

CHAPTER III.	PAGE
<b>UNIVERSAL GRAVITATION .....</b>	<b>74</b>
§ 1. Newton.—Discovery of Gravitation .....	74
§ 2. Gravitation of Small Masses.—Density of the Earth.....	81
§ 3. Figure of the Earth.....	86
§ 4. Precession of the Equinoxes.....	88
§ 5. The Tides .....	90
§ 6. Inequalities in the Motions of the Planets produced by their Mutual Attraction.....	93
§ 7. Relation of the Planets to the Stars.....	101

MEA

**PART II.****PRACTICAL ASTRONOMY.**

<b>INTRODUCTORY REMARKS .....</b>	<b>103</b>
-----------------------------------	------------

**CHAPTER I.**

<b>THE TELESCOPE.....</b>	<b>106</b>
§ 1. The First Telescopes.....	106
§ 2. The Achromatic Telescope.....	114
§ 3. The Mounting of the Telescope.....	118
§ 4. The Reflecting Telescope .....	121
§ 5. The Principal Great Reflecting Telescopes of Modern Times...	125
§ 6. Great Refracting Telescopes.....	135
§ 7. The Magnifying Powers of the Two Classes of Telescopes....	139

THE

THE

GENE

THE S

**CHAPTER II.**

<b>APPLICATION OF THE TELESCOPE TO CELESTIAL MEASUREMENTS .....</b>	<b>146</b>
§ 1. Circles of the Celestial Sphere, and their Relations to Positions on the Earth .....	146
§ 2. The Meridian Circle, and its Use.....	152
§ 3. Determination of Terrestrial Longitudes.....	157
§ 4. Mean, or Clock, Time .....	162