

**ENGINEERING EDUCATION  
SERIES. THE GASOLINE  
AUTOMOBILE. PREPARED IN THE  
EXTENSION DIVISION OF THE  
UNIVERSITY OF WISCONSIN**

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**GEORGE W. HOBBS & BEN G. ELLIOTT**

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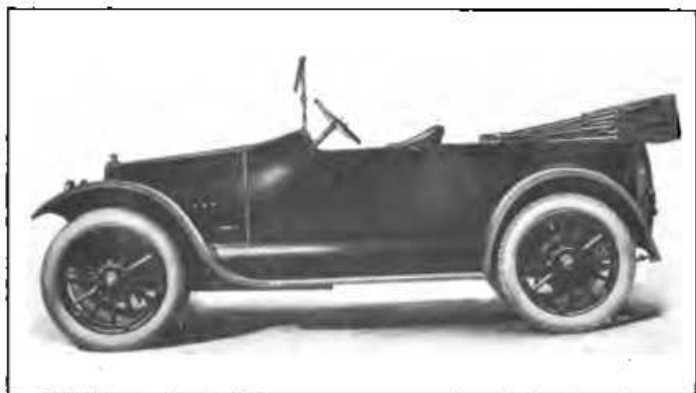


## THE GASOLINE AUTOMOBILE





Geo. B. Selden in his "Benzine Buggy."



The present day motor car.

*(Frontispiece)*

ENGINEERING EDUCATION SERIES

# THE GASOLINE AUTOMOBILE

PREPARED IN THE  
EXTENSION DIVISION OF  
THE UNIVERSITY OF WISCONSIN

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1915

## PREFACE

MOORE 10 27 '15

The purpose of this book is admirably expressed in the following quotation taken from the Buick instruction book: "To derive the greatest amount of satisfaction and pleasure from the use of his car the driver should have a complete understanding of the mechanical principles underlying its operation. Merely knowing which pedal to press or which lever to pull is not enough. The really competent driver should understand what happens in the various parts of the car's mechanism when he presses the pedal or pulls the lever. He should know the cause as well as the result."

When we consider the complexity of modern automobiles from a mechanical standpoint, with the duties that are required of them, together with the fact that the great majority of them are operated by men with little or no experience in the handling of machinery, the automobile stands as one of the most remarkable machines that the ingenuity of man has ever produced. The operating expense of the automobile has already assumed a large place in the budget of the American people. Although it is so built that the owner may secure good service from his automobile with very little knowledge of its construction, still it is evident that an intimate acquaintance with its details should enable him to secure better service at less expense and at the same time to prolong the useful life of the car.

It is with the hope of increasing the pleasure of automobile ownership and reducing the trouble and expense of operation that this book is offered. It is planned primarily for use in the University Extension work in Wisconsin, for the instruction of those who drive, repair, sell, or otherwise have to do with motor cars. It is largely the outgrowth of a series of lectures on the subject which were given in twenty-three cities of Wisconsin during the past winter.

The thanks of the authors are especially due to Mr. M. E. Faber of the C. A. Shaler Co. for assistance in preparing the section dealing with tire troubles, to Prof. Earle B. Norris for much of the chapter on Engines and for editing the manuscript and reading the proof, and to the many manufacturers who have liberally assisted in the preparation of the work by supplying their cuts and other material.

G. W. H.

MADISON, WIS.,  
Sept. 15, 1915.



11

12

13

14

15



# CONTENTS

## CHAPTER I

### GENERAL CONSTRUCTION

ART.	PAGE
1. The steam propelled car . . . . .	1
2. The electric car . . . . .	1
3. The gasoline car . . . . .	2
4. Types of cars . . . . .	2
5. The chassis . . . . .	2
6. The frame . . . . .	6
7. The springs . . . . .	6
8. The front axle . . . . .	8
9. The steering gear . . . . .	10
10. The rear axle . . . . .	12
11. The differential . . . . .	13
12. The power plant and transmission . . . . .	14
13. The torque arm . . . . .	15
14. Strut rods . . . . .	16
15. Brakes . . . . .	16
16. Wheels . . . . .	18
17. Tires . . . . .	19
18. Rims . . . . .	20
19. The speedometer drive . . . . .	21
20. Control systems . . . . .	23

## CHAPTER II

### ENGINES

21. What is an explosion? . . . . .	25
22. Cycles . . . . .	25
23. The four-stroke cycle . . . . .	26
24. The order of events in four-stroke engines . . . . .	27
25. The mechanism of four-stroke engines . . . . .	28
26. Valve timing and setting . . . . .	29
27. Valves . . . . .	30
28. Valve arrangements . . . . .	33
29. The Knight engine . . . . .	34
30. The rotary valve . . . . .	34
31. Two-stroke engines . . . . .	35
32. The flywheel . . . . .	38
33. Ignition . . . . .	39
34. Clearance and compression . . . . .	39
35. Piston displacement . . . . .	39
36. Cylinder cooling . . . . .	40
37. The muffler . . . . .	40
38. Horse power of engines . . . . .	41

## CONTENTS

## CHAPTER III

## POWER-PLANT GROUPS AND TRANSMISSION SYSTEMS

Art.		PAGE
39.	Single- and multi-cylinder engines . . . . .	43
40.	Power plant and transmission arrangements . . . . .	44
41.	Modern automobile power plants . . . . .	50
42.	Constructional features of four- and six-cylinder engines . . . . .	56
43.	Eight- and twelve-cylinder power plants . . . . .	60
44.	Clutches . . . . .	64
45.	Change gear sets . . . . .	66
46.	Planetary gearing . . . . .	67
47.	Universal joints and drive shaft . . . . .	69
48.	Final drive . . . . .	70
49.	Types of live rear axles . . . . .	71

## CHAPTER IV

## FUELS AND CARBURETTING SYSTEMS

50.	Hydrocarbon oils . . . . .	75
51.	Fractional distillation of petroleum . . . . .	75
52.	Principles of vaporization . . . . .	76
53.	Heating value of fuels . . . . .	79
54.	Gasoline gas and air mixtures . . . . .	79
55.	Principles of carburetor construction . . . . .	79
56.	Schebler, model L carburetor . . . . .	82
57.	Schebler, model R . . . . .	84
58.	The Holley model H carburetor . . . . .	86
59.	Holley model G . . . . .	87
60.	Stewart model 25 . . . . .	89
61.	Kingston model L . . . . .	90
62.	Marvel carburetor . . . . .	91
63.	Stromberg, model H . . . . .	94
64.	Zenith model L . . . . .	94
65.	Rayfield model G . . . . .	95
66.	Carter model C . . . . .	97
67.	General rules for carburetor adjustment . . . . .	98
68.	Carburetor control methods . . . . .	99
69.	The gravity feed system . . . . .	99
70.	The pressure feed system . . . . .	100
71.	The vacuum feed system . . . . .	100
72.	Intake manifolds . . . . .	102
73.	Care of gasoline . . . . .	102

## CHAPTER V

## LUBRICATION AND COOLING

74.	Friction and lubricants . . . . .	103
75.	Cylinder oils . . . . .	104
76.	Viscosity . . . . .	104