

THE DEVELOPMENT AND IMPACT OF  
THE PARKING METER BEFORE  
WORLD WAR II

By

ROBERT EMMETT SMITH, JR.

Bachelor of Science

Northwest Missouri State College

Maryville, Missouri

1960

Submitted to the Faculty of the Graduate College  
of the Oklahoma State University  
in partial fulfillment of the requirements  
for the degree of  
MASTER OF ARTS  
July, 1968

Copyright 1968

By


ROBERT EMMETT SMITH, JR.

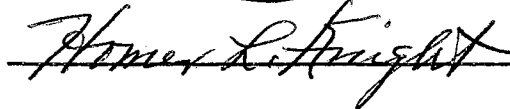
All rights reserved. No part of this thesis may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any informational storage and retrieval system, without permission in writing from the author.


JAN 30 1969

THE DEVELOPMENT AND IMPACT OF  
THE PARKING METER BEFORE  
WORLD WAR II

Thesis Approved:

  
\_\_\_\_\_  
Thesis Adviser

  
\_\_\_\_\_

  
\_\_\_\_\_  
Dean of the Graduate College

696455

## PREFACE

The parking meter has been condemned or lauded by millions of motorists who have utilized its services. Few of these individuals have ever paused to consider urban life without it. Its development was not as spectacular as many other inventions, but it has influenced the lives of countless millions who have benefited from its services.

When the first parking meters went into operation in Oklahoma City on a hot July day in 1935, few would have predicted how important the strange looking device would become in modern urban America. There were onlookers who compared it with a hitching post and predicted that it would not last. Others declared that it was an illegal infringement on their right to use public streets. Doubters did not comprehend its long-range effect on urban development and could not accept its immediate impact on their lives.

The faith of Carl Magee of Oklahoma City and a small group of associates was not so easily shaken. They realized that their invention was destined to provide an answer to the critical problem of parking. It was this enduring faith in an idea, which weathered many a storm, that makes the history of the parking meter to World War II an outstanding example of challenge and successful response.

The purpose of this thesis is to investigate the events that led to the invention of the parking meter, the legal battles that were fought in its behalf, its introduction throughout the United States, and the effects it had on the nation's life prior to World War II.

The author is deeply grateful to all those who have given him assistance with the research and writing of this study. He extends his thanks to the staffs of the Oklahoma State University Library, the Tulsa City-County Library, and the St. Joseph, Missouri, Library for help in locating many publications. He is indebted to the research staff of the Oklahoma City Chamber of Commerce; John J. DeShanzo, Jr., Director of the Department of Traffic Control of the City of Dallas, Texas; the staff of the Traffic Control Office of the City of Oklahoma City; Oklahoma City Chief of Police Hilton Geer; and Roy H. Sempster, Municipal Counselor of Oklahoma City, for the valuable help they gave in locating documents which were useful in evaluating parking meter operations in these urban centers.

The author extends a special word of thanks to H. G. Thuesen, co-developer of the first operable parking meter, who gave his time for interviews. The author is also deeply grateful to the late Gerald A. Hale, the parking meter co-developer, who provided a manuscript copy of his unpublished reminiscences. The author is grateful likewise to the many other inventors of parking meters who took the time to relate their experiences in developing their models; the letters from these inventors are listed in the Bibliography.

The author also wishes to acknowledge the valuable assistance given him by Melitta Hartung and the Honorable William R. Hull, Jr., in pursuing the American Automobile Association's corruption investigation.

Heartfelt gratitude is extended to Dr. LeRoy H. Fischer for his continual advice and assistance. He established the need for this study and guided the author in developing his research in this field. He also

gave generously of his time in editing and provided valuable advice regarding form and style. Dr. Alexander M. Osipov was also of great assistance in critically reading this manuscript, and the author desires to extend further appreciation to him for stimulating interest in critical writing through his seminar. The author wishes also to thank Dr. Homer L. Knight, whose confidence in his ability has been an inspiration.

Lastly, the author acknowledges with gratitude the help given by Shirley Huber through her literary criticism, and his wife, Ann, whose patience, suggestions, and typing skill enabled him to complete this thesis.

TABLE OF CONTENTS

Chapter	Page
I. EARLY DEVELOPMENT OF PARKING METERS . . . . .	1
II. PARKING METER LEGAL INVOLVEMENTS . . . . .	27
III. PARKING METER PROMOTION AND DEVELOPMENT . . . . .	43
IV. PARKING METER TRAFFIC CONTROL AND REVENUE . . . . .	65
V. PUBLIC REACTION TO PARKING METERS . . . . .	79
VI. CONCLUSIONS . . . . .	92
BIBLIOGRAPHY . . . . .	100

## CHAPTER I

### EARLY DEVELOPMENT OF PARKING METERS

When motorists drove to the downtown area of Oklahoma City on July 16, 1935, they noticed strange looking devices mounted on the curbs. On closer examination they found that these new machines, known as parking meters, were designed to record their parking time for a fee.

Public reaction was immediate. Some motorists were outraged and expressed their feelings vocally, while others breathed a sigh of relief that at long last something was being done about the parking problem. A third segment of the population was noncommittal and adopted a wait-and-see attitude.<sup>1</sup> The ever-present publicity seekers had their day. Two couples set up a folding table and four chairs in a parking space, and after depositing a nickel, played a rubber of bridge. A local rancher used a parking meter as a hitching post and justified this action by explaining that it was cheaper than a livery stable.<sup>2</sup> While the complainers and attention grabbers treated the public to a circus, few individuals comprehended the significance of the world's first installation of parking meters in Oklahoma City. The fascinating story

---

<sup>1</sup>"Officers Find Nickel Parker Fickle Parker," Daily Oklahoman, July 17, 1935, pp. 1-2.

<sup>2</sup>"Its Pay As You Park in Oklahoma City Now," Tulsa Tribune, July 18, 1935, p. 11.



of the development of the device was hidden behind the glare of nationwide publicity.<sup>3</sup>

The appearance of the parking meter was a result of many divergent factors culminating in the need for its invention and development. The parking meter would never have been necessary if parking were not the unproductive part of travel. Although it is necessary to park when concluding a trip, parking constitutes a nuisance to others attempting to travel in a congested area.

The parking problem is not a recent phenomenon, but has persisted down through the ages whenever a large number of vehicles assembled in a congested area. In the reign of Julius Caesar, chariots were prohibited from entering Rome during business hours.<sup>4</sup> This is understandable when one considers that a vehicle of this type could block a Roman thoroughfare and impede travel on the public streets. The remedy was rather harsh and really was no remedy at all. The officials of ancient Rome were unable to find a solution to the problem of vehicular travel in a congested urban area, so they prohibited vehicular traffic altogether.

The ever increasing use of vehicles in trade and commerce made it proportionately difficult to resort to such drastic curtailment of travel and parking privileges. When it became evident that some provision would have to be made to control travel and parking, there were attempts at regulation. On May 22, 1812, Lord Ellenborough ruled in a

---

<sup>3</sup>"Park-O-Meters Start a Controversy: Oklahoma City Split Into Two Camps," New York Times, July 21, 1935, Sec. 2, pp. 1 and 5.

<sup>4</sup>Lewis R. Hogan, "Metered Parking Clears Congested Streets," American City, LXI (December, 1946), p. 117.

British court that a stage coach should not park longer than forty-five minutes on a public highway. He maintained that parking was a nuisance and that no one had the right to make a stable yard of the king's highway.<sup>5</sup> This was one of the first attempts to set a time limit on parking. While no effort was made at this time to facilitate efficient enforcement, Lord Ellenborough recognized that a problem existed and attempted to find an equitable solution.

As time passed the population of the world increased, and this fact created new transportation demands that were partially satisfied by the ever-increasing number of vehicles. The invention of the horseless carriage foretold of a new and more efficient means of transportation. The United States adopted the automobile quickly, and soon it began to replace animal-drawn vehicles as the principle mode of transportation. By 1922 the United States could boast of having 85.6% of the world's automobiles.<sup>6</sup> When the first official estimate of the number of motor vehicles in the United States was made by the Bureau of Public Roads in 1913, it was pointed out that Americans owned 1,258,062 cars and trucks. Only seventeen years later this number had increased over twenty-one times to a total of 26,545,287.<sup>7</sup>

While the number of automobiles increased, the amount of space available remained constant. The automobile was faster than any

---

<sup>5</sup>Charles S. Rhyne and Charlie O. Murphy, Parking Meters - Legality - Model Ordinance Annotated (Washington, D. C.: National Institute of Municipal Law Officers, 1947), p. 6.

<sup>6</sup>"71% of World's Passenger Cars Registered in U. S." Automobile Facts and Figures, XXII (1940), p. 21.

<sup>7</sup>United States Department of Commerce, Statistical Abstract of the United States, LVIII (1936), p. 365.

animal-drawn vehicle and demanded a more sophisticated system of control to insure the safety and well-being of the public. Nowhere was this more evident than in densely populated urban areas. As the cities grew in size and population, the demands on the center of each city increased proportionately. The amount of space available in the downtown area was relatively unchanged. Streets were paved, which made it easier for the motorist to travel, but he still faced the problem of congestion. This situation was compounded when the motorist parked his automobile. The parked automobile was an obstruction to maximum freedom of passage on streets, and this made the congestion even more acute on well-traveled streets. In an attempt to alleviate this problem, many cities placed a time limit on curb parking.<sup>8</sup>

Oklahoma experienced a phenomenal increase in the number of automobiles during this period along with other states. The first count of motor vehicles in Oklahoma conducted in 1913 estimated about 3,000 motor vehicles of all types. By 1930 the number had increased 183 times to over 550,000.<sup>9</sup>

Oklahoma City, the largest city in Oklahoma, was growing rapidly in this period and was becoming a large metropolitan area. One of her more pressing problems was how to deal with an ever increasing number of autos in a limited downtown area. By 1935 Oklahoma City alone accounted for nearly 10% of the motor vehicle registrations in the

---

<sup>8</sup>Hawley S. Simpson, "When, Where and How Should Parking Be Restricted," Institute of Traffic Engineers Proceedings for 1938 (Chicago, Illinois Institute of Traffic Engineers, October, 1938), p. 28.

<sup>9</sup>United States Department of Commerce, Statistical Abstract of the United States, LVIII (1936), p. 365.

state.<sup>10</sup> Her status as the state capital and the leading commercial center in the state brought many visitors to the downtown area daily, and this compounded the problem. The city administration fixed time limits on downtown curb parking in an attempt to facilitate faster auto parking turnover. Once the time limits were set, there remained the problem of enforcement. Traffic patrolmen attempted to keep an accurate check of parking time by chalking the tires of cars parked in time zones. If the automobile was not moved in the prescribed length of time, the patrolman could tell by the position of the chalk on the tire. The parker was given a traffic ticket for this violation by the traffic officer. This system would have worked if all motorists had honestly tried to observe the time limits. It soon became evident that there were flagrant violations of this system, but it was difficult to stop these violations. It was easy to remove the chalk marks or move the automobile, and this destroyed the evidence of a parking violation.<sup>11</sup>

By 1932 the problem of downtown parking in Oklahoma City seemed insoluble. A survey indicated that police attempts to enforce the parking time limits were only between 5 and 10% efficient. The Oklahoma City Chamber of Commerce was understandably concerned with this dilemma. In 1932 Carl C. Magee was appointed chairman of the Traffic Committee of the Chamber of Commerce. Magee took his

---

<sup>10</sup>"City Automobile Registration, Street Mileage, Population and Area, 1935," Automobile Facts and Figures, XVIII (1936), p. 81.

<sup>11</sup>Interview of author with H. G. Thuesen, Stillwater, Oklahoma, June 14, 1967.

appointment seriously and was determined to find a solution to the problem.<sup>12</sup>

Magee was well known locally and had some fame nationwide. He had testified before the United States Senate Public Lands Committee on the personal activities of Secretary of the Interior Albert Fall and his involvement in the Teapot Dome Scandal. Magee's testimony was partially responsible for the Teapot Dome exposure.<sup>13</sup> At the time of his involvement with Teapot Dome, Magee was a newspaperman in Albuquerque, New Mexico. He attempted to expose corruption in the New Mexico court system and was arrested for libel and contempt. New Mexico Judge D. J. Leahy, one of the principals in the corruption charges, heard the cases and imposed fines and sentenced Magee to a prison term. Magee, however, was pardoned by the governor of New Mexico. In 1925 Judge Leahy met Magee in a Las Vegas hotel and knocked him down. Magee pulled out a revolver and shot at Judge Leahy, but killed an innocent bystander. This time Magee went on trial for manslaughter, but he was acquitted. In 1927 he left New Mexico and came to Oklahoma City.<sup>14</sup> He started a weekly newspaper, The Oklahoma News, and was its editor in 1932.<sup>15</sup>

Magee realized that an entirely new approach would have to be made to the parking problem. Reliance on the existing mechanics of

---

<sup>12</sup>Louis W. Heaver to James B. Furrh, May 11, 1953, Oklahoma City Chamber of Commerce Archives, Oklahoma City, Oklahoma.

<sup>13</sup>Burl Noggle, Teapot Dome: Oil and Politics in the 1920's (Baton Rouge, Louisiana: Louisiana State University Press, 1962), pp. 68-69.

<sup>14</sup>"Parking: Slot Machines Now Sell Curb Space in Five Cities," Newsweek, VII (March 7, 1936), pp. 36 and 38.

<sup>15</sup>Gerald A. Hale, "The Park-O-Meter Story," manuscript article in author's possession, p. 1.

enforcement had proved unsatisfactory, and there was no indication that there was any chance for improvement in the foreseeable future. Magee turned to the idea of a mechanical device as a possible solution to the problem. He approached a government mechanic and asked him to make a meter that would remedy the situation. The mechanic gave up in two or three weeks.<sup>16</sup> He then hired a local machinist to build a timing device that would note the time each parker spent in a metered zone. A rough model was constructed, but it was not satisfactory.<sup>17</sup>

Magee realized that his parking meter idea was good. All he needed was a machinist capable of constructing a workable model. He decided to contact his old friend, Dean Phillip S. Donnell of the Oklahoma State University College of Engineering, and discuss the problem.<sup>18</sup> Dean Donnell gave a luncheon in the latter part of 1932, and invited Magee and members of the College of Engineering faculty. It was at this luncheon that Magee first met Professor H. G. Thuesen who was later to have such a vital part in the development of the parking meter. Magee discussed the problem at the luncheon, but nothing definite was decided at this first meeting.<sup>19</sup>

On a subsequent automobile trip to Perry, Oklahoma, Magee conceived the idea of a coin operated signal device which would provide reliable

---

<sup>16</sup>"Device Contest is Launched by Capital Editor," Oklahoma State University, Daily O'Collegian, January 8, 1933, p. 1.

<sup>17</sup>Ibid.

<sup>18</sup>Interview of author with Thuesen, Stillwater, Oklahoma, June 14, 1967. Until 1957, Oklahoma State University was known as Oklahoma Agricultural and Mechanical College, and the College of Engineering was known as the School of Engineering.

<sup>19</sup>H. G. Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV (Summer, 1967), pp. 114-115.

evidence of time spent in a timed parking zone. There were further meetings between Magee and faculty members of the Oklahoma State University College of Engineering. Dean Donnell attended these meetings along with engineering faculty members O. M. Smith, E. C. Baker, L. E. Hazen, DeWitt Hunt, A. Naeter, Ren G. Saxton, Phillip Wilbur and Thuesen. At these meetings Magee conveyed his idea of a parking device to those present.<sup>20</sup>

At one of these conferences Magee presented a novel proposal. He wanted to sponsor a contest for engineering students of Oklahoma State University to develop a parking meter. He suggested that the contest be divided into two parts. The first competition would be to develop a design and the second to construct a working model. Magee gave Dean Donnell \$500 to finance the contest and presented his crude model of an element of a parking meter. \$400 was to be offered as prize money and \$100 would be utilized to provide materials.<sup>21</sup>

Dean Donnell announced the opening of the competition on January 4, 1933. \$160 in prize money was offered in the design contest: \$75.00 for first place, \$40.00 for second place, \$20.00 for third place, \$15.00 for fourth place, and \$10.00 for fifth place. The remaining prize money was designated for the working model competition.

The contest committee was composed of Professor Hunt, Head of the Department of Industrial Arts Education, chairman; Professor Thuesen, acting Head of the Department of Industrial Engineering; and Professor

---

<sup>20</sup>Ibid., p. 115.

<sup>21</sup>Ibid., pp. 115 and 117.

Baker, Head of the Department of Mechanical Engineering. The design contest was to end on January 31, 1933.<sup>22</sup>

On January 7, 1933, Magee met with the applicants in room 208 of the Old Engineering Building, now Gundersen Hall, and outlined what he expected from the contest. He emphasized that the meter must be small, attractive, and lend itself to low cost construction. A lever was to be incorporated into the design to facilitate winding the clock mechanism. He mentioned the long-range financial benefits a device of this type would contribute to a city's treasury. There were thirteen applicants at this meeting, and six of them worked as three teams.<sup>23</sup>

Magee's parking meter element was placed in the office of Mary M. Graves, reference librarian of the College of Engineering for the use of the contestants. The contestants often came to view the element and the patent papers accompanying it. The design competition progressed satisfactorily and the students put in many hours of work.<sup>24</sup> The deadline was extended to February 3, 1933, and all entries were submitted by 6:00 p.m. on that date.<sup>25</sup>

The contest judges were Oklahoma City engineers Carl Boener, Clair Drury, S. L. Rolland, Ward Sherman and A. E. Phillips. They met with the committee on Saturday, February 4, 1933, in the offices of the Oklahoma Gas and Electric Company in Oklahoma City and chose the

---

<sup>22</sup>"Engineers to Compete in Carl Magee Parking Device Contest," Oklahoma State University, Daily O'Collegian, January 4, 1933, p. 3.

<sup>23</sup>"Device Contest is Launched by Capital Editor," *ibid.*, January 8, 1933, p. 1.

<sup>24</sup>"Aggie Engineers Work on Device," *ibid.*, January 14, 1933, p. 1.

<sup>25</sup>"Contest Winners Will be Picked," *ibid.*, February 4, 1933, p. 1.



winning designs. Victor L. Rupe emerged as the winner of this phase.<sup>26</sup>

The working model competition was to start immediately, but inclement weather, which prevented Magee from meeting with the contest committee, caused its start to be postponed. Professor Thuesen began working on two models, one with the signal device on the outside and the other with the signal device enclosed in the meter. This was done to provide the students with a guide for their models.<sup>27</sup>

Magee was able to meet with the committee on February 11, 1933, and he approved the design with the signal device enclosed, which Thuesen had drawn from the diagrams submitted by the students. It was adopted because Magee and the committee believed it would be more weatherproof. The College of Engineering provided the contestants with drawings of this design, and the students based their models on these drawings.

The entrance deadline was set for February 17, 1933, and the contest was to end on April 1, 1933.<sup>28</sup> The entrance date was later extended one week to allow more students to participate.<sup>29</sup> Eight students constructed models in the contest. To allow the contestants more time, the final deadline was tentatively extended to May 6, 1933.

At first progress was not good, but the contest continued. The students resorted to using old alarm clocks to perfect their timing

---

<sup>26</sup>"Rupe is Winner of Carl Magee Design Contest," *ibid.*, February 5, 1933, p. 1.

<sup>27</sup>"Deadline is Set Up in Contest," *ibid.*, February 11, 1933, p. 3.

<sup>28</sup>"Parking Contest Deadline Set Up," *ibid.*, February 12, 1933, p. 4.

<sup>29</sup>"Deadline Extended in Magee Device Contest," *ibid.*, February 18, 1933, p. 4.

mechanisms.<sup>30</sup> The model competition was called to a close on May 4, and that evening the entries were judged. Lloyd Goodwin won the first prize of \$100, but none of the models were sophisticated enough to insure smooth operation. At this point Thuesen began to take an active part in the development of a workable parking meter model.<sup>31</sup>

Thuesen was well qualified to build the model. He was a graduate of Iowa State University and held a Professional Degree and a Master's Degree in Mechanical Engineering.<sup>32</sup> At the age of sixteen he had developed a speed indicator, which used a timing device, and obtained a patent on it.<sup>33</sup> He spent some time working in industry and taught at the University of Colorado before coming to Oklahoma State University in 1921. In 1933 he was an associate professor and acting Head of the Department of Industrial Engineering.<sup>34</sup>

He sent a letter to Magee informing him that the models were not wholly satisfactory and that an operational model would need more

---

<sup>30</sup>"Old Alarm Clocks are Still Needed by Carl Magee Contest Entries," *ibid.*, April 27, 1933, p. 3.

<sup>31</sup>Thuesen to Carl C. Magee, May 5, 1933, H. G. Thuesen Collection, University Archives, Oklahoma State University Library, Stillwater, Oklahoma.

<sup>32</sup>M. R. Lohmann to Chairman, Awards Nominations Committee, American Institute of Industrial Engineers, October 8, 1963, Thuesen Collection, University Archives, Oklahoma State University Library. At the time, Iowa State University was known as Iowa State College.

<sup>33</sup>United States Patent Office, Official Gazette, CCXX (November, 1915), p. 430.

<sup>34</sup>Lohmann to Chairman, Awards Nominations Committee, American Institute of Industrial Engineers, October 8, 1963, Thuesen Collection, University Archives, Oklahoma State University Library.

work.<sup>35</sup> Thuesen decided that he would ask a promising engineer to help him develop a better model. He thought of a former student, Gerald A. Hale, who was a 1927 graduate of Oklahoma State University and was at that time employed as an instructor in the Department of Mechanical Engineering. Hale had worked with Thuesen on a machine to increase output in hooking rugs for a government sponsored student aid project. The machine was a success although the rug hooking project failed. Thuesen found that Hale was an outstanding engineer, and they worked well together.<sup>36</sup>

Hale agreed to work with Thuesen primarily for the experience and the pleasure of seeing the parking meter project succeed. They began their efforts in May, 1933, and all of the work took place in the Old Engineering Building on the Oklahoma State University campus. The design of the meter was characterized by three main points: (1) the signal was enclosed in a window through which it was visible, (2) the last coin deposited was visible through a window to guard against attempts to cheat the meter, and (3) there was provision to accumulate energy supplied by the operator turning a lever.

It took Thuesen and Hale about three weeks to design the mechanism.<sup>37</sup> The two engineers called Magee when they completed the design, and he came to Stillwater to view the drawings. He quickly grasped the importance of the salient features and was favorably impressed. He

---

<sup>35</sup>Thuesen to Magee, May 5, 1933, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>36</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, p. 121.

<sup>37</sup>Ibid., pp. 121 and 123.

asked Thuesen how long it would take to build a model of the design and how much it would cost. Thuesen informed him that it would take about ten days and would cost about \$100. Magee told Thuesen and Hale to go ahead and make the model and contact him in Albuquerque, New Mexico, when they had completed the project.

Thuesen and Hale began working on the model the next day. The actual construction was done in the Engineering Shops Building on the Oklahoma State University campus. They completed the model in ten days. All the interior parts were constructed by the two engineers. A local plumber made the case, and a Yale lock was used to secure it. This model came to be known as the "Black Maria" and is presently on display in the Department of Industrial Engineering at Oklahoma State University.

Thuesen attempted to telephone Magee at Albuquerque, but he was unable to contact him. Failing to reach Magee after repeated attempts, Thuesen and Hale decided to find out how much it would cost to manufacture the parking meter. They prepared drawings of the model and submitted them to various manufacturing companies. They asked the companies to give them an estimate of the cost of constructing manufacturing tools necessary to make each part, as well as the cost of producing enough of each part to construct 1,000 meters.<sup>38</sup> The Century Electric Company of St. Louis, Missouri, provided them with a complete cost estimate. The company was willing to do this because there was a chance for them to get the construction contract, and they were much in need of new business during the years of the Great

---

<sup>38</sup> Ibid., pp. 123 and 125.

Depression.<sup>39</sup>

Thuesen finally contacted Magee in the early fall of 1933, and Magee agreed to come to Stillwater to look at the model. Magee detested doing business over the telephone or writing letters and tried to confine his activities to personal conferences. When he saw the "Black Maria," he was favorably impressed and asked the engineers to prepare a cost estimate immediately. They presented him with the estimate prepared by the Century Electric Company, and he was delighted with their foresight.

During the Christmas holidays of 1933, Thuesen traveled to Milwaukee, Wisconsin, and Chicago, Illinois, to talk with prospective parts suppliers for the parking meter. Thuesen gave his report to Magee, and together they decided to employ a Sand Springs, Oklahoma, machinist named Adolph Schillinger to do further work on the model.<sup>40</sup> Schillinger had a fairly well-equipped shop and used ingenious methods, but his efforts were unsatisfactory.<sup>41</sup>

In the early summer of 1934 Magee and Thuesen went on a trip to meet with prospective manufacturers of the parking meter. They talked with Schillinger in Sand Springs and went from there to Kansas City, Missouri, where they talked to a die caster and a slot machine manufacturer, but they did not accomplish any tangible results. They proceeded to St. Louis and had a conference with officials of the Century

---

<sup>39</sup> Interview of author with Thuesen, Stillwater, Oklahoma, June 28, 1967.

<sup>40</sup> Tulsa City-County Library to author, March 5, 1968, in author's possession.

<sup>41</sup> J. B. McGay to author, August 14, 1967, in author's possession.

Electric Company. Century Electric assured them that their company could build both the tools and the parts necessary to undertake the venture. With this information Magee and Thuesen returned to Oklahoma.

Before embarking on the trip, Thuesen had tried to contact a Tulsa firm, the Nic-O-Time Company. This company had constructed timing devices used for exploding nitroglycerin in oil wells, but by early 1934 the firm was no longer in business.<sup>42</sup> After Magee and Thuesen visited Schillinger in Sand Springs, Schillinger decided to sell the information that Magee was looking for someone to manufacture parking meters. He contacted J. B. McGay and G. E. Nicholson, the owners of Macnick Company which had been formed in 1932 and had replaced the Nic-O-Time Company. He offered to sell them the name of a man who wanted an unspecified item developed and produced. McGay and Nicholson paid Schillinger \$50.00 for this information. They contacted Magee and made an agreement with him to produce his parking meter.<sup>43</sup>

Magee raised enough capital to start his own corporation. He acquired the necessary funds from 125 businessmen and incorporated the Dual Parking Meter Company.<sup>44</sup> The offices of the company were located in the Commerce and Exchange Building in Oklahoma City.<sup>45</sup> The Dual Parking Meter Company was created primarily to promote and sell parking meters, while their manufacture was carried out by the Macnick Company

---

<sup>42</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, p. 127.

<sup>43</sup>McGay to author, August 14, 1967, in author's possession.

<sup>44</sup>"Parking: Slot Machines Now Sell Curb Space in Five Cities," Newsweek, VII, pp. 36 and 38.

<sup>45</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, p. 132.

of Tulsa. The parking meters were not actually produced in Oklahoma City until after World War II, and then by a new firm, the Magee-Hale Park-O-Meter Company. By this time the Dual Company had been sold to the Union Metal Company of Canton, Ohio.<sup>46</sup>

Magee was the president of the Dual Parking Meter Company, and Virgil Brown and H. L. Eddy were his aides.<sup>47</sup> Later, Hale joined the firm. In 1936, R. J. Benzel, Vice President of the Southwestern Bell Telephone Company, became executive vice-president of the company.<sup>48</sup> After agreeing to manufacture the meters, McGay and Nicholson bought some stock in the company.<sup>49</sup>

The name chosen for the parking meter was the Park-O-Meter. However, it was discovered not long afterwards that the name "Park-ometer" was protected by a trademark. Magee tried to secure a release of this trademark, but his efforts were unsuccessful.<sup>50</sup> By 1937 the meters were known as "Dual" after the Company.<sup>51</sup> The trademark "Parkometer" was purchased during World War II, and when the new company was formed after the war, the trademark "Park-O-Meter" was used

---

<sup>46</sup>Hale, "The Park-O-Meter Story," manuscript article in author's possession, p. 5.

<sup>47</sup>Interview of author with Thuesen, Stillwater, Oklahoma, June 14, 1967.

<sup>48</sup>"Benzel to Quit Phone Job, Join Parking Meter Firm," Daily Oklahoman, September 16, 1936, p. 15.

<sup>49</sup>McGay to author, August 14, 1967, in author's possession.

<sup>50</sup>Hale, "The Park-O-Meter Story," manuscript article in author's possession, p. 3.

<sup>51</sup>"Toledo Installs Automatic Parking Meters," American City, LII (January, 1937), p. 104.

on the Magee-Hale meters.<sup>52</sup>

When the Macnick Company agreed to manufacture parking meters for the Dual Parking Meter Company, they decided to modify the original Thuesen-Hale model. This decision was based primarily on its adaptability to the production equipment possessed by the Macnick Company. The original model had been designed to be produced with standard machines requiring a minimum of initial tool cost. However, the Macnick Company had produced bomb timers and recording meters. They were one of the few firms in the area equipped with automatic lathes and punch presses necessary to produce these products. The Macnick Company developed a model which could be manufactured by using predominately punch press sheet metal parts.

The model was quite similar in its concept to the original Thuesen-Hale model. It used an enclosed signal which was visible through one window and provided another window through which the coin last deposited could be seen. One of the flaws in this model was that it did not require the operator to complete the winding cycle. Thus, someone could purposely turn the handle only part of the way through the cycle and make the meter appear to be operating. The operator could manipulate the handle so that the signal flag would be up, but the coin would remain in the machine and could be used repeatedly to operate the meter.

Thuesen and Hale met with McGay and Nicholson and pointed out the flaws in the new model. The paramount problem was that the design did not cause the operator to store energy necessary to drive the mechanism

---

<sup>52</sup>Hale, "The Park-O-Meter Story," manuscript article in author's possession, p. 6.



through its cycle without completely turning the handle. McGay and Nicholson were quick to recognize the flaws, and they recommended changes in the Macnick design. When these changes were incorporated in the design, they partially overcame its shortcomings.<sup>53</sup> The first parking meters installed were based on this model. The Macnick Company set up their plant to manufacture this type of meter and the Dual Company began their quest for a trial installation.

The creation of a new invention is an achievement in itself, but in many instances it has been quite difficult to persuade the public to give it a meaningful trial. Fortunately, conditions were excellent for the acceptance of the parking meter. Motorists in the United States had been enduring intolerable parking conditions for years, and they were beginning to look to new methods to solve the problem. Also, city governments were in need of additional sources of revenue during these years of the Great Depression, and the parking meter would alleviate this problem in part. Magee recognized these facts and decided to attempt to set up a test installation in Oklahoma City.

Oklahoma City was experiencing the same problems that were common in most large cities during this period. In addition to the parking situation in the downtown area, the city was experiencing a steady shrinkage in the valuation of her tax base. In 1931 the valuation of real and personal property in Oklahoma County was assessed at \$169,774,658. By 1934 the assessed valuation of this property had dropped to \$119,142,466. The assessed valuation of public service companies in Oklahoma County in 1931 was \$31,392,103. By 1934 their

---

<sup>53</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, p. 130.

assessed valuation had plunged to \$24,401,306. This meant that the tax base of property and public utilities had shrunk 28.8% in only three years. This rapid drop in the tax base left the city administration in a critical position. As the amount of tax money decreased, the city could revert to deficit spending and continue to maintain all the ordinary services performed before the fall in valuation, drastically curtail services and stay within its budget, or look for new sources of income.

Oklahoma City chose the last method. There was always the possibility that the state could aid the city through the crisis. However, the total assessed tax base in Oklahoma had dropped 28.3% in the same three-year period.<sup>54</sup> The federal government was making loans to cities in this period, but to be in a favorable position to receive a federal loan, it was imperative that Oklahoma City pay its debts in an orderly manner. Oklahoma City maintained this policy, and by 1935 it was one of the five soundest municipal corporations in the nation.<sup>55</sup>

It was amazing that the city could boast of these facts. While the city administration was paying off its debt, it was collecting taxes on a steadily decreasing base. In addition, the levy had dropped \$5.23 per \$1,000 assessed valuation in 1934 alone. The city's population was increasing, but not fast enough to warrant this decrease in

---

<sup>54</sup>Oklahoma Tax Commission, Report of the Oklahoma Tax Commission - from its Creation January 19, 1931 to July 1, 1931; and for the Three Fiscal Years Ending June 30, 1932, 1933 and 1934 (Oklahoma City, Oklahoma: Harlow Publishing Company, 1934), pp. 157-171.

<sup>55</sup>"Bond Debt Cut Puts City in Nation's Top Financial Rank," Oklahoma City Times, April 19, 1935, p. 18.

the levy.<sup>56</sup>

The city manager who was directing this masterful manipulation of the city's revenues was Orval M. Mosier. He was able to effectively utilize existing funds. He was aided by provident state supreme court rulings which released over \$300,000 to the city's treasury in the early 1930's. However, by the end of 1934 the city was faced with the problem of using all of its surplus to maintain services in 1935, or seeking new sources of revenue.<sup>57</sup>

Mosier could have recommended a general tax levy, but he was reluctant to resort to this method.<sup>58</sup> He turned instead to the oil companies which operated pipe lines and wells within the city limits. A heavy pipe line tax was imposed on the Oklahoma Natural Gas Company, and this tax alone accounted for over \$30,000 a year in increased revenue. He proposed a \$250 a year tax on each oil well operated within the city limits. However, the city council, after hearing arguments from the oil companies, agreed on a \$100 a year tax on each well. Mosier's plan would have netted the city \$70,000 a year, but the compromise tax would only net \$27,700. The city needed \$200,000 a year in new revenue, and the two new sources would bring in less than \$60,000. Mosier could look to two additional new sources of revenue, an extended sewer tax and parking meters.<sup>59</sup>

---

<sup>56</sup>Ibid.

<sup>57</sup>"Mosier Faces Problem of Finding New Revenues to Replace Shrinkage in Income," Daily Oklahoman, April 29, 1935, p. 9.

<sup>58</sup>"Mosier Hopes to Keep City Without Levy," *ibid.*, April 21, 1935, Sec. A., p. 9.

<sup>59</sup>"Mosier Faces Problem of Finding New Revenues to Replace Shrinkage in Income," *ibid.*, April 29, 1935, p. 9.

The sewer tax on users outside the city limits was aimed primarily at the packing houses. Mosier voiced the opinion that if the packing companies used the sewers, they should be charged for the privilege. The sewer tax would net \$25,000 a year, but that still left the city far below the needed \$200,000 in new revenue.<sup>60</sup>

Mosier had been planning to utilize parking meters for some time. He recognized their value and recommended that the city council act on an ordinance permitting the use of parking meters by the municipal government of Oklahoma City. On November 20, 1934, the city council directed the municipal counselor to prepare a suitable ordinance providing for the installation of about 200 parking meters in downtown locations.<sup>61</sup> When Mosier was faced with the problem of finding new sources of revenue in April, 1935, he was able to submit this ordinance to the city council. It was introduced to the council on April 25, 1935. No action was taken at this meeting, and it was deferred to the next council meeting.<sup>62</sup>

The council that would vote on the ordinance was somewhat more favorable to Mosier than the council that had instructed the city counselor to draw up the ordinance. In early April, 1935, G. A. Stark, the leader of the opposition to Mosier, was defeated in the city's

---

<sup>60</sup>T. T. Johnson, "Opposition to Mosier Regime Still Evident as Revenue Measures Draw Fire," *ibid.*, April 22, 1935, p. 12.

<sup>61</sup>"Ordinance is Ordered on Parking Meters," *Oklahoma City Times*, November 20, 1934, p. 1.

<sup>62</sup>"Council Faces Heavy Docket," *Daily Oklahoman*, April 23, 1935, p. 2.

election.<sup>63</sup> Without Stark there was not much organized resistance in the council. On April 26, 1935, Mosier let the fact that he intended to ask for a five mill levy leak to the newspapers.<sup>64</sup> The reaction by council members was immediate. They countered with the proposal that they would wait until the budget proposals were announced and until it was definitely known how much money the city would receive from federal funds before they would commit themselves on any levy increase that would raise taxes \$1.50 for each \$1,000 in property valuation.<sup>65</sup> The day the council met, Mosier announced in the newspaper that he was seeking new ways to avoid an ad valorem levy for general fund purposes. He again advocated the use of indirect taxation with the income derived from the new sewer tax and the installation of parking meters. He estimated that the parking meter would bring \$75,000 to the city's coffers the first year.<sup>66</sup>

On May 2, 1935, the parking meter ordinance was read for the second time before the Oklahoma City council. It was passed by a vote of five to three. It called for the installation and regulation of Park-O-Meters and provided for a penalty for violations. The wording of the ordinance used the term "Park-O-Meter," the Dual Parking Meter

---

<sup>63</sup>Johnson, "Opposition to Mosier Regime Still Evident as Revenue Measures Draw Fire," *ibid.*, p. 12.

<sup>64</sup>"Mosier 10 Year Plan Faces Council Test on Levy Issue," Oklahoma City Times, April 26, 1935, p. 23.

<sup>65</sup>"Council May Get Two City Budget Proposals in July," *ibid.*, May 2, 1935, p. 4.

<sup>66</sup>"Mosier Favors General Fund Levy Next Year Unless New Revenues are Found," Daily Oklahoman, May 2, 1935, p. 12.

Company's trademark.<sup>67</sup>

Mosier's victory was not complete on the parking meter issue. Within a few days opposition to his plans began to develop, but he was not seriously challenged.<sup>68</sup> He did not press for the levy increase once the parking meter ordinance had been passed. However, Mosier's master plan had called for the eventual installation of 1,000 parking meters, and it was on this basis that he had anticipated an additional \$75,000 in new revenue.<sup>69</sup>

The test plan provided for the installation of 200 meters in the downtown area of Oklahoma City. The parking meters would be set up on fourteen blocks in the city's most congested area.<sup>70</sup> It set the parking fee at five cents for the use of each timed zone. Each violator would be required to pay a \$20.00 police court fine under the original ordinance.

Speculation on just how the parking meters would work was made a short time after the ordinance was passed. At first the newspapers reported that a red flag was visible in the glass window, and when a motorist deposited a nickel, a green flag popped up and replaced it until the parking time elapsed.<sup>71</sup> However, they soon reported that

---

<sup>67</sup>Oklahoma City, Oklahoma, "Minutes of the Meeting of the City Council, May 2, 1935," Book 9, p. 234, manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

<sup>68</sup>Horace Thompson, "Mosier's Job Called Secure Until Autumn," Oklahoma City Times, May 8, 1935, p. 13.

<sup>69</sup>"Parkers Will Pay, Lawyers Will Litigate," Daily Oklahoman, May 8, 1935, p. 1.

<sup>70</sup>"Parking Meters to be Installed in City at Once," Oklahoma City Times, May 7, 1935, p. 1.

<sup>71</sup>Ibid.

there was no red flag, and only a green flag would be used to signal that the motorist had paid his parking fee. Magee conceived the idea of a sealed tube in the meter which would collect all deposited coins and be removed while sealed by a city employee and transported to the treasurer's office.<sup>72</sup>

The parking meter made its first public appearance in Oklahoma City on May 8, 1935.<sup>73</sup> While Oklahoma City's residents were preparing for this novel device, Magee was preparing a contract for presentation to the city council. The city advertised for bids on parking meters on June 12, 13 and 14, 1935, and the Dual Parking Meter Company submitted its bid on June 17, 1935. The company agreed to sell parking meters to the city for \$23.00 each, and the payments would be made at thirty-day intervals from receipts from the meters.<sup>74</sup> The city council accepted the bid by a vote of five to three, but did not agree to pay interest on the unpaid balance.<sup>75</sup>

Although the contract authorized the purchase of 225 parking meters, only 175 were actually installed.<sup>76</sup> The initial installation

---

<sup>72</sup>"Parkers Will Pay, Lawyers Will Litigate," Daily Oklahoman, May 8, 1935, p. 1.

<sup>73</sup>"Here's the Park-O-Meter in Action - For a Nickel a Park," *ibid.*, May 8, 1935, p. 2.

<sup>74</sup>Oklahoma City, Oklahoma, "Contract Between The Dual Parking Meter Company and The City of Oklahoma City, July, 1935," manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

<sup>75</sup>Oklahoma City, Oklahoma, "Minutes of the Meeting of the City Council, July 2, 1935," Book 9, p. 429, manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

<sup>76</sup>"Park Meters Cost Lacking," Daily Oklahoman, July 21, 1935, p. A-9.

was made on July 16, 1935. This event caused a storm of controversy which put the practicability and legality of the device to a severe test in the months ahead.<sup>77</sup>

Man has the ability to adapt to different situations, and when his plight becomes intolerable, he begins to seek alternatives. The simplest method to alleviate a nuisance is to prohibit it. When this is impossible, or not practical, he attempts to control the problem. By 1932 the parking situation had become unbearable in most of the large cities in the United States. The methods used by city administrations to regulate parking were unsuccessful and a fresh approach was needed. It only remained for someone to grasp the complexity of the problem and evolve a general idea of what was required to solve the dilemma. It was not unusual that man turned to a machine to aid him in relieving this problem.

What was Magee's vague idea in 1932 had advanced into a workable parking meter by 1935. It became a reality through the efforts of many individuals who held the opinion that it was possible to create a machine to overcome a problem caused by man's lack of foresight. No one expected the first parking meter to be perfect. Therefore, the trial installation in Oklahoma City was vital in proving whether they would, in fact, be adaptable to the needs of a modern city. The original model from the drawing boards at Oklahoma State University, modified by the Macnick Company, was the finished product that Oklahoma City tested. The men who stood behind the development of the parking meter were confident and predicted that the invention would be accepted.

---

<sup>77</sup> Julia Baughman, "Park-O-Meter - Yea? Bah!," Oklahoma City Times, July 16, 1935, pp. 1-2.



Optimism alone does not insure success. In the final analysis, the people of Oklahoma City and their city council would determine the future of the parking meter.

## CHAPTER II

### PARKING METER LEGAL INVOLVEMENTS

When parking meters were installed on Oklahoma City streets, opponents of the devices maintained that they were an illegal infringement on the individual's right to free use of the public streets. Favorable court rulings negated this opinion. Therefore, more complex legal strategies were used in attempting to remove parking meters in Oklahoma City and throughout the United States. In some cases the defenders of the parking meters lost court decisions, but in most instances the meters were found to be legal.

Magee had anticipated court actions when he began his development of the parking meter. He was an attorney and believed that they would be declared illegal because city governments would be charging rent for the use of public streets. He decided to approach the problem from another direction. He maintained that parking meters could be utilized to regulate traffic and for this purpose a small fee would be legal.<sup>1</sup>

When the Oklahoma City council instructed the municipal counselor to prepare a suitable ordinance providing for the installation of parking meters, some Oklahoma City residents did not think that the meters would be legal. Attorneys Ed S. Butterfield and R. R. McCormack announced that they would file an injunction suit if the city planned

---

<sup>1</sup>Interview of author with Thuesen, Stillwater, Oklahoma, June 14, 1967.

to install parking meters.<sup>2</sup>

Butterfield became the leader of the opponents to the parking meter ordinance as it became evident that the ordinance would actually be passed. When the city council passed the measure in May, 1935, Butterfield changed his tactics. He decided not to contest the ordinance, but to confine his opposition to the legality of the city paying for parking meters. He planned a two-pronged attack on the meters. First, he would file a suit against city officials to prevent them from paying for parking meters and, second, he would file a suit against Magee to prevent him from collecting any money to pay for the parking meters. Butterfield elected to allow the city to install the parking meters in order to build a better case.<sup>3</sup>

The opponents of the parking meters took no legal action against the meters until they were installed on July 16, 1935. However, by July, Butterfield had changed his approach and sought a temporary injunction charging that the city was attempting to levy a further tax on automobiles while it maintained that parking meter fees were used for traffic regulation. He contended that this tax was depriving automobile owners of their property without due process of law. In addition he maintained that the fees were for the sole purpose of raising revenue. A temporary restraining order was granted on July 17, 1935, by District Judge Clarence Mills on these grounds.

Now the two lines of battle were clearly drawn. The opponents of

---

<sup>2</sup>"Ordinance is Ordered on Parking Meters," Oklahoma City Times, November 20, 1934, p. 1.

<sup>3</sup>"Parkers Will Pay, Lawyers Will Litigate," Daily Oklahoman, May 8, 1935, p. 1.

parking meters had used the approach Magee had anticipated. The city could base its defense on the idea that the parking meters would be used merely to regulate parking and let the courts decide on the legality of its stand.

As soon as the restraining order was granted, City Manager Mosier ordered Police Chief John Watt to revert back to the old parking ordinance and enforce timed zone parking without using the meters. The money was collected from the meters, and they were rendered inoperative pending a court ruling on the temporary restraining order.

A hearing to determine whether the temporary restraining order should be changed to a permanent restraining order was set for July 23, 1935, in the courtroom of Judge Sam Hooker. Harlan Deupree, the city attorney, was aided by Magee's attorneys, Malcolm W. McKenzie and W. H. Brown, in preparing the city's defense.<sup>4</sup> A. P. Van Meter, assistant municipal counselor, actually represented the city at the hearing, and the defense of the ordinance was presented by Brown, who acted as special attorney for the City of Oklahoma City.<sup>5</sup> The opponents of the parking meters were represented by Butterfield, Melville F. Boddie and Harry L. Neuffer.<sup>6</sup>

The day before the hearing Butterfield served Mosier with a subpoena to appear in court the next day, but Mosier disregarded the subpoena and left for Washington, D. C., the night before the hearing.

---

<sup>4</sup>"Meter Parking 'Free' Pending Test in Court," Oklahoma City Times, July 17, 1935, p. 2.

<sup>5</sup>"Plaintiffs Claim Mosier Dodged Subpoena in Parking Meter Test Suit Today," Daily Oklahoman, July 23, 1935, p. 12.

<sup>6</sup>"Oklahoma City Autoists Plan to Fight Nickel-in-Slot Curbstone Parking Meters," New York Times, July 17, 1935, Sec. 1, p. 21.

Butterfield used this event to furnish more publicity for the hearing.<sup>7</sup>

When the hearing began the next day, the courtroom was packed with interested spectators. Judge Hooker was aided by Judges Mills, Ben Arnold and George Giddings. Butterfield based much of his case on an appeal to personal sentiment. He presented himself as a witness and attempted to create the impression that he was a model citizen. He maintained that a good citizen would only park the prescribed time in a timed zone, that if he overparked, he would gladly pay his fine, and that a parking meter was an insult to the good citizen's integrity. He maintained that charging a nickel for the use of public streets was illegal. The spectators in the courtroom applauded his attack so many times that Judge Hooker had to threaten them with eviction to maintain order.<sup>8</sup>

Brown's presentation of the city's case was in marked contrast to the tactics used by Butterfield. Brown attempted to present a case based on sound principles and did not resort to an emotional appeal to the court. He recognized the fact that this was the first case involving parking meters and that he would have to use similar precedents in order to create a strong case for the parking meter ordinance.

Brown began his defense by explaining the operation of the parking meter and pointed out that it was a progressive invention. He maintained that if there was not a need for parking meters, they would not

---

<sup>7</sup>"Plaintiffs Claim Mosier Dodged Subpoena in Parking Meter Test Suit Today," Daily Oklahoman, July 23, 1935, p. 12.

<sup>8</sup>"Cheering Throng Back Butterfield in Parking Fight," Oklahoma City Times, July 23, 1935, pp. 1-2.

have been invented. He alleged that parking was a privilege and not a right, and that the parking meters were necessary in some instances to preserve this privilege.

Brown contended that the principles of law involved were not new. Oklahoma City required the payment of license fees by individuals who desired the privilege of operating certain businesses in the city, and the same principle applied to parking meters. He argued that the city charged these fees to regulate businesses and would apply the same principle with parking meters.<sup>9</sup>

Brown was not content to limit the scope of his defense to local ordinances, but based much of his case on state statutes. He maintained that cities could establish ordinances that were not in conflict with the laws of the United States or laws of Oklahoma and would benefit trade and commerce.<sup>10</sup> He noted that a city could pass an ordinance to prevent an encroachment upon its streets.<sup>11</sup> He went on to say that the city had the right to pass ordinances that it deemed necessary for its own welfare.<sup>12</sup>

Brown turned next to the city charter and noted that the city was empowered to pass and enforce ordinances that provided for the removal

---

<sup>9</sup>W. H. Brown, "Memorandum Brief and Argument, Ed Butterfield vs. The City of Oklahoma City, July 23, 1935," pp. 1 and 3, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>10</sup>Frank O. Eagin and C. W. Van Eaton, comps., Oklahoma Statutes, 1931, (2 vols., Oklahoma City: Harlow Publishing Co., 1932), Vol. I, p. 1879.

<sup>11</sup>Ibid., p. 1883.

<sup>12</sup>Ibid., p. 1886.

of nuisances that were in conflict with the best interests of the city. He contended that overtime parkers were in this category. He quoted forty-six pertinent court decisions from all over the United States and noted in each case that the court had gone far beyond what was necessary in order to preserve a similar ordinance. He ended his defense by stating that the city had every right to charge a regulatory fee for the privilege of parking on its streets.<sup>13</sup>

The judges took one day to deliberate the case. They concluded that the city had the right to install parking meters and charge a nominal fee in order to regulate parking on its streets. However, while they maintained that parking was indeed a privilege given by the city, they contended that if the meter revenues remained as high as they were on the first day of operation, then the fee was exorbitant.<sup>14</sup>

When the court's decision was announced, Butterfield did not lose heart. He maintained that the decision was a victory for the opponents of parking meters. He was confident that the amount of revenue taken in by the meters would remain constant, and if this was true, then he would have a case. Magee laughed at this contention and commented that he could set the parking meters so they would take a different coin.<sup>15</sup>

Notwithstanding the confidence of Magee, Butterfield announced

---

<sup>13</sup>Brown, "Memorandum Brief and Argument, Ed Butterfield vs. The City of Oklahoma City, July 23, 1935," pp. 4-26, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>14</sup>Sam Hooker's decision of July 25, 1935, in Brown, *ibid.*

<sup>15</sup>"Parking Appeal Rushed, Meters Go in Use Again Friday," *Oklahoma City Times*, July 25, 1935, p. 10.

that he would appeal the decision to the Oklahoma Supreme Court.<sup>16</sup> However, Butterfield waited three months before he took any positive action. He was joined by Boddie in making an amended petition for an injunction in district court. The new petition charged that the parking meter ordinance was a revenue raising measure and not merely a regulatory measure.<sup>17</sup> The injunction was never granted and this phase of court actions against parking meters was superceded by the H. E. Duncan case in 1937.<sup>18</sup>

When the district court denied the opponents of parking meters a permanent injunction against the meters, they began to seek new ways to attack the meters. Paul Dillard, an Oklahoma City attorney, decided he could seek a referendum on the parking meter ordinance in the next election. He announced on July 25, 1935, that he would attempt to get enough signatures on a petition to place the ordinance on the September 24 ballot.<sup>19</sup>

Mayor J. Frank Martin agreed that Dillard had a good idea and said that he would vote for the referendum if the city council vote ended in a tie. He contended that the people should have an opportunity to vote on an ordinance as controversial as this one. However, he did not give any help to Dillard and left it up to the opponents of the meters to

---

<sup>16</sup>"Parking Meters Held Legal," New York Times, July 25, 1935, Sec. 1, p. 12.

<sup>17</sup>"Changes Made in Meter Suit," Daily Oklahoman, October 5, 1935, p. 4.

<sup>18</sup>"Parking Meters Ruled Valid by Court, But City Denied Profits," Oklahoma City Times, March 9, 1937, p. 1.

<sup>19</sup>"Parking Appeal Rushed, Meters Go in Use Again Friday," *ibid.*, July 25, 1935, p. 10.



get the necessary signatures.

When Dillard began his referendum movement, he thought that he would have to get 8,000 signatures to get his referendum on the ballot. However, the last election in Oklahoma City had been over the gas franchise for the city and only 11,000 voters had bothered to cast their ballots. This meant that Dillard would need only 3,000 signatures. Another legal question arose before Dillard submitted his referendum petition to the city council. Legally he would have had to submit his petition within thirty days of the passage of the parking meter ordinance. Although over two months had passed since the ordinance was passed, the city attorney was agreeable and allowed Dillard to submit the petition if he could get the necessary signatures.<sup>20</sup>

Dillard and his associates were successful, and on August 6, 1935, they submitted a petition containing 3,153 names which called for a referendum on the parking meter ordinance at the next election.<sup>21</sup>

However, opponents of the referendum protested and were successful in having a hearing date delayed until September 18, 1935. Dillard realized that this would not give his forces enough time to wage a successful campaign even if the council found the petition sufficient. Reluctantly Dillard dropped out of the fight on September 11, 1935. He announced that he would try to get the referendum on the next city election in April, 1937, but by that time the Oklahoma State Supreme

---

<sup>20</sup>"Mayor Will Support Move for Popular Vote on City Parking Meter Question," Daily Oklahoman, July 26, 1935, p. 4.

<sup>21</sup>"Spread of Parking Meter Seen," Oklahoma City Times, August 6, 1935, p. 1.

Court had reached a decision in the H. E. Duncan case.<sup>22</sup>

The method used to settle the question of the legality of parking meters in Oklahoma City was the arrest and conviction of individuals for violations in metered zones. Magee had decided that five cents would be the best fee to charge when he conceived the idea of parking meters. He held that the amount was sufficiently small so as to impose no hardship on the parker and yet it was enough to pay the cost of operating the meters.<sup>23</sup> However, the opponents of the parking meters did not have the same opinion. No matter how small the fee was, the principle of paying it was in fact tacit agreement that the city had the right to charge a fee for metered parking.

On the day parking meters were installed in Oklahoma City, attorneys Neuffer and Dillard spent all day violating the parking meter ordinance. However, they were not arrested.<sup>24</sup> Police Chief Watt gave orders to his men not to arrest anyone until the public got accustomed to the meters. It was obvious that the police were not going to create a test case before the expected injunction hearing took place, and Butterfield and Boddie were only able to issue threats of what they would do if anyone was arrested. Butterfield offered to pay the fine of the first arrested motorist and Boddie said that he would apply for

---

<sup>22</sup>"Parking Vote Plea Dropped," Daily Oklahoman, September 12, 1935, p. 1.

<sup>23</sup>Interview of author with Thuesen, Stillwater, Oklahoma, June 28, 1967.

<sup>24</sup>"Officers Find Nickel Parker Fickle Parker," Daily Oklahoman, July 17, 1935, pp. 1-2.

a writ of habeas corpus on the individual's behalf.<sup>25</sup>

When the temporary injunction was granted, there was some confusion in the city administration on what to do to prevent tampering with the parking meters. Pranksters found a way to jam the meters the first day of their operation, but City Manager Mosier could not find any city ordinance to deal with the problem.<sup>26</sup> However, when the permanent injunction was denied, Chief Watt announced that the parking meter ordinance forbade tampering with the meters in any way, and that the police department would arrest violators. He compared parking meters with mail boxes and fire alarm boxes and vowed to uphold the ordinance.

At the same time Butterfield announced that he would defend free of charge the first violator of the parking meter ordinance.<sup>27</sup> However, the police would not cooperate with Butterfield. They began issuing courtesy tickets which warned the motorists that they would be arrested in the future.<sup>28</sup> Magee printed an appeal in the Daily Oklahoman asking for the cooperation of the public. He pointed out the benefits of the parking meter and asked for the public's patience in the experiment.<sup>29</sup>

The first person arrested for a parking meter violation was Reverend C. H. North of the Third Pentecostal Holiness Church of

---

<sup>25</sup>"Oklahoma City Autoists Plan to Fight Nickel-in-Slot Curbstone Parking Meters," New York Times, July 17, 1935, Sec. 1, p. 21.

<sup>26</sup>"Officers Find Nickel Parker Fickle Parker," Daily Oklahoman, July 17, 1935, pp. 1-2.

<sup>27</sup>"Parking Appeal Rushed, Meters Go in Use Again Friday," Oklahoma City Times, July 25, 1935, p. 10.

<sup>28</sup>"Courtesy Tags Used on Curb Meters Today," ibid., July 26, 1935, p. 1.

<sup>29</sup>"Concerning the Park-O-Meters," Daily Oklahoman, July 26, 1935, p. 11.

Oklahoma City. Reverend North said that he was guilty, but maintained he had gone to a store to get change, and when he returned to deposit his nickel, he found a ticket on his windshield. After hearing this testimony, Police Judge Mike Foster dismissed the case.<sup>30</sup>

R. H. Avant of Clinton, Oklahoma, was the first person actually fined for a parking meter violation. He was arrested for placing a slug in a parking meter. He was fined \$11.00 for this infraction and Police Judge Foster said similar cases in the future would call for the \$11.00 fine. Avant paid his fine so there was no test case.<sup>31</sup>

On August 2, 1935, the same day Judge Foster was assessing his first parking meter fine, an event was taking place in another part of the city which could have dealt irreparable harm to the parking meters. District Court Judge Mills parked his car in front of the Tradesmen National Bank and deposited his nickel. He and his baliff went to lunch and returned in twenty-seven minutes, only to find a ticket for overtime parking. He went straight to police headquarters and explained the situation to Police Captain Tom Webb. Webb agreed that something must be wrong with the parking meter and took the ticket. Judge Mills did not pursue the matter further because of the expected amended injunction hearing that was pending.<sup>32</sup>

When Police Judge Foster suspended Mrs. C. W. Alley's \$3.00 fine for overtime parking in order to give her time to sell her chickens to

---

<sup>30</sup>"Testimony Blocks Park Meter Test Involving Pastor," Oklahoma City Times," July 30, 1935, p. 1.

<sup>31</sup>"Parker Fined for Cheating Meter," *ibid.*, August 2, 1935, p. 1.

<sup>32</sup>"Judge Mills Has Evidence in re Meter," *ibid.*, August 2, 1935, p. 1.

pay the fine, another interesting point came up. Mrs. Alley contended that two police officers told her not to put money in the parking meter because people were already paying enough taxes. Chief Watt ordered an investigation, and the case made good publicity for the opponents of parking meters.<sup>33</sup>

On October 8, 1935, Boddie was fined \$3.00 on each of two charges of not placing a nickel in a parking meter. Neuffer, who acted as his attorney, said that he would appeal the conviction to the criminal court of appeals if the county court upheld the police court conviction.<sup>34</sup> However, Boddie was really using the tactic of not placing money in the parking meter as a part of the amended petition Butterfield submitted in the injunction suit, and consequently, the Boddie case did not become a test case.<sup>35</sup>

No further action was taken to create a test case until the late summer of 1936. The test case originated as two separate cases. One involved Tom Chambers, an attorney who parked in a taxi zone, and when arrested, contended that the city did not have the right to segregate parking zones. The other involved H. E. Duncan, a sign salesman, who did not deposit a nickel in a parking meter.<sup>36</sup> Both men were committed to the city jail, and when James R. Eagleton brought habeas corpus

---

<sup>33</sup>"Watt Hears Two Policemen Knock Parking Meters," *ibid.*, August 3, 1935, p. 1.

<sup>34</sup>"Meter Conviction Heads Test Case to High Court," *ibid.*, October 8, 1935, p. 1.

<sup>35</sup>"Changes Made in Meter Suit," Daily Oklahoman, October 5, 1935, p. 4.

<sup>36</sup>"Judges Will Gang Meters," *ibid.*, September 11, 1936, p. 3.

action, it was refused.<sup>37</sup> However, the Oklahoma City police department did not feel the offenses were serious enough to warrant a police record and did not bother to keep a record of the cases.<sup>38</sup> Even though these were considered minor offenses, the stage was set for further court action.

Chambers and Duncan appealed to the District Court for a writ of habeas corpus. They had difficulty getting the court to meet and the hearing was delayed repeatedly.<sup>39</sup> Finally, they were able to get a hearing on September 25, 1936. Eagleton, acting as their attorney, declared he wanted to get a clear cut decision so that the case could be brought to the state supreme court.<sup>40</sup> Judges Hooker, Arnold, Giddings and Mills listened to the presentation of the two cases. Eagleton contended that the regulation of traffic and streets is a state-wide concern and that the municipal authorities, restricted to things local, had no right to regulate streets. The judges took the case under advisement and did not reach a decision at this time.<sup>41</sup> The District Court decided to deny the writ of habeas corpus and Duncan applied to the Oklahoma State Supreme Court for the writ.<sup>42</sup> Chambers joined Eagleton and acted as one of Duncan's lawyers in the case. The

---

<sup>37</sup>"Parking Law Faces Delay," *ibid.*, September 4, 1936, p. 3.

<sup>38</sup>Hilton Geer to author, November 2, 1967, in author's possession.

<sup>39</sup>"Parking Law Faces Delay," Daily Oklahoman, September 4, 1936, p. 3; "Judges Will Gang Meters," *ibid.*, September 11, 1936, p. 3.

<sup>40</sup>"Meter Issue is Up Today," *ibid.*, September 25, 1936, p. 3.

<sup>41</sup>"Decision is Delayed on Parking Meters," *ibid.*, September 26, 1936, p. 14.

<sup>42</sup>Roy H. Semtner to author, August 31, 1967, in author's possession.

Supreme Court acted on the case on March 9, 1937, when Duncan was denied the writ of habeas corpus. The court said in effect that parking was not such an absolute right for which the city was prevented from charging a fee. The validity of the parking meter ordinance was upheld as a regulatory measure, but the decision might have been different had the ordinance been for revenue purposes.<sup>43</sup> This was the final defeat in Oklahoma City for the opponents of parking meters. Eagleton did not push the case further and no new action was taken in Oklahoma City against the validity of parking meters. With an eye on the Great Depression, however, the court still maintained that if the fees proved to be excessive, then the parking meters were not being used primarily for regulation.<sup>44</sup> The Oklahoma City case did not decide the parking meter question statewide, and as late as 1961 the city of Lawton, Oklahoma, was involved in a court fight over parking meters.<sup>45</sup>

Oklahoma was not the only state involved in legal battles over parking meters. Before the Duncan case was decided, the Florida State Supreme Court had ruled on a similar case. Irwin W. Harkow was fined for refusing to place a coin in a Miami, Florida, parking meter, and he appealed his conviction all the way to the State Supreme Court.<sup>46</sup> On December 10, 1936, the Florida State Supreme Court upheld his conviction and based their decision on the same grounds as those used

---

<sup>43</sup>Ex Parte Duncan, 179A, Oklahoma Reports (Oklahoma City, Oklahoma: Harlow Publishing Co., 1937), pp. 356-358.

<sup>44</sup>"Parking Meters Ruled Valid by Court, But City Denied Profits," Oklahoma City Times, March 9, 1937, p. 1.

<sup>45</sup>Semtner to author, August 31, 1967, in author's possession.

<sup>46</sup>"Legislation in 1936 Favorable," New York Times, November 8, 1936, Sec. 12, Part 2, p. 5.

in the Duncan case.<sup>47</sup>

However, the legality of parking meters remained in question in some areas. The next court decision was a blow to the proponents of parking meters. The Hood-McPherson Realty Company of Birmingham, Alabama, brought suit against the City of Birmingham. It was charged that the parking meters obstructed the property owner from the right of access to his property. The Alabama State Supreme Court ruled on January 14, 1937, that parking meters denied the property owner free access to his property, and that he did not need to pay a tax when he parked his car next to his property.<sup>48</sup>

After the Duncan case in Oklahoma, most of the court decisions were in favor of parking meters. Twenty-three cases were decided in favor of parking meters before World War II, while only seven decisions were unfavorable. All the unfavorable decisions were confined to the states of Alabama, North Carolina, Louisiana, Rhode Island and Iowa.<sup>49</sup>

The parking meter was thus considered legal in most localities across the nation. This was an important step in getting city administrations to give it a trial installation. The favorable decisions still stressed the same legal point that the Oklahoma City circuit court had outlined in the original decision in July, 1935. They maintained that as long as the revenue was used to regulate traffic and was not

---

<sup>47</sup>Kenneth O. Warner, "Florida Court Upholds Miami Parking Meter Ordinance," Public Management, XIX (January, 1937), p. 25.

<sup>48</sup>Simpson, "When, Where and How Should Parking be Restricted," Institute of Traffic Engineers Proceedings for 1938 (Chicago, Illinois Institute of Traffic Engineers, 1938), p. 33.

<sup>49</sup>Rhyme and Murphy, Parking Meters - Legality - Model Ordinance Annotated, p. 8.



exorbitant, then parking meters were legal. The meter did not infringe on the individual's right to free use of the public streets. The decisions that parking meters were legal was a stimulant to city administrations which were contemplating installing the machines in their cities.

These decisions were an important first step, but the fact that the courts had decided that parking meters were legal did not necessarily mean they would be a successful solution to the parking problem. They were still in the trial stage and how they performed their mission depended on their acceptance by the motorist. The average motorist cared little about the legality of parking meters and would accept them only if they provided a method by which to overcome a vexing situation. In the months ahead it would be the motorists of cities all over the United States who would decide whether the parking meter would succeed where other methods had failed.

## CHAPTER III

### PARKING METER PROMOTION AND DEVELOPMENT

The success of a new invention is measured in part by its ability to capture the public's imagination. The promoters of parking meters were aware of this axiom and they devoted a sizeable amount of energy to capturing the public's attention just preceding and immediately after the first installation of parking meters in Oklahoma City. As early as May 8, 1935, almost two months before the first installation, the Daily Oklahoman printed a picture of Mayme Warren, a pretty Oklahoma City housewife, operating a demonstration model of a Dual Park-O-Meter.<sup>1</sup>

This brief public exposure was followed by the actual installation of parking meters. The local newspapers seized upon them as a novelty and consequently gave the parking meters free publicity in their pages. When a nine year old girl deposited a nickel in a parking meter on the first day of their use because she thought it was a gum machine, it made the front page of the Oklahoma City Times because it was humorous reading.<sup>2</sup> The public cooperated in providing publicity and before long people were playing bridge in parking spaces, and ranchers were tying their horses to parking meters. These stunts, carried out after

---

<sup>1</sup>"Here's the Park-O-Meter in Action - For a Nickel a Park," Daily Oklahoman, May 8, 1935, p. 2.

<sup>2</sup>Baughman, "Park-O-Meter - Yea? Bah!" Oklahoma City Times, July 16, 1935, pp. 1-2.

depositing the required nickel, made the newspapers.<sup>3</sup> Whenever an embarrassing situation occurred concerning parking meters, the newspaper printed humorous stories about it. For example, Marvin Shahan and R. C. Clouse parked their British-made Austin automobiles in one parking space. The dilemma facing Oklahoma City patrolman J. P. Roughton when he attempted to ticket the autos presented a hilarious situation and focused more attention on parking meters.<sup>4</sup> A motorist from Oilton, Oklahoma, submitted a poem about parking meters, and it was good enough to be printed in the Oklahoma City Times.<sup>5</sup> News about parking meters was not confined to newspapers and periodicals. Camera-man Webber Hall of the Fox Movietone News captured Ted Winneberger, a seven year old Oklahoma City resident, in the act of parking his soap box derby car at a parking meter, and this sequence made the weekly movie news film.<sup>6</sup>

These situations caught the public eye and provided publicity, but at the same time they afforded another service to the promoters of parking meters. In most instances the articles went on to explain how parking meters worked, and in this way provided valuable instruction on their use. The articles created an atmosphere that did much to counteract the bad publicity that parking meters were receiving in court fights and made people want to try them to see if they worked.

---

<sup>3</sup>"It's Pay as You Park in Oklahoma City Now," Tulsa Tribune, July 18, 1935, p. 11.

<sup>4</sup>"Bargain Rate on Parking; Two for a Nickel?" Oklahoma City Times, August 3, 1935, p. 1.

<sup>5</sup>Samuel Knapp, "Meters," Oklahoma City Times, July 22, 1935, p. 4.

<sup>6</sup>"Soap Box Driver Tries Meters, Lands in Movies," *ibid.*, July 22, 1935, p. 1.

The task of promoting parking meters was vigorously pursued by the Dual Parking Meter Company. Dual was the first company to produce parking meters and continued to be the industry's leader until it was sold. One of the main flaws in the original meter was its reliance on a manual type operation. Hale and Thuesen attempted to correct this difficulty by designing an improved model in 1935. However, the Macnick Company designed a parking meter model which incorporated an automatic operation. Magee called a meeting to discuss the merits of the two designs on December 31, 1935. McGay, Nicholson, Thuesen and Hale attended this meeting in Oklahoma City. After discussing the good and bad points of each design, it was decided to produce the automatic parking meter. Thuesen and Hale agreed that this was a good idea.<sup>7</sup> Cooperation such as this enabled the Dual Parking Meter Company to retain its industrywide leadership in the pre-World War II period. While other companies were just beginning to prepare a manual type parking meter for the market, the Dual Parking Meter Company was planning a better product for the future.

There were people who did not think that the parking meter was an invention. The Parkrite Corporation of Houston, Texas, an early competitor of the Dual Parking Meter Company, contended that the parking meter was not really an invention, but merely made use of common mechanical knowledge. The Parkrite Corporation sought an injunction against the Dual Company which was trying to prevent the sale of Parkrite meters without a patent. Federal Judge Edgar S. Vaught refused to enjoin the Dual Company on March 19, 1936, and recommended that the

---

<sup>7</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, pp. 133 and 135.

Parkrite Corporation sue for damages.<sup>8</sup> No damage suit resulted, but the ruling established the parking meter on much firmer ground. There could be no doubt that the Dual Company's patent rights were valid, and the way to produce a parking meter was to apply for a patent.

When Magee started selling parking meters, he took into consideration the feasibility of cash payments. He knew that in the depression most municipalities would be reluctant to make a large capital outlay from already exhausted revenues, so he devised a time payment plan. The arrangement was to lease parking meters to cities until the meters had paid for themselves out of parking revenues. The Dual Parking Meter Company got 85% of the income, and the city retained 15%. The city's percentage of the revenue was used to defray the cost of maintaining the parking meters. When the Dual Parking Meter Company was paid in full, the city gained possession of the parking meters and from that time on all of the revenue went to the city.<sup>9</sup>

The amount of money paid by the city for each parking meter varied with each transaction. The first parking meters were sold to the City of Oklahoma City for \$23.00 each by the Dual Parking Meter Company.<sup>10</sup> By November, 1935, the Dual Company asked and got \$30.00 per parking meter from the City of Dallas, Texas, and in March, 1936, sold 1,000 additional parking meters to the City of Dallas and received \$35.00 for

---

<sup>8</sup>"Meter Patent Suit Quashed," Daily Oklahoman, March 20, 1936, p. 2.

<sup>9</sup>Interview of author with Thuesen, Stillwater, Oklahoma, June 28, 1967.

<sup>10</sup>Oklahoma City, Oklahoma, "Contract Between The Dual Parking Meter Company and the City of Oklahoma City, July, 1935," manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

each unit.<sup>11</sup> The price of parking meters continued to rise until the spring of 1936. From this time on the standard price was \$58.00 per meter. However, many cities continued to get them at bargain rates.<sup>12</sup> Mayor Martin of Oklahoma City demanded that the Dual Company supply the city with any additional parking meters at \$28.00 per meter. He cited the cooperation of Oklahoma City officials in promoting parking meters as something to be taken into consideration when arriving at a price.<sup>13</sup> In this instance the Dual Company lowered its price to \$33.00 per meter for the second order of parking meters purchased by Oklahoma City.<sup>14</sup>

As competitive firms entered the parking meter field, the bidding for city contracts became intense. The question of price fixing was posed by the American Automobile Association as early as 1938. They charged that the \$58.00 price was not the real price. They stated that a great price variation continued to plague the industry.<sup>15</sup> The American Automobile Association attributed the high cost of parking meters to corruption and bribery. They were assured by some manufacturers that if "pay-offs" to city officials were eliminated, a standard parking meter could be produced for less than \$20.00. They also

---

<sup>11</sup>John J. DeShazo, Jr., Director, Department of Traffic Control, City of Dallas, to author, July 20, 1967, in author's possession.

<sup>12</sup>"Parking Meters Installed in 50 Cities," Public Management, XX (July, 1938), p. 212.

<sup>13</sup>"Martin to Demand Low Meter Price," Daily Oklahoman, June 10, 1936, p. 3.

<sup>14</sup>"Parking Meters Installed in 50 Cities," Public Management, XX p. 212.

<sup>15</sup>"A.A.A. Reads Parking Meter Statistics," American City, LIII (September, 1938), p. 7.

contended that parking meters should be fixed to take a one-cent coin and that no parking meter patent was worth the price of a blueprint. They concluded that if the patent rights could be eliminated, then the price would drop, resulting in substantial savings to municipalities.<sup>16</sup> This hostile attitude of the American Automobile Association was a continuation of its open opposition to parking meters.

One manufacturer of parking meters said that bribery was the normal way of doing business with city governments and expressed surprise that the parking meter industry should be singled out by the American Automobile Association. This organization was not swayed by the argument, and submitted all of its findings concerning bribery in the parking meter industry to the United States Department of Justice.<sup>17</sup> The Department of Justice did not find the evidence sufficient to warrant an investigation.<sup>18</sup> When the Department of Justice did not investigate the matter, the American Automobile Association stopped its investigation.

The Dual Parking Meter Company was successful in weathering this storm and continued to lead the parking meter industry. The methods used by the Dual Company to promote its product changed over the years. At first most of the promotion was done by Magee, and he usually went directly to the city officials to make the lease and purchase

---

<sup>16</sup>A. J. Montgomery, "Flash On Parking Meter Developments," Special Information Bulletin, No. 9 (Washington, D. C.: American Automobile Association, 1938), pp. 1-2.

<sup>17</sup>Melitta Hartung, Department of Public Relations, American Automobile Association, to author, October 11, 1967, in author's possession.

<sup>18</sup>William R. Hull, Jr., Congressman, Sixth District of Missouri, to author, November 7, 1967, in author's possession.

arrangements. However, as time passed and the idea of parking meters caught on, it was necessary to expand the company's promotional techniques. In September, 1935, Magee announced that any city that wanted to see how efficient parking meters were could write him and he would send them a motion picture on the whole parking meter operation. The film started with scenes of Oklahoma City streets before parking meters were installed and also after the parking meters were operational. It went on to show how the machines were serviced and how the money was collected by the city.<sup>19</sup>

The most ambitious effort made by the Dual Parking Meter Company to promote parking meters was a series of advertisements in nationwide periodicals. In October, 1935, the first advertisement appeared in the American City, a monthly independent journal devoted to cities.<sup>20</sup> The magazines selected were those which would be read by a large number of city officials. The format of the Dual Company's advertisements did not change drastically. This company was the parking meter industry's leader in sales as well as the first to produce a parking meter; these two facts were used by the company to sell its product. The advertisements usually listed many of the cities that had purchased Park-O-Meters, and after competing companies entered the field, the advertisements began stressing the fact that the Park-O-Meter was the original parking meter.<sup>21</sup>

---

<sup>19</sup>"Park-O-Meter Use Shown by Movie," Daily Oklahoman, September 1, 1935, Sec. A., p. 4.

<sup>20</sup>"Your City Needs the Park-O-Meter," American City, L (October, 1935), p. 98.

<sup>21</sup>"Another Park-O-Meter City, Fort Worth, Texas, is Now Installing 650 Original Carl Magee Meters," *ibid.*, LI (June, 1936), p. 108.



In December, 1936, the first automatic Park-O-Meters were produced, and from this time on the company's advertisements stressed the virtues of automatic parking meters.<sup>22</sup> When competing firms declared their products were not assembled, thereby implying that the Dual Company's parking meters were assembled, Dual countered by stating that the Park-O-Meter was not an assembled product.<sup>23</sup> The name change from Park-O-Meter to Dual Parking Meter in January, 1937, had little effect on sales because most of the advertisements still carried the name of Magee as the president of the company.<sup>24</sup>

Magee recognized the value of personal appeal and did not rely entirely on advertisements and movies to promote his parking meters. He hired salesmen to carry the message about the value of parking meters to municipal officials across the nation. The number one salesman for the Dual Parking Meter Company was J. Numa Jordy. Jordy's enthusiasm knew no limits. He attempted to complete an arrangement with New York City which would have grossed \$11,600,000, and he also had plans to introduce parking meters in Paris, France, and London, England.<sup>25</sup> Jordy was unsuccessful in convincing New York City officials that their city needed parking meters, but he continued to be the leading salesman for the Dual Parking Meter Company.

---

<sup>22</sup>"Automatic Parking Meters, Control Parking, Aid Motorists, Help Business, Promote Safety and Traffic Enforcement," *ibid.*, LI (December, 1936), p. 110.

<sup>23</sup>"Read This Record," *ibid.*, LIII (July, 1938), p. 100.

<sup>24</sup>"Toledo Installs Automatic Parking Meters," *ibid.*, LII (January, 1937), p. 104.

<sup>25</sup>"Nickel-in-Meter Regulates Parking," Literary Digest, CXXII (August 22, 1936), pp. 35-36.

The first city to purchase parking meters after the initial installation in Oklahoma City was Dallas, Texas. Traffic Engineer C. G. Beckenbach, Mayor Pro Tem D. R. Graham and Rutland George Plummer went to Oklahoma City on September 4, 1935, to see parking meters in operation. They liked what they saw and recommended that the City of Dallas buy parking meters. The city council authorized the purchase of 1,000, the first of which went into operation on Dallas streets on November 4, 1935. They were so successful that the City of Dallas bought 1,000 additional parking meters on March 6, 1936.<sup>26</sup>

Not all sales ventures by the Dual Parking Meter Company were successful. Magee tried to convince city officials of Tulsa, Oklahoma, that parking meters would solve downtown traffic congestion in their city. In this instance there was the emotional appeal that the Macnick Company was a hometown industry, and by purchasing parking meters the city would be creating more work for Tulsans. On September 12, 1935, Tulsa City Attorney H. O. Bland prepared a parking meter ordinance in anticipation of a favorable city council vote.<sup>27</sup> However, the city council rejected the purchase of parking meters on September 14, 1935, claiming that the money necessary for such a purchase was not in the city treasury.<sup>28</sup> It looked like the parking meter ordinance would get a second chance when on September 17, 1935, a merchant's committee headed by G. H. Lehrman appealed to the city council to reconsider the

---

<sup>26</sup>Collection of Dallas Newspaper Clippings, 1935-1937, Department of Traffic Control, Municipal Building, Dallas, Texas.

<sup>27</sup>"Parking Meter Measure Drawn," Tulsa Tribune, September 12, 1935, p. 1.

<sup>28</sup>"Tulsa Gets No Parking Meters," *ibid.*, September 14, 1935, p. 1.

September 14 decision. Russel Rhodes, manager of the Tulsa Chamber of Commerce, expressed the fear that if Tulsa did not buy parking meters, the Macnick Company would move to a friendlier city. The Tulsa city council took the appeal under advisement.<sup>29</sup> The Chamber of Commerce and the Retail Merchants Association representatives continued to urge individual members of the city council to act favorably on a parking meter ordinance.<sup>30</sup> When the city council met on September 23, 1935, the parking meter question was not discussed because a quorum was not present.<sup>31</sup> When the Tulsa city council finally met on September 25, it voted three to two against including \$8,600.00 in the city budget to purchase parking meters. The majority expressed the opinion that parking meters would be an additional tax burden on Tulsa motorists and that most of the revenue collected in the first year of operation would go to the Dual Parking Meter Company to pay for the parking meters.<sup>32</sup>

An occasional failure to sell parking meters to a city did not dampen the enthusiasm that surrounded the Dual Parking Meter Company's sales force. St. Petersburg, Florida, purchased 150 parking meters on January 6, 1936, and became the third city to install them.<sup>33</sup> The

---

<sup>29</sup>"Parking Meters Possible Again," *ibid.*, September 17, 1935, p. 1.

<sup>30</sup>"Parking Meter Urge Hinting New Action," *ibid.*, September 20, 1935, p. 1.

<sup>31</sup>"Quorum Absent so the Parking Meters Pass," *ibid.*, September 23, 1935, p. 1.

<sup>32</sup>"Park-O-Meter Out of Tulsa's Revised Budget," *ibid.*, September 25, 1935, p. 1.

<sup>33</sup>Vernon G. Agee, "Parking Meter in a Resort City," American City, LIV (October, 1939), p. 15.

novelty of parking meters was beginning to wear off and cities all over the nation were beginning to seriously consider the purchase of parking meters. The Fort Worth, Texas, city council began to consider the purchase of Park-O-Meters on September 18, 1935. The council analyzed parking meter usage in cities like Oklahoma City and Dallas and received reports on October 9, 1935, February 19, and April 1, 1936, before voting to purchase 300 Park-O-Meters the following April 18.<sup>34</sup>

A big boost in parking meter sales came from additional purchases by cities that were already using a limited number on their streets. Oklahoma City became the first city to make a second purchase of Park-O-Meters. On December 17, 1935, the city council approved a budget transfer which would permit the city to pay \$6,900.00 for an additional installation of parking meters.<sup>35</sup> 298 additional parking meters were installed on Oklahoma City streets on December 20, 1935. The city kept fifty-seven parking meters in reserve to meet future requests.<sup>36</sup> Dallas bought an additional 1,000 parking meters from the Dual Company in March, 1936.<sup>37</sup> St. Petersburg, Florida, bought 205 automatic parking meters in November, 1938, and the Dual Company accepted the original 150 manual type parking meters for partial

---

<sup>34</sup>Jim Vachule, "Editor's Idea Puts Cash in Fort Worth's Coffers," Fort Worth Star-Telegram, July 24, 1960, Sec. 4, p. 1.

<sup>35</sup>"Council Approves Budget Transfers," *ibid.*, December 18, 1935, p. 11.

<sup>36</sup>"Take of Parking Meters is \$221," *ibid.*, December 21, 1935, p. 1.

<sup>37</sup>Collection of Dallas Newspaper Clippings, 1935-1937, Department of Traffic Control, Municipal Building, Dallas, Texas.

payment.<sup>38</sup> These repeat sales continued to be an important part of the Dual Parking Meter Company's total sales.

When the Dual Company produced its first automatic parking meters in December, 1936, it shifted its promotional emphasis toward the purchase of automatic machines.<sup>39</sup> This encouraged city officials to make an initial purchase of automatic parking meters or to trade their old manual type parking meters for credit toward the purchase price of new automatic parking meters.<sup>40</sup>

The Dual Parking Meter Company continued its steady industrywide leadership up to World War II. By February, 1942, there were over 55,000 Dual parking meters in operation on city streets across the nation, and most of them were of the automatic type. The city with the largest number was Cleveland, Ohio, with 3,679.<sup>41</sup> The Dual Company sold 71,393 parking meters before World War II caused a shutdown in 1942. Of the 71,393 parking meters sold, 15,607 were returned as partial payment for new automatic meters. Competing companies sold about 120,000 parking meters in the same period. The Miller Meter Company of Chicago, Illinois, was the Dual Company's biggest competitor, and it sold only 35,000 parking meters before the war.<sup>42</sup>

---

<sup>38</sup> Agee, "Parking Meter in a Resort City," American City, LIV, p. 15.

<sup>39</sup> "Automatic Parking Meters Control Parking, Aid Motorists, Help Business, Promote Safety and Traffic Enforcement," *ibid.*, LI, p. 110.

<sup>40</sup> Agee, "Parking Meter in a Resort City," *ibid.*, LIV, p. 15.

<sup>41</sup> Clarence E. Ridley and Orin F. Nolting, "Parking Meters," Municipal Year Book 1942 (Chicago: The International City Managers Association, 1942), pp. 522-528.

<sup>42</sup> Hale, "The Park-O-Meter Story," manuscript in author's possession, p. 5.

Once parking meters began to prove their value on Oklahoma City streets, competing firms commenced planning to produce parking meters. The first person who attempted to organize a firm to compete with the Dual Company was A. W. Glaze of Oklahoma City, Oklahoma. He announced plans to organize the Universal Parking Regulator Company on October 15, 1935. Glaze called his parking meter a Park-O-Lator and claimed that it was superior to the Park-O-Meter because it resisted chiseling.<sup>43</sup> Oklahoma City officials were able to evaluate the Park-O-Lator when they considered purchasing additional parking meters in December, 1935.<sup>44</sup> However, they preferred the Park-O-Meter, and the Dual Company was able to win its first test against competition.<sup>45</sup> Another early competitor was the Parking Tax-O-Meter which was produced by the Parking Tax-O-Meter Corporation of Long Beach, California. This device issued tickets upon the receipt of a coin and these tickets assured the motorist that he had one hour of parking time.<sup>46</sup> The Parking Tax-O-Meter was not very practical and offered no serious challenge. It dropped out of competition within a year. A much more serious competitor was the Mark-Time parking meter which was produced by the R. H. Rhodes Company of New York City. It featured a dial which was easier

---

<sup>43</sup>"New Parking Meter Ready," Daily Oklahoman, October 16, 1935, p. 9.

<sup>44</sup>"Competition Seen on Parking Meters," *ibid.*, December 1, 1935, Sec. A., p. 2.

<sup>45</sup>"Council Approves Budget Transfers," *ibid.*, December 18, 1935, p. 11.

<sup>46</sup>"Parking Tax-O-Meter is the Answer to the Downtown Parking Problem," American City, LI (June, 1936), p. 134.

to read than the Park-O-Meter, and it continued to be manufactured throughout the pre-war period.<sup>47</sup>

The next parking meter to enter the field was the Red Ball parking meter. It was produced by the Martin Timing Device Company of Springfield, Massachusetts. It featured a red ball in a glass case on the top of the parking meter which rose when a motorist dropped a nickel in the slot and dropped when one hour was up.<sup>48</sup> This parking meter was never accepted and did not offer any competition. The Park-O-Graph parking meter, similar to the Park-O-Meter, was produced by the National Park-O-Graph Corporation of Chicago, Illinois.<sup>49</sup> It sold quite well, and its largest order went to Omaha, Nebraska, where 1,000 of its parking meters were installed.<sup>50</sup> The Karpark parking meter, an early competitor of the Dual Company, recognized the selling potential of automatic parking meters. Karpark abandoned its manual type parking meter to offer an all new automatic parking meter that would compete with the better known automatic Dual parking meter.<sup>51</sup> By 1942 there were eleven competing companies in the parking meter industry.

The Dual Parking Meter Company had continued to lead its nearest competitor by a wide margin, and some companies never made any sizeable

---

<sup>47</sup>"Mark-Time," *ibid.*, LII (February, 1937), pp. 28 and 29.

<sup>48</sup>"Red Ball Parking Meter - Tamperproof, Foolproof and Theftproof, Streamlined Sturdy and Rugged," *ibid.*, LII (June, 1937), p. 116.

<sup>49</sup>"Leadership, Responsibility, Quality and Positive Efficiency Specify Guaranteed Parking Meters," *ibid.*, LII (July, 1937), p. 12.

<sup>50</sup>Richard W. Jepsen, "Why Omaha Likes Parking Meters," *ibid.*, LIII (January, 1938), p. 17.

<sup>51</sup>"On the Shelf Before it Got Off," *ibid.*, LIII (September, 1938), p. 98.

sales of parking meters.<sup>52</sup> However, competition forced the larger companies to improve their product constantly. The leading companies submitted their parking meters to torture tests to prove that they would withstand all kinds of weather.<sup>53</sup> Changes in the various parking meters managed to make news in the industry and this stimulated sales.<sup>54</sup> It was not illegal for competing firms to make wild claims about the virtues of their products in the pre-war period. The parking meter industry did not have trade regulations until 1951 when the Federal Trade Commission set forth a set of twenty rules.<sup>55</sup> Many of the companies that could not back their claims went out of business, and the older and more reliable firms continued to prosper. The competition in the industry paved the way toward a better parking meter for the potential customer. It became evident that in order to remain in business, the parking meter companies had to conform to the requirements of the customer, and this resulted in better service to cities and to motorists.

There were many patents applied for on devices that could be classified as parking meters before World War II. Most of them were never produced for sale on the open market. Many were impractical, and could not satisfy the requirements of motorists or municipalities. The first person to apply for a patent on a parking device was Edwin A.

---

<sup>52</sup>Ridley and Nolting, "Parking Meters," Municipal Year Book 1942, pp. 522-528.

<sup>53</sup>"An All Weather Parking Meter," American City, LII (July, 1937), p. 117.

<sup>54</sup>"Improved Parking Meter," *ibid.*, LI (December, 1936), p. 109.

<sup>55</sup>"Trade Rules of Parking Meter Industry," *ibid.*, LXVI (May, 1951), p. 135.



Hopkins of Brooklyn, New York. Hopkins applied for this patent on January 27, 1930, and a patent was granted on February 2, 1937. He called his machine a parking post, and it actually held the vehicle physically for a predetermined length of time. It was not coin operated and could not be called a parking meter.<sup>56</sup> It was never developed further and was never manufactured.<sup>57</sup> The first machine to be actually called a parking meter was developed by Elmer L. Nichols of Boston, Massachusetts, and Roger W. Babson of Wellesley, Massachusetts. They applied for a patent on May 6, 1931, and it was granted on August 29, 1933. This parking meter operated without a coin, secured the vehicle's tire in a casing and had a timing device which prevented the vehicle from being moved during a predetermined period.<sup>58</sup> Nichols and Babson worked on several parking meters in the early 1930's, but none of them ever went beyond the experimental stage.<sup>59</sup> Babson was the first person to develop an automatic parking meter, and he obtained a patent on it in September, 1934.<sup>60</sup> Inventions were his hobby. However, Babson devoted most of his time to other pursuits. He founded Babson Institute in 1904 and continued to have a leading role in the financial world of

---

<sup>56</sup>United States Patent Office, Official Gazette, CDLXXV (February, 1937), p. 99.

<sup>57</sup>Edwin A. Hopkins to author, January 17, 1968, in author's possession.

<sup>58</sup>United States Patent Office, Official Gazette, CDXXXIII (August, 1933), pp. 1231-1232.

<sup>59</sup>Charles J. McCullough, President, Business Statistics Organization, to author, August 28, 1967, in author's possession.

<sup>60</sup>United States Patent Office, Official Gazette, CDXLVI (September, 1934), p. 392.

Wall Street throughout the 1930's.<sup>61</sup> He was active in politics and ran for president of the United States as the Prohibition Party's candidate in 1940.<sup>62</sup>

Herman S. Johns of Oklahoma City, Oklahoma, patented the first electric parking meter in November, 1936, but the patent rights on this design were purchased by the Dual Parking Meter Company.<sup>63</sup> Johns also developed a belt driven parking meter and the patent rights for this machine were likewise bought by the Dual Company.<sup>64</sup> Samuel Lee Miller of Maywood, Illinois, and Richard C. Cook of Chicago, Illinois, designed a parking meter that took tokens instead of coins. This patent was purchased by the Miller Meter Company of Chicago.<sup>65</sup>

Lon J. Darley of Jackson, Mississippi, designed a parking meter which operated on the hour glass principle and used sand instead of a timing device.<sup>66</sup> Charlie Klemt of San Antonio, Texas, created a parking meter which attempted to correct a defect in most meters; he claimed that his parking meter dial indicator would always go back to zero.<sup>67</sup> A parking meter developed by Joseph E. Morris of Pasadena, California, was attached to the vehicle and recorded the time the

---

<sup>61</sup>Roger W. Babson, Actions and Reflections (New York: Harper and Brothers, 1949), pp. 203-217.

<sup>62</sup>Ibid., pp. 299-316.

<sup>63</sup>United States Patent Office, Official Gazette, CDLXXII (November, 1936), p. 862.

<sup>64</sup>Ibid., CDLXXX (July, 1937), p. 799.

<sup>65</sup>Ibid., CDLXXV (February, 1937), p. 399.

<sup>66</sup>Ibid., CDLXXXVI (January, 1938), pp. 605-606.

<sup>67</sup>Ibid., CDLXXXIX (April, 1938), p. 725.

vehicle was parked.<sup>68</sup> Raymond C. Pierce of Chicago, Illinois, designed a parking meter that took paper parking checks instead of a coin.<sup>69</sup>

A parking meter with a shutter that hid the dial while a coin was placed in the meter was developed by David C. Rockola of Chicago, Illinois, and Alfred Vischer, Jr., of Parkridge, Illinois.<sup>70</sup> This parking meter was created to improve on the design of the Dual parking meter and incorporated most of the advances already developed by the Dual Company. It became the National Park-O-Graph meter.<sup>71</sup>

Rodney B. Campbell of Los Angeles, California, built a parking meter with a light on top of the head. When the parking time period elapsed, the light went off, enabling a patrolman to check the parking meters with greater ease.<sup>72</sup> John W. Bullock of Miami, Florida, designed a parking meter that used a camera and timing device to record the length of time an automobile was in a parking space.<sup>73</sup> Ernest J. Sweetland of Piedmont, California, built a parking meter that required the motorist to drive over a scale type machine and used this device to record the elapsed time in the parking space.<sup>74</sup> A parking meter developed by Hilton H. Lysons had two light bulbs on the head, and

---

<sup>68</sup>Ibid., CDXCI (June, 1938), p. 894.

<sup>69</sup>Ibid., DI (April, 1939), p. 249.

<sup>70</sup>Ibid., DV (August, 1939), p. 1204.

<sup>71</sup>Alfred Vischer, Jr., to author, September 5, 1967, in author's possession.

<sup>72</sup>United States Patent Office, Official Gazette, DVIII (November, 1939), p. 372.

<sup>73</sup>Ibid., DXVII (September, 1940), pp. 603-604.

<sup>74</sup>Ibid., DXIX (October, 1940), pp. 600-601.

these lit when a coin was deposited. This was supposed to give a traffic officer even greater visibility when checking this design of meter.<sup>75</sup> Produced by the Chrono-Park Meter Company of Seattle, Washington, only fifty were actually manufactured, and they were sold to the City of Atlantic City, New Jersey. The company went out of business in 1937.<sup>76</sup> Cecil T. Mitchel of Dallas, Texas, perfected a parking meter that had two steel beams projecting into the street to record the entry of a vehicle into a parking space. A coin was deposited in a head mounted on a shaft, and the motorist could park for an hour before a violation was recorded on a dial.<sup>77</sup>

An unusual parking meter was patented by Francis I. DuPont of Wilmington, Delaware. It was coin operated, but required the use of a key by the operator in order to activate the timing mechanism.<sup>78</sup> DuPont planned to have his concern, the Delaware Chemical Engineering Company, manufacture this parking meter, but he died shortly after the patent was issued and it was never produced.<sup>79</sup>

Another parking meter operated by a key was designed by William C. Burton of Webster Groves, Missouri, and Herbert J. Brandenberger of

---

<sup>75</sup>Ibid., DXXI (December, 1940), p. 859.

<sup>76</sup>Hilton H. Lysons to author, August 24, 1967, in author's possession.

<sup>77</sup>United States Patent Office, Official Gazette, DXXII (January, 1941), p. 574.

<sup>78</sup>Ibid., DXXVII (July, 1941), p. 664.

<sup>79</sup>Hubert I. DuPont to author, August 30, 1967, in author's possession.

St. Louis, Missouri.<sup>80</sup> A group of identical keys were to be issued to prospective parkers by the municipality. The motorist would park his vehicle, insert a key in the parking meter's head, and this would start the timing mechanism. When the motorist returned after conducting his business, he would deposit a coin of the proper denomination and retrieve his key. If he did not put in the proper coin, he would be unable to get the key out of the parking meter; the patrolling officer would need to spot such a violation and take steps to fine the offender. This parking meter was not practical, so the inventors abandoned the project after applying for a patent.<sup>81</sup>

David C. Rockola of Chicago, Illinois, created a parking meter, using an oil flow mechanism for a timer, which was patented and assigned to the National Park-O-Graph Corporation.<sup>82</sup> The Standard Meter Corporation of Hartford, Connecticut, produced a parking meter built by Louis V. Lucia of West Hartford, Connecticut. It had a timing mechanism which gave the motorist a short period of free time after the hour elapsed before it registered a violation.<sup>83</sup>

A parking meter which printed on a ticket the time the mechanism was activated was developed by Walter Ruska of Houston, Texas, and was manufactured by Vehicular Parking, Ltd., of Washington, D. C.<sup>84</sup> Joseph

---

<sup>80</sup>United States Patent Office, Official Gazette, DXXXV (February, 1942), pp. 398-399.

<sup>81</sup>Herbert J. Brandenberger to author, August 28, 1967, in author's possession.

<sup>82</sup>United States Patent Office, Official Gazette, DXXIX (August, 1941), p. 320.

<sup>83</sup>Ibid., DXXX (September, 1941), p. 695.

<sup>84</sup>Ibid., DXXXIX (June, 1942), p. 145.

F. Balisteri of Houston, Texas, obtained a patent on a parking meter which operated through a system of pulleys.<sup>85</sup> This parking meter was designed by V. C. McIntire, but it never went beyond the experimental stage.<sup>86</sup>

Most of the parking meter patents applied for in the pre-World War II period were very similar to the Dual parking meter, and they represented attempts to improve on the original design. The unusual parking meter inventions were usually not practical and were never manufactured. These attempts to incorporate new ideas did have some effect on the future development of the parking meter. Some of the seemingly impractical ideas were perfected and incorporated in newer models.

The men who designed the parking meter models were as diverse as any group of individuals selected at random. They ranged from wealthy executives and national leaders to machinists and clerical workers. The only bond that characterized them all was their imagination and creativity.

To build a model of a parking meter was an accomplishment, but to build one that was practical and would be accepted by the public was an even more difficult task. It took more than imagination and creativity to insure the success of a parking meter. Once a parking meter was proven practical, it still had to pass the test of public acceptance. The keys to success were the production of a reliable parking meter and good promotion. The parking meter companies that survived and prospered in the pre-World War II period had good products and were

---

<sup>85</sup>Ibid., p. 894.

<sup>86</sup>Joseph F. Balisteri to author, August 28, 1967, in author's possession.

able to sell them.

The management of the parking meter companies had to be flexible when responding to the nation's demands. They needed to be able to survive an investigation by those who were concerned with the public's welfare. As the parking problem increased with the growing number of automobiles in the United States, the industry grew even more rapidly. However, as in all rapidly changing areas of business, the companies that lost sight of the needs of the ever changing market perished. Increasing orders enabled companies to mass produce their parking meters, but they still could not overlook small orders from medium sized cities. Every order brought in more money and put more of their product before the public, but in each case the individual motorist would be the final judge of parking meters.

The public recognized that the parking meter was doing the job for which it was intended. More than anything else, this fact meant that the parking meter was a success. In the first test installation in Oklahoma City in 1935 public acceptance meant the difference between success and failure. By 1942 there was no doubt that motorists throughout the United States had accepted parking meters. Even the World War II shutdown of the manufacture of parking meters could not hold back the development of even more and better models at the conclusion of the war.

## CHAPTER IV

### PARKING METER TRAFFIC CONTROL AND REVENUE

The parking meter had been accepted by the public by 1941 and had spawned a new industry for the nation. In the final analysis, an invention's worth must be weighed as to its ability to fulfill its purpose over a long period of time. When Magee started his firm, he chose its name with this thought in mind. He called it the Dual Parking Meter Company because he believed that the parking meter had a twofold purpose. The primary purpose was to control traffic in congested areas, and the secondary purpose was to provide revenue for municipalities.<sup>1</sup>

If the parking meter did not aid in controlling traffic in a congested area, then it was, as some critics claimed, nothing more than a means of collecting more taxes from the public without serving a useful purpose. Oklahoma City officials recognized the need to determine whether parking meters were fulfilling their purpose, and on August 11, 1935, A. M. Mosier, the city manager of Oklahoma City, instructed Jeff Lambert, a city employee, to conduct a survey for this purpose in Oklahoma City.<sup>2</sup>

A second purpose of the survey was to determine whether merchants

---

<sup>1</sup>Hale, "The Park-O-Meter Story," manuscript article in author's possession, p. 3.

<sup>2</sup>Jeff Lambert, "Survey of Parking Meters in Oklahoma City, August 26, 1935," p. 1, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.



and motorists were accepting parking meters. When Lambert submitted his findings to Mosier on August 26, 1935, the results were very favorable for parking meters. Lambert observed that in non-metered parking zones 60% of the automobiles were owned by merchants or people who worked in the downtown area, and that very few of the motorists parked in these zones were shopping. After making repeated observations on the same non-metered street, he found that the same automobiles remained. When observing metered zones, Lambert found that there was a sharp contrast to this situation. Here he observed a rapid turnover of automobiles in parking spaces, and an even flow of traffic. Lambert praised parking meters in his report and said that they were the answer to Oklahoma City's parking problems.<sup>3</sup> Mosier wanted something to back up his proposal to extend the use of parking meters in Oklahoma City, and the survey gave him the concrete evidence he needed.<sup>4</sup>

The parking space in each metered zone on Oklahoma City streets was twenty feet long. This made it easy for the motorist to park, and eliminated the problem of a driver attempting to enter a space which was too small for his automobile. Twenty feet continued to be the allotted meter space in most cities prior to World War II. Mosier was very pleased with the results achieved by parking meters in Oklahoma City. He believed that Oklahoma City needed 1,808 parking meters to control all of its limited parking zones. He installed them a few at a time and waited for the public to recognize a need for them in a

---

<sup>3</sup> Ibid., pp. 1 and 2.

<sup>4</sup> "Mosier Asks Data on Effectiveness of Parking Meter," Oklahoma City Times, August 12, 1935, p. 1.

new area before he authorized additional installations.<sup>5</sup>

City officials of Dallas, Texas, the second city to install parking meters, made extensive surveys to determine the effectiveness of parking meters on their streets. In a spot check traffic engineer C. G. Beckenbach found that parking meters were totally effective. There were only three violations and only one case of double parking. He was pleased with the whole operation of parking meters in Dallas.<sup>6</sup> The parking problem in Oklahoma City and Dallas showed a marked improvement by the spring of 1936, and by this time both cities had installed additional parking meters.<sup>7</sup>

An obstacle parking meters had to surmount was the desire by the motorist to cheat the meter; a slug could be inserted and it would operate. This problem was eliminated by the foresight of Thuesen and Hale, when they made the last coin deposited visible through a window in the head of the parking meter. The motorist would also try to stop the handle on the meter before it completed its movement and this would enable him to park an unlimited time without using another coin. The Thuesen-Hale principle of making a mechanism which forced the user to push the handle far enough to enable the device to store energy enough to complete the cycle, forestalled any attempt to gain free time by

---

<sup>5</sup>O. M. Mosier, "Our Experience with Parking Meters," American City, LI (January, 1936), p. 97.

<sup>6</sup>C. G. Beckenbach, "Eighteen Months of Intelligent Parking Meter Operation, Dallas," *ibid.*, LII (September, 1937), pp. 60-61.

<sup>7</sup>"Regulating Parking by Meters," Public Management, XVIII (February, 1936), pp. 43-44.

this method.<sup>8</sup>

Before the installation of parking meters, many cities were plagued by the all-day parker. The fact that 80% of Oklahoma City parkers stayed in one parking space all day was one of the prime reasons Magee turned to parking meters as a solution to this problem.<sup>9</sup> Although the parking meter was not infallible, it was much more reliable than police efforts to control all-day parking by chalking tires. It was so effective that by 1938 some cities were claiming the all-day parker had disappeared from metered zones.<sup>10</sup>

Not all motorists could be relied on to keep an accurate record of their parking time in metered zones. However, the knowledge that a device was recording the elapsed time served to remind more parkers than ever before that they had a limited period to park in a time zone. There was a drastic reduction in the number of tickets issued in metered zones. This was in marked contrast to the continued practice of overtime parking in non-metered zones.<sup>11</sup>

The ability to control parking meter violations rested primarily on the acceptance of parking meters by traffic patrolmen. When they were first installed in Oklahoma City, a few policemen were reluctant

---

<sup>8</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XIV, pp. 121 and 123.

<sup>9</sup>Ibid., p. 115.

<sup>10</sup>A. E. Dowell, "Metered Parking Safe and Efficient," American City, LII (January, 1938), p. 73.

<sup>11</sup>Simpson, "When, Where and How Should Parking be Restricted," Institute of Traffic Engineers Proceedings for 1938, p. 30.

to enforce parking meter violations.<sup>12</sup> As time passed and parking meters became widely accepted across the nation, this attitude changed. The policemen learned to accept the parking meter as an ally. The timing mechanism in a parking meter was quite reliable and did not show any favoritism. This made it easier for the patrolman to defend his reason for writing a parking violation ticket. It was still possible for a policeman to destroy a parking ticket that was issued to one of his friends. The parking meter could not eliminate this evil without the wholehearted cooperation of the police force.<sup>13</sup>

Parking spaces twenty feet long took up more curb space than the old parking system. More automobiles could be squeezed into existing downtown curb space before parking meters were installed. With this in mind, it would be quite reasonable to conclude that more motorists could park before the installation of parking meters. This contention, however, leaves out the factor of automobile turnover, which was not as great in metered areas as in non-metered areas. In a test city the number of cars parked in timed zones before the installation of parking meters was ten and nine-tenths per day. After parking meters were installed, the number decreased to ten and two-tenths automobiles parked per day. On the surface this would suggest that more different automobiles were parked on downtown streets before parking meters were installed. This was true, but when the parkers were examined more closely, it was found that many motorists who had formerly parked in

---

<sup>12</sup>"Watt Hears Two Policemen Knock Parking Meters," Oklahoma City Times, August 3, 1935, p. 1.

<sup>13</sup>Simpson, "When, Where and How Should Parking be Restricted," Institute of Traffic Engineers Proceedings for 1938, p. 28.

the non-metered zones were not shoppers. These people parked outside of the congested downtown district once parking meters were installed, and most of the motorists who used the parking meters were in the downtown area to conduct business or to shop. It was also observed that there were usually empty parking spaces in metered zones, which made it easier for the motorist to park.<sup>14</sup> As parking meters continued to gain acceptance across the nation, the same trends continued. Downtown congestion was lessened considerably, and the parking meter proved that it could cope with the ever-increasing number of automobiles.

It is doubtful that the parking meter system would have begun without the prospect of raising municipal funds. Oklahoma City officials were much in need of additional revenue for the city's coffers when they began to consider installing parking meters.<sup>15</sup> Without the anticipation of new revenue to compensate for the loss of tax money through an ever decreasing tax base, it is doubtful that Oklahoma City would have been willing to spend money on an untried method of parking control.

From the first day of operation, the revenue received from parking meters in Oklahoma City was encouraging to city officials. City treasurer Joe Ammerman announced that the city received \$85.73 in revenue on the first day of the parking meter's operation. This was an average of forty-nine cents for each meter. Ammerman's precise announcements of parking meter revenue earned him the title of "Jitney Joe," but he continued to report all parking meter revenues to the

---

<sup>14</sup>Ibid., p. 32.

<sup>15</sup>"Mosier Faces Problem of Finding New Revenues to Replace Shrinkage in Income," Daily Oklahoman, April 27, 1935, p. 9.

people of Oklahoma City.<sup>16</sup> By the time the city had removed the heads of the parking meters to comply with the court order, Oklahoma City motorists had deposited another \$30.23 in the four hours it took to remove the parking meter heads.<sup>17</sup>

At this rate it was obvious to Oklahoma City officials that parking meters would provide a much needed boon to the city's treasury. However, parking meter revenue fluctuated with seasonal traffic movement into the downtown area. By October, 1935, the parking meters were not producing as much revenue as in September.<sup>18</sup> Even with this slight decline in revenue the city was able to pay for all of its parking meters in two and one-half months.<sup>19</sup> This was a strong argument to back the purchase of additional parking meters. When the second order of parking meters went into operation on Oklahoma City streets, this faith was justified. On the first day of operation of 472 parking meters, the city collected \$221.85 in revenue. Basing calculations on this daily revenue and taking into consideration seasonal business slumps, F. G. Baker, the Oklahoma City auditor, predicted that parking meters would bring \$55,000 in additional revenue to the city treasury.<sup>20</sup> This estimate was quite accurate because in December, 1936, Oklahoma

---

<sup>16</sup>"Its Pay as You Park in Oklahoma City Now," Tulsa Tribune, July 18, 1935, p. 11.

<sup>17</sup>"Revenue in Parking Meters Tops \$115," Daily Oklahoman, July 19, 1935, p. 9.

<sup>18</sup>"Parking Payments Decline Slightly," *ibid.*, October 13, 1935, Sec. B, p. 7.

<sup>19</sup>"City Counts on \$500,000 Surplus to Make Extensive Municipal Improvements," *ibid.*, December 6, 1935, p. 6.

<sup>20</sup>"Take of Parking Meters is \$221," *ibid.*, December 21, 1935, p. 1.

City was sure of at least \$60,000 in parking meter revenue.<sup>21</sup>

Oklahoma City's results were not unusual. Dallas parking meters paid for themselves in three months.<sup>22</sup> Parking meters in the relatively small city of St. Petersburg, Florida, averaged over \$10,000 a year in revenue.<sup>23</sup> Cities all over the nation reported excellent revenue returns from their parking meters, and this source became a dependable addition to municipal tax structures.

As time passed, some indications of where parking meters would do well were demonstrated. The most important single factor was the size of the city. Large cities were able to collect more revenue from each parking meter than were small cities. Cities with a population between 250,000 and 500,000 were the nation's leaders. They averaged \$80.41 per parking meter each month. Cities under 5,000 averaged \$3.25 per parking meter in the period before 1942, and in cities of this size parking meters were the least profitable.<sup>24</sup> A second factor in determining the amount of revenue collected from each parking meter was its location. A parking meter was more profitable in a downtown congested area than in a fringe area where there would be far fewer automobiles parked over a month's time.<sup>25</sup>

---

<sup>21</sup>"City Revenue for 5 Months Tops Million," *ibid.*, December 13, 1936, Sec. A, p. 27.

<sup>22</sup>"Dallas Auto Meters Yield City \$30,000," *ibid.*, February 18, 1936, p. 12.

<sup>23</sup>Agee, "Parking Meter in a Resort City," American City, LIV (October, 1939), p. 15.

<sup>24</sup>Ridley and Nolting, "Parking Meters," Municipal Year Book 1942, p. 522.

<sup>25</sup>"The Case for Parking Meters," American City, LVI (October, 1941), p. 89.

How much money was collected depended on the type of parking meter used. It was important to have a machine that continued to operate in all kinds of weather and could withstand punishment. The introduction of automatic parking meters eliminated some of the difficulties motorists had in operating the manual type. It was very important that each parking meter be kept operational. A parking meter that needed little maintenance or repair would continue to produce revenue, and the motorist would be more satisfied with it than one which was subject to constant breakdowns and caused the parker undue annoyance.

The amount of time allowed in each parking zone was likewise a factor in determining how much revenue was collected from each parking meter. When they were first installed in Oklahoma City, it cost motorists five cents whether they parked in a fifteen-minute zone or in a one-hour zone.<sup>26</sup> At first the time allowed in each metered parking space did not conform to the needs of the motorists. After Lambert took his survey in August, 1935, Mosier concluded that the time period permitted in metered zones should be correlated with the time requirements of the location. Mosier then took steps, with the Oklahoma City Traffic Commission concurring, to limit the parking time in front of banks to thirty minutes.<sup>27</sup> This would enable more motorists to use the facilities of the banks, and the time allowed was enough to transact normal business. The five cent fee remained, so it was possible to collect twice as much money from parking meters installed in front of

---

<sup>26</sup>"Park-O-Meters Start a Controversy: Oklahoma City Split into Two Camps," New York Times, July 21, 1935, Sec. 2, p. 1.

<sup>27</sup>"Parking Time to be Longer," Daily Oklahoman, September 14, 1935, p. 1.



banks than from those installed throughout other parts of the downtown area. When cities cut the time allowed in a parking zone and did not cut the fee, they were not always concerned with the placement of the parking meters. Whole streets in downtown Minneapolis had thirty-minute timed zones and still the fee was five cents.<sup>28</sup>

Although five cents was the usual fee charged for parking, there was no specific reason why this coin had to be used in all parking meters. Magee maintained from the start that he had decided on a nickel because he had to start with some coin, and as long as the denomination was small, it did not matter what coin was used.<sup>29</sup> As time passed, penny parking looked like a solution to the high cost of parking at a short period metered zone. In 1939 New Haven, Connecticut, installed 397 penny parking meters. They allowed the motorist to park for fifteen minutes for one cent, and thirty minutes for two cents. This setup accounted for a rapid turnover of automobiles, and since the parking meters could still bring in four cents every hour, they produced a large amount of revenue.<sup>30</sup>

In 1941 Syracuse, New York, installed 1,090 penny parking meters. They allowed the motorist to park for forty-five minutes for one cent. Syracuse city officials announced that the low cost of parking was in keeping with a tradition of providing services at a minimum cost to the public. Mayor Rolland B. Marvin stated that the parking meters

---

<sup>28</sup>J. C. Vincent, "Parking Meters in Minneapolis," American City, LVI (July, 1941), p. 95.

<sup>29</sup>"Court Ruling May Legalize Coin Parking," Daily Oklahoman, July 24, 1935, p. 2.

<sup>30</sup>Philip T. Smith, "Penny Parking Pays," American City, LV (September, 1939), pp. 49-50.

were paying for themselves and providing revenue even though the fee was small. Stiff fines for violations and the reluctance of motorists to take advantage of unexpired free time did much to make this system work.<sup>31</sup>

Another innovation was the introduction of parking meters which would take more than one type of coin. These meters usually took one cent for each twelve-minute time period, five cents for an hour and ten cents for two hours. They worked quite well and were satisfactory to the motorists.<sup>32</sup>

Parking meter violations raised the question of deciding on penalties. Oklahoma City officials maintained that a light fine would be both effective and in keeping with the nature of the violation; a motorist was penalized \$1.00 for over parking in a timed zone, and this worked quite well.<sup>33</sup> Another method was to impose a small fine for the first offense and continue to raise the amount for each subsequent violation.<sup>34</sup> Most cities made it possible for the offender to mail his fine to the police department. This eliminated the need for a traffic court to be in session all the time. The fines were enough to make the motorist hesitate before violating a parking meter, and small enough not to cause undue hardship on the parker.

---

<sup>31</sup>Rolland B. Marvin, "Each Penny Meter Parks 400 Cars a Month," *ibid.*, LVI (May, 1941), pp. 91 and 93.

<sup>32</sup>R. F. Agard, "Pennies Add Quickly to Parking Dollars," *ibid.*, LV (October, 1940), p. 99.

<sup>33</sup>"Tom McGee Fined, But Likes Meters," *Oklahoma City Times*, July 31, 1935, p. 1.

<sup>34</sup>William M. Healy, "Light Fines Make Meters Effective and Popular," *American City*, LV (July, 1940), pp. 46-47.

Another question for city governments to consider was the use of parking meter revenue. These monies could be put in the city treasury and used to defray day-to-day municipal expenses, but this would only serve to reinforce contentions that parking meter fees were just another tax. One solution to this problem was to allocate parking meter revenue for traffic purposes. Cities were able to upgrade their safety programs and employ additional traffic control personnel. Portland, Oregon, was an outstanding example of wise use of parking meter revenue. By World War II Portland was able to hire fifty additional traffic patrolmen and pay for badly needed police equipment out of parking meter revenue.<sup>35</sup> Not all cities chose to put all of their parking meter revenue into a traffic fund. When the Accident Prevention Division of the National Conservation Bureau took a nationwide survey of the use of parking meter revenue in 1941, it found that only about 25% of the net income from parking meters was being spent for traffic purposes. However, 40% of the cities with parking meters were devoting at least some parking meter revenue to traffic purposes.<sup>36</sup> When motorists could see improvements being made to relieve traffic congestion and aid in speeding up traffic flow, they were much more willing to pay for the privilege of parking on city streets.

Collecting parking meter coins did not pose any difficulty. This was possible because the Dual Company had foreseen the problem and incorporated an ingenious gathering system in their parking meter. The

---

<sup>35</sup> Donald R. Hammitt, "20,000,000 Parking Meter Nickels Save 26 Lives," *ibid.*, LVIII (October, 1943), p. 101.

<sup>36</sup> Harold F. Hammond, "Using Parking Meter Revenues for Traffic Improvements," *ibid.*, LVI (March, 1941), p. 93.

nickels fell into a tube located below the head of the parking meter. When the coins were collected each day, the tube was replaced with an empty one. The sealed used tubes were taken to the city treasurer's office. Each tube was marked, and this enabled the city to keep an accurate record of how much money was deposited in each parking meter. The money was counted and recorded in the treasurer's office.<sup>37</sup> This procedure allowed the City of Oklahoma City and all other cities that installed parking meters to evaluate the performance of each parking meter. It was easier to determine whether a parking meter was actually needed in any location and what time limit should be set on any particular parking meter.<sup>38</sup>

In conclusion, there were many problems that faced city officials across the nation when they began to collect parking meter revenue. The court decisions that specified parking meter fees could not be exorbitant and still be legal had a temporizing effect on city administrations. Cities surmounted most of the fee obstacles and were rarely challenged for charging too much for the use of parking spaces. Once the motorists could see the advantages of metered parking, they rarely argued about the fee.

As time passed, more and more cities used parking meter revenue to make traffic improvements, and this was something the motorists could see. This made it easier to refute claims by opponents of parking meters that parking meter revenue was just another tax. Secure collection methods made it more difficult for individuals in the city

---

<sup>37</sup> Interview of author with Thuesen, Stillwater, Oklahoma, June 28, 1967.

<sup>38</sup> "Record Falls," Daily Oklahoman, August 7, 1936, p. 4.

government to cheat the city, and this blocked most claims of internal graft. Most taxpayers could see that parking meter revenue was offsetting the tax losses that came with the Great Depression. They knew also that this was a tax, but that there was a difference between this and other taxes, for this was being paid by those who benefited most from the privilege of parking on city streets. When parking meter revenues were clearly in excess of the amount needed to control downtown traffic congestion, the taxpayers did little or nothing to reduce meter fees. They knew that parking meters were accomplishing their intended task of providing parking space, and the meter fee thus became an unimportant consideration.

## CHAPTER V

### PUBLIC REACTION TO PARKING METERS

When parking meters were first installed on Oklahoma City streets in 1935, no one knew with any degree of certainty what effect they would have on traffic control or on commercial activity in the downtown area. Merchants who had parking meters in front of their establishments did not know if parking meters would have an adverse effect on their businesses. They knew that the traffic congestion in the downtown area was undesirable for their businesses before the installation of parking meters, and that this was one of the reasons that prompted the Oklahoma City Chamber of Commerce to ask Magee to find a solution to the parking problem.<sup>1</sup>

City Manager Mosier was anxious to determine if the downtown businessmen of Oklahoma City supported the installation of parking meters. When he instructed Lambert to make a survey of the effectiveness of parking meters in August, 1935, one of the purposes of this study was to determine whether businessmen in the effected area supported parking meters. When Lambert submitted his findings, it was evident that parking meters had won an overwhelming vote of confidence from downtown businessmen. All bankers, building and loan executives, and hotel managers interviewed favored parking meters.

---

<sup>1</sup>Thuesen, "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, XLV, pp. 114-115.

123 merchants were in favor of parking meters and only four voiced their disapproval. They were asked if any changes should be made in the system, and many thought that there should be minor variations. For the most part, however, the merchants were satisfied. Most of the changes they recommended were concerned with a variation of time limits, depending on the business establishment effected.<sup>2</sup>

Mosier used the information submitted by Lambert to revise parking limits in timed zones. Most metered parking spaces retained their one-hour limit, but spaces near banks were designated as half-hour zones. Mosier was complying with requests that had been voiced by businessmen, and this helped increase the popularity of parking meters in the Oklahoma City business community.<sup>3</sup>

Mayor Martin did not want to use the information obtained in the Lambert survey when he was asked by city officials all over the nation to give them an analysis of the effectiveness of parking meters in Oklahoma City. Martin did not want to involve the city in advertising the product of the Dual Parking Meter Company. In October, 1935, he asked the Oklahoma City Chamber of Commerce to take another public opinion survey.<sup>4</sup> They decided to fulfill the mayor's wishes and appointed J. M. Gayle to direct the study. It lasted three weeks and when the results were tabulated, they showed another victory for

---

<sup>2</sup>Lambert, "Survey of Parking Meters in Oklahoma City, August 26, 1935," pp. 1-9, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>3</sup>"Parking Time to be Longer," Daily Oklahoman, September 14, 1935, p. 1.

<sup>4</sup>"Survey of Public Stand on Parking Meters is Slated," *ibid.*, October 4, 1935, p. 21.

parking meters. Businessmen who favored parking meters outnumbered opponents 146 to twelve. Again the businessmen had some suggestions for improving the parking meter system, but now they were clamoring for an extension of metered zones.<sup>5</sup> Mosier was able to persuade the city council to act favorably on this request, and by December 20, 1935, Oklahoma City's second battery of parking meters were in operation.<sup>6</sup>

When parking meters were installed in other cities, downtown businessmen were some of the strongest supporters of the experiment. In Dallas, Texas, 99% of the merchants favored parking meters.<sup>7</sup> The most ambitious survey taken to determine the reaction of merchants concerning parking meters was conducted by the S. S. Kresge Company in 1939. This business polled its store managers in fifty-one cities across the nation that had installed parking meters. They found that sixty-nine store managers supported parking meters while eleven were opposed to them. Nearly all of the store managers were opposed to parking meters at first, but when they saw that the traffic congestion problem was being solved, they were won over.<sup>8</sup>

In some cities merchants were almost completely against parking meters prior to their installation. Kansas City, Missouri, merchants did not like parking meters when they read about the Oklahoma City installation. Merchants in Kansas City proposed that special buildings

---

<sup>5</sup>"Coin Parking Survey Vote is Favorable," *ibid.*, November 26, 1935, p. 14.

<sup>6</sup>"Take of Parking Meters is \$221," *ibid.*, December 21, 1935, p. 1.

<sup>7</sup>Beckenbach, "Eighteen Months of Intelligent Parking Meter Operation, Dallas," American City, LII (September, 1937), p. 60.

<sup>8</sup>C. E. Holzworth, "Chain Store Managers Report on Parking Meters," *ibid.*, LIV (November, 1939), p. 49.



be built for parking purposes, or that federal government grants be made to the city to provide for new offstreet parking lots.<sup>9</sup> However, ideas such as these were much more costly than parking meters, and within a few months Kansas City merchants were appealing to their city government to consider their installation. Kansas City installed its first parking meters in June, 1936, and within a short time they were winning approval from all segments of the population.<sup>10</sup>

Numerous city administrations waited until downtown merchants appealed to them before they took any serious steps to install parking meters. If the merchants came to the city and asked that parking meters be installed, then city officials knew that a strong and influential segment of the population supported parking meters, and this made their task much easier. Minneapolis, Minnesota, waited until fourteen business and civic groups petitioned them to purchase parking meters before they took any action.<sup>11</sup> Thus it was not unnatural that Minneapolis merchants gave their wholehearted support to the venture and helped insure its success.<sup>12</sup>

Once parking meters proved that they helped increase business,

---

<sup>9</sup>"Its Thumbs Down as Far as Most Kansas City Merchants are Concerned on Parking Meters Like Those in Oklahoma City," Daily Oklahoman, August 9, 1935, p. 9.

<sup>10</sup>T. J. Seburn, "Transportation Speeded by Kansas City Parking Meters," American City, LVII (March, 1942), pp. 83 and 85.

<sup>11</sup>"Minneapolis Businessmen Want Parking Meters," ibid., LIII (October, 1938), p. 7.

<sup>12</sup>Russell H. Bacon, "Meters Help Business in Minneapolis," ibid., LVI (June, 1941), p. 26.

they were supported by the merchants. The main argument against parking meters by businessmen all over the country was that small towns did not have metered parking, and because of this some out-of-town customers would be reluctant to come to a city and pay for parking time while they shopped. However, only a small minority of merchants expressed this fear, and after an extended period of parking meter operation in their cities, they found that increased availability of parking spaces in the downtown area more than offset this loss.

Perhaps the most important segment of the population with regard to parking meter reaction was the private citizen. He would need to use the parking meter when he conducted his business in the downtown area, and his acceptance of the system was vital to its success. Mosier and Magee were aware of the importance of acceptance of parking meters by motorists, and even before parking meters were first installed in Oklahoma City, they tried to prepare the public for the experiment by a series of newspaper advertisements and radio broadcasts.<sup>13</sup>

When Magee appealed to the people of Oklahoma City in an open letter concerning parking meter installation published in the Daily Oklahoman, he directed his reasoning toward motorists.<sup>14</sup> Mosier was as interested in the opinions of private citizens as he was in those of businessmen. When he asked Lambert to take a public opinion survey on the acceptance of parking meters, he instructed him to include the

---

<sup>13</sup>"Regulating Parking by Meters," Public Management, XVIII (February, 1936), p. 44.

<sup>14</sup>"Concerning the Park-O-Meters," Daily Oklahoman, July 26, 1935, p. 11.

opinions of motorists. Lambert found that of the thirty-nine motorists interviewed, thirty-seven were in favor of parking meters, while only two were opposed to the idea.<sup>15</sup>

When the Oklahoma City Chamber of Commerce took its parking meter survey in November, 1935, it found that 75% of the motorists interviewed favored the meters.<sup>16</sup> Statistics such as these made a favorable impression on city officials in other cities who were contemplating installing parking meters in their cities. Many city officials took surveys to determine public attitudes toward parking meters once they were installed. All of these surveys showed that a majority of motorists favored parking meters. In 1938 the Bureau of Municipal Information of the State of New York conducted a nationwide survey to determine public acceptance of parking meters. They sent questionnaires to cities all over North America that had installed parking meters. Of the cities that answered the questionnaire, only Mexico City, Mexico, motorists did not give parking meters a clear vote of confidence. Half of Mexico City's motorists did not like parking meters, but over 99% of the motorists in most of the other cities answering the questionnaire were in favor of parking meters.<sup>17</sup>

Motorists who opposed parking meters did so for a variety of reasons. In Oklahoma City a majority of those opposed to parking

---

<sup>15</sup>Lambert, "Survey of Parking Meters in Oklahoma City, August 26, 1935," pp. 1-9, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>16</sup>"Coin Parking Survey Vote is Favorable," Daily Oklahoman, November 26, 1935, p. 14.

<sup>17</sup>"Parking Meters an 'Unqualified Success' in 18 Cities," American City, LIII (May, 1938), p. 7.

meters said they did not favor the experiment because they disliked Magee. Some shared the opinion of Butterfield that parking meters were illegal.<sup>18</sup>

Across the nation the minority of motorists who opposed parking meters voiced the opinions that they were illegal or that they imposed an undue financial hardship on those who were least able to pay for timed parking. Favorable court decisions quieted the first argument and with the return to a more normal business climate in the late thirties, the second argument lost most of its force.

Some citizens took more vigorous action against parking meters than was possible in the nation's courts. In Fort Worth, Texas, an irate motorist tried to chop down a parking meter with an ax.<sup>19</sup> Another citizen hit a parking meter that would not operate with his fist and skinned his knuckles. While he was at a local physician's office obtaining treatment for his injured hand, he received a parking ticket.<sup>20</sup> These instances were the exception rather than the normal reaction to parking meters. Most motorists, whether they favored or opposed parking meters, accepted them and benefited from their service.

The most organized resistance to parking meters came from the American Automobile Association. In 1936 it passed a number of resolutions which condemned the parking meter system. Some local affiliates

---

<sup>18</sup>Lambert, "Survey of Parking Meters in Oklahoma City, August 26, 1935," p. 2, manuscript document, Thuesen Collection, University Archives, Oklahoma State University Library.

<sup>19</sup>Vachule, "Editor's Idea Puts Cash in Fort Worth's Coffers," Fort Worth Star-Telegram, July 24, 1961, Sec. 4, p. 1.

<sup>20</sup>Lewis Nordyke, "Those Irritating 'Snitching Posts,'" Coronet, XLVII (April, 1960), p. 178.

of the association conducted successful campaigns against the installation of parking meters in their cities. However, not all local American Automobile Association affiliated auto clubs opposed parking meters. In St. Petersburg, Florida, and El Paso, Texas, where parking meters were installed, the local auto clubs were in favor of parking meters.<sup>21</sup>

D. D. Hatcher, the secretary-manager of the Toledo, Ohio, Automobile Club, expressed the sentiment of many of the local auto clubs. At first the local organization fought the installation of parking meters, but after the installation and the subsequent improvement of the downtown parking problem, it began to give its support to parking meters.<sup>22</sup>

The main argument against parking meters expressed by officials of the American Automobile Association was that they were just another taxing device and that the association was trying to protect the American motorists from unjust taxes. In 1938 the association published a report favorable to parking meters. It stated that parking meters reduced cruising by prospective parkers, speeded the flow of traffic, and allowed more motorists to find parking spaces.<sup>23</sup> At the same time, the American Automobile Association was investigating alleged bribery in the sale of parking meters. The association had switched

---

<sup>21</sup>"Parking Meters Gain," Business Week, (no volume), June 27, 1936, p. 16.

<sup>22</sup>Paul S. Robinette, "Eliminating Business District Congestion in Toledo," American City, LIII (March, 1938), p. 83.

<sup>23</sup>"A. A. A. Reads Parking Meter Statistics," *ibid.*, LIII (September, 1938), p. 7.

the attack to abuses in the industry and contended that motorists were being overcharged for metered parking.<sup>24</sup>

As parking meters were proving their value in cities across the nation, the American Automobile Association began to reevaluate its earlier opposition to parking meters. Some local affiliated clubs deviated from the views of the national office of the association, and by 1938 the organization was not able to overlook growing local support for parking meters. Although the association did not lend its wholehearted support to parking meters in the pre-war period, it recognized that metered parking was growing in popularity, and confined its opposition to evils within the system. It accepted the installation of parking meters as a necessary remedy to combat traffic congestion in the downtown areas of American cities. It continued to fulfill its role as the guardian of America's motorists by alerting the public to any attempt within the parking meter system to cheat the motorist.

Another important consideration was the reaction of commercial carriers to parking meters. One such group affected was trucking firms that delivered products to downtown stores. Before the installation of parking meters, delivery trucks had accounted for much of the problem of double parking. After parking meters were installed, there was more available parking space, but now the trucks had to pay for its use. Dallas, Texas, attempted to satisfy the delivery companies by allowing trucks to park free until 10:00 a.m., and after that they would be charged the regular fee. This system worked so well that Oklahoma City officials went to Dallas to observe the method in operation. Oklahoma

---

<sup>24</sup>Montgomery, "Flash on Parking Meter Developments," Special Information Bulletin, No. 9 (March 9, 1938), pp. 1-2.

City had set aside specific loading zones where trucks could park free while they were making deliveries to stores.<sup>25</sup>

These were the two methods used across the nation to insure orderly deliveries in the downtown areas of cities. By stipulating that deliveries had to be made in the morning, city officials knew that those firms that took advantage of this concession would help eliminate some of the downtown traffic congestion. Most shoppers did not arrive downtown before 10:00 a.m., and by that time trucks would be gone. By creating free loading zones, cities were virtually eliminating double parking. Most truck drivers would be more unwilling to double park and risk a fine than park in a loading zone.<sup>26</sup> When satisfactory arrangements were made for truck parking, most complaints from delivery firms ceased.

Another type of commercial carrier that was affected by parking meter ordinances was the taxicab companies. Most cities allowed taxicabs to park in "stands" for an unlimited time while they were waiting for passengers, but when parking meters were installed in some cities, taxi stands were eliminated and replaced with metered zones. Taxicab companies claimed that this was an infringement of their right to conduct business. Some cities, such as Oklahoma City, would not allow taxi companies to rent parking meter spaces at the maximum possible rate. However, in order to eliminate an unfavorable reaction to parking meters by taxicab companies and potential taxi passengers, most

---

<sup>25</sup>"City Board to Study Parking," Daily Oklahoman, February 18, 1937, p. 17.

<sup>26</sup>Robinette, "Eliminating Business District Congestion in Toledo," American City, LIII (March, 1938), p. 81.

cities relented and assigned taxicabs free parking zones.<sup>27</sup> Taxicab companies began to accept parking meters when it was evident that they were beneficial to their purposes. The time needed to complete a taxi trip in cities such as Memphis, Tennessee, and Tampa, Florida, was reduced by up to 50% after parking meters were installed because the general traffic flow had accelerated to that extent.<sup>28</sup> When taxicab companies were able to use parking meters to their own advantage, they also accepted them.

With the start of the population movement from the central residential sections of cities to the suburbs in the thirties, another problem concerning parking meters arose. Indirectly, it affected those railroads that provided commuter service. In these years before the super highway, many people drove their automobiles to the railroad station and parked all day while they rode the commuter trains to and from work. As the number of automobiles parked at the railroad station increased, the parking problem in the area became intolerable.

One solution to this problem was for the city to build a parking lot. This was not as simple as it would appear, for part of the all-day parkers were usually not residents of the municipality where the railroad station was located. Some citizens held the opinion that it was unfair to use public money to provide benefits for non-residents. The answer to this problem was parking lots equipped with parking

---

<sup>27</sup> Leon R. Brown, "Effective Control by Parking Meters," *ibid.*, LII (August, 1937), pp. 53-54.

<sup>28</sup> "Parking Meters Speed Traffic," *ibid.*, LVII (February, 1942), p. 91.



meters.<sup>29</sup> No money was actually taken out of the city treasury to build the parking lot and the parking meters paid for themselves as well as for the lot. All parkers paid the same fee for parking, so the tax burden was distributed among those who actually benefited from the service. As long as the cities provided parking meters and the parking lots, the railroads were sure to benefit.

Not all railroads, however, were in favor of parking meters. Perhaps the most unusual case illustrating this fact happened in Phoenix, Arizona. Buchanan Street, the thoroughfare which gave passenger access to the Phoenix Union Station, was a private street owned jointly by two competing railroads. One railroad favored parking meters and the other was against using them. The railroads alternated maintaining Buchanan Street for two-year periods. Every time there was a change in maintenance supervision, the parking meters were either removed or installed.<sup>30</sup>

Opinions held by groups and individuals concerning parking meters varied according to the degree of service provided by metered parking for the group or individual. As it became clear that parking meters were not just a passing fad, but were providing a basic service, most organized opposition faded. As motorists became more familiar with parking meters, they lost their fear of being cheated and began to accept the parking meter as an impartial judge that recorded their

---

<sup>29</sup> Arthur Richards, "Metering Municipal Parking Lots," *ibid.*, LVI (May, 1941), p. 95.

<sup>30</sup> Nordyke, "Those Irritating 'Snitching Posts,'" *Coronet*, XLVII (April, 1960), p. 178.

parking time.

Opposition to parking meters in Oklahoma City because some motorists knew and disliked Magee was a good example of some of the petty reasons expressed by those who disliked the whole idea of metered parking. Perhaps the only legitimate reason for opposing parking meters was voiced by those who said the five cent fee imposed upon them a real hardship. When Syracuse, New York, installed penny parking meters, it forestalled even this argument. Another element parking meter opponents did not take into consideration was the time spent cruising their automobiles while looking for parking spaces, more of which were available because of metered parking. Cruising took gasoline, and if this cost were subtracted from parking meter fees, it would show that metered parking was far less expensive than the nickel fee. In the pre-World War II period public opinion concerning parking meters changed from an attitude of distrust and suspicion to one of faith and appreciation after the parking meter had proved to be a workable method of solving most municipal parking problems.

## CHAPTER VI

### CONCLUSIONS

The parking problem came as a result of long neglect in regulating traffic in urban areas. Cities all over the world had grown in population, but the area of their downtown sections remained relatively constant. This growth in population paralleled a similar growth in vehicular and pedestrian traffic. While pedestrian traffic did not cause vexing problems, vehicular traffic did. Once a vehicle stops it is nothing more than an object that serves no purpose. This was recognized in ancient times in the city of Rome, but all that was done was to ban vehicular traffic in one part of the city. As time passed more and more notice was paid to parked vehicles. With the phenomenal increase in the number of automobiles in the United States in the 1920's and 1930's, the parking problem was compounded with the production of each car.

When Magee decided to build a parking meter, he was aware of the hopelessness and dissatisfaction that surrounded the prevailing parking system. He knew that he was in for a good fight, but he was a proven fighter, and he welcomed the challenge. He was not able to accomplish his mission alone, so he went to those who had the technical knowledge to develop an operable and satisfactory parking meter. Without this action his dream would not have been realized, and his efforts would today be in the same category as those of numerous inventors

who failed in the parking meter industry. The never-failing diligence of Thuesen and Hale took Magee's idea from the crude stage of student experimentation and gave it the professional engineering creativity and attention that would insure its ultimate success.

Magee's organizational ability was a vital part of the success of the parking meter. He understood that no matter how fine a product his company produced, the public would be reluctant to try it without a test. The initial installation in Oklahoma City was the trial of public acceptance. Magee was aware of this and did everything possible to insure a favorable verdict.

Working behind the scenes was an important ingredient of Magee's success, although face-to-face hard sell contact was probably the most important factor in getting a new product started in the 1930's. Even though he used radio, articles in periodicals, newspapers, and motion pictures to reach the largest number of potential customers, this was but the preliminary stage in his sale technique. He realized that only when he or his salesmen came into actual contact with a potential customer, he either won or lost his bid to install parking meters for the municipality.

Magee's product, the Park-O-Meter, was the industry-wide leader during the entire pre-World War II period. This was no accident. When Thuesen and Hale designed the first manual type parking meter, they were aware that the Park-O-Meter would have to withstand spirited competition. By building the finest prototype possible the first time, they avoided many of the pitfalls that plagued competing companies. The willingness of Magee's Dual Parking Meter Company to experiment and constantly present the buyer with an advanced product, accounted for

its continued leadership in the industry.

Concerns which became competitors of the Dual Company were not able to capture a large share of the market. Many of these companies were not based on a firm financial foundation. Some of the companies were nothing more than enlarged backyard machine shops, and consequently their products were not adequately designed or manufactured and could not hope to compete with Magee's parking meter.

Municipalities took bids on parking meters, and models of the various designs were usually submitted for their approval. City officials were looking for durability and dependability, and this accounted for the sales leadership of the larger and more sophisticated parking meter firms such as the Dual Parking Meter Company. Sales promotion, ever-changing design, and continuous improvement were all factors vital in market leadership during the 1930's. If the parking meter had started as a machine shop invention and had not benefited from the support of able professional engineering skill and well-organized sales campaigns, it is unlikely that its use would have spread so rapidly over the United States.

Patent rights granted to individuals and sold to the various companies had a twofold effect on the parking meter's development. By having a patent, the inventor was given security against someone copying his invention. On the other hand, the granting of a patent had a stifling effect on the design of parking meters. It is conceivable that an amalgamation of the best features of all parking meter designs would have presented the motorist with a more trustworthy and reliable parking meter. By granting patents the government was in effect giving a monopoly to individuals on what in some instances were worthwhile

innovations in the field of parking meters. Many of these new ideas never got beyond the experimental stage, and thus it cannot be determined whether they were really as promising as they seemed at the time the patent was granted.

The legal question of the use of parking meters was never settled to the satisfaction of its developers. The question of whether parking meters are legal, if they provide the municipality with revenue beyond traffic enforcement needs, can still be posed. The issue was never answered adequately because no specific amount was ever arrived at by cities that would be considered sufficient to meet the costs of traffic enforcement. When parking meter revenue was used for traffic improvements, this further complicated the matter. It brought up the lingering doubt of whether traffic improvements could be considered a legitimate expense accountable to parking meter revenue.

The question of whether parking meters violated the use of the public streets was answered in 1937. The Oklahoma Supreme Court ruled in that year in the H. E. Duncan case that parking meters did not violate the use of public streets. However, when the Alabama Supreme Court gave its decision in the same year, it was a reversal of the Duncan case. The major difference was that the Alabama case was decided in favor of abutting property owners, while Duncan did not own property adjoining the metered zone that he violated. In nearly all the decisions against parking meters in the pre-World War II period, the plaintiff could claim that he was protecting his property rights. If opponents of parking meters had no property that was endangered by the added expense of metered parking, it was highly unlikely that court decisions would support their claims. The primary question then

was whether parking meters infringed upon an individual's real property. If he relied on his share of public property as a basis for his claim against parking meters, then he would probably lose his case. Most courts saw that the benefits of parking meters far outweighed any burden they might impose on a single individual.

Revenue collected from parking meters began to assume significant proportions soon after Oklahoma City began its parking meter operation. The Great Depression made it imperative that cities look for new sources of income to pay for vital services, and parking meters thus became an entirely new approach to municipal taxation. Once a few cities began to experiment with parking meters as a source of revenue and had such excellent results, other city officials began to explore this new method of taxation. Revenue from parking meters became somewhat of an emergency tax, and once the Great Depression was over, there was little justification for the original fee. But when a tax has been levied in an emergency, the government involved inevitably depends on it after the crisis has passed.

There was little evidence to support the continued use of five cent parking meters for service charges. One possible justification was to place the revenue in a traffic improvement fund. Only about 25% of the revenue, however, was used for traffic improvement. Magee allowed each city to retain 15% of its parking meter revenue while it was buying Park-O-Meters. Using this figure as a gauge of actual maintenance costs, it is possible to evaluate how much profit the cities were making. Even if a city put part of its parking meter revenue in a traffic improvement fund, it still made a 60% profit. This profit was used, however, to allow other taxes to remain stable in the Great

Depression period. The influx of parking meter revenue enabled hard pressed cities such as Oklahoma City to continue to meet daily obligations at a time when it seemed that they would default on bond payments. Through the influx of parking meter revenue, some cities were able to remain in good financial standing and thus weather the Great Depression.

The parking meter itself did not control parking. Without rigid enforcement by police departments parking meters were little more than expensive ornaments that lined city streets. It soon became evident that these machines were not a cure-all for all of the ills of traffic enforcement. When a parking meter system was used in conjunction with impartial traffic enforcement, the results were usually very favorable. Psychologically, the parking meter gave the patrolman an edge when he wrote a parking violation ticket. Even though some parking meter timing devices were not accurate, most motorists were unwilling to dispute the dial indicator. The parking meter presented the motorist with an impartial recording device, and made enforcement of timed parking zones much easier in metered zones.

Without the support of city business communities, parking meters would not have been a success. At first businessmen opposed the installation of parking meters, but when they saw that the machines were correcting parking congestion problems and helping their income, they were quick to give their approval to parking meters. Parking meters were inexpensive and seemed to provide businessmen with a cheaper solution to their customer's parking problems than other proposals. In 1935 when parking meters were first installed, there was little thought given to federally financed offstreet parking. Multi-story parking garages such as those proposed by Kansas City, Missouri, merchants would



have been far more costly than parking meters.

Commercial carriers were at first skeptical about metered parking because they saw it as an additional expense that would cut into their profit margin. When it became evident to them that city officials had included safeguards in their traffic planning programs that would guard every means of the commercial carrier's livelihood, then commercial carriers began to support parking meters. A second factor which won added support from commercial carriers was the ability of the parking meter system to speed up traffic, and with the increase in speed, profits could not help but go up. Once commercial carriers were able to determine that parking meters were helping their operations, they were quick to cooperate in complying with parking meter regulations.

There is little doubt that parking meters would have succeeded without their acceptance by motorists. When Thuesen and Hale designed their parking meter model, they kept its operation simple to accommodate the motorists, and Magee deliberately held the fee at a nickel to please the parkers. With the users always in mind, the parking meter companies proceeded cautiously before making any changes on their machines which would make them more difficult to operate. The trend was always in the opposite direction. First, automatic parking meters were produced, which required less manipulation by the motorist, and then multiple coin machines, which were more convenient, were introduced. The motorist learned to accept parking meters when he saw that they benefited him in his efforts to park in the downtown areas of cities.

Parking meters, however, were not the complete solution to the parking problem in the cities, for it is possible to park only a certain

number of automobiles in a given area. No matter how rigidly timed zones are enforced, they reach a saturation point whenever the number of motorists who desire to park exceed the number of spaces available. When that point is reached, then no system of onstreet parking is satisfactory. Parking meters in the pre-World War II period were, with the exception of suburban railroad parking lots, almost always used to regulate onstreet parking, and thus could regulate parking for only a limited number of vehicles.

It would be unfair to conclude that parking meters did not perform their task of controlling onstreet parking at a time when the streets of America's cities could accommodate most automobiles in metered zones. Parking meters were never intended to regulate all automobile parking forever; they were, however, an inexpensive means of onstreet parking control feasible in the 1930's, and they performed this task to the point of perfection. In the final analysis, without their invention some idea involving offstreet parking, much more costly and probably with not as wide public acceptance, would have been implemented to control intolerable downtown parking problems.

## BIBLIOGRAPHY\*

### Interviews

Personal interviews with H. G. Thuesen, Stillwater, Oklahoma, June 14, 1967, June 28, 1967.

These interviews with Professor Thuesen, the co-developer of the parking meter, proved of incalculable value in writing this thesis. They were particularly helpful in providing background for the invention of the parking meter. Details were related by Professor Thuesen which otherwise would not have been available.

### Unpublished Materials

Balisteri, Joseph F., to author, August 28, 1967, in author's possession.

Balisteri's letter was helpful because he told of his experiences in working on a parking meter model that operated on a series of pulleys.

Brandenberger, Herbert J., to author, August 28, 1967, in author's possession.

Brandenberger's letter was useful because it recounted his experiences in designing a key-operated parking meter.

Brown, W. H., "Memorandum Brief and Argument, Ed Butterfield vs The City of Oklahoma City, July 23, 1935," manuscript document, H. G. Thuesen Collection, University Archives, Oklahoma State University Library, Stillwater, Oklahoma.

This is a summary of Brown's defense of parking meters.

DeShazo, John J., Jr., Director, Department of Traffic Control, City of Dallas, to author, July 20, 1967, in author's possession.

DeShazo's letter was particularly valuable because he told of all the circumstances surrounding the first installation of parking meters in Dallas.

Du Pont, Hubert I., to author, August 20, 1967, in author's possession.

Du Pont told of the experiences of his father, Francis I. Du Pont, in the parking meter field.

---

\* Contains only items cited in footnotes.

Geer, Hilton, to author, November 2, 1967, in author's possession.

This letter by Oklahoma City Police Chief Geer was useful in determining how seriously the Oklahoma City Police Department considered parking meter violations.

Hale, Gerald A., "The Park-O-Meter Story," manuscript article in author's possession.

This is Hale's reminiscences of his part in the invention and development of the parking meter. It provided valuable first-hand information about the early development of the parking meter.

Hartung, Melitta, Department of Public Relations, American Automobile Association, to author, October 11, 1967, in author's possession.

Hartung's letter furnished important details concerning the American Automobile Association investigation of price fixing in the parking meter industry.

Heaver, Louis W., to James B. Furrh, May 11, 1953, Oklahoma City Chamber of Commerce Archives, Oklahoma City, Oklahoma.

This is a letter written by the 1953 vice president of the Oklahoma City Chamber of Commerce. It gives valuable background information on the circumstances that led to the development of the first parking meter.

Hopkins, Edwin A., to author, January 17, 1968, in author's possession.

The information given here was useful in determining Hopkins' part in the development of the first parking device.

Hull, William R., Jr., Congressman, Sixth District of Missouri, to author, November 7, 1967, in author's possession.

Hull's letter was valuable in determining the depth of the investigation into parking meter price fixing conducted by the United States Department of Justice.

Lambert, Jeff, "Survey of Parking Meters in Oklahoma City, August 26, 1935," manuscript document, H. G. Thuesen Collection, University Archives, Oklahoma State University Library, Stillwater, Oklahoma.

This survey was the first public opinion poll and on-the-spot evaluation of parking meters taken in Oklahoma City.

Lohmann, M. R., to Chairman, Awards Nominations Committee, American Institute of Industrial Engineers, October 8, 1962, H. G. Thuesen Collection, University Archives, Oklahoma State University Library, Stillwater, Oklahoma.

Lohmann's letter was useful because it lists many of Thuesen's accomplishments throughout his life.

Lysons, Hilton H., to author, August 24, 1967, in author's possession.

Lysons told of his experiences designing the two-light parking meter and of working with the Chrono-Park Meter Company.

McCullough, Charles J., President, Business Statistics Organization, Inc., to author, August 28, 1967, in author's possession.

This letter confirmed the death of Roger W. Babson on

March 5, 1967, and went on to relate some information on the association of Babson and Elmer Nickols.

McGay, J. B., to author, August 14, 1967, in author's possession.

McGay's letter described some of his involvements with the development of the parking meter while he was president of the Macnick Company.

Oklahoma City, Oklahoma, "Contract Between The Dual Parking Meter Company and the City of Oklahoma City, July, 1935," manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

The terms for the first installation of parking meters in Oklahoma City are stated in full.

Oklahoma City, Oklahoma, "Minutes of the Meeting of the City Council, May 2, 1935," Book 9, p. 234, manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

This was the meeting at which the Oklahoma City Council passed the first parking meter ordinance.

Oklahoma City, Oklahoma, "Minutes of the Meeting of the City Council, July 2, 1935," Book 9, p. 429, manuscript document, Traffic Control Office, Municipal Building, Oklahoma City, Oklahoma.

It was at this meeting that the Oklahoma City Council accepted the bid of the Dual Parking Meter Company.

Semtner, Roy H., to author, August 31, 1967, in author's possession.

This letter was valuable because it gave important information concerning the Duncan case.

Thuesen, H. G., to Carl Magee, May 5, 1933, H. G. Thuesen Collection, University Archives, Oklahoma State University Library, Stillwater, Oklahoma.

Thuesen's letter to Magee lists the winners of the parking meter model contest, and for the first time mentions the employment of Oklahoma State University personnel to perfect the crude models submitted in the contest.

Tulsa City-County Library to author, March 5, 1968, in author's possession.

This was used to determine the first name of Adolph Schillinger, a Sand Springs, Oklahoma, machinist, who attempted to perfect a parking meter model for Magee.

Vischer, Alfred, Jr., to author, September 5, 1967, in author's possession.

Vischer mentions that his parking meter was based on the Dual parking meter designs, and that he tried to improve on them.

## Published Documents

Eagin, Frank O., and C. W. Van Eaton, comps. Oklahoma Statutes, 1931. 2 volumes, Oklahoma City: Harlow Publishing Co., 1932.

These were valuable in analyzing the various state statutes pertaining to free use of public streets.

Oklahoma Reports. Oklahoma City, Oklahoma: Harlow Publishing Co., 1937.

The Duncan case was analyzed in detail in this issue.

Oklahoma Tax Commission. Report of the Oklahoma Tax Commission - from its Creation January 19, 1931 to July 1, 1931; and for the Three Fiscal Years Ending June 30, 1932, 1933 and 1934. Oklahoma City, Oklahoma: Harlow Publishing Company, 1934.

These reports were helpful in evaluating the decline in tax revenue in Oklahoma County and in the State of Oklahoma in the years preceding the installation of parking meters in Oklahoma City.

United States Department of Commerce. Statistical Abstracts of the United States, Vol. LVIII. Washington: Government Printing Office, 1936.

This volume was useful in determining the increase in the number of automobiles in Oklahoma from 1913 to 1935.

United States Patent Office. Official Gazette, Vol. CCXX. Washington: Government Printing Office, November, 1915.

Thuesen's first patent for a speed indicator was recorded in this issue.

\_\_\_\_\_. Official Gazette, Vol. CDXXXIII. Washington: Government Printing Office, August, 1933.

The Babson-Nickols patent of the first device to be called a parking meter is in this volume.

\_\_\_\_\_. Official Gazette, Vol. CDXLVI. Washington: Government Printing Office, September, 1934.

Babson's patent on the first automatic parking meter is in this issue.

\_\_\_\_\_. Official Gazette, Vol. CDLXXII. Washington: Government Printing Office, November, 1936.

The patent on the first electric parking meter is recorded here.

\_\_\_\_\_. Official Gazette, Vol. CDLXXX. Washington: Government Printing Office, July, 1937.

The first patent on a belt-driven parking meter is listed in this issue.

\_\_\_\_\_. Official Gazette, Vol. CDLXXV. Washington: Government Printing Office, February, 1937.

This contains Edwin Hopkins' first patent for a device resembling a parking meter, and also a patent on a machine which took tokens instead of coins.

\_\_\_\_\_. Official Gazette, Vol. CDLXXXVI. Washington: Government Printing Office, January, 1938.

A parking meter patented in this issue used an hour glass timer instead of a conventional timing device.

\_\_\_\_\_. Official Gazette, Vol. CDLXXXIX. Washington: Government Printing Office, April, 1938.

A parking meter designed to correct failures on the clock dial indicator was included in this issue.

\_\_\_\_\_. Official Gazette, Vol. CDXCI. Washington: Government Printing Office, June, 1938.

This issue contains a patent on a parking meter that was attached to the vehicle.

\_\_\_\_\_. Official Gazette, Vol. DI. Washington: Government Printing Office, April, 1939.

A parking meter patent in this issue was on a device which took paper checks instead of coins.

\_\_\_\_\_. Official Gazette, Vol. DV. Washington: Government Printing Office, August, 1939.

A patent on a parking meter that incorporated a shutter to hide the dial while the coin was being deposited was recorded in this volume.

\_\_\_\_\_. Official Gazette, Vol. DVIII. Washington: Government Printing Office, November, 1939.

This issue contains a patent on the first parking meter to use an electric light.

\_\_\_\_\_. Official Gazette, Vol. DXVII. Washington: Government Printing Office, September, 1940.

This volume was useful because it contains a patent on the first parking meter to use a camera as a recording device.

\_\_\_\_\_. Official Gazette, Vol. DXIX. Washington: Government Printing Office, October, 1940.

This issue contains a patent on a parking meter which was built into the street and required the automobile to drive over it before it operated.

\_\_\_\_\_. Official Gazette, Vol. DXXI. Washington: Government Printing Office, December, 1940.

A two-light parking meter, which was built to give the patrolman greater visibility, was patented in this volume.

\_\_\_\_\_. Official Gazette, Vol. DXXII. Washington: Government Printing Office, January, 1941.

This volume was useful because it contains a patent on a street-mounted parking meter which had two steel beams to hold the auto in place.

\_\_\_\_\_. Official Gazette, Vol. DXXVII. Washington: Government Printing Office, July, 1941.

This contained Francis I. Du Pont's parking meter patent, a key-operated device.

\_\_\_\_\_. Official Gazette, Vol. DXXIX. Washington: Government Printing Office, August, 1941.

A patent on an oil flow parking meter was recorded in this issue.

\_\_\_\_\_. Official Gazette, Vol. DXXX. Washington: Government Printing Office, September, 1941.

This issue contains a patent on a parking meter which gave the motorist a free time period.

\_\_\_\_\_. Official Gazette, Vol. DXXXV. Washington: Government Printing Office, February, 1942.

A patent on a parking meter which operated when one of a group of identical keys was inserted in the head was included in this issue.

\_\_\_\_\_. Official Gazette, Vol. DXXXIX. Washington: Government Printing Office, June, 1942.

This contains a patent on a parking meter which recorded elapsed time on a ticket. It also listed a parking meter patent on a device which operated on a system of pulleys.

#### Newspapers

Collection of Dallas Newspaper Clippings, 1935-1937, Department of Traffic Control, Municipal Building, Dallas, Texas.

These clippings were valuable because they covered the Dallas experience with parking meters in detail.

Daily Oklahoman, 1935-1937.

This newspaper was the most important source that covered the parking meter story from before the first installation to 1937.

Fort Worth Star-Telegram, July 24, 1960.

This issue gave a summary of the story of parking meters in Fort Worth, Texas.

New York Times, 1935-1936.

Valuable nationwide opinion on parking meters was located in various issues of this newspaper.

Oklahoma City Times, 1934-1935.

Daily accounts in this publication on the parking meter story



in Oklahoma City, especially the legal involvements, were very helpful.

Oklahoma State University Daily O'Collegian, January - April, 1933.

This publication covered the parking meter model and design contests in detail, and was valuable in completing this thesis.

Tulsa Tribune, July - September, 1935.

This newspaper was useful in determining state-wide reaction to the installation of parking meters, and in recounting the story of parking meters in Tulsa.

#### Articles

"A. A. A. Reads Parking Meter Statistics," American City, Vol. LII (September, 1938), p. 7.

This study was related to the American Automobile Association investigation of price fixing in the parking meter industry.

Agard, R. F. "Pennies Add Quickly to Parking Dollars," American City, Vol. LV (October, 1940), p. 99.

This article was important because it discussed the operation of multiple coin parking meters in Saginaw, Michigan.

Agee, Vernon G. "Parking Meters in a Resort City," American City, Vol. LIV (October, 1939), p. 15.

This account was useful because it provided details concerning the parking meter operation in St. Petersburg, Florida.

"An All Weather Parking Meter," American City, Vol. LII (July, 1937), p. 117.

Described here were the kinds of torture tests various companies used on their parking meters.

"Another Park-O-Meter City, Fort Worth, Texas, is Now Installing 650 Original Carl Magee Meters," American City, Vol. LI (June, 1936), p. 108.

This was the first Dual Parking Meter Company advertisement to stress that their product was the original in the industry.

"Automatic Parking Meters Control Parking, Aid Motorists, Help Business, Promote Safety and Traffic Enforcement," American City, Vol. LI (December, 1936), p. 110.

Because it was the first Dual advertisement to stress automatic parking meters, this article was of significant importance.

Bacon, Russell H. "Meters Help Business in Minneapolis," American City, Vol. LVI (June, 1941), p. 36.

The acceptance of parking meters by the Minneapolis business community is illustrated in this article.

Beckenbach, C. G. "Eighteen Months of Intelligent Parking Meter Operation, Dallas," American City, Vol. LII (September, 1937), pp. 60-61.

Dallas Traffic Engineer Beckenbach relates his city's experience with parking meters for the first year and a half of their operation. He gives details which were important in constructing the Dallas parking meter experience.

Brown, Leon R. "Effective Control by Parking Meters," American City, Vol. LII (August, 1937), pp. 53-54.

This article was helpful in determining the methods used by cities in providing taxies with loading zones.

"City Automobile Registration, Street Mileage, Population and Area, 1935," Automobile Facts and Figures, Vol. XVIII (1936), pp. 80-81.

This study conducted in 1935 by the Reuben H. Donnelley Corporation tabulated the number of automobiles registered and provided street mileage. The statistics concerning Oklahoma City were useful in this thesis.

Dowell, A. E. "Metered Parking Safe and Efficient," American City, Vol. LIII (January, 1938), p. 73.

The account was based on an evaluation of parking meter operations in a typical city.

Hammit, Donald R. "20,000,000 Parking Meter Nickels Save 26 Lives," American City, Vol. LVIII (October, 1943), p. 101.

The Traffic Safety Commissioner of Portland, Oregon, relates how the city was able to employ additional patrolmen with parking meter revenue.

Hammond, Harold F. "Using Parking Meter Revenues for Traffic Improvements," American City, Vol. LVI (March, 1941), pp. 93 and 95.

Hammond calculated the percent of parking meter revenue being spent for traffic improvements in cities across the United States.

Healy, William M. "Light Fines Make Meters Effective and Popular," American City, Vol. LV (July, 1940), pp. 46-47.

Healy's article is important because it analyzes the system of imposing graduated fines for repeated parking violators.

Hogan, Lewis R. "Metered Parking Clears Congested Streets," American City, Vol. LXI (December, 1946), p. 117.

Hogan comments about street congestion in ancient Rome and explains the use of parking meters in Millville, New Jersey.

Holzworth, C. E. "Chain Store Managers Report on Parking Meters," American City, Vol. LIV (November, 1939), p. 49.

This was a nationwide poll taken by the S. S. Kresge Company to determine merchants' opinions of parking meters.

"Improved Parking Meter," American City, Vol. LI (December, 1936), p. 109.

This was the announcement of the development of a better Park-O-Meter.

Jepsen, Richard W. "Why Omaha Likes Parking Meters," American City, Vol. LIII (January, 1938), p. 17.

The largest order of Park-O-Graph parking meters was discussed in this article.

"Leadership, Responsibility, Quality and Positive Efficiency Specify Guaranteed Parking Meters," American City, Vol. LII (July, 1937), p. 12.

This advertisement illustrated the promotion of parking meters similar to the Park-O-Meter.

"Mark-Time," American City, Vol. LII (February, 1937), pp. 28-29.

This was an advertisement by an early competitor of the Dual Parking Meter Company.

Marvin, Rolland B. "Each Penny Meter Parks 400 Cars a Month," American City, Vol. LVI (May, 1941), pp. 91-93.

Syracuse Mayor Marvin discusses his city's unique attempt to utilize parking meters at the least possible cost to the motorist.

"Minneapolis Businessmen Want Parking Meters," American City, Vol. LIII (October, 1938), p. 7.

This article illustrates an appeal for parking meters by the business community of a large city.

Mosier, O. M. "Our Experience with Parking Meters," American City, Vol. LI (January, 1936), p. 97.

Mosier's article was one of the first written by a principal involved in the first installation of parking meters. It gives valuable insights into the early parking meter operation in Oklahoma City.

"Nickel-in-Meter Regulates Parking," Literary Digest, Vol. CXXII (August 22, 1936), pp. 35-36.

This article was helpful because it gave some information on outstanding members of the sales force of the Dual Parking Meter Company.

Nordyke, Lewis. "Those Irritating 'Snitching Posts,'" Coronet, Vol. XLVII (April, 1960), pp. 177-181.

Nordyke's article was useful because it told of some of the humorous situations created by parking meters in the pre-World War II period.

"On the Shelf Before it Got Off," American City, Vol. LIII (September, 1938), p. 98.

This Karpark advertisement illustrates attempts by competing companies to keep up with advances in the designs of the Dual Parking Meter Company.

"Parking Meters an 'Unqualified Success' in 18 Cities," American City, Vol. LIII (May, 1938), p. 7.

This article analyzed a survey to determine acceptance of parking meters by motorists.

"Parking Meters Gain," Business Week, (no volume number), June 27, 1936, p. 16.

Information was found here on the support of parking meters by some local American Automobile Association affiliated clubs.

"Parking Meters Installed in 50 Cities," Public Management, Vol. XX (July, 1938), p. 212.

This article was valuable in determining the standard price of parking meters.

"Parking Meters Speed Traffic," American City, Vol. LVII (February, 1942), p. 91.

This survey evaluated the acceptance of parking meters by taxicab companies.

"Parking: Slot Machines Now Sell Curb Space in Five Cities," Newsweek, Vol. VII (March 7, 1936), pp. 36 and 38.

This article was particularly valuable in giving background information relating to Magee's career in New Mexico and the problems he faced in starting the Dual Parking Meter Company in Oklahoma City.

"Parking Tax-O-Meter is the Answer to the Downtown Parking Problem," American City, Vol. LI (June, 1936), p. 134.

This account was useful because it was the first advertisement in a national magazine of a company competing with the Dual Parking Meter Company.

"Read This Record," American City, Vol. LIII (July, 1938), p. 100.

This advertisement was valuable because it illustrated the method used to refute claims made about Park-O-Meters.

"Red Ball Parking Meter - Tamperproof and Theftproof, Streamlined, Sturdy and Rugged," American City, Vol. LII (June, 1937), p. 116.

This is an advertisement of a very unusual parking meter.

"Regulating Parking by Meters," Public Management, Vol. XVIII (February, 1936), pp. 43-44.

This informative article gave important details concerning the first months of parking meter operation in Oklahoma City and Dallas.

Richards, Arthur. "Metering Municipal Parking Lots," American City, Vol. LVI (May, 1941), p. 95.

Richard's article was valuable in determining how municipalities coped with parking congestion at suburban railroad stations.

Robinette, Paul S. "Eliminating Business District Congestion in Toledo," American City, Vol. LIII (March, 1938), pp. 79-83.

Robinette's article was useful in determining the attitude of local American Automobile Association affiliated clubs concerning parking meters.

Seburn, T. J. "Transportation Speeded by Kansas City Parking Meters," American City, Vol. LVII (March, 1942), pp. 83 and 85.

Seburn noted the opinion of the people of Kansas City, Missouri, regarding parking meters.

"71% of World's Passenger Cars Registered in U. S.," Automobile Facts and Figures, Vol. XXII (1940), p. 21.

This article was based on findings gathered by the Automobile-Aeronautics Trade Division of the United States Department of Commerce. It was helpful in tabulating the ever-increasing number of automobiles registered in the United States from 1930 to 1939.

Smith, Philip T. "Penny Parking Pays," American City, Vol. LIV (September, 1939), pp. 49-50.

New Haven, Connecticut, Chief of Police Philip Smith presents a good case for penny parking as an important revenue source.

"The Case for Parking Meters," American City, Vol. LVI (October, 1941), pp. 85-89.

Summarized here were nationwide results of metered parking, with special attention to case studies conducted in three Oregon cities.

Thuesen, H. G. "Reminiscences of the Development of the Parking Meter," Chronicles of Oklahoma, Vol. XLV (Summer, 1967), pp. 112-142.

Thuesen's memoirs were particularly valuable for this thesis. He related his part in the development of the parking meter, and this was vital to the completion of this study.

"Toledo Installs Automatic Parking Meters," American City, Vol. LII (January, 1937), p. 104.

The Dual Parking Meter Company used the name "Dual Parking Meter" for the first time in this advertisement.

"Trade Rules of Parking Meter Industry," American City, Vol. LXVI (May, 1951), p. 135.

This article outlined the trade rules for the parking meter industry set up by the Federal Trade Commission.

Vincent, J. C. "Parking Meters in Minneapolis," American City, Vol. LVI (July, 1941), p. 95.

Vincent's article was significant because it pointed out that whole sections of Minneapolis had thirty-minute metered zones.

Warner, Kenneth O. "Florida Court Upholds Miami Parking Meter Ordinance," Public Management, Vol. XIX (January, 1937), p. 35.

Warner analyzed court decisions concerning parking meters in Florida.

"Your City Needs the Park-O-Meter," American City, Vol. L (October, 1935), p. 98.

This was the first advertisement used by the Dual Parking Meter Company in a national magazine.

#### Books and Pamphlets

Babson, Roger W. Actions and Reflections. New York: Harper and Brothers, 1949.

Babson's autobiography gave interesting sidelights into his colorful life and his part in the development of the parking meter.

Montgomery, A. J. "Flash on Parking Meter Developments," Special Information Bulletin, No. 9. Washington, D. C.: Department of Public Relations, American Automobile Association, March 9, 1938.

This circular was sent to all local American Automobile Association clubs, and stated the claims relating to the price fixing investigation and further action being taken.

Noggle, Burl. Teapot Dome: Oil and Politics in the 1920's. Baton Rouge, Louisiana: Louisiana State University Press, 1962.

Noggle provided valuable background information on Carl Magee's part in the Teapot Dome scandal.

Rhyne, Charles S., and Charlie O. Murphy. Parking Meters - Legality - Model Ordinance Annotated. Washington, D. C.: National Institute of Municipal Law Officers, 1947.

This pamphlet summarizes the court decisions involving parking meters in the pre-war period. It gave valuable information concerning early efforts to control parking.

Ridley, Clarence E., and Orin F. Nolting. Municipal Year Book 1942. Chicago: International City Managers Association, 1942.

Ridley and Nolting provided many important statistics on the number and use of parking meters in the United States in the pre-war period. It also provided valuable data concerning parking meter sales by the various parking meter companies.

Simpson, Hawley S. "When, Where and How Should Parking Be Restricted," Institute of Traffic Engineers Proceedings for 1938. Chicago: Illinois Institute of Traffic Engineers, 1938.

Simpson, a research engineer for the American Transit Association, provided a series of valuable surveys concerning parking meters. This study was helpful in all phases of this thesis.

VITA

Robert Emmett Smith, Jr.

Candidate for the Degree of

Master of Arts

Thesis: THE DEVELOPMENT AND IMPACT OF THE PARKING METER BEFORE  
WORLD WAR II

Major Field: History

Biographical:

Personal Data: Born in Brooklyn, New York, September 28, 1937,  
the son of Robert E. and Lillian V. Smith.

Education: Attended elementary and high school in Brooklyn  
and Hartwick, New York; received the Bachelor of Science  
in Education degree from the Northwest Missouri State  
College, Maryville, Missouri, in June, 1960; attended the  
India Studies Graduate Program at the University of  
Wisconsin, Madison, Wisconsin, in 1962; completed require-  
ments for the Master of Arts degree at Oklahoma State  
University in July, 1968.

Professional experience: Taught civics, world, and American  
history in the East Buchanan High School, Gower, Missouri,  
1960-1968.

Professional organizations: Missouri State Teachers Association.