THE MONUMENT OF THE CONTINENT

"A Sentinel it stands
In rugged majesty."

THE Monument of the Continent! No term could be more fitting. Serene and bold it stood, a noble monument, throughout the myriad years that spanned the cycles of antiquity. Still grand and vigilant, its snow-crowned crest gave to the toiling pathfinders the first glad signal that there were limits to the dreary waste of plain. For the pioneers that followed, it served not only as a monumental landmark, but its name stood for all the vast country whose border it guarded—not only the known regions, but that greater stretch of awesome mountain mystery. And now the swifter and more luxurious traveler, in his journeyings toward the setting sun, hails it first as he speeds across the plain, and—be it ever so familiar—gazes eagerly and with quickened pulses as the lessening distance expands its majesty and beauty to his view.

Pike's Peak is history—a strange and hushed romance. Oblivion veils its mystic past. No crumbling parchments hint its thrilling tales. Yet it is older, so scientists relate, than regions that are thus gazetted. Men
lived and wrought and vanished in that long ago. The great white mountain watched it all, and locked the secret in its mighty breast.

Authentic lore of this monument of the continent dates from November 13, 1806, when Major Zebulon M. Pike, a gallant soldier and a daring adventurer, then head of a small exploring party of United States soldiers, sighted the mountain’s whitened crest when many miles distant upon the plains. It cost him ten days’ marching to reach its base; and, after vigorous attempts to scale it, Pike abandoned the project with the declaration that “No human being could ascend to its pinnacle.” That was long ago. There have been many wonders since.

Beginning then, Pike’s Peak saw busier times. The region passed through varying vicissitudes, and now an empire lies within the mountain’s shade. Enormous riches crowd its depths and lurk about its base; the hum of industry is wafted on its breeze.

These are subjects that could well fill volumes. But it is Pike’s Peak itself, its scenic attractions and its unique railway, that form the purpose of this little book.

THE MANITOU & PIKE’S PEAK RAILWAY

The Manitou & Pike’s Peak Railway (familiarly known as the Cog Wheel Route) was completed in the autumn of 1890. As an engineering achievement it is remarkable, and in many respects it is the most wonderful railway in the world. In general terms it is an Abt system cog road, though that conveys little idea of what it really is. There are similar roads in foreign countries, but they are all pigmies compared to the one whose head lies on the loftiest pinnacle of Pike’s Peak and whose foot rests on the plain. The
greatest of these stops short of 7,000 feet of altitude. The Manitou & Pike's Peak Railway climbs 14,147 feet above the sea, a far greater attainment of elevation—
even considering the difference in the altitudes of lower terminals—than any of the others.

The road is within a fraction of nine miles in length, and in this distance it overcomes one and one-half vertical miles. It is standard gauge and with a roadbed that is all in point of excellence that it is possible to make it. Where this is not cut in the solid rock it is most thoroughly ballasted. On the heavy grades the track is securely anchored at frequent intervals to guard against any possible displacement from the effects of extreme variations of temperature. The mean grade is 16 per cent, the maximum 25 per cent (a rise of one foot in four), and the sharpest curves are 16 degrees. The outside rails are of the ordinary T pattern, and here the similarity to the ordinary railroad ends. The T rails serve merely to guide the train and bear its weight. It is the rack rails in the middle of the track upon which the propulsion and safety of the train depends. The rack rails are double every inch of the way from the valley to the summit. They are made from superior Bessemer steel and are of extra heavy weight on the steeper grades.

The locomotives are an exciting novelty to anyone with an interest in machinery. These powerful mountain climbers are constructed with the utmost nicety of detail. There are five of them in the road's equipment, all of the four-cylinder Vaulclain type, weighing about thirty tons each. Two double cogwheels underneath the locomotives engage the toothed rack rails. The locomotives are provided with brake power in abundance—hand brakes, steam brakes, water brakes and automatic brakes.

The coaches are beauties—elegant observation cars. Each seats fifty passengers. They precede the locomo-
A RAILROAD RIDE ABOVE THE CLOUDS

ENGLEMAN'S GLEN is one of the beauty spots of earth. It is a place to lie supine and rest; to listen to the voices of the swaying pines and the music of a limpid, purling stream; to gaze on a world of color, to feast on Nature's grace; to breathe God's purest air and offer up a prayer of thankfulness to Him for all He has bestowed.

At the mouth of Engleman's Glen, close to the famous Ute Iron Spring, is the Manitou Station of the Cog Wheel Route. The electric road from Colorado Springs, through Manitou, terminates at the station platform. Here the start is made for the ride above the clouds.

At first the interest is centered in the novel train, but after the start the attention is quickly diverted to the surroundings. As the Glen narrows, its attractiveness expands. One of the steepest grades on the line is encountered soon after leaving the Manitou station. The glen soon merges into a cañon-like defile. The train hugs the left hand wall, beneath dizzy, pine-clad heights. On the right is a yawning gulch, and the Ruxton churns and splashes through a bed of giant boulders. At times the rivulet is hidden beneath a confused mass of rocks big as houses; but farther along it reappears, foaming, clamoring, rioting. Anon little parks open up in the chasm, and quaint and striking pictures form.
Minnehaha is the first stop. A quaint hamlet of rustic cottages snuggled in a tiny park, it takes its name from Minnehaha Falls, whose foaming waters fill the air with melody. Next, through scenes of ever-changing beauty, the Half-Way House, which is far from half way to the summit, is reached. Here new interests are presented. The Half-Way House is a rustic mountain hotel surrounded by a grove of stately pines, and, towering above it, the pinnacled rocks of Hell Gate, through whose portals the train then passes on.
There are six stations on the line, besides the terminals, and three water tanks—for the engine is a thirsty monster. At one of these may be strikingly seen the apparent phenomenon of water flowing up hill in an open trough. Another illusion that excites comment is in the grade. Every inch of the road is up; yet when approaching a moderate from a steeper grade, anyone would declare that the track ahead was a down grade.

Quaint beauties, grotesque shapes and strange illusions fairly crowd the way. The conductor shows them all. Among the surprises is a printing office perched on the mountain side. Here a souvenir daily paper is issued with the news of Pike's Peak—the names of its visitors, illustrations, descriptions, etc.

The climb is unceasing. Ere long the scene expands. The verdured hills shrink back and leave the big, bleak peak a towering monument. The trees desert the landscape, and groups of stunted aspens shiver in the breeze. Grand vistas open everywhere. A sense of awe transcends that of delight.

The scenes of near-by interest now are gone. Rocks, gaunt and jagged, only line the way. The train now gains in elevation rapidly. The air grows chill; windows must be shut and outer wrappings donned. Away below—itself high in the hills—is spread out like a mirror the crystal, placid Lake Moraine, about whose shores tradition weaves some thrilling legendary tales. Thick billowy clouds—unless the day be strictly fair—

float far below. In the early season snow is everywhere and forms some strange effects. The opening of the road in the spring involves cutting through enormous depths of snow and ice.

The locomotive labors sturdily and

heroically on; and presently, and quite unexpectedly—ninety minutes from the time of starting—the train halts on the Summit; Colorado is spread below.
SIXTY THOUSAND SQUARE MILES OF EARTH

FOURTEEN thousand, one hundred and forty-seven feet above the sea! And yet—in the matter of scenic vantage points—altitude is not everything. There are higher peaks, even in the Rocky Mountain range; but there is no accessible elevation on earth that affords so extended a range of vision, or a view so varied and inspiring, as that from the summit of Pike’s Peak. And the reason is simple. All other accessible mountains, of elevations approaching that of Pike’s Peak, are in the midst of mountain chains; consequently the views from their summits are uninterruptedly mountainous and the ranges of vision restricted by the surrounding heights. Standing isolated, at the very extremity of a grand spur of the Rockies, Pike’s Peak guards both mountain and plain, and the view from its summit presents, in juxtaposition, diametrically opposite effects.

And that magnificent, sweeping view! How futile is description! Here is sublimity; here is immensity incredible! There, to the west, stand a thousand towering peaks in spotless white—majestic, beautiful, awful! On the east a mighty ocean of plain, superb and placid, stretches infinite. The eye is strained, the senses dazed, in grasping the proportions of that stupendous sea. And the sun shines golden on its glimmering sands, while purple shadows wander here and there beneath the shifting clouds.

There are nearer things to view, but they must wait. Who has gazed from that sublime eyrie without emotions deep and thrilling; and who has not borne away impressions strange and indefinable, but indelible as well? Here, where infinitude is so vividly portrayed, he who knows not reverence will bow his head.

Aroused at last from awesome contemplation, there are interests of the summit that must not be overlooked. Upon top of the new Summit Hotel is a steel tower, and here is on duty a powerful telescope through which the gorgeous landscape may be studied in detail. Eighty miles away to the north Denver can be recognized by
the telescopic aid; to the south, Pueblo, the Pittsburg of the West, crowned by the smoke-clouds of its furnace fires; to the west, Cripple Creek, Victor, Goldfield, Independence, and the dozen lesser towns of the busy Cripple Creek gold mining district. Manitou peeps out from its nest at the eastern base of the mountain; and, beyond, Colorado Springs lies like a vast checker-board on the border of the plain. Colorado Springs is fourteen miles distant, as a bird would fly; yet so near does the telescope bring it to the observer, that signs on the stores may be read.

The top of the peak comprises several level acres thickly strewn with big rocks that are principally in cubes and other rectangular shapes. One might easily imagine it to be the scene of some Titanic building project—the materials all assembled but construction abandoned.

The Bottomless Pit and the Abyss of Desolation are great shuddering rents in the mountain, into which the sun never finds its way, and where the snows of centuries lie in unconjectured depths.

The Summit Hotel is a very substantial, commodious and comfortable building, and it furnishes entertainment for the many pilgrims that remain over night to view the glories of the sunrise. Sunrise excursions, which are run weekly in the latter part of the summer, have also become very popular, sometimes the entire equipment being required to handle the crowds.

Within the hotel building is a Western Union office, the highest telegraph station in the world; also a lunch room and souvenir store.

The locomotive blows a warning note; a photograph is made of the passengers grouped about the train; the time is up; the conductor says his say.

And then they come down.

A GLIMPSE OF MANITOU

GRACEFUL VALE encompassed by cathedral hills; pure, invigorating atmosphere swept from snowbound heights, perfumed with piney odors and tempered by a genial sun; clear, crystal waters rolicking in stony beds, and effervescent fountains sparkling and delicious, and offering health and life as well; delightful parks, romantic, winding paths; cool, arcaded nooks; a very world of scenic beauty crowded all about. Such, in a sentence, is Manitou, upon which the Indians bestowed the reverenced name of their Great Spirit. It has many hotels and every adjunct of a well ordered resort, and among them it has in the whole world no peer. Thousands traverse oceans to seek health and scenery in far distant climes. Of the former there is richer promise, and in the latter they can find more wondrous things, right here.
Elevations Above Sea Level.

Pike's Peak, (M. & P. P. Ry.)..........................14,147
Saddle House ...........................................12,502
Windy Point, ............................................12,233
Timber Line, .............................................11,578
Mountain View .......................................... 9,705
Half-Way House, ........................................8,913
Minnehaha, .............................................. 8,400
Manitou, .................................................. 6,620
Mt. Washington, N. H., (Mt. W. R. R.) ........... 6,293
Mt. Tamalpais, Cal. ..................................... 2,604
Mt. Lowe, Cal. ........................................... 6,000
Rigi, Switzerland (Arth. Rigi R. R.) ................. 5,832
Pilatus, Switzerland (Pilatus R. R.) .................. 6,963
Jung Frau, Switzerland ................................ 13,667
Denver, Colo .............................................. 5,314
Colorado Springs, Colo ................................. 5,915
Pueblo, Colo ............................................... 4,400
Cripple Creek, Colo ..................................... 9,490

Distances on Manitou & Pike's Peak Railway.

Summit (Pike's Peak)................................. 0
Saddle House ............................................ 1.77
Windy Point ............................................. 2.25
Timber Line ............................................. 2.87
Mountain View ......................................... 4.86
Half-Way House ....................................... 5.27
Minnehaha .............................................. 7.06
Manitou .................................................. 8.90
Colorado Springs, (via connecting lines) ........... 13.90
Pueblo, ................................................... 50.50
Denver, .................................................. 90.40
SUMMIT, 14,147 FEET.

PIKE'S PEAK.

Arctic-Alpine Zone — No trees; vegetation low, with brilliant flowers, and usually very fragrant. Characteristic species: Senecio Fremontii (Sneezewort); Antennaria scopolium (Alpine Wormseed); Menziesiia Alpina (Alpine Mertensia); Eriochlamys argentea (Pike's Peak Forget-me-not); Poa neglecta pulvinata (White-leaved Quill); Silene acutifolia (Cushion Pink); Claytonia megarhiza (Spring Beauty); Primula Parryi (Hymal Chime Primrose); Saxifraga reticulata (Net-veined Willow); Saxifraga curvata (Nodding Saxifrage); Gilia congesta var. cerebrosa (Gilia); Oxalis diphylla (Mountain Sorrel); Gentiana frigida (Arctic Gentian); Chionopra jamaicensis; Trifolium dasyphyllum; Trifolium nemorum; Dryas octopetala (White Mountain Avens); Draba reclusa (Arctic Whitethroat); Thlaspi alpestre (Penny-cress).

Transitional species, or those found in the lower Arctic-Alpine Zone and Upper Hudsonian Zone:
- Erigeron uniflorus (Arctic Erigeron); Pilocereus grandiflorus (Large-flowered Pilocereus); Solidago multiradiata (Northern Goldenrod); Pilocereus australis (Steamless Pilocereus); Stevia umbellata (Chickweed); Saxifraga thunbergii (Snow-ball Saxifrage); Saxifraga nivalis (Saxifrage); Saxifraga jamaicensis (Rocky Mountain Saxifrage); Campanula uniflora (Arctic Harebell); Sedum roseum (Rosy Sedum); Castilleja Alpina (Alpine Paint Brush); Penstemon Hallii (Hall's Beardtongue); Cymopteris Alpina (Alpine Cymopteris); Caesal thurifera (Elkspike).

Hudsonian Zone — Zone of "black timber," i.e., large spruce trees, dwarf juniper, etc., though these also extend much lower down. Characteristic species of flowering plants: Aquilegia brevistyla (Small-flowered Columbine); Phacelia sericea (Wyoming Phacelia); Castilleja palida (Paint Brush); Pyrola chlorantha (Greenish-flowered Wintergreen); Pileanumum fulgens (Pearly Poa); Pileanumum Mellitorum (Honey-scented Pileanumum). Transitional species, frequently found in the upper Canadian Zone, some extending as low as Mantua. Astrogena occidentalis (Mountain Virgin's Bower); Arabis glabra (Tassel Mustard); Erysimum asperum (Western Wallflower); Potentilla glandulosa (Glandular Cinquefoil); Potentilla rivosa (Chubby Cinquefoil); Rubus strigosus (Wild Red Raspberry); Fragaria vesca (strawberry); Salmonia chamaejasme (Buckbean); Oenothera fruticosa (Western Yellow); Helianthella Parryi; Senecio eucosmophyllum; Penstemon glaucus, Gentiana acuta (Northern Gentian); Menziesii alpina (Tall Menziesia); Sedum rhodanthum (Pink Stonecrop); Eryngium elegans (Large-flowered Eryngo); Thalictrum alpinum (Arctic Meadow Rue).

Canadian Zone — Zone of Quaking Aspen, Rock Pine, Douglas Spruce, Picea pine, Rocky Mountain Juniper, etc. Some of the more common plants: Swertia perennis; Gentiana Parryi (Parry's Gentian); Castilleja rotundifolia (Elkspike); Rudbeckia flava (Western Black-eyed Susan); Geum chiloense (Long Plumed Purple Avens); Aster fremontii (Aster); Senecio Euphorbia (Senecio); Chrysopsis villosa (Golden Aster); Penstemon glabrous (Smooth Beardtongue); Eupatorium grandiflorum (Long-stalked Eupatorium); Lappula floribunda (Large-flowered Stickweed); Crepis runcinata (Hawksbeard); Arctostaphylos uva-ursi (Kinnikinnick); Epilobium parvifolium (Panicked Willow-herb); Hydrastis canadensis (Hooded Ladies' Tresses); Limonotha viridiflora (Gum Orchid); Monarda uniflora (One-flowered Wintergreen); Chamaenerion umbellatum (Fishtailsew).

Transition Zone — Some of the common showy flowering plants: Dodecatheon meadia (Shooting Stars); Antennaria diffusa (Spreading androcat); Gentiana officinalis (Purplish-leaved Gentian); Aquilegia caerulea (Purple Columbine); Aquilegia chrysanthemum (Yellow Columbine); Delphinium scopulorum (Mountain Larkspur); Aconitum columbianum (Mountain Monkshood); Clematis douglasii (Douglas Clematis); Thlaspi coloradense (Colorado Life); Physaria didymocarpa (Double Banded); Arachnoidea muscifera (Tufted Locoweed); Astragalus saxosumans (Rocky Mountain Locoweed); Rubus deliciosus (Yellow Raspberry); Opuntia monacantha (Cane), Potentilla arguta (Tall Cinquefoil); Cardamine pratensis (Cow Purslane); Aster levis (Smooth Aster); Aster dumosus (Bush Aster); Arnica cordifolia (Heart-shaped Arnica); Penstemon humilis (Rocky Mountain Beardtongue); Penstemon scrophulifolius (Tall Beardtongue); Penstemon Torreyi (Gigarte Beardtongue); Campanula integrifolia (Mexican Paint Brush); Viola patula (Yellow Violet); Viola canadensis (Canada White Violet); Monarda fistulosa (Wild Bergamot); Lastertia pulchella (Blue Lettuce); Sedum stenomarum (Yellow Stonecrop); Yucca Glauca (Spanish Bindweed); Lilium Moncum (Tiger Lily); Calochortus nuttallii (Mariposa Lily); Metelidia multiflora (Yellow Measle); Gilia aggregata (Scarlet Gilia); Gilia bicolor (Northern Bed-straw); Campanula Parryi (Parry's Bellflower); Iris missouriensis (Western Blue Flag).

T. D. A. Cockerell.
Sept. 16, 1905.
Revised by E. C. Schneider, P. H. D.

UPPER AUSTRAL Zone.

TRANSITION ZONE.

(Transition between the Boreal and Austral Zones, not easily defined, and the two elements are much mixed in the cañon, owing to the different temperatures of the slopes, and other factors.)

This is the highest zone for cultivated fruit trees.

COLORADO SPRINGS,

Pikes Peak, Colo., Sept. 16, 1905.

T. D. A. Cockerell.

Revised by E. C. Schneider, P. H. D.

COLORADO SPRINGS.

PROX. 5,000 FEET