the period.<sup>98</sup>

Arriving at the grove of giants, the Hillmans obtained the warden's permission to set up their camp. Joining the other campers "in a semi-circle of the great giants" the Hillmans pitched their tent at the base of one of the trees. The tree chosen "had been hollowed out by a fire," which, as the author noted and photograph depicted, made "a novel garage." Despite what might appear as negligence of the landscape, the Hillmans reported that "it was the best managed and most orderly camp" that they had ever visited. One of the unwritten "rules" of camping, heeded by most, maintained that campers should leave their camping area clean and in better condition than when they found it. The Coleman Lamp Company of Wichita, Kansas, included a list of "Tourist Don'ts," on the rear cover of its 1926 trade catalog, "Motor Campers Manual." It read,

When on the road to everywhere,  
Out on the Gypsy trail,  
Play the game and play it fair  
E'en though the others fail.

Don't leave your rubbish strewed around  
The whole blamed place, confound it!  
But try and leave each camping ground  
Just better than you found it.

Don't, on arriving late at night,  
Make lots of noise and clatter;  
But pitch your tent, douse the light  
And muffle all the chatter.

Don't try to make a lot of foes,  
No matter where you're going.  
Eventually you'll come to blows

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<sup>98</sup> J.C. Hillman, "A Motor Camp Among Giants," *The Fordowner*, V. 3, No. 6, September 1915, p. 54.

Through midnight radioing.

Don't kick because some camps are bad  
And some are mighty small.  
For there are times when you'll be glad  
Of any camp at all.

Don't scatter rubbish from the car  
And o'er the roads you roam;  
For traveling near or traveling far  
These highways all are "Home."

Remember, starting on your trip,  
With the whole world your abode,  
The firm glad hand of fellowship,  
The call of the open road.

In the early years, such rules or guidelines proved manageable. Still, as the number of vacationers continued to grow, new rules and better enforcement proved necessary to protect the environment and the visiting public. Numerous communities and individuals alike recognized the extent of the growing camping phenomenon and in turn instituted camp or park rules and regulations governing quiet hours, trash, open fires, and camp placement. Still, in the early years of autocamping, 1900 - 1920, many campers understood the unwritten rules governing the camping experience, and they acted accordingly.<sup>99</sup>

As distinct styles evolved in the methods of camping -- ranging from free-standing and auto-tents, cooking gear, bedrolls and auto-cots to camp-trailers and auto-conversions -- by 1915, a variety of manufacturers and dealers of camping-related equipment were in place nationwide to support the growing trend in autocamping. Sleeping in the automobile, in a cot perched above the seats, proved a tight arrangement. Too., sleeping in a tent often placed

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<sup>99</sup> *Ibid.*, p. 54, 55, 56; Frank E. Brimmer, "Coleman Motor Campers Manual" (Published by the Coleman Lamp Co., Wichita, Kansas, 1926), Trade Catalog, PB, Coleman Lamp Co., 1926, HFM/GV, Accession 86.11.8.1.

one at nature's mercy. Some autocampers identified roughing it as too rough, tenting as primitive, and, as such, demanded a new form of ready-made shelter. Camp-trailers and auto-conversions not only grew in popularity; their builders also advanced other recreational-vehicle technologies.

## CHAPTER 4

### CRAMPED CARS, COLD QUARTERS, AND THE DESIRES FOR BETTER CAMPING ACCOMMODATIONS

When you are resting, *rest*. Make a business of it.  
Throw all care and worry, of either home or camp life, off your mind.  
Do nothing, say nothing, think nothing, be nothing. Recuperate.<sup>100</sup>

With the interior of the car already cramped and entry impeded by gear on the running boards, some early campers resorted to transferring the gear to a separate tow vehicle -- a trailer. For instance, in January 1902, Oliver Lippincott, of Los Angeles, announced his intention to test the utility of the automobile Toledo, manufactured by the International Motor Company of Toledo, Ohio. Because Lippincott anticipated being "far from supplies," he added a trailer to carry extra gasoline, water, food, and other necessary supplies. Included in the February 1902 *Automobile* article "A Trip through the Rockies," a photograph of Lippincott's small, two-wheeled box-type trailer showed the primitive nature

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<sup>100</sup> George S. Bryan, *The Camper's Own Book* (New York, The Log Cabin Press, 1912). "Odds and Ends of Camp Wisdom," p. 183.

of the earliest trailers. In essence, it resembled a small, open-top box (36 x 36 x 12 inches high), built on an axle.<sup>101</sup>

The earliest trailers were crude, often made out of discarded wagon or buggy frames. One article, for instance, specifically recommended that "old delivery wagons," if properly "rehabilitated and restored," provided a useful means of carrying camp equipment. Early photographs offer a glimpse of the individual variety of trailers converted. As better automotive wheel and axle assemblies came into use, these technologies transferred to trailer builders, as did subsequent technological advances. The earliest manufactured trailers followed a similar approach, borrowing automotive, railroad, airplane, and other technologies. The Detroit Trailer Company manufactured a camp-trailer as early as 1913. The Model-A trailer of that year had elliptical springs and artillery-type wheels similar to contemporary automobiles. Parry Manufacturing Company, of Indianapolis, however, advertised its firm as "one of the largest and oldest manufacturers of wagons and vehicles in the United States." The trailer pictured in the *Fordowner* advertisement for January 1916 showed "a handsome four wheel" trailer. The trailer, in fact, resembled the wooden-wheeled wagon of pioneer days. Even Mayer's Ideal Trailer model for 1915, fitted with "high-grade axles and Sarvan wheels," reflected the wagon notion with its "steel tires." Despite the name, these "ideal" tow vehicles and their carriage-converted cousins often appeared broken and abandoned along the roadway. While automobiles generally traversed the crude roads with minimal problems, the trailers they pulled often bore the brunt of the trip. Whereas automobile tires could often be patched, the wooden spokes and iron rims of trailer wheels

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<sup>101</sup> "A Trip Through the Rockies," *Automobile*, v. 4, no. 2, February 1902, p. 50.



usually required replacements. As the commercial market for trailers expanded, manufacturers developed better frame and wheel assemblies to meet the need for more durable and larger capacity tow vehicles. By 1919, for example, the Ohio Trailer Company boasted three-inch steel frames, automotive-type axles with heavy-duty bearings, quarter elliptic-type springs, and pneumatic tires only four years later.<sup>102</sup>

As manufacturers integrated automotive technologies into trailer building, the image of the trailer changed from that of a wagon being towed to that of an automotive accessory. Camping-trailers evolved through the same stages as the early tow-trailers, resembling wagons or carriages and, later, adopting automobile technologies. One person with initiative, for instance, started with an old Model T body which he placed on a new frame and axle. A local blacksmith hitched the units together, and a homemade trailer had evolved. One author of the period pointed out, in August 1916, that a "distinct trend in motor-camping paraphernalia" had emerged in "the use of trailers, drawn behind the car [for] carrying the entire camp equipment." Whereas the earliest tow-trailers served as a carry-all for camping equipment, the camp-trailer systematically organized the numerous camp items into a single unit. Instead of loose pieces of camping gear stowed in a trailer for easier transport, the camp-trailer incorporated many of the basic camp items into the initial trailer design and construction. Moving the camp gear out of the car and into the trailer not only freed up the

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<sup>102</sup> H.E. Harman, "On the Trail of the Trailer," *Illustrated World*, May 1918, p. 415; "The Detroit Trailer," *The Horseless Age*, May 28, 1913, p. 995; "Equipment Review," *Fordowner*, January 1916; "Mayer's Ideal Trailer," *Fordowner*, August 1915, p. 6; "Two New Trailer Models," *The Fordowner*, September, 1919, p. 174-5. See also trade catalog, J&F Howard, Britannia Iron Works, Bedford, England, dated 1879, p. 31, "Howard's Improved Travelling House," (HFM/GV, Trade Catalogs). The picture depicts a wooden house with side entry mounted on "springs and wrought iron wheels, and fitted up complete with sleeping berths, cooking stove, and all requisites necessary for a lodging for workmen." The horse drawn "house" resembled a railroad car on wagon wheels.

interior and exterior of the automobile; it also allowed for a relaxing of self-imposed restrictions on the quantity of equipment one could carry on a trip. With more room to move in and out of the automobile, many tourists' conscious notion of camping with only the necessities gave way to desires for better camping conditions and more niceties.<sup>103</sup>

In *Autocamping*, Brimmer addressed the subject in his chapter "The Autocamper's Castle, the Trailer." The author opened his chapter by praising the trailer for making the car "free from duffle and equipment." The camp-trailer solved "in one single unit of equipment the problem of tent, beds, stoves, food transportation, furnishings, and illumination." The camp-trailer was clearly a product of its environment. In an age of systems and scientific management,<sup>104</sup> some builders advertised camp-trailers as "systematic camping." Brimmer pointed out the "scientific precision" of the unit in that "everything is builded for just the place it is located - both when trailering and when making your camp - and you carry everything in its appointed place and put it to its foreordained purpose." Contemporary notions maintained that the autocamper with loose equipment had a "homemade outfit," while those with a trailer had "a ready-made outfit." Addressing arguments of the former group that trailers placed more strain on the tow vehicle, Brimmer pointed out that having compared the two modes of camping, he found that towing a trailer required "much less labor" than hauling items in the car. Towing a fully equipped trailer not only freed up the

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<sup>103</sup> A. Johnston, "The Fine Art of Motor-Touring," *Countryside Magazine* (August 1916, p. 67); Emma Sanderson, "Camping in Comfort," *Outing*, October 1916, p. 47; *The Fordowner*, November 1919, p. 80.

<sup>104</sup> For details on systems and scientific management and the influence of each on American society and culture see, Marcus, *Technology in America: A Brief History*, especially Part Two, "Systematizing America," pp. 132-254; Samuel Haber, *Efficiency and Uplift* (Chicago, University of Chicago Press, 1964); Alfred D. Chandler, Jr., *The Visible Hand* (Cambridge, Harvard University Press, 1977); Frederick Winslow Taylor, *Scientific Management* (New York, Harper & Brothers, 1947).

automobile interior and running boards; it also placed less strain on the wheels, brakes, axle, motor, and transmission. By 1921, at least ten firms built camp-trailers for sale.<sup>105</sup>

The earliest trailers, like Lippincott's 1902 model, resembled a box built on an axle. A decade later, the earliest camp-trailers began from this same premise. The first camp-trailers, like the *Prairie Schooner* built by The Warner Manufacturing Company of Beloit, Wisconsin, or the Minneapolis-built Shattuck Convertible Outing Trailer, each began with a box built on an axle. Beds extended from the sides of the box trailer and a waterproof cover, usually a tent of canvas or duck, rested atop a frame assembly. The other camp essentials -- stove and ice-box -- occupied convenient places in the trailer interior. All spaces were utilized for best efficient camping. By 1916, the Commercial Sales Company of Minneapolis offered the Twin Bed Outing Trailer. It measured "81 inches by 44 inches by 11 ½ inches deep" with a canopy top of the same dimensions. Standard equipment included an ice chest, one folding table, one gasoline stove, two mattresses with springs, ropes, and stakes. The outfit weighed 550 pounds completely loaded and cost \$150 that same year. Better equipped and furnished, both the Shattuck and the *Prairie Schooner* cost \$175 that same year. When purchasing a camp-trailer, the buyers started with the basic equipment package and then modified it to fit their individual needs and desires. Warner advertised that the *Prairie Schooner* equipment included "a folding tent of heavy, double-filled duck, khaki-color, waterproof, two separate folding double Pullman beds with non-sag springs 4 by 6 feet each, two mattresses and each compartment curtained off." For the additional price of twenty-five dollars, the camper also gained an extra two hundred pounds of weight. When measuring

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<sup>105</sup> Brimmer, *Autocamping*, p. 170-71.

one's comfort, the cost, conveniences, and weight all required consideration. More experienced campers prided themselves on achieving a proper balance between these factors.

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Beginning with the box trailer, these early units used rods or poles to attach and support a ridge pole which held the apex of the canvas tent. Additional supports held out the sides of the canvas and, in some models, attached directly to the beds. Some outfits, like the Shattuck, could have the shelter erected over the trailer or function as a stand-alone tent. In essence, these earliest camping trailers served as a means to carry the collection of individual camp pieces in one single unit, outside of the automobile. Within a few years, another type of camp-trailer evolved from being a collection of parts, into a single piece of camping equipment. Rather than use poles and lines to secure the canvas to the trailer, several models of camp-trailers had, by 1920, incorporated the tent and beds into the trailer design. Similarly, other camp equipment like the ice box and clothes lockers evolved from being single-unit pieces into built-in trailer accessories. No longer trailers that *could be* used for camping, the new models were considered *camp-trailers*. As the growing number of manufacturers demonstrated, numerous Americans desired "the newest thing in the automobile accessory world . . . living quarters on wheels."<sup>107</sup>

Two basic camp-trailer designs had evolved by 1921. The older style combined a basic box trailer with fold-out beds and a canvas cover or "tent" supported by adjustable poles or a wood frame and anchored (at minimum) to the hitch. These early units folded flat when not in use, usually not extending more than a few inches above the box. Manufactured

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<sup>106</sup> "Home Comforts En Tour," *Motor Age*, May 18, 1916, p. 52-3.

<sup>107</sup> *Ibid.*, "The Open Road," *Outing*, September 1916 (No. 68), p. 686.

models included those by the Cosy Camp and Auto Trailer Company, The Shattuck Trailer Company of Minneapolis, the Hopp Auto Trailer Company, the Douglas De Luxe, the Carefree, the Curtis Trailer Company of Minneapolis, the Auto-Tour, the Kamprite, the Gypsy Trail, and the Auto-Kamp Equipment Company of Saginaw, Michigan. The significant change in design occurred when a full-height door, generally between sixty and seventy-two inches, replaced the shorter, box-high door. With the trailer design extending upward, other changes in design readily followed. The new camp-trailer, because of the roof and a full-height door, resembled a box trailer with an A-shape appearance when closed. When opened and set up, the camp-trailer provided concealed storage, an ice box, and a cookstove in the central aisle. On each side of the trailer core, a bunk folded out to provide sleeping accommodations for up to four persons. In addition to a built-in wardrobe, drawers and small compartments provided storage for food provisions, clothing, and necessary equipment. Manufacturers like the Auto-Kamp Equipment Company, continued to make trailers with tent attachments that folded flat while the Chenango Camp Trailer Company of Norwich, New York, and the Adams Motor Bungalow provided tourists with the latest in trailer design.

The camp-trailer built by the Auto-Kamp Equipment Company of Saginaw, Michigan, appeared in several autocamping articles as early as 1916. The "Auto-Kamp Trailer" measured forty-two inches wide by seventy-two inches long. When not used for camping, it "converted into a regular 1,500 pound trailer." Photographs of the camp-trailer opened and set up depict a canvas cover which extended to the ground, enclosing the area beneath the beds. Supported by a frame "made of well seasoned ash lumber," the poles fit inside the trailer when closed. Company advertisements for 1921 pointed out that the trailer

and beds had increased to a length of seventy-six inches, a more accommodating size. That same advertisement pointed out that the firm had changed its name to the Auto-Kamp Trailer Company.<sup>108</sup>

In addressing the question, "Why Get a Trailer?" the Auto-Kamp firm pointed out the advantage to touring by unhooking the trailer from the car. Without "bundles of camp equipment, utensils, etc.," tied to the car, tourists had the freedom to "unhook" and leave the "trailer camp set up" while they toured in comfort. The trailer attached to the automobile by means of the popular "ball and socket" method. A "pressed steel draw pole in the form of a channel" with a "spherical steel socket" on the front and an adjustable metal bracket at the rear connected the trailer to the car. The bracket contained a series of five holes which adjusted the rear of the draw pole up or down for a better, level connection with the tow vehicle. A simple pin with a key held the bracket at the desired height. On each side of the ball and socket, a heavy coil spring took "up any side play or rattle caused by wear."<sup>109</sup>

The "heavy khaki-colored duck" tent covering the trailer measured seven by twelve feet and included two screened "ventilators" with "storm proof covers" at the head of each bed. Beds measured forty-eight inches wide by seventy-six inches long. The ice box, "sufficient for 50 pounds of ice," included a removable galvanized tray. Auto-Kamp advertisements noted a list of furnished "equipment" that included "two mattresses, four pillows, one two-burner American Kamp-Kook air pressure gasoline stove," as well as an

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<sup>108</sup> *Ibid.*, "The Auto-Kamp Trailer," advertisement for the Scott-Omaha Tent & Awning Co., Omaha, Nebraska, 1921; "Real Recreation! - Joys of the Open by Night as well as by Day," Auto-Kamp Trailer Company, Manufacturers, Saginaw, Michigan, ca. 1921; "The Auto-Kamp Trailer," advertisement and price sheet, 1923; All sources, SI/NMAH, Transportation Division vertical files.

<sup>109</sup> "The Auto-Kamp Trailer," Scott-Omaha Tent & Awning Co., Omaha, Nebraska, 1921, SI/NMAH, Transportation Division vertical file.

"electric light outfit complete with wire and plug . . . folding table and folding shelves." A feature unique to the Auto-Kamp trailer, draw-back curtains divided the unit lengthwise into two compartments for more privacy. When extra sleeping space proved necessary, "children" could sleep in the aisle or on cots fit outside of the trailer, under the beds. Though enclosed by the tent, these extra cots were "on the ground" unless the trailer itself had been parked on top of a ground cloth. Most camp-trailers, however, had tents that only enclosed the beds, not extending to ground-level. Clearly, the convenience of not sleeping on the cold, damp ground proved a distinct advancement in camping accommodations. Additionally, the built-in accessories eliminated much of the work associated with the loading, unloading, and assembly of individual camp pieces.

The Auto-Kamp trailer advertisements for 1923 pointed to two notable changes in trailer design. The earlier model had an axle of "1 7/16 inch solid drop forged steel," whereas the later models had a "1 1/4 inch" steel axle. The second and more notable change to the trailer proved the method of attachment. Earlier models employed a ball and socket-type hitch, but, after 1923, models attached using a "block and socket" style hitch. The end of the new trailer hitch, shaped like a flattened C or a sideways U, secured to the automobile by means of a pin which dropped through the end once hooked on to the "hitch bar." A secure attachment, the new hitch proved more convenient when connecting the trailer. Auto-Kamp continued to use this type of hitch into the 1930s.<sup>110</sup>

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<sup>110</sup> *Ibid.*; "Real Recreation," Auto-Kamp Trailer Co., 1923, SI/NMAH, Transportation Division, vertical files; "Auto-Kamp Trailer, Bungalow Model No. 5," Auto-Kamp Trailer Company, ca. 1925. David Woodworth collection.

Another camp-trailer manufacturer, E.P. Gilkison & Sons, Incorporated, of Terre Haute, Indiana, built its first trailer in 1922, and started production in 1925. "The Gilkie," as it came to be known, continued in production until 1952. Although the company's products were similar to other camp-trailers, Edward and Warren Gilkison obtained patents for their "Auto camp trailer," the Gilkie "tent structure," the "trailer leg," and the Gilkie "trailer body" between December 1928 and October 1932. Apparently, not all manufacturers bothered to obtain patents, often copying ideas from models they had seen or had purchased, often for just that reason. This trend continued into the 1930s, when trailer coach builders also copied the ideas and plans of others.<sup>111</sup> Although the Gilkie resembled other camp-trailers in form, steel cables, rather than poles, attached to the top frame and supported the tracks the beds slid in and out on. The sliding frame proved more convenient than other contemporary models. Moreover, the slide-out beds opened up more floor space inside the unit. The tent cover rested on a primarily metal, not wood, frame. The Gilkie proved a well-built and reliable camp vehicle, as evidenced by the number of years it remained in production and the various testimonials stressing those points.<sup>112</sup>

Another Michigan firm that built camp-trailers organized in 1921, under the name Zagelmeyer Auto Camp Company. Camp-trailers, however, proved only one interest of Frank Zagelmeyer. Born in September 1861, to Prussian emigrants, Zagelmeyer lived in

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<sup>111</sup> Details on the copying of ideas and recreational vehicle design are laid out in chapters five and six. Especially noteworthy are the ideas originated by Glenn Curtiss and copied by Hawley Bowlus. Within a few short years, Wally Byam transferred ideas from Bowlus into the design of his popular Airstream line.

<sup>112</sup> Katie McMullen, "Calling All Gilkies!," *Better Camping*, June 1968; "The Gilkie Camp Trailer, Your Vacation Home," ca. 1925; "The Gilkie Camp Trailer, A Real Vacation Home for the Family," ca. 1927. All, SI/NMAH, Transportation Division, vertical files. Gilkison patents include: 1,696,113, Auto camp trailer, issued December 18, 1928; 1,707,960, tent structure, issued April 2, 1929; 1,727,430, trailer leg, issued September 10, 1929; 1,881,482, trailer body, issued October 11, 1932.



Genesee County, Michigan, with his foster parents, the Kampferts, until 1876 when he moved to Bay City to purchase and operate the Marine Ice Company with his brother Alexander. The business operated until 1888, and in 1889 the two brothers erected a pontoon bridge over the Saginaw River while a local bridge was under construction. Over the next decade, Frank Zagelmeyer involved himself with another ice company; held controlling interest in the local newspaper, the *Bay City Daily Times*; opened the first coal mine in the Saginaw and Bay City area; helped establish a chemical company; and also raised sugar beets in California. After two years in California, Zagelmeyer returned to Bay City in 1902, when he took up the manufacturing of paving bricks. In 1907, Zagelmeyer organized the Bay City Cast Stone Block Company, which manufactured cast stone blocks, using machinery he had patented. The following year, he organized the Zagelmeyer Cast Stone Block Machinery Company with himself as president. As such, Zagelmeyer brought diverse experience and creativity to the Zagelmeyer Auto Camp Company, organized in 1921.<sup>113</sup>

On October 7, 1922, Zagelmeyer filed his patent application for an "Automobile Camp Trailer." It took over five years before Zagelmeyer received patent number 1,650,253, issued on November 22, 1927. The patent drawings and descriptions support the many claims Zagelmeyer made in the advertisements for his trailer. For instance, whereas the Auto-Kamp had windows at the head of each bed, the Zagelmeyer model had a screened window in the middle of the front to provide "perfect ventilation without a draft blowing on the sleepers." The trailer also included a tent-fly for attaching to the rear of the unit. Four

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<sup>113</sup> Biographical data, Citizens Historical Association, Indianapolis, Record No. 2B394D20E9F65, dated March 7, 1936, Bay City Biography - Zagelmeyer, Frank. Woodworth Collection.

adjustable legs under the corners of the fold-out beds and two more on the rear corners of the trailer helped support the unit, as did the "leg" that extended down from the hitch. Two steel cables extended from the top of the trailer, on each side of the window, down to the end of the hitch. These cables held "the camp rigid in the heaviest winds." The firm also noted that its method of support kept the trailer from "tipping." The unit had an interior height of six feet, two inches, one inch less than the "inside length." The unit weighed five hundred and fifty pounds. A popular feature of the trailer, the food locker could be accessed from inside or outside the unit -- convenient when stopping for only a few supplies or when loading a fresh block of ice. Frank Zagelmeyer expanded his company and moved to a larger building in August 1926. He also expanded his camp-vehicle offerings around that same time to include camping cars -- a camp body mounted on a specific chassis and sold as a complete unit. The Zagelmeyer firm continued to improve and expand its products into the early 1930s.<sup>114</sup>

In 1920, William H. Brennan and several partners established the Chenango Camp Company, of Norwich, New York. The firm offered a camping trailer unlike its predecessors. The Chenango camping trailer differed from the standard flat-top box trailer in that the door measured twenty inches wide and sixty-one inches high. On both ends of the trailer, wood-framed walls enclosed the unit and offered support for the door in the rear and the window centered in the front. When folded up and closed, the Chenango had the shape of an "A" with a flat top. It measured seven feet, three inches high from ground to top when

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<sup>114</sup> *Ibid.*, "Zagelmeyer Universal Folding Trailer," Zagelmeyer Auto Camp Co., ca. 1925, David Woodworth collection; F. Zagelmeyer patent application, drawings, and official issuance, SI/NMAH, Transportation Division, Extant Trailers file.

closed and nine feet, four inches high when opened. The extra height of the door and frame provided an interior height of seven feet, four inches. Compared to other camping trailers, only the Chenango offered enough interior height for someone to stand fully erect. Campers experienced with camp-trailers recognized this advantage.<sup>115</sup>

Chenango advertisements as early as 1923 boasted that the trailer opened in "30 seconds." Similar advertisements for 1928 noted that the trailer "set up for immediate use in less than two minutes' time." Despite the exact time, the Chenango set up in four simple steps. First, the adjustable legs under the four corners lowered to "take the weight off the tires." After removing the dust cover, one stepped inside and pulled down on the beds which "automatically" raised the roof. Extension rods pushed out to complete the setup operation. In the October 1921 *National Sportsman*, Charles G. Percival pointed out that "after a long critical exhaustive test and inspection of every one on the market," he chose the Chenango Camp Trailer because of its "ease" of set up, "the standing room," and the weather and insect protection. According to Percival, the camp trailer was "a necessity and not a fad." Similar testimonials appeared throughout Chenango advertisements. For instance, in a letter dated February 23, 1923, A.R. Sather of Elmwood, Wisconsin, informed the company that he and his wife had examined three other models before deciding to purchase the Chenango in early 1922. They concluded that they "did not want the others at any price." Sather pointed out

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<sup>115</sup> Chenango Camp Trailer Company file, Office of Chenango County Historian. The file notes that the "Chenango Equipment Manufacturing Company first appeared in the Norwich City Directory for 1921. Also in that same file, a 1928 advertisement, "Chenango Camp Trailers, The Simplest, Most Compact, The Best Equipped Camping Outfit on the Market," noted on page two that the firm had "been building trailers for eight years." These two sources support the claim for the firm's establishment in 1920. See also the October 1921, *National Sportsman* article by Captain Charles G. Percival, "The Call of the Road, or Motor Camping," which includes three photographs and one "skeletonized" drawing of the Chenango Camp Trailer. (Reprint, no page numbers included.) Office of Chenango County Historian, Chenango Camp Trailer Company file.

that his trailer arrived "in the middle of April" and that the family camped in it eight miles north of home a week later. After "living" in their trailer "from June to September, seven days a week," Sather and his family believed the Chenango was "the last word" in camping trailers.<sup>116</sup>

The steel tubing that acted as the tent frame afforded generous support for the canvas. The "24 gauge metal" frame and body of the trailer, painted a "rich wine" color, contrasted nicely with the olive drab tent and "natural" varnished wheels. Covered with linoleum, "the 7/8" pine" floor included steel reinforcements on the ends of the tongue and groove flooring. Accessories included a built-in ice chest and a two-burner gasoline Kampkook stove, both located in the front of the trailer. Unlike the Auto-Kamp or Zagelmeyer units, the Chenango food and storage lockers only opened from the inside. By 1927, the design had changed to allow access to the ice chest from inside or out. Double-entry access proved a popular convenience by that time. Despite its 1918 position to only equip motor campers with proper "equipment" and not "outfits," by 1927, Jones & Van Doran, of New York City, illustrated in its catalogs that the Chenango camp trailer stood "head and shoulders above every other trailer on the market." Chenango had built "about 3000" trailers by 1930. As the first camp vehicle firm to institute assembly line production, Chenango moved into larger quarters in 1926 and set up production facilities. Beginning with the basic "Chenango Box Trailer," the "assembling department" converted these basic trailers into the popular camp trailer and several styles of commercial trailers. In 1926, the Chenango assembling department

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<sup>116</sup> *Ibid.*; Trade advertisement, "From This To This In 30 Seconds, Chenango Camp Trailer, 'Last Word' When It Comes To Trailers," Testimonial from A.R. Sather, Elmwood Lumber & Grain Co., Elmwood, Wisconsin, dated February 23, 1923, SI/NMAH, Transportation Division, vertical file.

borrowed Henry Ford's model of systematic production. Chenango began with a standardized design which enabled them to routinize machine and work processes. The work tasks also proved routine as the assembling of parts into components and components into a finished product followed a rational, systematic process. An early photograph showed a long, narrow building with trailers lined up end to end, and in various stages of completion. Records indicate Chenango produced around three thousand trailers, primarily during the Twenties. The camp-vehicle appealed to many Americans.<sup>117</sup>

The camping trailer that garnished the most praise from Frank Brimmer, the Adams Motorbungalow, first appeared in 1921. The distinguished aircraft designer and builder Glenn Hammond Curtiss deserves credit for advancing the ideas behind one of the earliest solid-body trailer coaches, the forerunner to the Adams Motorbungalow. The uniqueness of the Curtiss model, in addition to design, rested in the fact that several models were produced for consumer consumption. Discouraged by the lack of provisions available during his hunting excursions to the Catskill, Berkshire, and Adirondack mountains, in 1917, Curtiss built his "motor bungalow" to remedy those hardships.<sup>118</sup>

A two-wheeled trailer with an extended wood frame, the motor bungalow had rigid walls, a permanent roof, and an automobile wheel and brake assembly. Near three of the four corners, the trailer walls pulled down and out, providing the beds. The wall lowered

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<sup>117</sup> *Ibid.*: Jones & Van Doran, Inc., Motor Camping Outfitters, New York City, 1927, SLNMAH, Transportation Division, vertical file. Notes on 3000 trailers produced found in Chenango Camp Trailer Company file, Office of Chenango County Historian. Assembly line noted in, Edwards, *Homes For Travel and Living*, p. 9; Chenango Camp Trailer Company file at the County Historian's office noted that the firm was sold in 1937 to Clayton L. Curtis who also moved the firm to Sherburne in 1938. Noteworthy, the same notes dated 1966 also note the firm was still in production as of that time.

<sup>118</sup> "200,000 Trailers," *Fortune*, March 1937, p. 214; Cecil R. Roseberry, *Glenn Curtiss: Pioneer of Flight* (New York, Doubleday & Company, Inc., 1972), p. 444.

parallel to the ground, and the long screened wall then pulled up off the mattress to join and support the roof. Screen frames inserted in the ends helped brace the canvas ceiling and enclose the sleeping bunks. The fourth corner of the unit on the front left side contained the "kitchen cabinet," water tank, and storage lockers. A unique feature of the original motor bungalow, the coach had two doors directly opposite each other near the center of the trailer. Additionally, the body had a "stepped floor" so one stepped up when entering. Curtiss transferred both ideas to his later invention, the Curtiss Aerocar. The motor bungalow measured about twenty feet long and offered numerous conveniences. Pictures of the original motor bungalow in use show a tent fly covering the trailer which provided an additional eight or nine feet of awning on each side of the unit. According to that same February 1920 *Scientific American* article, the motor bungalow had "a kitchen, pantry, toilet facilities, an ice-box, clothes and bedding lockers, electric lights, a running water system, seats, a [collapsible] table, and even a separate tent cot for use by the chauffeur." By utilizing an elaborate trailer, Curtiss eliminated the problems of a cramped car and cold quarters.<sup>119</sup>

Glenn Curtiss filed a patent application for the "Camp Car" on April 28, 1921. He received patent number 1,437,172 on November 28, 1922. The Camp Car patent exhibited the years of experience Curtiss had in aircraft design and construction. Curtiss employed light-weight "wood veneer and other air-craft materials" in the construction of his first trailer. The patent application and drawings described other features that "characterized" the

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<sup>119</sup> "Big Home On Wheels Built Of Air-craft Materials," *Popular Mechanics*, April 1920, p. 538; "The Motor Bungalow," *Scientific American*, v. 122, No. 6, February 7, 1920, p. 139; "200,000 Trailers," *Fortune*, v. 15, No. 3, March 1937, p. 107.

invention, such as construction of the stepped body and rigid walls and roof. Too, the front "overhang" with the "goose-neck coupling" beneath appeared as a unique feature. In essence, the space above the fifth-wheel hitch provided extra storage space inside the unit, including space for the water-tank. The sides of the overhang angled inward and provided a rounded, more wind-resistant front. The Curtiss patent pointed out that the floor of the overhang rested atop stepped or bent "longitudinal members" to prevent a "break in the continuity of the supporting frame." According to the 1917 text, *The Design of Aeroplanes*, similar construction in airplanes allowed for "more perfect streamline forms" in "girder type fuselage" design. As "the leading American aircraft designer and manufacturer of the Teens," Glenn Curtiss recognized that these longitudinal members supported the entire body. These supports in airplanes, "known as the longerons or rails," also "run throughout the length of the body." Curtiss also recognized the light, yet strong properties of using ash for airplanes and trailers. The Curtiss Aerocar, available around 1928, combined even more aircraft technologies as the solid-body trailer coach fully emerged.<sup>120</sup>

Curtiss considered the beds and kitchen cabinet other distinct "characteristics" of his invention. As noted in patent records, the bottom or base of the bed hinged to the inside of the trailer wall. The front wall, hinged to the front edge of the base, pulled up from the bed and attached to the roof. When closed, the roof portion served as the outside trailer wall. Located in the front left side of the trailer, the "kitchen cabinet" and storage lockers offered

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<sup>120</sup> "Big Home On Wheels Built Of Air-craft Materials," *Popular Mechanics*, April 1920, p. 538; Patent application, drawings and official record, number 1,437,172, patented November 28, 1922, SLEMAH, Transportation Division, Curtiss file. Noteworthy, the Adams information is also contained in the Curtiss file. Design specifics: Patent, lines 39-49; White, "Planes, Trailers and Automobiles, The Land Yachts of Glenn Curtiss," *Automobile Quarterly*, January 1994, p. 32; Arthur W. Judge, *The Design of Aeroplanes* (New York, Whittaker & Co., 1917), p. 145-6.

conveniences found in few camp vehicles. The roomy, compartmentalized cupboard included a water spigot accessible from inside or outside the trailer. When opened outside, the hinged top raised to protect and shade the workspace. A tray or cutting board hinged to the inside of the left door swung upward and "latched" to the opened right side door. The ice-box, with a removable top, rested in the forward- most portion of the trailer, centered directly behind the "overhang." Because the ice-box did not extend the entire width of the trailer, the front cupboard with the water outlet remained accessible. With the kitchen cabinet accessible from both inside and out, the second door on the left side of the trailer proved especially convenient. <sup>121</sup>

Though Curtiss designed, built, and later patented the motor bungalow, his half-brother, G. Carl Adams, produced the smaller modified model for consumer consumption. The primary difference between the Curtiss original and the consumer model rested in the consumer model's modified design. The Adams product was no longer a full-height rigid-body trailer; the roof of the Adams model raised as the beds lowered. The front of the trailer, no longer rounded, had a V shape. Too, the kitchen cabinet moved from the front left side of the trailer to the right front angled wall. It remained accessible from inside and outside of the trailer. The interior space of the Adams model measured about four feet wide by seven feet long, about half the size of the prototype. Probably working out of the Curtiss plant in Garden City, Long Island, New York, Adams first offered the "Motor Bungalo" for sale in

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<sup>121</sup> Patent application, drawings and official record, number 1,437,172, patented November 28, 1922. Details on beds: Patent, p. 2, lines 100-109, and p. 3, lines 60-94; Details on kitchen cabinet and ice-box: Patent, p. 2, lines 128-30, and p. 3, lines 1-41. SI/NMAH, Transportation Division, Curtiss file.



1921.<sup>122</sup> Considered "a *de luxe* camping trailer outfit," the Adams Motor Bungalo (spelled Motorbungalo by 1923) offered campers two double-spring beds and mattresses; a complete kitchenette, including ice box refrigerator, folding kitchen table, shelf, holders for utensils and dishes, water tank, gasoline stove, and ample room for food storage; a wardrobe with a rod for clothes-hangers "large enough to contain clothing for four people"; five screened and curtained windows; and a water-tight roof. The Adams roof, guaranteed water-tight, was framed with light wood, covered with 10-ounce heavy oil duck, and overlaid with Fabrikoid similar to automobile tops. Unhinged, the rear door served as an additional camp table-top. Rounding out available accessories, the Complete Camp Equipment package included a "separate folding toilet and tent." According to *Motor Camping* magazine, the unit proved "much more elaborate in its appointments" than other outfits.

When setting up the Adams Motorbungalo, one simply stepped inside and pushed out on the upright beds. The beds counterbalanced the roof such that as the beds gradually lowered into place, their weight lifted the roof in to place. Adams considered this "automatic device" a unique feature of the trailer. The rear step, extending to the ground, and an additional leg beneath the ball and socket hitch provided "substantial" support for the outfit.

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<sup>122</sup> As Roger White concluded, and evidence supports, between 1921 and 1923, three addresses appear as the location of the Adams Trailer Corporation. The earliest address "was given as Farmingdale, Long Island, New York," but the firm's address was also "listed as Garden City and Hammondsport," both in New York. The earliest advertisement, probably from 1921, placed the firm in Farmingdale, while letterhead on correspondence dated, "June 12st, 1921," pointed out that the office and factory were located in Garden City, Long Island, New York with the "sales and export office" in the Grand Central Palace, New York City. White, "Planes, Trailers and Automobiles: The Land Yachts of Glenn Curtiss," *Automobile Quarterly*, January 1994, p. 36; Letter, Adams Trailer Corporation, Garden City, New York, to Raymond Price, Cresco, Pennsylvania, dated June 12st, 1921 (sic), and attached price list and brochure titled, "The Trail To Happiness," SI/NMAH, Transportation Division, Curtiss file.

If one desired, an adjustable leg on each corner could offer additional support for the unit. The builder recommended its use when set up for any extended period of time.

Adams boasted the solid construction of his trailer. In a company letter to a prospective buyer, dated June 21, 1921, Adams pointed out that his trailer was "not an experiment but the result of experiments, designed by capable transportation engineers." Adams advertised twelve specific trailers, including eight models designed for commercial use, three camp trailers (two designs), and a "Fire Equipment Trailer." Specifically, the basic trailer measured 48 inches wide and 109 inches long. Thirteen inches high, the 14-gauge all-steel sides rested atop the one-inch-thick floor. Made of one-inch pieces of wood bracketed with steel strips, the basic floor was designed to accommodate exacting use, such as with model "A-3, Commercial Trailer with Cattle Rack." The second type of camp trailer, the Motorbungalo, Jr., began with similar trailer construction. The smaller model differed from its forerunner in that it folded flat and had walls of canvas, not wood and metal. In essence, the Motorbungalo, Jr., resembled other camping trailers with its canvas roof and walls. Though similar to the original Curtiss and Adams trailers, the Motorbungalo, Jr., distinguished itself from other models with its furnished equipment. Curtiss designed and equipped his original coach to contain a variety of comforts and modern technologies. Similarly, other builders of camp vehicles also attempted to incorporate as many comforts and conveniences as possible into their products. Still, the Curtiss models reflected the wealth and prominence of its designer. As more middle-class Americans came into contact with these notions, they also desired similar comforts and conveniences in their camp

vehicles. This trend of the middle-class desiring similar equipment and furnishings continued to grow as more camp vehicles appeared for consumption.<sup>123</sup>

While the Motorbungalo had rigid walls, metal over wood, some early campers who built their own camp vehicles adopted similar construction but with different results. On September 15, 1915, Gustav de Bretteville of San Francisco filed a patent application for a "vehicle camping attachment." The official patent, issued August 29, 1916, and assigned number 1,196,309, noted that George R. Stein acted as "assignor to Gustav de Bretteville." The "construction and combination of parts" distinguished the "Telescope Apartment" from other camp vehicles. The unit attached directly to the rear frame of a roadster or truck. According to the patent specifications, "a plurality of hinged and extensible sections" mounted inside the interior of the box-like structure contained "compartments for the reception of various articles, such as stove, cooking utensils, groceries, guns, fishing tackle, etc., and which also contain[ed] a bed" that extended outward when in use. (see Appendix, Figures 4 and 5) Also referred to as the automobile-telescope apartment, the entire outfit closed up into "a steel cylindrical case" that measured three feet, four inches long, four feet, four inches wide and three feet, eight inches high.<sup>124</sup>

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<sup>123</sup> *Ibid.*, Brimmer, *Autocamping*, p. 174-6; Long, *Motor Camping*, p. 50; Letter, Adams Trailer Corporation, Garden City, New York, to Raymond Price, Cresco, Pennsylvania, dated June 12st, 1921 (sic), and attached price list and brochure titled, "The Trail To Happiness," SI/NMAH, Transportation Division, Curtiss file.

<sup>124</sup> Patent specifications and drawings, p. 1, lines 11-26, SI/NMAH, Transportation Division, Telescope Apartment file; "Fitting Makes Motor Car Just Like A Pullman," *The San Francisco Examiner*, Automobile Section, Sunday, February 13, 1916; "Home Comforts In Motor-Car Camping Outfit," *Popular Mechanics Magazine*, May 1916, p. 642-44; "A Ford Home," *The Fordowner*, April 1916, p. 23. This author is further indebted to David Woodworth who owns and meticulously restored a Telescoping Apartment. In addition to answering the authors questions and demonstrating how the unit operated, Mr. Woodworth tolerated this authors extensive examination of the unique recreational vehicle.

A fascinating design by any standard, the Telescope Apartment was reportedly "manufactured" by Gustav de Bretteville in San Francisco. The inventor noted that he had started "experimenting" with the design in 1912. It took almost three years of revising plans and making modifications before he had reduced the overall weight and costs of producing the unit. Unfortunately, no records have been found to document the number produced, the unit cost, or the length of time the builder offered them. Evidence suggests Gustav de Bretteville built camp vehicles at least as late as September 1916. Still, the uniqueness of the invention warrants further examination.

To set up the camping outfit, the hinged rear door lowered, and a sliding "leaf" pulled out from under the main body to support the door. Two thumb screws located near the end of the leaf fit into threaded sockets located near the center of the extended compartment to hold the leaf and door together. "A pair of detachable and extensible" legs, also secured with thumb screws, offered further support. As patent specifications noted, the interior compartments telescoped out of the "main casing" by riding on "track sections." Extending from the main casing, the compartments then moved sideways, again on tracks, revealing the interior space of the unit and the mattress. Supporting arms swung out to brace the compartments. In the front of the opened interior, a bookcase held reading material and other small items. Screened windows provided ventilation on each side near the head of the bed. Resting flat on top of the compartment frame, an additional door lifted up and swung downward to completely enclose the unit. If propped open, this same door held a tent which served as a dressing room. If the camper also bought the optional ten-gallon water tank,

nestled in the top of the main casing, then the tent served as a "shower-bath." An obvious drawback to the shower, was that it puddled at the entrance to the outfit.<sup>125</sup>

Although the Telescoping Apartment included all the basic equipment, it did not offer campers much space. Some campers believed that if one planned to modify the automobile by adding a camp body, then it only made sense to build it big enough to accommodate the necessary equipment and still offer some space for moving about. Rather than using a trailer to haul equipment, or even a furnished camping trailer, some early builders mounted a new camp-body on an existing automotive chassis. These "auto-conversions" served as another solution to the problems of cramped quarters, limited conveniences, and continual set up and take down of equipment. One of the earliest records of an auto-conversion occurred in 1910, when a Montreal real estate agent refit a 3-ton Packard chassis with a camp body that could sleep thirteen. In early 1915, another conversion built on a truck chassis included an upper deck for the enjoyment of "passengers en route to the San Francisco Exposition." On a more conventional scale, the Ford Model T conversions advertised in magazines such as *The Fordowner*, *Outing*, and *Popular Mechanics* appealed to a wider group of campers touring the nation, especially middle-class Americans.

To further promote their predictions of "Ford Camp Touring" becoming the most popular American sport, *The Fordowner* editors frequently published detailed plans on how to build a camp-body for mounting on a Ford chassis as well as articles detailing the conversion efforts of individual campers. In the February 1916 article "Remarkable Touring

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<sup>125</sup> E.W. Bowne, "The Open Road," *Outing*, September 1916, p. 688; "Patent specifications and drawings, p. 1, lines 85-91, 95-7, 51, and 63; p. 2, lines 12-30, SI/NMAH, Transportation Division, Telescope Apartment file; "Home Comforts in Motor-Car Camping Outfit," *Popular Mechanics Magazine*, May 1916, p. 642, 644.

Ford," C. W. Lindsay of Dayton, Ohio, described how he converted his Ford into an "Auto Home." Lindsay's conversion had expandable "wing rooms" on both sides and the roof raised eighteen inches to provide an interior height of seven feet. In addition to the folding gasoline stove, collapsible furniture and ice-box, the Auto Home also had a "Dynamo lighting system" and a "six gallon hot water reservoir," conveniences not available in many homes. Lindsay further personalized his unit with a "rug on the floor, bookcase, reading light and little curtains on the windows." While most auto-conversions contained the basic food and shelter provisions, the personalizing of the unit often illustrated something about the individual who owned it. While Lindsay enjoyed his books and reading lamps, a tinsmith from Nebraska hand-punched intricate designs into his cupboard and closet doors. Furthermore, while one family enjoyed the "back porch" of its 1921 "Bungalow Car," another builder covered his unit with pressed tin, providing an appearance of red bricks. The mobile "brick Bungalow" proved quite a curiosity. The idea of customizing one's camping unit persists today, though I have yet to witness any with deer antlers mounted on the front like Mr. Sherwin Cramer of New York City, had on his 1920s Model T conversion.<sup>12b</sup>

Although different for each and every unit, when building a camp body, one followed several basic guidelines. The principal concerns centered around the height and weight of the camp vehicle. If the unit turned out too heavy, then travel proved cumbersome and hard on the engine. If too high, the camper feared winds and low- hanging tree limbs in addition to structural stress from "jolting," swaying, and everyday use. Wind resistance did not

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<sup>12b</sup> Edwards, *Homes For Travel and Living*, p. 8; "Remarkable Touring Ford," *The Fordowner*, V. 4, No. 5, February 1916, p. 16-17. For some interesting photographs of some personalized auto-conversions see: *Ibid.*, March 1918, p. 72; *Ibid.*, June 1920, p. 56; *Ibid.*, June 1921, p. 70; *Ibid.*, June 1922, p. 65. Cramer conversion, "He Takes His Home With Him," *Ford Owner and Dealer*, June 1923, p. 56.

appear as a design factor in many of these conversions. The majority resembled a box on a chassis or, more specifically, a motorized bungalow with a flat front, generally about six to eight feet high. The addition of doors, windows, and in some cases a stove pipe provided the bungalow with its home-like appearance.

When building a homemade camp body, individuals had numerous articles and illustrations to guide them. A particularly informative article appeared in the August 17, 1922 edition of *Automotive Industries*. In "Designing Camping Cars and Trailers," author Harry Wilkin Perry pointed out five "chief essentials" to consider when building a camp outfit. The five requirements included portability, ease of manipulation, comfort, convenience, and moderate price. Perry further noted that when compared to tents or trailers, camp cars required a "minimum of work" when "making camp." The author noted this as especially important when taking "long trips with one-night stops." Still, like motor homes today, the camp car had "to be closed every time the car" was used. Perry recommended that the designer who could combine the advantages of the various camping methods would certainly realize great demand and success. While he believed both the trailer and the camping body offered "promising fields for development," Perry noted the development of camping bodies remained "virgin ground." Similar sentiment appeared in *The Fordowner* for January 1915, where the editors pointed to the growing need and "demand for a cheap, light, serviceable camping body."<sup>127</sup>

Perry aimed his article at individuals who wanted to design and manufacture a camp body, a camping trailer, or a "new type of body" combining the best "characteristics of both."

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<sup>127</sup> Harry Wilkin Perry, "Designing Camping Cars and Trailers," *Automotive Industries*, August 17, 1922, p. 324-27; "Ford Camp Touring," *The Fordowner*, January 1915, p. 13.

He reminded readers that two factors would influence the market for their design: "its good appearance and the cleverness with which its real purpose" could be "concealed."

Addressing the need for better designs in both types of camping vehicles, Perry elaborated upon the basic equipment and how its arrangement influenced overall design. For instance, the choice of tent material versus "stiff panels of sheet metal, plywood or composition" led the author to conclude that a stiff, solid top proved better than a cloth top. Still, Perry argued that the "lower the top . . . the better." As a solution or compromise between designs, the author suggested a "simple mechanism for raising the (rigid) top and extending the beds simultaneously" in a single operation. Combining the goal of providing the desired headroom with the other objective of placing the beds "outside" of the body appeared as a systematic, efficient solution to two problems. The author included three related designs "covered by patents." Perry concluded that although the problems of design proved "many and difficult," the way had "already been explored in a number of directions" and was fostered by an existing "demand" for such a camp vehicle.<sup>128</sup>

Throughout the Teens, a number of individuals experimented with designs for camp bodies. One of the initial factors considered, the choice of automobile chassis directly influenced design. The Telescope Apartment and the Zagelmeyer model, for instance, fit only the smaller Ford or roadster chassis. In his *Automotive Industries* article, Perry pointed to the simplicity of adapting a camp body for mounting on a "speed wagon chassis." The advantage to this chassis rested in its "straight side frames" and "no kick-up over the rear axle." Similar advantages appeared in some of the larger bus and truck frames. Furthermore,

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<sup>128</sup> Perry, "Designing Camping Cars and Trailers," *Automotive Industries*, August 17, 1922, p. 326-7.



each of these chassis types allowed for a larger, body, "rectangular, with straight lines and panel sides." <sup>129</sup>

Among the numerous articles documenting homemade camp cars or camping bodies, many with photographs, the *Scientific American* article, "On the Road to Anywhere," stands out as particularly descriptive. In it, author Richard R. Carryl of New York City, described how he and his wife planned and executed the conversion of their "old faithful Buick." Like "a bull being led to the slaughter block," Carryl drove the Buick to the back yard and within two hours had removed the top and body. After removing the windshield for use in the new body, Carryl cut the body at the front door hinge. The three-inch by four-inch by eleven-foot spruce sills rested flat on top of the frame. Carryl also grooved the sills to fit securely where the chassis raised up in the rear. Standard two-by-four floor joists placed at twelve-inch intervals rested flat on top of the sills. On top of this frame, Carryl nailed a "tongue-and-groove floor" which he "then covered with a grey-pattern linoleum." The side frame, attached to the sill, employed similar construction, but the tongue-and-groove wainscoting ran horizontally the length of the vehicle. Rafters placed twelve inches apart, screwed to the plate, and secured "with six-inch strap hinges," supported the wainscoting roof. Carryl covered the roof with waterproofed heavy canvas and the sides with "a light weight tin, of a pressed brick pattern" which Mrs. Carryl painted red. Thin white lines "painted between the bricks" represented mortar.

In addition to the driver's side door, a rear door provided access to the vehicle. The lower two-thirds of the door tipped outward and downward, revealing a flight of five steps

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<sup>129</sup> *Ibid.*, p. 326.

built on the inner side of the door. The upper third of the door contained a window and swung upward. On each side of the door, a window similar to the one in the door also swung upward, providing "a roof over the two window openings and back steps." Of the fifteen total windows, the side panels contained three each. These side panels measured six feet long and forty-three inches wide. Hinged at the top, the panel swung outward to form a roof over half of the double bed that tipped out from the inside. The three windows in each side wall provided a view of the stars with the beds opened. Double-thick canvas fastened in place to enclose the ends of the bed. Windows on each side of the reinstalled windshield provided the driver with an ample view of the highway. Photographs of other homemade camp cars demonstrate that builders sometimes overlooked this consideration, allowing for dangerous "blind spots." Carryl also installed two small panels above the windshield, but these swung inward and upward to provide ventilation when desired. Carryl screened each window.

In addition to twelve small closets, a large wardrobe provided a generous amount of storage space. Other compartments accessible from outside the vehicle held tools, ropes, a "five-gallon pressure tank" to feed the gasoline stove, an air pump to maintain the correct pressure, and other small items. In the rear left-hand corner, a built-in ice box supported the camp stove. The ice box held thirty pounds. Opposite the ice box, a "kitchen cabinet" with five large drawers and a folding shelf complemented the unit. A table located in the center of the car and mounted to a piece of "three quarter inch pipe" unscrewed from a fitting in the floor, making it completely "removable." Though probably not the original, Carryl's idea of mounting the table on a removable pipe proved a common feature in later recreational vehicles. While a removable table and a brick-like appearance proved novel ideas, for all

intents and purposes, the "Wanderer of the Highways" resembled the numerous other auto-conversions or camp cars that traveled the American highways.<sup>130</sup>

For those individuals who desired even better, larger accommodations, custom-built units provided the solution. By the early 1920s, several firms such as Kampkar and Livabout offered camping bodies for mounting on an automotive, bus, or truck chassis. Additionally, some advertisements recommended their "delivery" type body as a base for a camp car or auto-conversion. While some firms had specific experience building automobile bodies, others had limited related experience. The Bender Body Company serves as an example of the former and the Anheuser-Busch Company, the latter.

Throughout the early 1920s, various automobile-body builders toyed with the idea of building camp-bodies. Bender Body Company of Elyria, Ohio, for instance, sold a luxurious house-body for mounting on a bus chassis. Because Bender regularly supplied Chrysler with bodies and Reo with parts, the manufacturing of camp-bodies fell within the manufacturer's capabilities. Similarly, "a western motor-car company" built and offered a "traveling home" for sale in 1922. Still, few camp-body manufacturers existed, and the majority of "camp-cars" were, in essence, homemade or custom-built auto-conversions.<sup>131</sup>

Desiring a luxurious camp vehicle, Will Keith Kellogg, the cereal magnate, had a "palatial" touring home custom-made for his enjoyment. Mounted on a White, model 50 bus

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<sup>130</sup> Richard Rickard Carryl, "On the Road to Anywhere," *Scientific American*, May 1928, p. 428-29.

<sup>131</sup> "Traveling Homes for Automobile Tourists Being Manufactured in Standard Models," *Popular Mechanics* (39.1), January 1923, p. 88-9. No specific details regarding this model have been found other than the source noted. Photographs of the unit show that it closely resembled the Kampkar model. Another "manufactured" camp body, the Kampkar, appeared as early as late-1920, though little information exists to document its designer, builder or unit specifications. The Kampkar mounted to a Ford chassis. "Pullman-Car Fords," *Ford Owner and Dealer*, July 1921, p. 62; Brimmer, *Autocamping*, p. 181.

chassis, Kellogg's 1923 coach, "The Ark," resembled the Pullman cars of earlier years. With lavish mahogany cabinetry and woodwork, Spanish leather covering the walls, and interior equipment that swivelled, folded, or converted in much the same ways as the Pullman cars, Kellogg's miniature Biltmore was one of the earliest fully self-contained travel vehicles. Self-contained refers to the fact that it had a chemical toilet, a Kelvinator refrigerator, and oil and electric stoves, as well as hot and cold running water. For this reason, "The Ark" could be considered the first motorhome.<sup>132</sup> While custom-made conversions proved popular, the extent of one's comfort and conveniences served as a measuring stick among early campers. Whereas wealthier tourists like Kellogg had lavish custom-made conversions, the majority of Americans built their own camp-bodies. Additionally, a few moderately priced camp bodies provided middle-class campers with an alternative. Indeed, by the 1920s, the camping phenomenon had secured a place in American culture, society, and economy.

With passage of the 19th Amendment in 1921, and Prohibition menacing American freedoms, some businesses carried the burden more than others. The Anheuser-Busch Company of St. Louis, hit especially hard, looked to its experience building bodies for beer-delivery trucks as an asset to be exploited. In order to remain afloat, the firm turned to building a camp-body for mounting on a Ford Model T chassis, one model known as the Lamsted Kampkar. Desiring a larger market for its product, the firm quickly adapted the camp body to fit other automobile frames, such as Chevrolet, Reo, and White.

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<sup>132</sup> "Rolling Palace Has the Comforts of Home," *Scientific American*, v. 129, November 1923, p. 343; "A Palatial Touring Home," *Motor Camper & Tourist*, v. 1, no. 1, June 1924, p. 9 (HFM/GV, Henry Austin Clark Collection) Regarding the note on the "motor home," the Ark is the earliest example of a camp vehicle, self-propelled and fully self-contained. While auto-conversions were self-propelled, none were self-contained. In essence, Kellogg's Ark had a refrigerator and toilet whereas others did not. According to that definition, then, Kellogg's custom-made unit could be considered among the earliest, if not *the first* motorhome.

Samuel B. Lambert, of the Lambert Pharmaceutical Company, makers of Listerine, designed the Lamsteed Kampkar. An October 1921 advertisement, probably its first, included a picture and caption which read, "Where Lamsteed Kampkar Bodies Are Made." The picture showed a four-story brick building with the sign "Wagon Factory" across the top. The camp body was indeed "the product of the Commercial Delivery Equipment Department of the Anheuser-Busch Company," the department which built bodies for beer-delivery trucks, despite the fact the unit was advertised as a product of the Camping Car Company. Several other features distinguished the Lamsteed Kampkar from other camp bodies.<sup>133</sup>

Advertised as having a balanced body, the Lamsteed was designed to prevent the unit from being top-heavy or awkward. The company claimed that with "side-sway" virtually eliminated, the Lamsteed driver and passengers would not have experienced "the constant jolting and jarring so evident when the body balance was neglected." Another feature of the body, advertised as "aeroplane built," Anheuser-Busch constructed the Lamsteed Kampkar using lightweight, yet strong poplar wood, the common wood used in contemporary aircraft. Built in individual sections, "similar to sectional bookcase construction," the small unit bolted to the frame work, which also made the unit easy to ship or store. Because of its lightweight materials, the Lamsteed weighed only six hundred pounds, "less than a Ford Sedan" body. While the Lamsteed Kampkar offered light weight, strong materials, and easy conversion, compared to other models of the time, it proved small. The unit measured nine feet long with a floor space of only twenty-two inches wide and fifty-seven inches long. One reason for its shorter length rested in the fact that the body extended beyond the rear axle a

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<sup>133</sup> Frank Taylor, "A Camper That Fit To A 'T'," *Ford Illustrated*, Fall 1975, p. 22; "The Lamsteed Kampkar," Advertisement flyer, 1921, Authors copy from the private collection of David Woodworth.

mere thirty-one inches. Still, the unit slept four and came equipped with the basic essentials, including a two-burner KAMP-KOOK stove and popular Wearever Aluminum cookware.<sup>134</sup>

While Bender Body Company had extensive experience building automobile bodies and Anheuser-Busch had limited experience with delivery vehicles, the Zagelmeyer Cast Stone Block Machinery Company, of Bay City, Michigan had no related experience when it began offering camp vehicles. Organized in 1921, the Zagelmeyer Auto Camp Company initially produced camping trailers. This experience soon led Frank Zagelmeyer into other areas of recreational vehicle development. In August 1926, the firm moved into a larger building owned by Zagelmeyer. A 1928 brochure noted the building contained "over 45,000 square feet of floor space." Zagelmeyer believed it constituted "the largest building in the world devoted to the manufacture of Camping Trailers and Camping Cars." Evidence suggests he speculated correctly. The firm needed the larger space because beginning around 1924, Zagelmeyer offered three new camp vehicles, including the Pullman Touring Coach, the Overland Cruiser, and the Gypsy Cruiser. These camp cars ranged in price from \$1300 for the Gypsy Cruiser, to \$1720 for the Overland, to \$3550 for the Pullman Touring Coach. These were not just camp bodies; Zagelmeyer sold complete units already mounted on a variety of chassis.<sup>135</sup>

The body of the largest unit, the Zagelmeyer Pullman Touring Coach, measured fifteen feet, six inches long. Overall length measured twenty feet, two inches. "Designed for

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<sup>134</sup> "The Lamsteed Kampkar," Advertisement dated 1921, David Woodworth Collection.

<sup>135</sup> Michigan Reports (296), 1941, p. 151-3, "In re Zagelmeyer's Estate Claim of Zagelmeyer Auto Camp Company," SI/NMAH, Transportation Division, Extant Trailers file, Zagelmeyer: "Take The Work Out Of Camping, Zagelmeyer" Zagelmeyer Auto Camp Company, Bay City, Michigan, 1928 Brochure, Price List, and company correspondence (bound as 26 pages), David Woodworth collection.

and mounted upon" the "General Utility Reo Speed-Wagon chassis -- a six-cylinder model with a 143-inch wheel base," the body weighed 2100 pounds. Though Zagelmeyer preferred the Reo Speed Wagon, a note near the bottom of the last advertising page pointed out that the Pullman body could "be built to order at a slightly higher price to fit any chassis of one and one-half ton capacity, measuring 115 inches or more from back of hood or cowl to center of rear axle." The Gypsy Cruiser measured eleven feet, five inches long and mounted to a Chevrolet one-half-ton speed truck chassis. The Overland Cruiser measured two feet longer and fit on a Chevrolet one-ton truck chassis. The Overland Cruiser body "fit any one-ton chassis" that measured ninety-seven inches or more. Zagelmeyer believed his choice of chassis provided each unit with a good "speed, capacity, sturdiness and fine riding qualities," making each one "an ideal chassis for a touring coach." Additionally, the specified frames rested low enough that one did not have to "climb" steps to get into the unit.<sup>136</sup>

The floor plan and body design varied little, despite the difference in size of coach. Zagelmeyer pointed out his goal of designing a "Camping Coach to provide all of the practical comforts and necessities of a home and to arrange them in such a way" to efficiently provide the greatest amount of room. Another goal, to provide an attractive appearance and maintain "full standing room," Zagelmeyer achieved by constructing the roof so that it sloped "down to the top of the window line in a graceful curve." Not only did the curved roof provide "the appearance of a modern, high-speed passenger bus;" Zagelmeyer claimed it also provided a lower center of gravity and better balance. The roof resembled a loaf of bread

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<sup>136</sup> "Take The Work Out Of Camping, Zagelmeyer," p. 14, 18-21.

with its white top "rising" out of the coach. Noteworthy, trailer coaches of the Thirties adopted similar roof construction and later writers adopted similar terminology.

Another unique design feature was that the kitchen area rested in the front of the coach. Upon entering the coach, one saw, to the right of the door, a two-burner built-in stove resting atop a series of food lockers. Running down the front left side, a fifty-inch-long cabinet contained the ice box, sink with faucet, and twenty-gallon water tank. A drop-leaf desk with four drawers backed up to the sink cabinet. Opposite the desk, a wardrobe held up to "a dozen suits or dresses." A twenty-one-inch aisle separated the two. With checker-board linoleum on the floor, brass fixtures, windows surrounding the area, silk curtains, and a wicker bus chair functioning as a driver's seat, the kitchen area contributed to the appearance of "a real traveling home." The smaller Gypsy Cruiser did not contain a sink or water tank.

All three coaches contained similar equipment but the larger unit proved quite elaborate. Covered with "22 gauge Auto Sheet Steel," the exterior color of the coach depended upon the buyer's preference. Finished in white enamel, the ceiling contrasted with the mahogany-covered walls. In fact, "all interior woodwork, up to the top of the windows, [was] genuine mahogany." Suspended above both the desk and the wardrobe unit, beveled mirrors added a touch of home. A drop-leaf table permanently stood near the middle of the coach between two thirty-five-inch-long seats located over the wheel housing. When closed, a nineteen-inch aisle separated each upholstered seat from the table. Opened, the table measured forty-six by thirty-four inches. In the rear of the coach, a "davenport converted into two wide, comfortable, double berths, one above the other in Pullman style." When closed, the lower berth folded "out of the way and out of sight." Silk curtains separated the "sleeping compartment" if desired. "A heavy dark gray carpet" covered the



floor and blended nicely with the black-and-white checkerboard pattern linoleum in the anterior kitchen area. In addition to screens on all the side and rear windows, Zagelmeyer also had removable screens on the two front windows. In essence, two large windows that opened outward from the bottom served as the windshield. The majority of windows, however, dropped into the wall. The removable screens on the windshield proved beneficial and safer. A variety of drawers, lockers, and compartments, both inside and beneath the coach, offered generous storage space.<sup>137</sup>

Despite the lack of production figures, a letter to a potential customer dated May 25, 1928, noted that orders for the Pullman Coaches generally "took six to eight weeks" to fill. Other evidence suggests Zagelmeyer produced a steady quantity of coaches into the 1930s. During the 1920s, several builders of camping vehicles expanded their offerings to include camping trailers, camp bodies, and full auto-conversions. Other manufacturers continued to meet the needs of those campers who used tents, auto-tents, and various pieces of related camping equipment. Throughout the 1920s, camping trailers and camp-body conversions like those built by Zagelmeyer accommodated many autocampers, and they continued to do so, even after the solid-body trailer coach had evolved.<sup>138</sup>

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<sup>137</sup> *Ibid.*, p. 14-18.

<sup>138</sup> Letter dated May 25, 1928, From Zagelmeyer Auto Camp Company, Bay City, Michigan, to Mr. C.W. Layton, Plainfield, New Jersey, as found in David Woodworth collection.

## CHAPTER 5

### INDUSTRIAL DYNAMO IN DEPRESSION-ERA AMERICA: THE TRAILER COACH INDUSTRY

Across the far horizons of the west, the covered wagon rides the trail again. No oxen pull it now. This wagon keeps the swifter, smoother pace of modern men. From coast to coast it rolls; not months, but days now clock the westward course from sea to sea. The methods change, their purpose is the same, and turning wheels can still make history. To go -- to see the mountains and the plains; to leave the noise of cities far behind; to seek a fairer fate; at least, to flee the dull monotony of daily grind. Time has not dulled that urge. The wanderlust lives on forever in the hearts of men. Trails have grown smooth and comfort goes along as covered wagons travel west again.<sup>139</sup>

The next stage in camp-vehicle development preserved the tow vehicle while maintaining the solid walls and roof of the auto-conversion. Evidence documenting the earliest rigid-body trailer coach dates to 1913, in Los Angeles, California. Little information exists on the origins of the "Earl" other than specifics of ownership which accompany the original vehicle registration. Although the Earl had wood-framed walls and ceiling, both covered with sheet metal, it resembled a camp-trailer in a hard-shell. It contained two beds and a clothes locker inside with primary storage areas and the camp stove accessible from the

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<sup>139</sup> Gene Lindberg, "New Covered Wagon," originally published in the *Denver Post*, according to current source, "The Covered Wagon Rides the Trail Again," ca. 1936, Woodworth collection, Covered Wagon file.

outside of the coach. By comparison, the Earl seemed less equipped than contemporary camp-trailers such as the Detroit Trailer Company camp model available that same year.<sup>140</sup>

Another example of a solid-body trailer appeared in the January 22, 1916, *Scientific American* article "Transportable Bungalow Drawn by Runabout." Probably in 1915, Spencer W. Beasley of Pomona, California, designed his "bungalow" to be a "fully equipped traveling outfit." A large square box, similar to a railroad freight car, the Beasley bungalow surpassed all other available units in regard to size, comfort, and conveniences. Around eighteen feet long, the unit had "a kitchen, dining-room, living-room and four bedrooms." Extending from all four corners, each bed folded outward from the main body. The canvas cover that enclosed the bed on all sides provided the "commodious bed chamber" with shelter from the elements. In addition to its mirrors, bookcase, writing desk, and battery-fed electric lights, Beasley's trailer also had "hot and cold running water." Only a few so lavishly equipped camp vehicles existed in 1915.<sup>141</sup>

The manner in which Beasley's automobile hauled the trailer also appeared as a novel idea. The rear wheels from the auto were removed, and a steel extension fitted to the rear axle extended back to "another axle upon which the rear wheels of the Ford serve[d] as the front wheels of the house and the middle set of wheels for the autobungalow." To accomplish "the mechanical effect," a "jack-shaft and differential" hooked onto the area where the rear wheels had been removed. His design already considered "unique" or

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<sup>140</sup> The Earl camping trailer is located in the RV/MH Hall of Fame museum in Elkhart, Indiana. As of the time of this printing (2000) the Earl is the earliest documented trailer of its type.

<sup>141</sup> "Transportable Bungalow Drawn by Runabout," *Scientific American*, January 22, 1916, p. 102; "All the Comforts of Home," *The Fordowner*, V. 5, No. 2, May 1916, p. 21.

"strange" by the authors of the articles noted, Beasley also pointed out that the automobile "changed back into its original form within 20 minutes by removing the sprocket wheels and disconnecting the extension." A similar trailer, drawn by a runabout with a jack-shaft and differential, appeared in the August 1924 *Industrial Arts* magazine. Although a novel idea, Beasley's approach to hitching the units did not catch on, probably because of its apparent complexity or inefficiency.<sup>142</sup>

As noted in the preceding chapter, aircraft designer and builder Glenn Curtiss deserves credit for advancing the ideas behind one of the earliest solid-body trailer coaches, his 1917 Motor Bungalow. The uniqueness of the Curtiss model, in addition to design, rests in the fact that Curtiss and his half-brother, G. Carl Adams, built and sold over one hundred Motorbungalow vehicles between 1921 and 1922.<sup>143</sup>

By 1921, the year Adams started selling trailers, Glenn Curtiss, at the age of forty-one, had retired with an accumulated fortune "estimated at thirty-two million dollars." Interested in Florida land development, Curtiss and business partner James Bright that same year excavated the Miami Canal and developed a piece of land known as Hialeah. By 1926, the two men had developed the towns of Hialeah, Country Club Estates, now known as

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<sup>142</sup> *Ibid.*

<sup>143</sup> Among the evidence confirming Curtiss built his trailer in 1917, and not later are company brochures, "Modern Transportation - Curtiss Aerocar (1937), p. 1, and "The Curtiss Aerocar for 1938," p. 1; Sales of over 100 camp vehicles as noted in these same two publications, also on p. 1, also noted in White, *Planes, Trailers and Automobiles*, p. 38; "The Motor Bungalow," *Scientific American*, v. 122, No. 6, Feb. 7, 1920, p. 139; "200,000 Trailers," *Fortune*, v. 15, No. 3, March 1937, p. 107.

Miami Springs, and Opa-Locka. It is against this background that Curtiss developed his second, and much improved, camp vehicle, the Curtiss Aerocar.<sup>144</sup>

Though "retired," Curtiss had an overwhelming desire to "tinker" and experiment with mechanical devices, as he had for most of his life. As early as 1918, Curtiss applied aerodynamic principles to streamline a triplane that was developed at the Curtiss plant in Garden City, Long Island, New York. As Curtiss eased into early retirement following the world war, he applied his aeronautical skills to his hobby of altering car bodies. If streamlining minimized head resistance for airplanes, Curtiss "felt that automobiles could be improved by the same treatment." Not only were the results "astonishing," so were some of his altered car bodies, such as the "egg-shaped body" placed on "a new Packard" which Curtiss gave as a gift to his Florida real estate partner, Jimmy Bright.<sup>145</sup>

Throughout the early 1920s, Curtiss experimented with various automobiles "to ascertain the extent to which streamlining alone would increase their speed." Beginning with a stock coupe, "which as delivered from the factory ran at a maximum speed of seventy-four miles per hour," Curtiss removed the body superstructure and replaced it on the chassis backwards. Driving the same coupe, he found the top speed had increased to over eighty-seven miles per hour. Curtiss then returned the body to its original position and set out to design a trailer to accomplish the same aerodynamic streamlining effect. Weighing only fifteen hundred pounds and fastened to the rear of the coupe, Curtiss built his trailer in a streamline form to eliminate the vacuum at the rear of the coupe. The body tapered to a

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<sup>144</sup> See note 122; Florida details as found in, George L. Vergara, *Hugh Robinson, Pioneer Aviator* (University Press of Florida, 1995), p. 122-23.

<sup>145</sup> C. R. Roseberry, *Glenn Curtiss, Pioneer of Flight*, p. 444.

V-shaped prow with a gooseneck pivot which fit a coupling in the rear of the roadster or coupe. Despite doubling the weight that the engine had to pull, the streamlining increased the speed of the car eleven percent. Further tests by Curtiss proved that by merely streamlining the body, the speed of the average automobile could be increased by twenty percent when going twenty-five miles per hour.<sup>146</sup>

Numerous authors have speculated about the motivation behind Glenn Curtiss's developing his streamlined trailer. In an article related to the history of the Hudson automobile, author D.J. Kava noted Curtiss' interest in developing a vehicle to transport prospective buyers and friends to and from his Florida real estate developments. In a 1928 letter, Carl Fisher told Roy Chapin that "Curtiss built this trailer for advertising purposes." He wrote that Curtiss had intended to build a towable billboard advertising Wisconsin farm land for sale. Still, other accounts have pointed to camping and touring as the impetus behind the Curtiss Aerocar. Roger White noted the interest of Curtiss and his colleagues in developing a new type of motor vehicle, a unified articulated machine, using the aerocar body. Still, between the development of his Motorbungalow in 1917, and his late-1920s ideas on an articulated machine, Glenn Curtiss experimented, designed, and developed the Curtiss Aerocar.<sup>147</sup>

The Aerocar name reflected its origins in the "aeroplane" industry. "Curtiss borrowed airplane fuselage design" for his new trailer design. "A typical truss fuselage consisted of

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<sup>146</sup> C.R. Roseberry, *Glenn Curtiss: Pioneer of Flight*, p. 444; Norman Bel Geddes, *Horizons* (New York, Dover Publications, Inc., 1977), p. 53.

<sup>147</sup> Letter, Fisher to Roy Chapin, dated April 30, 1928; D.J. Kava, "In Search of Hudson History- The Curtiss Aerocar," *White Triangle News*, March/April 1981, p. 25; George L. Vergara, *Hugh Robinson, Pioneer Aviator*, p. 124; White, "Planes, Trailers and Automobiles," p. 38.

fabric over a grid of wooden struts and longerons that were connected by diagonally crossed truss wires. These wires had turnbuckles that were used to 'tune' them to optimum tension, giving rigidity to the structure. In the early days of aviation this type of fuselage was useful because it was lightweight yet strong enough to withstand torsion, shocks and tail skid. By the late Twenties, however, it was on the way to obsolescence; tubular metal frame and monocoque (stressed-skin) metal fuselages were being made more frequently." Building on what he knew so well, Curtiss made "a Jenny-type frame that was large enough for people to step inside and walk comfortably from front to rear." Utilizing fuselage-type construction held out several advantages: "Road stresses were distributed evenly, and according to Aerocar literature, the body frame, like an airplane fuselage, could be rejuvenated merely by twisting the turnbuckles on the cross wires and truing the body shape." A 1933 brochure, *The Curtiss Aerocar*, further pointed out that because of the "sturdy airplane construction" the vehicle did "not become noisy nor develop squeaks or rattles, even after long service." A similar brochure from around 1936, titled *Modern Transportation*, made similar claims, pointing to Aerocars that had "been in daily service for from four to eight years." Aerocars such as those used for passenger transportation at "Pan American Airways airports, Virginia Hot Springs, Georgia Warm Springs and The Florida Year-Round Clubs" provided the owners with "comfort and the economy of operation." Additionally, the advertisement noted that "careful costs kept by the Club Transportation Service, Inc. who operate[d] sixteen Curtiss Aerocars for the Florida Year-Round Club prove[d] conclusively that Aerocars" cost less to maintain and "operated at a lower-per-mile cost than buses." The long-term daily use of the passenger transport Aerocars testified to the durability of the unit and to the soundness of its construction. (see Appendix, Figure 6) And despite the fact that the Curtiss trailer "was born

of an airplane design whose time was thought to have come and gone," Glenn Curtiss successfully transferred the technology from an older industry and coupled it with new ideas and intentions to develop a new commercial venture – the manufacturing of travel trailers.<sup>148</sup>

Despite his prior experience building the Motorbungalow with Adams, Glenn Curtiss, it appears, did not readily recognize the potential for his new trailer design.<sup>149</sup> According to Roger White, the "catalyst for Curtiss' second trailer manufacturing venture was a fellow automotive pioneer and part-time Floridian, Carl G. Fisher. Fisher had "developed the Indianapolis Motor Speedway, the Prest-O-Lite Company (which made carbide gas tanks for automobile lamps)," as well as "residential and commercial properties at Miami Beach and Montauk Point, New York." After taking test rides and examining the vehicle in April 1928, Fisher urged Curtiss to consider "the enormous possibilities" of the trailer "for touring and light delivery use." In a letter to Roy D. Chapin, chairman of the board of the Hudson Motor Car Company, Fisher expressed his belief that "Glenn's trailer" was "going to revolutionize

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<sup>148</sup> White, "Planes, Trailers and Automobiles: The Land Yachts of Glenn Curtiss," p. 38-9. It should be pointed out this authors debt of gratitude to Roger White. Roger's article appeared shortly before we met. I had the fortunate opportunity to spend two weeks in Washington D.C. working in the archives and collections of the Smithsonian Institute where Roger assisted me and gave me full access to his notes on Curtiss as well as those files in the National Museum of American History, Transportation Division. I am also grateful to the National Science Foundation for funding this research project in part. Since Roger has written such a well thought out and documented essay I choose to quote him at length. I have also included citations to identify these primary source documents used by both Roger and I. See also, "The Curtiss Aerocar," company brochure dated 1933. Original maintained in Harrah's Automotive Library, Reno, Nevada, copy found in SI/NMAH, Transportation Division files. "Modern Transportation, Curtiss Aerocar," circa 1936 or 1937, p. 8; Philip H. Smith, "Trailers to the Front," *Automotive Industries*, vol. 74, January 4, to June 27, 1936 (The Chilton Co., Inc., Philadelphia), p. 832.

<sup>149</sup> As the letters which follow in this text support, Curtiss apparently did not recognize the potential of his trailer coach, the Aerocar. Still, the possibility exists that Curtiss knew exactly what he was doing when he demonstrated his trailer to Fisher. As these letters clearly demonstrate, Fisher was very enthused with aerocar possibilities. Perhaps the retired Curtiss was looking for an enthusiastic entrepreneur to do some of the initial 'leg-work' and test the waters as to the potential for its manufacture and consumption. Unfortunately, because of his early death and lack of written evidence we will never know if Curtiss was "surprised" or otherwise. Still, with the origins of the Motorbungalow in 1917, Curtiss knew the convenience of the trailer coach for camping and traveling purposes, a point all authors have agreed upon.



touring" in America. Fisher further related to Chapin that he and five others had "rode at fifty-five miles an hour behind a Ford in this trailer over some rough road and the trailer rode much better than any Packard" and "without a single sound." The letter continued to point out that Fisher had told Curtiss he "wanted to buy four of them at once." Fisher admitted to Chapin that he was "tremendously enthused" with the possibilities. He also pointed out that when he told Curtiss he wanted to buy four of them, Glenn asked him what he wanted with them: "He seemed very much surprised to think anybody wanted to buy one of these trailers." Fisher further admitted to Chapin that he was trying his "very best to get Glenn stirred up to the enormous possibilities." Fisher also wanted to get Chapin interested. He wrote,

I don't know that you would be interested at all, but I do know that seven or eight hundred thousand other people are going to be interested, and of course I am bringing it to your attention as quickly as possible and am doing everything I can to see that Glenn protects himself as quickly as possible with his patent applications and also with contracts which will bolster up his patent. I have offered him \$50,000 for a one-third interest in his patents if they are granted. . . . Glenn's idea was to establish a little manufacturing affair down here at Miami to give work to these poor people. Of course, that is all right, but it will take some big factories to turn out these trailers as fast as they are going to be called for, and I think Glenn is dead wrong in his idea of confining any part of the business particularly to this section where freights are high and very little skilled labor.

In his May 8th reply to Fisher's letter, Chapin thought "it would be a wiser plan for Glenn Curtiss to hook his trailer proposition up with some company that is already established" in automobile or body manufacturing in order to utilize established sales and marketing networks. Chapin also suggested that Curtiss consider "licensing the rights to manufacture" in order to "make the most money out of it." Additional letters between Fisher,

Chapin, Curtiss, and other potential business partners detail "the subsequent events that formed the Aerocar trailer companies." <sup>150</sup>

Correspondence written throughout the Summer of 1928 demonstrates how Fisher excited and involved other business partners in the Curtiss invention and its manufacture. A July 12, 1928, letter from Fisher to Chapin noted that the trailer had traveled "3,600 miles, over all kinds of roads," and remained "absolutely perfect." With growing enthusiasm, Fisher told Chapin that everybody who had seen the trailer seemed to think that it would be "very successful." A variety of individuals had taken rides, and Fisher informed Chapin that Walter Chrysler would be getting his ride in the trailer later that "morning." The letter further related that Chapin would be able to see the trailer "in Detroit the early part of next week." Showing his business acumen, Fisher expressed his desire to "get several of the old timers together in this company and have a very strong board of directors which will look good on paper to bluff out patent infringers." <sup>151</sup>

It appears that Fisher had turned his desire into a reality. As Roger White noted,

by late July 1928, "Curtiss, Fisher and Howard Coffin, a Hudson consulting engineer, had discussed the formation of a company that would license automobile body companies to make trailers according to Curtiss' design. Through their efforts, the Aerocar Corporation (briefly called the Aerocar Company of America), a closed-stock corporation, was organized in mid-1928 to accomplish this objective. The number of original Aerocar stockholders apparently was small; those who initially showed interest in owning stock were Glenn Curtiss, Roy Chapin, Howard Coffin, Carl Fisher, body manufacturers W.O. Briggs and James Wilson, Clement M. Keys - an executive of Curtiss Aeroplane and Motor Corporation who had purchased the Willys interests in

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<sup>150</sup> White, "Plane, Trailers and Automobiles," p. 39; Letter dated April 30, 1928, Carl Fisher to Roy D. Chapin, and reply, Chapin to Fisher, dated May 8, 1928. All original correspondence regarding the establishment of the Aerocar company are found in the Carl G. Fisher papers, Curtiss Aerocar file, of the Historical Association of Southern Florida archives. Copies located in the SI/NMAH, Transportation Division files.

<sup>151</sup> Letter dated July 12, 1928, Fisher to Chapin, Carl G. Fisher papers, Curtiss Aerocar file, of the Historical Association of Southern Florida archives. Copies obtained from the SI/NMAH, Transportation Division files.

1920 - and Chester W. Cuthell, a corporate lawyer who had participated in the formation of Curtiss Aeroplane and Motor Company. Glenn Curtiss received his shares of Aerocar stock in exchange for the assignment of his current and future trailer patents to the licensing company."<sup>152</sup>

Soon after the company got started, it built a second prototype to entice "manufacturers, engineers, potential buyers and others." Fisher wrote to several automobile builders, pointing out that trailers needed tow cars. Alvan Macauley, president of Packard Motor Car Company, and Walter Chrysler both received letters from Fisher: "Through Carl Fisher's infectious enthusiasm, word of the trailer and the new business venture continued to spread through the automotive business community during 1928." Officers of the newly formed Aerocar Corporation set out to consider which automobile makers and body builders should receive Aerocar licenses:

A license included a set of blueprints of the Aerocar trailer and, of course, the right to manufacture Aerocar trailers in return for a royalty on each one made. Companies that showed interest in making Aerocar trailers included Briggs Body Corporation (Detroit), Hudson Motor Car Company (Detroit), Mengel Body Company (Louisville), Lang Body Company (Cleveland), Stutz Motor Car Company (Indianapolis) and Weymann American Body Company. Only Briggs and Glenn Curtiss are known to have manufactured Aerocar trailers and it is not known whether the other companies actually were granted licenses. Stutz built at least one Aerocar, a custom trailer for Carl Fisher. . . [that] carried a party of Indianapolis men to the annual Chicago auto show in January 1929. Hudson maintained a strong interest in Aerocar, and in September 1929 an Aerocar trailer was displayed in Hudson's New York showroom.<sup>153</sup>

As White noted, only two builders actually produced Aerocars:

The Briggs Aerocar business began with much promise. The company took over a large plant in Detroit expressly to build Aerocar trailers. Byron F. Everitt, a veteran

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<sup>152</sup> White, "Planes, Trailers and Automobiles," p. 40; See also, Letter dated July 28, 1928, Lewis A. Garred to Carl G. Fisher (on Roy D. Chapin stationery); Letter dated July 31, 1928, Fisher to Garred; Letter dated August 3, 1928, Carl G. Fisher to Glenn Curtiss; Western Union telegram dated August 28, 1928, Fisher to W.O. Briggs. Correspondence as found in the Carl G. Fisher papers, Curtiss Aerocar file, of the Historical Association of Southern Florida archives. Copies obtained from the SI/NMAH, Transportation Division files.

<sup>153</sup> White, "Planes, Trailers and Automobiles," p. 40-1.

body maker and automobile manufacturing executive, was president and general manager of Briggs' Aerocar subsidiary, which was named Aerocar Company of Detroit . . . Carl Fisher thought that the Detroit Aerocars were ugly and cheaply built, however. Aesthetic inferiority apparently didn't prevent Aerocar Company of Detroit from competing in the trailer market; as late as 1940, the company was listed in *Thomas' Register of American Manufacturers* at 4815 Cabot Avenue in Detroit.<sup>154</sup>

Glenn Curtiss fulfilled his wish of establishing a trailer factory in Florida after he received a license from the parent company and incorporated the Curtiss Aerocar Company of Florida. By early 1929, Curtiss had established the "first industry " in his planned town of Opa-Locka. Among his real estate developments, Glenn Curtiss had "envisioned Opa-Locka as a special place." Ultimately, "it was the idea of Bernhardt E. Mueller to build the city on an *Arabian Nights* theme, naming the streets after characters from that series of stories. The city hall resembled a mosque and the plan for the city included an archery club, a golf club, riding stables, a zoo, and beautiful gardens along with hotels, banks, stores and other necessary components of a city," such as industry. The terraces, minurets, domed buildings, and large garden spaces each contributed to this community being "a special place." "As a result of its unique architecture and design, a pseudo-Moorish architecture, around 1926, Opa-Locka became the fashionable place for Miamians and tourists to visit." Against this background, Glenn Curtiss established the Curtiss Aerocar Company of Florida which he located in a "stately *Arabian Nights*-style building."<sup>155</sup>

The Florida franchise of the Aerocar Corporation lasted for twelve years. During its short existence, Curtiss Aerocar proved "the most important and productive branch of the

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<sup>154</sup> *Ibid.*, p. 41.

<sup>155</sup> Vergara, *Hugh Robinson, Pioneer Aviator*, pg. 123-25. Quote on pseudo-Moorish architecture, White, "Planes, Trailers and Automobiles," p. 42.

Aerocar enterprise." The firm started out with numerous orders. A letter dated September 28, 1928, titled "Orders For Aerocars," listed twenty-two names of individuals who desired the Curtiss invention. Orders for Aerocars continued to grow, and establishment of the manufacturing end proceeded rapidly: "By June 1929, the Florida factory had built Aerocar number 122, and production continued through the late Thirties. Curtiss Aerocar trailers were sold by representatives as far north as New York City and as far west as Santa Barbara, California." Despite the company's great networking efforts and quality product, it appears that fewer than five hundred Curtiss Aerocar trailers were built in the firm's twelve-year history.<sup>156</sup>

Advertised with pictures, the Curtiss Aerocar streamline form appealed to wealthier clients -- especially those who enjoyed novel technologies. While Curtiss could not have known that the Aerocar would be the symbol of upper-class Americans for the next decade, the Curtiss Aerocar, nonetheless, was targeted at wealthier consumers. As *Fortune* magazine reported in 1937, the "Curtiss Aerocar *is and has been* the Rolls-Royce of the trailers." The cheapest model cost around \$3000, while some of the custom-made coaches ranged upwards of \$10,000. Pictures of the custom coaches graced the pages of many Thirties Curtiss Aerocar catalogs. Similarly, the Aerocar Company of Detroit depicted its 1936 "Aerocar Land Yacht" as the choice of "a more discriminating class of user." The firm suggested that buyers customize their "unique, ultra-modern mode of transportation" to meet their "individual requirements and specifications." The catalog cover depicted a butler delivering drinks to the

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<sup>156</sup> White, "Planes, Trailers and Automobiles," p. 42. Letter dated September 28, 1928. "Orders For Aerocars," list turned in by Dave McKeenan, Carl G. Fisher papers, Curtiss Aerocar file, of the Historical Association of Southern Florida archives. Copies obtained from the SI/NMAH, Transportation Division files.

finely dressed owner and his wife. The 1936 *Modern Transportation*, *Curtiss Aerocar* catalog pointed out that "for years the Curtiss Aerocar has been the choice of people of discernment." The intended audience proved clear: only the wealthy could afford the Aerocar.<sup>157</sup>

In addressing the high costs, *Modern Transportation* revealed much about the Aerocar industry in general. The trailers cost so much because they were "individually built, using the best material and workmanship available. In each instance a large proportion of the sale price represents actual cost of materials. They are built to a high standard of quality rather than to meet a low price demand." Curtiss Aerocar built "elaborate custom trailers for many wealthy and prominent motorists," including Arthur K. Bourne of Singer Sewing Machine Company, Philip K. Wrigley (son of the chewing- gum king), William K. Vanderbilt (heir to the New York Central Railroad empire), Henry L. Doherty, the utilities magnate, John L. Senior, Charles A. Munn, W.G. Potts, and Gerardo Machado y Morales, president of Cuba. In a letter to Carl Fisher, dated December 31, 1929, H. Sayre Wheeler, president of the Florida Aerocar firm, noted that Aerocar number 113 had been shipped to Havana, Cuba, the previous day. It appears that Fisher bought the trailer as a gift for the president.<sup>158</sup>

In an early Thirties catalog, an excerpt from President Machado congratulated the firm for the "masterful workmanship and absolute safety and beauty of" his new Aerocar. Another

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<sup>157</sup> Curtiss Aerocar (ca. 1930-33); *Modern Transportation*, *Curtiss Aerocar* (1937); *The Curtiss Aerocar for 1938*; unidentified full page advertisement, "Ride through Sales Resistance With Curtiss Aerocar. Open new outlets, rouse drowsy markets," Curtiss Aerocar Co. Inc., Coral Gables (The address change from Opa-Locka to Coral Gables dates the advertisement to 1934 or later.) SI/NMAH, Transportation Division, Curtiss file. Letter dated May 1, 1936, Aerocar Company of Detroit letterhead and stamped signature, to Mr. H.W. Headley of Findlay, Ohio, and attached catalog, "Travel in Luxurious comfort, in unsurpassed style, The Aerocar Land Yacht," Lost Highways, Philadelphia, Aerocar file.

<sup>158</sup> *Modern Transportation*, *Curtiss Aerocar* (1936); White, "Planes, Trailers and Automobiles," p. 45; "200,000 Trailers," *Fortune*, March 1937, p. 214; Letter dated December 31, 1929, from H. Sayre Wheeler to Carl G. Fisher, Carl G. Fisher papers, Curtiss Aerocar file, of the Historical Association of Southern Florida archives. Copies obtained from the SI/NMAH, Transportation Division files.

testimonial from the Hotel Sevilla - Biltmore of Havana, represented another market area targeted by the Aerocar Corporation, commercial applications. That same catalog included testimonials from Pan-American Airways, who owned four Aerocars, as well as from the Philbrick Funeral Home of Miami, which purchased an Aerocar ambulance trailer in 1930. The Aerocar ambulance listed for \$3500 in the 1937 catalog. Another firm which purchased at least four Aerocar trailers for commercial use, the Enna Jettick Shoe Company of Auburn, New York, used its "fleet" to carry company salesmen and samples to the stores or homes of shoe retailers.<sup>159</sup>

Curtiss Aerocar catalogs of the Thirties depict an array of trailers sold for commercial applications. Many of these trailers, like the majority of Aerocars, were custom-built units. The exterior of one General Electric trailer resembled a row of refrigerators while another trailer interior included washing machines, vacuum cleaners, electric ranges, more refrigerators, and even alarm clocks. The exterior advertised "Hot Point Electrical Appliances." Similarly, the "Nestor Caravan" carried Norge electrical appliances. According to a letter dated October 9, 1933, from W.J. Parrish of the Aerocar Company of Detroit (the Briggs franchise), General Electric had purchased numerous trailers. In his letter to S.J. Meeks of Washington, D.C., Parrish noted that GE Aerocars were "in service in Washington, as well as every State in the Union." The Curtiss Aerocar appeared to have a variety of

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<sup>159</sup> *Curtiss Aerocar* (ca. 1930-33); *Modern Transportation, Curtiss Aerocar* (1937); White, "Planes, Trailers and Automobiles," p. 47; "The Enna Jettick Aerocar and attached newspaper article, "Hammondsport, Steuben County, N.Y., Thursday, February 27, 1930, "The Moving Sales Room," both items located in the files of the Curtiss Museum, Hammondsport, New York; *Curtiss Aerocar* (ca. 1933), stamped "Earle Ovington, Factory Representative, Curtiss Aerocars, Santa Barbara, California. Copy from Harrah's Automotive Library, Reno, Nevada, as found in SI/NMAH, Transportation Division files.

commercial applications. Meeks wanted a "quote on a job to handle a 22' speed boat." It is unclear exactly how many businesses purchased custom or standard model trailers.<sup>160</sup>

Preserving the exterior design of the trailer, the Fostoria Glass Company of Moundsville, West Virginia; Victor Radio; Kingfisher fishing tackle; and encyclopedia publisher The Grolier Society; each had the interior of their Aerocars customized for display purposes. A variety of firms attempted to acquaint a consuming public with their products. Suppliers brought the latest goods directly to the dealer or the consumer, often establishing a regular route and a good rapport with customers. Rather than visiting a store or salesroom, customers enjoyed the convenience of having the salesroom brought directly to them. Other reported applications included using the Aerocar as a horse trailer and even a "plain, rectangular version that hauled garbage for the city of Miami." The Activated Alum Corporation, of Baltimore, Maryland used its Aerocar as a "mobile laboratory." Although Carl Fisher's ideas of broad applications for the trailer did materialize, the cost of the Aerocar limited purchasers to only the more affluent.<sup>161</sup>

While his Aerocar Company of Opa-Locka, Florida, proved a pioneer of the solid-body trailer market, Curtiss's ingenuity did not stop there. Combining his aeronautical skills, as applied to his trailer business, and his interest in automobiles, in June 1929 Curtiss

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<sup>160</sup> Curtiss Aerocar (ca. 1930-33); *Modern Transportation, Curtiss Aerocar* (1937); *The Curtiss Aerocar for 1938*; unidentified full-page advertisement, "Ride through Sales Resistance With Curtiss Aerocar. Open new outlets, rouse drowsy markets," Curtiss Aerocar Co. Inc., Coral Gables (The address change from Opa-Locka to Coral Gables dates the advertisement to 1934 or later.) SI/NMAH, Transportation Division, Curtiss file. Letters (2) dated October 9th, and October 16, 1933, W.J. Parrish to S.J. Meeks' Son, Washington D.C., Lost Highways, Philadelphia, Pennsylvania, Aerocar file.

<sup>161</sup> *Curtiss Aerocar* (ca. 1930-1933); *Modern Transportation, Curtiss Aerocar* (1937); *The Curtiss Aerocar for 1938*; unidentified full-page advertisement, "Ride through Sales Resistance With Curtiss Aerocar. Open New Outlets, Rouse Drowsy Markets," Curtiss Aerocar Co. Inc., Coral Gables; SI/NMAH, Transportation Division, Curtiss file, and SI/NMAH, Library (The last two items found by this author in the library files. They are probably now located in Transportation Division files); White, "Planes, Trailers and Automobiles," p. 46-7.



set up another business venture to wed the two ideas. In his hometown of Hammondsport, New York, Curtiss and his employees set to "work on an experimental automobile with a front wheel drive." Curtiss envisioned applying the principle of front-wheel drive to the Aerocar, making it self-propelling. The dream came to a premature end, however, with the untimely death of Glenn Hammond Curtiss on July 23, 1930.<sup>162</sup>

While the Curtiss Aerocar fulfilled the need and met the desires of wealthier Americans, the majority of autocampers continued to use tents, auto-conversions, and camp-trailers until the solid-body trailer coach came to be mass produced. The earliest record of assembly-line production was in 1926 at the Chenango Camp Trailer Company, in Norwich, New York. The firm had a standard design box trailer which it assembled and then modified according to its use. Chenango sold models for various purposes, including camping, cattle, and commercial delivery. Although Chenango operated an assembly-line production process, it did not achieve mass production. The use of advanced machine-tool technology and routine machine processes, key elements to mass production, waited until the Covered Wagon Company opened its enlarged plant in 1935. Although Chenango assembled parts into components and assembled those parts and components into an end product, until the full assembly line evolved, manufacturers relied on customary crafts methods and practices. For instance, Chenango started with a standard box trailer upon which it attached the necessary

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<sup>162</sup> Roseberry, *Glenn Curtiss: Pioneer of Flight*, p. 449,454-5. Following the July Fourth weekend, Glenn Hammond Curtiss developed acute appendicitis. Curtiss was transported via train from Hammondsport to Buffalo General Hospital for an emergency appendectomy. Curtiss stayed in the hospital for quite some time. According to Roseberry he entered around July 8th, yet we know he was there on July 14th because he missed attending the New York State Air Tour. We also know he was visited in the hospital by his wife Lena, and others on the 22nd. Preparing to go home later that day, "around 6:30 in the morning of July 23," Glenn Curtiss got up from his hospital bed, walked to the bathroom and collapsed to the floor. He died of a pulmonary embolism at the age of 52.

items. Carpenters built the frame for the canvas cover, storage closets, cupboards, and the frames for the fold-down beds. Wood pieces appeared simple and required no special templates or jigs to cut them. Even the door and drawer faces appeared as a single piece of plain, unembellished wood. While hammers, screwdrivers, planes, and saws proved necessary, routers or chisels did not. Carpenters simply cut the parts to size and then assembled the pieces. With the prefabricated stove and ice-box installed, linoleum covered the floor. The canvas cover, cut and sewn in a separate department, attached to the basic trailer frame, converting it into the camp-trailer. Inside the unit, installation of the bedding completed the unit.<sup>163</sup>

Assembling standardized parts enabled Chenango to garner a larger share of the camp-trailer market. In essence, Chanango built one type of camp-trailer, and all the parts proved interchangeable. Special-purpose machines like lathes and milling machines proved unnecessary as the firm manufactured no parts. With the exception of sewing the canvas cover and building the wooden pieces, Chenango merely installed prefabricated, pre-purchased equipment into a pre-built box trailer. The original owners reportedly manufactured "about 3000" trailers. Unfortunately for Chenango, however, the tent-trailer market diminished and all but disappeared by the mid-Thirties. Chenango was sold in 1937, and the firm moved from Norwich to Sherburne, New York, the following year. The new owners of Chenango switched to manufacturing solid-body trailer coaches.<sup>164</sup>

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<sup>163</sup> Carlton Edwards, *Homes for Travel and Living* (East Lansing, Michigan: Carl Edwards & Associates, 1977), p. 9, 33.

<sup>164</sup> Carlton Edwards, *Homes for Travel and Living* (East Lansing, Michigan: Carl Edwards & Associates, 1977), p. 9, 33. On dates of sale and moving of Chenango see, Norwich City Directory and Chenango Camp Trailer Company file, Office of Chenango County Historian. See also, "Chenango Camp Trailers, The Chenango Trailer Works, Sherburne, New York," and "New Type Chenango Camp Trailers" (both ca. 1948-53), Chenango.

Although the Curtiss Aerocar Company served as a pioneer of the solid-body trailer market, and Chenango demonstrated that assembly-line procedures could be effectively applied to trailer production, a Detroit bacteriologist, Arthur Sherman, carried the combined notions forward. Owner of Sherman Laboratories of Detroit, a vaccine manufacturer, Arthur Sherman wanted to vacation with his family without the "grief of making and breaking camp." Following a disastrous camping trip with his family in 1926, Sherman decided to never use a camp-trailer again. According to most accounts of this event, Sherman spent almost two hours, "in a drenching rainstorm," trying to set up a canvas-topped camp trailer that, according to the salesman, took "only fifteen minutes" to accomplish. The following year, he searched around the Detroit area, looking "for something ready-made that he could tow behind his car." Sherman's search proved futile, however, so he decided to build one himself. Although his first trailer had problems (the interior height was too low), Sherman built a modified version, available by late 1928, which met his camping needs.<sup>165</sup>

Beginning with a pair of wheels and an axle, Sherman built a six-foot-wide, nine-foot-long, two-foot-high boxlike trailer. It had a single window centered on the front wall and a smaller window in the rear-entry door. Folding bunks, a small wardrobe closet, an icebox, and a coal-burning stove completed the interior. A waterproof canvas cover stretched over rounded iron supports provided the trailer with its appearance. The trailer resembled a shortened Conestoga wagon with rubber tires. (see Appendix, Figure 7) Where the canvas

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vertical file, RV/MH Hall of Fame collection.

<sup>165</sup> Edwards, *Homes for Travel and Living*, p. 125; Kay Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 16; "The Covered Wagon for 1930," company brochure (probably its first), Woodworth collection, Covered Wagon file. According to the latter two sources, Sherman started building his trailers in 1926. According to Edwards, he started in 1928, and entered business in 1930. Still, Sherman delivered his redesigned model to the January 1930 Detroit Auto Show, which proves he was in business before 1930.

cover met the box of the trailer. Sherman had screening inserted so that by sliding the tight canvas cover up, off the corners, and then the side, the screen was revealed, allowing the free flow of air through the trailer. Content with his project results and the \$243 cost, Sherman and his family went touring. Sherman quickly found the interior height so low that he rigged a trap door which dropped to the ground when they needed room to cook. "The space between the dropped section of the floor and the trailer" Sherman enclosed "with heavy canvas to keep out cold, moisture and insects." Too, the floor had short legs underneath which rested on the ground. Upon his return to Detroit, Arthur Sherman built another trailer for a friend. He also warned him of the "trailer tappers" -- those curious campers who came knocking to catch a glimpse of, and ask questions about, the two-wheeled dwelling. The curiosity with the trailer grew and Sherman built several more for friends and neighbors. Aroused by the interest his trailer generated, Sherman decided to attempt manufacturing.<sup>166</sup>

Determined to risk no more than \$10,000, Sherman rented a garage and hired a handful of cabinetmakers to build trailers. Crediting his daughter for the name, Sherman offered the Covered Wagon for sale at a cost of around \$400. In January 1930, Sherman exhibited the Covered Wagon trailer at the Detroit Automobile Show. Again, it generated so much interest that Sherman sold the model on the spot and took orders for more. He sold one hundred trailers that year. In 1931, he sold 117 units. While 1932 proved a hard year, with only eighty units sold, from then on, business "skyrocketed."<sup>167</sup>

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<sup>166</sup> Kay Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 16-18; Letter dated April 22, 1931, Covered Wagon Co., signed by Arthur Sherman, to Mr. Ralph C. Marsh of Bethel, Vermont, and attached brochure, Lost Highways collection, Covered Wagon file; "The Covered Wagon for 1930," p. 1,2,6.

<sup>167</sup> Kay Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 16-17; Edwards, *Homes for Travel and Living*, p. 108, 125. David Thornburg includes a chapter, "Mister Sherman and His Covered Wagons," in , *Gallopang Bungalows. The Rise and Demise of the American House Trailer* (Camden, CT., Archon

Sales increased so rapidly that Sherman found his manufacturing space inadequate. In 1935, Sherman relocated his entire operation to an abandoned candy factory. Moving twenty-six miles north of Detroit, to Mt. Clemens, the Covered Wagon Company occupied a twenty-acre site with 160,000 square feet of factory floor space. The firm sold 1,371 trailers in 1935, despite the transition and relocation. The firm also offered a new model that year, the streamlined "De Luxe Covered Wagon." By 1936, Covered Wagon boasted that its mass production and mass distribution network effected large savings for the consumer. Consumers responded. That year alone, Covered Wagon sold 6,000 units, or one out of every six factory-built trailers. Reports indicate that the smallest model, the seventeen-foot "Master," accounted for sixty percent of plant output in 1936. (see Appendix, Figure 8) Covered Wagon led the industry in sales and output. Capitalized at \$750,000, the firm employed over 1200 people, including "famous automobile body designers and automotive engineers." <sup>168</sup>

With the advice and assistance of his engineers, designers, management staff, and laborers, Sherman developed his firm to include all elements of manufacturing. Recognizing early on that parts suppliers had trouble filling his orders, Sherman diversified the Covered Wagon works to meet his own needs. Besides the four production lines which moved seventy-six units each, Sherman set up separate departments to fill his needs for upholstery.

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Books, 1991); unfortunately, Thornburg's analysis lacks specific details on the firm. Too, his text included only a Select Bibliography and no footnotes or references to sources. Another account of Sherman's rise in the industry appeared in, Allan D. Wallis, *Wheel Estate, The Rise and Decline of Mobile Homes* (New York, Oxford University Press, Inc., 1991), p. 50-52.

<sup>168</sup> Kay Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 16-17; Edwards, *Homes for Travel and Living*, p. 108, 125; Taylor W. Meloan, *The Development of the Trailer Coach Industry* (unpublished dissertation, Indiana Business University, 1953), p. 10. Additional details on production are noted in the text and notes which follow.

convertible furniture, cabinetry, sheet metal, chassis and running gear assemblies, and trailer bodies. In addition to the "Production" department, "Engineering, Design and Sales" departments were integrated to ensure quality and efficiency.

The Covered Wagon production line employed numerous carpenters. Essentially a house on wheels, the trailer coach included many items used in the building of homes rather than in assembly-line production. The wood paneling, cabinetry, electrical equipment, plumbing and fixtures, and furniture made trailer coach production a cross between an automobile assembly line and the building of a house.

Trailer construction began with the chassis assembly. The manufacturer from whom Sherman purchased his earliest chassis frames is unknown, but later he bought them from the Motor Wheel Corporation, of Lansing, Michigan. Electrically welded and riveted, the all-steel chassis served as a "husky, rugged" frame upon which to build the coach. Fender wells made in Sherman's metal shop began the assembly process. With the steel drawbar hitch and caster wheel attached next and plywood bolted to the frame, the unit was then turned upside down. Workers then installed the axle, springs, electric brakes, and wheels before returning the unit to upright. Covered Wagon boasted that because of "systematic factory planning," it took only thirty minutes to complete a chassis assembly. Using standardized parts and a "well-planned routing of those parts to the assembly line," workers assembled a complete chassis assembly in about thirty minutes. The unit then moved down the line, where workers attached the back, the roof, and the sidewalls to the frame with bolts.<sup>169</sup>

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<sup>169</sup> Kay Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 18.

To produce thousands of walls, workers used "pattern jigs." The worker simply guided the machine along a template while the saw cut the wood to form. These jigs produced exact duplicates which, if necessary, proved interchangeable. The sidewalls, roof, and back of the trailer body had "spun glass insulation." As the coach proceeded down the line, workers applied the window wells, wired it for electricity, and attached the interior paneling. They also installed cabinetry of custom sizes pre-built in the woodworking division. Cabinet doors and hardware waited until the trailer proceeded through the paint shop. Outside the coach, workers stretched the roof canvas taut over the roof and secured it with more than 1000 brads (small, thin finishing nails) and a molding strip. At the same time, the trailers continued moving down the production line toward the paint shop.

Upon arriving at the paint shop, the exterior was washed, sealed, and dried with a yellow prime coat applied in the spray booth. Workers blocked off the windows with "wooden masks" and covered the roof with masking paper. While workers used spray guns to varnish the interior, others applied the first coat of paint to the exterior. The trailer continued through the paint shop as workers applied the final coats of enamel to the exterior. At the end of the paint shop, the line turned, moving the trailer back through "the hot air oven where the enamel was baked." Workers applied a heavy metal aluminum paint to the roof by hand, and the trailer then proceeded back to the assembling area.

Proceeding along the final assembly line, exterior workers applied moldings, striping, bumpers, running lights, and stop lights. Inside the coach, workers hung the cabinet doors and installed hardware as well as installing the beds and other equipment such as the ice box and stove. Similar to the woodworking division, the mattress and bedding division cut, sewed, and preassembled the standardized upholstered pieces as well as made curtains for the

windows. Following a close inspection for defects at the end of the line, the units left the factory "ready for the road."

With a national distribution network in place, Covered Wagon had "close to 1,000 dealers" throughout the nation by 1938. As part of its merchandising and publicity program, Covered Wagon advertised heavily in many of "the leading publications." A short list of periodicals included *Automobile and Trailer Travel*, *Trailer Topics*, *Fortune*, *TIME*, *Field & Stream*, *Sports Afield*, *The Saturday Evening Post*, and *National Geographic*. Credited with promoting and developing the trailer industry "more than any other manufacturer," the firm also received the lion's share of free publicity. As the leading manufacturer of the Thirties, Covered Wagon trailers appeared in numerous written and photographic articles.<sup>170</sup>

Production and marketing techniques proved only two factors that separated Covered Wagon from the competition. Unlike most other trailers which employed a ball and socket type hitch, the Covered Wagon was designed by engineers who employed a railroad-type coupler which permitted the trailer to be hooked up more easily -- the driver merely backed up until the hitch coupled itself. These hitches were built specifically by and for Covered Wagon. Other advances made by Covered Wagon included the adoption of "an all-steel, non-sag, automotive type chassis" replacing the "reinforced wood girders" of earlier times as well as the heavily publicized "Shermanite" steel exterior. Because of their permanently bonded together sheet steel and plywood construction, Shermanite exteriors were "regarded as among the toughest exteriors" produced.

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<sup>170</sup> *Ibid.*, p. 18.



Covered Wagon arrived at the Shermanite steel exterior after five years of experimenting with walls made of wallboard, Masonite leatherette, and plywood. Available first on the 1939 "low-priced trailer," reinforced masonite (masonite backed with plywood) replaced the Shermanite steel exterior. Despite the reduced cost, consumers preferred the Shermanite steel exterior to the reinforced masonite. Not only did the steel exterior prove stronger; the painted steel exterior tended not to crack and peel as fast as the masonite exterior. Advertisements pointed out that the Shermanite steel was "actually stronger than automobile steel" and fifty-five percent lighter. Though no test results exist to support the claim, sheet metal backed with plywood appeared to resist dings and dents better than manufactured automobile parts like hoods, doors, and fenders. Another area of development, use of spun glass insulation in the walls and roof, earned Covered Wagon the claim as "the first thoroughly insulated trailers."<sup>171</sup>

Throughout the mid-Thirties, Covered Wagon produced a better product than many of its competitors. The use of jigs afforded standardized parts which fit snugly every time. Covered Wagon also installed hydraulic brakes on the earliest of its trailers, not necessarily standard equipment with other models. Moreover, Covered Wagon assured quality by assembling all of its fabrics and upholstery "in house" rather than purchasing from suppliers. Using mass production techniques and relying on its own divisions for numerous supplies, Covered Wagon offered customers a good product at a competitive price. The firm built three models of trailers. The seventeen-foot-long "Master" model sold for \$395. The nineteen-foot "De Luxe" model and the twenty-three foot "Custom" sold for \$785 and \$1185, respectively.

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<sup>171</sup> *Ibid.*, p. 18, 28; "Announcing Three New 1937 Covered Wagon Trailer Coaches," SI/NMAH, Transportation Division file.

Equipment included two davenports that converted into beds, a porcelain sink, a stove, a heating stove, a folding table, a twenty-gallon water tank, and a refrigerator or a fifty-pound ice-box. The cabinetry included three "drawers, a cutting board, dish rack, pot and pan storage, vegetable bin and grocery cupboard and over ten square feet of work space." Black and white tiles in a checkerboard pattern or smaller similar tiles in a mosaic pattern covered the floor while curtains accented the upholstery. Beginning in 1935, the davenport adjusted to three different positions – straight back, half-inclined, and "an extreme lounging angle." Appealing to a broad assortment of consumers, Covered Wagon boasted its trailer as "the perfect home many women have dreamed about." With the addition of rich mahogany paneling, a lavatory with a sink, and a chemical toilet, Covered Wagon advertised its 1935 model as "the last word in camping and touring elegance coupled with practical, livable advantages." <sup>172</sup>

A pioneer of the trailer coach business, the Covered Wagon company also laid the foundation for the growth of the travel-trailer industry. Different individuals began their own trailer-related businesses (manufacturers, parts suppliers, financing companies, sales) after starting their career with Covered Wagon. Frank Boynton, for instance, helped Sherman set up the C.I.T. Financial Corporation to help dealers and customers finance trailer purchases. A few years later, Boynton established Pioneer Finance Corporation, one of the largest finance companies in the trailer coach industry. Burt R. Scheff, a sales manager of the Covered

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<sup>172</sup> *Ibid.*, "Travel by Covered Wagon," (1935), p. 2-4, 9-10; "Two New Covered Wagon Trailer Coaches for 1936," p. 1-4; "Follow the Trail to Health, Happiness and Pleasure in a Covered Wagon," (1936), Lost Highways, Covered Wagon file; "The Covered Wagon Rides the Trail Again," (1936); "Travel by Covered Wagon and Save," (1936); "Covered Wagon All Weather Trailer Coaches for 1938;" "Announcing Three New 1937 Covered Wagon Trailer Coaches," and "The New Covered Wagon," (1935) Flyer format advertisement sent to the Curt Teich Company as a layout model. SI/NMAH, Transportation Division, Covered Wagon file.

Wagon Company, joined with David Arehart and his brother to form the Palace Corporation in 1935. Similarly, Wilbur Schult, a Covered Wagon dealer, entered the business, building his own line of coaches in 1934.<sup>173</sup>

No other firm experienced the dramatic growth Covered Wagon had, but several competitors adopted similar integrated and synchronized production and manufacturing methods. In the same way Covered Wagon employed jigs and established upholstery departments, new firms also employed proven means of manufacturing. Newer firms also repeated the "process" of building trailer coaches by moving them continuously down the line while workers attached walls, fixtures, or other equipment. These firms entered business with the most advanced machine tool technology, a proven method of progressive assembly and construction, and the determination to garner a share of the trailer coach market.<sup>174</sup>

Early trailers were made with wheels, axles, springs, and some frames from discarded automobiles. Into the Thirties, as factory production picked up, builders sought regular suppliers of specific materials adaptable for their use. Component makers responded expanding their production to meet the trailer builders' needs. Other suppliers expanded their

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<sup>173</sup> "200,000 Trailers," *Fortune*, vol. 15 (March 1937), p. 108, 110; "Nation of Nomads," *TIME*, vol. 27 (June 15, 1936), p. 53; W. Clifford Harvey, "Back to the Covered Wagon," *The Christian Science Monitor* (October 7, 1936), Magazine section, p. 3; Edwards, *Homes for Travel and Living*, p. 125-28; Taylor W. Meloan, *The Development of the Trailer Coach Industry*, p. 10-11; Wallis, *Wheel Estate*, p. 52.

<sup>174</sup> Spencer, "A Pioneer Trailer Company," *Trailer Topics*, October 1938, p. 16-17; Edwards, *Homes for Travel and Living*, p. 108, 125; Taylor W. Meloan, *The Development of the Trailer Coach Industry*, p. 10. This author has personally noted over three hundred articles on the camping phenomenon between 1910 and 1950. Many of the articles with photographs are from the 1930s. For instance, see *Popular Mechanics*, "The Trailer Grows Up," [72.2, August 1939], This article includes pictures of the original Sherman trailer as well as his latest model. This same article includes a photo of a Bowlus-Teller Trailer Coach -- the ultimate in streamlined luxury. Though not what one usually expects to read or see in *Fortune* magazine, the article "200,000 Trailers" [15.3, March 1937] includes diagrams or floor plans of three models as well as photographs of three toilets. Other periodicals include *Popular Science Monthly*, *Scientific American*, *Womans' Home Companion*, *Mechanix Illustrated*, *Trailer Topics*, *Trailer Dealer*, *Automobile and Trailer Travel*, *Travel*, and *Sunset*.

product line, serving as distributors and component manufacturers. The Hammer Blow Tool Company, of Wausau, Wisconsin, *1936 Trailer Builders Guide*, for instance, advertised trailer plans, frame brackets and bracing, stoves and grills, windows and blinds, electrical and plumbing accessories, chassis and frame units, and its specialties, axle and spring assemblies, and "Bulldog" hitches. Similarly, known for its chassis assemblies, Karavan-R-Industries of Chicago specialized in a few components while offering a catalog of various manufacturers' related components.<sup>175</sup>

Early trailer production reflected and indeed borrowed from automobile manufacturing. Component parts such as the auto body were supplied to automakers by companies such as the Bender Body Company of Cleveland, which regularly supplied Chrysler with bodies and Reo with parts. The Hayes Body Corporation, of Grand Rapids, Michigan and Federal Motor Truck, of Detroit, similarly furnished various automotive components for use by automotive manufacturers. Though early coach builders acquired components from many of these same auto suppliers, when assembled into a final product, the automobile parts reflected little of their original intent.

By the mid-Thirties, many automobile manufacturers had established separate corporate divisions to manufacture required components. Other automobile makers practiced vertical and horizontal integration, buying out competitive firms and then incorporating them as separate divisions. For automobile body builders and other parts suppliers, the dynamic changes in automobile manufacturing demanded changes in their market and manufacturing strategies. While some firms folded, more innovative producers targeted the growing trailer-

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<sup>175</sup> "Trailer Builders' Guide," 1936, Hammerblow Tool Company, Wausau, Wisconsin, Henry Ford Museum & Greenfield Village, Library.

coach market as an outlet for their goods. Hayes and Bender, for instance, completely transformed their auto-body operations, choosing, instead, to manufacture their own line of trailer coaches. Another body builder, Norman C. Wolfe, "built truck bodies for the Ford Motor Company and the Chevrolet Division of General Motors Corporation until those firms decided to build their own bodies." In 1932, Wolfe started producing trailer coaches at the Silver Dome Company, in Detroit. By 1936, the best sales year for Covered Wagon, that firm had three major competitors. The Silver Dome Company, of Detroit; the Palace Corporation, of Flint, Michigan; and the Schult Corporation of Elkhart, Indiana, sold a combined 3900 trailers in 1936.<sup>176</sup>

Whereas the Silver Dome Company had its origins in the automobile industry, both Palace and Schult Corporation had roots in the Covered Wagon Company. Burt R. Scheff, a sales manager of the Covered Wagon Company, joined with David Arehart and his brother to form the Palace Corporation in 1935. The Arehart Brothers built their first trailer in 1928, but the firm really took hold after it reorganized as Palace Corporation. During World War II, the Palace Corporation expanded greatly to fulfill its government contract for trailers. The Schult Corporation, of Elkhart, Indiana, began in 1934, when Wilbur J. Schult, a Covered Wagon dealer since 1932, started building his own line of trailers in an old carriage factory. The firm "was the third largest manufacturer in the industry" by 1936. These four competitors each earned the title of "top producer" in the years after 1935, leading up to the onset of war.

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<sup>176</sup> Edwards, *Homes for Travel and Living*, p. 42-7, 100-104; Taylor W. Meloan, *The Development of the Trailer Coach Industry* (unpublished dissertation, Indiana Business University, 1953), p. 10.

Subsequently, the Covered Wagon firm "declined in importance" while "the other pioneers continued to grow."<sup>177</sup>

Though trailer manufacturers flourished in the early to mid 1930's to a fifty- million-dollar industry by 1937, the economic recession of 1938 took its toll on those businesses that had overextended themselves. Covered Wagon had a "near financial disaster" during the "recession of 1938." With a large-scale organization and industrial base, the Covered Wagon firm lacked the flexibility of smaller manufacturers. As the recession hit, production dropped drastically to between five and ten units a day. Obligated to suppliers, the top producer found itself stockpiling materials. For instance, the firm "had contracted with Motor Wheel Corporation to supply wheels, springs and chassis for a hundred trailers a day." Until sales increased, Covered Wagon had little choice but to stockpile its extra materials.

Although the firm offered several models, its scale of output production prohibited it from adapting to change quickly or easily. Increasing the difficulty of Covered Wagon's financial position, public desires in trailer coach design changed the following year. Where Covered Wagon produced 6 1/2 -foot-wide coaches, in 1939 other builders "had turned to 8-foot-wide designs." As preference for the smaller model declined, Covered Wagon found itself unable to easily adjust having to modify the smaller chassis to hold a wider trailer body. Luckily for the firm, government contracts in support of the war lifted the company out of its downturn, but the company never returned to building trailer coaches.<sup>178</sup>

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<sup>177</sup> "200,000 Trailers," *Fortune*, vol. 15 (March 1937), p. 108, 110; "Nation of Nomads," *TIME*, vol. 27 (June 15, 1936), p. 53; W. Clifford Harvey, "Back to the Covered Wagon," *The Christian Science Monitor* (October 7, 1936), Magazine section, p. 3; Edwards, *Homes for Travel and Living*, p. 125-28; Taylor W. Meloan, *The Development of the Trailer Coach Industry*, p. 10-11; Wallis, *Wheel Estate*, p. 52.

<sup>178</sup> Edwards, *Homes for Travel and Living*, p. 126-7. It should be noted that although Covered Wagon produced items during the war, including "sectional homes for the TVA at Fontana Dam," it never returned to building

While some trailer builders went under and others just survived the Recession of 1938, some outside firms turned to building trailer coaches in an effort to generate income. As a manufacturer of exquisite automobiles which came to symbolize the prosperous Twenties, Pierce-Arrow found itself by the mid-Thirties, in a downward spiral reflective of the times. As a last-ditch effort to stay afloat, Pierce-Arrow extended its manufacturing talent to include trailer coaches. The Pierce-Arrow Motor Corporation, of Buffalo, New York, the first automobile manufacturer to undertake trailer production, formally announced its intentions in August 1936.

The Buffalo Trailer Company, Inc., located at 1231 Main Street, a separate division of the parent company, produced three models of coaches. The firm introduced the Travelodge to the public on September 28, 1936. The three models, A, B, and C, measured 19', 16 1/2', and 13' 7," respectively. Advertised as the product of "engineering and craftsmanship," Pierce-Arrow "claimed to establish entirely new standards of construction, quality and completeness." Building on the firm's reputation of quality, elite products, Pierce-Arrow hoped to break into the industry by appealing to the desires of customers for a new and improved trailer coach. The "Trailer Industry News" section of *Trailer Travel*, for September 1936, detailed the construction and features of the Travelodge coach. Although the coach contained advanced ideas and technologies, it differed little from standard coaches offered by contemporary firms. The three models sold for \$1145, \$845, and \$595. The firm offered Bendix-brand hydraulic brakes and a spare tire as separate options. Other builders like

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trailer coaches. Having lost its principal personnel and dealer organization with the onset of the war, the firm lacked what it needed to return to manufacturing coaches. Too, having received "a good offer for the sale" of its plant, the firm was liquidated in December 1945.

Covered Wagon and Schult offered these two items as standard equipment. While the three Travelodge models reflected the cost and quality of other coaches, the 450 coaches Pierce-Arrow manufactured between 1936 and 1937 could not keep the company afloat. By March 1938, Pierce-Arrow was insolvent.<sup>179</sup>

Though trailer production continued to grow, single-unit or homemade coaches still outnumbered industry-produced units by three to one until the 1940s. Whereas some coach builders relied heavily on suppliers, merely assembling the unit, much like Ford's systematic assembly-line production, more dynamic builders evolved their firms from the static assembling of components into a network of operations. In a sense, the Chenango Trailer Company, of Norwich, New York, resembled the Ford Motor Company in that it line-produced one type of trailer. Like Ford, which offered one model, the Model T, Chenango offered one type of camping trailer. Similarly, both firms used single-purpose machines in their manufacturing. On the other hand, the Covered Wagon Company, of Mount Clemens, Michigan resembled General Motors in that it manufactured many of its component parts in-house, parts were interchangeable between models, and dealerships arranged financing for the yearly models. Automobile and trailer firms found flexibility in using general-purpose machine tools rather than single-purpose machines. Just as General Motors aimed its automobiles at the three socio-economic "classes," Covered Wagon also offered models appealing to all tastes and desires. In this evolution of manufacturing, other firms

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<sup>179</sup> "Pierce-Arrow Travelodge Introduced in Buffalo," *Buffalo Business*, vol. 10, no. 29, September 4, 1936 (official publication of the Buffalo Chamber of Commerce), p. 1; "Pierce-Arrow Introducing Its New House Trailers," *Buffalo Courier Express*, September 27, 1936, SI/NMAH, Transportation Division, Pierce-Arrow (Travelodge) file. "The 1937 Pierce-Arrow Travelodge," p. 1; "The 1937 Travelodges," *The Arrow*, series 69, model 3, Pierce-Arrow Society publication, p. 1-4. Lost Highways, Pierce-Arrow file. "Pierce-Arrow Presents Travelodge Trailers," *Trailer Travel*, September 1936, p. 38; "Pierce-Arrow Motor Corporation Trailer Division F.O.B. Factory List Prices, effective August 1, 1936," HFM/GV, Henry Austin Clark collection, Accession 150.



followed Covered Wagon's lead expanding their component production in proportion to unit output. Reported as the "fastest-growing new industry," the *Fortune* article "200,000 Trailers," noted the existence of over 400 firms building trailer coaches in March 1937. The early Thirties witnessed numerous firms entering trailer manufacturing. Some were newly formed like Covered Wagon, while others grew out of automobile body builders. From Arthur Sherman's garage in 1928, with a production of two units, to over 400 firms producing 35,000 units in 1936, the trailer coach had made a grand entry and was welcomed by thousands.<sup>180</sup>

The reasons for this growth in trailer production are numerous and diverse. The *Fortune* magazine estimate of "200,000 Trailers" on the road in 1936, accounted for the largest share of trailers produced. Two of every three trailers on the road in 1936 were homemade, either in the garage or backyard. These figures beg the question, then, who bought and built trailer coaches and for what purpose? An examination of periodicals, popular literature, and advertising paraphernalia revealed the existence of a dichotomy in who used trailer coaches and for what purposes. Besides commercial applications, by the mid-Thirties there existed at least two distinct groups of coach users -- those who used them as

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<sup>180</sup> "200,000 Trailers," *Fortune*, v. 15, no. 3, March 1937, p. 110. Ford mass produced the Model T using an assembly line. Workers assembled parts into components (such as carburetors) and components into larger working parts and pieces (such as the engines). Workers and parts moved down an assembly line, attaching parts and components to produce a finished automobile. All parts and components had a single use and, when assembled, produced one type of automobile. In contrast, parts from the lower-cost Chevrolet models fit the moderately priced Oldsmobile. Too, parts made for the Oldsmobile could be interchanged with parts on the Cadillac. Ford used single-purpose machines to produce parts. General Motors, on the other hand, used general-purpose machines to achieve "flexible mass production." This gave GM an easier way to retool for annual model changes. Even after Ford introduced the Model A, the company continued to use the static method of single-purpose machine, producing one model of automobile. This change in industrial manufacturing is well documented in Marcus, *Technology in America*, p. 230-233.

travel trailers and those who used coaches as house trailers or mobile homes. Within these two markets, prices varied from cheap to lavishly expensive.

By the mid-Thirties, several publications had evolved to assist consumers with their purchases and encourage others to take up the camping pastime. These publications also included recent developments within the trailer industry as well as stories related to state or local legislation. As fledgling publications, the earliest editions addressed numerous topics related to camping, touring, trailers, dealers, and suppliers. Not until the Fifties did periodicals differentiate their purpose and audience. In order to appeal to manufacturers, and hopefully enter into advertising agreements with them, as well as generate subscriptions from customers, magazines like *Automobile and Trailer Travel* and *The Trailer Caravan* offered stories recounting pleasant camping experiences in a trailer, often laced with tidbits of advice. Moreover, these novice publications required an immediate audience in order to generate income. *The Trailer Caravan*, for instance, issued its first edition in August 1936. Published in Detroit by Hesbar Publications, the first issue included mainly advertisements from Michigan coach builders and parts suppliers. Additionally, the first issue included stories focused primarily on Midwestern areas like Ohio, Michigan, and Indiana. Four of the seventeen articles, in fact, focused on Michigan. It proved important to generate the regional base before going national with the publication. Still, issues soon recounted "Canada's Playground," the calling of the Ozark's "Texas Topics," the call to "Go West," the "Great Okefenokee" and, of course, "A Grand Tour of America." Other topics included insurance for trailers, sanitation, editor's comments, "Trailer Hints," and "Things New in the Trailer Field." Similarly, *Trailer Travel*, published in Los Angeles, offered western readers variety with a

slight California emphasis. The first issue, for instance, included a cover photo of a Bowlus Road Chief being pulled through the desert near Palm Springs.<sup>181</sup>

*Trailer Travel*, later *Automobile and Trailer Travel*, appeared as the first and “only national magazine in the trailer field” with its January/February 1936 inaugural issue. As the earliest, *Trailer Travel* quickly gained the support of manufacturers and suppliers. By August, the magazine had competition from *The Trailer Caravan*. Another publication, *Trailer Topics*, entered the competition with its first issue in May 1937. *Trailer Topics*, a Chicago-based publication, included fewer articles on travel and more features on advances in manufacturing as well as plans and stories on building your own trailer coach. Still, no major distinctions regarding magazine content appeared until later. These three publications dominated the trailer field into the Fifties.<sup>182</sup>

The existence of these publications not only offered trailer enthusiasts an avenue to express their interests; it also symbolized that the trailer coach had gained a following. By 1936, trailer coach manufacturing had developed into a multimillion-dollar industry consisting of hundreds of builders. While some firms built coaches to fill the traditional role of the trailer as a touring accessory, others offered models aimed at extended-stay users. Coaches could be bought as a basic shell, complete and self-contained, or somewhere in between. And while internal accommodations fell within a given range, external design did

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<sup>181</sup> *The Trailer Caravan*, September 1936; *Ibid.*, November 1936; *Trailer Travel*, vol. 1, no. 1, January/February 1936. Noteworthy, the photo on the cover depicts a Bowlus Road Chief travel trailer, not an Airstream as claimed by Allan Wallis in, *Wheel Estate* (p. 55). As this study demonstrates in chapter six, the Bowlus trailer preceded the Airstream and actually served as the prototype for the more famous Airstream trailer. In that light, the assertions Wallis made concerning aerodynamic styling or the “streamlined aesthetic” apply to Bowlus more than Wally Byam and Airstream.

<sup>182</sup> *Trailer Travel*, vol. 1, no. 1, January/February 1936. Quotation from cover.

not. Many of the changes in coach design reflected changes in the preferences of consumers as well as changes in American culture. While some builders built coaches to be more home-like, others designed sleek, aerodynamic trailers for traveling. Manufacturers continued to offer new ideas and designs to appeal to these changing needs and desires.

## CHAPTER 6

### DESIRES AND DESIGN – CULTURAL ICON OR SOCIAL MENACE?

Mother nature has always designed her creatures for the function they are to perform. She has streamlined her fastest fish, her swiftest birds, her fleetest animals that move on land.<sup>183</sup>

In the mid-Twenties, Glenn Curtiss designed and developed the earliest streamlined or aerodynamic trailer coach, in the form of the Curtiss Aerocar. As with most novel technologies, only the wealthy could afford the newest travel technology. Still, average Americans became familiar with the newest ideas in design at places like the 1934 “Century of Progress” Chicago World’s Fair and annual automobile shows in New York and Los Angeles. Other ideas found expression through contemporary architecture, but most Americans became acquainted with “Modern” design through the numerous advertisements for merchandise. A specific group of “industrial designers” held the most responsibility for introducing these new forms and ideas to the American public. This group included Norman Bel Geddes, Raymond Loewy, Donald Deskey, Russel Wright, Henry Dreyfuss, and Walter Dorwin Teague, among others. This group streamlined or modernized everything, including

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<sup>183</sup> Advertisement with Norman Bel Geddes’s endorsement for the Chrysler Airflow, *Saturday Evening Post* (December 16, 1933), p. 206, as found in, Jennifer Davis Roberts, *Norman Bel Geddes: An Exhibition of Theatrical and Industrial Designs* (University of Texas at Austin, 1979), p. 31.

pencil sharpeners, toasters, washing machines, and vacuum cleaners, as well as buildings, railroad locomotives, and imaginary ships and airliners. In the Thirties, *modern* or streamlined objects were in vogue.<sup>184</sup>

Norman Bel Geddes established the first firm in the United States to offer "industrial design services" in 1927. He employed a varied staff of architects, draftsmen, designers, and artists who, when not working for a client, were encouraged to pursue "development work." These "imaginative exercises" resulted in ovoid shaped ships, streamlined cars, buses, trains, and aircraft, as well as new expressions in housing. In the late Twenties, Bel Geddes spent a generous amount of time researching streamlining principles. Although Bel Geddes applied streamlining principles to transportation in general, "his main concern was the achievement not of greater speeds, but rather greater efficiency and economy of operation." Norman Bel Geddes designed for function.<sup>185</sup>

In 1929, Bel Geddes developed a series of five cars for the Graham-Paige Motor Company. Had it not been for the stock-market collapse that fall, the streamlined models "might have replaced the box-like cars" of the period. In 1932, Bel Geddes published a collection of drawings and designs that highlighted the ideas flowing from his firm and contemporary trends. *Horizons* also detailed the author's own work in streamlining

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<sup>184</sup> Numerous titles exist which document the ideas or notions surrounding streamlining as a cultural expression. In general, the works of the men noted above served as reflections of these new design ideas. Their ideas found expressions in modern or streamlined products such as automobiles like the 1933 Chrysler Airflow, Teague's design for the 1936 Kodak Bantam camera, Loewy's design for the Coldspot refrigerator as well as his streamlined engines for the Pennsylvania Railroad. Interesting accounts can be found in, Martin Greif, *Depression Modern: The Thirties Style in America* (New York, Universe Books, 1975), Bush, *The Streamlined Decade*, and Roberts, *Norman Bel Geddes*.

<sup>185</sup> Jennifer Davis Roberts, *Norman Bel Geddes: An Exhibition of Theatrical and Industrial Designs* (Austin, The University of Texas at Austin, 1979), p. 31; Donald J. Bush, *The Streamlined Decade* (New York, George Braziller, Inc., 1975), p. 17-19; Norman Bel Geddes, *Horizons* (New York, Dover Publications, Inc., 1932; reprint edition, Dover, 1977), p. 53.

automobiles. Accurately, Bel Geddes pointed to aviation designer Glenn Curtiss as among the earliest to experiment with streamlining automobiles. *Horizons* documented the Curtiss experiment in which the body of a stock coupe was turned around and placed back on the chassis backwards. The result of the experiments showed that “streamlining alone” raised the speed and, thus, the efficiency of the average automobile. The Aerocar served as the Curtiss expression of streamlining principles. Bel Geddes, among others, built upon the streamlining developments initiated by Curtiss. Although the Curtiss Aerocar appeared somewhat out of the ordinary, by 1931, Bel Geddes had designed another line of automobiles more radical than his earlier Graham-Paige designs. The ultimate form of streamlined automobiles appeared in the 1931 Bel Geddes line of five teardrop-shaped cars.

Streamlining in general “referred to the elimination of all protruding forms, such as the headlights, fenders, spare tires, and door hinges of a car or the smokestacks, lifeboats, deck housings, and ventilating funnels of a ship, in order to reduce wind-resistant surfaces and rear vacuums.” Norman Bel Geddes “believed that the perfect streamlined shape was the teardrop, the shape assumed by a drop of water sliding down a smooth surface.” Although the teardrop shape found expressions in automobiles and trailer coaches alike, most designers and builders of the Thirties softened the approach to streamlining. One of the main problems encountered by teardrop designers proved to be the efficient use of the small, sloping space formed in the rear of the vehicle. If one could preserve the space in the rear while maintaining the advantages of streamlining, then, perhaps, the vehicle would prove viable. Numerous trailer coach builders of the Thirties attempted to incorporate streamlining principles while maintaining the advantages of a full-height coach. Still, other builders tended to shy away

from the box-like structure of the earlier models, incorporating contemporary or “modern” desires and designs.<sup>186</sup>

Although Bel Geddes believed that a teardrop shape proved the ultimate in streamlined forms, aeronautical designer William Bushnell Stout disagreed. In the September 1932 *Popular Mechanics* article “The Motor Car of the Future,” Stout proposed that a turtle-shaped car proved better. Probably because of the limited interior height offered by a “turtle,” Stout introduced his version of a streamlined automobile with the Stout Scarab in 1935. The car looked like a scarab beetle with lines extending back to a truncated rear-engine compartment. Still, numerous designers of the Thirties sought a balance somewhere in between. While most coach builders adopted a revised “beetle” version maintaining interior headroom, other builders designed and sold teardrop-shaped travel trailers. In general, teardrop trailers measured under twelve feet in length and were too short to stand up in. Most served as sleeping quarters and storage only, with even the cooking facilities located outside the trailer. The 1940 Jim Dandy “Sportsman” model, for instance, measured just over eight feet long, and four feet in width and height. The “Hunter” model measured ten feet long, six foot, seven inches wide, and six feet, four inches high. The Hunter, however, lost its true teardrop shape by adding the extra interior height. Throughout the early and late Forties, *Popular Mechanics* published a number of articles on how to build your own trailer. Several of these articles detailed homemade teardrops. From its inception in 1945, KIT Manufacturing Company, of Norwalk, California offered twelve-foot long teardrop trailers. It sold thousands of these models before it expanded its line, offering a larger, streamlined coach in 1948. Other

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<sup>186</sup> Roberts, *Norman Bel Geddes*, p. 31; Bel Geddes, *Horizons*, p. 53.



builders incorporated the teardrop shape but provided the coach with headroom. These modified teardrops proved more rounded and truncated rather than having smooth flowing lines ending in a point at the rear of the trailer. As such, most builders offered a “streamlined,” “modern,” or “aerodynamic” coach rather than the smaller teardrops.<sup>187</sup>

In January 1936, *Trailer Travel* magazine first appeared. At its inception, it existed as the “only national magazine in the trailer field.” The first issue included a variety of articles, including one by Wally Byam titled “New Stream-lined Coaches Use Modern Principles.” Byam’s article included various references to automobile and trailer coach designers’ attempts at applying “the laws of aerodynamics and modern principles of engineering” to their designs. Although designers did go to “the university and technical laboratories and learned the tremendous importance of true and scientific streamlining,” Byam inaccurately attributed the advances made by Glenn Curtiss to these other designers. As noted earlier, Curtiss first experimented with reversing the automobile body, finding it “actually ran better backward than forward.” Moreover, where Byam wrote of the new streamlined trailers, he described, without crediting, the Bowlus Road Chief as the latest and most advanced trailer coach. The February 1936 article “By Wallace M. Byam, Designer of Airstream Trailers,” has inaccurately been used to support the idea that Byam invented the Airstream Clipper in January 1936. Regardless of these claims, evidence supports the actuality that Byam utilized

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<sup>187</sup> William B. Stout, “The Motor Car of the Future,” *Popular Mechanics*, 58.3, September 1932, p. 440; Donald J. Bush, *The Streamlined Decade*, p. 108-9; Todd B. Kimmell, “Teardrops: Let’s Get Small,” *Lost Highways Quarterly*, vol. 1, no. 2, Winter 1995, p. 8; “Jim Dandy, Wausau, Wisconsin, Trailer Plans Featuring 9 Practical Designs,” 1940, p. 8-10, Woodworth Collection, Jim Dandy file; “Midget Trailer,” *Popular Mechanics*, February 1940, p. 284-88; “Midget Trailer - Part II,” *Popular Mechanics*, March 1940, p. 441-45; “A Travelling Home for two,” *Mechanix Illustrated*, October 1946, as found in Lost Highways, Teardrops, Variety file.

and copied from the Bowlus Road Chief to finally introduce the Airstream Clipper later in 1936.<sup>188</sup>

William Hawley Bowlus had over twenty year's experience in the design and construction of aircraft when, in 1934, he set out to investigate, analyze, and correct what he viewed as the "unsatisfactory features" in contemporary trailer coaches. Bowlus's experience in aeronautical design began in 1910 when, at the age of fourteen, he built and flew his first glider. His entry won first prize in the glider category of the Los Angeles City Annual Kite Tournament. After serving in the United States Air Service from 1917 to 1919, Hawley Bowlus piloted between Los Angeles and San Diego. During the 1920s, he designed and built several gliders. By 1927, when he supervised construction of "The Spirit of St. Louis" at Ryan Air of San Diego, Bowlus had made a name for himself as a pilot and designer.<sup>189</sup> The following year, Mahoney-Ryan moved to St. Louis, but Bowlus chose to remain in San Diego, where he founded Bowlus Sailplanes, Ltd. Bowlus taught Charles and Anne Lindbergh and Richard DuPont, among others, to fly gliders, and his students held the first nine glider

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<sup>188</sup> Wallace M. Byam, "New Stream-lined Coaches Use Modern Principles," *Trailer Travel*, vol. 1, no. 1, January-February 1936, p. 20-21. It is worth noting that various authors have mistakenly pointed to the aluminum trailer in the April 1936, *Popular Science* article, "Luxury Trailers Create New Army of Modern Gypsies," as the Airstream Clipper when in fact it is a Bowlus Road Chief. Two other pictures appear in the article. One depicts the frame and chassis assembly, and the other has Ruth Bowlus posing in the doorway of the trailer. Additionally, the article specifically cites Bowlus in regards to streamlining and gas efficiency. Another case of mistaken identity is that the trailer that appears on the cover of the first issue of *Trailer Travel*, January 1936, is a Bowlus Road Chief not an Airstream Clipper. Ruth Bowlus confirmed being along on that "trip to the desert."

<sup>189</sup> Hawley Bowlus had a variety of experience in aircraft building and design as well as associations with other prominent individuals. For instance, Bowlus knew and was friends with Jack Northrop, Art Mankey, and Donald Douglas. Douglas served as Chairman of the Board of Bowlus Sailplanes in the late Thirties. Irv Culver, an engineer at the Skunk Works, knew Bowlus since High school. T. Claude Ryan employed Hawley for the Spirit of St. Louis job. The two had met in flight school in 1917. B.F. Mahoney, builder of the Spirit of St. Louis, sold Bowlus-Teller trailers in 1936. Howard Hughes was an associate and employer in the late Thirties. Bowlus knew Glenn Curtiss and first watched him fly at the Los Angeles Air Meet, at Rancho Dominguez in 1910. That William Hawley Bowlus had relations with these individuals demonstrates the extent and level of his involvement in the aircraft industry.

licenses in the United States. By mid-1930, however, the Great Depression had taken its toll on Bowlus Sailplanes. Hoping to promote his failing business, Bowlus went east in 1931 for the U.S. National Soaring Competition held in New York. While there, Bowlus met German glider ace Wolfram "Wolf" Hirth, and the two established the Bowlus-Hirth Soaring School in New York City.

Following the Nationals, Bowlus returned to California, where he worked as the principal instructor at the Curtiss-Wright Institute of Aeronautics, in Glendale. One of his students, Richard DuPont, encouraged Bowlus to quit Curtiss-Wright and go into the sailplane business again, with his backing. In 1932, they opened Bowlus-DuPont Sailplanes. The firm built four single-place and one two-place gliders, three for DuPont himself, before the firm closed in 1934. That short union, however, produced America's first true sailplanes, in the form of the Bowlus-DuPont Albatross, the Falcon, and the Albatross II. With the introduction of his Albatross series of gliders in 1932, Hawley Bowlus broke the sailplane distance and altitude records held for eighteen years by the Wright brothers.<sup>190</sup>

As a diversion from his usual pursuits of aircraft design and construction, in early 1933, Bowlus started tinkering with a trailer coach idea. Using a sailplane trailer, Bowlus built and attached a steel tube framework which he covered with a linseed-oiled canvas cover. Bowlus loaded up the family and took them camping in the snow. Photographs of his first trailer depict a giant canvas egg. A movie director saw the trailer, liked it, and decided he had

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<sup>190</sup> Specifics on Hawley Bowlus as found in the authors collection: Biographical material published in *The Journal of The Soaring Society of America*, October 1967, reprinted in *Soaring* magazine, and received from Society member, and former Bowlus employee, Paul Casper; Advertisement reproductions - "Outstanding Features of Bowlus-Teller Streamlined Trailers," 1936; "1935 Bowlus Road Chief," SI/NMAH, Transportation Division, Bowlus file. Additional details as described in interviews with Hawley's wife, Ruth Bowlus, conducted by Raul Blackstein, Vintage Sailplane Association Archivist, and Editor, VSA newsletter, *Bungee Cord*. Details of oral interviews found in author's collection, e-mail letters dated July 8, 9, and 11, 2000.

to have one. After building this second canvas egg, Bowlus believed he could build another trailer that incorporated his aircraft experience, designs, and the latest materials – duraluminum or “doral.”

In 1934, Bowlus set out to apply his aeronautical experience to trailer coach design. To correct the “unsatisfactory features” in trailer coaches, Bowlus analyzed the coach as a whole unit and made those changes necessary to correct the unit as a whole. Rather than mixing separate parts, the end use of the trailer for traveling determined the end results. Bowlus believed that like the early automobiles, early trailer builders understood little about “economy, durability, speed or beauty.” He hoped to catch up with more modern automobile designs and to introduce a “streamlined” trailer coach. Just as all-metal airplanes served as a symbol of aircraft modernity, the first being the all-metal Boeing 247 in 1933, the following year Hawley Bowlus revealed his all-metal, “modern” trailer, the Road Chief.<sup>191</sup>

The result of Bowlus’s aircraft design experience and wind tunnel experimentation,<sup>192</sup> the Bowlus Road Chief appeared smooth and streamlined, absent of any superfluous ornamentation. Bowlus wrote that “proper streamlining insured economy, prevented strain on the auto, created exceptional riding qualities, and added greatly to its beauty.” Not only did the “duralumin” covering provide an advertised “95% heat resistance;” it gave the coach a

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<sup>191</sup> Author’s collection: Details on the modernity of the Boeing 247 as told to this author by W. David Lewis, June 29, 1994, at the Iowa State University, NEH Summer Institute, “Technology and Science Within American Culture, 1830-1950,” roundtable discussion, Alan I Marcus, Director. Also see: W. David Lewis and Wesley Phillips Newton, *Delta: The History of an Airline* (Athens: University of Georgia Press, 1979); Roger Bilstein, *Flight in America, 1900-1983* (Baltimore: Johns Hopkins University Press, 1984); and, Joseph J. Corn, *The Winged Gospel* (New York: Oxford University Press, 1983).

<sup>192</sup> All of the Bowlus-Teller advertisements indicate that Bowlus tested his trailer in a wind tunnel. Despite interviews with past employees and family members, it remains unclear at which Southern California aircraft factory Bowlus did his testing. He was closely connected with Ryan Air of San Diego, but it moved to St. Louis in 1928, as Maloney-Ryan. The consensus is that Bowlus utilized his contacts at either Douglas or Lockheed for testing.

*“modern”* appearance. The shiny aluminum exterior imitated the streamlined Boeing 247. The sweeping curves and rounded corners were broken up only by the horizontal band of windows. The rear of the trailer resembled a ship’s prow in that it curved back to a riveted seam running vertically down the center. One entered through the door positioned in the front of the coach, over the parking stand and hitch. Bowlus placed the door up front instead of on the side because it proved more aerodynamic. The portal window in the door made the Road Chief look more like a land-yacht. Similarly, the galley kitchen and sleeping berths imitated those found in finer yachts. While the exterior appeared understandably smooth and bare, concealed within the coach a plethora of rich accouterments awaited the user. (see Appendix, Figure 9)

A stainless-steel “fireproof” galley included a three-burner Coleman stove fitted to its position, a twenty-five-pound ice box or refrigerator, drawers and cupboards for utensils and can goods, and a stainless steel sink connected to a twelve-gallon water tank. Chrome-plated furniture and Pullman-type beds of subdued colors accented the smooth curvilinear form of the *“modern”* Road Chief interior. Inlaid linoleum covered the entire floor, but a removable rug covered all but the galley area. The sliding windows of shatter-proof glass proved an advantage over typical roll-out windows. The interior lighting system connected to a six-volt battery or “city electric (110 volt) when available.” The coach also had an intercom “telephone system connecting the car and trailer.”<sup>193</sup>

The Road Chief measured eighteen feet, six inches long, six feet wide and seven feet, six inches high. The coach weighed an advertised eleven hundred pounds. Bowlus boasted

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<sup>193</sup> “Bowlus-Teller Manufacturing Company,” flyer, circa 1935, SI/NMAH, Transportation Division, Bowlus file.

his acetylene welded tubular steel frame as an asset from his experience in airplane manufacturing. The frame and use of aluminum proved such a novel idea that *Popular Science* included three pictures of the Road Chief in its April 1936 article "Modern Gypsies." The article included one photograph of a bare frame showing the tubular-steel construction, similar to "airplane-type" construction. Bowlus concealed the frame and undercarriage with sheet aluminum riveted together, the first builder to conceal the underside of the coach. Furthermore, Bowlus enclosed the top-half of the wheel-wells to prevent wind resistance. Advertisements noted that this streamlining effect prevented "rumbling and swaying." Practicing a unique pattern for the attachment of the aluminum exterior, Bowlus placed one screw between every four rivets. The designer applied aerodynamic principles to practically every detail on his coach. The rear bumper consisted of two pieces of tubular steel connected with vertical and diagonally running supports. Spanning the width of the coach, air flowed from beneath the coach and through the bumper. Additionally, the coach had "bullet-type" tail lights and stop lights. Bowlus reportedly "supervised all of the manufacturing" from start to finish.<sup>194</sup>

Though only twelve were built, the 1935 Road Chief appeared as the only streamlined trailer at the Los Angeles trailer show. The \$2000 price tag proved too high for most customers, but the 13' Papoose model sold much better for around \$600. Between 1935 and early 1936, the Bowlus-Teller Manufacturing Company of San Fernando, California, built around two hundred trailers. By January 1936, the firm advertised a line of seven models.

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<sup>194</sup> Andrew R. Boone, "Luxury Trailers Create New Army of Modern Gypsies," *Popular Science*, April 1936, p. 29-32.

ranging in price from \$550 to \$7500. The most expensive model, the thirty-foot "Motor Chief," was a forerunner of the motor home.<sup>195</sup>

Though other engineers and designers had envisioned the motor home – Norman Bel Geddes and Corwinn Willson, for instance<sup>196</sup> – few self-contained, self-propelled, specially designed vehicles were built until the late 1950s. Bowlus built only two Motor Chief's, but his streamlined design addressed the same aeronautical experience that went into his other designs. The duralumin shell or airplane-skin exterior proved the most obvious of technologies transferred from his aircraft experience. The design not only borrowed from the airplane industry; Bowlus specifically designed his models as streamlined and *modern*. Amenities included a flush-type toilet, hot and cold running water, and a refrigerator. The Motor Chief existed as the culmination of streamlining principles, aeronautical design experience, and the latest advances in recreational travel technologies.

Hawley Bowlus, though a great designer and builder, lacked the business acumen necessary to make his firm profitable. He was led into bankruptcy at least three times by business associates. In 1935, Bowlus became acquainted with Wally Byam, perhaps at the Los Angeles trailer show. Bowlus wanted to hire Byam for his sales and marketing experience. Wally Byam had been building trailers since 1930. Byam did not join the firm but agreed to sell Bowlus trailers right alongside his own Airstream models. Instead of Byam, Jacob Teller joined Bowlus, and the firm became Bowlus-Teller. Teller, however, proved a less-than-honest business associate, and within months the firm went bankrupt. Teller

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<sup>195</sup> "Bowlus-Teller Manufacturing Company," flyer, circa 1935, SI/NMAH, Transportation Division, Bowlus file.

<sup>196</sup> "Motor Trailers are Homes on Wheels," *Popular Science*, vol. 138, no. 4, April 1941, p. 130-31.

reportedly went on business trips, buying products for the Road Chief and Papoose trailers that were of no use. Besides the sleeping bags, the most remembered mistake was when Teller purchased kapock-filled mattresses that did not even fit inside the trailer. The Bowlus family used them as floats in the family pool. Theories hold that Teller bought useless items at inflated prices, receiving a kick-back after the sale.<sup>197</sup> By May 1936, Bowlus-Teller was bankrupt, and Hawley even had to buy his own tools back from the Sheriff. Subsequently, Wally Byam went to Bowlus and asked if he minded if he continued to build the trailers. Bowlus told Byam there was nothing he could do to stop him. Bowlus, like so many other builders, never patented his designs or trademark. The result was the 1936 Airstream Clipper. It is unclear exactly when Byam introduced the first Airstream Clipper. A popularly held belief is that the first couple of Clipper trailers actually proved to be Bowlus Road Chiefs with a new nameplate. Others maintain the Clipper appeared earlier, in January 1936.<sup>198</sup>

Regardless of the date on the “earliest” model, Byam befriended Bowlus in early 1935, and actually agreed to sell Bowlus trailers. Conceivably then, Byam used the Bowlus Road Chief as an example to copy from, a popular practice in the trailer coach industry.<sup>199</sup> Byam quickly redesigned the trailer, moving the door to the side of the coach, losing some of

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<sup>197</sup> The idea that Teller bought useless items at inflated prices and received kick-backs is a theory put forth by Ruth Bowlus, Hawley’s widow. No records exist to substantiate the claims, however.

<sup>198</sup> *Ibid.*; Also see notes, 188, 190 and 195.

<sup>199</sup> In the trailer coach industry, as early as the Teens with camp-trailer builders, individuals often copied technical designs from other builders. Individuals often purchased a trailer and then tore it apart to see how it worked and its design. After making minor changes, though not always, these individuals entered into the business of building trailers. Many small builders started out in this manner. One reason for the duplication of ideas rested in the fact that few trailer builders ever patented their designs or custom features. Covered Wagon, for instance, did not even take steps to protect its name from being used after the firm closed, much less patent its own design for the railroad-type coupler. As such, designs were often copied or built upon. Evidence suggests this is how Byam got his design for the Airstream Clipper, by redesigning one of the Bowlus Road Chiefs that his dealership sold.



its aerodynamic benefits in the process. The Bowlus Road Chief design proved a distinctly superior design when compared to the aluminum-covered plywood kit model, the Airstream Torpedo of 1935. Still, 1937 advertisements for the Clipper document the same aeronautical and streamlining principles Bowlus advertised in 1935. Thus, the shift from the Torpedo or Silver Cloud models to the Clipper proved inconsistent. (see Appendix, Figure 10) As such, adoption of the streamlined form, use of riveted duraluminum, enclosed wheel-wells, and an enclosed undercarriage, as well as the exact use of Bowlus advertising nomenclature bear out the notion that the Airstream Clipper evolved out of the original Bowlus Road Chief design and Wally Byam's familiarity with and experience selling the Bowlus trailer.<sup>200</sup>

Wally Byam began manufacturing the popular aluminum Airstream travel trailer in 1936. Having built his own backyard trailer in the late 1920s, Byam reportedly wrote an article for *Popular Mechanics* that detailed his plans. Rather than building their own trailers, however, Byam received numerous requests from readers for him to build and sell his trailer. Closing his small publishing business in 1930, Wally Byam officially entered into the trailer business.<sup>201</sup>

The first trailers Byam made resembled other wood trailers of the period. The Silver Cloud trailer, designed in 1931 and built in 1932, followed the idea of a wood-framed trailer

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<sup>200</sup> Don Reasons, "Airstream History, Silver Palace on Wheels" (June 2000), as found at <http://www.clubncair.com>. Also see, Michael A. Rockland, *Homes On Wheels* (New Brunswick: Rutgers University Press, 1980), p. 41-44; Donald J. Bush, *The Streamlined Decade*. Another account can be found in Robert Landau and James Phillippi, *Airstream* (Salt Lake City: Peregrine Smith Books, 1984), but this text contains numerous errors regarding the earliest years of Airstream.

<sup>201</sup> Several of the authors cited above have noted that Byam wrote an article for *Popular Mechanics* detailing a trailer design. Despite a thorough scouring of this publication, this author has yet to find this article if it actually exists. It is worth noting that none of the authors who reference this article have ever cited it in their footnotes or bibliographies. In a similar vein, the references to Byam's publishing business suggest only that it was a small firm. No specifics on it appear anywhere, and those individuals involved with Airstream history, including older individuals who knew Wally personally, similarly know nothing about it. No records of it have been found in the Los Angeles City Directories for the 1910' or 1920s.

but with a roof that sloped off in the front and rear. Early on, the firm offered plans for customers to build their own trailers. One set of plans, the "Torpedo" of 1935, maintained the sloped roof in the rear but had rounded corners on the front and the roof no longer sloped off. The Airstream Torpedo, Torpedo Junior, Silver Bullet, and Silver Cloud models of 1936 each had rounded tops in front and rear, but rounded corners no longer appeared on the models. None of them resembled the upcoming Clipper. In *Trailer Travel, Here and Abroad*, Wally Byam noted the shift to streamlined trailers and the use of aluminum "in the middle thirties" and specifically to, "the first all-aluminum Airstream trailer" that "appeared shortly thereafter, in 1937."<sup>202</sup>

The Airstream, like the Bowlus and Curtiss trailers, was aimed at the wealthier market. The shiny aluminum exterior bespoke modernity and appealed to many consumers. Byam intended his coach to be used for recreational purposes, and his actions reflected his devotion toward this end. Besides pioneering the Blue Berets in 1955, a travel club reserved strictly for Airstream owners, in the Thirties Byam openly spoke of his contempt for people who lived in trailer coaches. Airstream advertised its products as travel trailers. Emphatic about this point, when called upon by the War Production Board to manufacture trailers as "temporary housing," Wally Byam chose instead to close his manufacturing facility and work as an engineer at Lockheed Aircraft. Still, Byam would not have found materials, as the Government restricted the use of aluminum.<sup>203</sup>

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<sup>202</sup> See <http://www.airstream.net> for details and photos. Wally Byam, *Trailer Travel, Here and Abroad* (New York, David McKay Company, Inc., 1960), p. 20.

<sup>203</sup> Michael A. Rockland, *Homes on Wheels* (New Brunswick, N.J., Rutgers University Press, 1980), p. 26, 44-5.

Above all others, Wally Byam's Airstream carried on the cultural curiosity with streamlining principles. Other coach builders of the Thirties quickly adapted an aerodynamic appearance. In selling their expression of streamlined or modern trailer coaches, firms like Airfloat, Airstream, Silver Dome, and Stream-Lite also sold their name. Numerous firms toyed with the idea of streamlining, but many simply cut off and rounded the top corners of the coach. Others V-shaped the front of the coach, extending the body out over the hitch. Top-of-the-line manufacturers like Bowlus and Airstream incorporated many newly developed technologies into their designs, including shatterproof glass, three-point suspension systems, double-action shock absorbers, and the fireproof "duralumin" covering. Use of an aluminum skin and tubular-steel construction streamlined models to a greater efficiency, reducing overall trailer weight by as much as two-thirds. Byam followed the practice started by Bowlus of enclosing the underside of the trailer and the wheel-wells. With wind-resistance drastically reduced, the tendency for the trailer to track behind the automobile greatly improved. Other aerodynamic-designed recreational vehicles appeared throughout the late Thirties and early Forties. Many of these models were special-built custom designs.

Some firms built specially designed models for special purposes. In late 1936, Edward G. Budd Manufacturing Company, of Michigan, for instance, built a "light-weight, stainless steel air conditioned trailer" with sleeping capacity for fourteen adults for use in the Syrian desert between Baghdad and Damascus. Budd reportedly "sealed" the coach for the six-hundred-mile trip, two-thirds of it through open desert with no roads. The fifth-wheel trailer measured thirty-six feet, eight inches long and was "pulled by a 150 hp diesel tractor" built by the Van Dorn Iron Works, of Cleveland. The trailer included streamlining features such as enclosed wheel-wells, horizontal lines, and a semicircular rear. Two other

aerodynamic fifth-wheel trailers built in the late-Thirties served on exploratory adventures. One such trailer, designed by Count Alexis de Sakhnoffsky, served as a “deluxe apartment on wheels” for Commander Attilio Gatti and his wife on their ninth African expedition in 1938. A second model served as the mobile “base-camp” for Gatti’s crew. An International Harvester advertisement for 1938 pointed out that the Gatti “Jungle Yachts” pulled easily with specially designed, streamlined International trucks. Similarly, explorer Lawrence C. Thaw had built a streamlined fifth-wheel trailer for use on the Thaw Asiatic Expedition of 1939-40. Both the Thaw and Gatti trailers had lavish equipment, including built-in bars, libraries, desks, air conditioning, full toilet and bathing facilities, wine racks, and observation decks. Another company, Schult Trailers of Elkhart, Indiana, specially designed a streamlined travel coach for publishing magnate Myron Zobel.<sup>204</sup>

Built in 1938, the “Continental Clipper” combined the latest technological advances in manufacturing as well as top-line equipment. A specially built tractor, equipped for the chauffeur, hauled the early fifth-wheel trailer. The custom-built trailer took about six months to build. Made of five-inch welded steel, the body rested on top of the thirty-foot long chassis. Designed by Mister Zobel and Ray Gilkinson, chief engineer for Schult, the trailer and tractor cost an estimated \$17,000 to build. The amateur two-way radio station built into the trailer cost an additional \$3000. “A Chevrolet one and a half ton cab-over-engine truck” pulled the Continental Clipper. Inside the coach, padded cork leather lined the lower walls while Schult covered the upper parts of the walls and ceiling with “figured Aspenwood.” The stainless-steel kitchen included a four-burner stove with oven and broiler that operated on

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<sup>204</sup> “Air Conditioned Sleeper for Syrian Desert,” *Motor*, March 1937, p. 90; “International Trucks chosen for Commander Gatti’s ‘Jungle Yachts’,” advertisement, 1938, authors personal collection.

bottled gas, a full-sized sink, and an electric refrigerator. "Completely enclosed in glass," the front of the coach served as "an observation lounge" while traveling. When not traveling, the observatory couch reversed, allowing passengers "to face the interior of the lower story." The couch also converted into a double bed. The air-conditioned coach slept five people "in addition to the accommodations in the galley to sleep the steward." The steward slept on a collapsible cot. The two drivers, who drove in shifts, slept in the berth inside the cab of the truck. The tiled bathroom included hot and cold running water, a shower, a toilet, and his-and-her towel bars. The intercom, or "intercommunication telephones," connected the office desk with the truck and the galley. Zobel used the coach to travel between the Graduate Group offices in San Francisco, Los Angeles, Chicago, Detroit, and New York. The rolling office included "an electric dictating machine, typewriter, desks and other office paraphernalia." After several years of use, Zobel sold the Continental Clipper, wine cellar and all, to King Farouk of Egypt, who later sold it to the Maharaja of India.<sup>205</sup>

Pictures of the Continental Clipper present an image almost too hard to believe. The Continental Clipper appeared clean, smooth, and streamlined. Because it was painted white, pictures of the coach appear to be line drawings.<sup>206</sup> Like the Bowlus Road Chief, the Continental Clipper appeared as a uniquely designed, streamlined coach absent of any superfluous ornamentation and accented only by horizontal lines running the length of the cab

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<sup>205</sup> "The Continental Clipper," *Trailer Topics*, March 1939, p. 9, 23: "RV Classics: The Great and 'Near Great' Moments in RV History – Fit for a King and a Maharaja." SHURflo advertisement, not dated, circa 1980, as found in Schult file, Lost Highways; "The Schult Family - Our First Forty Years," Schult Mobile Home Corporation publication, 1974, as found in RV/MH Museum and Hall of Fame, Schult file. Duplicate copy in author's personal collection.

<sup>206</sup> *Ibid.* Specifically see the picture published in "The Schult Family, Our First Forty Years," and related photographs in the Schult file, RV/MH Museum and Hall of Fame.

and coach. (see Appendix, Figure 11) These sleek, streamlined models, however, did not appeal to everyone.

By the mid-Thirties, other changes involving the trailer coach had emerged. Whereas Bowlus and Airstream specifically built "travel trailers," other firms targeted the desires of other users. The travel trailer market rested at the core of business, yet what consumers chose to do with the product revealed new trends, new markets, and changing needs and desires. The trailer coach industry evolved out of these social needs and cultural desires and continued to evolve throughout the Thirties and into the Forties.

While some manufacturers specifically built travel trailers, other firms targeted the extended-stay market. Periodical articles not only reflected a dual purpose for trailer coaches; many of these articles encouraged extended use. The 1938 *Look* magazine article "Rolling Homes - One Way To Avoid Rent" acknowledged that "early U.S. trailers were built for vacation purposes" and that "the idea of year around occupancy developed later." Other articles such as "We Live in a Trailer" (1942), "Trailer Convertible into Permanent Cottage" (1937), and "We'll Soon be Living on Wheels" (1936), each enlightened the reader to the "advantages" of living in a trailer coach permanently.<sup>207</sup>

It is impossible to say who first owned or lived in a trailer coach as a primary residence. Also difficult to determine are the particulars as to why someone chose to call a trailer coach home. Certainly the Great Depression may have fostered these outcomes. The fact remains, however, that in the early-Thirties the number of individuals living in trailer

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<sup>207</sup> "Rolling Homes - One Way to Avoid Rent," *Look*, May 10, 1938, p. 56-7; "We Live in a Trailer," *Woman's Home Companion*, 69:88, June 1942; "Trailer Convertible into Permanent Cottage," *Popular Mechanics*, 68:6, December 1937; "We'll Soon be Living on Wheels," *Trailer Travel*, 1:1, January 1936.

coaches increased steadily. To accommodate these individuals, campground owners set aside specially designated areas. Often these sites had electrical, sewage, and water connections. Additionally, owners provided laundry and bathing facilities, mail delivery, and, very often, groceries and related supplies. Various periodical articles noted the extent, or lack, of user facilities at these trailer parks. Park owners in Florida, Texas, and California especially focused on adapting to permanent coaches as more and more people found themselves staying in these states for months at a time, often for the winter. These *trailer parks* saw an influx of *trailerites* throughout the 1930s, and new parks opened to meet the demand.<sup>208</sup>

By 1938, it had become apparent that not everyone wanted trailers for vacation purposes only. Reports indicate that in the late Thirties more and more people viewed the trailer as a permanent, yet mobile, form of shelter. Certainly the thousands of trailer parks established in the late Thirties supported this notion. A census of "tourist camps" released in 1937 accounted for 9,848 camps. Of that total, 2,034 camps also operated a gasoline "filling station" in conjunction with the tourist camp. Estimates show that many parks operated throughout the year, offering accommodations for extended-stay users. This proved especially true in California, the state with the most tourist parks, and in Florida and Texas. Trailer owners no longer sought a temporary parking space where they could relax and vacation for a short duration. Rather, many looked for trailer parks which provided amenities necessary for extended stays. How long campers stayed at these parks depended upon their reason for being there. While some campers, often older retirees, headed to warmer climates for the winter, others moved around, taking part-time work where they could find it. Still

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<sup>208</sup> "Latest Comforts for Homes on Wheels," *Popular Mechanics*, 67:4, April 1937.

others, similar to the Joads in Steinbeck's *The Grapes of Wrath*, went to California in search of Depression era jobs. Others just went camping and touring. One of the most popular camps of the period, Ollie Trout's Trailer Park, located around two miles north of Miami, had 350 individual lots, thirty by thirty-five feet. A former landscaper, Ollie Trout invested \$150,000 in his park, including \$30,000 worth of transplanted trees and shrubs. Each site had the full range of amenities or "hook-ups." Additionally, each lot had a palm tree on each corner. Trout held regular dance competitions and other forms of entertainment that drew in guests. Not all parks proved as elaborate or well-kept as Trout's did. Accompanying demands for more permanent parks, trailer manufacturers also received new, and specific, customer demands. One manufacturer who specifically responded to customer desires was Schult Trailers, Incorporated.<sup>209</sup>

Wilbur Schult started out in the trailer business as a Covered Wagon salesman in 1933. After a year of sales, Schult formed a partnership with Walter Wells to build trailers. From its humble beginnings in a rented garage in Elkhart, Indiana, Schult Trailers quickly advanced into an industry leader. By 1937, Schult manufactured four different models in addition to several models aimed specifically at commercial ventures. Offering basic equipment on the Nomad and Sport, Schult targeted these models at the touring market. These models modestly incorporated streamlining features yet preserved the amount of headroom and storage space inside. Early on, Schult advertised its coaches as more than just travel vehicles. One advertisement from late 1936 introduced the new, "1937 Home and

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<sup>209</sup> "Tourist Camp Census," *Business Week*, June 12, 1937, p. 54; Ollie Trout's Trailer Park advertisement, ca. 1940, as found in *Lost Highways Quarterly*, vol. 1, no. 3, Winter 1995, p. 17. Original advertisement located in the Lost Highways archives, Trailer Parks file. Also see, "Latest Comforts for Homes on Wheels," *Popular Mechanics*, 67.4, April 1937, p. 510.



Vacation Coaches at Sensible Prices.” Supporting his idea of trailer living, Schult developed plans for a model trailer park, which he distributed to his dealers in support of the Schult motto, “any place is home in a Schult house trailer.” <sup>210</sup>

For trailer living, Schult developed the Homestead and Country Club models in addition to the Schult Custom. These models maintained the amount of headroom and storage space inside, imperatives to trailer living. Being the largest commercially built trailer at the time, 20' x 8', the Homestead model featured living and dining quarters separated from the sleeping area as well as installation of electric refrigerators and forced- air heating. The more expensive model, the Country Club, featured better fabrics, a built-in radio, and a bathtub located beneath the davenport. Advertisements promoting year- around livability featured mature, possibly retired couples as compared to young couples or sportsmen used in the Nomad and Sport models. One Sears, Roebuck and Company advertisement for October 1937, showed a fisherman behind the Nomad trailer coach with a caption that read, “Sears offers what we sincerely believe to be one of America’s greatest line of trailers.” Within a few short months, the firm offered twelve standard models.

By 1939, Schult expanded and altered its line to include two eighteen-foot models, the Nomad and the Master, and two twenty-foot models, the Cavalier and Commodore. The firm continued to build the Homestead model, but it now measured twenty-two feet long. Replacing the smaller Country Club model, in 1939 Schult offered the two-door, twenty-four foot Aristocrat and Aristocrat Imperial models. The Imperial cost \$1545 and included

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<sup>210</sup> “1937 Home and Vacation Coaches at Sensible Prices,” Schult Trailers Incorporated, Elkhart, Indiana. Dealer’s brochure stamped. Fred Hawkins & Son, Inc., 2435 So. Michigan Ave., Chicago, Ill., Distributors. Original found in Schult file, Lost Highways; “The Schult Family, Our First Forty Years,” p. 5.

mahogany wood whereas the standard Aristocrat utilized fir and cost \$300 less. The firm expanded its line that same year, offering a two-door, twenty-six-foot "Luxury Liner" that sold for between \$2400 to \$3600. In addition to cedar-lined closets, broad-loom carpeting, complete bathroom facilities, "electric refrigeration," and a built-in radio, advertisements noted that "any ultra modern convenience" was available as were "woods of rare, exotic appeal." Woods included "Figured Aspen, English Gray Hardwood, Flakey Lacewood, Curly Maple, Figured Satinwood, Striped Tigerwood, Philippine Mahogany, Birdseye Maple, Quarter-sawed Oak, Striped Walnut, Zebra Wood, Australian Walnut, Red Cedar, Northern Birch, Redwood Burl and Oriental Walnut."

As a pioneer of the trailer industry, established in 1934, Schult Trailers Incorporated introduced the first steel frames, built-in electrical appliances and complete interior plumbing, including bathtubs and flush-type toilets. The air-conditioning system, first advertised in 1938, used an "air circulator" that drew in some inside air, mixed it with some outside air, and blew it over a refrigerating unit and through a dehumidifying unit before the unit expelled "the cooled, dried air into the trailer." Furthermore, the firm included a three-year warranty on all coaches. By 1939, Schult Trailers Incorporated had earned its place as an industry leader.<sup>211</sup>

Whereas travel trailers like Bowlus and Airstream appeared as a cultural icon, something that represented all that was in vogue for the period, by the later Thirties some people viewed trailer coaches as a social menace. Specifically, articles noted the hesitation

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<sup>211</sup> Schult information as found in author's collection: "The Schult Family - Our First Forty Years," 1974; "1937 Home and Vacation Coaches at Sensible Prices," 1936, and "Schult Engineered Trailers," 1939, both, SLNMAH, Transportation Division, Schult file; Edwards, *Homes for Travel and Living*, p. 60. It is worth noting that as of this publication date, Schult Homes is still in business manufacturing modular homes.

and weariness people had towards trailer coaches serving as permanent housing. Articles cited the loss of tax revenues, the expense of schooling “migrant” children, and the unhealthy conditions associated with people being “crammed in like sardines” at some parks, as well as the notion of severing one’s roots. Other articles questioned the demand on local resources. Another concern centered around homemade trailer coaches, many of which “littered the highways.” And of course, numerous articles on sanitation appeared, most of which included a horror story of sewage leaking out as the coach moved down the road, or even worse, leaking while parked. One *Popular Science* article from April 1937 estimated that one million people lived in trailer coaches.

Citizens had legitimate concerns, and many of these issues or debates appeared in follow-up articles. Still, other concerns proved more complicated. For instance, one article objected to “trailerites” putting up picket fences around their coaches and the planting of gardens. This led to an appearance of permanency. On the flip side, other articles encouraged trailer owners to “spruce up around the place” to make it more inviting or appealing. Still, the largest stigma surrounding trailers and trailer parks appeared after the war. Many trailer parks established to accommodate the overflow of war workers were located either close to an industrial location or in less-than-desirable locations. The notion of locating trailer parks on cheap land – near rivers and flood plains, next to industrial centers, adjacent to major highways and similar areas – continued long after the war. In turn, it continued to further taint the image of trailer coaches as viable housing alternatives.<sup>212</sup>

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<sup>212</sup> Edwin Teale, “Five Weeks in a Trailer,” *Popular Science*, 130:4, April 1937, p. 46-8. A sampling of articles describing the pros and cons of trailer living include “The *Fortune* Quarterly Survey: VII,” *Fortune*, vol. 15, no. 1, January 1937, p. 86-7, 162-64; “200,000 Trailers,” *Fortune*, vol. 15, no. 3, March 1937, p. 105-11; “New Comforts for Trailer Travel,” *Popular Science*, 132:2, February 1938, p. 38-9; “Improved Trailer Fittings and How To Make Life on Wheels More Comfortable,” *Popular Science*, 131:1, July 1937, p. 84-5; “Motor Trailers

To keep trailer builders in a good public light, the industry turned to its representative body, the Trailer Coach Manufacturers Association. In August 1936, a group of thirty-four trailer manufacturers and nineteen parts suppliers attended the Sandusky trailer show. After discussing issues "dealing with various phases of the industry," the group of men agreed that an association would prove beneficial. On August 12<sup>th</sup>, thirty industry representatives met, discussed membership dues, and decided to leave the issue to the Board of Directors. With the constitution and by-laws agreed upon, the group elected its officers. The men also assembled committees to "take up matters" including annual trailer shows and publicity. Established to guide trailer coach manufacturers and advise them on industry developments, the Trailer Coach Manufacturers Association (T.C.M.A.), based in Chicago, emerged as the leading industry representative and governing body. Still, the T.C.M.A. represented primarily Eastern and Midwestern manufacturers. Established in March 1936, the Trailer Coach Association of California similarly advised and coordinated manufacturers located in California and, later, other western states. By 1941, when the group launched its promotional periodical, *Trailer Life*, the group had also dropped "California" from its name to become the Trailer Coach Association (T.C.A.). These two associations served a majority of trailer builders nationwide. From their earliest beginnings, the two groups discussed "forming one

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are Homes on Wheels," *Popular Science*, 138:4, April 1941, p. 130-31; Corwin Willson, "Diagnosing Trailer Fever," *Trailer Travel*, vol. 1, no. 4, July 1936, p. 17; A. W. von Struve, "Trailer Progress to Be Revealed by U.S. Census," *Automobile and Trailer Travel*, vol. 5, no. 1, January 1940, p. 13; Mrs. G.G. Dickinson, "The Call to Service," *Automobile and Trailer Travel*, vol. 7, no. 1, January 1942, p. 6; David Arehart, "Mobile Homes for Defense," *Automobile and Trailer Travel*, vol. 7, no. 2, February 1942, p. 7; Karl Hale Dixon, "Planning for the Post-War Period," *Automobile and Trailer Travel*, July 1942, p. 7; Karl Hale Dixon, "Past and Present in Trailer History," *Automobile and Trailer Travel*, December 1942, p. 5; Elsa M. Reed, "The Woman's Viewpoint," *Automobile and Trailer Travel*, October 1943, p. 7; John M. Tibbetts, "The G.I. Trailerite," *Automobile and Trailer Travel*, December 1944, p. 13; "We Live in a Trailer," *Woman's Home Companion*, vol. 69, June 1942, p. 88; "Trailer Town – Three Cheers," *Woman's Home Companion*, vol. 69, July 1942, p. 54-5; "Trailer Convertible into Permanent Cottage," *Popular Mechanics*, 68:6, December 1937, p. 833.

strong, unified, national organization.” Still, that notion took almost forty years to develop. They merged in 1975.<sup>213</sup>

In the same issue that *The Trailer Caravan* announced the formation of the T.C.M.A., the editor called for “full, whole-hearted support of the several organizations.” The editor, Edward J. Barrows, pointed to the “real need of efficient and complete organization of the trailer industry.” Like Barrows, manufacturers agreed that the three main problems facing the industry were “standardized types of construction, safety devices, and their universal acceptance, as well as problems of legislation.” As Barrows pointed out to his readers, the “infant” industry would face many “new problems, and as time goes on it will face more.” As such, the editor encouraged support of both the T.C.A. and the T.C.M.A.<sup>214</sup>

The October issue of *The Trailer Caravan* further highlighted these three problem areas and the work of the newly formed Trailer Coach Manufacturers Association. In a new addition to the magazine, the “Out in the Field” section highlighted the September 14<sup>th</sup> meeting of the Board of Directors. The officers discussed “a code of ethics, safety in construction, and proposed legislation.” In effect, the three issues proved intermingled. If builders agreed to a set criteria in the safety features and construction standards of trailer coaches, then, legislation regarding these elements could also be addressed from a unified position. The Board also agreed to conduct a survey of the industry to determine the “exact number of manufacturers” and “the various types of trailers” being produced. The officers then set out to list and address the problems with safety features. A major concern, safety

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<sup>213</sup> “Trailer Men Organize,” *The Trailer Caravan*, vol. 1, no. 2, September 1936, p. 11; David A. Thornburg, *Gallopings Bungalows* (Hamden, Connecticut, Archon Books, 1991), p. 146-47.

<sup>214</sup> *Ibid.*, “Editor’s Comments,” p. 30.

problems included no set standards in signaling devices, clearance lights, reflectors, brakes, safety chains, and reliable hitches or means of attachment. To assist with these standards and receive advice, Board members contacted members of the National Association of Motor Vehicle Administrators (N.A.M.V.A.).<sup>215</sup>

The T.C.M.A. issue of safety features appeared in the formal discussions at the November 1936, annual meeting of the National Association of Motor Vehicle Administrators. At the meeting, members of the T.C.M.A. met and communicated with N.A.M.V.A. officials regarding safety features. Representatives for the T.C.M.A. appealed to the group to offer ideas on safety and construction. Shortly before the meeting closed, the executive secretary presented a "report on House Trailer Recommendations." Combining "recommendations from administrators from most of the states," the group formally adopted a resolution offering seven specific guidelines for the T.C.M.A. to consider. The group agreed that the trailer needed to safely carry the load, and be stable when loaded or unloaded. Additionally, a "secure attachment to the driving vehicle" offered coaches the safety of "being drawn safely at normal speeds or when" the unit accelerated or decelerated "without swaying or otherwise endangering other users of the highway." In addition to brakes, warning lights, and appropriate mirrors on the tow vehicle, the group recommended that the width of coaches, including any attachments, not interfere with other vehicles on the highway. The T.C.M.A. representatives accepted the resolution, and N.A.M.V.A. officials agreed to form a committee to "thoroughly" consider the matter further.<sup>216</sup>

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<sup>215</sup> "Out in the Field," *The Trailer Caravan*, vol. 1, no. 3, October 1936, p. 13.

<sup>216</sup> Philip H. Smith, "Administrators Consider Coach Trailer Regulations," *Automotive Industries Index*, vol. 74, January 4 to June 27, 1936, November 21, 1936, p. 720-722.

Within six months, the T.C.M.A. had “drafted a twelve-point legislative program, proposing, among other things, that states establish a licensing fee based on unit weight; vehicles be required to have lights; their wiring meet building codes; and adequate couplers be required between car and trailer. The Association hoped that all states would adopt the model standards to assure reciprocity of regulation.” If the industry could encourage standards, backyard builders would be forced to comply. The industry hoped to eliminate the blemish that homemade units cast on all trailer coaches. Realistically, the industry wanted to eliminate the amateur builders and promote their own products.<sup>217</sup>

A more challenging task, the Association also headed off attacks on trailer coaches through their public relations campaigns. Industry representatives routinely found themselves defending the industry against attacks that labeled their product as inferior, a social menace or a transportation nightmare. This problem with image was raised at the first meeting of the T.C.M.A. Board of Directors in September 1936. In turn, the Board “set up an aggressive and interesting” public relations program. As the T.C.M.A. pointed out, and the National Association of Motor Vehicle Administrators agreed, the real problem with recreational vehicles, trailer coaches especially, “was not the manufactured trailer of commerce but the home-made contraption.” Both groups argued that “it was the backyard school of design” that “brought the trailer into disrepute.” In turn, the T.C.M.A. continually pointed to the safety and superiority of manufactured coaches.<sup>218</sup>

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<sup>217</sup> Wallis, *Wheel Estate*, p. 77.

<sup>218</sup> *Ibid.*, p. 721; Edwards, *Homes for Travel and Living*, p. 217; “Out in the Field,” *The Trailer Caravan*, vol. 1, no. 3, October 1936, p. 13.

To promote the industry and its products, the Association encouraged members to advertise their individual products and to promote the fact that they were produced by professionals using set guidelines. Manufacturers in turn promoted the fact that their trailers included the latest in equipment, standard safety features like brakes and shatterproof glass, as well as the quality of professional construction techniques. Still, bearing the cost of an extensive advertising campaign proved hard on smaller builders allowing the larger producers like Covered Wagon, Palace, and Schult to dominate the pages of contemporary magazines. In addition to choice of floor plans, these advertisements often featured cut-away drawings or photographs taken on the assembly line to show things like heavy-duty springs, a steel chassis and frame, insulated walls, exterior lighting, a running water system and, of course, the hitch.

Trailer coach manufacturers used numerous types of attaching devices in the earliest years. As noted earlier, Covered Wagon designed, manufactured and used for several years a railroad-type coupler. Like a train, the driver backed up to the trailer until the hitch coupled. The earliest hitches used a clevis and bolt to attach the trailer draw bar to the bumper of the car. The ball and socket replaced it in the Teens. Still, as trailers grew longer and heavier, the trailer hitch weight proved too much for the automobile bumper and rear springs to bear. Auxiliary springs often reinforced the rear of the car to keep it from sagging. An alternative appeared in the form of a dolly. Generally two-wheeled, a dolly connected to the ball on the rear bumper, while the trailer connected to the dolly. In this manner, the weight of the trailer rested on the dolly transferring the weight onto the wheels of the dolly more than the automobile. Still, all of these hitches showed problems. While the ball and socket proved reasonably safe, it placed too much weight on the rear of the automobile. Additionally, a dolly often hindered the turning or backing up of the unit. Moreover, with most state laws



restricting the length of the whole unit, the length of a dolly added to the length of the car forced users to choose a smaller trailer coach to make up the additional overall length with the added dolly. With the dolly attached to the bumper, the rear of the car still bore some of the weight of the unit. Another alternative developed out of the ball and socket.

Instead of attaching the hitch to the bumper, the axle hitch carried the hitch weight directly on the rear axle and wheels rather than the bumper and springs. Adding a torsion bar leveled the trailer and automobile and helped “cushion the up and down action on the road.” Still, the axle hitch placed “too much load directly on the differential and rear wheel bearings.” Ultimately, the frame hitch transferred the weight of the hitch onto the rear frame and springs of the automobile. Added torsion bars leveled the unit and cushioned the jolting. The torsion bars “leverage and lifting action actually transferred hitch weight forward in the auto frame to all four wheels thus relieving the rear springs and tires of some load.” This method proved most common because it proved safer and it distributed the strain of the hitch throughout the automobile.<sup>219</sup>

Besides safety issues like hitches, the T.C.M.A. lobbied “for favorable legislation and especially” against “oppressive bills,” many regarding the establishment of trailer parks. As early as the later Thirties, trailer parks had gained an unsavory reputation. Some parks had muddy streets, no sidewalks, inadequate bathroom facilities, and, of course, a number of trailers that appeared dirty, dented, in need of paint, with broken windows, or any number of other items that some people considered inappropriate or bad. Trailer parks also came into the

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<sup>219</sup> Edwards, *Homes for Travel and Living*, partial reprint titled “Recreational Vehicles of Today and Yesterday (1993),” p. 15-17. It is worth noting that fifth wheel hitches have been used on trailers since 1915. Glenn Curtiss popularized it as the means of attaching the Curtiss Aerocar. Still, the fifth wheel hitch, and trailer, waited until the early Seventies before it reappeared. The fifth wheel hitch and trailer proves one of the most common types in use today.

public eye when people started adding porches, fences, and flower beds. While the fences and flowers may have appeared charming, the addition of porches or rooms led the general public, including many local officials, to question whether or not the travel trailer would ever travel again.<sup>220</sup>

Certainly the Great Depression “encouraged year-round trailer use,” especially among migrant workers. Coupled with migration from the Dust Bowl, thousands of Americans owned and lived in trailers, both manufactured and homemade. Estimates of trailers produced by manufacturers, added to homemade units, ranged between 55,000 to 300,000 for 1936 alone. By 1938, studies like those conducted by sociologists Clark and Wilcox estimated “that there were 250,000 trailers with one million users.” Of the quarter-million trailers in use, industry officials estimated that 10 percent of their units “were being bought as full-time housing.” Others estimated 25 percent lived in their trailers year-round.<sup>221</sup>

Witnessing this migration, communities expressed concern that “migrant worker families would descend upon them en masse, draining local services.” In response to local concerns, communities enacted restrictive zoning laws regarding the duration trailers could remain at a given location, such as a trailer park. Detroit proved among the earliest to act in 1936, restricting trailers to ninety days. Noteworthy, and typical of communities nationwide, “neither the [Detroit] Building Department nor the Health Department could determine who

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<sup>220</sup> Philip H. Smith, “Administrators Consider Coach Trailer Regulations,” *Automotive Industries Index*, vol. 74, January 4 to June 27, 1936, November 21, 1936, p. 721; Edwards, *Homes for Travel and Living*, p. 217.

<sup>221</sup> “200,000 Trailers,” *Fortune*, March 1937, p. 108; C. Clark and C.E. Wilcox, “The House trailer Movement,” *Journal of Applied Sociology*, 22, 1939, p. 503-16, as cited in, Wallis, *Wheel Estate*, p. 69-71; Edwards, *Homes for Travel and Living*, p. 216. It remains impossible to know the exact numbers of trailers on the road, or the users who lived in them year-round during the mid to late Thirties. No such records exist regarding home built units especially considering most states did not initially require registration of any sorts. These laws came into existence primarily in the Forties as noted further in this text.

had jurisdiction over trailer housing.” Almost two years later, Toledo, Ohio, enacted a similar ordinance limiting stays to “three months.” The Toledo law, however, was endorsed by the T.C.M.A. as “both reasonable and equitable.” The T.C.M.A. hoped to portray the industry in a good light. Eliminating the second-hand or homemade coaches from trailer parks served to diminish or, hopefully, eliminate the tarnished image associated with trailers. Industry officials knew these battles would have to be fought on the local level and by local residents. Moreover, ninety days proved reasonable when cities like Rochester, New York, limited stays to two days. During the later 1930s, the T.C.M.A. served the builders by making them aware of various laws and restrictive zoning ordinances.<sup>222</sup>

Among the most reported and defining cases regarding zoning restrictions, the case of *People v. Gumarsol* appeared in the summer of 1936. During that summer, Mr. Hildred Gumarsol parked his trailer on a rented lot in Orchard Lake, Michigan. “Rather than remove his trailer at the end of the season, he set it on blocks, added a porch, and left it there over the winter, expecting to return the following summer.” Nearby landowners filed the suit out of concern that “others would follow Gumarsol’s example, and that Orchard Lake might soon become a shantytown of trailers, lowering their own property values.” In turn, Gumarsol and five other trailer dwellers “were arrested for violating a town ordinance requiring that a dwelling have an area of at least 400 square feet. Gumarsol argued that his trailer was not a dwelling but an automobile accessory.” The local court disagreed.

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<sup>222</sup> Wallis, *Wheel Estate*, p. 71; Katherine Lynch, “When Is a Trailer Not a Trailer,” *Trailer Caravan*, vol. 1, no. 5, January 1937, p. 13; “Toledo, Ohio Ordinance Cited by T.C.M.A. as Model,” *Trailer Travel*, vol. 3, no. 6, June 1938, p. 15-16. As Wallis accurately noted in his text, that by agreeing to the Toledo law of ninety days, the T.C.M.A. hoped to “counter far more restrictive time limits, such as that of two days imposed by Rochester, New York.” Wallis, *wheel Estate*, n.47, p. 261.

In his decision, Justice Green ruled: "It is the opinion of this court that a house trailer of the type occupied by the defendant and having a great many appointments of a modern home would come under the scope of a human dwelling whether it stands upon blocks or the wheels attached thereto or whether it be coupled to or detached from an automobile." As such, the Justice affirmed that "trailer shantytowns will no longer be allowed at Orchard Lake." The Orchard Lake case proved typical of community objections to trailers. Many believed that trailer users did not pay a fair portion for using local services (sewers, water, and schools) and that "unrestricted placement" of trailers and trailer parks "threatened real estate values." This debate of dwelling versus travel trailer continued to dominate interests until the demands of war took precedence. The T.C.M.A. routinely informed members of legislation impacting their product and lobbied to lessen hurtful or overly restrictive ordinances. The industry would be more united on this front following the war.<sup>223</sup>

At its height in the Thirties, the trailer coach industry included over four hundred firms. Businesses like Palace Trailer Coach Company, of Flint, Michigan, and Schult Trailers, of Elkhart, were among the earliest to orient production toward the housing market. With the onset of World War II, tens-of-thousands of trailers served as "temporary," "emergency," or "stop-gap" housing. In that regard, the social needs, brought on by war, further transformed the travel trailer into a mobile home. Throughout the first half of the Forties, the trailer coach industry served the nation by providing thousands of coaches for defense workers and numerous other war-related activities. Following the war, those trailer

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<sup>223</sup> Wallis, *Wheel Estate*, p. 71-73; *Municipal Law Journal*, 4, 1936.

coaches supplied for the wartime effort continued to function as temporary housing, many at our nation's colleges and universities.

## CHAPTER 7

### THE TRAILER COACH IN WAR AND PEACE: EMERGENCY HOUSING

I am going to make an astonishing prediction: Within twenty years, more than half the population of the United States will be living in automobile trailers! Roger Babson (1935) <sup>224</sup>

While Europeans struggled with the war, American industries recorded "a record amount of industrial expansion for the arms program." Accompanying growth in defense industries, demands for war worker housing continually grew. This "reshuffling of the population" proved to be the "greatest short-term migration in American history." More than 27 million people moved. Government and industry leaders recognized early on that in order to recruit and maintain this army of defense workers, they needed great quantities of housing. Providing this housing proved the responsibility of Defense Housing Coordinator, Charles Palmer. <sup>225</sup>

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<sup>224</sup> Roger Babson was a famous statistician who, among other things, predicted the stock market crash of 1929. His prediction regarding trailers as mobile homes first appeared in the *Los Angeles Times*, and was reprinted as, "We'll Soon Be Living on Wheels," *Trailer Travel*, vol. 1, no. 1 (Jan.-Feb. 1936), p. 10.

<sup>225</sup> "Home Building in Nation Soars Under Push of Housing Program," *Newsweek*, February 17, 1941, p. 44; William E. Leuchtenberg, *Life History of the United States*, 1964, TIME Inc., New York, v. 11, 1933-45, "New Deal and Global War" The author reported that more than 27 million people moved in relation to defense work.

In the fall of 1940, Palmer began his task of providing defense housing with \$290,000,000. By February 1941, Palmer returned to Congress, requesting \$166,750,000 for housing. Of the second request, \$6.75 million dollars went for temporary shelters, including trailers. Though a small request in comparison to the whole, the importance of trailer coaches as housing became well known and acknowledged. Trailer manufacturers furnished so much housing during the war that by war's end, Palace Trailer Coach Company of Flint, Michigan, alone accounted for over \$43,000,000 worth of defense housing and temporary shelters.<sup>226</sup>

In November 1940, trailer coach manufacturers from across the nation, predominantly guided by the Trailer Coach Manufacturers Association (T.C.M.A.), sent representatives to Washington, D.C., to meet with the Council on National Defense. These representatives provided the Council with their proposals detailing the efficient use of trailer coaches as mobile, temporary defense housing. Interested in the proposals, the Council on National Defense, Housing Division asked trailer manufacturers to conduct a survey to obtain ways and means of producing additional trailers for defense housing projects. In response to the February 1941 request, the T.C.M.A. appointed a National Defense Committee to coordinate with the Council and to undertake the survey. Through this committee, manufacturers made their argument for additional contracts, and, as a result, output more than doubled in 1941, with a majority of trailers sold to defense workers. Recognizing the efficiency of mobile housing, the Government encouraged the trailer industry to apply for a priority rating, which

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<sup>226</sup> "Home Building In Nation Soars Under Push of Housing Program," *Newsweek*, February 17, 1941, p. 44; Kendall K. Hoyt, "From Washington. . ." *Architectural Record*, March 1941 (v. 89), p. 16; Details on Palace Coach as found in William B. Stout, *So Away I Went* (New York, The Bobbs-Merrill Co., Inc., 1951), p. 292.

it received in November 1941. Though given a preferential rating, trailer coach manufacturers, like so many others, wangled to get precious war materials.<sup>227</sup>

In response, the T.C.M.A. appointed a War Activities Committee to negotiate for materials. In May 1942, T. Spencer Shore, Chief of the Bureau of Industry Advisory Committee, appointed members of the T.C.M.A. War Activities Committee to the "House Trailer Industry Advisory Committee of the War Production Board." This committee coordinated with the Government to produce suitable housing with the limited materials available. Though not content with material restrictions, manufacturers supplied the best product they could with the materials available. Some people referred to these units as "the cardboard trailers." The use of "homasote" on the exterior, a mixture of wood pulp and ground newspaper, led to this image. According to the T.C.M.A. publication, "Mobile War Housing," wartime coaches contained one hundred fifty-three board-feet of lumber and ninety-three pounds of "critical metals." Recognizing these material shortcomings and the below-standard units that resulted, federal officials, nevertheless, acknowledged the immediacy of housing needs. For many, the federal government included, the notion of establishing trailer parks and living in trailer coaches revealed relatively new, but definite, misgivings. The housing shortage which existed, however, grew only more desperate as the

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<sup>227</sup> For details on the availability and wangling of wartime materials, see George McJimsey, *Harry Hopkins. Ally of the Poor and Defender of Democracy*, Cambridge, Harvard University Press, 1987, especially chapter 15, "No Front Stairs in Washington," p. 223-39; Frederic C. Lane, *Ships for Victory: A History of Shipbuilding Under the U.S. Maritime Commission in World War II*, Baltimore, The Johns Hopkins Press, 1951, especially chapter 10, "The Battle for Steel," p. 311-52; and Donald R. Whitnah, ed., *Government Agencies*, Westport, Ct., Greenwood Press, 1983, especially R. Elberton Smith, "War Production Board," and "Industrial Mobilization for War." 1941.



United States continued its defense build-up and millions of Americans migrated to and from defense plant areas.<sup>228</sup>

For instance, early in 1941, a gunpowder plant was being constructed near Charleston, Indiana. While six hundred construction workers lived in trailers they personally owned, another eleven-hundred workers slept in their automobiles, waiting for other trailers to arrive. Similarly, the town of Orange, Texas, witnessed its population of 7,400 increase seven-fold due to wartime activity at the local shipyard facility. In addition to three hundred sites for trailers, four hundred forty Government-owned trailers moved into the area quickly. The use of trailers for emergency housing quickly proved beneficial.<sup>229</sup>

Initial involvement of trailer builders came with the "inception of the Lend-Lease Program" when the "industry was called upon to furnish housing equipment to accommodate" defense workers. Beginning with an order in 1940 for 1,500 trailers to house construction workers, in March 1941, the Farm Security Administration<sup>230</sup> ordered another 2,035 trailer

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<sup>228</sup> Carlton Edwards, *Homes for Travel and Living: The History and Development of the Recreation Vehicle and the Mobile Home Industries*, p. 111-13; Homasote and cardboard trailer as noted in Thornburg, *Galloping Bungalows*, p. 150; T.C.M.A., 1942, "Mobile War Housing," p. 3-5; Alexander G. Ruthven, President, University of Michigan, as quoted in the *Michigan Daily*, January 19, 1946. Ruthven noted the U. of M. policy to adopt temporary housing measures was necessary yet, "greatly regretted." Bentley Historical Library, University of Michigan Archives, War Historian, Box 15, Records 1941-45. Also see, letter from Reverend LeRoy S. Burroughs to daughter, Marguerite, dated "Holy Monday, April 15, 1946," LeRoy S. Burroughs papers, Personal correspondence, MS-223, Iowa State University Archives.

<sup>229</sup> "Defense Trailers," *Business Week*, February 15, 1941, p. 32; "Government Interest in Mobile Housing," *Trailer Life*, February 1952, p. 4; Taylor W. Meloan, *The Development of the Trailer Coach Industry*, unpublished dissertation, Indiana University, 1953, p. 24-7.

<sup>230</sup> The Farm Security Administration (F.S.A.), because of its experience housing migrant workers and responsibility over other government housing projects, was initially in charge of providing the necessary housing units for prewar defense-related construction workers. During the war, the National Housing Authority (N.H.A.) subsumed those duties from the F.S.A. In 1944, the War Production Board took over from the N.H.A. all jurisdiction over the trailer industry. Further details on the N.H.A. are found in this chapter. See, General Services Administration, The National Archives, *Federal Records of World War II*, Vol. 1, p. 1016-17; "Homes on Wheels," *Business Week*, December 7, 1940, p. 46-8; "Trailers Trailing," *Business Week*, January 16, 1943,

coaches. By July 1941, the government “had called upon the trailer industry to produce in excess of 4,935 trailers.” The industry scrambled to meet the emergency need, operating its plants at full capacity. While the National Trailer Corporation of Elwood, Indiana, had an almost new, enlarged facility, in mid-1940 the Indian Trailer Corporation, of Chicago, opened a “supplementary plant” to increase its output. A proven source of “stop-gap housing,” trailer industry production continually rose in relation to increases in defense-related production. Although it produced only 9,728 coaches in 1940, the industry recorded a production figure of 20,427 in 1941 and an estimated 50,000 in 1942. Not only had the trailer coach industry performed its patriotic duty meeting an urgent national need; it accomplished the feat of increased production with fewer and fewer manufacturers. In March 1942, the T.C.M.A. “compiled a list of 103 manufacturers in twenty states.” This list pointed out that “the leading states and number of manufacturers were: California 26; Michigan 18; Indiana 14; and Illinois 12.” By January 1943, *Business Week* estimated that only one-third of that number remained in business. While some firms could not find enough workers, many could not obtain materials or compete in the war time market.<sup>231</sup>

Industry officials received bad news in September 1942, when the War Production Board announced Limitation Order number L-205. Specifically, L-205 “cut down production by any one manufacturer to 150 units monthly and limited distribution to the N.H.A. (National Housing Agency).” Although builders were limited to 150 units, fewer than ten

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p. 69-70; Jim Crane, “Trailer Production Gets the Greenlight,” *Automobile and Trailer Travel*, January 1944, p. 8.

<sup>231</sup> Edwards, *Homes for Travel and Living*, p. 109; “Homes on Wheels,” *Business Week*, December 7, 1940, p. 47; “Stop-Gap Housing,” *Business Week*, March 22, 1941, p. 32; “War Production Board Limits Trailer Building,” *Automobile and Trailer Travel*, 7:11, November 1942, p. 5; “Trailers Trailing,” *Business Week*, January 16, 1943, p. 69-70.

manufacturers had the capacity to produce that many units each month. Despite total curtailment of trailers manufactured for civilian use, production of government units continued to grow. By war's end, "the largest single owner of trailers in the United States ...[was] Uncle Sam." The greatest quantity of defense trailers were produced by a handful of manufacturers including National Trailer Corporation, of Elwood, Indiana; the Indian Trailer Corporation, of Chicago; Elcar Trailer Corporation, of Elkhart, Indiana; Vagabond Coach Manufacturing Company, of Brighton, Michigan; and the Main Line Trailer Company, of Los Angeles. Two of the largest manufacturers, the Palace Trailer Coach Company, of Flint, Michigan and Schult Trailers Incorporated, of Elkhart, Indiana, in addition to producing housing, further proved their wartime value by adapting their factories to produce other defense-related items.<sup>232</sup>

Aside from standard house trailers being used by the N.H.A., Schult also produced special trailers for other Federal agencies, including the K-35 model for the U.S. Army Signal Corps, multipurpose utility trailers, mobile laboratories for the Department of Agriculture, mobile command quarters, clinic, dental, and hospital trailers which included mobile x-ray labs as well as Red Cross canteens, office trailers, and mobile recruiting stations. The Signal Corps had a second type of trailer equipped with electrical equipment and "pigeon coops for carrier birds." Schult's wartime involvement did not stop there, however. In addition to converting Army transport buses and Ford sedans into "masonite walled wartime ambulances," Schult also built sixty-foot-long wooden trailers used to transport Gliders to

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<sup>232</sup> "Homes on Wheels," *Business Week*, December 7, 1940, p. 47; "Stop-Gap Housing," *Business Week*, March 22, 1941, p. 32; "War Production Board Limits Trailer Building," *Automobile and Trailer Travel*, 7:11, November 1942, p. 5; "Trailers Trailing," *Business Week*, January 16, 1943, p. 69-70; Guy Reynolds, "Among Our Unsung Heroes," *Automobile and Trailer Travel*, June 1943, p. 7; Mary G. Seiders, "Utopian Villages," *Trailer Topics*, 9:9, September 1945.

Wright Field in Ohio. Another of Schult's contributions proved valuable to the future of its manufacturing as well as the nation – the development of sectional housing.

Schult used "trailer type construction" to produce thousands of 8' x 24' sections which, when assembled in groups of two, three, or four sections, produced a housing unit ready to use. These sections, "shipped from Elkhart, [Indiana] on flatbed trailers to the T.V.A. and the Army Engineers at Oak Ridge," Tennessee, provided not only a new type of housing but also served as a model for future developments in "sectional housing." Wartime production brought on other industry developments as well.<sup>233</sup>

Designed by Corwin Willson in 1937, the first two-story telescoping trailer was manufactured by the Liberty Trailer Company, of Syracuse, Indiana, in 1942. First displayed at the 1942 National Trailer Show in Chicago, the Liberty model cranked up and "closed down like a bon-bon box." The two-story model, however, did not catch on like the standard trailer unit which expanded sideways -- the Palace Expansible. Originally designed and built by aircraft designer William Bushnell Stout in 1936, the expandable trailer enlarged into a 19' x 22' ready-to-use housing unit. More importantly, the "expansible trailer" held other design advantages.<sup>234</sup>

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<sup>233</sup> "Homes on Wheels," *Business Week*, December 7, 1940, p. 47; "The Schult Family, Our First Forty Years," corporate publication, 1974, p. 8-9. In regard to sectional housing, note that the first sectional units used by the T.V.A. were units it designed and constructed. Thus, the origination of the sectional home is claimed by both Schult and the T.V.A.. Still others, like lumberyards and wood producers, also claim they originated the sectional unit. Regardless of its origin, the point remains that Schult manufactured a large number of the sectional housing units used during the war, including all of the units used at Oak Ridge, Tennessee. Moreover, as of today, the firm continues to manufacture modular housing, including single, double, and triple-wide units. Publication in author's personal collection.

<sup>234</sup> "Motor Trailers are Homes on Wheels," *Popular Science*, Vol. 138, No. 4, April 1941, p. 130-31; "Liberty, The Solution to the Housing Problem," 1942, authors personal collection; "Uncle Sam Comes First at National Trailer Show," *Automobile and Trailer Travel*, April 1942, p. 24; William Bushnell Stout, *So Away I Went*, pp. 283-299, "We Study Housing;" Additional notes on Stout as discussed with Ford R. Bryan, Henry Ford Museum & Greenfield Village archives volunteer, June 17, 1992.

Licensed to Palace Coach and Trailer Company, of Flint, Michigan, for wartime production, Stout's expansible trailer had sides which unfolded to become an extension of the floor. As the floor lowered into place, a counteraction raised the ceiling and outer wall. The side walls then folded out, and the whole unit was then secured to its foundation. This model transformed the standard trailer into a unit almost three times its original size. Palace, in cooperation with the War Production Board, Housing Committee, redesigned the expansible trailer into several different models. These modified units included single-family dwelling units, duplexes, laundry units, and a "central utility unit complete with showers and laboratories." In addition to such diverse applications, the Palace Expansible trailer routinely served as the administrative office at "practically all Government trailer camps."<sup>235</sup>

Representatives of the T.C.M.A. continued to reassure Americans that trailer coaches offered a viable alternative to meet the housing needs of wartime migrants. Still, a variety of articles objected to the temporary solution. One article specifically warned that "the Sloppy Sams and the Dirty Gerties and their undisciplined brats" proved the main reason that trailer parks had "such an unsavory reputation." Again, the T.C.M.A. worked to diminish the stigma associated with trailers and parks. The article recommended the elimination of "filth, squalor and disorder." In a similar vein, responding to a letter published in the *Cleveland Press*, Raymond Priest, a public-relations representative, reassured trailer dealer and park operator Gerald Brookins that at least he was "doing something to relieve the condition" of housing

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<sup>235</sup> Stout, *So Away I Went*, p. 293; "Two Rooms and Kitchen Fold Up Into Trailer," *Popular Mechanics*, Vol. 77, No. 3, March 1942, p. 44. See also National Housing Agency, F.P.H.A. publication, "Standards for War Trailer Projects: Bulletin No. 4," Appendix, "Trailer Floor Plans," dated December 18, 1942. Iowa State University, William Robert Parks and Ellen Sorge Parks Library, Special Collections, University Archives, Married Student Housing papers, hereafter cited as M.S.H.

shortages. Apparently an Ohio priest, Father Tom Gunning, had inspired the published letter. In the editorial, Gunning stated that trailer parks were "slums." He especially objected to the trailer park adjacent to a local church. The T.C.M.A. representative responded by pointing out that trailer parks eliminated "ghost towns." The mobile dwelling could be moved and reused at critical locations as needed. Priest advised Brookins that indeed, "the day may come when there is no longer any need for housing or your park. The vacant property then could become a church lawn because you will have it beautifully landscaped." Answering the Father's charge that trailer park children lacked guidance and a normal upbringing, Priest suggested that Brookins "counteract" the accusation. Turning the Father's argument around, Priest advised Brookins to "suggest that it is the province of the church to guide the lives of growing children. Say that even if the church doesn't you will see that there are recreational facilities; that you will have a day nursery for the small tots. These are badly needed where both parents are working. Also, mention that the government trailer park will have a community house and day care for children." To emphasize its argument, the T.C.M.A. representative suggested that Brookins "ask the good father what he is doing to help relieve the severe housing shortage in Cleveland? The situation is serious. People are without homes. You are doing something to relieve the condition. Tell him so." Similar objections appeared in newspapers across the nation, where housing shortages existed and trailers moved in to meet the need. Public relations representatives hired by the T.C.M.A. offered similar responses to these objections.<sup>236</sup>

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<sup>236</sup> John M. Tibbetts, "The G.I. Trailerite," *Automobile and Trailer Travel*, September 1944, p. 13; Letter dated July 2, 1943, from Raymond Priest of Theodore R. Sills & Company, Public Relations, Chicago, to Gerald Brookins, Trailer Mart, 15614 Lorain Ave., Cleveland, Ohio. Letter attached to *Mobile War Housing*, T.C.M.A. publication, as found in Lost Highways, T.C.M.A. file.

In the summer of 1942, the T.C.M.A. launched “a nationwide campaign of education designed to strip the ‘gypsy’ tatters from that mobile step-child of housing - the trailer coach.” The association hoped to portray the “true character” of the coach as “an economical, healthful, thrifty and flexible home.” The highlights of the plan included a public-relations campaign on the “trailers’ contribution to the war efforts.” One angle of that campaign, examples of “trailer Shock Troops,” highlighted the efforts to “solve 24-hour problems for military, naval, aviation and ordnance plants.” Numerous examples of trailer coaches meeting an immediate, desperate need for housing appeared in newspapers and magazines across the nation, as shown earlier with the Charleston, Indiana, and Orange, Texas, examples.<sup>237</sup>

Defense-related trailer parks dotted the American landscape as the United States continued its wartime build-up and production. Local newspapers and national periodicals from the period document the establishment of hundreds of defense trailer parks throughout the nation. Some of the larger parks, located near critical defense areas, included Mobile, Alabama; Portsmouth and Norfolk, Virginia; Baltimore; San Diego; Tacoma and Bremerton, Washington; Akron, Ohio; Ypsilanti, Michigan (Willow Run); and Erie, Pennsylvania. For many, the Palace Expansible served as an administrative office while the housing units consisted of a variety of models. Though content with the position filled by the trailer coach, the government focused its discontent on the diversity of trailer coach models and all the various maintenance and basic understanding that such a diversity of models encompassed. This apprehension, coupled with continuing material shortages, encouraged the War

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<sup>237</sup> Karl Dixon, “Spreading the Truth About Trailers,” *Automobile and Trailer Travel*, August 1942, p. 7.

Production Board to seek a compromise with the trailer coach manufacturers -- they sought a standardized model.

Manufacturers worked within the limitations of wartime material availability by eliminating the "refinements" of their trailer coaches. Items such as "chrome moldings, rub-rails and bumpers and the rubber splash aprons" as well as "newer plastic items, substitutes for metal" were all eliminated. Too, as manufacturers sought to accommodate the Government, the variety of colors came to be dominated by "Army olive green and khaki and Navy battleship grey and blue." The War Production Board, however, restricted manufacturers even further, limiting trailer sales to defense workers only. By October 1942, Limitation Order L-205 restricted sales to the federal government only. The private sales of travel trailers ceased, and the defense related mobile home market swelled. The government not only wanted more trailers, it wanted one standard design. Against this background, the War Production Board, in cooperation with trailer builders, transformed the variety of travel trailers into "a uniformly designed unit."<sup>238</sup>

On May 25, 1942, T. Spencer Shore, Chief of the Bureau of Industry Advisory Committees, announced the formation of, and appointments to, the War Production Board, House Trailer Industry Advisory Committee. These Committee members represented manufacturers from across the nation. The Committee worked to meet the need for a standardized, simplified housing unit. The committee trailer prototype was built at the Vagabond Coach Company facility, in Brighton, Michigan, and tested at the General Motors Proving Grounds, at Milford, Michigan. In April 1943, the House Trailer Industry Advisory

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<sup>238</sup> "Uncle Sam Comes First at National Trailer Show," *Automobile and Trailer Travel*, April 1942, p. 24; Edwards, *Homes for Travel and Living*, p. 109, p. 111.



Committee presented the Department of Defense with its standardized model. Dubbed the "Committee Trailer," the standard model used a minimum quantity of iron, copper, and lumber. The plan reduced electrical wiring by 75%, eliminated canvas duck as a roof covering, and substituted a wood chassis for steel. In turn, the trailer had few electrical outlets and minimal plumbing. Additionally, the trailer had no permanent running gear, as the trailer coach industry received only four thousand tires for every fifty thousand units produced. Most trailers sat on saw-horses or bricks after being moved to the government trailer park. The minimal use of canvas, copper, and steel allowed the government to direct those items where they were most needed for the war effort. Still, housing proved imperative, and the use of restricted items was necessary. Another feature, fairly new to trailers in general, was the Committee requirement that coaches have two doors. This lack of a second "emergency exit" had proven a sore spot with construction workers and others. Some had even refused to live in them for that reason. With a few minor modifications, the N.H.A., through the F.P.H.A. accepted the Committee trailer.<sup>239</sup>

Though around one hundred builders supplied coaches in early 1942, by the beginning of 1943, the trailer coach industry had declined by two-thirds to approximately thirty-five builders. Lack of materials, limited industrial capacity, set demands, and the shortage of able-bodied workers contributed to this decline. The industry quickly rebounded in the postwar

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<sup>239</sup> For specifics on changes to the trailer coach, see "Trailers for Wartime," *Automobile and Trailer Travel*, 5:7, July 1941, "4000 Tires for 50,000 Units," *Architectural Record*, April 1942, p. 24; "No More Trailers," *Business Week*, July 17, 1943, p. 19. Also see, "Standards for War Trailer Projects," Bulletin No. 4, Sheet TPS-1.1 (revised July 10, 1943), N.H.A., F.P.H.A. publication, M.S.H., Box 30. The Committee Trailer was the result of negotiations between the T.C.M.A. and the War Production Board, House Trailer Advisory Committee. Edwards, *Homes for Travel and Living*, p. 109-111, 129; Meloan, *The Development of the Trailer Coach Industry*, p. 27. Also see the authors, *Pammel Court and Veterans Housing: An Administrative and Technological History of the Development of Post World War II Veterans Housing at Iowa State University*, 1994, manuscript copy, ISU Library, Special Collections, University Archives, p. 11ff.

years with an estimated one hundred fifty manufacturers by 1947. In California alone, “fifty new factories” started in those first two years. Still, during the war years, trailer coach manufacturers continually worked to accomplish the onerous task of providing adequate temporary housing to tens of thousands of American men, women, and children.<sup>240</sup>

In January 1944, Limitation Order L-205 officially expired when the N.H.A. relinquished its authority to the War Production Board. By that time, most “emergency” needs had subsided. The War Production Board estimated that manufacturers would be authorized to produce “from 18,000 to 20,000 trailers” during 1944. Industry advertisements noted “the long-awaited news that a man with a war job” could once again “buy a trailer from his dealer.” No longer did war workers have to “obtain individual permission direct from the N.H.A.” Instead, “anyone who changed residence because of the requirements of a position recognized as important to the war effort” could purchase a trailer directly from a dealer. Anticipating postwar sales, by mid-1944, manufacturers increased their advertising to emphasize larger sizes, new styles and refinements, and the possibilities of trailer coach “living.” Additionally, builders wanted the general public to know they had supported and survived the war effort. Few advertisements boasted travel or recreational purposes.<sup>241</sup>

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<sup>240</sup> Meloan, *The Development of the Trailer Coach Industry*, p. 29; Edwards, *Homes for Travel and Living*, p. 106; “Trailers Trailing,” *Business Week*, January 16, 1943, p. 69; Lloyd Wendt, “Home on the Road,” *Holiday*, Vol. 2, No. 12, December 1947, p. 118.

<sup>241</sup> Crane, “Trailer Production Gets the Greenlight,” *Automobile and Trailer Travel*, January 1944, p. 8. Advertisements include “Now the Shoreland for 1944,” Chicago Streamlite Corporation, *Trailer Topics*, July 1944, p. 11; Platt Trailer Co., Inc., Elkhart, Indiana, *Trailer Topics*, August 1944, p. 23; “Luxury Home on Wheels,” Glider Trailer Co., Chicago, *Automobile and Trailer Travel*, November 1944, p. 18; and the numerous advertisements for the Palace Corporation, Flint, Michigan, including “How Palace Engineering Promotes Sales For Palace Dealers,” *Ibid.*, June 1944; “Palace Postwar Production Facilities,” *Ibid.*, July 1944; “Palace is Preparing for a BIG, NEW Postwar Market,” *Ibid.*, August 1944; “Science and the Postwar Palace,” *Ibid.*, October 1944.

During the war, recreational camping all but ceased. Restrictions on trailer sales, gasoline, tires, and travel, however, proved only minor causes as to why people did not camp. The onslaught of war focused Americans' attention toward freedom, democracy, and production, not leisure travel and camping. Families either parked the recreational vehicle, rented it out, or moved it near a defense location and lived in it temporarily. The needs of war brought on other changes involving the trailer industry as well.

In the late 1930s, the United States was beginning to recover from the Great Depression when it was called upon to ready itself for war. The various war-related programs mobilized a great quantity of American labor, capital, and natural resources. But even as the nation geared up for war, some began to plan for postwar readjustment -- demobilization. Insuring that war veterans received an adequate benefit program had a high priority. Guarding against the nation slipping back into a deep depression also garnered attention. Demobilization of millions of soldiers required the readjustment of an economy fully mobilized for defense to an economy operating for civilian needs. These plans required an orderly, calculated demobilization of soldiers, war workers, and related sectors of the economy. Some plans involved delaying workers entering the employment market. The Servicemen's Readjustment Act of 1944, also known as the G.I. Bill of Rights, proved one way of retarding high unemployment and deferring the pending need for jobs as well as providing veterans with other benefits. Not only would colleges provide a better skilled workforce; they would also provide a two-to-four-year window of opportunity in which industries could expand before hiring educated veterans.<sup>242</sup>

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<sup>242</sup> Formally known as the Servicemen's Readjustment Act of 1944 (Public Law 346, Chapter 268, Seventy-Eighth Congress, 2nd Session), the "G.I. Bill of Rights" was signed into law June 22, 1944.

Under the Servicemen's Readjustment Act, veterans received many benefits. In accordance with Title II, Chapter IV, qualified veterans were "entitled to education or training, or a refresher or retraining course, at an approved educational or training institution." Similar benefits applied to disabled veterans utilizing Public Law 16, the Vocational Rehabilitation Act. Though not immediately considered, the facilities available for use by returning veterans at most educational institutions proved inadequate. Educational administrators from a range of institutions as well as representatives from the National Education Administration solicited Congressional committees, arguing they would not be able to meet the needs of veterans unless educational institutions received assistance in the form of classrooms, supplies, and housing. Accordingly, Congress amended the October 14, 1940, "Act To Expedite The Provision Of Housing In Connection With The National Defense, And For Other Purposes," more commonly known as the Lanham Act, authorizing the Federal Works Administrator to provide surplus housing and facilities to educational institutions furnishing courses or training to persons under the Servicemen's Readjustment Act. Colleges and universities received approximately one-third of all the temporary housing used during the war.<sup>243</sup>

Just as a high demand for war-worker housing existed during the war, housing veterans following the war proved as demanding. With the end of the war, colleges experienced dramatically increased enrollment, with over two million veterans utilizing their educational benefits. One of the largest problems facing universities and like institutions

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<sup>243</sup> *Ibid.*, Title II, Chapter IV, Part VIII, No. 2; For a complete report on these hearings see, U.S. Congress, House, Committee on Public Buildings and Grounds, Hearing No. 3, Seventy-Ninth Congress, 2nd Session, Senate Bill 2085 (Washington D.C., U.S. G.P.O., July 24, 1946); Keith Olson, *The G.I. Bill, the Veterans and the Colleges* (Lexington, University Press of Kentucky, 1974), p. 66-7.

proved to be housing space for returning veterans who were married. In some areas, a full fifty percent of returning veterans were married students. Colleges had to deal with this new population dynamic which, in several ways, changed the nature of higher education itself.<sup>244</sup>

The impact of higher enrollment on colleges and universities due to the G.I. Bill proved only one factor that administrators confronted. Many veterans returned to school married, with children, which demonstrated that university housing for married students barely existed and in many cases, not at all. Moreover, most university physical plants proved inadequate to handle the growth associated with returning veterans.<sup>245</sup>

To deal with the pending impact on educational institutions, Congress amended the Lanham Act of 1940 to extend the defense war housing program to colleges and universities. One of the earliest Lanham Act amendments, passed July 3, 1945, not only authorized institutions to rent existing defense or war housing, but also provided means for them to construct additional temporary housing, or, if they were willing to pay moving costs, colleges could obtain surplus buildings at no cost. Another amendment, passed six months later, carried the program further. Congress appropriated \$253,727,000 in addition to the original \$191,900,000 to reimburse and pay for the transfer and conversion costs incurred by colleges and universities. By August 1946, the Federal Public Housing Authority (F.P.H.A.) reported "that it had allocated to the nation's colleges 101,462 accommodations." Colleges transferred another 38,160 buildings under authority of another amendment passed in December 1945.

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<sup>244</sup> J.C. Schilleter, *The First 100 Years of Residential Housing at Iowa State University, 1868-1968* (Ames, Iowa State University Press, 1970), p. 110.

<sup>245</sup> For a good analysis and details on legislation, procedures, support for and against increased veterans appropriations, and appropriations for educational facilities in general, see Olson, *The G.I. Bill, the Veterans and the Colleges*, pp. 66-78.

Over 13,000 trailer coaches once again served as emergency housing. The amendment passed on August 8, 1946, extended the program to its fullest extent, authorizing institutions to obtain, transfer, and set up facilities to be used as either housing for faculty members or classroom and laboratory facilities. The Servicemen's Readjustment Act and the Lanham Act, as amended, went hand in hand as demobilization and readjustment legislation. The first provided, among other things, the means for veterans to obtain a college education while the second gave educational institutions the means to educate, administer, and house a majority of the 2,232,000 veterans who attended school under the G.I. Bill. <sup>246</sup>

Many colleges and universities did not have the benefits of being located near major defense plants or military bases, which, as a part of reconversion, simply transferred the use of housing and related facilities to local educational institutions. For instance, the University of Michigan utilized thousands of units left over from the Willow Run Bomber plant eleven miles away. Similarly, the University of New Mexico utilized nearby Kirtland Field. On the other hand, colleges in the heartland, like Iowa State University, required their units to be transported in and set up. Colleges instituted a program of expansion, in addition to planned growth, to confront the strain on the institutions physical plants. This expansion included housing units, and temporary classroom and laboratory facilities, as well as increases in staff and faculty. Moreover, many local communities found it necessary to expand their electrical

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<sup>246</sup> U.S. Statutes at Large, v. 59, part 1, Seventy-Ninth Congress, 1st Session, 1945, Chapter 264, July 3, 1945, p. 383; *Ibid.*, Chapter 657, December 31, 1945, p. 674; Olson, *The G.I. Bill, the Veterans and the Colleges*, p. 66; *Ibid.*, p. 43; See also Omar Bradley speech to Association of American Colleges, Boston, January 14, 1947, where Bradley accounts for the enrollment "as of December 31, 1946 [of] more than two-and-a-quarter million veterans [in] education and training facilities." Bentley Historical Library, University of Michigan Archives, U. of M. Dean of Student Affairs (Bursley), Veterans Administration 1946-49, "Address by General Omar Bradley, January 14, 1947." For details on veteran's benefits, see Public Affairs Press, "Going Back To Civilian Life: Official Information About the Privileges, Opportunities, and Rights of Returning Soldiers" (Washington D.C., G.P.O., 1944).

generating plants, water and sewage facilities, garbage collection, and bus routes. Expansion of American institutions involved numerous federal, state, local, and university agencies.

The National Housing Agency (N.H.A.), established by an Executive order of February 24, 1942, included three sub-units: the Federal Housing Administration, the Federal Home Loan Bank Administration, and the Federal Public Housing Authority (F.P.H.A.). Each of these units oversaw and administered various war-related activities. The F.P.H.A., however, held responsibility for all "functions relating to public housing" and for the administration of the Defense Homes Corporation which had "furnished housing for war workers." By 1945, the development function of the agency declined while the management and disposal functions increased. Ten regional offices coordinated the disposition of surplus for the N.H.A.<sup>247</sup>

Following confirmation of the individual colleges' needs and verification of an F.P.H.A. Project Management Plan, the F.P.H.A. worked to secure housing for the colleges. Meanwhile, colleges prepared to accept and place the units. For most, this implied the establishment of a trailer park for the trailer coaches moved first and fastest to the new area of need. After the sites were graded, water and sewage lines went in, and electrical connections soon followed. Other college additions included roads, sidewalks, central bathing and laundry facilities, and even daycare facilities. Colleges that moved to meet their housing needs early on found they had to contract for not only transportation of the trailers, but for the entire

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<sup>247</sup> General Services Administration, The National Archives, *Federal Records of World War II*, Vol. 1, p. 1016-17.

disassembly, transportation, placement, and assembly procedures. Students moved into their trailer homes as early as January 1946.<sup>248</sup>

The first housing units sold to colleges generally relocated from within the regional area. For instance, the first one hundred fifty trailers received by Iowa State University arrived from three separate defense locations within F.P.H.A. Region III, Chicago office jurisdiction. From a wartime ammunition depot in Hastings, Nebraska; the Army-Air Corp Base located at Alliance, Nebraska; and the Badger Ordnance Plant near Prairie du Sac, Wisconsin, Iowa State received its first housing units. Incidentally, the cheapest expense in college housing proved the one dollar paid to the Government for each housing unit.<sup>249</sup>

Many institutions, under pressure to secure more housing for their veteran students, filed additional applications with the F.P.H.A. Fulfilling its own mission, the F.P.H.A. readily approved qualified applications as it continued its demobilization management and disposal functions. Following the initial disposal of trailer coaches, the F.P.H.A. offered colleges other housing such as Quonset Huts, demountable houses, and barracks-type buildings. The

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<sup>248</sup> For F.P.H.A. powers, duties, and functions, see *Federal Records of World War II*, Vol. 1, p. 1008, 1016-17; For figures on F.P.H.A. dwelling units "produced," see F.P.H.A. article dated January 1946, "Public War Housing: The Job of Re-Use and Disposal," M.S.H., Box 30; H. Summerfield Day, *The Iowa State University Campus and Its Buildings, 1859-1979*, p. 373.

<sup>249</sup> J.C. Schilleter, *The First 100 Years*, p. 163-4, H. Summerfield Day, *The Iowa State University Campus and Its Buildings, 1859-1979*, p. 373; F.P.H.A. publication, "Surplus Housing for Veterans: How The Federal Government is Re-Using Surplus Housing to Meet this Emergency Need," January 1946, M.S.H., Box 30; *Minutes*, December 10, 1945; Preliminary plan details as found in correspondence, "Veteran Housing Project," dated November 29, 1945, and memo, Ben Schaefer to J. Schilleter dated December 21, 1945, M.S.H., Box 30; For Pammel Court plans and specifications see the various "Project Management Plan(s) [F.P.H.A.-1481b]" for each of the college projects, M.S.H., Box 30; Letter dated November 29, 1945, Iowa State College Veteran's Housing Project, M.S.H., Box 30.



F.P.H.A. also sold trailer coaches and other surplus buildings to local communities and to individuals through sealed bids. Many others were scrapped as “unsuitable for resale.”<sup>250</sup>

Despite many delays, college officials continued their search for surplus facilities. A different, more immediate alternative open to educational institutions existed with the establishment of trailer parks. Institutions remained hesitant, however, to the idea of establishing trailer parks, especially on college property. Many people disdained the notion of placing small, temporary housing units near their own homes. Often, trailer parks lacked paved roads or sidewalks, leading to haphazard parking and muddy lots. Moreover, as trailer dwellers came to add porches or additions onto their trailers, local residents feared the trailers were becoming permanent fixtures. Indeed, the stigma associated with trailer park living was alive and well. For the veterans who lived in these trailers, however, they came to be called home. Most veterans were thankful to have a private residence for their family. For others, the “academic slums with its overcrowding, inadequate housing ...[and] vestigial trailers,” came to be viewed as something far less than desirable. For colleges, though, the need outweighed any other considerations, and the Summer of 1946 proved one of the most physically and administratively engrossing times in institutional history as institutions acted to deal with their housing crisis. Where institutions could not meet the need, private individuals set up trailer parks for privately owned coaches. Thousands of new “trailer parks” appeared in the postwar years. College and university towns grew familiar with the earliest of the postwar trailer parks.<sup>251</sup>

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<sup>250</sup> Meloan, *The Development of the Trailer Coach Industry*, p. 31.

<sup>251</sup> Reverend Le Roy S. Burroughs, letter to daughter Marguerite, dated “Holy Monday, April 15, 1946,” as found in the Papers of Le Roy S. Burroughs, Personal Correspondence, MS-223, ISU Archives, Parks Library, Iowa State University, Ames, Iowa.

Part of the larger federal plan, benefits awarded under the G.I. Bill necessitated that educational institutions honor commitments to veterans by making whatever arrangements proved necessary. For many colleges, this translated into establishing married student housing as well as an unavoidable expansion of their physical plants. Additionally, increased enrollment demanded an increase in staff, faculty, classrooms and laboratory facilities. This demobilization and readjustment of American resources, though broadly based, brought together many of the nation's educational institutions and the Federal government, not to mention the various state and local authorities. With over two million veterans utilizing educational benefits, the character of American educational institutions was remade. First to meet the demand for emergency housing before and during the war, trailer coaches also served as the first housing units used by returning veteran students. In general, the trailer coaches also proved to be the first units removed as soon as alternate housing became available. This disposal pleased trailer coach manufacturers and the T.C.M.A., who worried that wartime products tarnished the image of trailer coaches as a quality-built, viable alternative to conventional housing. Moreover, not using the wartime shelters, manufacturers believed, would encourage postwar sales.

Throughout the war, trailer builders reassured the public that they would return to normal production as soon as possible. Until then, firms like Palace surveyed defense workers, mainly women, to learn what modifications and advancements should be made to future models. Palace appealed to consumers, even though it had no product to sell, by advertising futuristic models. These ads portrayed trailers which resembled streamlined airplanes and railroad locomotives. Palace touted its "scientific" and "engineering" elements as great advances. Palace advertisements, like many others in the industry, instructed

potential customers to compare options on the company's various models and determine which one had the most to offer.<sup>252</sup>

Following the war, the trailer industry scrambled to meet demand. The fact that thousands of returning veterans lived in trailers on college campuses again demonstrated that the trailer coach had been accepted as a viable, even if only temporary, housing alternative. That trailers continued to serve as housing for thousands of Americans demonstrated public acceptance of the trailer as a new form of housing.<sup>253</sup>

Sales records maintained by the T.C.M.A. revealed that postwar sales skyrocketed. For instance, in 1937 the industry recorded \$17,000,000 in sales. By 1945, that number had increased to \$39,000,000. Still, the immediate postwar years witnessed record sales. Beginning with \$114,000,000 worth of sales in 1946, \$146,000,000 in 1947 (60,000 units), and \$204,000,000 in 1948 (85,500 units), the industry experienced a lull in 1949 with sales reaching only \$122,000,000. Problems with financing trailers as "homes" led to the decline in 1949. Banks proved reluctant to give such a substantial loan on a mobile asset. Sales for the next three years, however, grew rapidly with recorded sales of 216, 248, and 320 million dollars, respectively. Despite higher prices in these years, mainly due to demand for increased size and comforts, these sales figures demonstrate that the trailer coach was an acceptable housing solution. According to the 1950 Census of Housing, 290,000 trailer coaches served as housing. Records indicate that the majority of trailer coaches sold in the

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<sup>252</sup> "Post-War Dream Trailers." [a running series]. *Automobile and Trailer Travel*, 9:11, November 1944; "Tomorrow's Paradise," *Ibid.*, "The Woman's Viewpoint," *Ibid.*, 8:10, October 1943; "Planning for the Post-War Period," *Ibid.*, 7:7, July 1942.

<sup>253</sup> David Harmon, *Pammel Court and Veterans Housing*, p. 1ff; Formally known as the Servicemen's Readjustment Act of 1944, (Public Law 346, 78th Congress, Chapter 268, 2nd Session).

Forties and early Fifties served as housing. Changes in trailer coach design reflected these changing social needs and cultural desires. Many people wanted to settle down rather than travel about. Even terminology reflected the new position held by the trailer coach as postwar Americans viewed the trailer coach as a “house trailer” or “mobile home.” On the other hand, the recreational vehicle resumed its role more slowly as Americans readjusted to their postwar world. Still, this period witnessed distinct advances in recreational camping technology as changing needs and desires of American campers influenced and inspired changes in recreational vehicle technology and the broader industry.<sup>254</sup>

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<sup>254</sup> T.C.M.A. Table of Retail Sales, Meloan, *The Development of the Trailer Coach Industry*, p. 34; Bureau of the Census, *1950 Census of Housing: Preliminary Reports* (Washington D.C., G.P.O., 1951), p. 9; Edwards, *Homes for Travel and Living*, p. 113.

## CHAPTER 8

### SOCIAL AWARENESS, CULTURAL COMEDY, AND INDUSTRIAL REALITY: THE LONG, LONG TRAILER REVISITED

“Just breezin’ along with the breeze, trailing a trail, oh the sea.... We’re just going along as we please, breezing along with the breeze.”

As social needs and cultural desires changed, so did camp vehicle accommodations. Technological changes encouraged by these needs and desires further defined the recreational vehicle industry. So much so, that by 1949, the business had expanded into a network of industries producing travel trailers, mobile homes, and sectional or manufactured housing, as well as a variety of other recreational vehicles like truck campers. In hindsight, then, as American desires for better accommodations developed, trailer coach technology served not only as a social solution to camping accommodations but also as a temporary solution to housing shortages in the prewar years. The postwar years saw trailer coach technology in a different light. Whereas the 1930s trailer served as a technological solution to housing shortages, by the late-Forties, that same technology had become a social question. People questioned the end use of trailers as housing rather than their traditional purpose as a temporary camping accommodation. Still, many towns and citizens accepted the trailer as a form of housing, even if begrudgingly. The industry response to the question of purpose appeared to settle the debate. By the early Fifties the industry split into two defined

manufacturing elements -- those manufacturing trailer coaches for housing needs, and those building coaches and an assortment of other products for recreational camping and traveling.

By the late Forties, the social needs and cultural desires of trailer coach consumers had transformed the trailer coach from a technology for travel purposes into a manufactured form of housing. To meet the changing needs caused by this transformation, coach builders surveyed users, identified trends, and altered their product to fit the desired intent. Schult Trailers, for instance, focused its design and developments toward the housing market. In addition to its emphasis on "livability," Schult expanded production of its sectional housing units, leading the industry into another area of manufacturing. Additionally, Schult routinely provided dealers with plans for a model trailer park.

Similarly, Palace resumed production, offering the expansible trailer to dealers in Quebec and Winnipeg and "scientifically engineered" travel trailers in the United States. Unfortunately, the Palace plant burned, and the company shut down in the late Forties. Though some firms closed, more opened. For instance, with the war coming to a close, in the Summer of 1945, the Spartan Aircraft Company, of Tulsa, Oklahoma, set its engineers to work on a "house trailer" design. The aircraft engineers at Spartan Aircraft not only planned on using similar materials; they also believed the trailer "should be light and strong" like an airplane. The "all-aluminum" trailer plans moved from the drawing board to the production stage in 1946 as "Spartan Aircraft Trailercoaches" rolled off the line at J. Paul Getty's Tulsa facility. The coach had "a stressed skin monocoque type aluminum shell, unpainted on the outside and paneled in plywood on the inside." The skins were cambered for strength. Moreover, Spartan continued the practice of placing a door on each side of the trailer, a practice started during the war when workers refused to live in them for fear of fires. By

1949, Spartan offered five models, ranging from sixteen to thirty-three feet long. While the Spartanette and Spartan Manor had single axles, the Manor Tandem, Spartan Mansion, and Royal Mansion had two. Longer trailers, especially house trailers, needed dual-axes to support the increased length and weight of the coach. By 1953, Spartan offered an even longer and heavier coach. The Imperial Spartanette measured forty feet long and weighed “7830 pounds and up,” depending on furnishings and equipment. (see Appendix, Figure 12) In addition to interior height, overall length, and extra equipment, other changes occurred in response to the needs and desires of users.<sup>255</sup>

By 1950, many manufacturers oriented production toward the housing market, replacing wood and leather coverings with more permanent coverings like steel and aluminum. The installation of picture windows, screened doors, forced air heat, larger appliances, blinds instead of curtains, better insulation, and flush-type toilets not only demonstrated the housing emphasis; it also reflected the desires of the American public. These desires for “homes” appeared throughout American society. In the same way that Levittown offered homeowners identical designs and amenities, house trailers also contained mass-produced features of a home. Levitt’s houses offered a living room with a built-in television and a large picture window, a tiled bath, a compact kitchen with nice appliances, and two bedrooms. Numerous trailer manufacturers offered these same elements in their trailers. A November 1951 advertisement, for instance, showed a two-story home with a columned porch as well as a picture of a forty-one-foot-long house trailer. The firm advertised its model, the Colonial, with two words, “comparable comfort.” Clearly the

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<sup>255</sup> “1949 Spartan Aircraft Traileroaches,” company brochure, as found at <http://www.vintage-vacations.com>, “Spartan Homes Today, 1953,” company brochure, Lost Highways, Spartan file.

comparison to Levittown and home ownership was apparent. While trailer builders could not include the fireplace like Levitt, house trailers offered up to 500 square feet of living space as compared to Levitt's 800 square feet. In that light, the trailer coach industry offered an appealing, cheaper, alternative approach to the "American dream" of owning one's home.<sup>256</sup>

Many of these points appeared in the editorial columns of popular trailer magazines. The November 1944 *Automobile and Trailer Travel* included one editorial that pronounced "Women Should Design Interiors." In a running series titled "Post-War Dream Trailers," the editor of *Automobile and Trailer Travel* continually published suggestions from readers, mainly women. Similar sentiment appeared in the October 1943 article "The Woman's Viewpoint." In that article, author Elsa M. Reed surveyed over one hundred women "from various trailer parks in the vicinity of Los Angeles," asking them all seven questions. The survey showed some of these women had lived in their coaches since 1934. Moreover, these women offered their suggestions for improved "trailer living." Postwar manufacturers modified their designs in response to these requests. Most trailers remained eight feet wide, but trailer length continued to grow. Many units averaged between twenty-six and thirty-five feet long. Some models measured forty feet. A major industry innovation occurred in 1954, when Elmer Frey introduced the ten-foot-wide mobile home. Initially, Frey had to transport his trailer via railway due to highway restrictions. Lobbying efforts by coach builders and the T.C.M.A., however, proved successful, with most states granting permits for the movement of "over-width units" and a lessening of length restrictions.<sup>257</sup>

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<sup>256</sup> Marcus, *Technology in America*, p. 253-4; Colonial advertisement, *Trailer Dealer*, November 1951, p. 17.

<sup>257</sup> Elsa M. Reed, "The Woman's Viewpoint," *Automobile and Trailer Travel*, October 1943, p. 7-8; "Post-War Dream Trailers," *Automobile and Trailer Travel*, November 1944, and others; Edwards, *Homes for Travel and*



Other manufacturers responded similarly, offering many new models of "mobile homes." At least twelve manufacturers offered ten-wide models by March 1956. Many of these early mobile homes measured ten feet wide and forty-five feet long. By 1960, few house trailers over twenty-five feet long were eight feet wide. The ten-wide model, widely accepted among users, illustrated that the emphasis on livability and year-around use shaped these design and manufacturing changes. It has been estimated that by 1954, 90% of industry production of "trailers or mobile homes [were] used primarily for year around living" while only 5% focused on recreational use.<sup>258</sup>

Individuals who purchased "ten-wides" used them as housing. The manufacturer or dealer obtained the required permits, moved the trailer, and set it up for the customer on a temporary or permanent foundation. The eight-foot wide trailers remained smaller, generally under twenty-five feet long. The smaller trailers continued as the dominant form used by travelers or campers. Diversification of the industry came as the result of the needs and desires of Americans for an alternative to traditional housing. By the early Fifties, at least two distinct user groups existed -- recreational and residential. In turn, the industry transformed to meet the changing needs of consumers. While some specialized in house trailer or mobile home manufacturing, others oriented production toward the recreational user.

As more Americans returned to recreational travel and leisure camping in the Fifties, numerous new manufacturers and suppliers of camp equipment and recreational vehicles appeared. Some firms reopened their old shops, most sitting idle since the onset of World

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*Living*, p. 46-7, 114.

<sup>258</sup> *Ibid.*, p. 73, 114.

War II. These manufacturers offered updated or redesigned camping-related goods. Other firms, like Spartan Aircraft, entered into the industry by extending their expertise and facilities to make the change. Manufacturers who entered the market in the immediate postwar years produced mainly house trailers. Those who started in the mid- and later-Fifties focused on recreational users. Recreational vehicles and leisure camping bounced back in the mid-Fifties as people made time for camping, road networks improved and expanded, and Americans again focused on leisure.

Although recreational camping rebounded in the Fifties, not all recreational vehicles did. The manufacturers of tent-trailers, so popular in the Teens and Twenties, attempted to make a comeback by the early Fifties. Still, the once popular tent-trailer again lost out to the trailer coach. E.P. Gilkison & Sons, of Terre Haute, Indiana, producer of the Gilkie tent-trailer, and one of the original tent-trailer firms from the Twenties, shut down in 1952, ending a thirty-year operation. The demise of the Gilkie signaled a similar demise for the tent-trailer, at least until it rebounded again in the Seventies.<sup>259</sup>

Recreational vehicle manufacturing took on a new look following World War II. Not only did some of the older builders return to manufacturing; new ideas in camping vehicles spawned new industrial interests. In 1944, for instance, Walt King went hunting in the Northwest, towing a trailer behind his pickup truck. Getting stuck in a snowstorm, King had to abandon his trailer and fill the pickup with rocks to gain traction. After the incident, it occurred to King that if he mounted the trailer body on the truck he would accomplish the same goal of traction and actually improve maneuverability. Within months, King had

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<sup>259</sup> Katie McMullen, "Calling All Gilkies," *Better Camping*, June 1968, p. 36.

designed and mounted his new camp vehicle on the pickup truck. Enjoying his new accommodations, in the summer of 1945, King went camping in Montana. While stopped by the side of a road, a sheepherder galloped up to King and said, "I'll take five of them." King responded, "Five of what?" Reportedly the sheepherder pulled out \$500 and gave it to King as a deposit, and the pickup camper industry was born. Walt King established the Sport King Company, in Nampa, Idaho, as the first builder of pickup campers.

The pickup camper designed by King fit in the bed of the truck. The type that extended over the cab of the truck emerged in the late-Fifties. The pickup camper proved the easiest recreational vehicle to build. Lacking wheels and running gear, the Sport King model appeared as an aluminum-covered box with windows and a door. Later models had rounded corners and extra headroom. Despite its small size, a point that appealed to many, the unit contained most of the camping basics – stove, ice box, and seating and sleeping accommodations. Many buyers also included the chemical toilet in their initial purchase.

Another enthusiast, Don Hall, built the prototype of his Alaskan Camper in 1953. Alaskan Camper officially entered the industry by opening its facility in Southern California in 1957. Truck campers gained a following slowly during the Fifties, but as new truck designs emerged, so did camper designs. By the mid-Sixties, the typical over the cab design proved the prominent model. With the camper extending over-the-cab of the truck, the additional area offered more sleeping accommodations, usually a double-size bed. Additionally, some designers extended the camper body beyond the bumper of the truck, offering even more space and design options. For instance, some truck campers had the door on the side, not centered in the rear. The side-door design usually included a larger bathroom in the opposite rear corner. What began as a seven-foot-long box quickly developed into an

array of models ranging from smaller models that fit in the bed of the truck to fully self-contained models extending four to five feet over the cab and two or more feet over the bumper. Some models, including the early Alaskan camper, telescoped or cranked up to offer full headroom inside. By the late Sixties, many truck campers measured twelve feet long. Sales increased steadily throughout the Sixties from 15,800 units in 1961 to 92,500 units in 1969. By 1971, its peak year, truck-camper production exceeded 107,000 units and constituted 24% of all RV production. A direct descendant of the pickup camper, the pickup or truck “cap” also emerged in the Forties. The typical cap enclosed the bed of the truck and offered protection to whatever goods the user deposited in it – camping goods or otherwise.<sup>260</sup>

While the pickup camper offered a small, mobile shelter, other camping enthusiasts focused on scaling down the trailer coach. Starting in late 1945, the Kit Company introduced its teardrop-shaped KIT Kamper. (see Appendix, Figure 13) The firm had produced around 3,500 units by early 1947. The KIT Kamper was one of several teardrop-shaped vehicles built in the Forties. While KIT Company led the way, other producers of teardrops included Ben-Roy, Ken-Skill Kustom Kamper, Slumber Coach, Cabin Car, and Cree. The popular Scotty Sportsman appeared later. The small, streamlined KIT trailer offered an ice-box and cooking stove, storage areas, and a sleeping area. The outside kitchen area, protected by the rear door which swung up to open, included a nine-gallon running water system. Sleeping accommodations inside the KIT Kamper proved tight. After one crawled in through the half-size door, one had just enough room to lie horizontally. The unit sold for \$425, a small price

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<sup>260</sup> Michael A. Rockland, *Homes on Wheels* (New Brunswick, Rutgers University Press, 1980), p. 69; “Four Decades of RV Progress,” *Trailer Life*, July 1981, 40<sup>th</sup> Anniversary edition, p. 87; Edwards, *Homes for Travel and Living*, p. 26-7, 37.

for a small camper. Teardrop trailers averaged between seven and ten feet long and about four feet high inside. Later designers had good intentions, attempting to offer standing room inside the trailer, but the resulting design reflected little of its original teardrop shape, not to mention the benefits of its aerodynamic appearance. Though KIT Company only produced 3,500 of its teardrop models, the firm expanded its line, manufacturing longer trailers to meet that growing market demand. The firm continues as a prominent manufacturer and supplier.

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The growing demand for trailer coaches led numerous new firms into the industry. Many of these new manufacturers shared only one thing in common: their interest in supplying trailers to an expanding market. Like builders of the Thirties, those entering the industry after the war brought diverse experiences and backgrounds to their firms. While some aimed their products at the increasing housing market, others entered the industry building smaller to mid-size trailers aimed at recreational users or “weekenders.” Firms like Airstream, shut down during the war, waited until the end of the war, when materials and manpower again became available, before they resumed production. Airstream officially incorporated in 1947. Similarly, smaller firms with limited production capacity and shut down by the war resumed trailer coach production, many in new or expanded facilities. Most of the industry growth resulted from newly established firms.

Holiday Rambler, for instance, beginning in 1953, started out quite well. After moving into larger quarters in 1956, however, the firm struggled to compete against a bulging

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<sup>261</sup> “Teardrops, Let’s Get Small,” *Lost Highways Quarterly*, volume 1, number 2, Winter 1995, p. 8-10; “Kit, First in ‘46,” advertisement, *Lost Highways*, Teardrops file, 1947. Noteworthy is the fact that the KIT Manufacturing Company of Long Beach, California, continues in operation today with plants in California and Idaho.

marketplace. Founder and President Richard Klingler, noted those years as ones of competition with new manufacturers who sold “underpriced products that hurt the sales” of his models. Klingler developed a new model to compete with the cheaper units. The 1957 Holiday Rambler trailer coach measured only sixteen feet long, yet the unit was fully self-contained. It proved popular among vacationers and secured the firm’s position in that market. Holiday Rambler also proved to be among the earliest to contribute to the development and popularity of the fifth-wheel trailer in the early Seventies. The firm survives today.<sup>262</sup>

By the early-Fifties the industry had split into two defined manufacturing elements -- those manufacturing trailer coaches for housing needs, and those building coaches and an assortment of other products for recreational camping and traveling. By 1953, the Trailer Coach Manufacturers Association similarly understood the changes that had occurred in trailer coach technology and its applications. To better serve its industrial constituents, in October 1953, the Trailer Coach Manufacturers Association officially split into two separate organizations. Taking on its new name, the Mobile Homes Manufacturers Association represented the larger housing aspect of the industry while the Recreational Vehicle Institute eventually served manufacturers of recreational vehicles.<sup>263</sup>

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<sup>262</sup> Sue O’Hara, “Meet the Pioneers,” *Trailer Life*, July 1981, Fortieth Anniversary edition, p. 82. Fifth-wheel details in author’s personal collection.

<sup>263</sup> The split in the industry occurred sometime in October 1953. Beginning with the November issues of industry-related periodicals, all references to the T.C.M.A. had been replaced by the M.H.M.A. It is worth noting that in none of these journals is there any discussion or advance notice of this change, not even in the *Minutes* of Association meetings. With this change, manufacturers who focused only on travel trailers were essentially left without any associations or industry representation by associations.

By 1950, several organizations and their official publications had appeared to represent various elements of the trailer coach industry. For instance, the Trailer Dealer's National Association (T.D.N.A.), formed in 1940, used *Trailer Dealer* to voice its concerns and issues to manufacturers and dealers. The T.C.M.A. worked closely with the T.D.N.A. in regards to promotion and zoning issues, and these concerns regularly appeared in the periodical. The Trailer Coach Association (T.C.A.) of Los Angeles used *Trailer Life* to promote west coast interests and recreational travel. By the Fifties, distinct differences in these three groups had appeared. The T.C.M.A. primarily represented Eastern and Midwestern manufacturer's interests, focusing mainly on house trailers as compared to smaller travel trailers. As noted, the newly formed T.D.N.A. represented trailer dealers and trailer park operators (many being one in the same). Still, by 1950, Western manufacturers built the majority of travel trailers, and the T.C.A. offered these builders equal representation in its publication. Publications like *Mobile Living*, started around August 1951, focused issues toward those people who lived in trailers year around.

Throughout the late-Forties and early-Fifties, numerous articles appeared, relating the trailer coach to its use as housing. Some articles highlighted industry involvement such as manufacturers' efforts in setting up the Atomic Energy Commission related trailer parks at Paducah, Kentucky. Other features recounted the experiences of "house hunting." Statistics demonstrate that the majority of buyers purchased trailers for use as housing. Seventy percent of the 63,000 coaches built in 1951 were over thirty feet in length, and dealers reported that most were sold for use as housing, not traveling.<sup>264</sup>

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<sup>264</sup> O.E. Adams, "Progress in Paducah," *Trailer Dealer*, July 1951, p. 118; Dorothy Horton, "We Went House Hunting," *Mobile Living*, December 1955, p. 11; "Trailer Homes Reach Peak Sales; May Total \$234,000,000 For

This emphasis on housing appeared throughout manufacturer's advertisements as well as feature articles. With the stress on the idea of housing rather than traveling, builders of smaller trailers found their advertisements dwarfed by the numerous full-page accounts of the latest advances in house trailers or mobile homes. Equally noteworthy is the appearance of the new identity given to the trailer coach. Rather than calling their products trailer coach, or even house trailer, companies coined the term mobile home, which came into widespread use by the early Fifties. Noting customer desires and this emphasis on housing, the *Trailer Dealer* article "The Trailer Market is Shifting" specifically pointed out that "people want homes" and the "mobile home" offered them that solution. Beginning with the January 1953 issue, *Trailer Dealer* changed its heading to read "A Magazine Published Exclusively for the Mobile Home Industry" rather than "for the Trailercoach Industry." This subtle change appeared to underscore the growing emphasis on housing and the mobile home.<sup>265</sup>

Another obscure change within the industry took place in October 1953, when the Trailer Coach Manufacturers Association officially changed its name to the Mobile Homes Manufacturers Association (M.H.M.A.). The first hint of the change appeared in the October 1953 advertisement for the upcoming "17<sup>th</sup> Annual National Mobile Homes Show" sponsored by the M.H.M.A. Moreover, advertisements for trailers built by Association members still bore the flying wing emblem with the T.C.M.A. initials in the seal. The only exception is that the advertisement on the rear cover had the emblem with the M.H.M.A. initials. With the November issue, however, all traces of the T.C.M.A. had been replaced with the new logo and

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<sup>265</sup> "51," *Trailer Dealer*, September 1951, p. 26.

<sup>265</sup> "The Trailer Market is Shifting," *Trailer Dealer*, June 1951, p. 58; "Table of Contents," *Trailer Dealer*, January 1953. *Trailer Dealer* changed its name to *Mobile Home Dealer* in July 1959.



title. Not only did advertisements depict the new title; feature articles also shifted to using the new name. Noteworthy, no articles or editorials announced this change in the Association. Not even in the regularly published accounts of the T.C.M.A. Board of Directors *Minutes* did publishers note the change or any discussion of it. This vague change in the industry, however, symbolized the larger changes in the social needs and desires of trailer coach owners. With its change in name, the Association also changed its emphasis. Mobile home-related advertisements and articles in *Trailer Dealer* completely replaced any features related to travel trailers or touring. With this shift in emphasis to housing and mobile home parks, the Association also shifted to no longer representing manufacturers of travel trailers or the interests of seasonal trailer park owners.<sup>266</sup>

By October 1953, industry officials had recognized the distinct differences between travel trailers and house trailers as well as those who used them. The last article of the October edition served to remind manufacturers and dealers that trailers for traveling still offered dealers a growing market. Nevertheless the article appeared as the last feature in the issue and, in essence, served as a farewell to travel trailer enthusiasts and builders. Despite the article's plea, "Don't Forget The Traveling Trailerist," with the change in name and shift in emphasis, the M.H.M.A. no longer represented the builders of travel trailers or other recreational vehicles, like truck campers. Instead, for several years the T.C.A. and its organ, *Trailer Life*, spoke for travel-oriented coach builders and users. By 1975 when the T.C.A. merged into the M.H.M.A., the Recreational Vehicle Industry Association had emerged to

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<sup>266</sup> "17<sup>th</sup> Annual National Mobile Home Show," *Trailer Dealer*, October 1953, p. 102-103; "MHMA Prepares for the Show," *Trailer Dealer*, November 1953, p.46.

represent the broader, much neglected recreational vehicle market. This 1953 split in the industry and shift in emphasis reflected changes in the larger American society.<sup>267</sup>

What originally started as an automobile accessory for the affluent had, within thirty years, developed into a network of industries producing travel trailers, mobile homes, and sectional or manufactured housing, as well as other recreational vehicles like truck campers, fifth-wheel trailers, and motor homes. Having defined the intents and purposes of the trailer coach, by 1953, the American public also understood its potential and limitations. In short, the American public recognized the differences between the travel trailer and the mobile home. In that regard, the public also recognized the unconventional use of a mobile home as a travel trailer in the 1954 comedy, *The Long, Long Trailer*.

In 1954, Metro Goldwyn Mayer (M.G.M.) released the comedy movie *The Long, Long Trailer*, based on the novel by Clinton Twiss. In this film, a newlywed couple, played by Lucille Ball and Desi Arnaz, purchase a New Moon trailer coach to fulfill their need for affordable housing. Though the husband's job is in another state, the couple purchased their trailer with the intention of towing it themselves from California to their new home in Colorado. It is in this objective where the humor of the film rested and the dichotomy of the technology was revealed. In short, the humor of this film rested upon the numerous haphazard events that occurred when the newlyweds set out to transport their *mobile home* in the manner reserved for the *travel trailer*. Director Vincente Minnelli aptly used the twenty-eight feet of home sweet home to produce one of M.G.M.'s classic comedic films. In fact, *The Long, Long Trailer* was the studio's top-grossing comedy up to that time.

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<sup>267</sup> Evelyn B. Findley, "Don't Forget The Traveling Trailerist," *Trailer Dealer*, October 1953, p. 225.

The film opened with a newlywed couple debating the issue of buying a trailer coach. The wife plead her case of “making a home for her husband.” The film brought out the husband’s profession in construction with the mention of a tunnel in Colorado and past projects in Montana, Idaho, and Alaska. Arguing that they always live out of a suitcase, moving about, the wife’s arguments win the skeptical husband over, and the search for the perfect trailer home ensued. Determined to spend no more than \$1800, the couple set out to the local trailer show to look at an advertised model. At the show, they found the trailer “appeared much bigger in the ad” as six people squeezed in, rubbing bodies and tripping over each other in an attempt to view the small model. Discouraged, the couple started to leave, when suddenly, “they saw *it*,” the shiny yellow-striped New Moon trailer coach. Wanting to just look inside it, the wife opened the door, sounding the doorbell as she entered. The husband entered the coach, hitting his head on the door frame. Pointing out features like glass in the oven door, a full-size refrigerator, a linen closet and a shower, Lucille Ball’s character cheerfully smiled her approval that it was “a lovely little house.” Meanwhile, the husband tripped on the step leading from the sunken living room to the kitchen. (see Appendix, Figure 14)

The next scene showed the couple using their \$1750 as a 1/3 down payment on the \$5345 New Moon. Posing the question, “Ever haul a house trailer before?” the dealer recommended that the inexperienced couple hire a professional driver to move it to Colorado. By the time they finished, the couple had purchased a new house trailer, “a heavier car” to haul it, a hitch, and various gear the dealer believed they might need, “just in case.” As the husband noted in the film, he now had a \$7646 mortgage.

Laced into the film, a variety of examples portrayed typical trailer living in the 1940s and 1950s. For instance, the trailer park operator asked if they are “trailerites,” a term common after the war. Beginning their honeymoon travels, the couple find the going slow as around ten cars honk their horns, unable to pass on an uphill turn. As the cars eventually pass “the forty foot train,” the occupants heckled the honeymooners. After the couple arrived at their first park on their honeymoon night, the neighbors invaded the coach to welcome them. The neighbors, “Mrs Vagabond” and “the Kozy Koach man” wore the name of their “rig” as an identification. While the film portrayed dealers as helpful and informative, trailer coach dwellers, “trailerites,” appeared as friendly, yet “busy bodies” always inquiring into one’s personal business. Additionally, the film aptly portrayed a loudspeaker in the park with an announcement for one of the mothers to fetch her unruly children and another guest to call his mother. Finding the park too noisy, the couple set out to avoid the parks and camp as they pleased. Their inexperience leads into the main comedy of the film, the many mishaps the couple suffer as they travel with their “house trailer.”

Much of the humor of *The Long, Long Trailer* centered around the mishaps the couple encountered in traveling with their house trailer. Deciding that a logging road “looked like a nice place to stop for the night,” the couple soon find the trailer bogged down in mud during a rainstorm. Besides being stuck in the mud, the trailer slanted at a steep enough angle that everything inside kept sliding across the floor and table. While the angle of the coach initially held the door stuck in place, when the jack failed and the trailer tipped further, Lucille Ball flew out the door headlong into a mud puddle. When parking a coach, it proved necessary to level it out in order to prevent the door from jarring.

The next trailer lesson portrayed in the film involved Desi backing the trailer into a driveway. After reading through an instruction manual, the adventure started. Immediately, about fifteen people shouted advice on how to turn and within minutes the rig was jack-knifed in the yard and the prize rose bush proved the casualty. The next scene depicted a straightened-out coach and car backing in the driveway only to smash into the porch overhang, ripping off much of the structure.

Out on the road again, the couple sings the song "Just Breezin' Along" to denote their freedom of movement, the joy of nature, and the comfort of sleeping under the stars, "or in a bed, in the trailer." Scenes of American wonders like Yosemite National Park and the Colorado Rockies offered a background in support of the film and the couple's honeymoon travels. The film also depicted another notion popular to trailerites, collecting rocks from the various places one visited. When trailerites finally settled at a park, the rocks often decorated the site. In the movie, however, the wife collected numerous, large rocks, adding more weight to the three-ton load the car had to pull. She also collected fruits and vegetables along the way, canning peaches and such and storing them in the traveling pantry. Worried about the climb up an eight-thousand-foot mountain, the husband ordered the wife to get rid of the rocks. Grudgingly she agreed, but instead, she hid the rocks throughout the trailer. The large rocks found temporary hiding places under the sofa, in the shower, in the closets, and in the pantry. She even hid one rock in the oven. Eventually, the weight of the rocks and canned goods threatened to ruin the couple's trek through the mountains. The ups and downs of the mountains shifted the rocks, letting them roll freely around the trailer. As the car pulled the trailer up the mountains and around steep curves, rocks rolled about the inside of the coach. Outside the coach, the film depicted the long trailer almost slipping off the road while rocks

rolled out from under the wheels and down the steep, unprotected mountainside.

Encountering another vehicle descending the mountain, the driver pulled over and stared in awe. As the trailer gently coasted by the car, the side of the trailer scraped it. Though a national road network was in place by the 1950s, steep, narrow grades up and down the mountains continue to challenge drivers and tow-vehicles even today. The larger lesson portrayed, however, showed that excessive weight hampered and, in some cases, threatened to ruin the trip.

Another lesson of trailer living portrayed in the movie showed Lucy attempting to make dinner while Desi traveled down the road. The jolting of bumps and the side sway of the coach left the coach in a shambles, flour strewn everywhere, salad tossed on the floor, and the pantry emptied into the hallway, not to mention a battered and bruised wife. Still, Desi had a chance to sing while Lucy's screams went unheard. The film pointed out that riding in a moving trailer "was against the law in every state." An intercom between the units would have helped too. In many cases, the film served to teach its audience the do's and don'ts of using a trailer coach, especially the lesson of using a mobile home as a travel trailer.<sup>268</sup>

By the time *The Long, Long Trailer* appeared in 1954, the different social needs and cultural desires of trailer coach users had fully effected change in the production and marketing techniques of the industry. Whereas the earliest tourists camped in auto-conversions, tents, or camp-trailers, the needs and desires for better camp accommodations ultimately encouraged the development of the solid-body trailer coach. This technology quickly came into widespread use among tourists, supplanting the auto-conversion camp

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<sup>268</sup> *The Long, Long Trailer*. Metro Goldwyn Mayer. Culver City, California, 1954. Reissued in 1990 by M.G.M./U.A. (United Artists).

vehicle and the camp-trailer alike. As trailer coach production increased throughout the 1930s, manufacturers soon recognized the diversity of the people using coaches as well as the different manner in which the coach was employed. In turn, manufacturers diversified to meet the changing market needs.

Firms like Bowlus-Teller and Airstream, who manufactured aerodynamic, aluminum-skinned travel trailers, did not advertise their product as anything other than coaches for traveling or touring purposes. With Schult Trailers advertising models such as the Homestead and the Country Club, it followed that Schult was also among the first to provide dealers with plans on how to build and operate a "trailer park." Schult Trailers held true to its motto that "any place is home in a Schult trailer."

Wally Byam of Airstream, taken aback at the idea of someone actually "living" in a trailer coach, specifically attacked those manufacturers who targeted the extended-stay users. Wally Byam argued a lost cause, however, for by the mid-Thirties trailer coach users had evolved into two distinct user groups – travel trailers and house trailers. Manufacturers of travel coaches emphasized exterior looks and interior usability. Coach builders targeting the extended-stay market emphasized the completeness of their models and the latest in design layout with an emphasis on "livability." In that light, the couple's choice in *The Long, Long Trailer* of the 5000-pound New Moon house trailer to act as a travel trailer proved quite humorous. By 1954, distinctions had been made, by users and manufacturers, as to the purposes of a trailer coach. Manufacturers designed the streamlined, lighter, smaller coach for travel while the heavier, boxy, wider coach with the sunken living room and picture window was not. The use of the New Moon house trailer as a travel trailer proved quite funny in light of the fact that both society and the industry had, by the early Fifties, defined the

differences between travel trailers and manufactured house trailers or, mobile homes. The fact that M.G.M. chose the New Moon house trailer for its comedy illustrated that differences existed. The fact that the film proved so humorous and popular further exemplified the point that society had recognized these differences.

The social needs and cultural desires of American campers encouraged numerous changes within camping-related industries and their products. These changes not only reflected the changing needs and desires of individuals who enjoyed camping; they also reflected changes in the notion of camping itself. Where late-nineteenth-century campers often carried a minimal amount of equipment, the bare essentials, as more people came to enjoy automobile touring and camping, their needs and desires for better camping equipment inspired entrepreneurs to develop new products. Moreover, as campers ventured farther from home, they found themselves carrying more supplies. While running boards carried a generous amount of equipment, a trailer towed behind the car offered a more convenient way to access the car and camp gear. Once the tent and gear were placed in the trailer for hauling, in no time an entrepreneur had the ingenious idea of attaching the tent to the trailer and permanently installing the equipment. Similarly, campers who chose to convert their automobiles into camp vehicles did so because they desired a better solution to camping problems such as sleeping on the ground or in a tent and the monotony of packing and unpacking equipment. Thus, automobile conversions offered campers designated places for camp equipment and personal items.

The next stage in camp-vehicle development preserved the tow vehicle while maintaining the solid walls and roof of the auto-conversion. The solid-body trailer coach appeared as the solution to the problem of camping with a canvas shelter. Campers no longer



worried if the tent would leak in the next rain storm or if the wind would blow out the fire on the camp stove. Moreover, with all equipment transported in the trailer, designers built many of these items into the design of the coach, eliminating numerous pieces of gear. As the market for trailer coaches grew, manufacturers responded, offering a variety of styles and prices.

By the mid-Thirties, trailer coaches no longer served just campers. Instead, builders sought out new markets for their products, supplying mobile salesrooms to a variety of American retailers. Builders also found a market for their products in Americans who chose to live in their coaches. With the advent of war, the trailer coach industry found itself providing the U.S. government with thousands of coaches for use as temporary or emergency housing. This use of trailers as housing further concentrated that notion in the minds of Americans. Following the war, Americans purchased thousands of trailers to use as housing. Trailers served as a way for people to fulfill their desire of the "American dream," to own a home. This emphasis toward housing shaped and, in fact, dominated the industry into the Fifties. Still, entrepreneurs continued to advance new ideas and technologies related to automobile camping. The changing needs and desires of Americans who used trailer coaches directly effected change in the industry itself. By 1953 these changes had led the industry to split into two distinct manufacturing interests. While some firms focused their products towards the housing market, other manufacturers advanced new ideas in camping technologies by offering travel trailers, fifth-wheel trailers, truck campers, and motor homes. By the late Fifties, the popular pastime of camping had started to rebound. Into the Sixties, manufacturers of recreational vehicles experienced dramatic growth as numerous Americans

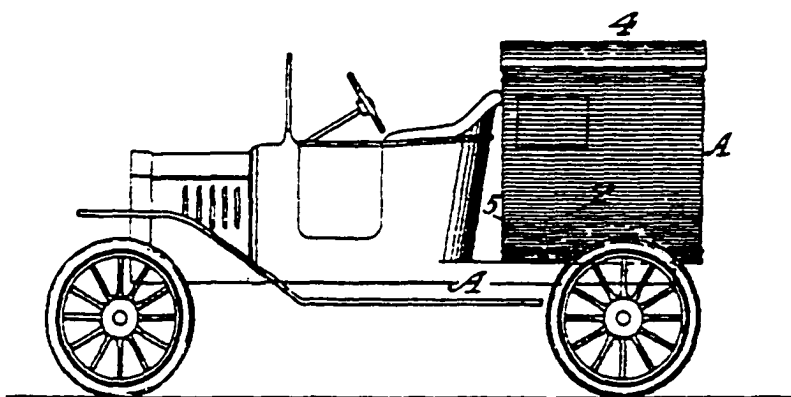
once again came to enjoy the American landscape and the culture of camping.

G. R. STEIN.  
VEHICLE CAMPING ATTACHMENT.  
APPLICATION FILED SEPT. 15, 1915.

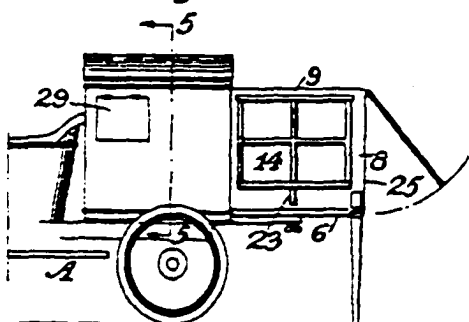
Patented Aug. 29, 1916.  
2 SHEETS—SHEET 1.

1,196,309.

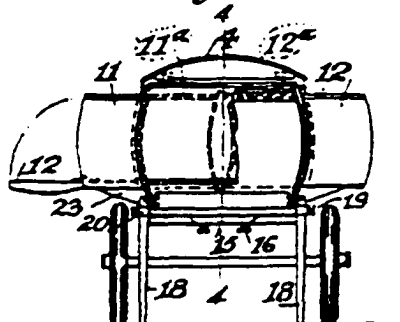
*Fig. 1.*



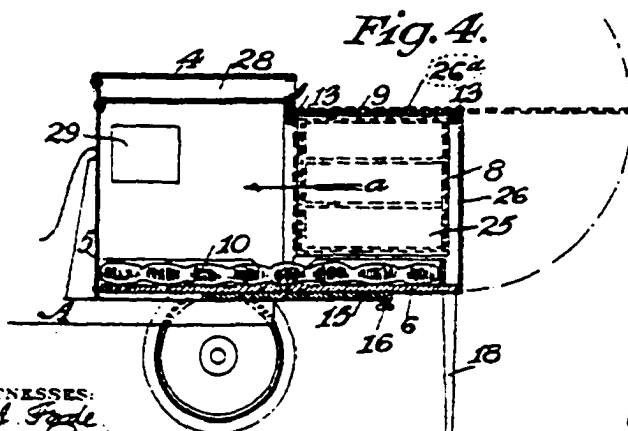
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:  
*L. J. Fode*  
*Wm. E. Penfield*

INVENTOR  
*George R. Stein*  
BY *Strong & Townsend*  
ATTORNEYS

Figure 4. Telescope Apartment.



Figure 5, Telescope Apartment.

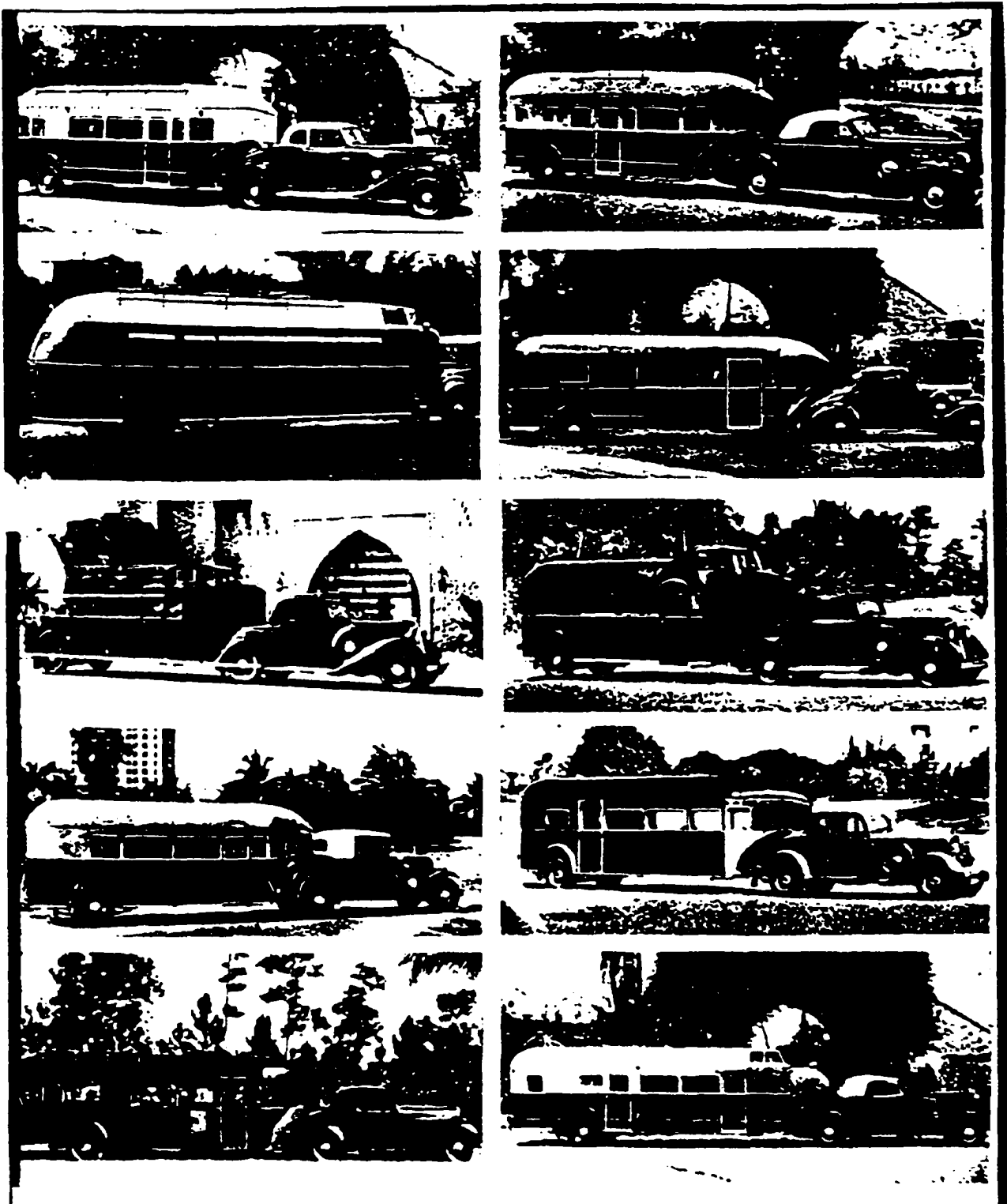


Figure 6. Curtiss Aerocar, several custom-made models.

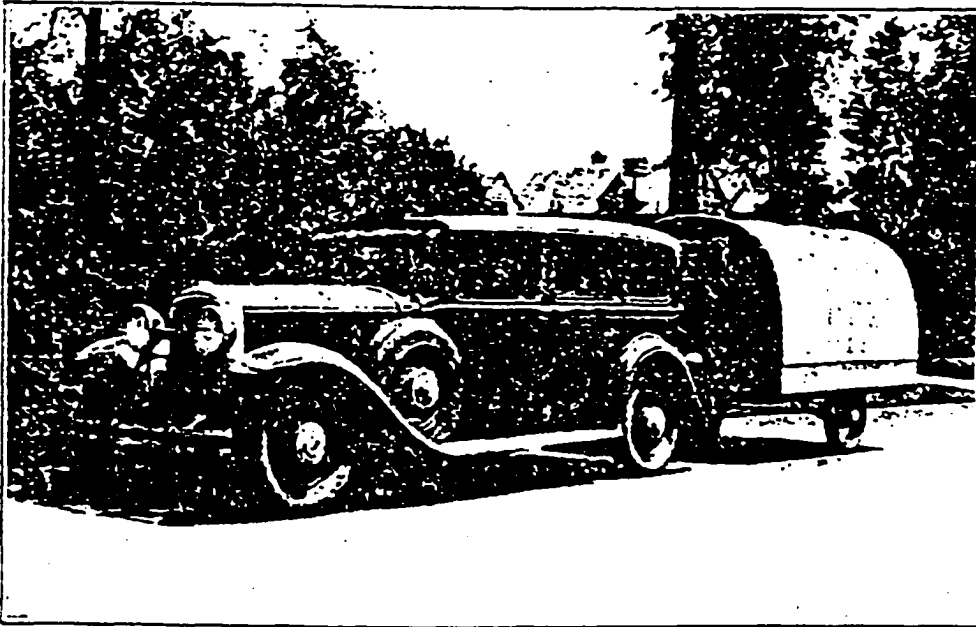
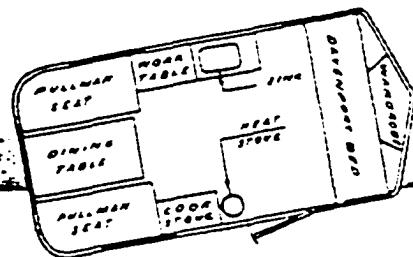
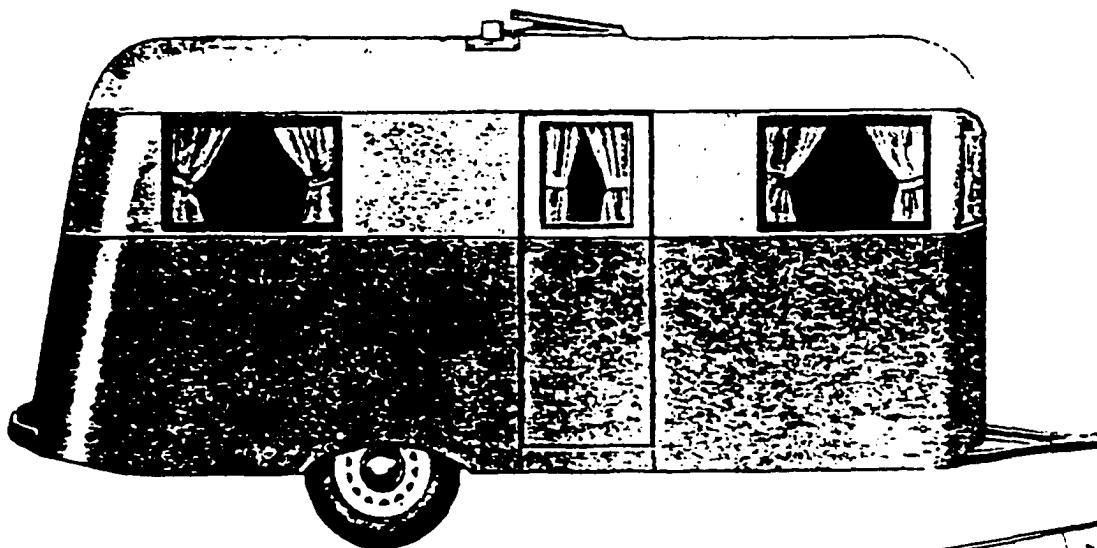


Figure 7. Covered Wagon. 1930

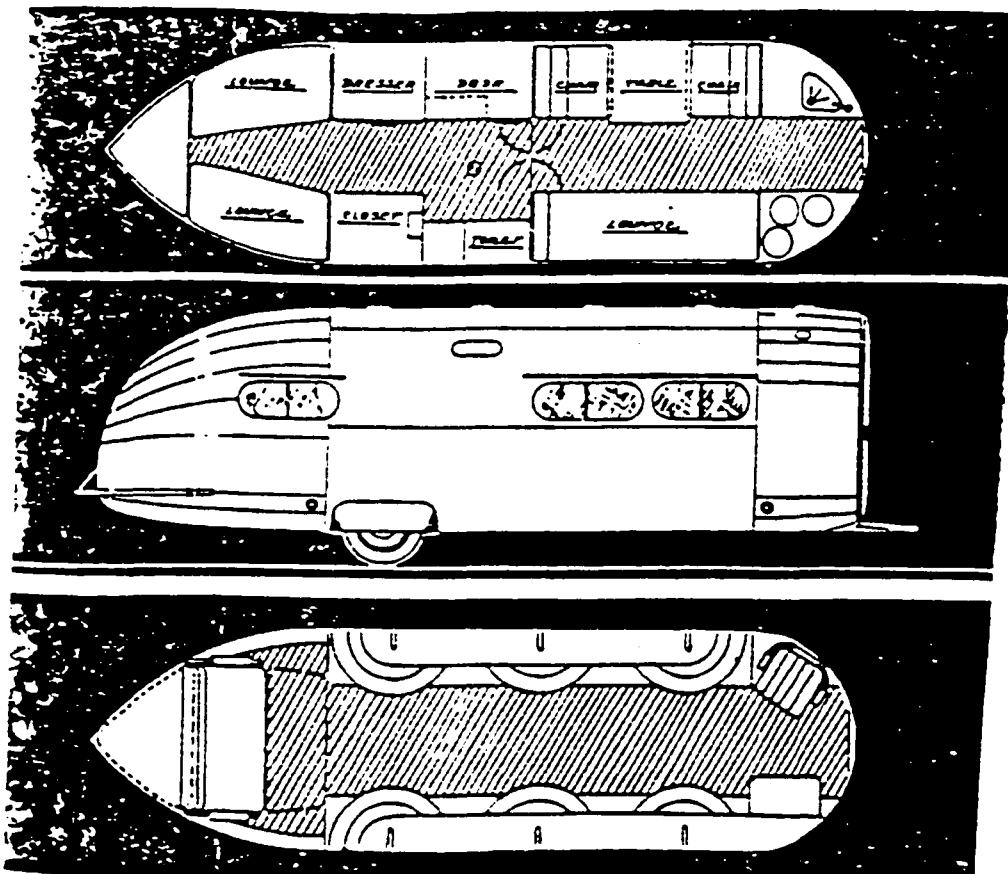


## The MASTER MODEL

Figure 8. 1936 Covered Wagon. Master Model



DE LUXE ROAD CHIEF



DE LUXE COMMERCIAL

Figure 9. Bowlus Road Chief, 1935

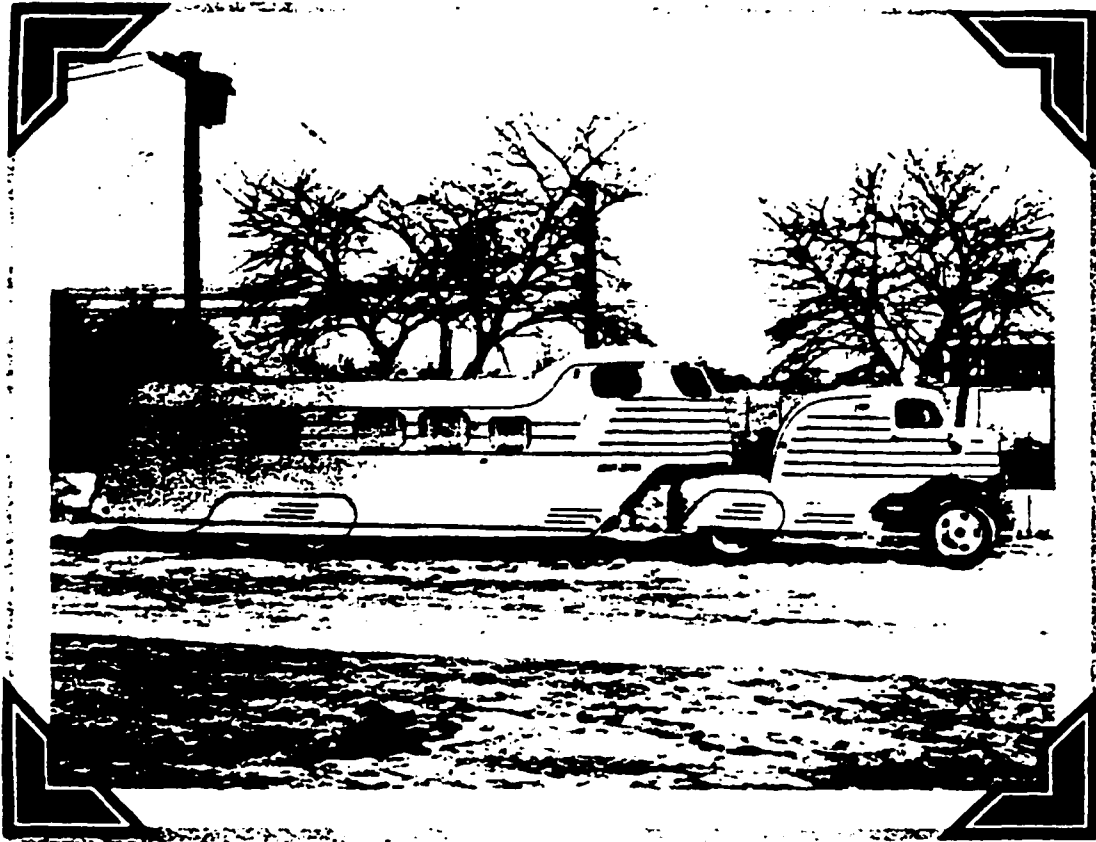


Figure 11, Continental Clipper. 1938



LIFE IN THE 1947 SPARTAN MANOR IS LIFE IN THE *Right Manner*



THE 1947  
SPARTAN MANOR  
HAS, WE BELIEVE, THE  
GOOD QUALITIES OF  
ITS PREDECESSOR  
PLUS  
MANY IMPROVEMENTS

**TO EACH HIS OWN**  
*The New 1947*  
**SPARTAN MANOR**  
ALL-ALUMINUM TRAILERCOACH

NOW on Display by Dealers  
*Write* FOR COMPLETE FULL-COLOR LITERATURE

SPARTAN AIRCRAFT COMPANY  
Manufacturers of  
LUXURY AIRCRAFT and TRAILERCOACHES  
Dept. C, 1900 North Escondido Road  
Tulsa, Okla. Telephone No. 9-3431

Retail price including dealer's profit, complete including freight, Sales Tax, \$1995. at factory, plus net over the  
a new transportation to your camp. Gas, water, and electrical hookups, refrigerator, \$120. camp fee, \$20.

Figure 12. Spartan Manor, 1947

**KIT—Designed for Sportsmen!**

**For Comfort**

1. Roomy, double bed
2. Clothing storage hamper.
3. Two doors to sleeping compartment
4. Complete lighting

**For Convenience**

1. Aluminum easy to clean Kitchen.
2. Two burner Butane stove.
3. Nine gallon running water system
4. Kamsol-insulated 25# icebox.

Plus engineering factors such as the unique torsion bar axle and independent wheel suspension, for finest roadability.

*first in '46*

Created in '46 to answer the ARCA of Sportsmen for an ideal trailer, was the KIT KAMPER. Price, comfort and ease of handling promptly boosted KIT sales to the top among sportsmen's trailers.

*first again in '47*

Growing demands for KIT destined trailers led to improvement of KIT KAMPER and the introduction of a new SPORTSMAS TER, with prices within the reach of every outdoorsman. All of you who like to vacation 62 times a year!

**IS ON THE MOVE!**

Join the thousands of enthusiastic KIT owners. See your KIT Dealer and learn how easily you can own a KIT SPORTSMAS TER or KAMPER. Write for free booklet and the name of your nearest dealer (more than 300 already and more being franchised each day!)

National Distributors: SACKETT NICHOLSON CORP., 2485 American Ave., Long Beach, Calif.

Figure 13, teardrop shaped KIT, 1947



Lucille Ball and Desi Arnaz arrive on the M-G-M lot with their New Moon where they star in the color comedy hit "The Long, Long

## ... NEW MOON

Figure 14. The Long. Long Trailer

## WORKS CITED

American Academy of Political and Social Science, *The Automobile - Its Province and Problems*, Philadelphia, AAPSS, 1924

Appleton, Victor, *Tom Swift and His House on Wheels*, New York, Grosset & Dunlap, 1929

Bancroft A.L., *Bancroft's Tourists' Guide Around the Bay (South) Yosemite*, San Francisco, A.L. Bancroft & Company, 1871

Bean, L.L., *Hunting-Fishing and Camping*, L.L. Bean, Inc., Freeport, Maine, 1950

Beard, Daniel Carter, *The American Boys Handy Book: What to do and How to do it*, Charles Scribner's Sons, New York, 1882; Reprinted 1890

Bel Geddes, Norman, *Horizons*, New York, Dover Publications, Inc., 1932, Reprint 1977

Bilstein, Roger, *Flight in America, 1900 - 1983*, Baltimore, Johns Hopkins University Press, 1984

Braden, Donna R., and Judith Endelman, *Americans on Vacation*, Dearborn, Michigan Henry Ford Museum & Greenfield Village, 1990

Brierly, Brooks T., *There is no mistaking a Pierce Arrow*, Coconut Grove, Fl., Garret and Stringer Inc., 1986

Brimmer, Frank E., *Motor Campcraft*, New York, The Macmillan Co., 1923

-----, *Autocamping*, Cincinnati, Stewart Kidd Co., 1923

Bryan, George S., ed., *The Camper's Own Book: A Handy Volume for Devotees of Tent and Trail*, New York, The Log Cabin Press, 1912

Bryan, Ford R., *Henry's Lieutenants*, Detroit, Wayne State University Press, 1993

Buffalo Chamber of Commerce, *Buffalo Business*, vol. 10, no. 29, September 4, 1936

Bullman, Barbara Hanson, ed., *The Winnebago Story*, Forrest City, Iowa, Winnebago Industries, 1988

Bureau of the Census, *1950 Census of Housing: Preliminary Reports*, Washington D.C., G.P.O., 1951

Burke, Edmund, *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful*, London, printed for R. and J. Dodsley, 1757. Reprint edited by James T. Boulton, Notre Dame, University of Notre Dame Press, 1986

Burroughs, John, *Camping and Tramping With Roosevelt*, Boston, Houghton, Mifflin and Company, 1907

-----, *In the Catskills*, New York, Houghton Mifflin Co. 1910

-----, *Our Vacation Days of 1918*, ca. 1919 (Published scrapbook with photographs of John Burroughs, Henry Ford, Harvey Firestone & Thomas Edison) Huntington Library

-----, *That Pastoral Paradise - Kadiak*, The Elkus Press, Berkeley, 1945, Accession.# 264428, Huntington Library

Bush, Donald J., *The Streamlined Decade*, New York, George Braziller Inc., 1975

Buzzacott, Francis H., *The Complete Campers Manual. How to Camp Out. What to Do. How to do it*, Chicago, Francis H. Buzzacott, 1903

Byam, Wally, *Trailer Travel, Here and Abroad*, New York, David McKay Company, Inc., 1960

Champion, Roy D., *A Complete Official Road Guide of the Lincoln Highway*, Detroit, Lincoln Highway Association Inc., 1924

Chandler, Alfred D., Jr., *The Visible Hand*, Cambridge, Harvard University Press, 1977

Chittenden, Hiram Martin, *Yellowstone National Park, Historical & Descriptive*, Stanford, Stanford University Press, 1949; Originally published, New York, The Baker and Taylor Company, 1895

Citizens Historical Association, Indianapolis, *Biographical Data*, "Bay City Biography, Zagelmeyer, Frank," Record No. 2B394D20E9F65, dated March 7, 1936

Collins, A. Frederick, *Motor Car Trailers: How To Build, Equip, and Furnish Them, Complete Specifications and Detailed Drawings for Making an Inexpensive Trailer and a Luxurious Trailer*, Philadelphia, J.B. Lippincott Company, 1936

- Conway, John, *Tourists' Guide From The Yosemite Valley to Eagle Peak for the Spring and Summer of 1879*, San Francisco, Spaulding, Barto & Co., Printers, 1879, Accession # 441289, Huntington Library
- Cooper, Morley, *The Trailer Book: How to select, equip, and maintain a modern trailer coach*, New York, Harper & Brothers Publishers, 1950
- Corn, Joseph J., *The Winged Gospel*, New York, Oxford University Press, 1983
- Covert, William Chalmers, *Wild Woods and Waterways*, Philadelphia, The Westminster Press, 1914
- Croffut, George A., *Croffut's Trans-Continental Tourist's Guide*, New York, George A. Croffut, Publisher, 1872,
- Darling, J.N., *The Cruise of the Bouncing Betsy: A Trailer Travelogue*, New York, Frederick A. Stokes Co., 1937
- Day, H. Summerfield, *The Iowa State University Campus and Its Buildings, 1859-1979*, Ames, Iowa, Iowa State University Press, 1980
- Dixon, Winifred Hawkrige, *Westward Hoboes, Ups and Downs of Frontier Motoring*, New York, Charles Scribner's Sons, 1924
- Dulles, Foster Rhea, *America Learns To Play*, New York, D. Appleton-Century Co. Inc., 1940
- Dyal, Donald H., *Norman Bel Geddes: Designer of the Future*, Monticello, Illinois, Vance Bibliographies, July 1983
- Edwards, Carlton, *Homes for Travel and Living: The History and Development of the Recreation Vehicle and Mobile Home Industries*, East Lansing, Michigan, Carl Edwards & Associates, 1977
- , *Motor Homes, Birth and Life*, East Lansing, Michigan, Carl Edwards & Associates, 1993
- , *Recreation Vehicles of Today and Yesterday*, East Lansing, Michigan, Carl Edwards & Associates, 1993
- , *Manufactured Homes Now and Then*, East Lansing, Michigan, Carl Edwards & Associates, 1993
- Ferguson, Melville F., *Motor Camping on Western Trails*, New York, The Century Company, 1925

Findley, Evelyn and Howard, *The Findley Trailer Primer*, Fort Myers, Florida, Evelyn Bailing Findley and Howard N. Findley, 1950

Fink, James J., *America Adopts the Automobile, 1895-1910*, Cambridge, M.I.T. Press, 1970

-----, *The Car Culture*, Cambridge, The MIT Press, 1975

Fordyce, Claude P., *Trail Craft, An Aid In Getting The Greatest Good Out Of Vacation Trips*, Cincinnati, Stewart Kidd Company, Publishers, 1922

Gibson, W. Hamilton. *Camp Life in the Woods and the Tricks of Trapping and Trap Making*, New York, Harper & Brothers Publishers, 1881

Haber, Samuel, *Efficiency and Uplift*, Chicago, University of Chicago Press, 1964

Haines, Aubrey L., *The Yellowstone Story: A History of Our First National Park* Yellowstone Library and Museum Association, Yellowstone National Park, Wyoming, in cooperation with Colorado University Press, 1977

Harmon, David L., *Pammel Court and Veterans Housing: An Administrative and Technological History of the Development of Post World War II Veterans Housing at Iowa state University*, unpublished thesis, Iowa State University, William and Ellen Sorge Parks Library, Special Collections, Ames, Iowa, 1994

Hope, Laura Lee, *Bunny Brown and His Sister Sue On an Auto Tour*, New York, Grosset & Dunlap Publishers, 1917

-----, *Bobsey Twins at the Seashore*, New York, Grosset & Dunlap, 1907

-----, *Bobsey Twins in the Country*, New York, Grosset & Dunlap, 1907

-----, *Bobsey Twins Camping Out*, New York, Grosset & Dunlap, 1955

-----, *The Outdoor Girls in a Motor Car*, New York, Grosset & Dunlap, 1913

Huth, Hans, *Nature and the American, Three Centuries of Changing Attitudes*, Lincoln, University of Nebraska Press, 1990

Hyde, John, editor, *Official Guide To The Yellowstone National Park, A Manual For Tourists*, St. Paul, Minnesota, 1888; Original edition, 1886

Gartner, John, *All About Pickup Campers, Van Conversions and Motor Homes*, Beverly Hills, California, Trail-R-Club of America, 1969

General Services Administration, The National Archives, *Federal Records of World War II*, Washington D.C.

Gibson, W. Hamilton, *Camp Life in the Woods and the Tricks of Trapping and Trap Making*, New York, Harper & Brothers Publishers, 1881

Grief, Martin *Depression Modern: The Thirties Style in America*, New York, Universe Books, 1975

Gulick, Luther H., *A Philosophy of Play*, New York, Charles Scribner's Sons, 1920

Hope, Laura Lee, *Bunny Brown and Her Sister Sue On an Auto Tour*, New York, Grosset & Dunlap Publishers, 1917

Jefferson, Thomas, *Notes on the State of Virginia*, edited by William Peden, New York, W.W. Norton & Company, 1982

Jessup, Elon, *The Motor Camping Book*, New York, G.P. Putnam's Sons, 1921

Judge, Arthur W., *The Design of Aeroplanes*, New York, Whittaker & Co., 1917

Khayyam, Casey, *Autolog: The Book of Touring Information*, Kansas City, Missouri, published for the Auto Bed Manufacturing Co., 1920

Kimball, Winfield A., *The Trailer for Pleasure and Business*, New York, McGraw-Hill Book Co. Inc., 1937

-----, *Touring with Tent and Trailer*, New York, McGraw-Hill Book Co. Inc., 1937

Kephart, Horace, *Camping and Woodcraft: A Handbook for Vacation Campers and for Travelers in the Wilderness*, New York, The Macmillan Publishing Co., Inc., 1917, Reprint, University of Tennessee Press, Knoxville, 1988

Kimball, Winfield A., and Maurice H. Decker, *Touring With Tent and Trailer*, New York, McGraw-Hill Book Company, Inc., 1937

Landau, Robert, and James Phillippi, *Airstream*, Salt Lake City, Peregrine Smith Books, 1984

Lane, Frederic C., *Ships for Victory: A History of Shipbuilding Under the U.S. Maritime Commission in World War II*, Baltimore, The Johns Hopkins Press, 1951

Lewis, Richard Warrington Baldwin, *The American Adam: Innocence, Tragedy and Tradition in the Nineteenth Century*, Chicago, University of Chicago Press, 1955



- Lewis, W. David, and Wesley Phillips Newton, *Delta: The History of an Airline*, Athens, University of Georgia press, 1979
- Lindbergh, Charles A., *The Spirit of St. Louis*, New York, Charles Scribner's Sons, 1953
- Leuchtenberg, William E., *Life History of the United States*, New York, TIME Inc., 1964
- Long, John Cuthbert, and John D., *Motor Camping*, New York, Dodd, Mead and Company, 1923
- Loudy, Flavius E., *Metal Airplane Structures*, New York, The Norman W. Henley Publishing Company, 1938
- MacDowell, Syl, *We Live in a Trailer*, New York, Julian Messner Inc. 1938
- Marcus, Alan I, *Technology In America: A Brief History*, New York, Harcourt Brace Jovanovich, Publishers, 1989, Second edition, 1999
- Marx, Leo, *The Machine in the Garden: Technology and the Pastoral Idea in America*, New York, Oxford University Press, 1964
- Mason, Bernard S., *Camping Crafts*, New York, A.S. Barnes and Co., 1916; Reprint, companion to "Woodcraft" and "Crafts of the Woods," 1973
- McJimsey, George, *Harry Hopkins, Ally of the Poor and Defender of Democracy*, Cambridge, Harvard University Press, 1987
- Meyer, Judith L., *The Spirit of Yellowstone: The Cultural Evolution of a National Park*, New York, Rowman & Littlefield Publishers, Inc., 1996
- Meyer, Stephen, *The Five Dollar Day*, Albany, State University of New York Press, 1981
- Nash, Charles Edgar, *Trailer Ahoy*, Lancaster, Pennsylvania, Intelligencer Printing Co., 1937
- Nash, Roderick, *Wilderness and the American Mind*, New Haven, Yale University Press, 1973
- Nevins, Allan, *Ford, the Times, the Man, the Company*, New York, Charles Scribner's Sons, 1954
- Northrup, A. Judd, *Camps and Tramps in the Adirondacks, and Grayling Fishing in Northern Michigan: A Record of Summer Vacations in the Wilderness*, Syracuse, N.Y., Davis, Bardeen & Co., Publishers, 1880

Nulsen, David R. & Robert H., *Mobile Home and Recreational Vehicle Park Management*, vol. 1-2, Published by, "Trail-R-Club of America, Beverly Hills, Ca., 1971

Nye, David E., *American Technological Sublime*, Cambridge, The MIT Press, 1994

O'Brien, Howard Vincent, *Folding Bedouins or, Adrift in a Trailer*, Chicago, Willett, Clark & Co., 1936

Olson, Keith, *The G.I. Bill, the Veterans and the Colleges*, Lexington, University Press of Kentucky, 1974

Partridge, Bellamy, *Fill 'er Up!*, New York, McGraw-Hill Book Co., 1952

Pocapalia, Dan, *I Love A Challenge! A Half Century at KIT Manufacturing Company*, Long Beach, California, KIT Mfg. Co. 1994

Pomeroy, Earl, *In Search of the Golden West, the Tourist in Western America*, New York, Knopf, 1957

Public Affairs Press, *Going Back To Civilian Life: Official Information About the privileges, Opportunities, and Rights of returning Soldiers*, Washington D.C., G.P.O., 1944

Rae, John B., *The American Automobile*, Chicago, University of Chicago Press, 1965

Ralston, Marc, *Pierce-Arrow*, San Diego, A.S. Barnes and Co. Inc., 1980

Roberts, Jennifer Davis, *Norman Bel Geddes: An Exhibition of Theatrical and Industrial Designs*, Austin, University of Texas at Austin press, 1979

Rockland, Michael, *Homes on Wheels*, New Brunswick, N.J., Rutgers University Press, 1980

Roseberry, Cecil R., *Glenn Curtiss: Pioneer of Flight*, New York, Doubleday & Company, Inc., 1972

Runte, Alfred, *National Parks: The American Experience*, Lincoln, University of Nebraska Press, 1987

-----, *Trains of Discovery: Western Railroads and the National Parks*, Flagstaff, Arizona, Northland Press, 1984

Scharff, Virginia, *Taking the Wheel: Women and the Coming of the Motor Age*, New York, The Free Press, 1991

- Schilletter, Julian Claude, *The First 100 Years of Residential Housing at Iowa State University, 1868-1968*, Ames, Iowa, Iowa State University Press, 1970
- Sears, George Washington, a.k.a. Nessmuk, *Woodcraft*, New York, Forest and Stream Publishing Co., 1895
- Segal, Howard, *Future Imperfect: The Mixed Blessings of Technology in America*, Amherst, University of Massachusetts Press, 1994
- Sims, Blackburn, *The Trailer Home. With Practical Advice on Trailer Life and Travel*, New York, Longmans, Green and Company, 1937
- Somkin, Fred, *Unquiet Eagle. Memory and Desire in the Idea of American Freedom, 1815-1860*, Ithaca, Cornell University Press, 1967
- Stewart, F.S., *Airframe Materials*, New York, McGraw-Hill Book Company, Inc., 1945
- Stokes, Katherine, *The Motor Maids at Sunrise Camp*, New York, Hurst & Co., 1914
- Stout, William Bushnell, *So Away I Went*, New York, Bobbs-Merrill Co., Inc., 1951
- Sward, Keith, *The Legend of Henry Ford*, New York, Rinehart, 1948
- Taylor, Frederick Winslow, *Scientific Management*, New York, Harper & Brothers, 1947
- Thornburg, David A., *Galloping Bungalows*, Hamden, Ct., Archon Books, 1991
- Thorndyke, Helen Louise, *Honey Bunch: Her First Auto Tour*, New York, Grosset & Dunlap Publishers, 1926
- Varney, Porter, *Motor Camping*, New York, Leisure League of America, 1935
- Vergara, George L., *Hugh Robinson, Pioneer Aviator*, University Press of Florida, 1995
- Vinson, Michael, *Motoring Tourists and the Scenic West. 1903 - 1948*, Dallas, De Goyler Library, Southern Methodist University, 1989
- Wells, George, and Iris, *The Handbook of Auto Camping and Motorist's Guide to Public Campgrounds*, New York, Harper & Brothers, 1954
- Wallis, Allan D., *Wheel Estate*, New York, Oxford University Press, 1991
- Wallis, Roland S., "Tourist Camps," *Iowa State College of Agriculture and Mechanic Arts. Engineering Extension Department Bulletin*, 56, Ames, Iowa, Feb. 1923

Waugh, Frank A., *Recreational Uses on the National Forests*, Washington, D.C., U.S. Dept. of Agriculture, Forest Service, GPO, 1918

White, Stewart Edward, *The Outdoor Omnibus - The Mountains* (1904), *The Cabin* (1911), *The Forest* (1903), New York, Grosset & Dunlap Publishers, 1913

-----, *Camp and Trail*, New York, Doubleday, Page & Co., 1915

Whitnah, Donald R., ed., *Government Agencies*, Westport, CT., Greenwood Press, 1983

Wirt, Mildred A., *The Phantom Trailer*, New York, Cupples & Leon Co., 1938

### **Film/Media**

*The Long, Long Trailer*, Metro Goldwyn Mayer (MGM), 1954; Reissued in 1990 by MGM/UA (Metro Goldwyn Mayer / United Artists)

### **Serial Articles (no author)**

"A Trip Through the Rockies," Automobile, vol. 4, no. 2, February 1902, p. 50

"Air Conditioned Sleeper for Syrian Desert," Motor, March 1937

"All The Comforts of Home," The Fordowner, vol. 5, no. 2, May 1916, p. 21

"Automobiles of 1936, Trailers," Consumers' Research Bulletin, vol. 2, no. 6,

Consumers' Research, Washington, N.J., March 1936

"Automobile Trailers," Consumers Union Reports, May 1937

"Automobile Trailers," Consumers' Research Bulletin, March 1937

"Automobile Traveling Vehicles," Scientific American Supplement, No. 1196, December 3, 1898

"Big Home on Wheels Built of Air-Craft Materials," Popular Mechanics, April 1920, p. 538

"The Call of Touring," The Fordowner, vol. 1, no. 3, June 1914, p. 1

"Camping for Women," *Country Life in America*, June 1910, p. 176

- "Catholic Church Placed on Wheels," Motor Age, April 30, 1914, p. 31
- "Changes in Summer Migration," Nation, vol. 53, September 17, 1891, p. 210
- "Now the Shoreland for 1944," Chicago Streamlite Corporation, Trailer Topics, July 1944, p. 11
- "Chrysler Airflow," advertisement with endorsement of Norman Bel Geddes, Saturday Evening Post, December 16, 1933, p. 206
- "The Continental Clipper," Trailer Topics, March 1939, p. 9
- "Defense Trailers," Business Week, February 15, 1941, p. 32
- "The Detroit Trailer," The Horseless Age, May 28, 1913, p. 995
- "Equipment Review," The Fordowner, January 1916
- "Fitting Makes Motor Car Just Like A Pullman," The San Francisco Examiner, Automobile Section, February 13, 1916
- "Ford Camping Outfit," The Fordowner, June 1914, p. 26
- "Ford Camp Touring," The Fordowner, vol. 2, no. 4, January 1915, p. 1
- "A Ford Home," The Fordowner, April 1916, p. 23
- "The *Fortune* Quarterly Survey: VII," Fortune, vol. 15, no. 1, January 1937, p. 86
- "Four Decades of RV Progress," Trailer Life, July 1981, p. 87
- "Gipsying De Luxe," Independent, May 1919
- "Luxury Home on Wheels," Glider Trailer Co., Chicago, Automobile and Trailer Travel, November 1944, p. 18
- "Government Interest in Mobile Housing," Trailer Life, February 1952, p. 4
- "He Takes His Home With Him," Ford Owner and Dealer, June 1923, p. 56
- "Home Building in Nation Soars Under Push of Housing Program," Newsweek, February 17, 1941, p. 44
- "Home Comforts En Tour," Motor Age, May 18, 1916, p. 52

"Home Comforts In Motor-Car Camping Outfit," Popular Mechanics Magazine, May 1916, p. 642

"Homes on Wheels," Business Week, December 7, 1940, p. 46

"Improved Trailer Fittings and How To Make Life on Wheels More Comfortable," Popular Science, July 1937, p. 84

"Joys of Auto Camping," The Fordowner, April 1915, p. 69

"Latest Comforts for Homes on Wheels," Popular Mechanics, April 1937, p. 4

"Mayer's Ideal Trailer," The Fordowner, August 1915, p. 6

"MHMA Prepares for the Show," Trailer Dealer, November 1953, p. 46

"Midget Trailer," Popular Mechanics, February 1940, p. 284

"Midget Trailer - Part II," Popular Mechanics, March 1940, p. 441

"The Motor Bungalow," Scientific American, vol. 122, no. 6, February 7, 1920, p. 139

"Motor Trailers Are Homes on Wheels," Popular Science, April 1941, p. 130

"Nation of Nomads," TIME, vol. 27, June 15, 1936, p. 53

"New Comforts for Trailer Travel," Popular Science, February 1938, p. 38

"The 1930s Trailer Boom," Special Interest Autos, Sept.-Oct. 1974, p. 44-49

"No More Trailers," Business Week, July 17, 1943, p. 19

"Nomadic Motoring," Independent, June 1, 1918

"Novelist Sinclair Lewis Designs a Two-Story Trailer For His New Book," Look, February 1, 1938

"The Open Road," Outing, September 1916, p. 678

"How Palace Engineering Promotes Sales for Palace Dealers," Automobile and Trailer Travel, Palace Corporation, Flint, Michigan, June 1944

"Palace Postwar Production Facilities," Automobile and Trailer Travel, Palace Corporation, Flint, Michigan, July 1944

- "Palace is Preparing for a BIG, NEW Postwar Market," Automobile and Trailer Travel, Palace Corporation, Flint, Michigan, August 1944
- "Science and the Postwar Palace," Automobile and Trailer Travel, Palace Corporation, Flint, Michigan, October 1944
- "A Palatial Touring Home," Motor Camper & Tourist, vol. 1, no. 1, June 1924
- "Pierce-Arrow Introducing Its New House Trailers," Buffalo Courier Express, September 27, 1936
- "The 1937 Travelodges," The Arrow, series 69, model 3, Pierce-Arrow Society
- "Pierce-Arrow Presents Travelodge Trailers," Trailer Travel, September 1936, p. 38
- "Planning for the Post-War Period," Automobile and Trailer Travel, July 1942
- "Platt," Platt Trailer Co., Elkhart, Indiana, Trailer Topics, August 1944, p. 23
- "Post-War Dream Trailers," Automobile and Trailer Travel, November 1944
- "Pullman-Car Fords," Ford Owner and Dealer, July 1921, p. 62
- "Remarkable Touring Ford," The Fordowner, vol 4, no. 5, February 1916, p. 16
- "Rolling Homes - One Way To Avoid Rent," Look, May 10, 1938, p. 56
- "Rolling Palace Has the Comforts of Home," Scientific American, vol. 129, November 1923, p. 343
- "Round the Ford Camp Fire," The Fordowner, vol. 2, no. 5, February 1915, p. 13
- "Stop-Gap Housing," Business Week, March 22, 1941, p. 32
- "Stout Designs Home For Modern Nomads," Automotive Industries Index, Volume 74, February 15, 1936, The Chilton Co., Philadelphia
- "Streamline Trailer of Duralumin Saves Fuel," Popular Mechanics, November 1935, p. 711
- "Toledo, Ohio Ordinance Cited by T.C.M.A. as Model," Trailer Caravan, vol. 3, no. 6, June 1938, p. 15
- "Trailer Convertible into Permanent Cottage," Popular Mechanics, December 1937, p. 6
- "The Trailer Grows Up," Popular Mechanics, vol. 72, no. 2, August 1939

"Trailer Homes Peak Sales; May Total \$234,000,000 For '51," Trailer Dealer, September 1951, p. 26

"The Trailer Market is Shifting," Trailer Dealer, June 1951, p. 58

"Trailer Town - Three Cheers," Woman's Home Companion, June 1942, p. 88

"Trailers for Wartime," Automobile and Trailer Travel, July 1941, p. 30

"Trailers Trailing," Business Week, January 16, 1943, p. 69

"Transportable Bungalow Drawn by Runabout," Scientific American, January 22, 1916, p.102

"Traveling Homes for Automobile Tourists Being Manufactured in Standard Models," Popular Mechanics, vol. 39, no. 1, January 1923, p. 88

"A Traveling Home for Two," Mechanix Illustrated, October 1946

"Touring Days Here," " The Fordowner, vol. 5, no. 3, June 1916

"Touring Fever," " The Fordowner, May 1917

"Touring With the Ford," " The Fordowner, vol. 1, no. 3, June 1914, p. 22

"Two New Trailer Methods," The Fordowner, September 1919, p. 174

"Two Rooms Fold Up Into Trailer," Popular Mechanics, March 1942, p. 44

"Uncle Sam Comes First at National Trailer Show," Automobile and Trailer Travel, April 1942, p. 24

"War Production Board Limits Trailer Building," Automobile and Trailer Travel, November 1942, p. 5

"We Live in a Trailer," Woman's Home Companion, June 1942, p. 88

"17<sup>th</sup> Annual National Mobile Home Show," M.H.M.A. advertisement, Trailer Dealer, October 1953, p. 102

"4,000 Tires for 50,000 Units," Architectural Record, April 1942, p. 24

"200,000 Trailers," Fortune, vol. 15, no. 3, March 1937, p. 107



### Serial Articles

Adams, O.E., "Progress in Paducah," Trailer Dealer, July 1951, p. 118

Allenby, Jim, "Building the Cabinette Cruise Trailer," Modern Mechanix and Inventions, May 1938

Anderson, Larz, "Camping for Women," Country Life in America, June 1910

Arehart, David, "Mobile Homes for Defense," Automobile and Trailer Travel, vol. 7, no. 2, February 1942, p. 7

Babson, Roger, "We'll Soon Be Living on Wheels," Trailer Travel, January 1936

Baker, Ralph, "Home, Sweet Home Goes on the Road," The American Mercury, September 1935, p. 103

Baker, M.G., "Camping for the Entire Family," Country Life in America, June 1910, p. 286

Boone, Andrew R., "Luxury Trailers Create New Army of Modern Gypsies," Popular Science Monthly, April 1936, p. 29

Bowne, E.W., "The Open Road," Outing, vol. 68, September 1916, p. 684

Burnham, Charles P., "A Six-Wheel Bungalow," Industrial Arts, August 1924

Byam, Wallace M., "New Stream-lined Coaches Use Modern Principles," Trailer Travel, vol. 1, no. 1, January-February 1936, p. 20

Calkins, Earnest Elmo, "Rolling Homes and Rolling Stones," The Rotarian, July 1937, p. 14

Carryl, Richard R., "On The Road To Anywhere," Scientific American, May 1928, p. 428

Chilton's, "House Trailers," February-March 1937

-----, "House Trailers," 1938

C. Clark and C.E. Wilcox, "The House Trailer Movement," Journal of Applied Sociology, no. 22, 1939, p. 503

Clarke, W.A., "Automobiling in the Yosemite Valley," Overland Monthly, 2<sup>nd</sup> Series, vol. 40, August 1902, p. 104

Crane, Jim, "Trailer Production Gets the Greenlight," Automobile and Trailer Travel, January 1944, p. 8

Davis, Bob, "The Trailer Parade of 1937," Field & Stream, February 1937

Dickinson, G.G., Mrs., "The Call to Service," Automobile and Trailer Travel, vol. 7, no. 1, January 1942, p. 6

Dixon, Karl Hale, "Planning for the Post-War Period," Automobile and Trailer Travel, July 1942, p. 7

-----, "Past and Present in Trailer History," Automobile and Trailer Travel, December 1942, p. 5

-----, "Spreading the Truth About Trailers," Automobile and Trailer Travel, August 1942, p. 7

Dugas, Ernest L., "The New Language of Touring America," Trailer Topics, July 1939, p. 14

Dugmore, A. Radclyffe, "Comfortable Camping vs. Boarding-Houses," Country Life in America, June 1905

Dunn, Harry H., "Living in an Automobile," Suburban Life, vol. 9, July 1909

Emmons, Myra, "The Adventures of a Woman Who Hunts Big Game in the West," *American Homes and Gardens*, December 1905, p. 400

Eustis, John R., "Gipsying De Luxe," The Independent, May 3, 1919, p. 184

Findley, Evelyn B., "Don't Forget The Traveling Trailerist," Trailer Dealer, October 1953, p. 225

Fleming, John W., "Business Hits the Trail," Nation's Business, September 1937

Gladden, George, "An Automobile Prairie Schooner," Country Life, June 1908

Harman, H.E., "On the Trail of the Trailer," Illustrated World, May 1918, p. 415

Harvey, W. Clifford, "Back to the Covered Wagon," The Christian Science Monitor, October 7, 1936, p. 3

Hitchcock, A. Sherman, "My Vacation in a Motor Car," Suburban Life, June 1911

Hillman, J. Constantine, "A Motor Camp Among Giants," The Fordowner, vol. 3, no. 6, September 1915, p. 54

-----, "Cross Country Fording," The Fordowner, vol. 3, no. 5, August 1915

- , "Cross Country Fording II," The Fordowner, vol. 3, no. 6, September 1915
- , "Cross Country Fording III," The Fordowner, October 1915
- , "Cross Country Fording IV," The Fordowner, November 1915
- , "Cross Country Fording V," The Fordowner, December 1915
- , "Cross Country Fording VI," The Fordowner, January 1916
- , "Cross Country Fording VII," The Fordowner, February 1916
- , "Cross Country Fording VIII," The Fordowner, March 1916
- , "Cross Country Fording IX," The Fordowner, April 1916
- , "Cross Country Fording X," The Fordowner, May 1916
- Horton, Dorothy, "We Went House Hunting," Mobile Living, vol. 4, no.5, December 1955, p. 11
- Hoyt, Kendall K., "From Washington," Architectural Record, March 1941, p. 16
- Hunt, William H., "A Palace Car Of The Railless Ways," Popular Mechanics, June 1921, p. 896-8
- Johnston, Alexander, "The Fine Art of Motor Touring," Countryside Magazine, August 1916, p. 66
- Kava, D.J., "In Search of Hudson History, The Curtiss Aerocar," White Triangle News, March/April 1981, p. 25
- Kimmell, Todd, "Teardrops: Let's Get Small," Lost Highways Quarterly, vol. 1, no. 2, Winter 1995, p. 8
- Lathrop, Melvin, "Touring By Motor Caravan," Technical World Magazine, July 1914, p. 680-81
- Lawson, George Lorando, "An Automobile Prairie Schooner," Country Life, June 1908, p. 176
- Leggett, Julian, "The Trailer Grows Up," Popular Mechanics, August 1934
- Lindberg, Gene, "New Covered Wagon," Denver Post, ca. 1931

Lynch, Katherine, "When Is a Trailer Not a Trailer," Trailer Caravan, vol. 1, no. 5, January 1937, p. 13

Magee, H.W., "Hitch Your Wagon To a Car, Part I," Popular Mechanics, December 1936

-----, "Hitch Your Wagon To a Car, Part II," Popular Mechanics, January 1937

Martin, Harold H., "Don't Call Them Trailer Trash," The Saturday Evening Post, August 2, 1952

McMullen, Katie, "Calling All Gilkies!," Better Camping, June 1968, p. 36

Miller, Laura B., "Duffel for Women," Outing, September 1916, p. 592-95

Osborn, George A., "A Trailer Cabin for the Outdoorsman," Field & Stream, April 1937

O'Hara, Sue, "Meet the Pioneers," Trailer Life, July 1981, p. 82

Parsons, Marion Randall, Treasurer of the Sierra Club, "A Woman's Tramping Trip Through Yosemite," Overland, November 1915, p. 421-427

Percival, Charles G., "The Call of the Road, or Motor Camping," copy of article, no source noted, as found in, Office of Chenango County Historian, Chenango Camp Trailer Company file.

Perry, Harry Wilkin, "Designing Camping Cars and Trailers," Automotive Industries, August 17, 1922, p. 324

Post, George E., "At Home On the Go!," The Buick Magazine, July 1936, p. 12

Reasons, Don, "Airstream History, Silver Palace on Wheels," June 2000, as found at <http://www.calldon.com/air.htm>

Reed, Alsa M., "The Woman's Viewpoint," Automobile and Trailer Travel, October 1943, p. 7

Reynolds, Guy, "Among Our Unsung Heroes," Automobile and Trailer Travel, June 1943, p. 7

Sanderson, Emma, "Camping in Comfort," Outing, Oct. 1916, p. 47

Saunders, Lawrence, "Roll Your Own Home," The Saturday Evening Post, May 23, 1936

Seiders, Mary G., "Utopian Villages," Trailer Topics, September 1945, p. 32

- Shanks, Charles B., "Automobiling in the West," Scientific American Supplement, No. 1335, August 3, 1901, p. 21398
- Silbar, Robert G., "New Uses for Commercial Trailers," Trailer Topics, December 1938, p. 10+
- Smith, Philip H., "Trailer Trends for 1938," Automobile Trade Journal, Oct. 1937, p. 22
- , "Where Is the Trailer Going?," S.A.E. Transactions, vol. 40, no. 2, February 1937, p. 45
- , "Trailers to the Front," Automotive Industries Index, v. 74, June 13, 1936, p. 830
- , "Administrators Consider Coach Trailer Regulations," Automotive Industries Index, v. 75, November 21, 1936, p. 720
- , and Henry S. Churchill, "What is the Trailer's Place?," Automotive Industries Index, v. 76, April 3, 1937
- Spencer, Kay, "A Pioneer Trailer Company," Trailer Topics, October 1938, p. 16
- Spooner, J.C., "Build this Pullman Trailer Yourself - Construction of a Pullman Trailer," Popular Handicraft, March-April 1935
- , "Construction of a Pullman Trailer," Popular Home Craft, March/April 1935, p. 551
- Stewart, Walter G., "Build Your Own Trailer," Popular Crafts & Hobbies, April 1937, p. 4
- Stiglmeier, Herman J., "Hawley Bowlus," Soaring, October 1967
- Stout, William B., "The Motor Car of the Future," Popular Mechanics, vol. 58, no. 3, September 1932, p. 440
- Taylor, Frank, "A Camper That Fit To A 'T'," Ford Illustrated, Fall 1975, p. 22
- Teale, Edwin, "Five Weeks in a Trailer," Popular Science, April 1937, p. 46
- Tibbetts, John M., "The G.I. Trailerite," Automobile and Trailer Travel, December 1944, p. 13
- Twitchell, Anna Spencer, "The Log of the Liliput," " The Fordowner, vol. 3, no. 2, May 1915, p. 44

-----, "More Adventures of the Liliput," " The Fordowner, vol. 3, no. 4, July 1915, p. 16

Vanderbilt, Cornelius, Jr., "Paradise on Wheels: Rolling My Home Behind Me," Liberty, December 5, 1936

Von Ofen, George A., "The Traveler -- A Light, Utilitarian Trailer," Popular Home Craft - The Home Workshop Magazine, February 1936, p. 537

von Struve, A.W., "Trailer Progress to Be Revealed by U.S. Census," Automobile and Trailer Travel, vol. 5, no. 1, January 1940, p. 13

Walsh, George E., "Outfitting the Camper and the Hunter," Independent, vol. 65, August 20, 1908, p. 425

Wendt, Lloyd, "Home on the Road," Holiday, 2:2, December 1947, p. 118

Whipple, Harvey, "When the Women Went Along," Country Life, June 1919, p. 55-57

White, Elizabeth C., "A Woman in the Party," Country Life in America, September 1916

White, Roger, "Planes, Trailers and Automobiles, The Land Yachts of Glenn Curtiss," Automobile Quarterly, January 1994, p. 32

Wilson, Alice, "You Can Take It With You," The Saturday Evening Post, August 14, 1937

Willson, Corwin, "Diagnosing Trailer Fever," Trailer Travel, vol. 1, no. 4, July 1936, p. 17

Wisby, Hrolf, "A Practical Automobile Touring Outfit," Scientific American, vol. 86, March 1, 1902, p. 134

-----, "The Automobile Camper," Country Life in America, April 1905

Wood, Richard K., "The 1937 Trailer Parade Continues," Sports Afield, February 1937

York, Robert W., "Build Aloha Trailer," Modern Mechanix & Illustrations, July 1934

-----, "Build Aloha Trailer, Part II," Modern Mechanix & Illustrations, August 1934

### **Trade Catalogs and Manufacturers' Advertising Literature**

"Abercrombie & Fitch Co.," untitled advertisement, New York, 1905

-----, "From One Sportsman To Another," New York, 1913

-----, untitled advertisement, New York, 1922

"David T. Abercrombie Company, Camp Outfits," 1933

Adams Trailer Corporation, Garden City, Long Island, New York, "The Trail To Happiness," with price list and letter dated June 21, 1921

Aerocar Company of Detroit, Detroit, Michigan; "Travel in Luxurious Comfort in Unsurpassed Style - The Aerocar Land Yacht," and letter dated May 1, 1936

"American Compressed Food Co., Woodcraft," ca. 1900

Albany Hardware & Iron Company, Albany, New York, "Comfort Guide for Sportsmen, Campers, Tourists," 1920

"American Duralumin Co., New York, "Light as Aluminum, Strong as Steel," 1912, Smithsonian Institute, Library, Accession, 37420

"Auto Bed Camp Mfg. Co., Kansas City, Mo., 'Dublservis', Spotlight Turned on Refined Motor Camping," 1922

Auto Bed Camp Manufacturing Company, Kansas City, Missouri; "Autolog - The Book of Touring Information (by Casey Khayyam), 1920

Auto-Kamp Trailer Company, Saginaw, Michigan, "Real Recreation – Joys of the Open by Night as Well as by Day," ca. 1921

-----, "The Auto-Kamp Trailer Bungalow Model No. 5," ca. 1925

-----, "The Auto-Kamp Trailer." (price sheet), 1923

1871 Bancroft's Tourist' Guide Around the Bay, (South) Yosemite, A.L. Bancroft & Co., San Francisco, 1871 ["Pocket Guide to Yosemite Valley and the Big Trees"] Huntington Library

"BARCO, World Famous Waterproofed Tents, Barnett Canvas Goods and Bag Company, Inc., Philadelphia," 1927

"E.A. Barrett's Patent Combination Cot Bed," ca. 1900

"Baxter Camping Outfits," No Date/ca. 1900

"Birchmont: A Camp for Adults," ca. 1915

"John Boyle & Co., Camping Outfits," ca. 1900

"1935 Bowlus Road Chief," Bowlus Manufacturing Co., San Fernando, California, 1935

"Bowlus Trailers," Bowlus Manufacturing Co., San Fernando, California, 1935

"A New Design for Living," Bowlus Manufacturing Co., San Fernando, California, 1935

"Outstanding Features of Bowlus-Teller Streamlined Trailers," Bowlus-Teller Manufacturing Co., San Fernando, California, 1936

"Bowlus-Teller Presents the Royal Family of Trailerdom," Bowlus-Teller Manufacturing Co., San Fernando, California, 1936

"F.J. Burch & Co., The Tent & Awning Makers, Pueblo, Colorado, The Burch Combination Bed Sheet, Tent & Sleeping Bag," 1908, Smithsonian Institute, Library, Accession, 23079

"Carnie-Goudie Mfg. Co., Kansas City," untitled advertisement, ca. 1915

-----, untitled catalog, ca. 1920

"George B. Carpenter & Co., Chicago, Net Price List Applying to Catalogue of Tents, Camp Equipment & Furniture," 1914, Smithsonian Institute, Library, Accession, 24237

-----, untitled advertisement, 1899

-----, untitled advertisement, 1920

"George B. Carpenter & Company, Makers of Tents, Flags & Awnings, Rainproof Covers, Camp Furniture, Yacht Sails," Chicago, 1908

"Chenango Camp Trailers," The Chenango Trailer Works, Sherburne, New York, ca. 1948

"New Type Chenango Camp Trailers," The Chenango Trailer Works, Sherburne, New York, ca. 1948

"Chenango Camp Trailers, The Simplest, Most Compact, The Best Equipped Camping Outfit on the Market," Chenango Camp Trailer Company, Norwich, New York, 1928

"From This To This In 30 Seconds, Chenango Camp Trailer, 'Last Word' When It Comes To Trailers," Chenango Camp Trailer Co., Norwich, New York, 1923

Chicago Automobile Show Program, Nov. 14-21, 1936



Close-To-Nature Company, Colfax, Iowa; "Portable Buildings of All Kinds," catalog, 1920

"Coleman Motor Camper's Manual," (by Frank E. Brimmer), The Coleman Lamp Co.,  
Wichita, Kansas, 1926

"A.S. Comstock, Protean Tent," ca. 1892

"The Covered Wagon for 1930," The Covered Wagon Co., Detroit, 1930

"The New Covered Wagon," The Covered Wagon Co., Mt. Clemens, Michigan, 1935

"The Covered Wagon Rides the Trail Again," The Covered Wagon Co., Mt. Clemens,  
Michigan, ca. 1936

"Travel by Covered Wagon and Save," The Covered Wagon Co., Mt. Clemens, Michigan,  
1936

"Follow the Trail to Health, Happiness and Pleasure in a Covered Wagon," The Covered  
Wagon Co., Mt. Clemens, Michigan, 1936

"Announcing Three New 1937 COVERED WAGON Trailer Coaches With Exclusive  
Shermanite Steel Bodies and Steel Chassis," 1937

"Covered Wagon All Weather Trailer Coaches for 1938," The Covered Wagon Co., Mt.  
Clemens, Michigan, 1937

"The Curtiss Aerocar," Curtiss Aerocar Company, Opa-Locka, Florida, 1933

"Modern Transportation, The Curtiss Aerocar," Curtiss Aerocar Company, Coral Gables,  
Florida, ca. 1937

"The Curtiss Aerocar for 1938," Curtiss Aerocar Co., Coral Gables, Florida, 1938

"Ride Through Sales Resistance With Curtiss Aerocar, Open New Outlets, Rouse Drowsy  
Markets," Curtiss Aerocar Co., Inc., Coral Gables, Florida, ca. 1934

"Travel in Luxurious Comfort, in Unsurpassed Style, The Aerocar Land Yacht," Curtiss  
Aerocar Company, Inc., 1936

"Build It Yourself," Jim Dandy, Trailer Supply Co., Wausau, Wisconsin, 1936

-----, Catalog - "Trailer Plans Featuring 9 Practical Designs," 1938

The Dickey Manufacturing Co, "Awnings-Tents-Tarpaulins," Toledo, Ohio, 1927

"Dougherty Bros. Tent and Awning Co., St. Louis, Catalog No. 66, 1917

"Yellowstone National Park and Alaska, White Pass," 1900 Gates Tours, Smithsonian Institute, Warshaw Collection (60:1.1 - 1.20)

"The Gilkie Camp Trailer, Your Vacation Home," ca. 1925

"The Gilkie Camp Trailer, A Real Vacation Home for the Family," ca. 1927

"Gold Medal Camp Furniture Mfg. Co., Racine, Wi., 'On Deck or Veranda, On Shore and Aboard' 1925"

"Gold Medal Camp Furniture Mfg. Co., Racine, Wisconsin," 1893

-----, 1894

-----, 1904

-----, 1920

-----, 1928

"Gotham Sporting Goods Co., New York, Motorcycle Supplies," 1921

Hayes Body Corporation, Grand Rapids, Michigan; Dealership materials, 1937

"Howard's Improved Travelling House," J & F Howard, Britannia Iron Works, Bedford, England, 1879

"International Trucks Chosen for Commander Gatti's 'Jungle Yachts'," 1938

"Jones & Van Doran Inc., Motor Camping Outfitters, New York," "Campolog, The Motor Campers' Book, 1927"

"KIT First in '46," KIT Manufacturing Co., Long Beach, California, 1947

Lampsteed Kampkar, Anheuser-Busch Co., Commercial Delivery Equipment Department, St. Louis, Missouri, 1921

Lampsteed Kampkar, "A Camper That Fit To A 'T'," Ford Illustrated, Summer 1976, p. 22

-----, Camping Car Company, St. Louis; "The Lampsteed Kampkar, Roughing it - Restfully," 1921

E.P. Lyons, Inc., Manchester, N.H., "The Lyons Camp Bungalow Trailer," 1920

"Marble's Outing Equipment," Marble Arms & Mfg. Co., Gladstone, Michigan, 1932-33,  
Smithsonian Institute, Library, Accession, 47425

"McMillan Auto Bed, Auto Bed Co., Bellingham, Washington," ca. 1917

"Henry Modell & Co., Inc., New York, Summer Catalog," 1951

"Mound City Duck and Rubber Co., Manufacturers of Tents, Wagon Covers, Awnings, Etc."  
832-834 North Broadway, Saint Louis, USA; May 1, 1922 price sheet enclosed

1936 "House Trailers: A Survey of All State Legislative Provisions Which Apply to Their  
Ownership and Use," National Highway Users Conference, Washington D.C., 1936

"Standards for War Trailer Projects: Bulletin No. 4," Washington D.C., National Housing  
Agency, Federal Public Housing Authority, December 1942

"Surplus Housing for Veterans: How The Federal Government is Re-Using Surplus Housing  
to Meet This Emergency Need," Washington D.C., National Housing Agency, Federal  
Public Housing Authority, January 1946

1938 Official Directory of Trailer Parks and Camps in the United States, Canada, and Mexico,  
published by *Automobile and Trailer Travel Magazine*

"Pierce-Arrow Motor Corporation Trailer Division F.O.B. Factory List Prices, effective  
August 1, 1936," Buffalo, New York, 1936

"The 1937 Pierce-Arrow Travelodge," Pierce-Arrow Motor Corporation Trailer Division,  
Buffalo, New York, 1937

"Rockaway Sales Company, Rockaway, New Jersey, 1954 #24382

"Schaeffer Tent and Awning Co., Denver" "Auto Touring and Camping Equipment, Catalog  
21-w, 1921"

"The Schult Family - Our First Forty Years," published for Schult Mobile Home Corporation,  
1974

"1937 Home and Vacation Coaches at Sensible Prices," Schult Trailers Incorporated, Elkhart,  
Indiana, 1936

"Schult Engineered Trailers," Schult Trailers Incorporated, Elkhart, Indiana, 1939

Scott-Omaha Tent & Awning Co., "The Auto-Kamp Trailer," Omaha, 1921

"1949 Spartan Aircraft Trailercoaches," Spartan Aircraft Company, Tulsa, 1949

"Tapatco Sleeping Bags and Camp Mattresses," The American Pad & Textile Co., Greenfield, Ohio, 1935 Smithsonian Institute, Library, Accession, 41140

-----, 1946, Smithsonian Institute, Library, Accession 41103

Telescope Apartment (invented by Gustav de Bretteville, San Francisco), 1915

"The Washburn Company, House Furnishings, Androck" catalog 222

"Trailer Builder's Guide," Hamerblow Tool Company, Wasau, Wisconsin, 1936

"Trailer Builder's Manual and Catalog of Parts, Supplies and Equipment," Trailer Supply Company, Wausau, Wisconsin, 1936

Trailer Coach Manufacturers Association, "Official Trailer Coach Yearbook," 1948

-----, "Mobile War Housing," Chicago, T.C.M.A. publication, 1942

"California and the Expositions," Union Pacific System, [Panama-Pacific International Exposition, San Francisco, Feb. 20, 1915 - Dec. 4, 1915] Accession, 372859, Huntington Library

"Yellowstone National Park - How To Go and What To See," Exhibit Brochure Union Pacific Systems, 1915, Accession, 372859, Huntington Library

"United States Tent & Awning Co.," flyer, ca. 1875

"United States Tent & Awning Co., Catalogue 29T," ca. 1928

Weed, Jack, "This Trailer Business," 1937 (manuscript) RVMH, Schult Scrapbook

"Western Auto Stores, Cleveland, Auto Owners' Supply Book, 1934"

Wiedman Body Co., N. Tonawanda, N.Y., "Improved Sport Model," ca. 1929

"Automobile Supplies, The Charles William Stores Inc., New York, Spring & Summer 1922

"J. H. Wittmann Manufacturing Company Limousine Camp," Kansas City, Missouri, July 1917

"Zagelmeyer Universal Folding Trailer," Zagelmeyer Auto Camp Co., Bay City, Michigan, ca. 1925

Zagelmeyer Auto Camp Co., Bay City, Mi.; "De Luxe High-Speed Auto Camping Trailers, Pullman Coach, Overland Cruiser, Gypsy Trailer," May 25, 1928

"Take The Work Out Of Camping, Zagelmeyer," (brochure bound with price list and correspondence), Zagelmeyer Auto Camp Co., Bay City, Michigan, 1928

Zagelmeyer Auto Camp Co., Letter to Mr. C.W. Layton, Plainfield, New Jersey, dated May 25, 1928

Zagelmeyer Estate, letters in reference to, Claim of Zagelmeyer Auto Camp Company, October 1940 - January 1941, *Michigan Reports* (296), 1941