

Cambridge University Press

978-0-521-74701-1 - Sphere Packing, Lewis Carroll, and Reversi: Martin Gardner's  
New Mathematical Diversions

Martin Gardner

Table of Contents

[More information](#)

## Contents

<i>Acknowledgments</i>	<i>page xi</i>
<i>Introduction</i>	<i>xiii</i>
<b>1</b> The Binary System	1
<b>2</b> Group Theory and Braids	11
<b>3</b> Eight Problems	23
<b>4</b> The Games and Puzzles of Lewis Carroll	38
<b>5</b> Paper Cutting	51
<b>6</b> Board Games	64
<b>7</b> Packing Spheres	80
<b>8</b> The Transcendental Number $\pi$	91
<b>9</b> Victor Eigen: Mathematician	106
<b>10</b> The Four-Color Map Theorem	118
<b>11</b> Mr. Apollinax Visits New York	132
<b>12</b> Nine Problems	142
<b>13</b> Polyominoes and Fault-Free Rectangles	160
<b>14</b> Euler's Spoilers: The Discovery of an Order-10 Gaeco-Latin Square	175
<b>15</b> The Ellipse	189
<b>16</b> The 24 Color Squares and the 30 Color Cubes	202
<b>17</b> H. S. M. Coxeter	216
<b>18</b> Bridg-it and Other Games	232

Cambridge University Press

978-0-521-74701-1 - Sphere Packing, Lewis Carroll, and Reversi: Martin Gardner's  
New Mathematical Diversions

Martin Gardner

Table of Contents

[More information](#)

x

**Contents**

<b>19</b>	Nine More Problems	241
<b>20</b>	The Calculus of Finite Differences	261
	<i>Index</i>	275