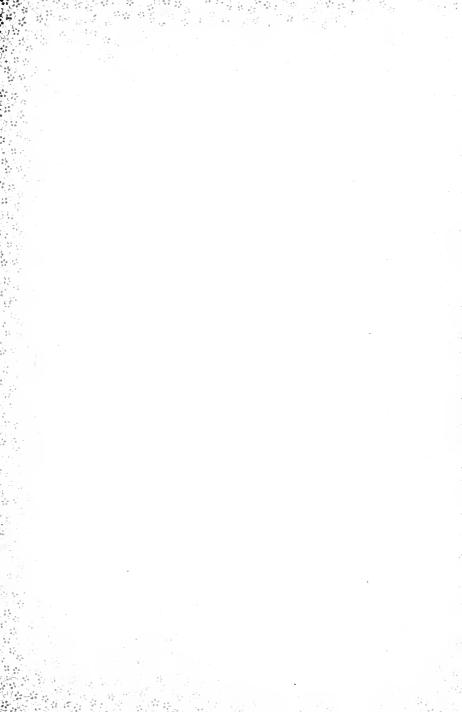
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TRAINING

THE TROTTING HORSE:

A NATURAL AND IMPROVED METHOD OF

EDUCATING TROTTING COLTS AND HORSES, BASED ON TWENTY YEARS' EXPERIENCE.

By CHARLES MARVIN,

Superintendent of Palo Alto Farm, Menlo Park, California.

ILLUSTRATED.

FOURTH EDITION.

EDITED BY
LESLIE E. MACLEOD,
EDITOR OF THE CHICAGO HORSEMAN.

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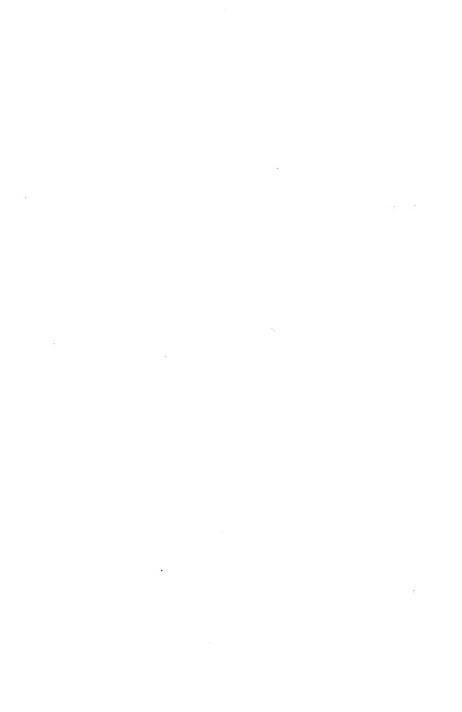
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TO THE

HONCRABLE LELAND STANFORD,

TO WHOSE GENIUS, THOUGHT AND ENTERPRISE THE SYSTEM OF
TRAINING EXPLAINED HEREIN IS MAINLY DUE, THIS
WORK IS DEDICATED AS A SLIGHT TOKEN
OF RESPECT AND GRATITUDE BY

THE AUTHOR.



EDITOR'S PREFACE.

Although the title page of this book is perhaps a sufficient preface, a word as to its origin and preparation is due the reader.

For publishing the book no apology is required. Whether it will fill a "long-felt want" or not is for the public to decide; but that the want exists no one can doubt.

What the Palo Alto system of training has accomplished is the best guarantee of its excellence. The system under which are developed animals to break the world's record at all ages, from one year old to four years old, speaks for itself. In common with many others, I have long recognized in Charles Marvin the greatest of trotting-horse trainers, or perhaps I should say educators. He seemed peculiarly the genius of his profession. His friends reasoned that a book on training was wanted—and who so fit to write it as the master trainer? Mr. Marvin is a modest man, and it was only in deference to the repeated urging of his friends that he consented, with the assistance of an editor, to undertake the work.

In January, 1889, I visited Palo Alto for the purpose of assisting Mr. Marvin in the preparation of the material for this work; and remained with him three months studying his methods by day, and writing from his dictation for several hours each evening.

In preparing the book for the press the aim has been in the simplest and most faithful phrase to record Mr. Marvin's ideas, instructions and explanations in his own plain manner. The endeavor has been to write a book in such simple and clear English that every stable-boy who aspires to be a trainer may read understandingly; and at the same time we hope that the breeders and the most intelligent trotting-horsemen of all classes in the land will find in its pages something of interest and of instruction.

An apology is due the public for the delay in publishing the work, and I wish to say that for that delay I am alone responsible. The work of preparing the material for the press was many times greater than I anticipated, and was a labor, but a pleasant one, undertaken in connection with other duties that of themselves should sufficiently employ one man's time. Time, like the horses, seems to go faster in California than elsewhere. I cannot recall any period in life more pleasant than the three bright, delightful months of congenial work, congenial companionship and congenial surroundings at Palo Alto, and the days flew by on hurrying wings. Still the "raw material" gathered

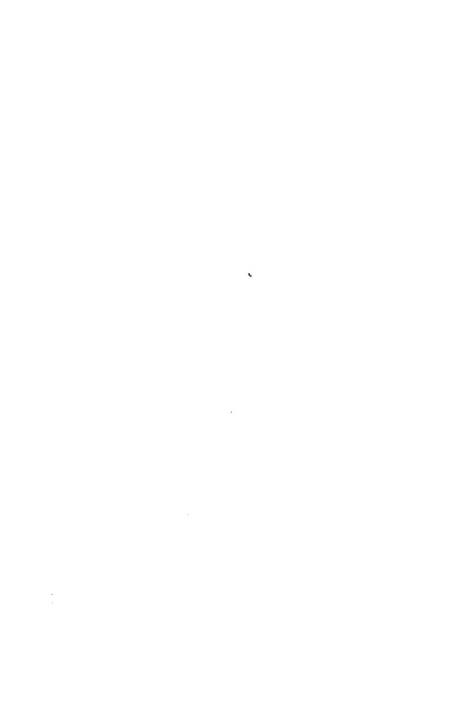
in that time was quite voluminous, and the work of editing it called for an expenditure of time and labor which, I presume, no one can appreciate who has not tried his hand at the "making of books."

I have to here cordially and thankfully acknowledge the assistance kindly afforded me by Mr. Ariel Lathrop (the manager of Senator Stanford's vast interests in California) in placing at my disposal plans, drawings, and other material for use herein.

In the hope that this book may be welcomed into the libraries of the trotting-horse breeders and trainers of America, it is submitted to the public, not without a sense of its imperfections, nor yet without confidence that in it will be recognized sufficient merit to assure it a place among standard works on the trotting-horse.

L. E. M.

New York City, April, 1890.



LETTER FROM JOSEPH CAIRN SIMPSON.

The following interesting letter is from the author of "Tips and Toe-Weights;" "Horse Portraiture," etc., and breeder and trainer of Anteeo, 2:16\frac{1}{4}, and Antevolo, 2:19\frac{1}{2}.

OAKLAND, Cal., Feb. 7, 1890.

Leslie E. Macleod, Esq.

My Dear Sir: Agreeably to your request, I send this short etter, in relation to my opinion of Charles Marvin as an educator and driver of trotters. It is always a pleasant task to me to write words of commendation when there is merit to warrant eulogistic phrases, and that Mr. Marvin presents a case exactly to my mind, those who are as well acquainted with him, his methods, and, above all, his strict honor and integrity, as I am, will concede.

Personally, the acquaintance dates from Mr. Marvin's residence in California, though before I left the East, now nearly sixteen years ago, I had received letters which gave me an insight into his character and his ability as the handler of trotters.

It will not be out of place to rehearse how that knowledge was obtained. In 1873, I was employed, by Charles Schwartz and A. S. Gage, to take charge of Dexter Park, which those gentlemen had rented of Messrs. Sherman and Tucker. During the early summer I received several letters from the owner of Smuggler, giving full descriptions of the horse, his rapid improvement under the charge of Marvin, in fact, a minute account of whatever would be likely to interest a purchaser. As a "token of good faith" he offered to deposit, to my order, whatever funds were required for the expenses of the trip, remuneration to whoever made the journey, and if the truth of his statement was not fully endorsed by the facts, the funds

provided should be drawn upon to cover the whole outlay. He particularly referred to the trainer as a man worthy of the fullest confidence, and that this certificate of good character would be signed by all who were intimate with him.

I was so strongly impressed with the evident candor of the writer that I urged Messrs. Schwartz and Gage to join me in the purchase. The price at that time was \$6,000, and there was a good chance to "win him out" at the meeting, which was to be held in July. There was a partial agreement, and I was preparing to make the journey when something came in the way, and the preparations for the meeting, at which \$40,000 were "hung up," engrossed my attention, and the idea of purchasing was abandoned.

He was to show 2:30 or better, and only a few weeks previous to his first letter he was far behind that figure. Writing from memory I cannot state positively what the improvement was, though it certainly demonstrated that there were the best of grounds for believing that he was destined to become a very fast trotter. The history of Smuggler is so well known that there is no necessity for amplification, further than to call attention to the fact that Mr. Marvin took him when he was regarded of "little account," and carried him through the whole of his education until he reached the summit of the temple of equine fame.

I hold that the talent necessary to be a successful trainer of trotters, especially youngsters, is more rarely met than the same amount of ability as a driver in races. And there is another point worthy of consideration, that a man who has been eminently successful as a teacher rarely, if ever, fails to be a good driver in races, whereas some of the renowned knights of the sulky are far from being in the front rank of the profession, or that part of it which consists in carrying animals from the primary schools to the first place in the graduating classes. There is a great deal of nonsensical talk, and not a little arrant humbug in the learned disquisitions which are heard when race-driving is the topic.

The jangle of words indulged in on such occasions would be amusing were it not that insidious comparisons, and, at times, malicious attacks are made by men who have small knowledge of the business, although their dogmatical assertions mislead people who are not conversant with trotting affairs. Mr. Marvin is unquestionably a driver of the highest class, and it would be eminently a work of supererogation to present long arguments to prove that he possesses that faculty.

It may be considered equally useless to lay so much stress on his handling colts, as nearly every "best record" has been made by colts that he has trained, and driven to that record. The word "nearly" can be cancelled as in the foregoing sentence, as yearling, two-year-old and three-year-old are to his credit, as the last year of colthood, four years old, is a dead heat for place, and that he will "break the tie" in 1890 is just as certain as anything of that nature can be forefold. Nothing so convincing as success. Argue as we may, present evidence piled upon testimony to prove that results should never have followed the practices which brought the desired return. Success is mightier than theories, however plausible. But granting that the proof of both educating ability and race-driving ability in Mr. Marvin, as shown by the records, is so strong that a mere statement is all that is necessary, it will be in keeping to consider the elements which entitle him to the rank I have conferred. The case instanced, that of Smuggler, is a good beginning; his subsequent victories overshadow that, and, as there is constant progression on his part, it is manifest that he has been educating himself as well as the renowned colts which have been his pupils.

Although I have never questioned Mr. Marvin on this point, from what is known it is a fair inference that the system formerly pursued was similar to that in vogue, and which was practiced by the best trainers of the period.

At Palo Alto there were startling innovations, "established methods" ruthlessly cast aside, and in place of pursuing systems, endorsed by such a number of professors that only a shadow of a minority questioned the practices, new ideas prevailed. Mr. Marvin had sense enough to understand, and wisdom to follow advice which had the backing of sound sense. It may seem singular to those who are not intimately acquainted with the training of horses, especially fast harness-horses, that there should be any hesitancy in accepting advice from owners, or other qualified persons, but those who have had the experience will agree with me, that very many trainers appear to regard suggestions as an implication of ignorance, and resent it in some way. I have frequently heard the Palo Alto system of training commented upon by trainers, and by those which it takes a good deal of courtesy to include in that list, and the latter named class particularly prone to denounce the departures.

As an illustration of the prevailing dislike to "obey orders," when the management of horses is the theme, during Mr. Marvin's absence in the East it was found necessary to put hurdles across the track to compel that the work should be limited to short brushes. Marvin was not imbued with such silly notions was fortunate all around. Fortunate for Governor Stanford to get a man who could understand what he wanted done, and with ability to execute; fortunate for himself by being placed in a position where his talents could be shown; fortunate for the horse interests of California, and, for that matter, for the whole country, by introducing methods of management which had been tested by the only true formula, years of patient, indefatigable work. Results have not been confined to "beating the record" so frequently. Nor has the limit been reached when the many races he won are brought together. Horses bred at Palo Alto are prominent in every State which pays much attention to the breeding of fast trotters. Celebrated at home and abroad, for qualities which are prized by purchasers, they find ready sale at prices which, a few years ago, would have been regarded as far beyond the value of any horse. And these values have not been confined to a few of the produce of sires and dams still owned at Palo Alto.

Fifty-one thousand, fifty thousand, twenty thousand dollars, and with a number more, ranging from five to twenty thousand dollars, money actually paid, is the best proof of their market value. Large offers reported are delusive, It is easy to make offers which have prearranged refusals for a basis, and which carry small influence with close observers; but money paid and animals transferred preclude all ideas of humbug, and is a stamp of merit which rabid jealousy cannot successfully impugn.

Next to Governor Stanford, Mr. Marvin must be credited with bringing about this result. As stated previously, the willingness to learn is one of the most praiseworthy traits in his character.

Relinquishing old and firmly-set habits is a difficult task, and to give up cherished ideas a mark of intelligence.

Before being competent to teach, a man must have been a pupil. After having passed through one educational course, it is still more difficult to cast aside the lessons of that, and practice what previous teachings had classed in the category of errors.

Then, too, it must be borne in mind that when Mr. Marvin became the pupil of Governor Stanford, the course marked out was comparatively untried. There had been, perhaps, an approximation to the systems inaugurated at Palo Alto, but without a practical test approaching the magnitude of what was contemplated by his employer.

No one had preceded him in carrying out the designs on the trestle board, and I again repeat that it was fortunate to every one concerned that he was the first.

In recalling the many educators of trotters I have known, there is not another who was so well fitted for the place.

To give my reasons for this opinion would demand more space than is permissible in this letter, and there is little requirement for elaborate arguments when subsequent facts are taken into consideration. Much is subsequent to the time when Mr. Marvin took his residence at Palo Alto; and, from 1880, when Fred Crocker lowered the two-year-old record to 2:25\frac{1}{4}, until 1889, when Sunol smashed the three-year-old, and made the marvelous mark of 2:10\frac{1}{2}, there have been a succession of victories, an unparalled array of events to prove that the most sanguine expectations were justified, and that reasons for holding the opinion advanced are superfluous.

Truly yours,

Jos. CAIRN SIMPSON.

List of Horses to Which Charles Marvin Gave Records.

Sunol, three-year-old	9.101
Sunol, two-year-old	9.19
Palo Alto.	9.191
Palo Alto, four-year-old	9.901
Smuggler	2.20⊈ 2.151
Manzanita, four-year-old.	0.10
Manzanna, tour-year-oid	2:10
Manzanita, three-year-old	2:203
Manzanita, two-year-old. Sallie Benton, four-year old.	2:20
Same Benton, four-year ofd	2:172
Bonita, four-year-old	2:18業
Bonita, two-year old.	$2:24\frac{1}{4}$
Bonita, two-year old. Hinda Rose, three-year-old.	$2:19\frac{1}{2}$
Hinda Rose, yearling	2:364
Tucker	$2:19\frac{1}{2}$
Alfred G., four-year-old	2:193
Elaine	2:20
Ansel	2:20
Express	2:21
Sport	2:224
Lorita	
Maiden, three-year-old	$2:23^{*}$
Abe Edgington	2.231
Abe Edgington. Rexford, three-year-old.	2:24
Alban	2.04
Carrie C., four-year-old	
Clifton Roll, four year old	9.941
Clifton Bell, four-year-old	9.941
Azmoor	9.941
St. Bel, four-year-old	9.911
Arol.	9.94
Class	0.08
Clay. Fred Crocker, two-year-old.	9.951
Carlida	0.061
Carlisle	
Marion	
Whips	2:274
Cubic	.2:274
Emaline	.2:211
Pedlar, two-year-old	.2:274
Clay. Palo Alto Belle, two-year-old.	2:28
Palo Alto Belle, two-year-old	$2.28\frac{1}{2}$
Capt. Smith	
Essex	,2:29
Ella, two-year-old	2:29
Albion	2:29
Del Mar, two-year-old	.2:30
Norlaine, yearling	$.2:31\frac{1}{2}$
	_

ILLUSTRATIONS.

_	AGE,
Portrait of Charles Marvin	iece.
SMUGGLER	59
Portrait of Hon. Leland Stanford(facing)	82
VIEW OF PALO ALTO STABLES AND TRACK(facing)	90
DIAGRAM OF PALO ALTO STABLES AND TRACK	93
HINDA ROSE(facing)	123
St. Bel(facing)	127
Manzanita(facing)	149
Palo Alto(facing)	154
Norlaine(facing)	167
Suxol(facing)	177
DIAGRAM A—COVERED TRAINING-PADDOCK	198
Diagram B—Training-Paddock	199
Воотѕ	265
Palo Alto Shoe	276
ELECTIONEER (furing)	901



Page.

CONTENTS.

BIOGRAPHICAL SKETCH OF THE AUTHOR	17
CHAPTER I.	
Why the Book is Written—A Profession Without Teachers or Text-Books—Our System of Training Original—Order of the Work—Early Experiences With Horses—My First Trotters—Dan, the Chestnut Saddle-Horse—Clipper—Rutland Girl—George—Sealskin and Olive Dunton—The Great Smuggler	28
CHAPTER II.	
The Great Smuggler—His Origin and Blood—How He was Named—Given Marvin to Train—How Smuggler was Converted to Trot—Weight-Carrying—Success at Last, and Rapid Improvement—Fast Trials and Sale of Smuggler to Colonel Russell—The Great Race at Buffalo, Won by Thomas Jefferson—Adverse Criticism of "The Western Hoosier"	33
CHAPTER III.	
Smuggler "Under the Weather"—A Famous Springfield Blacksmith Gets at Him—He Wins His First Race, Defeating Wellesley Boy—George Wilkes' Compliment—He Wins the Great Stallion Race at Boston—Record 2:20—1875 An Off Year—Judge Fullerton Defeated and the Stallion Record Lowered to 2:17.	14

CHAPTER IV.	GE.
The Great Race with Goldsmith Maid—The Details of the Most Memorable Race of the Centennial Year—A Close Call—"S. T. H.'s" Graphic Description	.54
CHAPTER V.	
The Free for-All Battles Down the Line — From Cleveland to Springfield—Great Race at Hartford—1877 a Poor Year for Smuggler—Taken to California—Breaks Down in the Spring of 1878 and Sent Home—Good-by to Smuggler	.73
CHAPTER VI.	
First Visit to Palo Alto—Sketch of Its Illustrious Founder and Proprietor, Leland Stanford—His Genius as a Horseman, His Pure Character, and His Munificent Charities—The History of Palo Alto in Brief Outline—A Scientific Demonstration of the Positions of Animals in Motion	.8 1
CHAPTER VII.	
History of Palo Alto Continued—First Trials of the Palo Alto System Unsuccessful—Reasons Therefor—Some General Observations on Training and Trainers—Occident and Abe Edgington Campaigns Briefly Outlined from 1878 to 1889—The Great Campaign of 1886—Plans for 1888 Frustrated by Fire—Further Successes.	.96
CHAPTER VIII.	
Sketches of Famous Animals Trained at Palo Alto—The Stars of Ten Years Ago—Occident the First Horse to Beat 2:17—The Strange History of His Sire—Old St. Clair—Abe Edgington—The Half-Brothers, Clay and Capt. Smith—The Great Mare Elaine, 2:20—Fred Crocker, the First Palo Alto Record-Breaker	10 7

CONTENTS. XIX

CHAPTER IX.

PAGE.

CHAPTER X.

The Great Four-Year-Olds of 1886—Manzanita and Palo Alto—
The Breeding, Training and History of Manzanita—The
Memorable Three-Year-Old Battles of 1885—Manzanita Beats
Patron, Silverone, Eagle Bird and Greenlander at Chicago—
The Smart Men Discover a "Quitter" and Pay for the Information—The Memorable Race for the Gasconade Stakes
at the St. Louis Fair—Patron Wins Through Bad Starting—
A Great Stable in 1886.

CHAPTER XI.

μ	•		3	٤.	
•	•	.,	3	-	•

CHAPTER XII.

Palo Alto, the Son of the Thoroughbred Mare Dame Winnie-
His Early Promise—The Name of "Palo Alto" Entrusted to
Him to Uphold—Almost a Clean Sweep in His Class in 1886—
Beating Aged Campaigners in Long Races—Only One De-
feat and Eight Victories-Narrow Escape from Death by
Fire—The Brilliant Campaign of 1889—Invincible and Un-
beaten—Record $2:12\frac{1}{4}$

CHAPTER XIII.

Sudie D. Takes the Yearling Honors to Kentucky for a Brief
Season—Norlaine, the Champion Yearling—Her Training—
She Breaks Sudie D.'s Record in $2:31\frac{1}{2}$ —Norval, $2:17\frac{1}{2}$, Her
Sire—Sallie Benton, 2:173, the Champion Four-Year-Old of
Her Day—Helen, 2:223—Sphinx, 2:23—Bell Boy, 2:191—
Chimes and Suisnn—Other Stars

CHAPTER XIV.

Sunol, the Phenomenal Trotter of the Nineteenth Century—Her Breeding and Her Form—Her Temper and Nervous Organization—Her First Lessons—Training on to Greatness—Details of How She was Worked—Wins Her First Race—Lowering the Two-Year-Old Record to 2:20½—Lowering It Again to 2:18—The Winter of 1888-9—A List of Brilliant Performances—Champion Three-Year-Old of the World—2:10½......178

CHAPTER XV.

A Chapter on Early Training—The Subject Considered in Various
Phases—Hiram Woodruff and His Day—The Advance Since
Then—Trotters Now Come to their Speed Early—The Prejudice Against Early Training Passing Away—A Practical
Necessity With Breeders Who Breed for Profit—Time that
Means Money—The Benefits of Early Training are Lasting—
It Must Not Be Overdone—The Past and Present Contrasted.

182

CONTENTS. XXI

CHAPTER XVI.

PAGE.

The First Days of the Colt's Life—Weaning Time—Feeding Colt	
and Dam—Haltering and Learning to Lead—The Benefits of	
Companionship — The "Kindergarten" — The Evolution of	
the Training-Paddock — Plans and Directions — The Colt's	
First Lesson in Training to Trot19	3

CHAPTER XVII.

Working on the Miniature Track — The Daily Performance—
Amount of Work Given-It Must Not Be Excessive-The
Colt's Confidence to be Retained—Hitching—Working with
a Runner-An Unnatural Method of Training-Balance and
Stride—The Benefit of the Training Paddock—Developing
Speed, Wind and Muscle Naturally203

CHAPTER XVIII.

Young Colts to be Liberally Fed—Colts Can Be Safely Worked
Twice a Day if Necessity Requires It—Breaking to Harness—
The Bitting Rig—Learning to Go by the Rein—In Double
Harness First-Then in Single Harness-Skeleton Wagon
Before Sulky-Find Out What You are Going to Do Before
You Try to Do It—Adopt a Programme—The Necessity of
Keeping the Gait Square and Preserving the Natural Bal-
ance

CHAPTER XIX.

CHAPTER XX.	AGE.
Weight in the Shoe—Use and Abuse—The Last Resort—When Weight is Needed—Reducing—Value and Necessity of Early Work—Early Training Necessary for Highest Results at Maturity—In Accord with Science—The Ill Effects of Neglected Education—A Case in Point—A Valuable Mare Ruined—Work Few Miles, if Any—The Mouth—Checking and Driving—The Colt Not to Be Controlled by Main Strength—To Drive with "a Silken Thread"—Light Hands—No Breaking if Possible—Catching—The Whip—Side Pulling.	228
CHAPTER XXI.	
Climatic Conditions—The Track-Work of the Three-Year-Old— The Speed-Making Brushes—Speed Wins Races—Manzanita and Patron—Brush at Different Places on the Track—Stopping at Spots and Its Remedy—Amount of Work Given—Working Twice a Day when Necessary—Another Caution Against Overdoing It—A Tired Horse Ripe for Break-Down—The Error of Persistently Driving Fast Miles—Working Mature Horses—Work Differs Only in Degree—Excessive Reduction—Condition—Peculiarities to Be Studied	25 8
CHAPTER XXII.	
Stables and Stabling—Palatial Stables Not Necessary—The Prime Essentials Cleanliness, Air and Light—Large and Small Barns—Advantages or the Latter—Roomy Boxes—Flooring—Clay Floors—Bedding—Feeding—Cracked and Ground Food—Bran—Importance of Good Quality of Food—Water—California Climate and Grasses	248
CHAPTER XXIII.	
The Daily Programme with a Horse in Training—The Morning Meal and Exercise—Caring for Him After Work—Rubbing, Blanketing and Bandaging—Temperature of Stables—Clothing—Muzzles—Hoods—Good Men for Rubbers—Boots—Some Specially Good Patterns of Boots—Toe-Weights—Seldom Necessary and Much Abused—The Perfect Trotter Will Not Wear Them.	25 7

Page.

contents. xxiii

PAGE.

CHAPTER XXIV.

CHAPTER XXV.

CHAPTER XXVI.

CHAPTER XXVII.

Common Injuries and Ailments and their Treatment—Horses that Trotted After Breaking Down—Treating Filled Legs—Iodine—A Favorite Remedy—Curbs—Cracked Heels—Distemper—Thrush—Quarter Crack—Tender Feet—The Lockiepad Shoe—Splints—Sprung Tendons—A General Caution....298

CHAPTER XXVIII.

PAGE.

The Question of Breeding-The Importance of Form and Action-
Action Should Be Pure—"Line-Trotting"—Structure of the
Stallion - Action and Structure of Dam - Good Mares or
None—Trotting-Blood Should Be Good—Developed Speed—
Thoroughbred Blood - Must Be Carefully Selected and
Good-Its Advantages in Finish and Quality, Not in Game-
ness-Viewing the Question Without Prejudice-Practices
in Breeding - Time for Breeding the Mare - Experiences
with Sprite, Dolly and Flower Girl-Trying After Breed-
ing-Foaling Time-Age to Breed Mares-Number Stallions
Should Be Allowed to Serve—Dangers of Overbreeding308
CHAPTER XXIX.
Nearing the End—A Tribute to Electioneer—His Breeding, His-
tory and Characteristics-His Speed-His Roll of Honor and
Rank as a Sire—The Electioneer Action—The Electioneers as
Campaigners — General Benton — Piedmont—Nephew—The
St. Clairs—The Belmonts—The Moors—Nutwood—Guy
Wilkes—A. W. Richmond—Au Revoir318

APPENDIX.......331

TRAINING THE TROTTING HORSE.

BIOGRAPHICAL SKETCH OF THE AUTHOR.

When in any field of endeavor, a man achieves that which makes him famous, we are not content merely to study what he has accomplished and how he has accomplished it, but we are curious to know something of the life and individuality of the man himself. Had it been left to the unobtrusive modesty of Charles Marvin, the record of his life-work would probably not be supplemented by even the brief sketch of his career which is embraced in these pages. In these days when "cheek" so often passes current for ability, it indeed becomes genuine merit to bear itself modestly; and while no trainer of trotting horses has ever approached Charles Marvin in successful achievement, there is not in his character a tinge of egotism, or in any word of his a note of self praise. He undertook the authorship of this book, because he has the faith grounded in over twenty years of practical experience that what we for convenience call the Palo Alto system of training trotting horses is superior to any other practiced, and he felt that it should be described and taught in a book that would prove a standard textbook in a field where such a work has not heretofore existed. Not what he did, but what he learned, he wished to tell; and he wished to tell it not to gratify personal pride, but that others might learn from his experiences. The idea of devoting a whole book to reciting the personal doings of a trainer and driver was always repulsive to Mr. Marvin, as it necessarily must be to a man with aims higher than self-glorification.

He took the broader, wiser view that not what a man does, but what he can teach, interests reading and thinking horsemen. Throughout the preparation of this book the author has, in teaching how to train trotting horses, studiously kept his own personality in the background; but the editor recognizes that the work would be in a measure imperfect without a sketch of the author's life, and in the following pages his career is outlined.

Charles Marvin was born in Springwater Valley, Genesee County, New York, on November 24, 1839. His father, Don A. Marvin, was by occupation a farmer and trader, and his mother, whose maiden name was Thorne, also came of a family of "tillers of the soil." Mr. Marvin's paternal descent is from what was known in family genealogy as "the Hartford branch" of the Marvin line. His father was directly descended in the sixth remove from Matthew Marvin, who was born in England early in the seventeenth century, emigrated to America, and was one of the original proprietors of what is now the city of Hartford, Connecticut.

Charles was the second of a family of seven, and in their youth the uneventful lives of himself and his five brothers ran in the same groove as the career of the average country boy of the time and place. In winter he attended school, and in summer assisted in the family work, and necessarily acquaintance with horses was with him, as with all boys so situated, a matter of early commencement. His skill at horsemanship quickly manifested itself, and, as a boy, his triumphs were in the direction of managing balky horses, and in excellent riding.

A half century ago, those who longed to better their worldly circumstances felt the magnetism of the West as strongly as we do to-day; and in 1846 or 1847, Don A. Marvin and his family removed to Lowell, in Kent County, Michigan, where they farmed and kept hotel for six years. In 1852, another western move was made to Rockford, Illinois; then to Council Grove, Illinois, and a few years later to Dubuque, Iowa, where Mr. Marvin, Sr., was engaged for a time as a railroad contractor. Later Mr. Marvin lived successively at Coffin's Grove, Cedar Rapids, La Grange and Des Moines, Iowa, and the latter city became the permanent home of the family. Mr. Don A. Marvin died at Des Moines in 1869, and Mrs. Marvin in 1885.

Before the removal to Des Moines, Charles Marvin determined to strike out for himself, and in April, 1862, started for California overland. Taking a team with him he began the journey with one George Babcock as a companion adventurer. On the way to Council Bluffs they fell in with a man whose destination was Pike's Peak, Colorado, and he persuaded Marvin to transport a load of stores for him to that point. In due time Pike's Peak was reached, and Marvin tried his fortune in the mines, but soon gave it

up and returned to Denver. There he was employed by the government as a teamster, and was sent with a six mule team to Fort Lyon with supplies. At Fort Lyon Marvin made the acquaintance of Captain L. D. Rouell, of Company F, of the Second Colorado Cavalry. The company were quartered during the winter of 1862–63 at Fort Lyon, and in the spring was despatched to Council Grove, Kansas, to hold the Santa Fe trail against Indians and lawless border raiders.

The company remained at Council Grove until the memorable dash of the Confederate raider, Quantrill, On the night of August 20, 1863, Quaninto Kansas. trill, with 300 men, crossed the State line from Missouri, and in the early morning of August 21st, swooped down upon Lawrence, with fire and sword. murder and sudden death were in the city's streets." The town was literally wrecked and ruined, and in flight was the only escape from the sword. After the sack of Lawrence, Quantrill's men recrossed into Missouri, timidly pursued by General Lane. Rouell's company was ordered to Lawrence after the raid, and a little later to Hickman's Mill, Missouri, thirteen miles from Kansas City. The country was practically depopulated, and for those who were loval to the Union there were only two paths to safety either to go within the Federal lines or leave the country, as it was in sympathy with the "lost cause." Marvin remained here with the company until the close of the war, the troops doing considerable fighting of a bush whacking order. In the fall of 1864, the rebel General Price made his formidable raid, and Captain Rouell's company was part of the force under General

Curtis that was engaged against Price. There was heavy fighting at The Blue, at Westport, and at Marisdeseynge. The command was also in the battle of Newtonia, where Charles Marvin's horsemanship and a good horse saved his life. A rebel cavalryman had fallen, on whose saddle was slung a white blanket. Rations were short just then, and Marvin mistaking it for a sack of flour, went after it. When near the supposed prize, some of the Confederate horsemen attempted to cut him off, and he had a decidedly "close call." The horse struck good footing and a clean piece of prairie, and by the hardest kind of riding the Federal horseman got back to his lines. Probably he never rode or drove a finish in saddle or sulky quite so desperate as on the home stretch of his race for life with the guerrillas, who would have been delighted to gather him in. In the summer of 1865 the company was mustered out at Fort Riley, and the war experiences of the author of this work ended.

In the army in these parts in the closing years of the war a good deal of horse-racing was indulged in, and when it was over, and the company mustered out, Marvin found himself in possession of two race-horses and two saddle-horses. He went to Kansas City and remained there, training and racing runners until the fall of 1866. It is hardly proper to call them race-horses, for they were merely quarter-horses, and few of them were good half-mile sprinters, the most of the races being at a quarter of a mile, 500 yards, and 600 yards straight away. The "cracks" of Marvin's string were Whitestockings, a good half-miler, of the Ariel blood, and Battery Grey, a lively scrambler whose "pedigree" traced to the Ninth Wisconsin Battery.

The following anecdotes, which we will have in Marvin's own words, serve to give an idea of the style of racing at Kansas City, and thereabouts, in those days:

"One of my most notable races was with a bay horse whose name I cannot now recall. It was, as usual, a short straight-away dash. There was a good rider about at that time, by the name of Pierce, who weighed 135 pounds. I matched my horse for \$400 a side to carry Pierce or his weight against a pony called Spot to carry catch weight. Pierce had a weakness for whisky, and it was always fully developed on race days. If he was to ride, it was his invariable rule to celebrate the event beforehand by 'getting full.' Originally there were some friends interested with me in the match, but when the time came, owing to Pierce's condition, I decided to ride the horse myself. My friends demurred, and I had to take all the match on my own hands. Having \$600 bet on the outside this ran up my stake on the race to \$1,000. The match was made with Hugh Kirkendoll, who had been a quartermaster at Fort Scott, but who is now a citizen and prominent horseman of Helena, Montana. (He visited Palo Alto the winter of 1889, but we failed to recognize each other until our conversation led to recognition, and an old acquaintance was renewed.) After I had mounted and was on my way to the post, Kirkendoll offered to bet me \$100 more that I would lose the race. I took the bet, and went to the start. I won the race easily, and among the losers were my friends who had withdrawn when I decided to ride my horse, and had then backed Spot, feeling sure that my riding would lose the race. Shortly after this I matched Whitestockings against a one-eyed chestnut horse called Cornstalk, alias Bogus Bill. The latter bolted, carrying my horse off the track. I had a sixty-five pound boy up, who was unable to control the horse after he left the track. This match was at Leavenworth, Kansas, for \$2,500, and in all I lost \$3,000 on the affair. I then made up my mind firmly to one thing, viz.: That I would never again race horses unless I could steer them in the race myself, and I have lived up to the resolution. I sold out my racing-stable immediately, and returned to Kansas City."

Shortly after this, in the fall of 1866. Marvin was engaged to manage a livery stable at \$100 a month in Kansas City, and it was during this engagement that he had his first trotting-race. He trained a chestnut stallion named Cæsar to trot, and entered him in a sweepstakes race, in which he finished second. A lumber dealer named Kendall had a horse called Harry in the same race, and afterward undertook to convince Marvin that Harry could beat Cæsar single-handed. They had three successive match races, all of which Cæsar won. Then Mr. Kendall gave up the job of convincing Marvin that Harry could beat Cæsar.

Marvin tired of the livery business, and, in the autumn of 1867, took a team and made a contract to haul rocks at so much per square yard to the abutment of the present railway bridge at Kansas City over the Missouri River, which was then being constructed. One evening, as he was caring for his horses, a sporting man named John Forbing happened into the stable, and inquired where he could engage a man to take a

load of merchandise to New Mexico. Finally Marvin agreed to take \$500 for the trip, and on January 27, 1868, he started for Maxwell's Mines, on the Cimarron River, in New Mexico. He engaged in mining at Elizabethtown, near Maxwell's Mines, until June, when he intended starting back to Kansas City, in company with a part of the Forbing party. Owing to a misunderstanding, however, the party left before Marvin was ready, and he changed his intentions. Visions of possible fortune in Texas was alluring, and he laid his course for San Antonio. This was no Sunday journey in those days. The trail lay down the Pecos River and across the dreaded Staked Plain. A writer describing this route says:

"It left the main trail somewhere near where the western line of Kansas now is, and turned southward across a plain—a vast country in fact—the very name of which was a synonym of danger before civilization came, and which is still almost unexplored. For this nearer trail to E! Paso lay across El Llano Estacado, and was in all likelihood the very dreariest road ever traveled. The distances were immense, water was not plenty, and Comanches were."

Marvin returned from San Antonio to Kansas in the spring of 1869 and located at Paola, where he formed a partnership with E. L. Mitchell in a livery and training stable. Here he began training trotters as a profession, and it has been his vocation ever since.

His twenty years of marvelously successful experience, the pith of which this book is designed to record and teach, thus began in earnest.

There is little more of interest of the great trainer's

life to tell here, for he fully records his experiences as a trainer in this book. In 1872 Mr. Marvin and his partner located at Olathe, Kansas, and leased the track. Then began his remarkable career with Smuggler, and shortly afterward the partnership between Mitchell and Marvin ended. When he parted company for the last time with Smuggler it was in San Francisco, on April 5, 1878. Smuggler had broken down, and was then shipped home, Marvin deciding to remain for a time at least in California, as he already had a stable in training at Bay District track. On April 10, 1878, Marvin went to Palo Alto and engaged to work on trial, and in due time became Superintendent of the farm as well as trainer, a position which he has filled with the greatest profit and credit to Palo Alto as well as with marked honor to himself.

Charles Marvin was married at Kansas City, December 3, 1873, to Miss Fanny Martin, of Ossowatomie, Kansas. Mrs. Marvin is a lady not only of much refinement, but of warm heart and lovable disposition, and is fortunate in the possession of the noble qualities of womanhood that make the charm of a model home. Mr. and Mrs. Marvin are happy in the possession of three children that are general favorites—Master Howard, aged nine; Miss Jessie, seven, and Master Charles, Jr., aged four. Their home is a pleasant cottage at Palo Alto, and only those who have enjoyed its unrivaled hospitality can appreciate how much Mr. Marvin is to be envied in his domestic relations.

One of the most admirable traits in the character of Charles Marvin, and a quality that has earned him the respect of all true horsemen, is his uncompromising

honesty. While others have depended on trickery for success on the turf, Marvin has earned a greater reputation than any of them, and has kept his character unstained. The tinge of jobbery never attached to his name. He has left to others the work of swindling the public, pulling horses in races, and driving for the pool-box. In this book you will find no boasting over "smart" jobs that were carried through—boasting that seems to afford some trotting-horse drivers infinitely more gratification than their honest triumphs—as trainers. The chief shade that rests on the trottingturf is the shameful fact that men who are notoriously and forever indulging in fraud on the tracks do so with impunity, and so far has this gone that some have written with boastfulness the story of jobs of which an honest man would be ashamed. This class of men in their lives and their words do the pitiable work of inculcating in the minds of young horsemen the idea that an honest man cannot succeed on the trotting-turf. that the price of success is the sacrifice of honor, except that honor that is by tradition supposed to exist among thieves. But this class of men are gradually finding their level in the public estimation, and the trainers that are entrusted with valuable horses, that have the confidence of rich and representative breeders, are not those whose names are always spoken lightly, but men who, like Charles Marvin, have a character to maintain that is worth more than all the money that was ever won by chicanery and fraud. Such men deserve well of the horsemen of America, and all the better class of turfmen and breeders feel a personal gratification that the highest pedestal of fame on the trotting-turf is reserved for men of clean character.

In his every-day life Mr. Marvin is, under all circumstances, a gentleman. His manner is easy and rather retiring, and in conversation he is at first somewhat reticent; but when he breaks through the ice, he talks freely and instructively, while always modestly. He does not feel the necessity of tiresome and hollow boasting, and is content to be judged on what he has accomplished. Mr. Marvin is, as already stated, exceptionally happy in his domestic life, and he is essentially a domestic man, loving his home and his family above all things else, and enjoying life nowhere as there.

Perhaps no man living is better fitted to give a just estimate of Charles Marvin's character than Col. Henry S. Russell, who owned Smuggler in the days of his glory on the turf. I cannot better close this inadequate sketch of his career than by quoting the following letter, written some years ago by Colonel Russell to the Breeders' Gazette:

"In addition to your very just praise of Charles Marvin as a driver, I beg to give my testimony of him as a man. Not only the horse, but the owner as well, may have every confidence in him. If the trotting interests of this country had been piloted by such as he, there would have been more honest owners in the field to-day, and the better part of our citizens would be ready to encourage, rather than suspect, the motives which prompt capital to invest in a pastime which, unfortunately, has been shamefully abused."

CHAPTER I.

WHY THE BOOK IS WRITTEN—A PROFESSION WITHOUT TEACHERS OR TEXT-BOOKS—OUR SYSTEM OF TRAINING ORIGINAL—ORDER OF THE WORK—EARLY EXPERIENCES WITH HORSES—MY FIRST TROTTERS—DAN, THE CHESTNUT SADDLE-HORSE—CLIPPER—RUTLAND GIRL—GEORGE—SEALSKIN AND OLIVE DUNTON—THE GREAT SMUGGLER.

THE idea of writing a book on training trottinghorses occurred to me some years ago. It certainly seemed to be a profession in which much was to be taught, but in which there were neither text-books or teachers. The need of a work on the subject is best illustrated by the fact that "The Trotting-Horse of America," by Hiram Woodruff, is still in demand, though fully twenty years out of date. The young man who reads Woodruff for instruction on training trotters in these days is much in the position of one who would follow Fulton's model in building a steamyacht. The crude process, of which Woodruff was a master in his day, has been improved and perfected into a fine art. It seemed to me that a modern work was called for, lucidly explaining the most recent practices in training trotters, so that new men in the business need not grope blindly in the dark, and only master their profession by here and there stumbling upon

the right way to do certain things, after losing perhaps years in doing them the wrong way. My friends were good enough to insist that my more than twenty years of experience in training trotters had been successful ones, and that that success was mainly due to the fact that the Palo Alto system of training was original in many of its features, and differed therein radically from conventional ideas. They urged, moreover, that I owed it not only to myself but to the trotting-horse public to write in book form what my experience was, and what it had taught, that others might profit by it. The chief obstacle in the way was lack of time to do the work justice—for I am a very busy man—but finally, with many misgivings, the work was determined upon, and within the covers of this book are the results.

After the work took definite shape in my mind, a somewhat difficult question arose as to the best order of procedure. Should I first explain a system of training and then tell what had been accomplished by it, or should I relate my experiences merely in training, tell how I did a certain thing, and let the reader judge whether it was right or wrong? My primary object in writing the book was not to pose as a story-teller, relating my own exploits merely for the pleasure of selfhorn blowing, but to endeavor to clearly explain what I believe to be the best system of training horses to trot fast. At the same time it is essential to have the work readable and interesting as well as instructive, and to most effectually serve these ends I have thought best to begin at the beginning, relate the story of Spuggler and other early horses, give a history of

Palo Alto, its horses, its methods and its campaigns, and then to lay down the course of training and management which these experiences have taught. With these prefatory remarks we may start at once upon our journey.

Though all my life had been spent in working more or less with horses, I first began training trotters, as a business or profession, in 1869. I was then at Paola, Kansas, engaged in the livery stable business, and took up the training of trotters as a supplementary occupation. Perhaps I should not say I began training trotters, for in reality I began training pacers to trot. Indeed my early successes were all in the line of converting pacers to the orthodox gait. The first horse of any account that came into my hands was the chestnut gelding Dan. He was a sort of saddle-horse, and a natural pacer. He was owned by Mr. S. O. Jerome, and after I had learned him to trot we started him at St. Joseph, Missouri, on July 4, 1870, against Aroostook Boy, George Wilkes Jr. and Pilot Boy. I won with Dan in straight heats, trotting the second heat in On the 6th he again defeated George Wilkes Jr., and on the 14th distanced Kansas Maid for a purse of \$400. Dan was on the turf for over four years, trotting upwards of twenty races, and winning eleven times, but he never beat the record I gave him in his first race at St. Joseph. I converted him from the pace with weight in the shoe.

My next horse of any account was the bay gelding Clipper, who had paced in 2:31. I learned him to trot, and after he got going clever at that gait, Mr. Benjamin Akers, the then well-known Kansas breeder,

bought him for \$5,000. He was at one time a very promising horse, but his day passed and left him unknown to fame.

About this time I had in my stable another pacer, the brown mare Rutland Girl. She was of the Halcorn blood, and though I converted her to trot, and trotted her a good deal, she never had speed enough to be of much account. I won two good races with her, one at Topeka, Kansas, September 26, 1873, and the other at Kansas City, June 2, 1875, for a \$500 purse, but her fastest mile was 2:43—slow for a baby trotter in these days. When, shortly afterward, I went east with Smuggler, I took Rutland Girl along and sold her in Boston to a gentleman from New Jersey.

Another, and about the most promising horse I had up to this time, was the gelding George. He was by Field's Royal George, the sire of Byron, 2:25½, and his dam was represented to have been a daughter of Sir Tatton Sykes. George was, unlike any other early horses, a natural trotter, and he certainly had the capacity to trot close to 2:20. I considered him about as promising a horse as Smuggler, but he died of lung fever before he had a chance to show what there was in him.

At Hannibal, Missouri, in September, 1872, a black horse of unknown blood called Sealskin made a pacing record of 2:26½, and later he came into my hands. I made a complete success of converting him, and although he has no trotting-record, I taught him to trot as fast as he could pace. This horse and a mare called Olive Dunton about completes the list of horses of my early training days, until one came into my hands that

was destined to be the foremost figure of his age on the turf, to overthrow its imperial queen, the mighty Goldsmith Maid, and to reign its acknowledged king. This was the great Smuggler, who came to me a 3:00 pacer, and left me with a trotting record of 2:15\frac{1}{4}—the fastest stallion record of that day.

It was the fortune of Smuggler and myself to earn our reputation together, to emerge from turf obscurity to turf fame, and like all that figures in the front battle line, we had our triumphs and defeats, enjoying applause and bearing condemnation together, just as the tide of fortune and the fickler tide of public favor chanced to ebb and flow.

CHAPTER II.

THE GREAT SMUGGLER—HIS ORIGIN AND BLOOD—HOW HE WAS NAMED—GIVEN MARVIN TO TRAIN—HOW SMUGGLER WAS CONVERTED TO TROT—WEIGHT-CARRYING—SUCCESS AT LAST, AND RAPID IMPROVEMENT—FAST TRIALS AND SALE OF SMUGGLER TO COLONEL RUSSELL—THE GREAT RACE AT BUFFALO, WON BY THOMAS JEFFERSON—ADVERSE CRITICISM OF "THE WESTERN HOOSIER."

In the summer of 1872, when I was engaged in training horses, as stated in the last chapter, at Olathe, Kansas, Mr. John Mason Morgan came to me with a bay pacer to train. The story he told me of the pacer's origin was this, in substance: He had formerly lived, he stated, at or near Columbus, Ohio, and had bought a pacing-mare that was brought by a cattle drover from West Virginia. This mare had been bought from a cavalryman at Clarksburg, West Virginia, in or about 1863, by a Mr. Irwin, and from him passed into the hands of the party from whom Morgan got her. Two or three years later Morgan purchased, through the same Mr. Irwin who had owned the pacing-mare, the bay stallion Blanco. Blanco was foaled in 1857, and was bred by Mr. Josiah Morgan, of Ohio County, West Virginia. He was sired by Iron's Cadmus, by Beach's Cadmus, thoroughbred

son of the great race-horse, American Eclipse, and the dam of Blanco was by Irwin's Tuckahoe, tracing beyond this to the blood of Bond's First Consul. Mr. Morgan mated the Virginia-bred mare with the Virginia-bred horse, and, forgetting the foaling-time, one morning in 1866 he unexpectedly found the youngster in a paddock with his dam, and other mares. The colt was endeavoring to secure maternal attention from another mare when discovered by Mr. Morgan which prompted that gentleman to exclaim, "Ah, you little smuggler!" And thus, according to the story told by Mr. Morgan when the horse was still obscure, he got the name of Smuggler on his natal morn, and it stuck to him.

In 1868, Mr. Morgan sold Blanco to a man named Tipton, and gave him two of his colts, one being Smuggler. Tipton moved to Kansas, and about a year later Morgan also settled in the "windy state." Tipton failed to pay Morgan for the horses, and he took back the whole outfit. He rode Smuggler under saddle, worked him on the farm, etc., and, as he showed some speed as a pacer, he started him in a pacing-race, and he was driven by one Lamasney, one of the Lamasney Brothers, the Western turfinen, who own Banner Bearer, and other well-known horses running on Eastern tracks. In that race Smuggler was distanced in 2:52, and subsequently Morgan came to place him in my hands as told at the opening of this chapter.

Mr. Morgan wished me to train him as a pacer and take a half interest in him, which I promptly and emphatically refused, telling him that pacers were of no

account, and he would have to allow me to train him to trot or I would not train him at all. This he refused, and came to see me almost every other day for two months, endeavoring to prevail upon me to meet his proposition. Morgan was a very erratic man, and had a peculiar old grey soldier-coat which he wore winter and summer. He, in copious and highly seasoned language, would ridicule the idea of trying to make Smuggler trot. "Why," he exclaimed, "if you knocked him down with a club he'd get up pacing." It amuses me now to recall how, after Smuggler became famous as a trotter, Morgan would loudly tell how he bred him for a trotter, and how he knew from the first that he would be a great trotter. And I am bound to add that once after Smuggler was defeated Mr. Morgan wrote Colonel Russell that if he would "buy Marvin a pair of rubber reins he would always have a I trust I have outlived the astute Mr. Morgan's suspicion.

Finally, finding it futile to urge me to train Smuggler as a pacer, Morgan compromised by giving him to me to train to trot, on condition that if I failed I was to make him pace as fast as he could when he came into my hands, which was not a very heavy contract to assume. Thus it was that Smuggler, obscure and unknown, came into my hands on August 15, 1872, the day he was six years old. I found him a good-looking bay horse, 15.3 in front and 16 hands high behind, with a white rear heel and a star and snip. He was a well-made horse all over, with excellent legs and grand feet. His head was well-shaped, and his broad forehead and rich hazel eyes gave him an expression of great intelligence.

I tried every known method of conversion with Smuggler, and at times I despaired of ever teaching him to trot. He was a pacer through and through. First I shod him with an ordinary shoe, but had to increase this again and again until he finally wore two pounds on each front foot, his hind shoes being ordinary five-ounce ones. It has been contended, I believe, that Smuggler was injured by carrying excessive weight, and that is possibly true. He had the best of feet, joints, cannons and tendons, and had it been otherwise he might not have stood what seemed necessarv to be done. If the reader will follow me, after I have done with my story-telling, into the discussions on shoeing and weighting, he will discover that I am, on principle, opposed to heavy shoes and "dead against" weights. But all cases cannot be treated alike; exceptional cases require exceptional treatment, and the case of Smuggler certainly was an exceptional one. should be remembered that he was not the only horse that carried such weight. Nettie, 2:18, carried ten ounces more than Smuggler ever did, and so did the little mares Lula, 2:15, and May Queen, 2:20. None of these could compare with Smuggler in muscular development, and another thing greatly in his favor was that he was a mature horse before the task was asked of him. In many cases the end justifies the means, and those who criticise the methods pursued with Smuggler have in $2:15\frac{1}{4}$ a stubborn obstacle to brush away.

As I have said, I tried every known method of conversion with this horse. I tried the cross-strap by which it is made impossible for a horse to pace;

I tried the plan of placing rails on the ground at such intervals as would compel the horse to put his feet down in the diagonal order; tried weighting in every way, and all availed nothing. Finally, by a sort of inspiration, I struck on a plan which perhaps found its first growth in the knowledge that a horse cannot turn short at the pace. I would start him up slowly and rather suddenly throw him off to one side at a pretty sharp angle, compelling him to change his gait, and the new gait he would keep for a few steps. As soon as he came back to the pace I would swing him off sideways again. Of course this was virtually driving around in a small circle, until he began to go a considerable distance trotting. At each time he would remain at the trot a little longer, and after the long, tedious and discouraging experimenting the reader may well understand how glad and encouraged I was when one day, after going around in a circle for eleven times, Smuggler struck a trot and kept it up for a quarter of a mile. Before this I had unsuccessfully worked with him for twenty-eight days. The third day after this evidence of a change of heart he went a full mile, trotting, in 4:20, and two days later did a little better, trotting the mile in 4:00. The seventh day after showing his first inclination to trot he showed a mile in 2:59, and the rapidity of his improvement is shown by the fact that on the thirteenth day he trotted the mile in 2:41\frac{1}{2}; the twenty-first day he worked three heats in 2:481, 2:381 and 2:32, and the twenty-eighth day miles in 2:321, 2:301. This ended the work for that season, and during the winter Smuggler suffered from an attack of epizootic.

was jogged easily during March, 1873, and in April we began working him again. On May 1st he was good enough to trot a mile in 2:27, and do it in a way that was full of promise of improvement. The second week in May he trotted a mile in 2:25, and three days after-Then Mr. Benjamin Akers offered ward in 2:23. \$10,000 for him, but we declined the offer. He kept right on gathering speed and improving in form every day, and a week after Akers offered \$10,000 for him he went a mile in 2:22; the next week he trotted three miles in 2:26, 2:21¹/₂, 2:20, and the following week I worked him two miles in 2:19\frac{3}{4} and 2:20\frac{1}{5}. He was then sold to Capt. W. S. Tough, of Leavenworth, Kansas, and shipped to New York, in my charge. The object of this visit was the projected sale of the horse to Mr. Robert Bonner, and, as I understood it, Mr. Bonner was to buy the horse for a certain sum if he could show three fast heats, one of which should be better than 2:20. The journey from Kansas to New York was not an easy one, but after being on his feet five days in the car, I drove Smuggler over Prospect Park for Mr. Bonner three heats in 2:191, 2:211, 2:21. He was timed by Mr. Bonner, Sim Hoagland, and George C. Hopkins. The last half of the last mile was made in 1:09. The next day Mr. Bonner sent a veterinary surgeon to examine the horse. This scientist reported to Mr. Bonner that he found the horse to have "a jack" which as a matter of fact never existed. When Mr. Bonner saw Captain Tough what he said to him was in substance: "This horse is in great form, up to concert pitch, but I would rather pay a little more money to see a little more speed. If the horse

could show a mile in 2:163, I would give \$75,000 for him."

The sale to Mr. Bonner having fallen through, we were in doubt whether to go to Boston and start against Goldsmith Maid's time, 2:163, or to return home. Meanwhile we quartered the horse in a stable on Great Jones Street, New York City, and there, September 1, 1873, Colonel Henry S. Russell, of Milton, Massachusetts, appeared on the scene. I was afterward informed that Colonel Russell was en route to Mr. Backman's Stony Ford Stud, in Orange County, when in the Turf, Field and Farm office conversation turned upon Smuggler, and the Colonel decided to see him. The trial at Prospect was on Thursday, August 28th, and if my memory serves me aright it was on Monday that the colonel came and opened negotiations for his purchase. They were speedily consummated, Colonel Russell buying the horse at the price asked, \$30,000, and on Wednesday evening he was shipped to his new home near Boston. On September 5th we showed Smuggler at the New England Fair, at Mystic Park, Boston, and, though hog-fat, he trotted a halfmile in 1:06, the first quarter in thirty-four and the last in thirty-two seconds.

As it was not Colonel Russell's intention to trot the horse that season he went into temporary retirement, and I returned to my Kansas home.

Smuggler was jogged all winter on the road, and in the spring was worked for speed by a Mr. Moulton. Colonel Russell entered him in the stallion race to be trotted at Buffalo, August 5, 1874, but the horse's work was not satisfactory and the Colonel telegraphed for me at the eleventh hour. I immediately came East and got the horse just eight days before the race, and it was said that up to that time he had not gone a mile better than 2:40. He began to shape up fairly well before the race, but was, of course, short of work and was not keyed up, but even at that he would, I believe, have won had he been fairly treated by the starter. Besides, the horse was raw and uneducated, knew nothing about scoring, and was all at sea in company. It was impossible to get him up with the other horses, and consequently at every start he got much the worst of it.

The field that started was composed of Thomas Jefferson, "the Black Whirlwind of the East;" Mambrino Gift, the first stallion to trot in 2:20; Joe Brown, Pilot Temple and Smuggler. Smuggler had the pole, but getting away in the first heat far back soon lost it to Joe Brown, who led at the quarter, Smuggler four lengths behind the field. We were fully eight lengths away from the leader at the half, but the Kansas combination began to get on steam in the stretch, and they told me afterward that the people shouted, "See Smuggler come!" In the stretch Smuggler carried Mambrino Gift to a break, and easily shook him off, and the chestnut son of Mambrino Pilot was also passed by Thomas Jefferson who came fast at the finish, but was beaten a length by Smuggler in 2:224.

Now Smuggler was made a favorite over the field, and in the second heat I asked the judges to let us go if my horse was going level, even though somewhat back. At the fifth score we went away, Smuggler eight or ten lengths back, with Pilot Temple in the

lead, and Mambrino Gift on his wheel. Mambrino Gift led at the half in 1:10. Smuggler cut down the field one by one going around the turn, and collared Mambrino Gift at the head of the stretch. The pressure was too much for Mambrino Gift and half-way up the stretch he went all to pieces, Smuggler winning by a length in 2:20½. When the time was hung out there was much excitement, enthusiasm and cheering, for the stallion record had been broken, and, moreover, Smuggler had made the fastest record ever achieved by a horse in his maiden race. He trotted the last half of that mile in 1:08¼, and went around the field at that.

Smuggler was now a pronounced favorite over the field, but it was not destined to be his day of triumph. His preparation had not been sufficient for a bruising race, and though it is possible he had enough left to win, the starter, Mr. C. J. Hamlin, of Buffalo, slaughtered him in the third heat. When the word was given Smuggler was far nearer the distance judge than the wire-indeed, I do not know but that the distance judge could have touched us with his flag. No worse start was ever given in an important race, and I saw at once that our chances of getting inside the distance flag were narrow. Around the turn Mambrino Gift led the field, Smuggler nearly a furlong behind. Mambrino Gift went on and won the heat in $2:22\frac{1}{4}$, and Smuggler beat the flag home. The Spirit said of it: "It was a hopeless task for Smuggler from the beginning. The send-off was too bad for anything without wings to make up against such a field, but right gallantly he struggled, and as the leader reached the wire

he was well up with the party, having made up about half of the disadvantage under which he started." In view of this who can doubt that, had the starter protected the pole-horse, as it was his duty to do, Smuggler would have won the race?

Smuggler was now dead tired. Want of condition, endless scoring, and three hard heats had settled the half-trained horse, and in the fifth heat, after twelve scorings, he was sent away again far back, "and the subsequent proceedings interested him no more." The heat was won by Thomas Jefferson in 2:23\frac{1}{4}, and Smuggler was distanced in company with Pilot Temple. Thomas Jefferson won the next two heats and the race in 2:26\frac{1}{2}, 2:28\frac{1}{2}, and Mambrino Gift got second money.

I was bitterly and unfairly criticised for the failure of Smuggler to win that day. Men who bet their money and lose are not the best judges of the driver's motives or skill, and of course talk from that class is not heeded. But all the reporters from New York to Conewango knew they could have driven Smuggler better than Marvin did, and with Doble, or Green, or Dan Mace in the sulky, everybody was sure that Smuggler could not have lost, and everybody conceived it to be his special duty to advise Colonel Russell what to do in the matter. The amount of good advice the Colonel received during the campaign of Smuggler represented an aggregation of wisdom that it is sad to think was thrown away. The Colonel was laughed at, jeered at, and advised about the awful consequences of keeping a great horse in the hands of "the Western hoosier;" and I certainly would have been glad at several times to have given him up to some of the many men of great reputation who were only waiting for a chance to electrify the world with Russell's mismanaged horse. The people who criticized the Buffalo race made no allowance for the fact that I had a green, raw horse, untrained and uneducated, short of work and but half prepared, one whose gait was artificial, one that had never been in a race before, and knew nothing about trotting in company.

Well, that is all a matter of years ago; and if the critics are satisfied with what they thought they knew, I am satisfied with what I did; and what is more gratifying to me than all is the fact that Colonel Russell after all was over was, and is, glad that he refused much kind advice, and stuck to the "Western hoosier."

CHAPTER III.

SMUGGLER "UNDER THE WEATHER"—A FAMOUS SPRING-FIELD BLACKSMITH GETS AT HIM—HE WINS HIS FIRST RACE, DEFEATING WELLESLEY BOY—GEORGE WILKES' COMPLIMENT—HE WINS THE GREAT STALLION RACE AT BOSTON—RECORD 2:20—1875 AN OFF YEAR—JUDGE FULLERTON DEFEATED AND THE STALLION RECORD LOWERED TO 2:17.

From Buffalo we came to Utica, starting Smuggler in the \$5,000 race for the 2:29 class, for which a field of nine faced the starter. Charley Green had Fleety Golddust in pretty good shape that day, and had little trouble in winning, after Music had captured one heat, in 2:24½. Smuggler was quite "off" from the effect of his hard race at Buffalo. He acted unsteadily, but we gave Fleety a pretty good argument in the third heat, which she won by half a length, after a fighting finish, in 2:23. Seeing that there was no chance of winning, and that the horse was not himself, he was, by permission of the judges, drawn after this heat.

Smuggler was then taken to Springfield, where we intended starting him August 18th. Here I had an instructive little episode with a "horseshoe-maker." Colonel Russell decided to try this gentleman's shoeing, and he went to work. I did not have much idea of what he was going to do, but I afterward learned

that he was going to make Smuggler trot faster. I had been trying to reduce weight, but the blacksmith decided that in the other direction lay success, so he put a twenty-five-ounce shoe on each fore foot and a fourteen-ounce shoe on each hind foot, thus doubling the weight of the hind shoes. On top of this he prescribed six-ounce toe-weights. Then, according to this eminent "harmonious blacksmith," Smuggler was rigged to smash records. He explained that the extra * weight behind would improve his hock action, of which he had little. Well, we tried him in this rig, and his speed would not have seemed indecorous at a funeral. We were then on the eve of a race, and with the horse anchored in every leg, the prospects were not cheery. But I "returned to first principles," threw away the Springfield patent, and put back the old shoes. Soon "Richard was himself again," and on the 18th he won his first race, in the second, fifth and sixth heats, beating the favorite, Wellesley Boy, and a large field, among which were Commodore Perry, H. C. Hill, and others of note in their day. Speaking of this race, Mr. George Wilkes said, in the Spirit: "The speed and gameness of this horse are something wonderful; in each of his heats he seemed totally incapable of doing any fast work until he had accomplished half the distance; then would come his time, as, with a gait the very perfection of motion, so easily and apparently without effort did he move along, he would cut down his field and win his heats."

Smuggler next started at Mystic Park, Boston, on September 2d, where he was defeated by Lucille Golddust, though he won the fastest heat of the race—the third—in 2:22. The heat before this Smuggler had broken badly, and in the first quarter of this heat Dan Mace said to Colonel Russell: "It's \$100 to one cent that he will be shut out." But he came home from the half in the vicinity of 1:06, winning the heat handily. At Beacon Park, on September 10th, in the 2:34 class, Smuggler won, beating a field of eight with comparative ease, the fastest heat being 2:26.

Then came the sensational trotting event of the year, Mr. David H. Blanchard's "Great Stallion Race for, the Championship of the United States, and a purse of \$10,000." When the race was first announced, early in the summer, some people sought to throw cold water on the whole thing with the easy cynicism that it was "a race made for Smuggler." But the races at Buffalo and further down the circuit line left very few to believe that Smuggler could defeat Mambrino Gift and Thomas Jefferson, and when the day came it looked to the public anything but "a race made for Smuggler." I do not think I ever saw a larger crowd on a racecourse than flocked to Mystic Park on September 15, 1874, to see the battle of the champions. Of the original fifteen entries, six came to the wire, viz.: Mambrino Gift, that trotted a few weeks before in 2:20, thus making the fastest stallion record to that time; Phil Sheridan, of whom much was expected, and his son Commonwealth, that afterward made a record of 2:22; Smuggler, with his record of $2:20\frac{3}{4}$, and his reputation for unreliability; Henry W. Genet, 2:26, then the fastest son of the sire of the great Hopeful, and Vermont Abdallah, who was as much out of place in the company as a fire cracker among cannon.

Just before the race, Thomas Jefferson, the conqueror at Buffalo, was drawn, as he went very lame in his warming-up jog. The betting was heavy, and a sample pool will show how strong a favorite Mambrino Gift was. This pool was sold in the city at the rooms of Morse & Morris the night before the race, and is said to be the largest ever made on a trotting race: Mambrino Gift, \$1,000; Smuggler, \$335; Thomas Jefferson, \$330; Phil Sheridan, \$175; Commonwealth, \$150; Vermont Abdallah, \$110; Henry W. Genet, \$45.

Mambrino Gift had the pole, and getting away well led to the quarter, with Sheridan second, but in the back-stretch I did not have much trouble in giving both the leaders the go-by, and got to the half in 1:11½ with a nice lead. Smuggler won the heat well in hand, and "Jock" Bowen, after a hot tussle, got Sheridan home ahead of Mambrino Gift for second place.

Phil Sheridan got the best of the start in the second heat and he led to the half in 1:11, where I cut Smuggler loose, and went on and won the heat in a common jog by about eight lengths from Sheridan, with the favorite, Mambrino Gift, very badly beaten. The time was 2:23, the same as in the previous heat.

The next heat we went away pretty evenly, but Smuggler at his best was slow to get into his stride, and Bowen rushed Phil Sheridan to the front, taking the pole. Mambrino Gift, also got away fast, but his effort was "a flash in the pan," as he soon went into a tangled break, and fell back. On the back-stretch Smuggler got into his big swinging stride, and went by the tired Phil Sheridan, in spite of all Bowen's efforts,

with ease. The time to the half was about the same as in the previous heats, 1:11 and a fraction, but I sent him along in the last quarter fast, and won "away off" in 2:20, thus equaling the fastest stallion record.

The applause of the Bostonians after the first heat was warm; after the second heat it was wild and hilarious: but after the race was won and the last heat trotted in 2:20 the enthusiasm of the crowd knew no bounds. They hurrahed for Colonel Russell, for Smuggler, for Mr. Blanchard, for Smuggler's driver and everything else in general. Those who remember that occasion will remember it as a red-letter day on the Eastern trotting-turf, and in closing my reference to it, a quotation from the Boston Herald may be pardoned: "In they came upon the track as soon as the deciding heat was finished, rushing from the grand stands before the horses had crossed the line, and filled the space around and in front of the judges' stand, cheering for Smuggler, his owner, his driver, Mr. Blanchard, the track, etc., etc. Loud calls were made for Marvin, the comparatively unknown driver of Smuggler, who had thus suddenly stepped into fame with his horse, but Marvin declined to appear, and quietly and modestly went to the stable to look after the animal over which he had handled the reins so successfully, receiving cheer after cheer as he passed along. Mr. Russell, the owner, made his appearance in the stand and bowed his acknowledgments to the ovation he received, and then Dr. George B. Loring was introduced and made a pleasant little speech to his 'friends and neighbors,' the theme of which was, of course, the horse. . . . Travelers toward home talked of

nothing but Smuggler's success, as in the morning they had thought of little but Smuggler's chances and the chances of others; and even about the hotels and other places of resort the evening was most enlivened by recounting the results of the day. The great triumph of Smuggler, perhaps, is as much due to the firmness of his owner as to the horse himself. Friend after friend of Colonel Russell has for weeks importuned that gentleman to change his driver. Doble or Mace should, in their judgment, be chosen to handle Smuggler, instead of a man concerning whom so little was known. But Marvin had known Smuggler in Kansas, had broken him from a pacer to a trotter, and Colonel Russell, while not doubting the ability of the drivers recommended, believed that the modest man from Kansas knew more about that particular horse than any one else, and refused to change. The result has proved that his judgment was correct, and it is within the range of possibility that no other whip would have won the race with Smuggler."

This race finished Smuggler's campaign of 1874, and he went into winter quarters the champion trotting stallion of the world. He had thoroughly made up for all his Grand Circuit reverses, and in a battle royal of champions had covered himself with glory. So 1874 was, after all, a brilliant year for Smuggler and his courageous and courtly owner, and the year was not wholly unkind to the Kansas driver, who thus with due diffidence made his debut among the master reinsmen of the grand circuit.

During the winter of 1874-75 I worked a stable of horses in Kansas, and in the spring started out to trot

through the Mississippi, Kansas and Minnesota circuits. with a small and not very formidable "string." While up in Minnesota, in the latter part of June, I received a telegram from Colonel Russell to come East and take Smuggler again. After the campaign of 1874 it was natural that I should not be quite content with a lot of 2:40 horses, so I did not have any hesitation about sending my stable home, and making my way to Boston. The campaign of 1875 was not of very great consequence. In August we started him against time, 2:20, at Boston, but father time was the winner that day. In each trial he broke, though showing great speed, and the best he did was 2:21. On the 4th of September, at Beacon Park, Smuggler beat Nettie, 2:18, easily in comparatively slow time, the fastest heat of the race being 2:22½. September 16th, at Hartford, he beat Sensation in straight heats in 2:22½, 2:21¼, Then a match race was made for \$2,000 with Thomas Jefferson, who had beaten Smuggler, Mambrino Gift and others in the stallion race at Buffalo, the year before. The race was trotted at Beacon Park, September 30th. Smuggler won the first two heats in a jog and then Jefferson was drawn, leaving him to walk over for the third heat. This ended his performances for 1875, and while he was not once beaten that year the season's work was something of a disappointment, for after the brilliant wind up of the year before we expected to lower the stallion record, the honor of which was shared equally by Smuggler and Mambrino Gift.

The season of 1876 was destined to be a busy and a checkered one for Smuggler. Defeats awaited him,

but they all were to be redeemed in the glory that was to be his when he overthrew the queen of the turf in a contest that will be memorable as long as the trotting horse is known.

We opened the campaign at Belmont Park, Philadelphia, July 15th, in a race against Judge Fullerton for a special purse of \$2,000. Belmont was a fast track in the Centennial year, and July 15, 1876, was a hot day in the Centennial city. The conditions were, therefore, favorable for fast time. Whether by reason of the heat or of the characteristic apathy of the Philadelphians the race, which should certainly have been a great drawing card, brought only a handful of people to Belmont. Thus one of the very best contests, between two crack horses, in the history of the trotting turf was witnessed by only about 300 people.

Budd Doble had Fullerton in grand shape and "the talent" felt sure of his victory and backed their opinion with pluck and liberality. The detailed account of the race, as published in Wilkes' Spirit of the Times, is here reprinted for the benefit of the reader:

"First heat: To a good send off Fullerton took the lead, and at the quarter swept by four lengths in advance. Smuggler now settled into that magnificent long, sweeping stride which has rendered him so famous, and which, in the great stallion race at Boston electrified the thousands present. At the half he had closed to within two-lengths, still steady as a clock. From this to the three-quarters he rapidly shut up the daylight, gaining at every stride. Entering the homestretch his driver forced him up a little, and he responded nobly; never making a skip, he closed on Ful-

lerton, and, sweeping by him, shot under the wire a winner in $2:17\frac{1}{2}$. Immense applause greeted this effort.

"Second heat: At the third scoring, they got the word. Fullerton on the outside, a half-length the best of it. Trotting very rapidly, the Judge opened a gap, and at the quarter he led three clear lengths. From there to the half no change occurred, but now Marvin shook up Smuggler, and he struck his lightning pace; before the three-quarters was reached, he had closed to a length of Fullerton. Coming up the home-stretch, Smuggler never trotted better; he collared the Judge, and showed a neck in advance. Doble gave Fullerton a taste of the whip, and the gelding answered to it in a flash, and held his own with the whirlwind, dashing under the wire yoked on dead even terms. stunning finish, and made the lookers-on wild with excitement. The judges announced a dead heat. Time, 2:18.

"Third heat: The betting, which had been largely in favor of Fullerton, now swung around, and Smuggler had the call at \$20 to \$17. Both horses had cooled out well, and came up, as it were, smiling. At the third attempt they got the word, once again Fullerton a little the best of it. As before, he trotted rapidly to the turn, leading two lengths. Both horses now were sent for all they were worth, and a tremendous struggle ensued, Smuggler gradually but surely closing; at the half, he lapped Fullerton's wheel; the time being 1:06. The struggle was kept up to the three-quarters, the stallion steadily gaining, passing this point in 1:414. Holding his feet superbly, he shot by this point with the lead, and swept up the stretch

winning by two lengths, in the magnificent time of 2:17.

"Fourth heat: Again, at the third attempt, they received the word. This time it was a tussle from the word. Fullerton did his best to take his usual lead, but Smuggler never let go his hold, and at the quarter they were neck and neck; on they swept to the half, both doing tremendous work. Reaching this point it was a question of endurance, Smuggler's head only showing in front—the time being 1:07. The Judge now seemed to tire on the up grade; Smuggler, fresh as at the start, and held well in hand, drew ahead, and as they rounded into the stretch he had two lengths the best of it. From this point home he jogged in an easy winner of the grandest contest ever seen on a trotting course, winning by five lengths in 2:20."

This race again brought Smuggler prominently before the world as a candidate for championship honors, and surprised those who had contended that his campaign of 1875 proved him unequal to the task of surpassing or even equaling his performances of 1874. At the very first attempt he had not only defeated one of the most formidable campaigners of his day, driven by the foremost reinsman of our time, but he had chipped three seconds off the stallion record, and between him and the proud title of King of the Turf there only stood one stumbling-block-Goldsmith Maid, 2:14. But what an opponent he had to beat in her! She was a mare of "blood and iron" at her best, and her record as a campaigner stands to-day unequaled. So, with the knowledge that there was "one more river to cross"—and a wide one—Smuggler and his retinue started for Cleveland to struggle for the crown.

CHAPTER IV.

THE GREAT RACE WITH GOLDSMITH MAID—THE DETAILS OF THE MOST MEMORABLE RACE OF THE CENTENNIAL YEAR—A CLOSE CALL—"S. T. H.'S" GRAPHIC DESCRIPTION.

During the fall of 1875, and before the race with Fullerton, I had been slowly reducing the weight of Smuggler's shoes. I had gradually got the fore shoes down to twenty-four ounces, and though it was necessary to "go slow," we were getting weight off and improving at the same time, as the race against Fullerton proved. There was at this time a great deal of nonsense being written and talked of Smuggler, and a Philadelphia newspaper man made a bold bid for first place when, in commenting on the Fullerton race, he declared that Smuggler "has been trotting with twopound toe-weights until recently, when, by careful and scientific handling, his driver has reduced them to one pound." As a matter of fact, Smuggler seldom wore toe-weights in races. When his shoes were greatly worn I sometimes had occasion to put on a four-ounce toe-weight, but that was all. The weight was enormous, but it was all in the shoe.

The race at Cleveland, July 27, 1876, was so important an event—not alone in my experience as a trainer, but in the history of the trotting-turf—that I

cannot pass it by briefly. I dislike to dwell on my own successes lest what I say be attributed to egotism, so I will make but a few remarks on that event and quote a description written by another.

Though Goldsmith Maid was clearly the favorite, the ovation accorded Smuggler, on his appearance on the track, surprised me. But his victory over Judge Fullerton, and especially his lowering the stallion record, at Philadelphia, had given him greater prestige than he enjoyed even after winning the stallion championship at Boston. He was looked to as the only horse in the field having any possible chance against Goldsmith Maid, and the public naturally cheered a horse that was good enough to dare to dispute the supremacy of the popular idol—the long-time queen of the turf. Another reason for the enthusiasm was the popularity of his owner, the courtly and accomplished gentleman, Colonel Henry S. Russell.

Here was the field that faced the starter: Goldsmith Maid, 2:14, driven by Budd Doble; Lucille Golddust, 2:19½, driven by Charley Green: Judge Fullerton, 2:18, driven by Dan Mace; Bodine, 2:19¼, driven by Peter Johnston; Smuggler, 2:17, driven by C. Marvin.

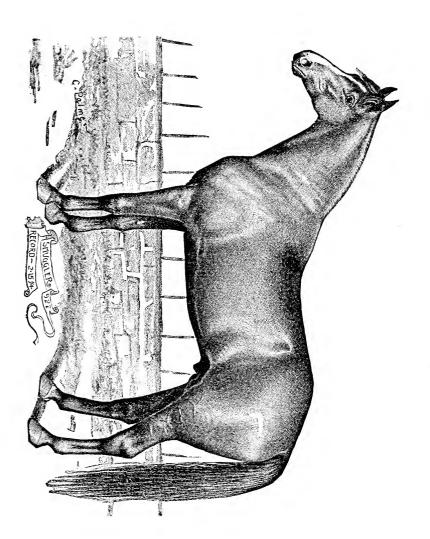
With the exception of Lula, then just becoming famous as one in the first rank of "cranks," this field comprised the cream of the trotting-turf of that day, and all things considered another such field has never come together on any track. Goldsmith Maid won the first heat in 2:15½, the fastest heat trotted in a race up to that time, but Smuggler was only beaten a neck, and that after throwing a shoe at the head of the stretch. The Maid finished tired, and Doble had to use

the whip persistently to get her home ahead of my unbalanced trotter. In the second heat Smuggler broke badly at the start and I laid him up, just dropping inside the flag, the Maid winning in $2:17\frac{1}{4}$. With two heats to her credit it was now a brown-stone house against a peanut stand that the mare would win. third heat was a desperate one. Swinging into the stretch I got Smuggler lapped on the Maid, and from that home I did all I knew to keep him together and yet call forth his best effort, while Doble emploved every resource of the master reinsman he is to drive the mare over the score in front. As the Spirit put it: "At the draw-gate Budd had but a neck the best of it, and now he nearly went wild in his efforts to reach the goal first, and save the reputation of his darling mare. At the distance stand she gave it up, and Smuggler winning by a head only had become famous. Time, $2:16\frac{1}{4}$. This race has probably never had an equal for wild and frenzied excitement since the day of Fashion and Peytonia, Henry and Eclipse, and Wagner and Grev Eagle." Such a tumult is rarely witnessed as occurred on the Cleveland track that day, and in the wild storm of applause I know there were many who cheered for Doble and the gallant old mare for the great fight they made. But the victory, now seemingly within our grasp, was very nearly snatched away in the fourth heat. Smuggler, though at the pole, was sent away rather behind, and Doble took it with Goldsmith Maid running. Green had Lucille Golddust lapped on the outside of Smuggler, and Fullerton was close up also. We were thus soon in an "air-tight pocket." Going at a 2:16 gait a

man has not a great deal of time to make plans or speculate on what may happen, but I trailed along not supposing that Green would endeavor to hold me in the pocket, with the mare having two heats and thus give her the race. Besides I expected Doble to go too fast for Lucille in the last quarter and thus make an opening. But it soon became clear that they had me there and meant to keep me there, and when well up the stretch I saw only a desperate chance and took it. That was to drop behind Lucille, pull out and go around the pair, and trust to one supreme burst of speed to make up the lost ground and beat the Maid to the wire. Green did not observe the movement until I had Smuggler straightened on the outside, and, as he saw Smuggler's white face at his shoulder and coming like a whirlwind, he shouted, "Look out, Budd, he's out." In the emergency Doble became "rattled," as we now express it, suddenly went to the whip, and drove the mare off her feet. True and straight, with a burst of speed that no horse that ever trod the turf could excel, Smuggler rushed on to victory, winning the heat by a neck, and with that heat vanished the Maid's last hope. In speaking of that sudden grasp at our only chance—seemingly a forlorn hope—and of that meteoric rush at the finish, a turf-writer said: "A smile of triumph lighted Doble's face, and the crowd settled sullenly down to the belief that the race was over. Marvin was denounced as a fool for placing himself at such a disadvantage, and imagination pictured just beyond the wire the crown of Goldsmith Maid with new laurels woven in it. But look, by the ghosts of the departed! Marvin has determined upon a bold

experiment. He falls back, and to the right, with the intention of getting out around the pocket. Too late, too late, is the hoarse whisper. Why, man, you have but a hundred and fifty yards to straighten your horse and head the Maid, whose speed has been reserved for just such an occasion as this. Her gait is 2:14, and you are simply mad. The uncounted thousands hold their breath. The stallion does not leave his feet although pulled at a forty-five angle to the right, and the mo ment that his head is clear and the path open he dashes forward with the speed of the staghound. It is more like flying than trotting. Smuggler goes over the score a winner of the heat by a neck, and the roar which comes from the grand-stand and the quarterstretch is deafening. As Marvin comes back to the stand to weigh, the ovation is even greater than that which he received in the preceding heat. Nothing like the burst of speed he had shown had ever been seen on the track, and it may be that it never will be seen again." It was, perhaps, bad judgment on my part to get into the pocket, but the way in which the heat was pulled out of the fire atoned for it, and the public cheered the same as if no apparent mistake had been made. Many who cheered that day had cursed "the hoosier" two years before at Buffalo, and had Smuggler lost his feet in the desperate maneuver he would have lost the race, and the cheers would have changed to imprecations. So fickle a thing is public favor, and upon so narrow threads depend victory or defeat!

That heat made it clear that a combination had been formed to beat Sninggler. The pocket game did not york, and tactics were changed. The trick now was



to worry Smuggler in scoring, and he threw the shoe that had gone in the first heat again. There was more scoring and in a break Smuggler threw another shoe. With the scoring and shoeing an hour was consumed, and the delay, it was believed, would rest the mare and thus favor her chances. When we got away Mace rushed Fullerton out to set a killing pace, the idea being for him to fight Smuggler in the early part of the heat, while the Maid trailed, reserving her strength for a fight in the stretch, when it was thought she might outfoot the horse after Fullerton had done with The scheme was a complete failure. I had Fullerton beaten at the half-mile, and the Maid was unable to give a serious challenge in the stretch, Smuggler winning easy in $2:17\frac{1}{4}$. This was conceded to have been the hardest fought race up to that day, and the heats were the fastest five consecutive miles on record. The shadows of evening were falling when the last cheers were reechoing on "the change of dynasty." The haughty queen that so proudly and imperiously strode forth to sure and certain victory in the bright sunlight of the afternoon that was to be her greatest day of triumph had by dusk laid down the crown. Here is the summary of the great race:

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CLEVELAND, OHIO, July 27, 1876.—Purse $4,000; free for all.

H. S. Russell's b. s. Smuggler, by Blanco. 2 5 1 1 1

Budd Doble's b. m. Goldsmith Maid...... 1 1 2 2 2

C. S. Green's b. m. Lucille Golddust...... 4 2 3 3 3

W. M. Humphrey's ch. g. Judge Fullerton. 5 3 4 4 4

H. C. Goodrich's b. g. Bodine......... 3 4 5 5 5

Time, 2:15½—2:17½—2:16¼—2:19¾—2:17½.
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In closing this description let me say that through

all our battles and ever since I have had the warmest friendship for Budd Doble, and he has done me many a kindness that is not forgotten. We have too few Budd Dobles on the turf. He is an honest and upright gentleman in the sulky and out, and no better driver ever pulled rein over a horse.

Now I have had my say about the sensational race of 1876, and I am sure the following condensation of a description written by that brilliant writer S. T. Harris, in *Wallace's Monthly*, will be a treat to the readers of this book. Few men wield a pen so gracefully as "S. T. H.," and I feel that this, one of his best descriptive articles, deserves a place here:

"The writer had taken the night train from Cincinnati on the evening before to see this mighty contest, which the victory of Smuggler over Judge Fullerton in 2:17, at Belmont Park a few days before, gave promise would be memorable in trotting annals.

"The train reached Cleveland in the morning twilight, just in time to enable us to repair to the track to witness the great horses taking their early exercise on the half-mile course of the agricultural department of the fair-grounds.

"Standing at the head of the stretch, we had a fine forehanded view of the great concourse of trotting-horses entered for the races. First came Charley Green, behind Lucille Golddust, whose speed and endurance are both severely taxed by the wide, clawing action of her front feet; and then the white face of Judge Fullerton, piloted by Dan Mace, a genius in the sulky and an idiot out of it, came in sight, plouding along with that high, violent, plunging, forward move-

ment that marks his marvelous waste of muscular action in front. Not far behind him Bodine jogged into the stretch, with that low, straight, thoroughbred knee-action for which the Volunteers have become famous. Then Goldsmith Maid came skipping along, with that artistic trick of hers that has enabled her to extire with the fastest record on the trotting-turf. Behind them all came Smuggler, well-poised, with that perfect balance that comes from a symmetrical frame, covered with a great wealth of muscular power and animated with a level brain, conscious of its unequaled capacity. As he moved past us, with ease, with power and with precision, he certainly looked like an emperor among the throngs of celebrated horses, just as Agamemnon towered above the bands of Grecian heroes.

"At the lunch given by President Edwards, later in the day, the writer asked Budd Doble, whether he would permit Smuggler to win one fast heat for the purposes of a stallion record. With grim determination he responded: 'No. If Smuggler scores a fast record to-day he will have to beat the Maid, and that will not be easy to do, in my judgment.' Then I was convinced that the contest would prove a battle among giants.

"The lunch over we eagerly repaired to the racecourse. Already the grand-stand was overflowing with a brilliant assemblage of elegantly dressed ladies and gentlemen, that presented the appearance of the gorgeous throngs of the *elite* that fill the boxes at the opera on gala nights. The quarter-stretch was densely crowded with men, and the field enclosed by the milecourse was packed with vehicles of every description. The military band of the Cleveland Greys was discoursing inspiring music. The roads were thronged with an interminable procession of carriages and street cars. The steam cars were rolling in long trains of eager passengers, and the entire tout ensemble presented a scene of tip-toe expectation, such as precedes the consummation of some long-heralded, great event.

"But when the bell rang for the appearance of the horses to contend in the free-for-all race, the impatience of the vast throng to catch the first glimpse of the grand entries rose to the very height of enthusiasm. The first to make her appearance was the wonderful queen of the turf, Goldsmith Maid, then in her twentieth year, yet looking as lithe and delicate as a colt, although she had campaigned for eleven years, and had asserted her supremacy in many desperate turf contests, from the lengthened shadows of the Green Mountains of Vermont to the golden gates of the jeweled daughter of the Pacific.

"As she moved gracefully past the grand-stand, ten thousand applauding hands and waving handkerchiefs welcomed her and her master trainer, Budd Doble, between whom it is difficult to determine which has showered the greatest honors upon the other. Then Fullerton, with Dan Mace bowing profusely to the ladies, as if he was the Beau Brummel of the trotting-turf, came by with his poise of head and neck, and high, determined knee-action, in exaggeration of the movement of that incomparable trotter, Dexter. He was closely followed by Lucille Golddust, whose driver, Charley Green, had, within a few years, risen to the

highest fame as a trainer. They had hardly passed through their shower of applause, when Bodine, the splendid son of Volunteer, renewed the greetings. But when Smuggler jogged through the gates, and some one exclaimed, 'There comes Smuggler!' the entire assemblage rose to their feet with round after round of deafening plaudits to the champion from the land-ocean prairies of Kansas. Neither the horse nor his trainer, Marvin, paid any more attention to the enthusiastic greetings than if they had been born both deaf and blind. The main facts in the history of the horse seemed to be familiar even to the ladies in the vast assemblage.

"When the places were assigned, Fullerton had the pole, Goldsmith Maid next, then Lucille Golddust, with Bodine fourth, and Smuggler, at the greatest disadvantage, on the outside.

"Two false attempts, and they were sent off with a beautiful start for all, except Smuggler, whose powerful action had not yet acquired sufficient space to attain its full speed. Before the first turn was reached, Fullerton had indulged in one of his provokingly slow breaks, and Goldsmith Maid had quickly taken his place at the pole as the leader. Bodine had rapidly trotted up into the second place, and, strange to say, Smuggler was close to his wheel, while Lucille Golddust was five lengths in the rear, and Fullerton fully fifteen lengths behind. At the quarter-pole, Goldsmith Maid had a fine lead. She fairly flew over the backstretch, but Smuggler was coming on to her very fast. He outfooted Bodine, and was second at the half-mile pole. From that place to the head of the last quarter.

he perceptibly closed up the space between himself and the leader, till they swung into the home-stretch. Here he suddenly faltered for an instant, and then quickly came on again like a whirlwind, finishing at the girths of Goldsmith Maid in 2:15½. The faltering at the head of the stretch was owing to his casting his off front shoe; to which accident, undoubtedly, the wonderful daughter of Alexander's Abdallah may attribute her victory in this first heat. She seemed to be relieved when the score was crossed: but the rushing speed of Smuggler under these adverse circumstances proved how level is his brain, how determined is his courage, how electric is his speed, and how tremendous is his momentum when in full motion; all of which qualities are invaluable to him as the progenitor of grand trotting-performers.

"The second heat was started after one false score. Goldsmith Maid rushed to the lead, while Smuggler, unable to trot around the first turn, broke badly, falling back more than a distance before he resumed his Every spectator thought he would be ingloriously distanced, as the entire field had left him back in the dust, too far it seemed, for him ever to bid defiance to the distance flag; but, again, the level stride, heroic resolution, and amazing speed came to his rescue. Rapidly he closed up the gap, and, when they reached the wire in 2:174 he was again in their company, only ten lengths behind. Again, on the second score, the word was given for the third heat. The fleet-footed, quick-witted little queen again shot to the front, followed by Fullerton two lengths behind. with Lucille Golddust at his wheel, Smuggler close up

to her, and Bodine in the rear. They all trotted very rapidly and steadily to the half-mile pole, the Maid reaching there in 1:08½, with Lucille four lengths behind her, and Fullerton at her wheel. Smuggler, in the meantime, had swung to the extreme outside, and was trotting with amazing speed. Before the threequarter pole was reached, he pad passed both the best daughter of Golddust and the swiftest son of Edward Everett, and his broad white face appeared instantly with the form of Goldsmith Maid as she swung into the home-stretch, trotting so near to the pole to save distance that it seemed almost certain her sulky wheel would strike the inside fence. Smuggler did not seem to care to economize space. He swung boldly into the center of the course. On came the leaders, like frightened phantoms fleeing from pursuing fate. Doble was lifting the little mare and vigorously applying the whip. Gallantly did she respond to every call upon her speed and endurance. Marvin, with firmly-extended limbs and tightly-nerved outstretched arms, was bracing himself to hold Smuggler together, not to force him ahead. At the drawgates the mare was only one-half length in advance of the mighty stallion. Doble put forth superhuman efforts to land the mare a winner. He shifted the bit in her mouth, and welted her sides with his whip, and fairly worked his body forward to force along the sulky, at the last fraction of a second letting go of her head, in order that her outstretched neck might give her the victory by at least a throat latch. But at that instant Smuggler was mightier than the queen and her master reinsman combined. On he came with that true, powerful stride, and truer,

more resolute purpose, till the daylight showed between his white nose and the flashing eye of the mare, and he passed the score just a head and neck in advance.

"The buzz and hum and flutter on the grand-stand as the horses were sweeping over the far side of the course had died away into profound silence when the leaders whirled into the home-stretch. Every figure was on tip-toe, every eve was strained to its utmost tension of vision, and every heart was hushed to the faintest throbbing, till the magnificent finish of Smuggler had landed him the winner of the heat; and then ten thousand white handkerchiefs waved to his victory, and more than ten thousand throats shouted wild, deafening hurrahs to his well-earned triumph. trotting world seemed to be on the eve of a change of dynasty. The heat was won in 2:164, and he trotted the last half of the mile, by the writer's watch, in 1:07. In this vast, swaying throng of excited spectators two attentive watchers stood exceptionally silent. Behind me, elevated on her chair, stood the wife of Goldsmith Maid's driver, arrayed like the Queen of Sheba in oriental colors, richer than the brilliant bues of the rainbow. But her features, in marked contrast to her raiment, were pale as alabaster, and her countenance was dejected with forebodings of the impending defeat of the little mare, whose performances had elevated her husband to the highest fame in trotting circles. Above her, dressed in the plain garb of republican simplicity, rose the form of the scholarly owner of Smuggler, wiping from his brow, with the broad palms of his tremendous hands, the perspiration that

bathed his head and face as if it flowed from inexhaustible springs. No excitement surpasses that of the race-course, in very important, closely-contested heats. both to the rival horses, their jockeys and their owners. That mountain of flesh, General Buford, had bravely ridden up to the foe on many a battle-field of the lost cause, even when his face was darkened by thickcoming showers of loyal bullets, without blanching in the least; but when his deer-like race-horse, Versailles, thrilled the audience at the Buckeye Course by challenging the champion Herzog for the lead and beating him home the first heat in the then remarkable time of 1:433, the stalwart General suddenly gave way to a spasm of nervous paroxysms, as he wrung his hands with joy before that vast throng, and exclaimed in tearful hysterics: 'My God, the fearful strain upon my nervous system is positively overwhelming.' If any reader dreams that such a mighty struggle as that between the emperor and the empress of the trotting-turf does not awaken in the interested spectator the very superlative of nervous tension, he should have gazed upon the two faces we have sketched, revealing a moment of supreme joy to the one and of depressive sorrow to the other.

"Never was witnessed a grander performance on the trotting-turf till Smuggler eclipsed his own greatness in the succeeding heat. In vain did Doble plead with the judges for the heat, laying before them the old age and gallant struggle of the favorite mare, but they were inexorable. Despite his special pleadings the heat was given to Smuggler, amid the acclaims of the approving spectators. The results of the concluding

heats were awaited by the vast concourse with intense impatience.

"When the bell tapped for the fourth heat every spectator sprung to his feet. On the second score the horses were sent on their way, with Smuggler at the pole, but fully two lengths behind when the word to start was given. Again Goldsmith Maid took the lead, rushing in front of Smuggler, while Lucille Golddust forced her way to the outside of Smuggler, and Fullerton trotted close up to Lucille's wheel. Then it became evident that the three ablest trainers on the turf, Doble. Mace and Green, and the three swiftest trotting-horses on the turf, Goldsmith Maid, Lucille Golddust and Fullerton, were combined to beat the champion stallion Smuggler. These were fearful odds. Nothing but the greatest speed, the most perfectly balanced brain and the most indomitable courage could overcome them. There they had Smuggler securely held in a double pocket. Doble drove the Maid just fast enough to enable his helpers to keep up the pace and hold Smuggler in his disadvantageous position. All around the course till they swung into the home-stretch was he thus safely kept a prisoner. They were then coming home better than a 2:20 gait. Suddenly Marvin bulled Smuggler back. The leaders, not dreaming of this piece of strategy, rushed on together in a close group. After they had passed, Marvin deliberately pulled Smuggler to the extreme outside and attempted to win the heat. His success seemed to be impossible. With almost any other horse, trotting at such a rate of speed, such a maneuver would have soured his temper or discouraged his

resolution or staggered his gait so that he would have indulged in a heart-broken, maddened, fatal break. But not so the nicely-poised, grandly-determined Instantly he resumed his wonderful Smuggler. stride. On he came to his adversaries, with the fatal swoop of an unerring eagle on its prey, rapidly passing the astonished Lucille and the struggling Fullerton till he overtook the fleet-footed Maid at the drawgates, and rapidly outfooting her, beat her to the score in two minutes, nineteen and three-quarter seconds. After such a splendid exhibition of balanced action, subjected to such an unexampled test, how futile is the tape-line assertion of Mr. Helm that Smuggler is an inch too short in the muscles of the forearm and too heavy forehanded for trotting equilibrium. The electric rush of his finish fairly frenzied the excited multi-Their former deafening plaudits seemed almost like the echoes that now came from the reverberations. of the surrounding forests. Again the water flowed down Colonel Russell's face like a river, and the lady spectator below him, overcome by the defeat of her favorite, retired from public inspection, ashen-pale and sick at heart.

"The fifth heat was called promptly on time. Smuggler seemed to be getting very lame in the off fore foot, but otherwise he was as fresh and composed, apparently, as when he first came out for the race. He seemed to possess more determination to triumph than ever before. On the second and fourth scores, so eager was he to rush to the front that he pulled off his right fore shoe. To replace it required considerable delay, which encouraged the backers of Goldsmith Maid.

VICTORY. 71

They argued that the delay rested her, and that the pulling of his shoes proved Smuggler was at least legweary. She, therefore, sold in the pools about even against the field, including Smuggler. But on that day they counted without their host. Had they noticed the grim resolution of the stallion during one of the false starts, they would have saved much of their wagered gold. On the fourth score so anxious was he to get off, that, when Marvin took a strong pull to restrain him, he resolutely took the bit in his teeth, and, stretching out the powerful muscles of his neck, he bent over and straightened out the strong iron waterhook on the saddle as if it had been only a bit of delicate tinsel ornament.

"On the sixth trial the start was announced. From the score it was evident the conspirators had changed their tactics.

"Goldsmith Maid was held back, trailing behind Smuggler. At the turn Fullerton was forced ahead to set the pace. He rushed to the quarter in thirty-four and one-half seconds, and sped on to the half-mile in 1:08½. Then he dropped back, giving way for the mare; and the Maid, comparatively fresh, was sent along to measure strides with the stallion, whose brush with Fullerton was intended to tire him. This is the well-known jockey trick of 'two pluck one,' and in nearly every instance two horses can tire and vanquish a third contestant, even though he has several seconds the advantage in speed and endurance. But Smuggler was more than a match against these fearful odds. Goldsmith Maid made a galiant brush for the lead; but the grand stallion had then attained to his greatest

momentum. After a desperate struggle around the upper turn the old mare gave up the contest, thoroughly discouraged and beaten.

"The stallion came away from her with tremendous power, he trotted down the home-stretch alone, in advance of all his competitors, pulling hard for his trainer to let him go up to his greatest flight of speed, finishing the mile, in the early twilight, in 2:17½, and winning the most remarkable race, taking in consideration his obstacles and opposing combinations, ever recorded in the history of the trotting-turf."

CHAPTER V.

THE FREE-FOR-ALL BATTLES DOWN THE LINE—FROM CLEVELAND TO SPRINGFIELD—GREAT RACE AT HART-FORD—1877 A POOR YEAR FOR SMUGGLER—TAKEN TO CALIFORNIA—BREAKS DOWN IN THE SPRING OF 1878 AND SENT HOME—GOOD-BY TO SMUGGLER.

From Cleveland we came down the line to Buffalo, and again met Goldsmith Maid, Judge Fullerton, Bodine and Lucille Golddust in the free-for-all. We met them, and we were theirs. The perfectly seasoned old campaigner, Goldsmith Maid, though the race at Cleveland was a hard one for her, had quickly rounded to, and was that day as good a mare as ever she was in her life, trotting three heats in 2:16, $2:15\frac{1}{4}$, 2:15—a performance rarely equaled even in these days. On the other hand, Smuggler was decidedly off, not having recovered from the Cleveland race, and lacking both in vim and steadiness. He could do nothing in the first heat, and in the first half of the second made a standstill break, being two distances out before he settled again, after which he went home from the half-mile post to the wire in 1:071, though eased up when the flag fell in front of him. Goldsmith Maid won in straight heats, in the time above given, and was again the popular idol.

This race illustrates a point in training that every

trainer must have observed many times. That is, that a hurried preparation will not do for a campaign, whatever it may accomplish for a race or two. Smuggler had been blistered the previous winter, and had been given no work, and not even enough exercise to have him in good shape to begin work. Therefore, when I commenced preparing him in the spring for his engagement in Philadelphia in May, the time was too short for gradual and proper conditioning. So, while not in the best shape to receive a hurried preparation he had to have it, and after his fast performance at Philadelphia, and that hard five-heat battle at Cleveland, it is not surprising that he "went back" temporarily. I have learned both by experience and by observation that, while you can sometimes hurriedly prepare a horse and get him up to pretty keen edge for a race or two, he will likely soon fall away from his best form, while the well-seasoned ones will go on getting better, if raced judiciously throughout the campaign. To fit a horse for a campaign in which you expect to keep him in first-class form, week after week, the preparation must be gradual and thorough. The horses that break records very early in the spring seldom are the winners of the first-class summer and fall battles.

At Rochester, a week after the Buffalo race, Smuggler began to improve, and beat Judge Fullerton, Lucille Golddust and Bodine in a pretty good race, Goldsmith Maid not starting. Dan Mace got into trouble at Buffalo, and was under expulsion, so that another driver—Voorhis—had to be put up behind Fullerton, and he did well with him, but Smuggler won in

straight heats in 2:15\frac{3}{4}, 2:18, 2:19\frac{1}{4}, Lucille doing the fighting in the last heat, while Fullerton had trotted fast and honest in the first two heats, being only beaten about three lengths in the 2:15\frac{3}{4} heat, and right on Smuggler's wheel in the next in 2:18. We did not start at Utica the following week, and Goldsmith Maid easily beat the same field Smuggler had to defeat at Rochester, she not having to go better than 2:18\frac{1}{4} to do it.

Next came the great free-for-all at Hartford, August 31, 1876, a contest rivaling in importance and result the memorable one at Cleveland a few weeks earlier. The four competitors at Hartford were also in the Cleveland race when Smuggler won, and from that point down there had been nothing to decisively settle the question of superiority between Smuggler and the Maid, and it was indeed one on which turfmen were greatly divided. It was expected that the contest at Hartford would settle the question, and when Goldsmith Maid, Smuggler, Bodine and Judge Fullerton answered the judges' bell for the free-for-all, excitement and feeling ran high. The expectations of the crowd ran high too, but still had any one foretold a six-heat race wherein the stallion record would be broken, and every heat would be trotted better than 2:20, he would probably have been jeered at.

The Maid, as usual, with that hop-skip-and jump trick of hers, got away first in the initial heat, but Fullerton went from the wire with the quarter-horse rush of which he seemed always capable at the start, and when he reached the quarter at a 2:12 gait he was well clear of Goldsmith Maid who led Smuggler and Bodine by

a length or so. Still Fullerton kept his terrific clip and passed the half at a record-breaking pace, the Maid close up and leading Smuggler who was just getting under proper headway. Fullerton and the Maid raced in double-team fashion to the turn, with Smuggler now getting right up with them. Fullerton was the first to weaken, Doble sending the Maid by him under the whip, but half-way between the distance flag and the wire Smuggler nailed her, and beat her home by about a length in 2:15\frac{1}{4}—the fastest heat ever trotted by a stallion up to that day.

In the second heat Smuggler got an even start, and the rest had a stern chase from wire to wire, the time being 2:17.

In this race the judges allowed Doble to score most unfairly with his great mare, and she had no equal in wearing her opponents out on the score, they trotting and she skipping and relieving herself. Tired of this I nodded for the word somewhat back at the fourth score in the third heat, believing that it was, if anything, better to take the chances of a bad start than to submit the horse to the tiresome scoring in which the judges showed no inclination to protect him. Smuggler, however, got up to the mare in the stretch (she having, in the meantime, helped herself by repeated skips, or rather gaining breaks), and just outfinished her in $2:16\frac{3}{4}$. The best judges (including the representatives of the Spirit of the Times and Turf, Field and Farm), who were so directly at the wire as to be in a position to judge, delared that Smuggler's white nose crossed the wire first, but even if they had crossed perfectly even he should have had the heat under the trotting rules, for he trotted it honestly without a skip or break which she did not, to say nothing of her two or three lengths advantage at the start.

Smuggler was now a very tired horse, the three fast fighting heats, with the great weight he carried on his feet, leaving him thoroughly leg-weary. We now removed the four-ounce toe-weights to partially relieve him, but in the fourth heat he was beaten after a good struggle in 2:17\frac{1}{4}, and he again contended gamely in the fifth heat which was won in 2:18, but in the sixth heat a standstill break very nearly left him outside the flag in 2:19\frac{3}{4}. Smuggler did not get first money that day, but it was a race in which he gained honors equal with the winner, and there was at least as much difference of opinion as to the question of superiority after the race as there was before it.

In consequence of criticisms of my asking for the word in the third heat when not on even terms, Colonel Russell wrote the following letter, which speaks for itself:

Home Farm, Milton, Mass.,) September 11, 1876.

As most of the papers, whilst saying that Smuggler was fairly entitled to the Hartford race, blame his driver, Charles Marvin, for asking for the word when some lengths behind Goldsmith Maid, I deem it only my duty to a man who has served me most faithfully to explain that his reason for acting as he did was the simple fact that the judges allowed, and showed no disposition to prevent, the most unfair scoring on the part of the Maid. No one who saw it will deny that she was allowed to act just as seemed best for her own

interests, irrespective of the good of others. Mr. Marvin preferred a bad start to the chance of his horse becoming fractious from the ill-usage which the judges showed no spirit to prevent, and I, for one, entirely indorse his action as the only way in which he could protect my interests after being deserted by those to whom had been entrusted a fair deal to all.

Furthermore, I will trot Smuggler three races against any horse, mare or gelding, for stake, purse, gate-money or charity, over such tracks as may be to the advantage of both parties; or I will trot him against any combination, a fresh horse to start against him in each heat, and all heats won by different horses in such combination to be counted as if won by a single horse in an ordinary race.

Respectfully, your obedient servant, Henry S. Russell.

The remaining performances of Smuggler can be summed up in few words. A week following he started at Springfield, but was not at all himself, the Maid winning easily. Then we took him to Bangor and gave an exhibition performance against time, which was followed by a match race against Judge Fullerton, at Mystic Park, Boston, October 2d, which Smuggler won. The next week we again trotted him a winning race against Fullerton, this time at Dover, New Hampshire, over a very heavy and deep track. In this race he injured his hip, and never was quite himself again. October 16th, in an unimportant match, or rather exhibition, Great Eastern won in slow time, and ten days later he trotted in the free-for-all at Fleetwood Park, New York, which was won by Rarus, then just coming into prominence.

In 1877 Smuggler did not come back to his old form,

and only started twice, defeating Great Eastern in a four-heat race in June at Boston, and being defeated by Hopeful in July.

It was Colonel Russell's desire to give Smuggler a faster record, and in November, 1877, we started for California, to give him the benefit of this genial climate. But the most carefully designed plans do not always Smuggler had a suspicious leg as early as 1876, and it interfered with his preparation in 1877. We arrived at Bay District track, San Francisco, Nosember 14th, and prepared winter quarters. Through ne winter I worked Smuggler very "gingerly," but it soon became apparent that the great horse could never race again, and in April, 1878, he finally broke down and was shipped home. Shortly afterward Colonel Russell sold him to W. H. Wilson, of Cynthiana; and after being denounced as a complete failure in the stud and sold for a song, he has at last shown that he can sire trotters, and I believe his services are now sought at a high price at the stock-farm of F. G. Babcock, Hornellsville, New York.

I make no apology for taking up a good share of space in giving a history of Smuggler. Whether he owes much of his fame as a great turf-horse to me or not we will let pass, but I certainly owe much to him, and the chapter or two of which he is the hero is only just acknowledgment from his old driver. In estimating his merits as a race-horse the truthful historians of the future will always record that "there were giants in those days," and that he battled with the giants and more than held his own.

Though he has yet no son or daughter as great as

himself, his progeny are by no means a degenerate race, and among them are winners of high merit.

Smuggler was in many respects a horse whose equal I have not seen nor ever expect to see. Though his hock action was not as free and exuberant as it might have been, he had a beautiful roll of the knee in motion, and his gait was direct and good. He went away easy and frictionlessly, and had abundance of vim and courage. Could he have been balanced with light shoes, he would no doubt have been a faster horse and a steadier one. As it was, carrying his two-pound shoes it is not to be wondered at that he sometimes "tangled" badly; that in long drawn out races he had to contend with unusual leg-weariness; that for these reasons he was somewhat unreliable, and that he did not always as quickly recover from a hard race as did those whose gait was less a matter of acquirement, and who did not require such weight to balance them. He was a game and resolute horse, and no man ever saw a trotter that would do more on his courage in a fighting finish than Smuggler.

I last saw the grand old horse on the 5th of April, 1878, the day he was taken East from the Bay District track.

CHAPTER VI.

FIRST VISIT TO PALO ALTO—SKETCH OF ITS ILLUSTRIOUS FOUNDER AND PROPRIETOR, LELAND STANFORD—HIS GENIUS AS A HORSEMAN, HIS PURE CHARACTER, AND HIS MUNIFICENT CHARITIES—THE HISTORY OF PALO ALTO IN BRIEF OUTLINE—A SCIENTIFIC DEMONSTRATION OF THE POSITIONS OF ANIMALS IN MOTION.

Among the horses in my stable at the Bay District track during the winter of 1878 was Gen. Benton, that had just been brought from New York State, by Governor Leland Stanford, to his farm at Palo Alto. He was sent to me to work during the winter, and a day or two after Smuggler went away, Gen. Benton was taken down to the ranch in the Santa Clara Valley, and it so happened that I went with him. The result was, that "the Governor," as all conditions of people in California delight to call him, engaged me to train the horses at Palo Alto, on trial. I came here April 10, 1878, and as the reader now knows am here still, and now endeavoring to tell what I have learned from twelve years work and experience, and I might add experiment, on the largest horse-breeding and training farm in the world.

For obvious reasons, this book would be incomplete without some sketch of world-famous Palo Alto and its renowned founder, Senator Leland Stanford, and we will devote this chapter to that purpose as an appropriate preface to what follows, concerning the achievements of its horses, and the exposition of the system of training that pertains peculiarly to Palo Alto.

The story of Leland Stanford is too eminently a matter of common history to call for recapitulation, except in the briefest manner here. In the history of the development of California - and, indeed, of the whole farther West, for who can estimate what the Central Pacific Railway has done?—his name will go down as that of a master spirit just as it will in the small sphere of development of the national American horse—the trotter. The following sketch, by a Californian writer, of the proprietor of Palo Alto, is a concise and brief biography which will interest every reader: "Leland Stanford was born in Albany County, New York, on the 9th day of March, 1824. The alternation of work upon the homestead farm, with study at a neighboring school, after the manner of the sons of intelligent and thrifty farmers in those days, contributed to give him that well-balanced mind, keen perception and perfect equipoise of faculties for which he has ever been distinguished. Endowed by nature with a powerful physical organization, he was, in youth, somewhat impatient of purely scholastic methods, which imposed too much in-door constraint upon a mind linked to a body full of vigorous life, which demanded a large degree of freedom and exercise in the open air. But this very impatience of confinement threw wide open to him the book of nature, laid the foundation for an enthusiastic love of the natural



Jones Very truly Lelandellanford

sciences, and made him a keen and discriminating observer of material things; a kind of education well adapted to fit him for the great enterprises and the high and responsible trusts in which he has distinguished himself. At twenty years of age, with such education as he had gathered by this somewhat desultory method, he determined upon the study of the law, and entered the office of Messrs. Wheaton, Doolittle & Hadley, an eminent law firm in the city of Albany, in the year 1845. Having completed his studies, and been admitted to the bar, he resolved to seek in the West a field for his future professional labors, and finally settled at Port Washington, Wisconsin, in 1848. Two years afterward he returned to Albany and was there married to a most estimable young lady, Miss Jane Lathrop, daughter of Dyer Lathrop, a merchant and one of the most respected citizens of Albany. His professional career in his Wisconsin home was of brief While practicing law at Port Washington, a circumstance transpired which some will regard as providential, giving an entirely new direction to his thoughts and energies. A fire occurred which destroyed his law library and swept away nearly all his worldly possessions. The loss was severe, and to one possessing less self-reliance would have been disheartening. It served, however, its purpose, and the result was, a determination on his part to join his brothers, who had already emigrated to California. He reached this State on the 12th day of July, 1852, and found his brothers engaged in mining and trade. Without any practical knowledge of either of these occupations, Mr. Stanford determined, for the time, to abandon the practice of

the law and engage in business with his brothers. After prospecting at various points he finally settled at Michigan Bluff, in the famous mining county of Placer, where he remained nearly four years conducting, in a very successful manner, the business in which he was engaged, and making a host of friends among the hardy pioneers and miners who were his principal patrons. In 1856, he removed to Sacramento, and, as a partner, became actively engaged in the mercantile house established by his brothers whose business had grown to large proportions, they being extensively engaged in importing, and having branch houses scattered through the State. The magnitude of the firm's transactions, the multifarious knowledge demanded and the natural aptitude of Mr. Stanford's mind for the administration of affairs of importance, all combined to develop and enlarge those extraordinary powers of observation and generalization which were subsequently displayed in the execution of the gigantic railway projects which he undertook and carried through with such energy and success. At the breaking out of the civil war, Mr. Stanford was a most pronounced friend of the Union. He was chosen a delegate to the Chicago Convention in 1860, and voted for Abraham Lincoln as the Republican candidate for the Presidency. The acquaintance which he there made with Mr. Lincoln ripened into intimacy and confidence, and Mr. Stanford spent many weeks at Washington after the inauguration, and became the trusted adviser of the President and his cabinet in regard to the appointments for the Pacific coast. It is not one of the least of Mr. Stanford's honors, that in

the perilous crisis of affairs which occurred in 1860, when California was in danger of following the bad example of the South, Mr. Lincoln and Mr. Seward regarded him as the ablest and most reliable friend of the government in this State, and deferred to his opinion accordingly. In 1861, Mr. Stanford, contrary to his wishes, was nominated by the Republican party for Governor of California, and, while he sought no political preferment, he deemed it his duty, in the disturbed state of affairs, to sacrifice his own wishes to the welfare of the State and nation. He, accordingly, entered actively into the canvass and was elected by a plurality of 23,000 votes. The period was one of unexampled difficulty of administration, but Governor Stanford was equal to all the demands made upon him, and, however great his achievements, he never seemed to have exhausted his resources or to have reached his full possibilities. His messages, and indeed all his State papers, were characterized by sound common sense and a comprehensive grasp of State and national affairs, remarkable in one who had never before held office under either the State or national government. At the close of his term he had the satisfaction of leaving the chair of state, feeling that no State of the Union was more thoroughly loyal than California.

"Governor Stanford was urged to accept a renomination, but being then thoroughly engrossed in the construction of the great transcontinental railway, and feeling that the crisis in the history of the State which had compelled his acceptance in the first instance was now passed, he declined the proffered honor. At the last regular session of our State Legislature, he was elected United States Senator, which high position he has since filled with marked ability and to the entire satisfaction of the people. His establishment and endowment of the great Leland Stanford Junior University, which bears the name of his lamented son, will go down to history as an act unparalled in the annals of public benefactions, and his memory will ever be cherished in the hearts of a grateful people."

Governor Stanford has done, by grand example, at least as much as any man living to elevate the horsebreeding interest, and clothe it in that respectability which by right it should wear. Passionately fond of horses, he is naturally a good judge of them. He is, indeed, the best judge of form and of the proper conformation for speed that I have ever known. By a sort of instinct he discerns the undeveloped merit that the most of us do not recognize until it is demonstrated. The matter of disposition and temperament he has made a study of, perhaps to a greater degree than the matter of form, and his success as a breeder, and especially his success in mating thoroughbred-mares with trotting stallions, is due in no small degree to his intuitive analysis of temperament, and careful discrimination in blending blood with regard to mental as well as to physical qualities. Not only is "the Governor" an adept in judging of individual qualities in horses, and of valuing blood, but his ideas on training have to a certain degree revolutionized that art. He is, as all the world knows—and as the reader of this book will better appreciate a little further on—the father of the Palo Alto system of training. That system is the outgrowth of an idea of which he was

the author. He believed that the way to develop the highest rate of speed was to work horses fast for short distances, and out of that idea a new system of training has evolved which has given the world the majority of fast records for young horses. None of the old trainers would entertain the idea—old trainers are not in the habit of listening to anything that seems averse to their practices—but in the yearling record of Norlaine, the two-year-old and three-year-old records of Sunol, the four-year-old record of Manzanita, the record of Palo Alto, and many other brilliant achievements we see the triumph of an idea.

As a man Governor Stanford is admired, or rather I should say loved, the most by those who know him best—who have been brought near to him in everyday life. With his employés he is just and considerate. Many a well-meaning man is in the wrong while he is trying to do right, and in such a case "the Governor" has the rare faculty of showing him the error of his ways effectively, but without hurting even the most sensitive feelings. A man's faults or mistakes he will not parade in the hearing of others; and while appreciative of good men will not tolerate worthless ones. The great charities of Governor and Mrs. Stanford are known from California to Maine. The grand "Leland Stanford Junior University," to build and endow which the greater portion of his many millions will go, is a gift to the people that can never be forgotten, and one that will carry down to future generations the memory of those who bestowed it. The sums given monthly "for sweet charity's sake" by Mrs. Stanford run high up into the thousands, besides

which she maintains numerous schools and kindergartens, where the children of the poor may be trained for the battle of life.

The lands owned by Governor Stanford include the Palo Alto Farm of 11,000 acres, devoted to the trotting and running-horse departments, besides the beautiful park and residence grounds, vineyards, etc.; the Vina Ranch, on the Sacramento River, of 55,000 acres, several thousand of which are in vineyards where the finest varieties of wine grapes, such as the Zinfandel and Charbonneau, are abundantly grown; and the Gridley Ranch, in Butte County, of 17,000 acres, principally devoted to wheat growing. All these lands are given to the Leland Stanford Junior University in the grant founding and endowing that noble institution, which is now being built at Palo Alto, and which will cost millions to complete.

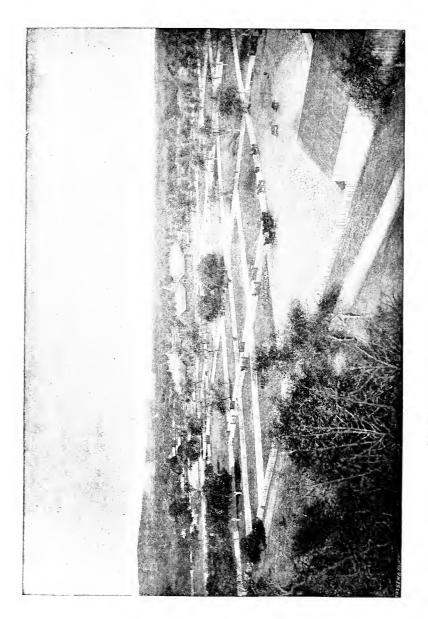
The Palo Alto farm lies partly in Santa Clara and partly in San Mateo Counties, in the beautiful Santa Clara Valley, a spot almost unrivaled among all the gardens of the earth. This fruitful valley, where the air is tempered by the breezes from San Francisco Bay, is at least the equal of any favored region of the Pacific Coast in its natural advantages; and wealth and enterprise have done perhaps more for it than for any other spot where Pacific breezes blow. Part of the Palo Alto farm adjoins the little town of Menlo Park, on the Southern Pacific Railway, an hour's ride from San The farm lies nearly all between an arm Francisco. of San Francisco Bay on the east, and the Southern Pacific Railway on the west, and is chiefly level, the western limits running into the foothills of the Coast Range of Mountains, the ocean being only thirty-five miles distant.

I came to Palo Alto when it was new and crude—the first of the tracts that form the Palo Alto of to-day only having been purchased in 1876—and from that day to this the work of improving and building has never ceased, until little either in the way of usefulness or ornamentation seems to be desired. While he who has an eye to the practical alone can see at Palo Alto every facility and every improvement for the accomplishment of practical ends, the lover of nature's beauties can breathe the purest air, enjoy the brightest sunlight and feast his eyes on the greenest of land-scapes beautified with trees and shrubbery from every clime.

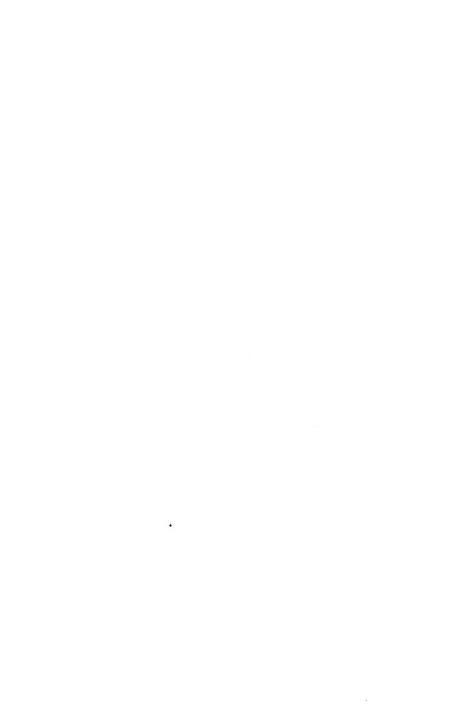
When I began work at the new farm the track was just being built, new buildings were hardly yet planned, there was only about a dozen men employed on the farm, and the stud consisted of Electioneer, Gen. Benton, old Mohawk Chief and about twenty to twenty-five brood-mares. I little thought that this beginning would even, under the stimulus of Governor Stanford's limitless enterprise and capital, grow into the most extensive trotting-horse breeding and training establishment in the world. Speaking of its dimensions, and of the scale on which the breeding and training of horses is conducted here, a writer recently said:

"The writer, who is accustomed to take the measure of a stock-farm in a day and review it with a fair degree of comprehensiveness in a single article, finds himself in deep water at Palo Alto. My first impression of Palo Alto was, that if one spent a month industriously here he might, at the end of that time, have a fair and intelligent conception of the trotting department of the great establishment in all its details. To-day, after devoting two months to the subject, I am sure that my first estimate was under the mark, and that I have not yet seen all that can profitably be seen, nor learned all that any intelligent horseman can learn. An establishment where any one of the several training stables equals the training department of any ordinary large stock-farm, and where from seventy to eighty trotting-horses are daily in training-where upward of twenty stallions are used more or less, and where the trotting-harem numbers upward of 300 matrons—such an establishment is not to be intelligently inspected in a day or a week. I have seen the principal stock-farms of America, and it is easy to say that no two or three of them rolled into one would duplicate Palo Alto; but saving so does not adequately convey an idea of the scale on which Governor Stanford's 'nursery of trotters' is conducted. In the extent of his enterprise, as well as in some other respects, Governor Stanford is easily the first trottinghorse breeder in the world."

Mohawk Chief was purchased in 1875 by Governor Stanford, in New York, and brought to Sacramento. He was a son of Rysdyk's Hambletonian, a horse of fine proportions and style, but he has proved a failure as a sire of trotters, though some of his daughters have produced well, notably Sontag Mohawk, the dam of the great mare Sally Benton, 2:17\frac{3}{4}, Sport, 2:22\frac{3}{4}, Eros, 2:29\frac{1}{2}, etc. Then, in 1876, the young son of Hambletonian



VIEW OF PALO ALTO FARM.



that is now known world-wide as the great Electioneer came, and, in 1877, Gen. Benton followed. In 1883, the famous campaigner Piedmont, 2:173, son of Almont, was purchased, and a few years ago Nephew, son of Hambrino, 2:21½, joined Electioneer, Piedmont and Gen. Benton to complete the quartette of famous Palo Alto sires. At different times lots of broodmares were brought from the East, and others had been purchased in California, until, with the natural increment, the brood-mares now number about 300. The most famous of the mares imported from the East are Elaine, 2:20, by Messenger Duroc, out of Green Mountain Maid, Electioneer's dam; Sontag Mohawk, the dam of Sally Benton; Norma, the dam of Norval, 2:17½; Lady Thorn Jr., the dam of Santa Claus, 2:17½; Sprite, by Belmont, out of the great mare Waterwitch; Gazelle, 2:21, by Hambletonian, out of Hattie Wood, by Harry Clay; the noted trotting-mares Lula, 2:15, and May Queen, 2:20, Lucy, 2:14, the great white pacer, and many other Eastern mares of note. Among those of Californian origin that were brought to Palo Alto were Beautiful Bells (the greatest dam of trotters, age considered, that ever lived), by The Moor, out of Minnehaha, also a famous producer; Addie, the dam of Manon, 2:21, and Woodnut, 2:16½; Aurora, 2:27, by John Nelson; Columbine, the dam of Antevolo, 2:191, and Anteo, $2:16\frac{1}{4}$; Mayflower, $2:30\frac{1}{2}$, the dam of Manzanita, 2:16, and Wildflower, 2:21; and May Fly, 2:301, the dam of Bonita, 2:181.

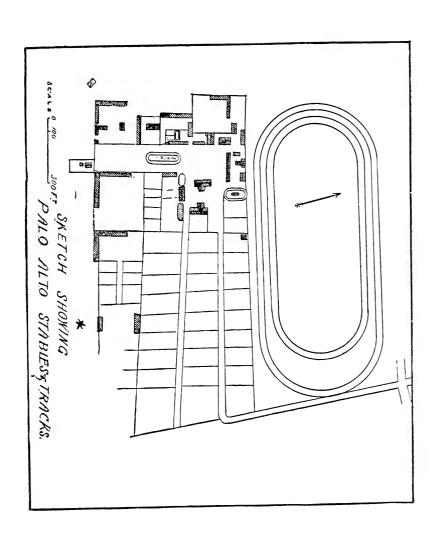
In this chapter I only propose to outline the founding and history of Palo Alto, but later on in the book

I will devote a chapter to some of the great horses of Palo Alto, giving some sketch of each in detail. In like manner I will outline the campaigns of the Palo Alto horses, and in following chapters will give full particulars of the training and trotting of those that proved stars on the turf.

The thoroughbred department at Palo Alto is kept entirely separate from the trotting department, the stables, track, etc., being located about two miles east of the trotting headquarters. The most noted sires there are Flood and Shannon, and among the best mares in the stud are imported Flirt, dam of the good race-mare Gorgo and of Faustine; imported Fairy Rose, dam of Shannon Rose; Glendew, the dam of Guenn and Geoffrey; Lady Evangeline, dam of Flood-tide, and other mares of the richest racing-blood of America and England. The superintendent and trainer of the thoroughbred department is Mr. Henry Walsh.

The business management of Palo Alto has been for years in the hands of Mr. Ariel Lathrop, who has general charge and direction of all Governor Stanford's vast financial interests, and the mere mention of this fact is sufficient evidence of Mr. Lathrop's business capacity and upright character.

The illustration and the diagram on the opposite page will give an idea of what the trotting department at Palo Alto is to-day. The reader will better understand the establishment by a comparison of the photographic view and the diagram, noting that the former was taken, looking northwest, from a point approximated by the star in the left lower section of the diagram, somewhat to the left of the center.



In order to accommodate it to the size of this work the diagram had to be drawn on a very small scale, and this must be remembered by the reader who tries to form a conception of the magnitude of the It will be noticed that there is a establishment mile and a three-quarter mile track, an open training paddock about one tenth of a mile in circumference, and a covered one about one-sixteenth of a mile around. These as well as the other training appliances will be fully described and discussed in the proper place We have generally about seventy colts and horses in training at Palo Alto, there being always six to seven assistant trainers. In all about eighty men are employed on trotters, not including the blacksmiths, harness-makers, etc., farmers or Chinese laborers.

No sketch of Palo Alto would be complete without some reference to Governor Stanford's great contribution to science, in demonstrating, through the agency of the camera, the actual movements and positions of animals in motion. Governor Stanford had for a long time entertained the opinion that the accepted theory of the relative positions of the feet of horses in rapid motion was erroneous. He believed that the camera could be utilized to prove that the conventional idea of the positions and movements in rapid motion was wrong, and that by instantaneous photographs the actual position of the limbs at each instant in the stride could be shown. He engaged Mr. Muvbridge, an expert photographer of San Francisco to conduct the experiments, and by an elaborate arrangement and equipment of twenty-four cameras, after many weeks' work, pictures were prepared showing the relative

position and movement of the limbs at every instant in motion, and the actual action of the trotting and running-horses, heretofore a matter of much speculation and supposition, was with exactness and certainty reduced to one of scientific truth. The publication of the elaborate work detailing these experiments—"The Horse in Motion"—caused surprise, and one might say created, too, an almost painful impression, showing as it did that the supposed graceful motions of the trotter and runner were chiefly an optical delusion, and that every stride or "revolution" of a horse in rapid motion is an almost unbroken succession of ungraceful and angular positions.

In this short chapter I have sought to outline Palo Alto as it was and as it is, and though I may have mentioned what may appear some unimportant matters, they will all, I think, assist the reader to follow understandingly the chapters that follow on the campaigns of the great horses, which will end our historical work and launch us into the closer discussion of the art of training trotters as pursued at Palo Alto.

CHAPTER VII.

HISTORY OF PALO ALTO CONTINUED—FIRST TRIALS OF THE PALO ALTO SYSTEM UNSUCCESSFUL—REASONS THERE-FOR—SOME GENERAL OBSERVATIONS ON TRAINING AND TRAINERS—OCCIDENT AND ABE EDGINGTON CAMPAIGNS BRIEFLY OUTLINED FROM 1878 TO 1889—THE GREAT CAMPAIGN OF 1886—PLANS FOR 1888 FRUSTRATED BY FIRE—FURTHER SUCCESSES.

The first horses I worked at Palo Alto were Abe Edgington and the more famous Occident that had made a record of $2:16\frac{3}{4}$ some years before. These horses were at Sacramento when I came to Palo Alto, but shortly were brought home. After some little work on the usual plan of training, I drove Edgington a mile in 2:22, and Occident worked in 2:19.

Then Governor Stanford explained to me his ideas of training, fully outlining a theory, the general principles of which are those now followed at Palo Alto, and which is properly called "the Palo Alto system." He explained the advantages he saw in the "brush plan" of teaching a horse to trot fast. He did not believe that the best way to teach a horse speed was by incessant jogging or working mile after mile in a drilling way. On the other hand, he contended that by sending a horse short distances nearly up to his limit but not far enough to tire him, allowing him to get his

breath between dashes, he would make speed faster, and do his work with eagerness, spirit and relish. He saw that speed was the great essential, and that the best results would be attained by making speed and then conditioning the horse to carry it, rather than by drilling him into condition without first teaching him to trot at a high rate. In short, he outlined to me the central features of the plan of training that is explained in detail in coming chapters of this work, though of course years of experiment and practice have modified in some details the projected system then unfolded by Governor Stanford. After endeavoring to give me a clear understanding of the methods he wished followed, he instructed me to train Occident, Edgington and the other horses accordingly.

This was new and rather strange to me, and I am free to say that while I was determined to do the best I could to carry out my employer's instructions, I had very little faith in the ultimate success of the experi-Horse-trainers are probably the hardest men in the world to teach—not because they are slow to learn when they want to, but because they know so much already that they cannot learn any more, and I presume I was no better in this respect than the majority. We are all too apt to think that our way is necessarily the best, and that no other possible plan can be better. I have also, in traveling along the highway of a busy life, observed that few mechanics work well with new and strange tools; that we never travel a new road quite so rapidly and steadily as over the beaten paths; and, moreover, it has seemed to me to be a rule that when a man starts in to do a thing believing that it is

bound to be a failure, it generally is one. The great majority of men who succeed in any certain undertaking are those who begin it with faith that they will succeed. These characteristics of human nature in part explain why my first essays with the new system of training were almost heart-breaking failures. It is my duty to detail these failures, not only as incidents in the history of Palo Alto, but to point out that should others try this plan of training and not at first succeed, it would not be a surprising thing, and should not be a discouragement.

After I had worked Occident and Abe Edgington on the new plan for about ten days, instead of improving on their 2:19 and 2:22 trials, it would keep them working all the time to trot in 2:40. Just as any other trainer would, I at once jumped to the conclusion that this new system of training trotters was one of the many pretty theories that won't do in practice. So, I went back and worked the horses on the old plan, which I knew something about, and got them going pretty well again. But then the Governor insisted that I should follow his instructions, and the new idea was worked on again with the same result. The horses lost their speed apparently as completely as if we had worked them over soft ground in a harrow. This was in September, 1878. One day Governor Stanford came down to the farm to see the horses work, as both had engagements that week. The best Abe Edgington could do was to get to the half in 1:14, and it took him 0:47 to come home from the head of the stretch. Occident's trial was even worse. Then I repeated Edgington, but he was unable to do better.

Governor Stanford asked me to repeat Occident, but I succeeded in having both the horse and myself excused, until he got over that attack of "the slows."

Now, however certain it seemed to me then that the fault was all with the system, I now know that this was not the true explanation of the lamentable temporary degeneration in the speed of Abe Edgington and Occident. The plan was all right, but I did not know how to use it, and I gave the horses too much of it. A man used to working horses mile heats naturally does not think he is doing anything in quartermile or furlong brushes, and in under-estimating the amount of fast work I was really doing, the job was overdone. An old horse, one that has been very long trained, cannot, it must be remembered, stand as much fast work as a young one can at the gait he can go. A child can play until tired, and after a little rest will be quite refreshed again, where a man will tire and remain tired. You can work a yearling colt twice a day to advantage, when a similar system of proportionate work will stale a mature horse. Once a horse develops a high rate of speed, it must be remembered that he cannot stand as much sharp work as one that has not reached highspeeding capacity. So after I became more familiar with training on the Palo Alto plan it was not necessary for me to seek any explanation of the first unsuccessful experiments, other than that I was working a system that I did not understand, and did not know how to apply with proper judgment.

When Electioneer came to Palo Alto thirteen of the get of Messenger Duroc came with him, and candor

compels me to say that with the exception of Electioneer and his half-sister, Elaine, there was nothing in the lot of any great account. When I first came to Palo Alto, however, Mohawk Chief was at the head of the stud, and I spent two hard seasons' work in trying to make trotters of his get, but I never saw one that any amount of training could make even a 2:40 trotter of. Once it was plain to Governor Stanford that Mohawk Chief was not a gifted sire of trotters, Gen. Benton became lord of the harem, and when, in 1880, the then phenomenal performances of Fred Crocker gave a slight token of Electioneer's coming greatness, he became the pride of Palo Alto. Mohawk Chief has long been retired to "private life."

For the purposes of this sketch of Palo Alto history merely a brief recapitulation of its campaigns are necessary, as the notable horses that have from time to time brought the stable fame and prestige are dealt with in their order in succeeding chapters.

The principal horses in the "string" in my first campaign (1878), under Governor Stanford's colors, were Occident and Abe Edgington. Though Occident was only successful in one race, he was second to Col. Lewis when that good horse made his record at Oakland, California, going three heats in 2:18\(^3_4\), 2:19\(^3_4\), 2:21, Judge Fullerton being third.

About a month later Occident beat Judge Fullerton, at Sacramento, in 2:23, 2:23½, 2:22. At Santa Clara, October 1st, Abe Edgington beat Doty, Coquette and Frank Ferguson in straight heats, taking a record of 2:23¾, which stands as his fastest mark.

In 1879 we did not campaign to any extent, starting

only Occident and the brown gelding Capt. Smith, by Locomotive, out of the famous mare Maid of Clay, the dam of the stallion Clay, 2:25, and Carrie C., 2:24, two of Electioneers get that have since distinguished themselves. We started at Sacramento, September 11th, where Capt. Smith was beaten by Del Sur, and Occident by Nutwood. We started Occident a couple of weeks later, at San Jose, against Graves, and Graves won in straight heats in 2:20, 2:20, 2:23. This race ended the turf career of Occident.

The following year, 1880, was a busier and more successful one for the stable, and it marked the debut of the first of the sensational youngsters that have come from Palo Alto, for in that year Fred Crocker lowered the two-year-old record to $2:25\frac{1}{4}$. We also campaigned Elaine, the half-sister to Electioneer, that season, and gave her a record of 2:20, and with Capt. Smith we beat Del Sur at Sacramento, giving him a record of 2:29. In 1881 Palo Alto brought out two other world-famous young performers in the yearling filly Hinda Rose, and the two-year-old Wildflower, daughters of Electioneer. Hinda Rose made a vearling record of $2:36\frac{1}{2}$, and Wildflower a two-year-old record of 2:21, and the former record stood unbeaten for six vears, while the latter was at the head of the list for seven years. On the same day that Hinda Rose made her record we gave Bonita a two-year-old record of 2:24½, beating all performances except Wildflower's; and now the star of Electioneer was fairly started in its ascendant flight toward that high pinnacle of supremacy as a sire of young trotters where no rival has been able to approach it.

In 1882 I started East with Wildflower and Hinda Rose, leaving Sacramento September 20th, and after winning the two stakes we went after, we returned home. In 1883 we again went East with Bonita, Hinda Rosa, and Wildflower, and the chief triumph of the campaign was Hinda Rose's lowering the three-year-old record to 2:19½, and Bonita also lowered the four-year-old record—2:19, by Jay-Eye-See—to 2:18¾. Wildflower suffered from distemper all through the season.

In 1884, owing to the death of the bright and well-beloved youth, Leland Stanford, Jr., the Palo Alto stable did not campaign; but as Elvira, daughter of Cuyler, had taken the four-year-old honor back to Kentucky by trotting a mile in 2:18½, we took a few young-sters up to the Bay District track in the autumn, and besides giving Manzanita a two-year-old public trial of 2:25, drove the four-year-old Sallie Benton, daughter of Gen. Benton, a mile in 2:17¾, and thus the four-year-old banner was pulled down from the Glenview staff, and hoisted over Palo Alto, where it yet remains, with "Manzanita, 2:16" blazoned on it.

In 1885, about the last of July, we shipped East a strong stable of twelve trotters, among them Manzanita, Sallie Benton, Sphinx, Carrie C., Palo Alto, Hinda Rose, St. Bel, Rexford and Chimes. We went direct to Rochester, thence to Albany, where Manzanita and Palo Alto each "walked over" for stakes. At Rochester two of the best strings in our bow snapped when Sallie Benton and Nellie Benton (a very promising mare) broke down. Among our successes were the victory of Manzanita in the great three-year old race

at Chicago, of Carrie C. over Princeton at Chicago, and of Sphinx over Nutbreaker at Albany.

Early in the spring of 1886 we started East again with nine car-loads of horses, eight of which were consigned to New York for sale, the other containing the trotting stables, which consisted of Manzanita, Palo Alto, Hinda Rose, Sphinx, St. Bel, Chimes, Suisun and the bay gelding Commotion. We shipped this car direct to Louisville, whence I went to New York. my return I found the horses all sick, and but for the assistance of Dr. Coster, of the Haggin racing stable, we would have fared badly. From Louisville we went to Kalamazoo, where Palo Alto beat Victor and others, July 29th, in straight heats; and on July 1st he defeated Anniversary and five others in straight heats in a good race. Now we went to East Saginaw, where Palo Alto beat Wilton, Lucy Fry and others, taking a record of 2:201 in the fifth heat. Manzanita was second to Belle Hamlin in a fast race at the same meeting. At Detroit, Wilton turned the tables on Palo Alto in a grand race; and at Cleveland the fouryear-old Manzanita was beaten, but not on her merits, by Belle Hamlin and a strong field of other aged horses. Next we went to Maysville, Kentucky, where St. Bel took a four-year-old record of $2:24\frac{1}{4}$ in his first At Covington, Manzanita easily beat Eagle Bird in a stake race, and Palo Alto defeated Tom Rogers and others after a six-heat battle; and at the same place St. Bel, Suisun and Sphinx also won races. Then we went to Lexington, where Manzanita beat Greenlander, trotting the third heat in 2:16, which still stands as the best on record for a four-year-old. Here

also Sphinx beat Castalia, and Suisun beat Ben Hur and others. Next we went to Cleveland, where Palo Alto defeated Deck Wright and other seasoned campaigners after a six-heat contest, and St. Bel won over a good field. Manzanita, Palo Alto, St. Bel and Sphinx put other victories to their credit before we returned to Lexington for the fall meeting. In the three-yearold stake Sphinx was beaten by Bermuda and Nutbreaker, and Hinda Rose was unequal to the task of beating the great Patron, but Manzanita carried the stable's colors to victory over Greenlander and August Haverstick in the four-year-old stake. At St. Louis, October 5th, St. Bel was beaten by Astral, but on the 7th Manzanita decisively defeated the Kentucky champion four-year-old, Patron, in a great race in straight heats, and on the following day Palo Alto, by beating Charley Hogan and others, closed what was certainly a very successful season for the Palo Alto stable. The greatness of Electioneer now received marked recognition, for Mr. Brodhead, of Woodburn, shipped with us Miss Russell (the dam of Maud S., $2:08\frac{3}{4}$), two of Maud S.'s sisters, a sister to Nutwood, and the dam of Pancoast to be bred to him. Though we got back home only three days before the Stanford Stake was trotted for, we started Rexford in that race, and beat Alcazar handily.

In 1887 our stable was not in the best of condition. Clifton Bell, after being beaten by Tempest at Sacramento, came to the Bay District track and won a good race, afterward taking a record of 2:24½. He was a four-year-old of great promise. Besides Clifton Bell we gave Ansel a record of 2:20, Maiden a three year-

old record of 2:23, Alban a record of 2:24, Carlisle a record of 2:28\frac{3}{4}, and Whips a record of 2:27\frac{1}{2}. But the triumph of the year was not with the "grown-up" colts, but with a tender youngster. After the news came from Kentucky that Sudie D. had lowered the yearling record of Hinda Rose to 2:35\frac{3}{4} on October 15th, we went to work with Norlaine (by Norval, son of Electioneer, out of Elaine, 2:20), and on November 12th sent them back an answer of 2:31\frac{1}{2} for a yearling record.

A great calamity befell Palo Alto in April, 1888. We had a formidable stable ready for the summer campaign, when, on the night of April 17th, a destructive fire broke out in the training-stable nearest the track, in which were twenty-two horses, including the cream of our "string." Nine were burned to death, viz.: Rexford, 2:23; Clifton Bell, 2:24; Norlaine, 2:31½, the great vearling; Kriss Kringle, that had gone a mile in 2:24; Cedric and Lowell, three-vear-olds, that could both beat 2:30 in their two-year-old form; Howard, a phenomenon that I regarded as one of the greatest young horses we ever had, and two geldings that had beaten 2:30. Palo Alto and Arodi, by Piedmont, were badly burned. Thus as strong a stable as Palo Alto ever had was utterly demoralized. We had then to take up a new lot of horses, including some that had been turned out as not being very promising. Notwithstanding this, we in 1888 lowered the two-year-old record to 2:18 with Sunol and gave the following other horses records: Palo Alto Belle (two-vear-old), 2:28½; Azmoor, $2:24\frac{3}{4}$; Cubic, $2:28\frac{1}{2}$; Ella, 2:29, and Express, $2:29\frac{1}{2}$.

The Palo Alto triumphs of 1889 are fresh in every one's memory. Sunol lowered the three-year-old record of the world to $2:10\frac{1}{2}$, and Palo Alto trotted in $2:12\frac{1}{4}$, faster than any stallion ever trotted previous to 1889. Express lowered his record to 2:21; Sport and Lorita, both by Piedmont, each trotted to a record of $2:22\frac{3}{4}$; Carlisle lowered his record to $2:26\frac{1}{4}$, Marion trotted in $2:26\frac{3}{4}$, Arol made a record of 2:24, Emaline a record of $2:27\frac{1}{2}$, Pedlar a two-year-old record of $2:27\frac{1}{4}$, and Del Mar a two-year-old record of 2:30. This makes certainly a brilliant record for a season.

CHAPTER VIII.

SKETCHES OF FAMOUS ANIMALS TRAINED AT PALO ALTO—
THE STARS OF TEN YEARS AGO—OCCIDENT THE FIRST
HORSE TO BEAT 2:17—THE STRANGE HISTORY OF HIS
SIRE—OLD ST. CLAIR—ABE EDGINGTON—THE HALF
BROTHERS, CLAY AND CAPT. SMITH—THE GREAT MARE
ELAINE, 2:20—FRED CROCKER, THE FIRST PALO ALTO
RECORD-BREAKER.

I have now outlined in as brief a manner as possible the general history of Palo Alto, but the scope of the foregoing chapters would not admit of justice being done each of the greater horses mentioned that have earned world-wide fame. Every horseman will, I know, be glad to have some more definite account of such great horses as Palo Alto, Sunol, Manzanita, Hinda Rose, etc., and I now propose to give sketches of each in turn, relating their individual characteristics, their breeding, their history, and important facts bearing on their training. Though I am averse to devoting too much of the space of this book to historical writing, or to story-telling, the reader will not fail to appreciate the fact that this matter is really illustrative of our system of training, and is necessary to a proper understanding of it, and of what it has accomplished and can accomplish. Just as the history of Smuggler had its lessons to the trainer, so the history

of every one of the Palo Alto stars has had its lessons, and the training of each one contributed its share in showing where improvements can be learned in the details of developing trotting horses. I will not, of course, attempt to sketch all of the horses I have trained and driven to fast records, but will confine myself chiefly to the great performers, who have made themselves an enduring name in trotting history.

It being desirable in a measure to observe chronological order, we will begin with the earlier trotters rather than with the greater ones. As already noted, Occident and Abe Edgington were the first horses I worked at Palo Alto, and as these horses were "made" before they reached my hands, I must be brief with them.

Occident was a brown gelding, foaled in 1863, and was bred by a Mr. Shaw in the Sacramento Valley. His pedigree did not amount to much, but the blood of his grandsire, St. Clair, has been made famous by such trotters as Manzanita, 2:16; Bonita, 2:18½; Wildflower, 2:21, and Fred Crocker, 2:25\frac{1}{4}. Old St. Clair, the pacer, was an "overland horse" that came across the plains, from no one knows where to California in 1849. He worked as a drav-horse in the streets of Sacramento, and later as leader in a stage team, but was finally, after he was foundered and good for nothing else, put into the stud in that city by Mr. John Miller, and was burned to death about 1864. Besides Doc, the sire of Occident, he sired Lady St. Clair that has the fastest five-mile pacing record in the world—12:543, made in 1874. His son, Doc, got only a few foals, and died on his way to Oregon about twenty-five years ago.

Occident's dam was a little bay mare, not quite 15 hands high, that came probably from Lower California. Occident had the usual life of a scrub with more than the usual hardships, until when he was three or four years old he in some way got into a "scrub race" and won it. Then a man named Eldred began training him, and with such good results that he became quite a sensation. Finally, Governor Stanford paid about \$5,000 for him, and he had gone so fast that his first race was against no less a competitor than Goldsmith This was in October, 1872, and the Maid Maid. won in straight heats. Next he tried conclusions with old Lucy, at San Francisco, and she distanced him in 2:20 in the second heat. The fastest heat that had ever been trotted up to this time was 2:17¹/₄, made by Goldsmith Maid when she defeated Lucy in September, 1872. In 1873 the California State Fair offered a valuable piece of plate for Occident to beat this record, and at the Fair at Sacramento, September 17, 1873, he broke that record, trotting the mile in $2:16\frac{3}{4}$. The next year he was beaten by Sam Purdy, but later beat Judge Fullerton, trotting the second heat of his race in 2:18. Then he was taken East by Budd Doble, but never started, owing to trouble with his feet. Doble "Dunbared" his feet, which process consists in cutting down the foot, sole, and frog, and shoeing with the shoe nailed well back on the heel, after which a "spreader," with spreading screws, is put in. He was brought back, and, after a long vacation, came into my hands in 1878, and won another good race against Judge Fullerton, as related in the last chapter.

Occident was a mixed gaited horse, and would amble

and break in the most annoying manner, and, as usual with a horse so strongly inclined to pace when he broke, he made standstill breaks. After I had him awhile I taught him to break better, and once drove him a quarter, with a break in it, in thirty-three seconds. He went a mile for me over the Palo Alto track, which was forty-five feet long, in 2:19. He was a little dark bay, or brown horse, weighing about 900 pounds, very compactly built, of pacing form, with a very steep rump, a handsome head, and legs of iron. He never was Occident while I had him, and Governor Stanford has expressed to me his belief that had our methods been followed with him when young he would have trotted as fast a mile as any horse of our day.

The grev gelding Abe Edgington was an Ohio bred horse. He was by Stockbridge Chief Jr., a grandson of Vermont Black Hawk. His first notable performance was at San Francisco, May 11, 1875, in a match with the brown gelding Defiance, by Chieftain. This horse had made a pacing record of 2:17\frac{3}{4} two years before, and had then been put to trotting, and in the spring of 1875 was matched against Edgington for \$10,000 a side. Defiance was beaten, though he won the first heat in $2:24\frac{1}{4}$, and the third in 2:29. Governor Stanford, I understand, paid a long price for Edgington—\$20,000 it was said to be. Doble took him East when he took Occident, and had better luck with him, winning two or three good races, and once beating among others the fast mare Belle Brasfield. I have already detailed what he did after I went to Palo Alto in 1878.

Abe Edgington was a peculiar sort of horse to train. He did best with about thirteen ounces on his front feet, though he could trot faster with eight, but could not get away fast. Hence he was at a disadvantage in starting. When he came into my hands he was in about as bad condition as a horse could be to prepare, and we experimented on him with the new system of training before we understood how to apply that system. So some allowances must be made, and I will here say that though his record is only 2:233, I have always believed that Edgington was the superior of Occident as a race-horse. He was an iron-gray, sixteen hands high, and would turn the scale at 1,050 pounds when in good shape. He was a stoutly-built horse, high at the wither and up-headed and lofty in carriage, and, as a show-horse or "parader," would attract marked attention anywhere. He was used in Governor Stanford's photographic work, illustrating the actual movements of the fast trotting-horse.

Capt. Smith, the brown gelding by Locomotive, out of Maid of Clay, was a much faster horse than his record indicates, but he became a bad puller, and little could be done with him. We drove this horse a quarter close to thirty-one seconds, and a mile in 2:21 as a four-year-old, but this clip made his head swim. The only race he ever won was against Del Sur, at Sacramento, September 24, 1880, and there are certain things connected with that race that fastens it pretty securely in my mind. We won it finally, but, as Splan would say, I had to "hustle" all I knew how to get there. Capt. Smith won the first heat in 2:29, and then Del Sur cut loose and won the second and third in 2:25 and

The betting was now \$100 to \$8 against Capt. Smith, and the prospect looked rather shady. In the next heat I laid Capt. Smith right on Del Sur's wheei and stuck "closer than a brother" to him for about seven-eighths of the mile. Then I pulled the Captain out, and carrying Del Sur to a tired break, just won in 2:32. Now consternation reigned around the pool-box. Strong influence was brought to bear on me not to win the deciding heat—influence not from the Del Sur people, but from parties who had "got into the box" the wrong way, and who, though it was their duty to look after Governor Stanford's interests, endeavored, by coaxing and threatening, to have me allow the Palo Alto horse to be beaten. I told these gentlemen that if they wanted to save their money, and could not "hedge," I failed to see any help for them unless night or something else would suddenly come and cause a postponement. Del Sur was not a game horse, and I had not much trouble in beating him in the last heat.

The gelding Clay was a half brother to Capt. Smith, being by Fred Low (or St. Clair, 656, as he is recorded), out of Maid of Clay. He was a little black fellow that would not weigh more than 710 pounds, but he was a much faster horse than Capt. Smith. Judiciously handled, 2:20 would not have stopped him, but we gave him too much fast work against the watch. Like Capt. Smith, he became an inveterate puller—one of the kind that would look the driver square in the face. He won a few good races for the farm, and took a record of 2:25½ in 1881.

Elaine was another trotter whose career was marred by that generally incurable fault—pulling. This mare

was bred by Mr. Charles Backman, at Stony Ford, New York, and was got by Messenger Duroc, out of Green Mountain Maid, the dam of Electioneer. When Governor Stanford bought Electioneer and a number of others from Mr. Backman in 1876, the brown filly Elaine was among them, and for her he gave \$7,000. She did not come to California with the others, but was left in Carl Burr's hands. Burr worked her easily through the winter of 1876-77, and fitted her for her engagement the following summer. At Hartford, in September, 1877, in a three-year-old stake, she distanced her field in the second heat in 2:28, thus breaking the three-year-old record. A year later, Burr gave her a record of 2:24\frac{1}{4}, making the four-year-old record of that day. She then came home to Palo Alto. We did not work her much as a five-year old, she having injured her leg by stepping in a gopher hole. developed into a mare of fine size, standing about 15.2, and of good form, with a great deal of natural speed. In her six-vear-old form—1880—we started her at San Francisco, September 22d, against Gibraltar, Reliance, and Echora, and won in straight heats in $2:21\frac{1}{4}$, $2:22\frac{1}{2}$, 2:24. At San Jose, October 6th, she beat Bateman and Brigadier in a better race. Time—2:203, 2:213, 2:213. I should here state that she was not an absolutely sound mare in these races, nor in the one with Santa Claus to which I am about to refer. In 1879 I worked her a fast half, and not wishing to send her right up to her limit, I twice took her back in the trial, but still she covered the distance in 1:05 flat. After this one of the rear flexor tendons gave way, and though we kept her up pretty well the two races just

mentioned had their effect, and when she started against Santa Claus, November 13th, she was lame, and wore a rubber bandage to support the strained ligament. Still she made Santa Claus trot five heats to win. The time of the race shows that it was a good one—2:20, 2:18, 2:20 $\frac{1}{2}$, 2:18 $\frac{1}{2}$, 2:20—Elaine winning the first and third heats. Santa Claus was a good racehorse, and it took a good horse nine years ago to force one of his class to trot five heats averaging better than 2:20. Elaine was a very rapid-gaited mare, and had, as I have shown, a world of speed, but her propensity for pulling on the bit made it difficult, and, indeed, impossible to properly control that speed, and so distribute or rate it over a mile as to show by the figures of a mile record just what her capacity was. She was somewhat peculiar in her gait. She might be going well and fast, and you could chirrup to her and she would respond, but the increase in her speed would be so gradual that she would have gone perhaps a hundred yards before you could detect that she had quickened her pace, but by that time it would be terrific speed. Her increase of speed was almost imperceptible, like the gradual gain of a wheel gathering speed from its own momentum. Elaine has better legs than the most of the Messenger Duroc family, and, barring Electioneer, was by far the best of Governor Stanford's purchases from Mr. Backman. Her daughter, the fleet and beautiful, but ill-starred Norlaine, had not exactly her action, but we have, at Palo Alto, in Anselma, a daughter of Ansel's and her's, a young mare gaited exactly like Elaine.

Even in these fast days two-year-olds that can trot in 2:25\frac{1}{4} are rather scarce, and when we remember that the record of 2:31, which So So made at Lexington, Kentucky, in 1877, stood unchallenged for three years, it is easy to understand the sensation made by Fred Crocker and Sweetheart in 1880, for until that year no one had ever seen a two-year-old that could beat 2:30.

Fred Crocker was foaled March 23, 1878, the son of Electioneer, and Melinche, a mare by old Saint Clair, whose history we have already referred to. He was a well-shaped bay colt, and has developed into a tall and stout good-looking horse. I broke him in the winter of 1880, little having been previously done with him, as Governor Stanford had decided not to trot any colts under three years of age. The summer previous he and Bentonian, son of Gen. Benton, had shown the best of all our yearlings lot-trotting, and it was exercising these youngsters in this way that we first thought of the idea of the miniature track that has since played so great a part in our system of training. At the proper place the evolution of this "kindergarten" will be fully related. In the spring of 1880, the directors of the California State Fair advertised a stake race for two-year olds, and then Governor Stanford reconsidered his resolution about not trotting colts under three years old. We pitched upon Fred Crocker as the most likely one of our two-year-olds to represent the farm in the stake, and, on June 5th, I began preparing the young gelding for the event. I found that he could brush fast, but could not go a quarter faster than forty-five seconds. I worked him

along on a sort of compromise between the old and the new way of training colts, very seldom working full miles, but giving him a good many fast halves, and under this treatment he progressed very well, but not so fast as we have since brought along youngsters whose early education was more intelligently directed. The race was advertised for September 15th, at Sacramento. We were not over-confident, for we knew that Mr. L. J. Rose's filly Sweetheart, by Sultan, had trotted in 3:07 as a yearling, and the reports of the doings of the Los Angeles mare were very favorable. She won the stake in straight heats—2:31½, 2:32¼ but Crocker gave her a good race, and in the estimation of many the second heat should have been awarded to him. The next day—the same day that Capt. Smith beat Del Sur, as already related-Mr. Rose sent his great mare against So So's two-year-old record (2:31), and she beat it handsomely in 2:261, and all California was fired with honest pride, for a Californian youngster had beaten the two-year-old record of the world, and those who foretold the great possibilities of the State as a horse-breeding region felt that their arguments had been eloquently and conclusively vindicated. It was a great day for the flowery land south of the Sierra Madre range—a great day for the San Gabriel farm, for the popular Mr. Rose, and for Sultan. And while we of the Palo Alto neighborhood, believing that California should have the two-year-old record, rejoiced and were proud of Sweetheart's performance, we still thought that the record-holder should hail from the Santa Clara valley, rather than the San Gabriel Valley, and accordingly set to work to eclipse Sweetheart's triumph. We were handicapped by Crocker's having a bad leg, and we had to proceed cautiously; and finally the leg gave way altogether, but not until he had done what was asked of him. on the day that Elaine raced with Santa Claus, we started Crocker to beat 2:30, and he did it in 2:281, and a week later—November 20th—he started to beat 2:284, and not only did that, but broke Sweetheart's record, trotting the mile at the third attempt in 2:25\frac{1}{4}, and he was at once the sensation of the day. Palo Alto had achieved its first great triumph as a "nursery of trotters," and Electioneer had given thus early an earnest of what he would accomplish with time and opportunity as a producer of phenomenal trottingspeed. Still no one dreamed then that the triumphs of Palo Alto would be what they have been-no one dreamed that Fred Crocker was a forerunner of that glorious host of record-breakers that have so irresistibly demonstrated the greatness of its blood and the fitness of its methods of breeding and training.

CHAPTER IX.

THE GREAT TRIO, WILDFLOWER, BONITA AND HINDA ROSE—WILDFLOWER, THE TWO-YEAR-OLD CHAMPION OF HER DAY—BONITA A GREAT TWO-YEAR-OLD, AND CHAMPION FOUR-YEAR-OLD—HINDA ROSE, CHAMPION YEAR-LING AND CHAMPION THREE-YEAR-OLD OF HER TIME—HER GREAT CAMPAIGN OF 1883—HOW SHE WAS SHOD AND BALANCED—THE CAREER OF THE FASTEST YOUNG TROTTERS THAT HAD YET BEEN PRODUCED—A STORY OF RECORD-BREAKING BY PALO ALTO COLTS—HINDA ROSE'S FAMOUS BROTHER, ST. BEL—HIS PURE GAIT, AND HIS RESOLUTE PERFORMANCES.

The next two year-old sensation after Fred Crocker was the bay filly Wildflower, by Electioneer, out of Mayflower, by St. Clair. Mayflower was an old-time California trotter herself, having a record of 2:30½, and besides Wildflower, she produced the famous mare Manzanita, who holds the four-year-old record of the world. Wildflower was foaled March 23, 1879. Although I did not handle her in her babyhood or drive her to her record, I studied her in all her work, and became very thoroughly acquainted with her afterward. Wildflower had perhaps as much natural speed as any animal bred at Palo Alto, and great as was her two-year-old achievement, it was hardly made under the most favorable auspices. Wildflower was not judiciously worked in her two-year-old form—indeed,

she was greatly overworked—and it is but fair to say that she had never shown anything to warrant the expectation that she would beat Fred Crocker's record. Indeed her doing so was a genuine surprise to all, and to none more than her driver. But owing to bad weather and other causes she got just the rest she needed, and was fresh and full of speed when the hour of trial came. This was the 22d of October, 1881, at the Bay District Track, San Francisco. She was driven by Henry MacGregor, and he drove her with much patience and excellent judgment. She took the word at the first score, went to the quarter in $0.35\frac{1}{4}$; to the half in 1:09½; made the third quarter in 0:35¼, and finished in 2:21—thus handsomely beating the twoyear-old by four and a quarter seconds, and setting a mark that the world aimed at in vain for seven years, and that was not beaten until another Palo Alto filly-Sunol—did it in 1888.

My first trip from Palo Alto, aiming at conquest on Eastern tracks, was with Wildflower and Hinda Rose, in 1882. We started the former at Fleetwood Park, New York, October 5, 1882, in a three-year-old stake worth winning against Meander, by Belmont, Senator Sprague, Lucy Walters, and Ernest Maltravers. She won the first heat very easily in 2:32. Maltravers was then drawn, and in the second heat, which Wildflower won in 2:27\frac{1}{4}, Lucy Walters and Senator Sprague were distanced, Meander getting second money. This is the only race that Wildflower ever trotted. She had no further engagements in the East that year, and after Hinda Rose had filled hers we returned home. The next spring when we again

crossed the mountains Wildflower got down with distemper, from which she has never recovered and the evidence of which she will always carry. She broke out in sores, which have left their scars, and the membranes of the nostrils were so affected that she "whistles" in her ordinary breathing. This attack was very unfortunate, for we expected—and had a right to expect—brilliant things of Wildflower in her maturer years. She was a great mare after the Fleetwood race, and could most undoubtedly have played. with any three year-old of her year. She was a puregaited, easy-going mare, had abundant natural speed, and was game and resolute. She would respond to the extent of her ability to every call. She is now a fine-looking brood-mare, and has already given evidence that it is not unreasonable to expect that some of her children will be as great as herself.

The little mare Bonita was another wonderfully fast two year-old, and, more fortunate than Wildflower, encountered nothing to prevent her training on "to greater things." She was foaled May 21, 1879, and is bred in lines of blood almost identical to those of Wildflower and Manzanita, being by Electioneer, out of Mayfly, 2:30½, by St. Clair. Mayfly was, like Mayflower, among the fastest Californian trotters of twenty years ago, and it is something of a coincidence that these two daughters of St. Clair, great trotters in their day and with records almost equal, should each in her turn produce, by the one sire, a daughter to break the four-year-old record of the world. It is only another proof that speed is not accidental, but an inherent quality of the blood. Though from the loins of Elec-

tioneer greatness has sprung in all places and flour-ished in all directions, the success, in a speed-producing sense, of the combination of his blood with that of these trotting-daughters of old St. Clair has been most striking, and has brought the name of the plebeian old-timer out of the obscurity that would have forever enveloped it but for the speed of Electioneer's gifted daughters—Manzanita, Bonita and Wildflower.

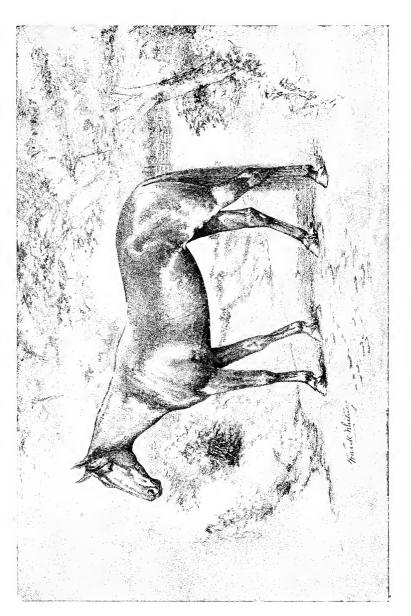
Bonita was worked in her younger days by Henry McGregor, and shortly after Wildflower took her 2:21 record. Bonita made a two-year-old record of 2:24½, thus placing the first, second and third fastest two-year-old record to the credit of Palo Alto. Had Bonita accomplished this before Wildflower trotted in 2:21 it would have made a great sensation; but good as her performance was, it was made under the shadow of the dazzling feat of Wildflower. The glamor thrown around the latter's achievement made the record of the former seem somewhat commonplace, and the applause was measured accordingly. Whether you are first or second makes all the difference in the world.

I worked Bonita as a three-year-old, but did not start her that year, I being most of the season in the East with Hinda Rose and Wildflower. But she was taken East, in 1883, in company with the mares just named, and, after an unsuccessful start against Eva and others, at Chicago, had a walk-over at Hartford, for a four-year-old stake, October 4th. The day was bad and no attempt was made to go a fast mile, but Bonita showed the public a quarter in thirty-one and three-fourths seconds. The four-year-old record of 2:19 that had been made by Jay-Eye-See still stood, and, as

Bonita had now rounded to, I determined to send her against it.

This was done at the Lexington meeting October 11th, and the rapid little mare beat old Father Time in fine style in 2:183, thus putting another best on-record to the credit of the Electioneers. As already stated our horses did not campaign in 1884, nor did we start Bonita in 1885, though she was kept in training. In the spring of 1886 she was sold to Colonel Lawrence Kipp, of New York, and in due time went into the hands of my friend, James Golden, of Boston, who campaigned her down the Grand Circuit in the 2:19 class, where she encountered such good race-horses as Arab, Mambrino Sparkle and Oliver K. She won at Albany, beating Felix and Billy Button in 2:21, 2:201, 2:191, and at Hartford she defeated Charles Hilton, Charley Hogan, William Arthur and Felix in straight heats in $2:22\frac{1}{2}$, $2:18\frac{1}{2}$, $2:20\frac{3}{4}$, thus lowering her record a fraction. Later she was sold to Mr. Shults, of Parkville, and campaigned, but with no success, and as, indeed, none of the Parkville horses have been very successful, it may be that Bonita, a difficult mare to train and manage at best, and a somewhat "sour" one, did not take kindly to the training at the big Long Island Farm.

Hinda Rose was our first youngster that earned fame at the early period of yearling form. She was foaled February 22, 1880, and is a brown mare, by Electioneer, out of Beautiful Bells, 2:29½, by The Moor, the sire of Sultan. Beautiful Bells, all things considered, is the greatest producer of speed that ever lived. Four of her get are in the 2:30 list, and two of them—



HINDA ROSE.
RECORD AT 3 VEARS 2:1916.

Bell Boy and Hinda Rose—beat 2:20 in their three year old form, while another—Palo Altc Belle—has a three-year-old record of 2:22\frac{1}{2}. The dam of Beautiful Bells was Minnehaha, the dam of Sweetheart, and four others in the 2:30 list; so our filly was bred well enough for a world-beater to begin with. She was well broken early, and in her vearling form I began working her. Her serious training began July 5, 1881; I had now gotten well into the Palo Alto system of training, and could work "the new fangled ideas" pretty skillfully. She was worked on the method described in chapters further on, until November 5th, the date of her first public performance. The yearling record was then 2:563, and at the Bay District Track a set of harness was offered to yearlings to trot against this record. The first trial was made by the filly Pride, by Buccaneer, owned by Count Valensin, and driven by John Goldsmith, who has since handled Guy Wilkes, Sable Wilkes, and other horses so successfully for Mr. Corbitt. Pride made the mile in 2:443. I then drove Hinda Rose and she went from wire to wire in 2:43½. On the 24th we gave her another trial, when she went in 2:361, and this stood as the yearling record until 1888, when it was lowered successfully by the Kentucky filly, Sudie D, and our lost Palo Alto star, Norlaine. In her two-vear-old form Hinda Rose was quite unsteady. She had carried a nine-ounce shoe as a yearling, and in her first easy work as a two-year-old I began with her barefooted, the only weight she carried being her quarter boots. Then she was lightly shod, and still acting as though she wanted more weight to balance her, I kept increasing until she carried eighteen

She, as I have said, acted unsteadily, and the then superintendent of Palo Alto declared that the fault was in her head, that her dam was rattle-headed. and that before Hinda Rose ever amounted to anything the driver would have to furnish her with "a new set of brains." My next experiment was to take off the shoes, and drive her barefooted awhile. I put on eight-ounce shoes, and fixed her out with three-ounce toe-weights. I would jog her about two miles, and when ready to speed would put on the toeweights. I had no more trouble with her after this, and she was trained successfully in this way without performing any operation on her brain. According to the old-fashioned rule, I should have kept on piling on weight, but when I got up to eighteen ounces I concluded that we had got past the right point, and would have to go back and start over again. More horses are suffering from carrying too much weight than from carrying too little weight.

I took Hinda Rose East in 1882, as she was engaged in a stake race at Lexington. She had a good field against her, those that afterward became most noted being Fugue, 2:17½, by King Rene; Early Dawn, 2:21½; Wilkes Boy, 2:24½, and Lizzie Wilkes, 2:22¾, a great aggregation of Wilkes talent. I need not take up the reader's time in details of the race. Fugue won the first heat in 2:36¾, distancing two of the field, Lexington Wilkes and Strathblane. Then Hinda Rose went on and won the second heat in 2:32, distancing all but Fugue, and in the deciding heat she easily beat Fugue in the same time.

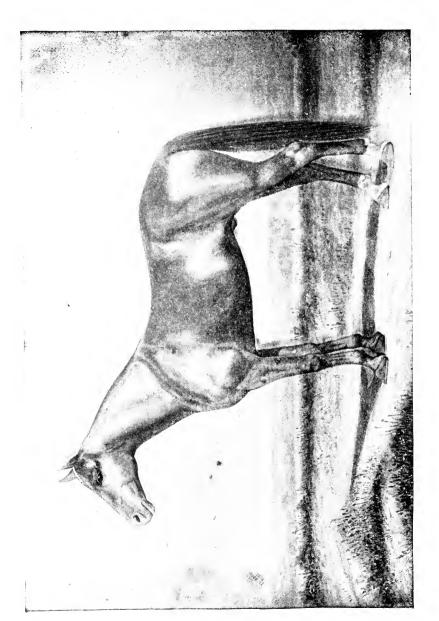
Hinda Rose opened her campaign of 1883 at Chi-

cago, July 20th, starting for the Ashland Stakes, for three-vear-olds, against the great Glenview mare Elvira, by Cuyler, and Major MacDowell's Fugue. Hinda won the race in straight heats without much trouble. She moved a trifle lame before the race, but won the first heat from Fugue in a jog in 2:31½, the track being heavy. Elvira made a bid for the second heat, but could not drive Hinda Rose out faster than 2:293, which, however, left Fugue outside the flag. The third heat we won very easily from Elvira in 2:31\frac{1}{3}. Hinda Rose's next race was at Cynthiana. Kentucky, where she again easily beat Fugue, in an uneventful contest; and at Lexington, a week later, she won the Mechanical Stakes in straight heats, beating Fugue, Lizzie Wilkes and Early Dawn, trotting the third heat in 2:23 We had Hinda Rose entered in the three-year-old stake, worth \$2,500, of the National Breeders' Association, so we now journeved North to Hartford, Connecticut, to win it. The fastest threeyear-old record at this time was 2:21, made by Phil Thompson, at Chicago, in 1881. As Hinda Rose was now rounding into great form, I determined to send her against that record at Hartford. It so happened that no other three-vear-old cared to meet her for the rich stake, and she had a walk-over; but the public knew better after the walk-over than before it that there was no three-vear-old on the turf that could give Hinda Rose a race. The day, October 3d, was raw, cold and windy, the track heavy and damp in spots, and the conditions not at all favorable for record-breaking. She trotted the first quarter in thirty-four seconds, went to the half in 1:10, and, though meeting a strong wind when she turned into the stretch, she made the second half as fast as the first, finishing the mile without a skip or a falter in 2:20. In the full flush of this honor she went to Lexington, and on October 10th eclipsed her own performance. Wilkes Boy and Fugue started against her in the stake for three-year-olds at this meeting. It is not necessary to take much space to tell so short a story even though the race resulted in putting on record a mark that stood unbeaten for four years. The first two heats she had only an exercise jog in 2:28\frac{3}{4} and 2:32, but in the third heat I drove her for a record, and she trotted the mile in 2:19\frac{1}{2}, Wilkes Boy and her old enemy Fugue being distanced. Fugue was a good mare, but she could never meet Hinda Rose at any time or place but she met her master.

With this race Hinda Rose finished her campaign of 1883 in a blaze of glory. She had won everything she started for during the year, never being beaten a single heat, and outclassing everything of her age in the East.

Hinda Rose did nothing in public in 1884 beyond trotting a mile in 2:20½ at San Francisco in an unsuccessful attempt to beat Elvira's four-year-old record of 2:18½, which we, after failing with Hinda Rose, succeeded in beating with Sallie Benton. Though Hinda Rose was in our stable in the East in 1885 she was never ready to start, and in 1886 she only started once, at Lexington, October 1st, where she, in company with Tom Rogers, C. F. Clay and Olaf, was beaten by Patron; but the defeat was handsomely avenged a few days later at St. Louis by her stable-companion Manzanita, when, in a great race, she defeated Patron





ST. BEL.

for the champion four-year-old honors. Hinda Rose was not herself either in 1885 or 1886, showing symptoms of breaking down, which precluded a proper preparation. Indeed, as in the case of Wildflower, though of course to a much smaller extent, distemper left its permanent effect on Hinda Rose. We have waited and worked patiently but vainly with this great mare in recent seasons, hoping that she would stand training again, believing that if she could be thoroughly prepared she would trot to a record "not far from the head."

The black colt St. Bel was the third member of the Beautiful Bells family in point of age, and was the next after Hinda Rose to earn distinction on the turf. I broke him at eight months old, and had him going nicely for his age, when I went East in 1883 with Hinda Rose, Bonita and Wildflower. On returning, I found him and Manzanita somewhat broken up, and both were some time in "rounding to" again. He did not make his first public appearance until 1885, in which year he accompanied the stable in its Eastern campaign. His maiden race was on a muddy track in the "National Trotting-Stallion Stakes for foals of 1882," at Albany, September 14th, and he won it easily in straight heats, quite outclassing his only opponent, and not having to go faster than 2:45 to win. This was his only start in 1885, but he was a colt that took his work well and showed steady improvement, and was quite a "bread-winner" in our stable the following season, although he contracted a severe cold crossing the mountains that year. His initial race was at Maysville, Kentucky, August 18th,

in the 2:35 class, and there were among others in the field Baron Wilkes, Strathblane, Oriana and Guitar, that are all performers of good reputation. St. Bel won in straight heats, trotting the first heat in $2:28\frac{3}{4}$, the time of the other heats being 2:30 and 2:31. Two days later he started in the 2:27 class, the best material in the field against him being Astral, that has now a record of 2:18, and Olaf, present record 2:22. St. Bel had not shown liking for trotting in company. He suffered all summer from the effects of his cold and lacked education especially in scoring. He would break badly in starting, and as a temporary expedient I put a little weight on him and it did steady him, but took away some of his speed. Olaf won the first and second heats in 2:23, 2:241, St. Bel second in each, and in the third heat St. Bel beat Olaf to the wire in 2:243, but the latter won the deciding heat in $2:22\frac{3}{4}$. On the 25th, St. Bel easily beat a field of six in the 2:35 class at Covington, in straight heats, in 2:27\frac{3}{4}, 2:29, 2:29. Three days later he got third place in a field of ten, the winner being the bay gelding Clipper. It was a five-heat race, and St. Bel did better in the last heats of the race than at the beginning for he was always resolute. Greenlander won the first heats in 2:244, 2:25, St. Bel being seventh and eighth. The third heat Clipper won in 2:231, Greenlander second, and St. Bel fourth. In the fourth and fifth heats St. Bel beat Greenlander out, finishing second in each. He did himself credit, for though he had scarcely speed enough that day, he showed great stamina. The horse that fights a game and determined losing battle meets the true race-horse test. In his next race St. Bel demonstrated that he was a stayer in a still more emphatic manner. This was at the Cleveland Fall Meeting, September 15th, when we started him against a strong field of aged horses in the 2:25 class. St. Bel was only four years old, while with the exception of Issaquena, five years old, the others ranged from seven up, and with a single exception every one has a record faster than 2:24, Hiram Miller, $2:22\frac{3}{4}$, and Billy, $2:23\frac{3}{4}$, making their records that day. Hiram Miller won the first heat in 2:23\frac{3}{4}; Lottie K, second; Hunter, third; Wallace, fourth; Mambrinette, fifth; St. Bel, sixth, and Little Billy, Issaquena and Justina bringing up the rear. Little Billy won the next heat in $2:27\frac{1}{4}$, and in the third heat St. Bel drove him out in $2:23\frac{3}{4}$. Then St. Bel went on and beat his field gallantly in 2:25, $2:25, 2:25\frac{1}{4}$, outlasting and outtrotting them all at the end. The next day it was raining when a gentleman and lady came to our stables to look over the horses. They were Mr. J. C. Sibley, of Franklin, Pa., and Mrs. Sibley, and having been in California the conversation turned on Electioneer. In speaking of his sons I said: "I think St. Bel will make a great stock horse," and referred to his exceptionally good action. When my visitors left I had no idea that they thought of buying St. Bel, but shortly after the purchase was made, and Mr. Siblev secured him for \$10,000—perhaps the best bargain that ever went from the Palo Alto stables.

From Cleveland we went to Albany, where St. Bel had a walk-over, and then made our way southwest again for the great St. Louis Fair, where our stable had important engagements. St. Bel started, October

5th, in the 2:25 class, against Astral, Alert, Consul and other seasoned campaigners. Astral and Alert were the favorites, and the former won the first heat in 2:22½. In the second heat Astral and Almont led into the stretch, but St. Bel finished strong on the winner's wheel in 2:24, Almont getting the heat; and the third heat St. Bel beat Alert home in 2:25. I drove for the next head and led to the turn into the stretch where St. Bel made a wild break and lost a great deal of ground, but he went fast after he got his feet again, finishing second to Astral in 2:22½, and the big mare just beat him out in a driving finish in the last heat in 2:23.

St. Bel is a handsome black horse, a trifle under the medium size, but very compact, stoutly muscled and highly finished. He is one of the purest gaited, and, perhaps, the most perfectly balanced horse that I ever sat behind, and, as for his speed, I can say that I think I have ridden behind him as fast as I ever rode in a sulky. He wore ten-ounce shoes in front as a rule. As I have already mentioned, St. Bel could never do himself full justice in his last campaign. He developed a splint that season which made us cautious, and interfered with his training, and, besides, he suffered all the season from the effects of a cold contracted in crossing the mountains. Though, for these reasons, he could not do himself full credit in the matter of speed alone, his gameness and resolution made it necessarv for another horse to have a good deal more speed than he had to beat him when the heats were split. He is what I may call a round-gaited horse; his gait is perfect for a race horse, true, rapid and direct, without the slightest friction. He seems to roll along without effort, right on top of his gait as if it were a wheel, and when he increases his speed to its utmost limit there is no sprawling, spreading, or striking a certain position, but just a gradual, smooth increase after the manner, as I have said of Elaine, of a wheel gathering speed from its own momentum. He has a splendid head-both as to its beauty and as to the quality of brain—and this, in addition to his compact, muscular make-up, his pure action and his great blood, should make St. Bel a successful sire. I shall expect to see him prove like Electioneer in power to get trotters out of thoroughbred mares, or, indeed, out of almost any kind of a mare, while from choice selected mares his colts should be sensational young trotters

CHAPTER X.

THE GREAT FOUR-YEAR-OLDS OF 1886—MANZANITA AND PALO ALTO—THE BREEDING, TRAINING AND HISTORY OF MANZANITA—THE MEMORABLE THREE-YEAR-OLD BATTLES OF 1885—MANZANITA BEATS PATRON, SILVER-ONE, EAGLE BIRD AND GREENLANDER AT CHICAGO—THE SMART MEN DISCOVER A "QUITTER" AND PAY FOR THE INFORMATION—THE MEMORABLE RACE FOR THE GASCONADE STAKES AT THE ST. LOUIS FAIR—PATRON WINS THROUGH BAD STARTING—A GREAT STABLE IN 1886.

The main reliance of our stable in its successful campaign of 1886 was placed in the two great four-year-olds Manzanita, full sister to Wildflower, and Palo Alto, by Electioneer, out of the thoroughbred mare Dame Winnie, by Planet. Manzanita was faster than Palo Alto as a four-year-old, and indeed the fact is that had she stood training to his age she would most certainly have taken a record closer to 2:10 than 2:12. There was no four-year-old of her year that could give Manzanita a race, and her easy defeat of Patron demonstrated that fact so conclusively that our good Kentucky friends could almost see it. Barring Patron, it is doubtful if any four-year-old outside of our stable could beat Palo Alto, so that we had the races for that age practically at our mercy. But this

condition of things was not without its disadvantages, for Manzanita and Palo Alto were compelled to trot, if they trotted at all, against aged horses, and in considering their campaign the reader will not forget that (except in stake races for four-year-olds) they were compelled to concede years of age to their opponents; and whatever we may believe as to mere speed, age undoubtedly tells in a long and trying race.

Taken on her public performances alone, Manzanita must be adjudged one of the most remarkable trottingmares that this fast age and the fast family from which she sprung has produced, but to fully appreciate her real worth one must know what the public does not know-must know the ailments and the mishaps, in spite of which she was the champion of her age; and after all she has publicly accomplished under these handicaps her real capacity has never been shown to the world, for she broke down just at the height of her powers, and when to an absolute certainty she was on the eve of trotting to a record faster than any mare, with the single exception of Maud S. and Sunol, has ever made. This may not meet the approbation of some critics, who, knowing nothing whatever of the real facts concerning Manzanita's history, her speed or her capacity, and who may have seen her in one race or who may have never seen her at all, presume to judge of her adversely, basing their whole judgment on the cast-iron and preconceived opinion that nothing great could come from her "plebeian-bred dam," Mayflower—that the blood of St. Clair must necessarily carry "softness" with it. However, as I trained and drove this great mare throughout her career, I will, I

trust, not be considered presumptuous in assuming that I have had a rather better chance to form a correct opinion of what class of trotter Manzanita really was than the general public have had, and the estimate I have given above of her quality is a conservative one. If it errs at all it errs certainly not on the side of flattery.

Mayflower, the dam of Manzanita, "encumbered with fore-shoes which weighed nearly two pounds each, and with rolls of shot almost as ponderous on each fore pastern, made a mile in 2:30½" back in the days when that was "about the top-notch in California." Her first foal, by Electioneer, was Maybell, the dam of Maralia, 2:25½; the second was the distinguished Wildflower, whose history has already been given, and the third was Manzanita. She was foaled February 2, 1882, and grew into a splendidly-made light bay mare, about 15 hands high, with a well-cut head, a long, nicely-shaped neck, heavy shoulders, lengthy barrel, with a strong though rather straight back and stout, muscular quarters; and her "traveling-gear" was good from the ground up.

Manzanita was broken in her yearling form and showed great promise on the miniature track. If it was true that "lot-trotters" never amount to anything, we should not have taken the trouble to train Manzanita, but we did not pay any more attention to such "wise old saws" then than we do now. She kept on improving until I left for the East in 1883, but on my return the boys had a sorrowful story to tell about the mare whose future we had all built hopes upon. They assured me that she "was no good," that she "could

not untrack herself," and, to cap the climax, they pronounced her "foundered." However, I did not give her up as wholly degenerate; in four or five months there was no sign of "founder," and she could show me a quarter in 0:42—or sav, a 2:50 gait. In her yearling form she attempted to come out of her box when the upper half-door was closed. She got her foreparts out all right, and then naturally raised herself, the door taking her across the back at the most sensitive spot—right over the kidneys. The result was that her hind parts were practically paralyzed, and the sprawling and dragging-motion of these parts plainly pointed to severe injury across the loins and in the region of the kidneys. It took two months of assiduous treatment and care before she could jog well; and, indeed, I cannot say that she ever recovered from the injury. for, as will be seen further on, she was attacked more than once with this partial paralysis in her campaigns. After we had gotten her, seemingly, over this disaster, and she could trot along in about 2:40, another barrier loomed up across her path. She threw out a nasty curb, and I thought of giving her up for the year. But after looking over the material I had in training, I could not reconcile myself to the idea of turning the filly out-for, in spite of her ill-luck and consequent backwardness, I liked her—and decided to endeavor to keep on training her and treat the curb at the same time. The double task was successfully accomplished. I cured the curb with iodine—the application of which I will refer to at another place—and on the day that Sallie Benton lowered the four-year-old record to 2:17¾ I drove Manzanita to a two-year-old trial of 2:25

She accompanied the stable East in her three-year-old form, and had walk-overs in her two first engagements—the Annual Nursery Stake and the Stallion Stake for three-year-olds. The stakes were worth \$1.250 and \$750 respectively, and we were "in luck" in having no opposition, for the mare was far from right. Her old ailment, partial paralysis in the rear quarters, attacked her, and she grew worse before we left Albany, so much so that I hesitated about shipping her to Chicago with the rest of the stable, fearing the risk. However, she went with the stable, and rounded to sufficiently to start at Chicago. September 25th, though she had not wholly recovered from her Albany sickness.

The field was the best three-vear-old material of the year. Patron, Silverone, Eagle Bird and Greenlander are names that all trotting horsemen will remember as giants of the three-vear-old class of that great threeyear-old year 1885. George Fuller was behind Patron, Crit. Davis drove Greenlander, Maxwell took care of Silverone, and Eagle Bird had the advantage of Budd Doble's piloting. Before the first heat Eagle Bird was the favorite, Manzanita second choice, while the afterwards mighty Patron was the outsider in the betting. We scored nine times before we got the word from Charles M. Smith, the starter, and Patron at once rushed to the pole, and led to the home-stretch, where Eagle Bird closed up, and I also sent Manzanita up to Patron's head. There was a short and sharp fight in the stretch, but Manzanita beat the Kentucky-bred youngsters at the finish, winning the heat in $2:23\frac{1}{2}$, Patron beating Eagle Bird for second place. In the second heat Manzanita got away a little back, but regained the pole before they went a quarter, and coming on won without any great exertion in 2:231 from Eagle Bird. The backers of Eagle Bird and Patron were now in trouble, and Manzanita sold a three-to-one favorite over the field. The next was a warm heat, as a blanket would have covered Manzanita, Patron and Eagle Bird from the start to the three-quarter pole, where they were racing head and head. Half-way up the stretch I had Patron and Eagle Bird beaten, and begun to ease up a little, when Silverone unexpectedly came with a great rush, carried Manzanita to a break, and won by about a length in $2:25\frac{3}{4}$. Silverone, I rather think had the speed of the party that day, but had to go back to the one-eighth to score, which killed her chances. Now all the wise men of the turf talked of Manzanita, and were dead sure she was "a quitter" and "done for," and acting on the hasty conclusion dumped good money into "the box" against her. would have been just as well invested in Lake Michigan, for in the last heat Manzanita made the pace so strong from the half that she had things her own way in the stretch, and won by two or three lengths in 2:243.

The "talent," after losing hard in learning the simple lesson that it is a fool's act to jump at sudden conclusions, had a tiresome and disconsolate task in figuring out how it was that a sore three-year-old filly trotted two heats in 2:23½, quit in 2:25¾, and then, after being "dead beat," "quitting," "setting down," and all that sort of thing, came back easily in 2:24½ in the fourth heat. There is this peculiarity about men whose

chief sharpness consists in finding quitters. They first look at a colt's breeding and they find a strain that some old campaigner has sworn by all the stable-oaths is "soft." They put it right down in their book that that colt not only will quit but must quit. Then when he comes on the turf they, before they have ever seen him, solemnly impart the information to all their friends that that colt is a quitter. And it don't matter how he trots, win or lose, whether he is a game one or not, whether he is sick or well, whether he loses a heat by an accident, by a break, or is beaten by a speedier horse, these sharp turfites, having once said that a horse must be a quitter, consider themselves under a solemn obligation to carry that belief intact to their graves. And every time they back their theory and lose, they believe in it all the harder, like the Salvation Army men who declare that unless we keep on "believing hard" we will lose our faith. Nothing will convince some talented observers of trotting-horses that they ever made a mistake about anything, and especially about "quitters" that they know nothing of. I have often, in remembering the criticisms passed on Smuggler and Manzanita, thought, "What fools these mortals be."

The close and logical observer will never jump at a conclusion about the qualities of a race-horse. You must see him not in one race, but in several races, and you must know about his condition in his races before you can determine that a horse is faint-hearted. The most resolute horse in the world will not trot resolutely if he be ailing, and he cannot trot resolutely if his physical machinery be out of repair. The gamest

horse will "stop" if short of work, and if you do not know that he has had sufficient work, that he is not sore or sick, how are you going to know whether he "stops" from physical causes, or from true quitting, which is a mental quality—cowardice, faint-heartedness?

Manzanita's next race was at the St. Louis Fair of 1886 in the Gasconade Stake, and that race will long be remembered as a battle royal between the best field of three-year-olds that has perhaps ever faced a starter. The field against Manzanita was composed of Patron, driven by Fuller; Silverone, driven by Maxwell; Eagle Bird, with Simmons in the sulky; Iona, driven by Bowerman, and the two Princeps stallions Granby and Greenlander-all the best three-year-olds of the vear, in fact. There were 100,000 people on the Fair Grounds that day. Eagle Bird got away in front, with Manzanita second, and she disposed of Mr. Simmons' roan stallion at the half. Patron made a strong fight in the stretch, but my mare carried me home in front with something to spare in 2:23\fmu. In the next heat it was Silverone that challenged Manzanita in the stretch, and she came so fast that the Blue Grass cheers began to swell, but they died away with true Kentucky loyalty when Manzanita beat the great daughter of Alevone out in the final tussle in 2:241. When Manzanita came out for this heat she was so sore that she could scarcely put one foot on the ground, but she warmed out of it in jogging. Mr. H. D. McKinney-better known as "Mambrino" McKinney—the starter, was thinking so much of the Mambrino blood in Patron that in starting the third heat he forgot the very first of a starter's

duties—to protect the pole-horse. Patron was sent away in front, lapped by Silverone and Eagle Bird, with Manzanita away back and shut in at the pole. The start was so unfair that even the local reporters noticed it, and the turf papers mentioned the fact in their reports. In trying to rush the mare through to the position that the starter deprived her of I forced her to a break, and being shut off, eased her up and did not drive for the heat, which Patron won from Eagle Bird in 2:23½. The public, seeing that Manzanita was not beaten on her merits, still kept her favorite in the betting. Patron was now the polehorse, and he was very carefully protected, getting away in front, but I brought Manzanita up from the rear and carried him to a break before the half was reached, and led to the three-quarters, with Silverone and Patron close up. We were all driving for all we were worth in the home-stretch, but Patron left his feet, the two mares fighting it out to the finish, with Silverone just beating Manzanita in 2:241. Both Silverone and Manzanita broke as the word was given in the fifth heat, and I at once saw that it was best to lay up that heat, wherein Silverone went on and drove Patron out in 2:243. The starter again "took care" of Manzanita in the sixth heat, and gave a start that can only be explained on the theory that he was so much interested in the great race that he failed to watch the field closely. Even yet so plain was it that Manzanita with a fair start could win, that she sold in the pools for \$25 to \$20 over the entire field; but in this last heat, though it was only the first score, and Manzanita ran all the way up the score, the

starter gave the word, sending her away on what the Chicago Horseman properly called "a wretched break." She was a good distance out before she settled, and of course her last chance was killed by the disgracefully bad start. Patron won in 2:26½. Patron was a good horse, and a courageous horse, but it was not Patron that beat Manzanita that day. Patron met Manzanita only twice under fair conditions and she beat him both times, and had she been given an even start she would have beaten him that day, just as decisively as she did a year later. And in saying this I am not detracting from the merits of Patron in the least. I always admired him as a true, good horse, and next to Manzanita one of the best of the youngsters of 1885 and 1886.

At the close of the St. Louis Fair we shipped our stable across the mountains to seek refreshment in the winter-summer of their home fields, and to prepare under California's genial skies to make greater conquests in 1886. And when we were ready to start East again we had the most formidable stable of young trotters that ever crossed the Rockies. There were in it Manzanita and Palo Alto, then just about invincible in their class; Hinda Rose, who shared with Patron the honor of the fastest three-year-old record; the good four-year-old St. Bel, and his two-year old brother Chimes; the promising three-vear-old Sphinx, and the two-vear-old Suisun, one of the best youngsters we have trained. These were all by Electioneer, and "though stars of differing magnitude," they were all stars in their classes. It was natural that we should have expected a very successful campaign with

this material, and the best evidence of the realization of our expectations was that furnished by the National Association of Trotting Horse Breeders of deciding to in future bar California colts from their stakes.

CHAPTER XI.

MANZANITA AS A FOUR-YEAR-OLD—A RACE LOST BY LAYING UP HEATS—SHE STARTS AGAINST A GREAT FIELD OF AGED HORSES AT CLEVELAND—LOWERS THE FOUR-YEAR-OLD RECORD TO 2:164 — BEATS EAGLE BIRD EASILY AT MAYSVILLE—DEFEATS GREENLANDER AT LEXINGTON—THE FOUR-YEAR-OLD RECORD LOWERED TO 2:16—WINNING FROM GREENLANDER AND HAVERSTICK IN A JOG—THE GLORIOUS VICTORY AT THE ST. LOUIS FAIR OVER PATRON—THE DEFEAT OF 1885 WIPED OUT, AND MANZANITA'S SUPERIORITY AS THE GREATEST OF FOUR-YEAR-OLDS ESTABLISHED—HER RETIREMENT—HER GREAT QUALITIES AS A RACEMARE.

Manzanita's first start in her memorable campaign as a four-year-old, was against a field of aged horses in the 2:24 class at East Saginaw, Michigan. As elsewhere related, on my return from New York, where a consignment of our horses went for sale, I found the trotting stable sick at Louisville, and, after the horses rounded to and were well over the effects of the long journey, we went to Kalamazoo. From there we shipped to East Saginaw to take a hand in the meeting at that place in July. Palo Alto began the campaign for the stable by beating Wilton, Lucy Fry and a good field, in fast time, on the 15th and 16th, and Manzanita's race was set for the 17th. The story can be

easily told. I laid Manzanita up in the first two heats which Belle Hamlin won in 2:21\frac{1}{4} and 2:22\frac{1}{4}. This left me in sixth place for the third heat and I drove for it. From the first turn the two mares had it nip and tuck; it was head and head up the stretch, and Belle just won in 2:184. Manzanita was separately timed in 2:18, and she went a long mile, trotting around the field in the first quarter. I laid up the first two heats according to an agreement which certain other parties failed to respect, and, undoubtedly, the breach of faith gave Belle Hamlin the race. The two mares far outclassed the rest of the field. Had both gone for it from the start, Belle Hamlin, with her advantage of three years in age—she then being seven—would have made a great race with Manzanita. From East Saginaw the scene shifted to the Grand Circuit tracks, and, in the 2:23 class, at Cleveland, July 28th, the two mares met again, and again the diplomatic owner of Belle Hamlin got the money. Besides the mares there were in the field such hardened campaigners as Longfellow Whip, Lowland Girl, Spofford, Charles Hilton and Kitefoot—rather formidable company for a fouryear-old filly to fight, especially in combination. scoring for the first heat Hilton upset Hickok out, and ran away, and he, of course, was drawn. When the word was given Belle Hamlin and Lowland Girl had the best of it, and went away at a hot pace, going to the quarter in 0:34, and the half in 1:08. I trailed about a length behind Lowland Girl, and my mare was going easy enough to satisfy me that Belle Hamlin would have to go another half in 1:08 or I should have a word to say about the finish.

Now Lowland Girl gave it up, but Belle kept up the clip fast and hot, and at the three-quarters, in $1:42\frac{3}{4}$, we were lapped. In the stretch I called on Manzanita, and after trotting head-and-head for nearly a furlong with Belle Hamlin, the latter "cracked," and Manzanita won in $2:16\frac{1}{4}$, lowering the four-vear-old record by one and one-half seconds and trotting the last quarter in thirty-three and one half seconds—a 2:14 gait. The next heat Belle Hamlin was laid up, and Lowland Girl and Longfellow Whip undertook to entertain me during the journey, my mare winning in 2:191/4. Manzanita broke at the first turn in the next heat, and I laid her up, Belle Hamlin winning from Spofford in 2:18½. A number of the drivers now began getting in fine work on the score, the judges failing to show ability to control them; and finally Colonel Edwards let us go, with Belle Hamlin well in the lead and Manzanita away back of the field. I again saw it useless to move for the heat, and Belle was never headed, winning in 2:19. The race was then postponed until the next day. The most shameful scoring was permitted by the judges in the deciding heat, and when they were finally sent off at the twenty-fourth score Belle Hamlin was in front, and none of us could ever catch her. She won in $2:18\frac{1}{2}$. The Spirit correspondent, in commenting upon this heat, said: "Manzanita never had a fair show to get at her (Belle Hamlin), but it would have been in vain, anyway. When she has a couple more years on her head she can, if right, give Belle Hamlin or any other in her class a red-hot race."

These two races against aged horses convinced me that we had a gem of the first water in Manzanita.

especially as she had little fast work in her preparation. When I get a four-year-old that can go in the old and tried company she did, where every heat is better than 2:20, I am satisfied, for it has been one endeavor of my life to be a reasonable man.

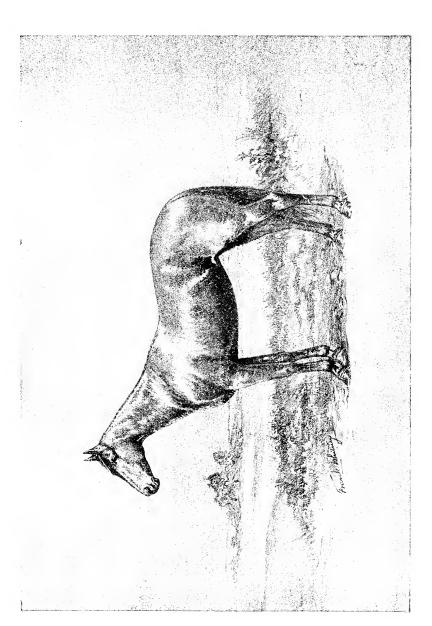
We left the Grand Circuit line for the South, the colts having engagements in Kentucky, and Manzanita's next race was in a four-year-old stake at Maysville, August 26th, where her only competitor was Eagle Bird, who could not give her the semblance of a race. I gave her three easy miles in $2:25\frac{1}{4}$, $2:25\frac{1}{4}$, 2:22. Her next race was one of the same kind, in that she had nothing near her own class against her. This was at the Lexington Fair, September 3d, in the Association Stake for four-year-olds, and Greenlander was the only competitor that faced Manzanita. I jogged the mare the first two heats in 2:22 and 2:221, and then distance was waived, and I drove her the mile, without a skip, a falter or a waver, in 2:16, lowering her own record by a quarter of a second and making a fouryear-old mark that stands unbeaten to this day, and one that has never been equaled or even approached in a race. This race was followed by a walk-over at Albany, September 21st, at the meeting of the National Association of Trotting-Horse Breeders. As Palo Alto, St. Bel, Sphinx and Chimes also had walk-overs at this meeting, our Eastern friends practically conceded that they could not compete with our colts by deciding to bar them from their stakes in future.

From Albany we turned southward and westward again to trot at the Lexington breeders' meeting, and at the "Great St. Louis Fair." Manzanita easily beat

August Haverstick and Greenlander in a four-year-old race at Lexington in slow time—for her. We started Hinda Rose against Patron, and the latter won comfortably enough in $2:20\frac{1}{2}$, $2:21\frac{1}{2}$, and $2:24\frac{1}{2}$, Hinda Rose winning the first heat in 2:21\frac{1}{4}. In their three-vear-old form the two duels of Patron and Manzanita had been the great features of the colt-racing of 1885, and in a manner honors were easy, each once defeating the other. All this made the prospective meeting between them at St. Louis, to settle the question of supremacy and demonstrate which was the greater four-year-old, one of intense interest. Patron's fine form at Lexington was encouraging, and our Kentucky friends were impatient to see the apple of their eye make the Palo Alto mare "set down," as they would have it, at St. Louis.

So, when Patron and Manzanita met on October 2d, it was the event of the day. It is said that there were many more than one hundred thousand people on the ground that day, and I never remember to have seen so dense and interested a crowd as was packed on all sides when we scored for the word. The night before, and the day of the race, the Patron party were fairly bubbling over with confidence. My mare had improved steadily with every race, and, although I did not shout it on the grand stand, I felt sure that she was better that day than she had ever been before. My friend, George Fuller, the driver of Patron, was all confidence, and kindly informed me in advance that "Patron was going to make Manzanita set down," and that he was backing his horse well. I told him that my mare was right, and that neither Patron nor any other

four-year-old could make her "stop." As a friend I advised Fuller in all sincerity and candor not to back his horse for very much, and I further expressed my belief that he and indeed all the Patron people overrated their colt and under-rated the mare. shrewd horseman, Colonel John W. Conley, was one of those who backed Manzanita. When talking with a party, an enthusiastic Patron man told him that Patron had "gone a half in 1:08." Conley quickly rejoined: "But Manzanita went two halves in 1:08 the other day." Colonel Conley came to me for my opinion that day, and told me that Fuller assured him that he would certainly "make Manzanita stop." I told the Colonel that if Patron beat Manzanita that day he would see the greatest four-year old race that was ever seen on earth. The Colonel stuck to the mare with confidence and pluck, while all the gentlemen who had discovered her "soft spot" a year before, with customary fatuity, bet their money that she would "stop." The betting was even before the first heat, with Eagle Bird, who was of no consequence in the race, almost unbacked at any price. I mention these details of betting and of opinion for the reason that it was said after the race that Patron was not right. Now if he was not himself why did his driver and his friends bet their money with such freedom and confidence? Surely Fuller, his trainer and driver, knew whether he was right or not. He was a good horse a little while previous at Lexington, and I have not any doubt that he was as good a horse that day as ever he was up to that time. It took a good four-yearold to trot the race he did, and the simple explanation



MANZANITA. RECORD AT 4 YEARS 2:16.

of it all is that he met his master, and his friends sought quite unsuccessfully to find an excuse for a performance that needed none.

As to the race, Patron had the pole and Eagle Bird the outside, with Manzanita between them. Mr. McKinney, the starter, had trouble in getting us away. and warned me to keep Manzanita well back, which would have been easier to do if the others could score with her. Finally, after about a dozen scores, the starter succeeded in getting the field of three off fairly well, and Fuller at once started out "to make something crack." I laid Manzanita right at Patron's shoulder, and, when he passed the quarter in 0:34, I was enjoying a comfortable ride. Now he made the pace hotter, but at the half, in 1:074, Manzanita was hugging him still closer, and I had not made a move behind her vet. I was not very anxious when we passed the three-quarters, locked head and head in 1:41½, for the mare was going something within herself and Patron was out to the last link and straining hard. The pace was hot and fast, but the mare never flinched. Turning into the stretch I said jocosely to Fuller, "Hit him on the back." Fuller looked around with an expression I shall not forget, and shouted, "I'll beat you yet," whereat I answered, "Well, let us go along a little this heat," for I did not realize how fast we had trotted it so far. Manzanita abated not in her speed in the stretch, but maintained the killing pace with absolute evenness, and, though Patron made a game struggle, he was not the filly's match, and broke just the wrong side of the wire, Manzanita winning in $2:17\frac{3}{4}$. The filly cooled out to please me, did not

"blow" the least, and I considered that race as good as won. I found in the previous heat that the footing was best just about one position, or sulky-width, from the pole, and as soon as the word was given in the second heat I took that ground. I did not drive the mare any faster than was necessary, allowing Patron to keep close company, and won it in hand by half a length in 2:193. Fuller now saw he was beaten, but I afterward heard that the owners of Patron gave him great encouragement in the remark: "You have always said you can make her stop, and we believe you can." The heat had been an easy one, and the mare showed not the faintest shadow of distress, but Fuller clung to the forlorn hope founded in the belief that Manzanita was a quitter, and so, in scoring for the third heat, he was full of "snap," and evidently intended to try to "make her set down" by hard scoring. We scored ten or eleven times very fast, but the wear and tear of this business was not telling on the horse it was intended for. Finally we went away with Fuller attempting to find that "soft spot" that was to help him out. He found it—but in the wrong place. At the word I again took the position I wanted and led Patron a merrier dance than he really enjoyed. We went down the back-stretch at a red-hot clip, with Patron under a hard drive and the mare gradually but surely wearing him down. The pace made his head swim, and just after we passed the half in 1:081 he gave it up in a tired, heart-broken break. He was an utterly beaten horse, and Manzanita came home alone in 2:20, far in front of Eagle Bird, who passed Patron after his collapse. The victory was brilliant, but the

race was a very easy one for Manzanita, and the work so helped her that she was fit the next day for the effort of her life. She clearly demonstrated her superiority over Patron, which was questioned after her race against him the year previous. We have not yet seen the four-year-old that could have beaten Manzanita that day. In the form she was when she played with Patron, she could out-trot and out-stay any four-year-old that ever lived. She had so much speed, and could rate so well from wire to wire that nothing of her age could have lived with her for a mile, and certainly no other horse could have even made as good an attempt, vain though it was, as did Patron.

As to Patron I may say here that I did not wholly like his gait. His stroke forward was quick, but somewhat spasmodic and peculiar. But he was a horse of great speed, determined and level-headed, and all in all was one of the greatest young horses that has yet campaigned. His defeats in his three and four-year-old form, by Manzanita, were nothing to his discredit. He had a superior, and it was no disgrace to lower his colors to the champion of his age. He was not first, but he was next to first. It has always seemed to me that Patron's misfortune was that his trainer, his owners and his friends have over-rated him as a turfhorse, and have asked of him what was beyond his capacity. Their confidence in his ability to beat Manzanita, at St. Louis, where she really had him at her mercy every yard of every heat, and in later times their attempting to beat Atlantic one day and "the demon," Clingstone, the next, and then asking him to campaign against so great a horse as Prince Wilkes, seems to me evidence of the lack of judgment to which I refer. A good horse on the turf, and grandly bred, he will be sure to gain further honor as a sire of trotters.

I have referred to what has often seemed to me one of George Fuller's occasional errors as a trainer—over-confidence—and it is not fair that I should not tell the rest of my opinion of him. To put it short I know George Fuller to be not only an able and very superior trainer, and a great driver, but, as a man, I have found him upright, honorable and manly—one whose word is as good as his bond, and for no driver have I more esteem, and in none have I greater confidence.

The victory at St. Louis was Manzanita's last race—a fitting close to a very brilliant career. We trained her the following year with the intention of driving her against St. Julien's California record, 2:12½. She took the preparation very well, and all was ready for the attempt at Los Angeles that fall. But I gave her a last trial and it proved one trial too much. I drove her a quarter in 0:30¼, and she shortly after broke down in a pastern suddenly and beyond repair. I have not the least doubt that not only would the 2:12½ of St. Julien been beaten, but that she would most certainly have taken a record of from 2:10 to 2:11½. This is no wild estimate, without foundation, but a conservative and safe conclusion based on what she actually did in her work.

Her retirement at the early age of five was unfortunate, in so far as her own record goes, for had she trained on to the age when the average horse is in his prime Manzanita would have surprised all but those

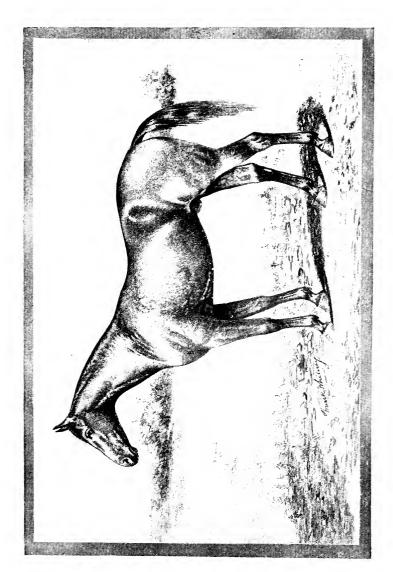
who knew her best. She improved with age, and was of the kind that would go on improving. She was a good feeder; had pure action, carrying ten-ounce shoes forward; had nerve-force enough without being fretful or irritable; improved under the wear-and-tear of a campaign; had a good, level head; was a good actor under all circumstances, and would go to her utmost limit on her courage. She had, in short, all the essential qualities of a great race-mare. As to her gameness, all I have to say is that I knew her through and through, and when she was fit and well she was game enough to suit me, and I am not suited very easily in that regard. I do not know of any mare I would sooner trust for a brood-mare than Manzanita, and with life and a fair chance in the stud she will be pretty sure to produce something that will do credit to so great a dam. She started eleven times, was victorious eight times, and two of her defeats were by an aged horse. She had not the cheap honor of being the best racer of her age in a bad year. As a three-yearold she met giants—met the best fields of three-yearolds that had ever come out in one year, and captured more than her share of honors; and she did not stop there, but came out as a four-year-old and demonstrated in the most marked degree her unquestionable superiority over the same champions with which she battled as a three-vear-old, and she lowered the fouryear-old record to a point which none have surpassed. That is glory enough to retire upon and laurels bright enough to remain forever fresh and green in the annals of the trotting-turf.

CHAPTER XII.

PALO ALTO, THE SON OF THE THOROUGHBRED MARE, DAME WINNIE—HIS EARLY PROMISE—THE NAME OF "PALO ALTO" ENTRUSTED TO HIM TO UPHOLD—ALMOST A CLEAN SWEEP IN HIS CLASS IN 1886—BEATING AGED CAMPAIGNERS IN LONG RACES—ONLY ONE DEFEAT—AND EIGHT VICTORIES—NARROW ESCAPE FROM DEATH BY FIRE—THE BRILLIANT CAMPAIGN OF 1889—INVINCIBLE AND UNBEATEN—RECORD, 2:124.

The second of our great four-year-olds in the 1886 campaign was the now famous Palo Alto, whose record of 2:12½ was one of the sensations of last season. Palo Alto is further noted as being the only horse out of a strictly thoroughbred mare that has ever beaten 2:20; and his performance demonstrates that it is quite possible to unite the blood of a positive and potent trotting sire with that of a good representative of the running race-horse, and get the action of the trotter combined with the finish and quality of the thoroughbred.

Palo Alto was foaled February 15, 1882, and was got by Electioneer out of the thoroughbred mare Dame Winnie (the only thoroughbred mare that ever produced three trotters to beat 2:30, and one to beat 2:20), by Planet, next dam by imported Glencoe, and she out of a daughter of imported Margrave, etc. We



PALO ALTO. RECORD 2124.



began working "the Dame Winnie colt" as the others were worked, in his yearling form, and he trotted from the start. At two years old he came directly under my charge, and his improvement was marvellous. Excepting Sunol we never had a two-year-old so promising as Palo Alto, and for those who do not believe that those that trot young train as a rule, it will be in order to note that these two most precocious youngsters have the fastest records to the credit of Electioneer. He could trot a quarter in 0:33 as a twovear-old, and he showed us at that age a full mile in $2:23\frac{3}{4}$. After that he was named Palo Alto, for then Governer Stanford thought him worthy to bear the name of the farm. He was always a favorite with the Governor, owing to his high form and his breeding, but he would not confer the name Palo Alto upon -him until he showed himself worthy of it. His twoyear-old trial met the requirement.

In his three-year-old form Palo Alto was still a great colt, but not as good, relatively, as in his two-year-old form, and until the past season (1889) he has never seemed to me to come up to the high promise of the time when he was enthusiastically named Palo Alto. The spring that he was four years old he was a very sick horse, and though his campaign of that year was splendidly successful, he was not the horse he would have been had he suffered no set-backs. That season, too, he developed a nasty splint, which at times troubled him quite seriously. He was also lame in the hip that spring, and, on Fuller's advice, I consulted the noted veterinarian, Dr. Sheppard, who located the trouble and successfully prescribed treatment.

Palo Alto opened our campaign of 1886 auspiciously at Kalamazoo, and he also rounded it up victoriously at St. Louis. His first start at the former place was on June 29th, in the 3:00 class, against Victor, by Hermes, and four or five others. Palo Alto won very easily in $2:32\frac{1}{2}$, $2:33\frac{1}{2}$, 2:33, outclassing his field entirely. July 1st we started him in the 2:40 class against a better field, comprising among others Col. Bowers and the good mare Anniversary. We won the first two heats comfortably in 2:30½ and 2:30¾. I was aware that the Grand Circuit was ahead, where the colt would have to go against aged horses, and I wanted to win without putting him out of the 2:30 class. third heat Anniversary crowded me so hard that I slowed up to avoid beating 2:30, and the public jumped to the conclusion that she "could win if she wanted to." In this heat Col. Bowers ran away, throwing out his driver, McLaughlin, and breaking several of his ribs. The judges called it no heat. In the next heat I went off at a hot pace, and trotted to the three-quarters in 1:45—a 2:20 gait—and then almost walked home in $2:29\frac{3}{4}$, to show the public whether Anniversary "could win if she wanted to" or not. Our next battleground was the fast track at East Saginaw, where Palo Alto struck hot company in the 2:29 class. There was that good horse Wilton that in his next race made a record of 2:191, and the fast Blue Bull mare Lucy Fry, 2:203 (whose dam was the well-known old gray campaigner, Kitty Bates, 2:19), besides Frank Middletown and others. I had third position at the start, Lucy Fry being between me and the pole-horse, Wilton having the bad luck to draw the tenth and last place in

the field. It was not unusual for Palo Alto to blunder a little in the first heat of a race, and he lost his feet just as we got off. Wilton shot to the front before we had gone far; Lucy Fry and Palo Alto chased him up the stretch, but failed to catch him, Wilton winning in 2:24, with my colt second. Wilton and Palo Alto had it to themselves from the start in the second heat, and trotted like a team nearly the whole route. Mike Bowerman called on Wilton in his most energetic and approved style for a finish; I did not give Palo Alto any peace either, and he won the heat for us pretty handily in 2:22. It was now late, rapidly getting dark, and the judges postponed the race. The next morning was warm and the track was fast. The race was confined really to Wilton, Palo Alto and Lucy Fry, the rest having no chance with these. Lucy was quick at the start, and generally got away in front of us. but in both the third and last heats she was overtaken by Bowerman with his pony, and myself with the fouryear-old colt, before she got much more than round the first turn. In each heat Wilton made a great fight, and the two horses were so closely matched that the slightest mistake might have changed the result. both heats I managed to beat him in the last hundred yards by very hard driving, the time being 2:22 and 2:204. This race showed that Palo Alto was a good race-horse, for Wilton had just as much and probably a shade more speed than Palo Alto then had, and he had, moreover, the advantage of two years in age. A four-year-old record of 2:201 in a fourth heat would have been highly creditable under much more favorable circumstances.

The close and exciting contest at East Saginaw showed Wilton and Palo Alto to be pretty well matched, and as both were entered in the \$5,000 stake for the 2:30 class, to be trotted July 22d at Detroit, that event became decidedly interesting. Palo Alto had not had a sufficient preparation to meet the strain of a fighting-race like that at Saginaw without feeling its effects, and he was not as good a horse at Detroit as he was at Saginaw. He was a trifle muscle-sore, and consequently unsteady when the pinch came. There were only five starters in the race, the now famous Guv with Splan behind him being one, but about all the good he did that day was to make trouble at the start, and give exhibitions of various ways of going, exclusive of the trot. He has kept up his reputation, though when he takes it in his head to trot he is "a whirlwind" sure enough. Palo Alto went into the air at the start in the first heat, and I just steadied him and made no move for the heat. Wilton never was headed and won in fine style in 2:193. The next heat I kept Wilton pretty close company all the way, but Palo Alto left his feet in the stretch and lost the heat in 2:19\frac{1}{4}. In the third heat Palo Alto made a still better fight, and had the best of it at the head of the stretch. He carried Wilton to a break, but just at the critical moment he broke also, by which time Wilton had recovered and come fast to the wire, winning the third heat and the big stake in 2:20 flat. Palo Alto was beaten, but he was by no means disgraced in this the only defeat he has ever met. Indeed this race is a brighter mark in his brilliant career than many of his easy victories for the best test a race

horse can meet is to make a good fight against odds, and struggle bravely and with undaunted courage throughout a losing battle.

Palo Alto's next race was at the Cleveland Grand Circuit Meeting, in the 2:29 class, July 22d. The field was not nearly of the class that he was in at Detroit, and, though he lost the first heat to Mabel A. in 2:23\frac{1}{4}, he won the subsequent heats too easily to call for any lengthy remarks. Clipper and Mabel A. were the best of the lot, and they finished, alternately, second and third, Palo Alto winning in 2:23, 2:22\frac{1}{4}, 2:21\frac{1}{2}, improving as the heats went on.

At Covington, Kentucky, August 28th, he met a fast field in the 2:20 class, among them being old Deck Wright, Tom Rogers and C. F. Clay. I decided that my best chance for victory was in letting the rest do the fighting for awhile, and so I laid Palo Alto up in the first three heats. Tom Rogers won the first in 2:20½, and Deck Wright the second in 2:22¼. As my time for action was at hand I trotted for a fair position only in the third heat, finishing third to Tom Rogers in 2:23½. Then I cut Palo Alto loose and won the race in 2:22¾, 2:25½, 2:24½, Palo Alto again demonstrating that his forte was staying rather than "sprinting."

At Cleveland, September 18th, he again met fast and thoroughly seasoned company in Harry Roberts, the perennial Deck Wright, Alert and George W. Deck Wright won the first heat in 2:20\frac{1}{4}, and Harry Roberts the next in 2:20. Then I got Palo Alto settled for business and he won the third and fourth in 2:21, 2:21\frac{1}{2}. The fifth heat I lost to Deck Wright, a boy frighten-

ing Palo Alto by running across the track. Darkness now stopped the contest, and it went over till the next Monday, with Palo Alto and Deck Wright having two heats each, and Harry Roberts one. The following Monday Palo Alto won the deciding heat and the race comfortably enough in 2:201. Two days later he "walked over" for a stake at Albany, and then we headed for St. Louis. Here he was brought to the wire again in the 2:20 class, the field against him being Charley Hogan, 2:18\(\frac{3}{4}\); Albert France, 2:20\(\frac{1}{4}\); Libby S., $2:19\frac{1}{4}$, and C. F. Clay, 2:18. I concluded before the race that some of these horses had a trifle too much speed for me, and that it would be better to let them work off a little of it between themselves, and reserve my effort until they came back a trifle toward my notch. C. F. Clav went off with a rush in the first heat, and Charley Hogan and Libby S. fought it out with him. Clay beating Hogan in 2:18. The same horses cut out the work in the next heat, but the mile in 2:18 took the fight out of C. F. Clay, and the finish was between Libby S. and Charley Hogan, Doble landing the latter winner in 2;20\frac{1}{4}. After we got by the half-mile post in the next heat I began to take a hand in the dispute with Palo Alto, and beat Libby S. home easily in 2:21. The fourth heat Libby S. and Palo Alto trotted neck and neck nearly the entire distance, and Palo Alto nearly lost it by a break in the stretch, but I caught him on time to snatch it out of the fire in $2:21\frac{1}{4}$. the next trip Horace Brown, the Buffalo driver, was put up behind Libby S., and in some way he and Van Ness, driving Albert France, got into collision at the first turn, and in the general confusion Palo Alto became "rattled" and made a very bad break, not settling until he was back of the field. Van Ness got out of the tangle best, and went after Charley Hogan, with Palo Alto hard on his track. But there was too much ground to make up in the stretch, and Palo Alto broke in a muscle-tired fashion, Albert France winning in 2:24\frac{1}{4}. My horse cooled out very well and he won the deciding heat without much trouble in 2:25. It was a trying race, and every horse was tired, making it all the more creditable for the four-year-old to stay and win in the end.

This campaign showed him to be a true and game four-year-old race-horse. Out of nine starts he scored eight victories. He had, like all horses, his peculiarities. He generally had to trot a heat in company before he was ready to go out for the money, and in driving him you had to strike a very happy medium. He required vigorous and constant driving. but there was a line beyond which it meant disaster to go. He could not be driven with an over-check-he liked a side-check with an independent snaffle-bit. His gait is good and pure, carrying ten-ounce shoes in front and five behind, and the usual protecting-boots all around. Notwithstanding that his dam is thoroughbred, he is a good-headed horse, being certainly as steady as the average purely trotting-bred horse, and showing certainly no more disposition to leave his feet under hard pressure than fast trotters usually do.

Palo Alto suffered in the fire of April, 1888, and had indeed a narrow escape from being burned to death. But few of the scars have lasted, his most conspicuous loss being the demoralization of his tail (as our faithful

picture shows), which, never very full, is now light enough to suggest "banging." Indeed, he would pass for a very fair-looking thoroughbred.

Trouble developed in 1888 in one of his fore feet or pasterns—in fact, it was a little difficult to exactly locate the ailment, and he had to be thrown out of training. The past spring I began, with many misgivings-"doubting, hoping, fearing"-to work him again. He did not go wholly sound, and indeed was lame in some of his best performances; but, as the brief summary below of what he did in 1889 shows, he demonstrated himself about as great a trotting-stallion as has yet appeared on the turf, taking a record of 2:12½, the fastest mile ever trotted by a stallion, with the single exception of the wonderful colt Axtell. After standing unequaled for five years, it is somewhat strange that the stallion record should be wiped out in a single season, both by a three-year-old colt and a stallion whose dam was thoroughbred. But it is the unexpected that always happens.

For a long time the trouble in Palo Alto's foot puzzled me. Though I never gave up hope entirely that he would train again, the prospect was not cheering. I thought the trouble was in the ankle, but kept watching and finally found that the fore foot had spread too far. I then shod him with a bar shoe, and had clips put on the outside of the shoe to prevent spreading, and the horse commenced to improve at once, though he showed soreness several times last summer.

Palo Alto's first start in 1889 was at Napa, August 13th, where, in the 2:20 class, he beat Bay Rose, Jim

L. and Victor in straight heats in $2:21\frac{1}{4}$, 2:20, 2:18. At Petaluma, August 28th, he again won the 2:20 class race, his time being $2:20\frac{1}{2}$, $2:21\frac{1}{4}$, $2:23\frac{1}{2}$, Bay Rose winning the second heat in 2:201. September 2d, at Oakland, he beat the same field in straight heats in 2:224, 2:20, 2:195. At the same track on the 7th, he defeated Lilly Stanley in $2:18\frac{1}{4}$, $2:19\frac{1}{4}$, $2:20\frac{1}{4}$. At Stockton, Palo Alto trotted the most brilliant race trotted by any horse in 1889. He had Direct and Bay Rose to beat, and he did it in $2:16\frac{1}{2}$, $2:17\frac{3}{4}$, $2:13\frac{3}{4}$, the last being the fastest third heat ever trotted by a stallion. At the Bay District track, November 2d, he trotted against time in 2:15. On November 9th he trotted this track in 2:12½, with a losing break at the finish. Then we took him to Napa, Stamboul going also, and on November 16th both stallions made records of 2:121. Palo Alto's feet hurt him and he broke in the last quarter, but settled in time to finish well. Rain prevented further attempts to break the stallion record which Axtell had set at 2:12, but had the weather remained fair it is not certain that there would not at the end of 1889 have been two stallions with records faster than Axtell.

Palo Alto's campaign of 1889 needs no eulogy or elaboration. Only a bare statement of the recorded facts is necessary to show its brilliancy.

CHAPTER XIII.

SUDIE D. TAKES THE YEARLING HONORS TO KENTUCKY FOR A BRIEF SEASON — NORLAINE, THE CHAMPION YEARLING—HER TRAINING—SHE BREAKS SUDIE D.'S RECORD IN $2:31\frac{1}{2}$ —NORVAL, $2:17\frac{1}{2}$, HER SIRE—SALLIE BENTON, $2:17\frac{3}{4}$, THE CHAMPION FOUR-YEAR-OLD OF HER DAY—HELEN, $2:22\frac{3}{4}$ —SPHINX, 2:23—BELL BOY, $2:19\frac{1}{2}$ —CHIMES AND SUISUN—OTHER STARS.

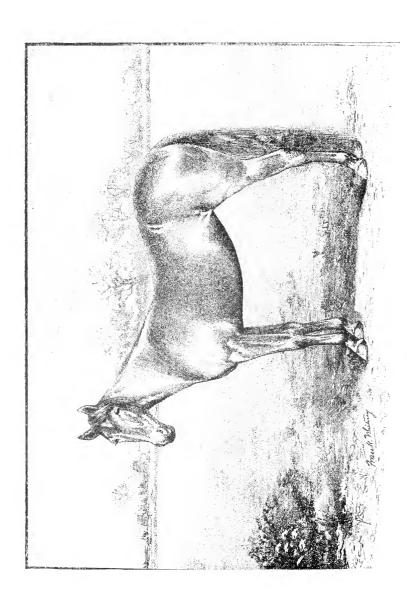
From the day that Hinda Rose made her record of 2:365 in 1881 there was no yearling produced in America to threaten that record until the season of 1887, and as long as it was not menaced we made no effort to improve it. But a surprise came from Kentucky in the year last mentioned, when the deeds of Sudie D. made her famous. This filly is by Sherman's Hambletonian, out of a daughter of American Clay, and must have shown great promise early in the summer, for it was said that Bowerman Bros., of Lexington, bought her in August for \$1,300. After George Bowerman drove her a trial in 2:36, John S. Clark, of New Jersey, gave—so the papers said—\$5,000 for her. He started her at Lexington, October 15th, and she went the mile in 2:35\frac{3}{4}. When the news arrived that the Palo Alto vearling record had been eclipsed we at once set to work to bring the honor back. The time was short, and we had to pick a good one of our youngsters and push development at high pressure. The most forward of our yearlings was the filly Norlaine, by Norval (present record, 2:171/2), out of Elaine, 2:20—the fast mare by Messenger Duroc, out of Green Mountain Maid, whose history I have already given. She was a rather dull brown in color, a trifle pony-built in some respects, but with a long, low-set body, short, sloping hip of the pacing formation, and low at the wither. Her legs and feet were of the best quality, and she had a level head. Norlaine was not impressive in appearance until you saw her She was always fast from her first lesson on the miniature track, and I began working her in April, but gave her only the easiest of work, as the intention was not to start her until she was two years old. Sudie D.'s brilliant performance in October changed all this, and I then began training the filly in earnest, working her twice a day. In doing this, of course, I took chances of injuring her, and, indeed, of breaking her down. Had we began earlier she could have been given more work, and could have been developed to a higher point, with little or no risk; but we never allow such considerations to stand in the way when the supremacy of Palo Alto in colt records is at stake. The filly took her hard work with relish, and improved under it until November 12th, when we felt that she was equal to the task of plucking the fresh laurels from Sudie D.'s brow. The trial was made at the Bay District track, San Francisco, and she trotted the mile in 2:311, a yearling record that has a good chance to last as long as Hinda Rose's. The time by quarters was 0:39, 0:36, 0:38, 0:38\frac{1}{2}. Now I wish to say that I

made a mistake in driving this trial, and had my "fore-sight been as good as my hindsight" on that occasion the record would surely have been a trifle faster. She faltered in going away, and the time to the eighth was 0:20. Then she again made a little mistake, but went to the quarter in 0:38½. From this point on the Bay District track there is an up-grade, and without thinking of this I began urging the filly and sent her the second quarter in 0:36—a 2:24 gait, which is certainly a terrific pace for a yearling baby. My error was in beginning the drive too early; had I gone easy to the three-eighth pole and come down the grade fast to the finish the time for the mile would have been faster.

After making this marvelous mile the filly was turned out until March. A few weeks before the fire she was taken up, and showed great improvement as soon as work was begun. She had a world of speed, and gave such promise that I expected her to take a record at two years old as fast as the record of her dam—2:20. In the fire of April, 1888, the little queen was burned to death, and in her Palo Alto lost a star that would have ranked among its brightest.

She had a right to be a great mare, for not only was her dam Elaine a great trotter, but so was her sire Norval. This horse was foaled in 1882, and therefore got Norlaine in his three-year old form, and she was the only foal he sired previous to 1888. He is by Electioneer, out of the gray mare Norma, 2:33½, by Alexander's Norman; second dam by Todhunter's Sir Wallace, and next dam Eagletta, by the race-horse Grey Eagle. Besides Norval, Norma produced Lucy





NORLAINE. VEARLING RECORD \$31%.

Cuyler, owned by Robert Bonner, and she is credited with having gone a mile in 2:15½—privately. Norval was worked voung and was one of our fastest colttrotters. I have driven him quarters close to 0:33, and in his two-year-old form he was almost as fast as Palo Alto. But he went wrong in a leg, and we decided to give him a long rest. In the fall of 1888 he began to round to, and was then sold to Colonel Robert P. Pepper, of Frankfort, Kentucky. Good fortune followed him, and in Colonel Pepper's hands he trained on so well that last summer he took a record of 2:1712. He is one of the most magnificent sons of Electioneer in form, in quality, in action, and indeed in every particular, and in him Colonel Pepper has a horse that I believe will prove one of the greatest sires in Kentucky. With a sire and dam whose average record is $2:18\frac{3}{4}$, and both splendid individuals and richly bred, Norlaine had the right to be a trotter.

I have already referred in several places to the famous gray mare, Sallie Benton, but have given no sketch of her, and, though it is a little out of the chronological order, we may without impropriety pay due tribute to her at this place. She is a gray mare of racy and good form, and was got by Gen. Benton, out of Sontag Mohawk, a daughter of Mohawk Chief. I worked her considerably in her two-year-old form, and as a three-year-old she, besides having a walk-over, won two good races, taking a record of 2:30. We worked her through the following winter, until the death of Leland Stanford, Jr., when all work was stopped and she ran out nearly all summer. In September, at Cleveland, Ohio, the Glenview mare Elvira

trotted in 2:18½, beating Bonita's four-year-old record, and then we had the task before us of regaining the four-year-old honors. I began preparing Sallie Benton, Helen (by Gen. Benton) and Hinda Rose to go against Elvira's time. The trials were at the Bay District track, December 13, 1884. First I tried with Hinda Rose, and her time was 2:20½. Then I drove Helen, and the best she did was 2:22½. The last string left was Sallie Benton, and right nobly she answered the question that was asked of her. She made the mile in 2:17¾, and this four-year-old record stood unbeaten until Manzanita's day.

When going slow, say at a 2:30 gait, Sallie Benton seemed rather awkward and tumbling in her gait, but at high speed her action was pure and beautiful. She did not pull, and was very resolute in carrying her speed. In making her $2:17\frac{3}{4}$ record she made a break, and her great speed is shown by the fact that I drove her a quarter in $0:30\frac{1}{4}$ as a five-year-old. In that year she developed trouble in a rear tendon, and though with our stable in the East, she gave way at Rochester and we had to throw her out of training. She is now a brood-mare at Palo Alto, and we have seen enough to warrant high expectations of her in the stud.

Helen, the mare that trotted in 2:22\frac{3}{4}, is not as well known to fame as she should be. She was a bay mare by Gen. Benton, out of Alameda Maid, 2:27\frac{1}{2}, by Whipple's Hambletonian. At Lexington, Kentucky, August 31, 1883, she won the third heat of a race against Fugue in 2:30\frac{1}{2}. The next year, as stated, she trotted the Bay District track in 2:22\frac{3}{4}, and in her five-year-old form I worked her a mile in 2:19. At Chicago

sphinx. 169

that season we started her in the 2:30 class, against Harry C., Endymion, and ten others. In the fourth heat there was a collision in which I was thrown out, and the mare ran away two miles, and was of course distanced. Her only other start was on a muddy track at St. Louis where she could do nothing in the going. She had a big swinging gait, was slow and awkward in getting away, and had a great deal of speed, but required plenty of education in races.

In drawing our historical portion of this book to a close. I cannot refer to all the trotters I have trained at Palo Alto that are entitled to consideration, but there are two or three more that we cannot pass by without some measure of just remark. One of the most prominent and most meritorious of the horses to which no special reference has vet been made is Sphinx, son of Electioneer, out of Sprite, by Alexander's Belmont, and next dam the famous Waterwitch, by Pilot Jr. He was foaled in 1883, was worked considerably as a vearling, and went East as a two-year-old. He was twice beaten by Nutbreaker and beat that good twovear-old once. He took a two year-old record of 2:29\frac{1}{2}. At St. Louis, where he met Nutbreaker for the last time that year, he won the first heat, and I thought the second too, but both colts broke just at the finish, and the judges curiously gave the heat to Nutbreaker because Sphinx made the best break. The next year, in his three-year-old form, he started eight times, winning four times. August 25th, at Covington, Kentucky, he beat Geneva and Phythias in straight heats, and at the same place, a few days later, he beat Castalia in a four-heat race, taking a record of 2:241 in the fourth heat. He was beaten by Bermuda, at Lexington, September 1st. At Albany he walked over twice, and again met Bermuda and Nutbreaker in that great three-year-old race, which it took six heats to decide, Nutbreaker winning a heat and making two-dead heats with Bermuda, who then won. Sphinx was now a little stale. He was also defeated by Nutbreaker at St. Louis, and again by Wild Rake in fast time—2:24\frac{3}{4}, 2:24\frac{1}{4}, 2:22\frac{3}{4}. The following year, in the hands of his present owners, Sutherland & Benjamin, East Saginaw, Michigan, he made a four-year-old record of 2:23. Sphinx was a good race-horse, and has the action, blood and individual force for a successful trotting sire.

Among the best youngsters we have sold that were partially developed at Palo Alto may be mentioned Bell Boy, Suisun and Chimes. It is my belief that each of these three horses would now have had records in the 2:20 list, or very close to it, had they remained at Palo Alto; whereas, as it is, only Bell Boy has done nobly, while Suisun and Chimes hang on the outskirts of 2:30, though the former has repeatedly beaten that figure, and the latter showed speed enough to do so.

Bell Boy, the brother of St. Bel, Hinda Rose and Palo Alto Belle was broken and worked by me as a yearling, and, after trotting a quarter in 0:38, he was sold to S. A. Browne, of Kalamazoo, Michigan, for \$5,000. In Mr. Browne's hands, trained by Sam Caton, he made a two-year-old record of 2:26. Mr. Browne sold him for \$35,000 to Seaman & Jefferson, and in the fall of 1888, Caton brought him to Cali-

fornia, and in a rainstorm gave him a three-year-old record of 2:19\frac{1}{4}. Later on he was sold by auction to Clark & Hopper, at Lexington, for \$51,000 — the highest price ever paid for a horse at public sale—and has since been burned to death.

The filly Suisun was among the best of the young Electioneers I had trained up to her time. She is bred to trot and stay, being out of Susie, 2:261, by George M. Patchen Jr., 2:27, son of George M. Patchen, 2:23\frac{1}{2}, and her grandam was by Owen Dale, son of Williamson's Belmont. We campaigned her in her two-vearold form-1886-and she won each of her two races, beating in the first Chastelard and Estelle, and in the second Ben Hur, Victor Wilkes and Georgette, trotting the third heat of her last race in 2:31\frac{1}{2}. At Cleveland, after she had gone a public trial in 2:28, we sold her to W. B. Fasig for J. B. Houston, of New York, for \$5,000. Last spring Mr. Houston sold her for over \$10,000, and "General" Turner campaigned her in the Circuit, but without getting her out of the class in which he began with her.

Chimes (brother to Bell Boy, St. Bel, Hinda Rose and Palo Alto Belle) we sold to C. J. Hamlin, at the beginning of our campaign of 1886 at East Saginaw, for \$12,000. That year he made a two-year-old record of 2:33½. I began working this colt when he was nine months old, and before he was fourteen months old he showed a quarter in thirty-five seconds. I regarded him as one of our most promising youngsters. In his two-year-old form he worked three-quarters at a 2:24 gait. This was at East Saginaw, after Mr. Hamlin bought him. Had I kept him in my stable he would

surely have had a two-year-old record below 2:25. But after he went into Mr. Hamlin's stable he went back, for when I saw him later at Cleveland he was not at himself. After this I was informed that Mr. Hamlin had toe-weights put on him, and if that be true I can readily understand his falling away from his true form. We wore a ten-ounce shoe on him, and he had no need of toe-weights. He has, I understand, grown very large, not being so compactly, strongly and closely built as his more distinguished brothers, and under his new training he has never been the horse he was before he left Palo Alto.

But the list of the good ones seems endless, and after I have written far more than I intended of a historical nature I find that a brilliant galaxy of trotters that I have trained and developed must be passed by without justice being done them. Ansel, 2:20; Azmoor, 2:24½; Carrie C., 2:24; Clifton Bell, 2:24; Maiden, 2:23; Gertrude Russell, 2:23½: Rexford, 2:23, and many others, would afford good material for additional chapters, but we must hasten on to the chapters on training, and so will end our historical chapters with a strong finish—the history of the greatest trotter the world has yet seen, the peerless and unrivaled Sunol.

"None but herself can be her parallel."

SUNOL. 173

CHAPTER XIV.

SUNOL, THE PHENOMENAL TROTTER OF THE NINETEENTH CENTURY—HER BREEDING AND HER FORM—HER TEMPER AND NERVOUS ORGANIZATION—HER FIRST LESSONS—TRAINING ON TO GREATNESS—DETAILS OF HOW SHE WAS WORKED—WINS HER FIRST RACE—LOWERING THE TWO-YEAR-OLD BECORD TO 2:20½—LOWERING IT AGAIN TO 2:18—THE WINTER OF 1888–9—A LIST OF BRILLIANT PERFORMANCES—CHAMPION THREE-YEAR-OLD OF THE WORLD—2:10½.

THE filly Sunol was foaled April 14, 1886. sire was Electioneer, and her dam is the chestnut mare Waxana, by Gen. Benton, and Waxana's dam was the mare Waxy, whose pedigree has been the subject of so much controversy. Waxy was always represented to be by Lexington, but until Sunol trotted in 2:18 at two years old no serious attempt was made to establish it. After Mr. Wallace, the compiler of the Trotting Register, questioned it, Governor Stanford employed Mr. Levi S. Gould, of Boston, a gentleman of much experience in tracing pedigrees, to investigate it. The controversy over this pedigree would fill many pages of this book, and of course I will not burden it with the dreary details, it being unnecessary to say more than that Mr. Gould reported, after a long and thorough investigation, that Waxy was a thoroughbred daughter of Lexington, out of a mare by Grey Eagle, and that she was a full sister to Annette, the dam of Ansel, 2:20. Whether this pedigree is proven or not is a matter of opinion—Governor Stanford and the general public accepting, and Mr. Wallace disputing it—but be the exact blood lines what they may, it is conceded by all who knew Waxy and knew her history that she was a thoroughbred, or we might say a racing-bred mare, that she raced, and that she produced in Alpha a good race-horse. That, after all, is the most important point about it.

Sunol's dam, Waxana, is a stout, big mare of excellent make-up. She was well-broken and driven, and though she never was transferred from the breaking barn to the training stables she could show about a 2:40 gait, and her action was good.

Sunol grew into a bay mare of rather unusual and peculiar form, one of the most "speedy-shaped" ever seen, and a veritable racing-machine in appearance. She stands 15.2 hands high at the wither, and measured at the quarter she stands full 16 hands. She has an exquisitely fine head, clean cut, expressive and bespeaking determination, the nostril full and delicate, and the eve prominent and striking. Her neck is long and shapely, delicately cut out at the throat; the shoulder lavs well back; the barrel is very deep through the heart region, and the back a little on the roached order, and very strong. Her height over the quarters, and her short, steep rump give her a somewhat remarkable appearance. The stifles are good, and her thighs of great length sweep down muscular and sinewy to the hocks, which like her knees are excellent. Her

legs are clean and flat and of fine quality, and she stands on first-rate feet.

She was fast in the paddock, but we had trouble in breaking her. She was terribly high strung and cranky from the outset, and every time it was necessarv to bring her under any sort of control or direction there was trouble. In the hands of a rough, harsh or bad-tempered trainer Sunol would have been ruined beyond a doubt. We began to break her to harness at a year old. We were as gentle as possible with her, had every consideration for the high tension at which her nerves were strung, and endeavored to gain her confidence. After we had her used to the harness, and to being guided by bridle and rein, she was worked a little while by the side of a steady-going horse, and was then asked to go in single harness. But this the haughty spirit of the coming queen would not calmly brook. It was a difficult thing to get her into the shafts, and after she was in she would do about everything possible except go ahead in a decorous and proper manner. In the skeleton-wagon she was mean—would go sideways, stop, turn, etc., and in short her course of education, in the breaking-barn, was a rather turbulent one—and she did not graduate with the highest honors, as to docility and reliability, when she was transferred from that primary department into my training-school in the fall of 1887. But that great sieve, the miniature track, had sifted her out as pure wheat, and we knew before we broke her that she was the rough stone that only required the trainer's polish to transform into a gem of the brightest ray.

For a good while after she came into my stable we could count upon an hour's time as the average duration of the process of hitching Sunol to a sulky. Not that she was exactly vicious, but she had and has a will, a temper and a determination of her own, and at that time every individual hair seemed to contain a nerve.

I worked her very carefully through the winter of 1887-88, stepping her fast for a short distance every other day or two. I strove to "gentle" her and never to do anything to make her dislike her exercise and work on the track. After she began going fast I would usually take her first to the back-stretch, where there was less to disturb and annov her than on the stretch near the stables; and, after working there about long enough, I would step her around and down the stretch at the rate of about 0:35 to the quarter. I never would drive over half a mile fast at one brush, and, generally, the brushes were nearer a quarter than a half. This system of work continued until July, when we shipped to Los Angeles, where she was entered in a two-year-old race to be trotted August 5th. We arrived at Los Angeles about July 20th, and up till this time Sunol had never been driven a mile at speed in her life. Four days before the race I gave her a full mile in 2:40½, which was her first work at a mile, although, as I have remarked, she had before this shown me the ability to speed at a 2:20 gait. I repeated her in 2:38. The next day she was merely exercised, and the second day before the race I gave her another mile and repeat in 2:36 and 2:33\frac{1}{2}. In the race her only opponent was Hon. L. J.

SUNOL. RECORD AT 3 YEARS \$:101/6.

Rose's filly Vesolia, by that great horse Stamboul, 2:124, and she was quite a good filly, by the way. My single fear was that Sunol would become so frightened at the crowd that she might not steady herself. So before the race I endeavored to accustom her to the people, driving easily up and down the stretch on two or three occasions. Still she was hardly reconciled to the noise and excitement of the race-track, but she won the race in 2:343 and 2:25. We then went home and trained her as usual, driving no more miles, but speeding fast quarters, with an occasional "pipe-opener" at a half. Her next engagement was at Petaluma. August 22d. After going to Petaluma I drove her a mile and repeat in 2:38 and 2:33. This was on the 20th. In the race she had Margaret S. (by Director) and Fortuna against her. She broke going away in the first heat, but settled and won it in 2:284. The next heat she won in $2:26\frac{3}{4}$, almost walking under the wire. We returned to Palo Alto, and kept her at home until the second week in October, when we went to the Bay District track, at San Francisco. Here she was driven a mile and repeat on two occasions—the first in 2:32 and 2:35, and the second in 2:28\frac{1}{2} and 2:23. The latter work was on the 18th. On the 20th she was to start against the two-year-old record—2:21 made by Wildflower, but she was not in condition to do herself full justice. She was suffering from troubles peculiar to her sex, and being naturally of a nervous temperament, was not near her best. But she succeeded in breaking the record in 2:204. I was not satisfied with this, and decided to remain at the track for another week and give her another trial on the

27th. We worked her no more full miles in the meantime, but endeavored to have her on edge as to speed, and to feel as well as possible under the circumstances. The track was good that day, excepting immediately in front of the grand-stand, where it had not dried out perfectly. My friend Orrin Hickok drove the running-horse in this trial, and no man could do it with better judgment. I carried my watch as usual—in my hand-and according to its showing we went the first quarter in 0:35, the second in 0:35, the third in 0:34 and the fourth in 0:34-2:18. The judges caught the same time for the mile, but their official verdict as to the fractional time differed slightly from mine, they making it 0.35, $0.34\frac{1}{4}$, $0.34\frac{1}{4}$, $0.34\frac{1}{2}$. This performance of course made Sunol's name world-famous, and it was conceded to be, all things considered, the greatest performance ever seen; and, excepting her own 2:103 at three years old, I know of no more creditable trotting performance on record than 2:18 for a two-year-old.

After this Sunol was taken home and given a vacation for the winter. She was not turned out, but had her exercise regularly in the skeleton-wagon, never, however, being speeded fast. About midwinter I had her turned out one day in a grassy paddock, and she was so full of animal spirits that, in rearing and prancing, she strained a tendon in the right hind leg. This swelled up, and at one time gave me some reason to fear that it might have a serious influence on her future as a turf star. But I treated it constantly with cooling lotions, and two or three good cold shower-baths a week, and in time all signs of the trouble disappeared. This gave rise to an erroneous rumor that

I had been training her under pretty high pressure during the winter, and that she had broken down.

She was given only exercise until my return from New York, May 19th. Then I found her hind ankles not in the best of shape, but commenced jogging her. It was about a month before I dared give her fast work; and she was brushed very little until I had her legs well seasoned. Then I worked her on our usual speed-making plan until she could step a quarter in about 0:30. Having the necessary speed, I gave her mile and repeat work, and when I left home she was in splendid form, and fit to race with anything. At the Bay District track she caught cold, and this developed a case of distemper so severe that she did not eat for five days. At Napa the weather was intensely hot, which did not agree with her. Her appetite was not good, and being a very highly organized mare, of nervous temperament, she became much reduced. I skipped the Santa Rosa Meeting, thinking she would have ample time to recover her strength before filling her engagement at Petaluma. But she was more reduced than I supposed, and was far from being right when she met Lillian Wilkes and Margaret S., at Petaluma, August 29th. My friend Goldsmith had Lillian Wilkes in fine shape, and Margaret S. made me go the first heat in 2:21½. Then Lillian was cut loose and won the race in $2:17\frac{3}{4}$, 2:22, 2:25. I think, however, even in the condition Sunol was, I could that day have beaten Lillian single-handed.

A week later, at Oakland, Sunol again met Lillian Wilkes and Margaret S., and avenged the Petaluma defeat, winning in straight heats in 2:21, 2:24, 2:20.

Here is a list of her other achievements in 1889:— Sacramento, September 12th, walk-over. Time, $2:16\frac{1}{2}$.

Sacramento, September 17th, beat Margaret S. Time, $2:20\frac{1}{2}$, $2:26\frac{3}{4}$, 2:18.

Fresno, October 2d, against time—2:1334.

San Francisco, October 12th, walk-over. Time, $2:15\frac{3}{4}$.

San Francisco, November 9th, walk-over. Time, $2:10\frac{1}{2}$.

Napa, November 16th, against time—2:15.

The fight between Axtell and Sunol, for the threeyear-old championship, was the all-absorbing event of the trotting turf of 1889. When Axtell trotted in 2:14, at Chicago, our Eastern friends were confident, but Sunol's 2:13\frac{3}{4} set them at work again, and at Terre Haute Axtell trotted in 2:12. Then all the East was ablaze with joy, and hardly a man dared be so rash as predict that Sunol would beat it, but when she trotted in 2:10\frac{1}{2} all candid men recognized that, great as Axtell is, the world has never seen Sunol's equal. For a threeyear-old to beat 2:12 by one and one-half seconds is certainly conclusive. Seconds are big things when you go down around 2:12. So the season of 1889, opening somewhat unfavorably, was one of great triumph for Sunol, for she closed it as plainly the greatest of all three-year-olds, as she proved herself in 1888 the greatest of all two-year-olds. If no mishap befalls her she is destined to reign queen of the turf!

Though I have left many really great young trotters unsketched, here we must conclude the historical portion of this work. It has already gone far beyond the

limit intended in my original plan, but when I come to write it I find so much that should be said that greater condensation was hardly possible. Though not as instructive, perhaps, as the chapters that follow, the history we have given is not, I think, without its lessons, and certainly not without much bearing on the remaining chapters of this work. The little glimpses I have given of how we trained these famous trotters will show that we have not followed altogether in beaten paths, and that our departures from old-fashioned grooves have not been barren of good results. To train

A yearling to trot in $2:31\frac{1}{2}$;

A two-year-old to trot in 2:18;

A three-year-old to trot in $2:10\frac{1}{2}$;

A four-year-old to trot in 2:16;

A stallion to trot in $2:12\frac{1}{4}$;

(the four first being the world's record for their respective ages, and the latter within a quarter of a second of the present stallion record), to say nothing of the many others whose performances were less sensational, is not a bad showing for ten years' work at one farm. I have told as briefly as I can do so justly what this system of training has accomplished. Now I propose to describe what the system of training is that has given such gratifying results.

CHAPTER XV.

A CHAPTER ON EARLY TRAINING—THE SUBJECT CONSIDERED IN VARIOUS PHASES—HIRAM WOODRUFF AND HIS DAY—THE ADVANCE SINCE THEN—TROTTERS NOW COME TO THEIR SPEED EARLY—THE PREJUDICE AGAINST EARLY TRAINING PASSING AWAY—A PRACTICAL NECESSITY WITH BREEDERS WHO BREED FOR PROFIT—TIME THAT MEANS MONEY—THE BENEFITS OF EARLY TRAINING ARE LASTING—IT MUST NOT BE OVERDONE—THE PAST AND PRESENT CONTRASTED.

The first man to earn a name as a trainer of trotting horses, and to publish his experiences and his opinions, was Hiram Woodruff, and his book-"The Trotting Horse of America"—is read as a standard work to-day, though Woodruff has been under the Long Island sod for over twenty years, and the crude methods of his day have been reduced to quite a fine art. I have no desire to speak other than respectfully of the pioneer of our profession or of his work. Trotting, me might say, was born in his day, and he had not, as we now have, the experiences and examples of others to profit by. In all horse-training for speed there are general principles that always apply, and the work that confronted Hiram Woodruff and the other trainers of his generation was to modify the principles of training the race-horse to suit the development of speed in the trotter. And though these methods were crude, as all

new processes are, and though some of the ideas that Woodruff believed most firmly in are no longer tenable, his book can still be read with profit, for in the record of what his experiences taught him are many sterling truths of horsemanship.

It is no part of my purpose to criticise the methods or the opinions of others whose experience has given them the right to speak with some degree of authority on the subject of training. Every trainer has his own ideas, his own peculiar methods, and his own reasons for them. We can well learn from each other, and it is therefore best that we should all be tolerant of the opinions and practices of others. I shall therefore, in the following chapters confine myself as closely as I conveniently can to explaining our system of training rather than criticising the methods of other trainers. I do not counsel any trainer or breeder to discard methods that he has found successful and substitute ours; but what the methods I am to explain have accomplished entitles them, in my judgment, at least, to the careful consideration of all horsemen as an improved system of training young horses to trot.

The thoroughbred race-horse of this day is just about as good at three years old as he ever is, but in the early years of the racing breed it was not so. "In the days of Flying Childers, Eclipse, Bay Malton, Gimcrack, Mambrino, etc., the race-horses were not commonly trained until they were five years old." So in Hiram Woodruff's day the trotter was quite mature in years before he was expected to show high capacity on the turf, while in our day we expect great performances at three and four years old, and often at two years old.

Woodruff quotes as quite wonderful the two-year-old performance of Young America in 3:06, the mile of Cora at three years old in 2:37, and of Ethan Allen in 2:36 at four years old. The two and three-year-old records of his day were, as they seem to us now, ridiculously slow, and he was in his grave for seven years before either a three or a four-year-old trotted a mile as fast as 2:30. Between the best three-year-old and four-year-old record and the all aged records of Woodruff's time, there was such a wide gap that he naturally believed that a horse must be nine or ten vears old before he was ready for great performances. "His own loved Lady Thorn" was when he died ten years old, but had not reached her best, and Dexter had not then beaten Flora Temple's 2:19\frac{3}{4}, but as he was only eight the old-time trainer reasoned that with a little more age he would do it. To come down a little further, fifteen years ago there was a gap of fifteen seconds between the fastest three-year-old record and the fastest all-aged record. Five years later the gap was reduced to thirteen seconds. In five years more Hinda Rose had closed it up to nine and a quarter seconds, and only six years more have elapsed and we find one three-year-old within two and a quarter seconds of the fastest record for any age, and another within one and three-quarter seconds of the fastest record. The history of the running-breed and the trotting-breed has been identical in this respect. The older the breed grows, and hence the higher its natural capacity in the special purpose for which it is bred, the earlier this capacity manifests itself in a high degree. In our earlier trotters the fast trot

was almost wholly a matter of teaching—an accomplishment which it took years of practice to acquire; but now it is a natural quality of the breed, a capacity born in the horse, not wholly acquired and hence it develops in its fullness earlier.

That the prejudice against early training in the past has hindered to some extent the progress in breeding the trotter I do not doubt. One effect was undeniably the diverting from the trotter of the attention of men who would breed if it were not that they believed it necessary to wait many years for any return from their capital, labor and care. They saw that they could breed race-horses and begin reaping the harvest of their success in three years at furthest, whereas the prevailing sentiment would have it that the trotter at three years was too young to even begin to educate. But this prejudice is to a great extent passing away. The business of breeding has now reached a point where few breeders have the inclination, even if they were financially able or believed it beneficial, to wait six or seven years for the get of their stallions and the produce of their mares to show what their blood is The buyer who selects a few youngsters—a stallion, perhaps, to head a future stud, or a filly or two for the harem—does not want to wait for years to find out whether they are worth keeping and breeding from or not. Hence he buys the blood that trots young. The small breeder who wishes to stint his favorite mare feels that at the very best he must wait a weary time; therefore he selects the stallion whose colts develop early speed. Again, and for these same reasons, the cream of the patronage goes to such stallions, for they gain prestige and popularity before the sire of a slow maturing tribe gets a start, and the latter loses more ground at the beginning than he can ever make up. The breeder with a large stud cannot sell his stock at paving prices or cannot attract attention to his horses until the youngsters trot, and so his every interest impels him to breed from blood that trots young, and to train the progeny young and prove that they are young trotters. The sooner that is done, the sooner the harvest begins. Until it is done money is going out-after it is done money begins to come in. When the brood-mare produces a performer at an early age her money producing power is much greater than if that honor came late in life when her prolific days were waning. Business wisdom and business necessity point the path to success in breeding from early-trotting blood and in developing it early.

These facts sufficiently account for the growing tendency toward early training and trotting and the public preference for blood that trots young and trots fast. Some of our great families of the past have been, it is true, the slow-maturing ones; but there are just as good families that we are not compelled to expend time and money in unnecessarily waiting upon. The earliest blood matures none too early; nor can the breeder bring out his colts, if they are good, any too early for the best results.

But I fancy I hear some one say: "Yes, we grant that it may pay better to train and trot your horses young, but will you produce horses as good at maturity in that way as the breeder does who waits upon them until they are older, their bones full grown and set, and their whole physical organization better fitted to stand the wear and tear of training?"

My answer is, "Yes, if they are properly trained," and, of course, when I speak of the benefits of early training, it is assumed that it is judicious training. Four colts out of five that have suffered from early training have not suffered because they were trained young, but because they were not properly trained. There are many men who can train a mature horse, and still more who can successfully drive him after somebody else has trained him; but the men capable of properly and intelligently educating colt trotters are as scarce as 2:15 horses. To listen to much of the clamor against colt training, one would imagine that aged horses never were known to break down. All horses gifted with natural speed have not the capacity to train on; and a horse lacking in this respect will inevitably "go wrong" before he reaches the limit of his speed capacity, no matter when he is trained. If he goes wrong at two years old he will be a cheaper failure than if he goes wrong at ten years old. If a stallion has not the power to make a great sire, and his get have not the capacity and quality to make good performers the quicker the owner and trainer find it out the better.

I am not only strong in the belief that the colt can be trained for speed from his infancy without injury, but that such training, if successfully and judiciously given, is a great and lasting benefit. It will make him a better aged horse. Let two colts in all other things equal be raised together, the one trained from his yearling form, the other not worked until he is five years old, and the chances are not one in ten that the latter will ever see the day that he is the equal of his trained brother, either in speed or in any of the qualities that go to make a race-horse. He will not only be uneducated, of untrained instinct and willful, but he will be deficient in physical as well as mental development, as compared with the trained one. Can the lounger run, leap, or wrestle with the athlete whose muscles have the substance, hardness and tone of long and constant training?

If you ask me whether a great and straining effort by a young colt will prove permanently detrimental, I will answer, "As a rule, yes." We are all too anxious, and many a colt has been a victim to the driver's impatience to accomplish in a week what should not have been attempted in two months. But, on the other hand, you can train a colt, and, if exceedingly promising, you can give him a fast record without necessarily requiring of him an exhausting effort. There is one thing I will endeavor to impress it upon the reader here, and I will endeavor to impress it upon him again and again. It is this: "Never require of the colt more than he can do within himself. Never overdo the work. Never carry him to the last inch of effort, to the point of exhaustion, for at that point not only does all development cease but you have probably undone many weeks of work, and have, perhaps, inflicted permanent injury. The reader will not fail to appreciate how delicate a thing the training of the young trotter is. A happy medium must always be preserved—a little misstep—a little error in judgment may bring all your efforts to naught. If you do not carry it far

KINDNESS. 189

enough your work will be barren of immediate results, while if you carry it too far you will not only spoil all that is already done but ruin the material that may be the making of a star performer. It calls for the most careful judgment, eternal vigilance and keen discrimination in knowing how far to go.

Another thing the reader's attention is directed to at the outset. No cast-iron set of rules can be laid down to fit every case. The same medicine will not suit every patient, the same diet and training is not best for all children, and all colts cannot be treated exactly alike. While no trainer can fail to increase his skill by studying the experiences of others, ten volumes will not relieve him from the necessity of using his own brains. Just as every man that was ever born differs in some respects in his mental, moral and physical nature from every other man, so do all horses differ, and from every colt the trainer trains he must learn another lesson. He must study the disposition and the temperament, respect the peculiarities and have regard to the physical differences as well, of each of his pupils, And, above all, my friend, do not go about your work like a slave driver; do not conduct yourself as though the colts were unfeeling, unintelligent brutes. Treat them for what they are—the noblest of God's creations after the human family. If you are a manly man you treat children with respect for their age and their undisciplined minds—you show them the gentler side of your nature. Remember then that the colts are the children of their kind. They are delicate and their feelings more sensitive, and their dispositions more easily spoiled than those of the full grown horse. Firmness

is sometimes required; there is always occasion for gentleness, but harshness, violence and bad temper are vices in a colt-trainer that wholly unfit him for his business. The trainer that has the colts' confidence and respect will do more and do it easier than the one who is regarded by the colt with only fear and distrust. You will never either scare or club him into being a record-breaker; if it cannot be done by rational education it cannot be done at all.

Twenty years ago the average trainer believed that the time to break a colt was at from three to four years The first performance was a stand-up fight between the trainer and the colt, and perhaps the colt came out of the mill worsted—he certainly came out It took all conceivable appliances to hold him. He was strong and willful, had never known subjection, and hence fiercely resented it. By the time he was "broken" to go properly, the trainer thought he had educated him, while in fact he had simply broken his Then when the colt was subdued to tractability, and training him to trot began, he was worked like an old horse, speeded mile heats, and two or three or four of them in a day, according to whether the trainer believed in "plenty work" or not. He, according to these old ideas, must be reduced low in flesh, well "drawn up," and hence he was "put on rations" and his appetite denied especially before a race. the horse was not considered of much account unless be would "take hold of the bit." or in other words unless he was a puller, and many of the matches were not so much matches between horse and horse as between driver and horse. Has not every farmer's boy been charmed by the pictures of old-time trotters with the driver laying back in a manner that suggested that the reins must have had the strength of traces? We no longer believe in pulling to the half-mile pole, and then riding home. The idea that it helps a horse's speed to draw a man's weight on his under jaw is hardly a reasonable one. In the old days, too, all the appliances were coarse and heavy. The tracks were crude and rough, and until twelve or fifteen years ago the seventy-five pound sulky was concidered a "frail bark" indeed.

Now all this is changed. The voungster is born and grows up under control-he never knows absolute freedom and therefore he never feels subjection. He is taught at the time when teaching is easy, when he is young, that he cannot oppose his strength to man's strength, and hence there is no violent struggle for the mastery, with its evil after effects on body and disposition. Before he is strong enough to make stubborn resistance he has forgotten that there is anything to To go as he is guided and do as he is directed, has become his natural habit. And then when he is trained he is not asked to do work beyond his years and strength. His whole early life is an inductional course of education. His mouth is not made callous and harsh, and he is not taught to regard his lessons in trotting as a dreaded process of running the gauntlet between two fires—the bit in front and the whip His harness and the thirty-eight or forty pound sulky which he draws are so light, perfectly fitted and balanced, that they seem a part of himself. The artificial appliances on his legs and feet are not ponderous hinderances, but easy-fitting, light and comfortable protectors, giving him the courage to extend himself, without any fear of striking a tender cord. In short, we have come nearer to nature in our latter-day training than did the famous trainers of the past generation, and our systems are not only more simple, reasonable and efficacious, but more humane. Is it then wonderful that with better-bred horses, and with such improvement in the methods and appliances of training, the trotter of to-day has made such rapid advancement in the matter of speed?

CHAPTER XVI.

THE FIRST DAYS OF THE COLT'S LIFE—WEANING TIME—FEEDING COLT AND DAM—HALTERING AND LEARNING TO LEAD—THE BENEFITS OF COMPANIONSHIP—THE "KINDERGARTEN"—THE EVOLUTION OF THE TRAINING-PADDOCK—PLANS AND DIRECTIONS—THE COLT'S FIRST LESSON IN TRAINING TO TROT.

Some philosopher has said that the proper time to begin training the colt is before he is born, and there is a good deal of truth in this. The discussion of this part of the colt's training, however, would carry us into the realm of breeding, and therefore we will let it pass for the present, as for our immediate purpose it will do to begin after the colt comes into the world.

If the climate will afford it, as it does with us at Palo Alto, the new-born colt should be turned out in the warm sun during the day with his dam, and of course housed at night. As long as he is well it is best to leave him pretty much to the care of his mother for the first few months. In this climate, after he is about two and a half months old, he is left out day and night, and in case the grass should not be good, other feed must be given. See to it that the mother is kept strong and stout. Especially if she has been bred and is again in foal, she must be kept thrifty and given abundance of nourishing food. She has then not only

herself and the life of the foal by her side to sustain, but there is an additional drain on her life-blood to supply the creature in embryo. There is no greater folly, no worse economy, than stinting the brood-mare in her food, unless it be the ruinous but, I am sorry to say, not uncommon course of allowing the colt to run down after he is weaned.

We aim to wean the colts at about five months old. and about this time the mare is taken up and fed oats and bran. It is a good plan to have some ground oats where the little fellow can reach it and where his mother cannot, especially if it should happen that she has laid on too much fat, which, however, will not often be the case. When his mother is eating oats, or any other grain food, ground grain being always preferable, the youngster will learn to nibble at it too, and it is surprising how quickly he will cultivate an appetite for oats. This is a good time to avail yourself of every chance to tame him. Handle him all you can without frightening. Gain his confidence and show him that he is not going to be hurt. He will soon begin to be familiar and quite at home with you, and when this is reached an important point is gained. After say a week of this daily feeding and familiarizing you will halter the colt and take him off the mare; but before taking him away from her, lead her a little, so that he will learn to lead by following her. Have your halter to fit; have it light, but so strong that no break is possible, and if you have done right by the colt you are not likely to have much trouble in getting it on.

The next thing to be done is to learn the colt to lead. Perhaps he will take a notion to lead without

any special teaching, but then again he may take a notion to pull the opposite way. Here is the appliance by which the difficulty is best overcome: Take a small rope and make a good-sized loop, large enough to throw over the colt's buttocks, leaving the head—the knot of the loop about his wither. Now run the free end of the rope through the halter ring. In addition to this you will have already snapped the regular leading line or strap into the halter-ring. Now take your leading line in one hand, with the free end of the body rope in the other, and tell him to come along, at the same time gently drawing him by the leading line. If he comes easily do not make any use of the body rope and do not put the slightest weight upon it, but be careful not to let it drop down too far on his legs. If, however, he hangs back, pull him along sharply by the body rope, and he will soon see that there is only one way to get along easily, and that is to obey the leading line, for he has to come along anyway. He cannot resist the pressure around his quarters. There should not be many of these lessons required until he is thoroughly under the control of the halter. We have always found it best to keep two colts together in these earlier days, both in the boxes and at work. They like company, are far more contented, and learn quicker. If you take one little fellow off by himself to teach him the ways of the halter he is far more likely to become frightened than if he has another to go through the process with him. I suppose that in all these first lessons the youngster experiences some mental misery, and it is said that "misery loves company." A scared horse has no sense; he must have sense if he is to learn anything, and, therefore, the reassuring effect of having a companion with him is very beneficial, and renders the work easier for both trainers and colts. By leading one after the other alternately they learn very quickly, their natural inclination to follow each other being a helpful influence. Let the boys lead them to the paddocks in the morning and back to the boxes at night, lead them to grass and back, and to and fro, around here and there, until they are perfectly gentle, halterwise and easily caught. If this training has been intelligently and gently done, the colt will come to call in the fields and show all the confidence of an old horse. The colts should never be meaninglessly played with, or petted beyond reason; nor should they ever be teased, frightened, whipped or in any way abused. My advice to every breeder and owner is that if your man abuses your colt, or horse either, no matter how good a trainer he may be, never overlook more than the first offence. At the second "bounce" him.

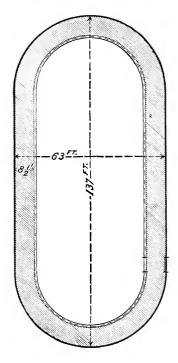
All this time, of course, the colt is to be right well fed and cared for. Each pair will be kept in a clean, warm, well-ventilated box, and each one attended to and fed as though the whole hope of the farm depended upon him. He will relish oats, good grass and hay, and don't be afraid that he will eat too much. After he is thoroughly halter-wise he will be ready for the lesson in preparation for his turf career. This is given in the miniature track—or, as it may be called, the kindergarten—and as this is a very important factor in our system of training, and one invented and used at Palo Alto, I will describe it with some fullness.

The evolution of the miniature track is part of the

history of Palo Alto, and its origin dates back to the spring of 1879. That season Bentonian and Fred Crocker were our most promising yearlings, and, to show their gait, we used to chase them in the paddock where they ran out. Naturally, when they got a-going along one side they would trot right up into the corner and then stop. To obviate this we saw that the corners must be rounded off. The next move was to throw up the turns a little, and then to prevent them making short cuts we built a brush fence ten feet from the outer fence of the paddock. Now we had a miniature track in the crudest form. Soon the colts learned the trick of jumping the brush, and we made another improvement by putting a low board fence around in place of the brush, and making a good dirt track. But they also jumped our new fence, and next we struck upon the idea of building a higher fence, with the rail inclined, so that they could "hug it" around and not strike their legs on the posts. So from a rough beginning our track was improved and perfected until we have the paddocks of to-day. I need hardly say that with the improvement in the track we improved in our skill in using it, as well as in appreciation of its great value as an invention in training equipments.

We have now two of these miniature tracks at Palo Alto, and to make their form and construction wholly plain to the reader, I supplement my description with clear drawings and plans. These tracks, it will be seen, are laid off in oval shape like a mile track, with proportionate turns and stretches. The track should be made of soil good for the feet, and should always be kept deep and soft. The turns should be thrown up

very sharply, especially in the case of one built on the



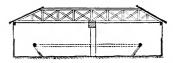


DIAGRAM A—COVERED TRAINING-PAD-DOCK — DISTANCE AROUND CENTER OF DRIVE 313 FEET.

smaller of the two plans given in our cuts. such a track six or seven inches to the foot is not too steep for the ends. The track should be about ten feet wide. The inner rail should be set at a good angle (see Diagram of Covered Training Paddock, Figure A), so that there can be no danger of the colt striking his feet or legs against the posts. This rail should be about high enough to strike the vearling colt a little above the center of the barrel. This top rail should be about five inches wide, of pretty stout material, and the edges nicely rounded off. Do not have any more posts than are necessary, so that the view will not be obstructed. You want to see how the colt handles his feet and legs, and if you have too many posts it will prove confusing to the eve to watch his motion. To be on the safe side, although if they are

set at the right angle there is really little danger, round off the edges of the posts, so that should the colt by any mishap come in contact with them he will not be cut. I have seen colts that were going fast and trying to stop and turn suddenly, sometimes throw themselves under the rail, and in such a slip of course a leg may be struck. But owing to the softness of the track it is really very rare with us for a colt to sustain any injury in the training paddock, either by falling, slipping, striking, or straining.

I would not advise any breeder to build a smaller track than our covered training paddock. One a trifle larger would be better. The other diagram is of a large open-air paddock. We work our youngsters almost wholly in the covered paddock, and only

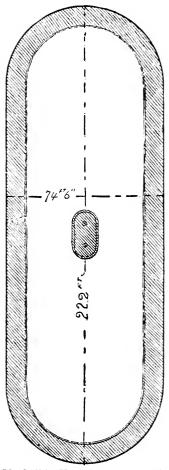


DIAGRAM B—TRAINING-PADDOCK — DIS-TANCE AROUND CENTER OF DRIVE 506 FEET.

use the larger one when we wish to see how colts of say a year and a half to two years handle themselves. This track can be used, however, to very good advantage, though as between the two the smaller one will be found the more useful, and easier to train in. Two men can train in the smaller paddock, and it will require three to properly work a colt in the larger one.

Now we have the track all ready, and as we had the colt thoroughly halter-wise before describing what the training-paddock is like, we are ready to give him his first lessons. After the colt has been given his breakfast and had his general morning "fixing up," we snap the leading-line into the halter and take him over to the paddock. Now we put on the boots, and must be very careful that they fit thoroughly and are the work of some one who knows how to make boots for young colts. Have good shin-boots all around—boots that will thoroughly protect the shins and tendons, that fit well and will not chafe. You also want quarter-boots all around, and I much prefer the bell-boot. Some horsemen profess to have a great aversion to boots. and never tire talking of "the kind that go without boots." Because we boot a colt is no reason for supposing that we know he will strike himself. They are used as a safeguard—as a preventive against possible accidents and injuries. You may work a colt or horse nine times without boots and he may never touch a hair, but the tenth time he may make a false step, may find a bad place in the track, become unbalanced and break, and I care not how pure-gaited he may be, he is quite likely to cut a quarter or strike a tendon, or sustain any of the many varieties of such injuries, ranging

in consequence from a temporary disability or spoiling the gait to permanent retirement. Do not take chances with a good colt; boot him safely. It is better to be sure than sorry. No trainer of experience or ability will neglect this important point in training.

Having booted him all right, take him into the track and lead him around it several times until he is thoroughly familiar with his new surroundings. Then let a man follow him around, and give him pretty much his own way until he has time to inspect the paddock, approve of it and become reconciled to the arrangements. After doing all this without hurry or bustle, it will be time to turn him loose. Quietly unsnap the leading rope from the halter and start him around. If he wants to run, let him do it at first; he will soon tire of it and settle to a trot. After a preliminary run or so, endeavor to keep him at the trot as much as possible. Two men will stand in the inclosure inside the track; one near either end, and will be provided with whips with long lashes and snappers. The colt will soon learn to obey the sound, the swish and the snap of these whips, together with the commands of the trainers. After you get him properly to work do not let him run when he breaks. By going toward the rail and slashing the whip across the track in front of him he will stop, and probably turn and go the other direction of the track. Teach him to go around the turn easy, and urge him through the stretches. You will soon learn just how much urging he will stand and just what sort of direction he best understands. He will learn just as quickly what you want him to do. and you will be surprised to find him soon understand

ing what every crack of the whip and every shout of the trainer means. Be patient and gentle in these first lessons. They are perhaps the most important. Do not generate in his mind a prejudice, a dread or a dislike for the track. Therefore let the first half-dozen lessons be short, and in showing him into the track and escorting him out of it, be kind, quiet and easy, so as to reassure him. The first few lessons and the effect they have on the colt's mind and disposition will have an important influence on his subsequent improvement.

CHAPTER XVII.

WORKING ON THE MINIATURE TRACK—THE DAILY PERFORMANCE—AMOUNT OF WORK GIVEN—IT MUST NOT BE EXCESSIVE—THE COLT'S CONFIDENCE TO BE RETAINED—HITCHING—WORKING WITH A RUNNER—AN UNNATURAL METHOD OF TRAINING—BALANCE AND STRIDE—THE BENEFIT OF THE TRAINING PADDOCK—DEVELOPING SPEED, WIND AND MUSCLE NATURALLY.

Now you have given the colt his first lesson, and you naturally desire to lay out for yourself and him a programme which, in your fond dreams, is to be a pathway to success. How much work are you to give him? How often is he to be worked, and how long at a time? What are the special benefits derived from this style of training? It requires more equipment in the way of a track, and it is, at the outset, more costly than working a colt with a runner, and what better is it? All these and a thousand more questions you will ask yourself, and I fancy you are asking them of me as you read. I cannot answer them all at a single dash, but will try and deal with each as it naturally comes up as we go along.

We have a great many colts to work, and to show the reader our "order of business" for a day, we will trace them through the daily routine at Palo Alto. It is simple enough. In the morning they are cleaned off

gently and well, watered and fed, and turned out in the paddock. In our paddock we have a long rack filled with hav, and there are also watering facilities. so that the colts can eat and drink at leisure. We have, it will of course be understood, this work confined to a department, with a superintendent and force of men and boys who have nothing to do with any other work than looking after the youngsters in their primary school. After all have had the morning attentions above indicated, they are, one by one, worked in the miniature track and turned out in a paddock. After all have been worked we let them run in a field of good grass. Meanwhile, their stalls or boxes are cleaned out and bedded, and feed put in. Then, in the evening, the colts are taken up, their feet cleaned out, and then they are turned into their boxes all right for the ni⊈ht.

When you first begin using the miniature track do not imagine that the colt is the only party concerned that has anything to learn. To make proper use of the track, to reap the best results, to do the greatest good with the least jarring, friction and trouble, you want skill as great as the man that sits in the sulky. True, it is not the same kind of skill exactly, but it requires the same order of judgment. It calls for coolness, watchfulness and thought. To know how far to go without going too far is the great point.

You must not tire the colt. Give him a good working (not forgetting that he is just growing out of the days of foalhood, and yet far from being a horse), but be very careful that you do not make the work wearisome. You will teach him, as I have said, to take the

turns easy, and come into the stretches prepared for a brush. After a few rounds, with three or four sharp brushes, let him stop if he wishes to get his breath free and well. Then start him around the other way. It will not do to have him go around the track one way all the time, for if you do this you will soon have him hitching. Making the turns always in the one direction gets him into the habit of throwing the inside hind leg further than the outside one—hence the hitching and roughness in the gait. In going around a turn the colt will always reach farthest with the inside foot. So you will endeavor to about equally divide the work—let him go one way about as much as the other.

Don't scare the colt. After he has got to showing some speed in the stretches you can urge him by clucking, snapping the lash, or "shooing him up" just as much as he will stand, but when he breaks endeavor to steady him with the usual calls in a reassuring voice, and if he persists in running stop him. A moment's reflection will show you how simple a thing it will be, but how injurious, to allow the colt to get the idea into his head that he is caught in a trap and being, as it were, "hunted." Never for a moment forget that he will learn just in proportion to the measure of his confidence in his trainers, and that if he becomes possessed of the idea that he is being merely chased he will think nothing about trotting, but all his mind will be centered on getting away and keeping away from those he may unfortunately regard as his tormentors. You should always be able to catch him—not capture him—on the track, and when done lead him out kindly and quietly. About fifteen minutes will be fully

sufficient to keep him on the track, and you will not require to keep him a-going too brashly to have a pretty good "work out" for the youngster in that time.

The longer he is in the ring the more work he can take with beneficial results. Increase it gradually, but always keep on the safe side. If you err at all, err in not giving him enough—not enough is far better than too much. Just as soon as a colt is overworked his educational progress not only ceases, but he goes back, and goes back by jumps compared to which his improvement is a slow process. If you find you have gone too far, give him a vacation, let him get thoroughly refreshed, and then begin again at the beginning and go slow. You will readily see how much better it is not to overdo the thing in the first place than to have to go back and begin all over again.

Provided your colt keeps all right, and is well, stout and strong, you can give him this work every week-day until he is twelve to fourteen months old, about which time you will break him to harness. If he is promising he will by this time have shown you a way of going through the stretches that will remind you of an old-stager on the track, and if you are, as we will presume, a good judge of action and balance you will be able to form a pretty fair idea of what kind of a horse you are going to have.

As our period of colt-education in the miniature track is identical with part of that at which many trainers work their youngsters by the side of a runner, I may as well here give my reasons for not resorting to that style of education. Some may say that I am

prejudiced against this system, but I believe I can claim honestly that I have no prejudice against anything that experiment has not given me reason to reject. I try to be reasonable and recognize merit wherever it exists. It has always seemed to me that the colt hitched with a runner learns to trot in a sort of unnatural, swinging, sailing way, without actually carrying his own weight, and certainly not balancing himself. They go fast that way no doubt. A boy can take hold of the rear bar of a wagon and follow it on a run just about as fast as a horse can trot. But is he running naturally? Is he balancing himself? He is striding about twice the distance he can naturally stride, and the moment he releases his grip on the bar he tangles his legs and falls headlong, showing that he is not running, but being carried practically through the air. We hear of yearlings trotting quarters in forty seconds hitched to a runner's bridle until we are almost forced to believe that 2:40 is the natural speed of these youngsters. But put them in harness and see how fast they can trot a quarter. When we time a voungster a quarter in forty seconds at Palo Alto we are not deceiving ourselves, for he does it exactly in the way he will have to do it when he starts in a race. The colt that is taught to go fast with a runner hitched to him does not learn to pull weight, to balance himself, and to stride out on his own responsibility. When he is taken away from the runner and harnessed to a sulky he is green and out of his element. He misses the tow-line. Does it not seem very rational to bring the colt up literally in the way he should go rather than waste his time and yours in teaching him

a style of trotting that will never be of any use to nim on the track? Let him learn something he is going to do, in the way he is going to do it, rather than in the wav he is not going to do it. I believe the action of a great many good colts has been spoiled, and the natural smoothness and balance destroyed by this yanking around with a runner. Remember that baiance is a very delicate thing. Suppose you are running at full speed, and your head is suddenly drawn to one side, do you think the stroke can be maintained true and even? Not at all. So this systematic unbalancing of the colt cannot fail to work injury. The theory, of course, is that the colt goes ahead of the horse, but will any man who watches this style of training for an hour tell me that this theory is strictly followed, or can be strictly followed, in practice? If it is I have never seen it. The colt's head is hauled and jerked this way and that; now he is going too fast and is pulled back; again he is going too slow and is towed by the head; then he goes too far out on the turns and his head is vanked around sideways; next he goes too close and is jostled by the runner. I prefer to let a colt go in his own way, balancing and striding naturally, and holding his head in its natural position.

You ask what the special advantages of work in the miniature track are. It educates the colt to stick to the trot, and to make that his natural order of locomotion. He learns that trotting is what he is wanted to do, and he learns to do it well. The first education of his life is in trotting, and it grows upon him with his age. He has to rely upon himself, for he does what he does of himself, and without assistance. His

natural action is developed, and as he develops speed he acquires perfection of balance, and gains complete control of his feet, his legs and all the muscles that are brought into play in trotting. When he breaks he is promptly reminded that he has made a mistake, and he soon learns to correct it quickly and neatly. The youngster's mind is receptive; like a child, what he learns young becomes second nature to him, and the trotting habit becomes fixed at the same that greater speed, steadiness and directness of action is being acquired.

The development of wind and muscle is another of the great benefits of this work. The well-fed, healthy colt that is daily worked will be a far stouter as well as a far speedier two-vear-old than the one that has run idle. His muscles will be not only fuller, but harder and of better tone. His lungs and wind will have developed and the action of heart and lungs will better meet the training test. You will see the youngster blow out after his work, and as the work continues you will trace the development of lung capacity in the gradual improvement in wind. After the colt has been worked in the track a while it will take more work to "blow him out," and his wind will be finer. You will see the colt gain in muscular strength and general stoutness, and every day become more and more a horse.

The action and balance of the colt in the miniature track you will observe is his natural action and balance, and you must study from it in part how to treat him in the future. Observe well the way he carries his head, and let that be your guide when you

come to adjust his check-rein. The check is a support, not a curbing arrangement to twist a horse's head and neck out of their natural position. If you study his balance and his action here, you will not be apt to make many mistakes in "hanging" him in harness, shoes and sulky.

Another very important point, and especially to those that have many youngsters to train, is the fact that the miniature track enables you to select those of your colts that will best repay the labor and expense of training. Let me work a lot of colts on this track for three months and I will pick out the stars, just as surely as they can be known three years later. All our famous youngsters distinguished themselves on the miniature track. They gave the promise of their future Sunol and Palo Alto, Manzanita and greatness there. Bonita, Hinda Rose and all the Beautiful Bells family have been stars of the kindergarten, just as they were afterward stars on the sterner battle-field of the turf. And this fact proves more than any other the truth of what I have contended—that this is above all the best natural method of training young trotters now extant. If it were not a natural system it would not prove so true an index of the capacity which the horse is afterward destined to exhibit.

FEEDING. 211

CHAPTER XVIII.

YOUNG COLTS TO BE LIBERALLY FED — COLTS CAN BE SAFELY WORKED TWICE A DAY IF NECESSITY REQUIRES IT — BREAKING TO HARNESS — THE BITTING RIG — LEARNING TO GO BY THE REIN — IN DOUBLE HARNESS FIRST — THEN IN SINGLE HARNESS — SKELETON WAGON BEFORE SULKY — FIND OUT WHAT YOU ARE GOING TO DO BEFORE YOU TRY TO DO IT—ADOPT A PROGRAMME—THE NECESSITY OF KEEPING THE GAIT SQUARE AND PRESERVING THE NATURAL BALANCE.

It is not my purpose to here refer at length to the feeding and keeping of colts and horses. I will treat on these details at another place. However, as we are now working our colt the reader may properly be reminded that it is important to see that the youngster is kept strong and stout. A very good diet at this stage is, besides the usual hay, ground oats for the morning meal, and at night a dish of ground oats, barley and a dash of bran steamed, the right proportion being about three parts of oats to one of barley. Give the colts all they will eat up clean. A colt cannot get too fat before he is two years old. Between his growth and his work all he can eat will be assimilated. The rule is that colts go back in condition after weaning. This is not as it should be, for a colt that is properly fed and cared for will improve after weaning.

The fact that his growth is arrested shows that after weaning he has insufficient or unsuitable food, and every breeder should be watchful at this period, for a set-back in the first year is never made up for. Feed them well, and especially if you are working the colt see that he is getting plenty of good food. You will not hurt him by giving him too much at this age, for he will not eat too much.

The colt will be worked in the miniature track in the manner described until he is, say, fourteen months old, when he will be broken to harness. In judging of how much work he should have both before and after he is broken to harness, you will be guided largely by what you expect to do. If he is to be driven for an early record as a yearling or two-year-old, he will require pretty strong work, while if he has no engagements until later his education will be more gradual. But do not under any circumstances let your anxiety for early reputation get away with your judgment. Remember the injunction I have already sought to impress upon the reader—do not overdo it.

We will suppose we have worked our colt every day in the miniature track, and now that he is a strong youngster, just past a year old, it is time to get him into harness. At Palo Alto we send him to the "breaking barn," and if you are a large breeder you will have a department of that kind in your stables.

However, as far as these instructions go, it does not matter whether you have a breaking barn or not—it is the *modus operandi* pursued with each colt that you are interested in, rather than knowing how to arrange to do it by wholesale. The first lesson in this breaking

is to get the colt into the bitting rig. This consists of saddle, breeching, crouper and bridle. The bridle will have an ordinary side-check, and the bit will be a snaffle, with a joint in the center. You will have become so familiar, by this time, with the way the colt carries his head that you can readily adjust the check just right, and be sure not to have it too tight. Lead him around in this every day for three or four days. After taking the harness off work him in the paddock; then turn him out for a run of a few hours. Then take him to the miniature track and give him his usual work with the bitting rig on, and in a day or two you can let him loose in the track, or in a paddock, with the rig on.

After he has become pretty well accustomed to this harness, make an addition to it in the shape of long reins. Let one man lead him at first while the other walks behind driving and seeking to guide him by the rein. Learn him to go ahead, stop, back, turn, etc. After a lesson or two the man at his head may be dispensed with, for if you have treated him right he will now understand what the rein means. Be firm, but not harsh with him, and see that the harness does not chafe or irritate him at any point, and watch that the bit does not hurt his mouth. Remember that the reason he does not do what you want him to at first is not because he is contrary or stubborn, but because he does not understand what you want. Do not mix up ignorance and perversity in seeking for the reasons why he will sometimes do everything but what you want him to. When you are sure that he understands what you want and will not do it, it is time enough to convince him that you are the managing partner in the combination. There is nothing more senseless and injurious than punishing a horse or a colt for not doing what he does not understand you to want him to do.

After you have gotten him thoroughly accustomed to the harness and obedient to the rein, hitch him to any light vehicle by the side of a reliable, gentle horse and drive him double. For the first time, about a quarter of a mile will be enough to go in a nice, easy, steady fashion, then drive your team back and quietly take the youngster out of the harness. Continue this daily driving for some time, increasing it as it continues, hitching him alternately each day on either side of his old-fashioned mate. This work is not for speed, but to thoroughly educate him to harness. He is getting his regular work on the miniature track every day, besides the harness education, so you will be careful that between the trotting and the driving he is not overdone.

After a little while of this education he will be a sensible and decorous horse in harness—unless he be a natural fool, for, unfortunately, there are born fools among horses as well as among men—and will be quite thoroughly broken in everything as far as his experience has gone. Now, we will shoe him with a neat, light shoe or plate behind, for it will shortly be necessary to have him wear toe-boots, or "scalpers" which the shoe must hold. You will, of course, have been watchful all the while that he has not been striking himself at any place, and is not, therefore, afraid to extend himself.

His next lesson is in single harness, and if all goes well he will before he knows it be going along by himself just as steadily as with the old horse. Hitch him as usual with the "old reliable;" go a little way, return, quietly take him out of the double rig, and hitch him to a skeleton wagon. I prefer the skeleton wagon to any other vehicle for breaking purposes. I place my feet on the axle, one on either side, and can thus assist the rein in steering him, teaching him to turn, etc. I must confess that a "break cart" is my pet aversion among training equipments. They are in great favor with some, but as far as I am concerned I have no use for them in my course of education. I believe that carts are responsible for spoiling more colts, knocking them out of their gait, etc., than any other single cause. They are long, stiff, shaky, lumbering vehicles, that must be a constant jarring handicap to a young colt. While many men who use these "break carts" to keep young colts straight with, are good trainers on the whole, I have as little respect for their judgment in this particular as I have for the cart itself. -

You do not work him for speed in the skeleton wagon, but principally to complete educating him to single harness. Drive him easy and do not drive him too far, for you are not now teaching him to drive fast, but rather to drive well. Keep this work up until he is thoroughly docile and intelligent in harness, so that you can depend upon his doing what you want him to do in obedience to voice and rein. When you have done this your colt is ready for the sulky, and now you can congratulate yourself upon having his education well under way.

He is now a yearling past—it is the early summer of his second year-and all the preliminary lessons having been learned while he was at the same time taking his regular work on the miniature track, the time has arrived when his regular track work will begin. But before you begin you will do well to know just what you want to do. Do you want to trot him as a yearling? or do you propose to go easy, give him a gradual and safe education, and not start him until the fall he is two years old, or perhaps not until he is three? Map out your programme so that you can work intelligently. Knowing what you are going to do and preparing to do it is half the battle. There are a great many Wilkins Micawbers handling horses, who are always waiting for something to turn up, and who think they are always ready for it, when in fact they are never ready for anything. The sailor who sails by chart and compass and always has in mind the course he is steering and the port for which he is bound, will make a better trip than the one who is drifting with the current and waiting for a favoring wind or tide. The famous recipe for cooking the hare began right: "First catch your hare." So at the beginning of trainyour colt in earnest, make up your mind what you are going to do before you try to do it. If you are "laying for" a two-year-old stake work him with an eve to that stake, and don't be distracted from your purpose by the little things that come along in the meantime. Keep your eye on that stake, and in the immortal words of an American philosopher "Say nothing but saw wood." In short, adopt a programme and stick to it.

If you mean to trot the colt as a yearling you will require to work him twice a day to make sure of the best results. The lessons are short, but it is sharp, speeding-making work; and where one work-out a day will be all a mature horse needs, you can give the colt a number of fast brushes in the morning and again in the afternoon without injury, provided the work is done with judgment and never overdone. After exercise, all young animals, as I have said, recover more quickly than older ones. A good, stout colt can be judiciously and advantageously worked twice a day until he is about two years old, but remember the work must never be allowed to tell on him. He must not lose his stoutness, or what goes with it at this age, his spirit and courage. At the first sign of track-weariness you should "let up." There can be nothing but harm come of working a jaded, failing, track-sick and spiritless colt.

I cannot too strongly impress upon the reader who seeks to profit by my experiences the importance of care at the point at which we have now arrived with regard to checking and balancing the young trotter, upon which greatly depends the purity of his gait. He is just to begin his track-work, and it is very essential that he begin it right. I hold that if your horse is not trotting perfectly square, if there is any hitching or roughness in his gait, or if he is in any way out of balance, he is not developing anything but faulty action, and can certainly not develop speed. Let it be understood at the outset that if you can get your horse in a hitching and laboring way over a quarter in thirty-five seconds, and your neighbor's colt can trot it in forty

seconds, square and smooth, his footfalls marking time as truly as the tick of the most perfect chronometer, he is doing far better than you are, and in calculating on the basis of a quarter in thirty-five seconds you are only deceiving yourself. It is not what he can do in any irregular, jerky, scrambling way that you must judge by. It is what he can do right.

Let me illustrate. There was a certain colt at Palo Alto that showed remarkably well in the paddock, but after we got him in harness we found that he could not show a trace of respectable speed. I drove him one day and found he could not trot a three-minute gait, do what I would with kim. After vain and discouraging work I gave him up for that day, thinking that, perhaps, he was out of humor and sulky, and a little tired. The next day I tried him again, but with no better results. Then I was in a quandary, and whistled a tune while I thought it over. I knew he was a trotter in the miniature track, and it was just as clear that he was not one in harness. So I unhitched him and turned him into the miniature track, and away he went as well A little study showed how he carried his head and how he balanced himself. I changed the check, harnessed him again, let his head free so that he could carry himself in his own wav, and that same day he showed me a quarter in better than forty seconds. In studying how he trotted without harness I "went back to first principles," and, in this return to nature, found the little causes that produced such important results. I might have gone on experimenting until doomsday with weights and shoes and I could never have gotten that colt right, for the reason that his head was checked out of its natural poise, and his whole carriage was unbalanced. When you run fast or walk fast you carry your head, your arms, your body in a certain way, and if you are forced to carry your head higher or lower, or to one side, all you have to do is to try to get up speed in that position to appreciate what it may mean in a colt's action to check his head an inch or two out of its natural place.

Therefore, before you take him on the track for the first time, it will be a good thing to adopt as a foundation principle to act upon throughout, that the natural balance and action must be preserved, and that the moment your colt begins to hitch or become unbalanced and irregular in his gait he is doing no good. Keep him going true, smooth and level, don't drive him faster than he can go squarely and he will develop speed if it is in him. "The matter depends not upon the doing, but upon the manner of its doing."

CHAPTER XIX.

FIRST WORK IN HARNESS—SHARP BRUSHES—AVOID JOG-GING, SWEATING AND SCRAPING—THE COLT MUST BE KEPT STRONG AND STOUT—COLTS CANNOT ALL BE WORKED ALIKE—IMITATION—ALL DEPENDS ON THE TRAINER'S FITNESS—AN OCCASIONAL LET-UP—"SPEED, SPEED, MORE SPEED," THE GREAT ESSENTIAL—SHOES AND WEIGHTS—EXPERIENCE WITH CHIMES AND CLAY.

In tracing our colt's career we have now reached the point where he is going clever in single harness and ready to hitch up for his first lesson on the regular He has as yet no shoes in front, but is shod behind. Put on all the boots that are necessary—all that caution and safety demand. Colts need practically no jogging, yearlings certainly none whatever. Of course no colt or horse should be worked soon after a meal; and you will find the yearling, always a trifle nervous, ready to work as soon as you get him on the track. Start him up at a good, fast jog for about 150 to 200 yards. Then turn slowly, giving him time to get his breath, and let him brush back a little faster. After going about the same distance, stop again, turning slowly, and send him back again, this time carrying him right up to his clip at some point of the brush, preferably near the end of it. In all his work, especially when the brushes are sharp, be careful to let him get his wind at each turn, and after this sharp brush that I have just described give him a little longer to breathe than you did before. Now straighten him out and brush him up the stretch again about the same distance, going up to his clip about the last of it, and that will be enough work for that day. Take him in, where no cold draft can blow on him, and take off the harness and boots, give him a swallow or two of water, rub him off lightly, and let the boy walk him a little, then put him in his box and leave him undisturbed, so that he can lay down, as a colt youngster will, and rest.

As I have said, young colts require little jogging and no sweating or scraping. Young animals do not take on fat internally like matured ones, and there is in fact no superfluous flesh in this rapidly growing period. The colt requires not to be reduced, but rather to be made stouter and stronger. Physicing, sweating and scraping are just the things no colt can take and thrive. It stops his growth and muscular development to strip him of his flesh, for the growing body, the maturing muscle and bone, need that nourishment which is only afforded in a condition of marked thriftiness. Only in this condition will the colt be in good fettle and spirit, and capable of taking his work with relish and being benefited by it. It therefore behooves the trainer to watch constantly that the colt does not "go back" in condition, for this loss of condition may be at first almost imperceptible. It is all the better if the colt carries a fair degree of flesh, which will not be of the "soft" kind with the work here prescribed. Keep him in good, vigorous condition, so that he will perspire freely with work, but leave beavy blankets, hoods, sweating and scraping alone

The amount of work will, of course, differ with different colts. No two can be worked exactly alike, and here will come in play the natural fitness of the trainer. If he is by nature fitted for a trainer, his own perceptions, or we might say his instinct, will teach him how to discriminate between different colts—to see where one requires to be handled a little differently from another, whether by reason of size, temper, or natural capacity. The trouble with the great majority of men who handle trotting-horses is that they are not thinkers but imitators. They saw Dan Mace or Budd Doble or John Splan do something with a certain horse, and they go right home and do it with their horses, under the impression that because a famous driver does it with one horse it is necessarily just the thing for all horses. No mere imitator can do anything intelligently, much less train horses, because to work intelligently he must understand the reason for everything he does. Doing a thing that you saw somebody else do without your knowing why he did it is just about as wise as taking a certain sort of medicine because it is taken by somebody else, whose disease vou do not know the nature of. There were never, probably, two horses in the world to which full justice could be done by treating them exactly alike. No cast-iron rules can be laid down; they must be taken as elastic enough to admit of modification to meet the requirements of thousands of different cases. So, while I am explaining in these chapters what we might call the average procedure at Palo Alto, defining the general principles and methods, and approximating as nearly as it can be approximated a course of training that can be advantageously followed, it must be remembered that all will, in the end, depend upon the judgment and fitness of the trainer who seeks to apply this system. Good tools never made a mechanic skillful; college education never made a man brilliant and talented; good training never made a trotter of a colt that had not natural speed, and the best system of training in the world will not make a great trainer of any man who has not natural fitness for his business. No amount of instruction and experience will make a good trainer of a man to whom nature has not given the qualities required in successfully and intelligently training horses. They may be called gifts of the eve and the hand, but they are more than that, for behind the well-directed eve and hand must be a cool, active and well-balanced brain.

The first day's training in harness, which I have described in this chapter, should be adhered to without any increase for the first ten days or so. From four to six brushes will be sufficient at first, but in say two weeks it can be increased a little. Don't increase the length of the brushes, but the number and speed of them, but this increase must be slow and gradual, according to the size and capacity of the colt, and the relish he shows for the work.

It is a good plan to let the colt up for two or three days, every three or four weeks, for a run out and a rest. This will freshen him up, and these breaks in the monotony will, if he is not overdone or harshly worked, be an effective preventative of track sickness and staleness. After each little let up he will go to work again with more keenness and vim. Barring

these rests, the colt's work will go on every day-Sundays excepted—presuming that he has been kept well and right. When he is two years old he will take more work, but not a greatly increased distance. I am not prepared to say that the length of the brush should ever be increased to over a quarter of a mile. We are now, mark you, working our colt for speed. You will, no doubt, inquire how a horse can trot a race without being worked mile heats. You cannot cut much of a figure in a race without speed, and, after you have developed speed sufficient to go away from home with, it will be time enough to condition him to carry it. You must have the speed before you can win races. It is of no use to condition your horse to go mile heats, if you haven't first got the speed to beat somebody else. You will see, then, that the Palo Alto system proceeds on the logic of the author of the recipe already quoted for cooking the hare: "First catch your hare." We aim to first develop the speed, and after that to condition the horse to carry it. The merit of this system of training in short, sharp brushes lies in the fact that it is the quickest and most effective way of at once toning up and hardening the muscles, and bringing out a high rate of speed—of teaching the colt to trot fast. A noted racing-man, when asked what the first essential quality in a race-horse was, answered, "Speed," that the next was "speed," and, after that, "more speed." After you have your colt going quarters in thirty-five seconds, or thirty-six seconds, or thirty-eight seconds, whenever you have had him show you enough speed and a big margin to spare to do what you are going to require of him, you

can condition him for mile and repeat performances. You may have him keyed up as hard as nails, but if your competitor can go a quarter in thirty-five seconds and you can go in thirty-seven, he will beat you all the way, and do it easy, while you are straining and struggling, and gameness and condition won't save you if the other horse is half-fit. He will be fresh after your colt is dead tired, and no matter how game your colt is he will have him a beaten horse in short order, simply because he can do with ease what you cannot do with your utmost effort. At the proper place I will write on the preparation of horses for races, and I here merely want to caution you that a two-year-old colt requires very little drilling at mile heats. Sunol trotted in 2:18 as a two-year-old, and no other has ever trotted nearly so fast. Just where we are now-the spring when your colt is two—is a good time to glance back at the chapter where her training is described, and see how many mile-and-repeat workings she had. When you have developed whatever measure of speed you believe sufficient to win the colt's engagement, vou can fit him for the race as Sunol was fitted, but remember you must first have the speed. Gameness and condition and all that won't prevail over a competitor that can throw dust in your eyes while going within himself.

At the beginning of work on the regular track, I have thought it well to explain the purpose and effectiveness of the brush system; for, just as I have remarked upon the necessity of knowing why you do things in a certain way, I have felt it my duty not only to tell how we handle colts, but "the why and the wherefore" as well.

When, for this purpose, we digressed, we had just been giving the voungster his first few days of work for speed in harness. It is now time to shoe him. Our two-year-olds at Palo Alto carry, as a rule, from eight to ten ounce shoes forward, and four to five ounces behind. At another place I will discuss shoeing, and its kindred subject weighting, but will here remark that the least possible weight with which you can balance the colt is what you should carry. I mean weight in the shoe—not toe-weights. My experience has taught me to almost wholly banish toe-weights from my stable, and I certainly advise the reader if he be starting out to train young trotters to have none of them. I could cite many cases to show the demoralization they work, but will content myself with reference to one striking instance. That was the case of Chimes, the brother of Bell Boy, Hinda Rose and St. Bel. I worked him as a two-year-old with ten-ounce shoes forward. With that balancing he trotted for me a quarter in 0:35, and three-quarters at a 2:24 gait. After Mr. Hamlin got him he put toe-weights on him, and he seemed to at once lose his speed, and he has, as far as the public know, never recovered it. He failed to trot for Mr. Hamlin faster than 2:301 as a threevear-old. He showed me ability to trot in 2:25 as a two-year-old, to make a very safe and conservative His is only one of many cases I could cite where toe-weights worked incalculable harm.

But putting superfluous weight on the toe is not the only way in which we sometimes go in exactly the wrong direction in trying to strike the happy medium in balancing trotters. The mare Hinda Rose, whose

history I have given, furnishes an illustration; and I learned another lesson with the stallion Clay. When he was a two-year-old I put on eight-ounce shoes, but in his work he acted as though he wanted more weight, seeming to go a little short in front, and not to handle his fore legs promptly enough. I then put on ten ounces, but that did not remedy the trouble, for in three or four days he seemed to require still more weight, and I kept on adding weight until he carried eighteen ounces on each fore foot. (That, remember, was some years ago.) Then he labored in the shoulders, and I reduced his shoes to eight ounces again, and kept him at a gait at which he could go squarely. In this rig he could show quarters right around thirtyfive seconds in his two-vear-old form. The following year he trotted some in public in eight-ounce shoes, and took a record of 2:34. After I went East with the stable in 1884, the driver who worked Clay, believing he needed more weight, increased his front shoes to fifteen ounces, and about two-thirds of the weight was at the toe. He did no good with this weight, and it caused him to strike his elbows. After my return from the East I took these shoes off, put on eightounce ones, and with little time to prepare gave him a record of 2:25 that fall. The weight I put on in the first place was needless, and I have no doubt that had I from the outset worked him in light shoes and not asked him to go faster than he could go level he would have ultimately proved a better horse.

CHAPTER XX.

WEIGHT IN THE SHOE - USE AND ABUSE - THE RESORT — WHEN WEIGHT IS NEEDED — REDUCING — NECESSITY OF VALUE AND EARLY NECESSARY HIGHEST TRAINING FOR RESULTS MATURITY - IN ACCORD WITH SCIENCE - THE EFFECTS OF NEGLECTED EDUCATION - A CASE POINT — A VALUABLE MARE RUINED - WORK FEW MILES, IF ANY -- THE MOUTH -- CHECKING AND DRIV-ING -THE COLT NOT TO BE CONTROLLED BY MAIN STRENGTH — TO DRIVE WITH "A SILKEN THREAD"— LIGHT HANDS - NO BREAKING IF POSSIBLE - CATCH-ING — THE WHIP — SIDE PULLING.

I have sought, in the illustrations just related, to show that we are too apt to jump to the conclusion that colts need weight when the difficulties that present themselves could be remedied without resorting to this artificial assistance. I need not enter into any argument to show that the ideal trotter will trot barefooted, needing no balancing other than what nature has given; and that the use of the shoe is simply to protect the foot. This is a self-evident truth, needing no elaboration. Every additional ounce of weight has its detrimental influences—it may be a necessity, but none the less an evil because a necessary one. You will, therefore, endeavor to reduce weight, and do not, under any pretext, increase it until you

WEIGHT. 229

are certain nothing else will remedy the difficulty you have encountered. It is a very nice thing to know just when a horse wants more weight. You may fancy he does not handle his fore legs promptly enough; he may break, or single-foot if urged, while, perhaps, you may notice that he will go a little faster if you pull him a little, the weight on the rein slightly altering the balance. More weight in the shoe may be required, and may prove helpful. If you decide to put on weight, and it remedies the trouble, do not conclude that it will always be necessary to retain it. After a reasonable time begin to reduce it gradually until you get down, if possible, to eight or ten ounces. But in nine cases out of ten, where more weight is thought necessary, the real cause of the trouble is that you are asking the colt to go a little faster than he can. True, weight may, for the time, help his speed; but, on the other hand, if you keep working him at a rate at which he can go square and clean, his speed will naturally and gradually improve, and the final result will be better than if you had resorted to artificial appliances. I will, therefore, again say: Keep the colt going square and true; do not be impatient, and if he develops roughness of gait, hitches, or becomes generally unbalanced, go back to a gait at which he can go level and seek to improve his speed by natural training before you experiment too much with his shoes. you are doing pretty well in a plain shoe of reasonable weight—say eight to twelve ounces—be content; if you are carrying more than that allow the shoe to gradually decrease in weight. By gradually decreasing I mean that wear will lighten it, and when you

replace it by a new shoe, if the colt is going well, have the new shoe made, not the weight the old one was when it was new, but the weight it now is after being reduced by wear. All the young stars of 1889—Sunol, Axtell, Lillian Wilkes, Margaret S. and Regal Wilkes carried light shoes. When horses were not born trotters, but were made to trot artificially, balancing by great weight was, in some cases, necessary—but now our youngsters are bred to trot, are foaled naturally-balanced trotters, and the nearer we keep to nature the better. Other things being equal, the horse that carries the least weight will stay better, go faster and remain sounder than the weight carriers. It is a point the importance of which cannot be well overrated, and now, when you are handling your two-year old, it is well to keep these facts in clear and constant view.

I am sometimes asked if, in the case of colts that are not intended to start until they are three or four years old, it would not be better to let them run out as yearlings and two-year-olds, to grow up in their free and natural way, and take just what exercise they like. This is a very pretty theory, but it is not found true in practice. I have already referred to the benefits of early work, but just at the time of which we are now writing, when you are working the two-year-old, another word may be in place. You may not intend to start your colt early, and in reading these observations on training you may think that Marvin is only writing for the benefit of men who want early records. That would be a wrong conclusion. I have already explained that the amount of work will vary according

to when you intend to start him, but even if you don't propose to do so until he is seven years old, to secure the best results you will find that work at an early age will be necessary. As previously remarked, the colt grows better and harder under the athletic training we have recommended. The lungs will develop with the muscles, and even the legs will attain a harder, cleaner substance. I believe it to be a scientific truth that the physical development of animals is modified by the use or exercise to which they are subjected during the period of growth. The boy who practices writing early has the advantage over a man who starts in late in life in more than the purely mental ground. The muscles that "push" the pen grow to better answer that requirement than if they receive no training until their growth is done. The boy who aims to shine, say, as an acrobat, will reach a higher point if he begins his training young, for the physical structure will during growth accommodate itself to the training, those muscles most brought into play increasing in bulk as well as in strength and tone, until the ease and deftness of the physical machine in a certain direction renders that order of exercise "a mechanical mode of life," or as we more commonly say it, second nature. Therefore it seems so clear to me that intelligently directed exercise, such as moderate training on the track, is superior to the impulsive, purposeless, and often violent exercise taken by a loose and untrained colt, that I cannot but wonder that there are those who do not see it. Some time ago Mr. S. A. Browne, the prominent Michigan breeder, who once owned Bell Boy, expressed, if I remember aright, the

opinion that when the record of Maud S. was broken it would not be by a horse that beat the world's record at two or three years old. I cannot agree with Mr. Browne on that point; but, even if his opinion were right, it would not be a point against early training, but rather, against asking a great effort of an immature horse. If I owned a yearling that I knew had in him the making of a world-beater, and if I did not want to trot him in public until he was fully matured, I would work him from his yearling form up, and would feel sure that he would ultimately be a greater horse than if he was allowed to grow up loose and uneducated until four or five years of age. Another fact is that horses in training are more carefully watched as regards health, and are generally under better hygienic conditions than those that grow up rough and untutored. Then again, with the latter, their tempers may develop in the wrong direction; they are not used to control, and they resent it, becoming so strongheaded that they may be physically as well as mentally ruined in breaking. A case in point: After Capt. Smith had gone a mile for me in 2:21 at four years old and the gelding Clay had shown great speed, I began to try to work a mare we had out of the same dam—Maid of Clay. At four years old this mare was unbroken, and we had to lariat her to catch her. She would kick, bite and fight whenever we tried to do anything with her; but after long and patient work I got her to drive double and single pretty well, and she acted like a trotter. One day I took her to a temporary blacksmith-shop to have her shod. Between two posts there was fastened, about four and a half

feet from the ground, a piece of scantling, and in struggling against being shod she got beneath that bar and raised right up under it. We tried to get the scantling off and could not, but we finally succeeded in pulling her out. She promised to be the best of Maid of Clay's family, but from that day, although not crippled, she never was worth a dollar. Her heart was broken, her spirit, her courage and ambition all gone. She would never go up on the bit again, and she was, in short, a subdued, useless and spiritless mare, where, had she been trained young, she would have been docile and educated, without the loss of ambition and spirit. So, my friend, who may be training a two-year-old, don't imagine, because you are not going to start him this year, that you are doing no good and might as well save yourself the trouble until the time for action comes. The work now is of more importance than at any other time, for you are laying safe and sure the foundation for the future, and if it is being well done you will some day find that in giving what to some may have seemed premature work you were "building better than you knew." There is a great lesson in the line: "Learn to labor and to wait."

Beyond the instructions already given I need say little more about working the two-year-old, as any average horseman will, after following through my remarks, be able to judge of how much work to give, and when to ease up temporarily. If you are going to start him in a race—and I advise you not to start unless you feel pretty sure that you have the speed to win—you can fit him for the race much on the plan pursued with Sunol. Do not give him too many miles,

and be very sparing in working him against the watch. Keep him in hard and stout condition, and don't trot the race until the race day. Further on I treat of preparing for races, and management in races, and while much remains to be said that is applicable to two-year-old training, the order of our work will cover it all as we proceed further on.

The first year in harness will have a great effect in many ways, and little mistakes now may have very momentous consequences hereafter, and in no way can more harm be done than by a little indiscretion with the colt's mouth. All you have to do is to check him up about three inches too far, and take a cast-iron grip on him while driving, to blight all his prospects in short order. You want to teach him so that he can be driven "by a silken thread"—driven with a light hand—and you will generally find that at first the colt with a loose check and with the lines lying almost loose on his back, will swing off at his own gait, whereas if you put weight on the bit, or check him up tight, he will be fighting it all the while, will be unbalanced in his gait, and be in no temper to trot. Let this ill-treatment be continued for a while, and your colt will have "a hard mouth," and will learn to pull, and to "hog on the bit." Sunol would have been a puller under any but the most careful treatment. Whenever she showed an inclination to "lug" I would let her have her head, talk to her, and have her go along as easily as possible, without being hard held, and she gradually forgot to pull; but had I fought her with the bit she would have been ruined. trained colt will learn to rate about any gait you set him a-going at with a lightly held rein. It is very essential to have him do this to train him to obey the voice, and jog easily without being held. After a horse begins to go fast, of course a little firmer grip is necessary to hold him safe and steady; but at all times let it be your aim to put as little extra weight on the rein as possible. Here will come in play what we call "good hands," about which there is an indefinable something that cannot be imparted. A light, yet firm, an elastic, yet steady, hold on the rein is what is wanted; but I can no more tell you how to do it than the painter can tell how to hold the brush for a master-stroke. It is a natural gift that does not seem capable of being acquired.

Don't waste, or worse than waste, time in teaching the colt to "break and catch." That is an idea that some men think the most important in training, but it is a pernicious one. You are teaching him to trot, not to "go as you please," and the great point is not to teach him to "break and catch" but to teach him not to break at all. If he does break, do not jerk him violently, "snatch" him, or see-saw on one side and then the other. We have all seen horses that leave their feet, throw up their heads and let go of the bit altogether. This is the result of jerking his head. He throws up his head to get away from the bit; he fears it, and hence cannot get into his balance and stride again. My plan is to give him a square pull back, and swing him very slightly to one side, giving him a chance to catch in the cross stride.

A few colts, even at this early age, are so dull and sluggish that a whip is often necessary to infuse ambi-

tion into them; but, while I always carry a whip, it is more for ornament than use with youngsters. With a nervous, highly-organized colt it is seldom necessary, and its abuse is absolutely ruinous in results. How often you see a man apply the whip to a young colt when he breaks, yet that is something that a boy of ten years old should have too much sense to be guilty of. To frighten and punish the colt at the very time when he requires to be steadied and reassured, is certainly not a sensible thing to do, and a man who will do it is not fit to get into a sulky, especially behind a well-organized youngster of fine fiber.

All these faults combined, or any one of them, may cause pulling, side pulling, or other vices of the head and mouth, with the numerous train of indirect results, such as spoiling the temper and the gait, causing the horse to become unsteady, hitching, etc. Pulling is a vice much to be dreaded, being generally incurable, and anything likely to encourage it should be carefully shunned. Care of the mouth is an important thing at this stage. See that the mouth is not sore, that the bit is not hurting it—never use severe bits—and endeavor to keep it in the naturally sensitive and easy state.

Side-pulling is a very disagreeable habit, and the cause can generally be found in the mouth. It may be caused by wolf-teeth (and the smaller the more painful they are), or before the colt has a full mouth, the gums may be swollen on one side of the lower jaw, between the molars and the incisors; or the sharp edges of the grinders may come in contact with his cheeks, especially if he is jerked; or the bit may be too long

and need washers to keep it from pulling through the mouth. There are various causes for side-pulling, which sometimes require care and much experience to locate. If you are not familiar with mouths, consult some one who is, and when the cause is found the remedy will be easily applied. In ordinary cases I have generally found wrapping the bit on one side with chamois skin to be effectual.

CHAPTER XXI.

CLIMATIC CONDITIONS—THE TRACK-WORK OF THE THREE-YEAR-OLD—THE SPEED-MAKING BRUSHES—SPEED WINS RACES—MANZANITA AND PATRON—BRUSH AT DIFFERENT PLACES ON THE TRACK—STOPPING AT SPOTS AND ITS REMEDY—AMOUNT OF WORK GIVEN—WORKING TWICE A DAY WHEN NECESSARY—ANOTHER CAUTION AGAINST OVERDOING IT—A TIRED HORSE RIPE FOR BREAK-DOWN—THE ERROR OF PERSISTENTLY DRIVING FAST MILES—WORKING MATURE HORSES—WORK DIFFERS ONLY IN DEGREE—EXCESSIVE REDUCTION—CONDITION—PECULIARITIES TO BE STUDIED.

The training of your colt will necessarily be affected by the climate in which you live. Our best time for work in California is in the fall and the winter-spring, barring the rainy season. Our summers are so dry—the grass burned up and the tracks hard—that it is a rather trying time on horses. The blood of a horse in training (eating as he does mainly food that is of a rather heating nature), as well as his legs and feet, is harder to keep just right in a dry summer than in the seasons when a feed of grass will regulate and cool the stomach, and a walk in the dew will cool the legs and feet.

In the East, and especially in the North, it is sometimes difficult to give a horse sufficient exercise in winter, and all I need say on this point is: Take the best advantage you can of your climate. If you have long stretches in the year when you cannot drive for speed, you can at least, almost every day, exercise the horse, whether it be over a snow-path or over winter roads. Aim to keep the horse in as near the good, hard condition he would be in if work on the track were possible, as you can, and he will at least be well prepared for track-work when the season comes for speeding.

The work of the three-year-old will be in great measure a repetition of that given the two-year-old, though he will now be given a little more of it, the main object being to keep him speedy. The brushes should not be very much lengthened, but he should go at a higher rate of course, though in your anxiety to have him do this do not "drive him over himself," as we say in stable parlance, or force him off his gait. I know if you are schooled in the ordinary ideas of training you will be impatient with my methods. He shows great speed for you at a prush, and you are anxious to drive him miles. You will not be likely to dispute the fact that the brush system—going a short distance at a high rate, rather than a long distance at a slow rate—develops muscle, lung power, speed and hardiness of the legs quickly; but, all the same, you want to go miles against the watch for the satisfaction of seeing what he can do. This is a tendency to be guarded against. There are miles enough ahead to be trotted and time enough to trot them in. You can go a mile at a certain rate, but you must go a fast quarter before you can go a fast mile. So first concentrate all your attention on getting the high speeding capacity developed; after you can go fast for a quarter the fast mile will come all right. Speed makes gameness. The horse that goes within his limit will always outlast the horse that is on his tip-toes from wire to wire. The case of Manzanita and Patron at St. Louis in 1886 is in point. She could trot a quarter that day, beyond doubt, better than thirty-two seconds—she could certainly have gone to the half close to 1:05. Going to the half in 1:08 so distressed Patron that he was a quickly beaten horse. He could not live with her that day any distance from "a panel of fence" to five miles, simply because she could trot him to a standstill without being all strung out, and each heat in the race was easy work for her, while he was driven out to the last inch.

It is not well to brush the horse always over the same ground, for he will then learn to stop at certain places on the track. Colts are quick of perception and retentive in memory, and when they find out they always start at one place and stop at one place they are apt to do it of themselves. In such cases the remedy is easy. When you find a colt getting into the habit of wanting to stop, or slacken speed at a certain place, make it a point to send him past that point at a lively gait. You can easily do this by shifting your brushing ground—sometimes working on one side of the track, sometimes on another, and occasionally giving him a breather around the turn and through the stretch. Another annoving little habit a colt is apt to get into is to try to turn out every time he passes the gate leading off the track. The same principle will cure him of this. When speeding never pull up just

at that point. Brush past it, down or up the stretch, then turn and walk or jog back. A little tact, in this respect, will break your colt of all inclination to stop or swerve while speeding, as he will know of no particular place where he is habitually stopped.

You began with the yearling going first about a furlong, and working him that distance four or five times. Gradually you increased it, until in two or three months you would give him six or seven brushes, of about 300 yards, going sharp at some point in each. Then, as he grew stronger, larger, stouter, and showed more speed, you increased the work a little more, giving the two-year-old about three-eighth brushes; and now in his three-year-old form, all being well, you can work him at from three-eighths to one-fourth mile brushes, never, however, fully stringing him out for a whole quarter, but sending him at high pitch for part of the distance. Occasionally he can be moved well within himself for a half-mile. When you want to do this, after you have given him nearly enough-and this, of course, varies with different horses—turn him and make the last brush about a half-mile, doing the most of the distance well within himself, and going the last furlong pretty nearly as fast as he can. You will soon learn to judge when a horse has sufficient They show it by "acting tired," and losing the eagerness to go which you will notice when you first bring him out. At the first sign of this, go to the barn.

The three-year-old wants very little jogging. Its only purpose is to have him empty his stomach, warm him, and generally "loosen him up." Although many

trainers seem to think differently, there is no development in jogging. Its only object is to get the horse ready to trot—a sort of preliminary exercise to gradually warm up the blood, unlimber the joints, and get the whole organization pitched to the point of action.

I have said once or twice already that a young horse can be worked twice a day to advantage if it is necessarv to start him young, or give him an early preparation. A youngster will tire slightly, lay down and rest, and be in a few hours refreshed, where an old horse will not rest thoroughly until night. So, until a colt is two years old you can work him twice a day, if necessary, with good results. The oftener he gets his work the quicker he will learn. Two short lessons are better than one long one. This semi-daily work may likewise be given older horses until they can trot fast enough to make work severe. You will appreciate the fact that the faster a horse goes the more work he will take in a certain time. So when your horse increases to a high rate of speed you will not keep him on the track so long as when he works slower. For instance, if your three-year-old can trot quarters in thirty-five or thirty-six seconds, you take him out, warm him, and when ready you give him five or six brushes fast, finishing each brush strong. If you will calculate a moment you will see that you have given him really more work and faster work, than if you had worked him a mile, and repeat, and he has been taught to go at a higher rate.

The trouble you will find it very hard to fight against will be, let me say again, the tendency to give the colt too much. You will like to see him go another

brush and when he is going fast and true, you will hate to stop him. So the virtue of patience will often need to come into play. Development ceases, you must remember, when you get out the last link. The brush should never extend beyond the point where you do not believe he can improve with the next step. When a horse tires he, in a great measure, loses control of his legs and feet, and if weighted the trouble is aggravated. He breaks, he falters in his gait, strikes himself, goes to hitching, hobbling—anything to rest himself—and as a natural consequence of this work goes back in speed, and loses precision in his action. And, moreover, a thoroughly tired horse is ripe for a break-down. We will suppose that you believe that if driven out, your horse can trot a mile in 2:20, and to satisfy yourself you start to do it. You feel him tiring at the seventh-eighth pole, but you want to finish that mile, and so hustle him along. In that last eighth the strain on his muscles tells, they begin to relax, the stroke is not so bold, true and far, and every sinew and cord is strained to its utmost, and vet he is asked to do more. He is not trotting now on his own courage, naturally and with marked, precise stroke, but is striving on mechanically, and is in the most favorable condition for a break-down. Did you ever notice how often race-horses break down in the home-stretch? It is the last straw—the call upon a weary horse to respond—that tests most severely tendon and cartilage. So I very strongly desire to impress upon you the importance of always working miles and halfmiles-when you work that distance at all-well within the colt's limits. In treating of preparation for races I will be more specific on this, but here, again, wish to put the trainer on guard. I have driven a three-vear-old, in a race in 2:22, that never trotted a mile in 2:30 before. If you have the speed, and the colt is in good condition, he will trot you a good mile when asked, if driven and rated with fair judgment. Do not exhaust the youngster in moonlight trials save the energy you would thus expend until race-day. You may want it. I consider there is no error more common and more grievous than the belief that the way to condition a horse for a race is to drive him and repeat him day after day right up close to his limit. You will find that when you begin to work the colt miles, preparatory to a race, he will lose some of his speed, even with the most careful working. With the fast mile-and-repeat business, as usually carried out, he cannot but lose his speed to a great degree. On race-day you want all the speed you can command, and you can have that and have the ability to go fast miles too by working on the moderate plan outlined in the chapters on Sunol, and on preparation for races in this book.

Though my object in writing this book is chiefly to deal with the training of young horses, that training differs only in degree from the manner in which, in my estimation, older horses should be worked. Suppose a man brings you a five-year-old horse to work for speed—a regular green one—soft and out of shape. You cannot start him up right away, but after getting his feet in shape, shod and "hung" right, you need not waste all summer in slow jogging before you do anything. Horses differ so in temperament

that it takes some time to know each one. Some are hearty eaters with appetites that nothing will affect, and these of course take more work than the more delicate kind. I do not believe in getting flesh off a horse with sweat-blankets and hoods. Work it off in the natural way. After you have got your horse into pretty good driving shape, with a fair share of flesh of the hard variety, he should be given as great a propor tion of his work in fast brushes as possible. After you have driven him until he is shaped up to take fast work without distress, you have got to a point beyond which I can give little more instruction than I have already given. The principle of the work for colts and mature horses is the same essentially. It differs only in degree. To prepare a green horse for work needs only a little average horse-sense—plenty of exercise, careful grooming and judicious feeding. Some men act on the principle that a horse must be as poor as a scare-crow before he is in condition, and some will even resort to physic to get flesh off. That is an erroneous idea, and the use of physic is simply unpardonable as long as a horse is well. It weakens and reduces a horse, which you do not want to do. The object is to keep him strong, but to work off superfluous flesh to get him in as nearly perfect healthy athletic condition as possible. Strength, vigor and energy do not stay by many horses whose ribs can be counted far off. After a horse approaches maturity he lays on internal fat, as all animals do, and in that condition strong, fast exercise distresses him, his wind being "thick" and "short." All racehorse men will tell you that some horses "run big" and others "run fine"—that is, that some are at their

best when rather stouter than what on the average is regarded as perfect condition, while others show the highest form when trained pretty "fine"—but the latter are in the minority. That some horses are at their best when very fine is true beyond question; but I know that in the great majority of cases a horse, to be in the pink of condition, must carry a quite fair degree of flesh—a good smooth coating over the ribs, not feeling gross and thick to the hand, but amply covering the bones. The hair should be soft and glossy, the coat smooth and velvety to the touch, never harsh and dried up, and the horse should perspire freely a clear sweat. But to describe condition is like trying to tell a man how to drive. You cannot do it. You can help, but his own intuition must be his greatest teacher in almost every point of the trainer's art. There is an old Spanish proverb which I have seen lately quoted with an apt application: "It is the eve of the master that fattens the horse." It is the eye of the trainer that makes him "fit."

The study of the peculiarities of your pupils, to which I referred, in passing a moment ago, is a most important part of the trainer's business. As the writer from whom I have just quoted very properly says: "Horses, like men, have idiosyncrasies of mind and body; like men, they require humoring, and cannot safely be treated as machines (which is too often done), and what is termed tact must be exercised with both. The progress of training must be gradual and progressive—never standing still. Inaction means deterioration." When a trainer and a horse get at cross-purposes with each other they had better part com-

pany. Neither one can do himself justice while he is fighting the other, and the divided house will come to grief. Work to be of any benefit will be taken in good temper on both sides. So the ideal trainer must not only have the faculties of observation, and the penetrativeness to discover the horse's peculiarities of nature, but he must have the elastic tact to accommodate himself to them.

I have now explained, at some length, the principles of our educational track work, and have indicated how a colt may be trained from infancy until he is a horse ready for the finishing touches in preparation for the fray. It would be very pleasant for the writer and the reader if a book could be written that, like a cookerv recipe, tells you all at once how to do every thing so that you can begin work when you begin reading, and do the job according to directions as you read on. But there are so many things that have to be done in their order every day, in horse training, that all the strings cannot be threaded at once. So, before we take up the preparation of the colt for races, and his management in them, we will leave the track and go to the barn, where it will be in order to give some attention to his care and keeping.

CHAPTER XXII.

STABLES AND STABLING — PALATIAL STABLES NOT NECESSARY—THE PRIME ESSENTIALS CLEANLINESS, AIR AND
LIGHT — LARGE AND SMALL BARNS — ADVANTAGES
OF THE LATTER — ROOMY BOXES — FLOORING — CLAY
FLOORS—BEDDING—FEEDING—CRACKED AND GROUND
FOOD — BRAN — IMPORTANCE OF GOOD QUALITY OF
FOOD—WATER—CALIFORNIA CLIMATE AND GRASSES.

The question of stabling is one of very great importance, but it is erroneous to suppose that a man needs to be a millionaire to properly stable his horses. Some of the farms in the United States have stables that are palaces, where liberality is seen to run into extravagance and practical comfort is forgotten in the chase of elegance. But as a general rule, for the purposes of training, I would not exchange the single story "shed stables" at Palo Alto for the mammoth barns where the light falls through stained glass windows upon polished woods, gilded iron, and brass. If I were asked to put in few words the requirements to be met in stabling I would say: Have ample room, scrupulous cleanliness, fresh air and abundant light. We have one great barn at Palo Alto—the largest and most expensive building on the farm—where three or four of the assistant trainers have their "strings," and I can say that the proportion of horses that go wrong in that barn is larger than in our long "shed" stables, where every box is independent. This barn is built on the usual plan-divided by two wide transverse aisles crossing each other in the center of the building, the boxes opening into them. The boxes are boarded up to the usual height, then divided by open work, and the space and shafts above are ample for perfect ventilation. But from the very nature of barns of this character there are always drafts, and you cannot regulate the air and temperature of each box. In the rows of single-story stables, where each box is a complete section, with its own door and window, you can regulate it to suit each horse just according as you wish to give him air, or protect him from drafts after work, etc. Then, again, there is greater safety, as each box is completely divided from its neighbors. Disease is not so apt to spread, and in case of fire you have a better chance to save horses. I would for many reasons rather have two or more small detached barns than one very large one.

As far as location goes I would only say: Have your stables convenient to the track, and on high, dry ground. It is better that they should face the south. When, as in so great a proportion of our stabling at Palo Alto, the boxes have independent doors opening to the outside world, it will be more pleasant to have a southern exposure, expecially in lands less favored with sunny weather than California. We have half-doors, and it will please you to notice, how on a fine afternoon, the horse likes to stand by his door, and with his head and neck protruding rejoice in the pure, sweet air, and watch all that is going on. Have a

veranda of liberal width to shade the box-door from the scorching heat of a summer sun, and to protect it from the rain.

As to ventilation and light, have it in purity and abundance. Foul air, as you know, rises, so that you will provide for its escape near the top of the box, either by an air shaft, or by ventilators; and the windows should be set pretty high, so that the air will not necessarily blow on the horses' body. A window swinging open from the top will well serve this purpose. There is nothing worse than a dark stable. Air, light, and cleanliness are absolutely essential to keep a horse in good health. They are cheap commodities and you can have them in plenty.

I like large, roomy boxes. A good size is 12x14, but 14x16 is better. It admits of free and natural movement; the horse does not feel pent-up and imprisoned, and it is certainly more conducive to health than smaller quarters.

As to what is the most desirable flooring is a much discussed question. An absolutely perfect plan for flooring and littering has yet to be devised. In a floor we seek durability, with economy, cleanliness, and substance healthful for the feet. For the perfect bedding we should have something soft and elastic, cleanly, and non-eatable. The advocates of peat-moss claim these virtues for it, but, as I have not had experience with it, I cannot speak with confidence concerning it. Some writers advocate cemented floors of bricks, tiles, or even stone, but I would not think of having a horse stand on such a hard floor. Imagine a horse brought in after a race, his feet tired and hot, compelled to

stand on bricks on flagstones. Many favor boarded floors, and much can be said in their favor on the score of cleanliness. If you lay such a floor have a little slope in it to carry the liquid excrement down to the draining gutter, but the slope must be very slight indeed, so that the departure from the true level will not be perceptible to the horse. I have had experience with several kinds of flooring, and I am free to sav I like a ground floor best. Some object that the earthen floor gets saturated with excretions, and it is difficult to keep clean. I have not found it so. I use lime liberally—sometimes chloride of lime. With careful and regular cleaning, and liming, the box can be kept perfectly clean and the air free from the health destroying ammonia that pervades wet and imperfectly cleaned and ventilated stables. For bedding I like ryestraw, and plenty of it. As to the details of stabling I need not speak, as every man "must cut the garment according to the cloth," and arrange his plans according to the size of his stable and the demands upon it. Every good horseman is orderly. He has "a place for everything and everything in its place," and the harness-room of a well-ordered stable should be kept as neat looking as a city harness-shop.

With all that has been written on feeding, the public ought to know it all, but still the writers write. After all we have not got beyond the simple facts that the horse's natural food is grass, hay and oats; that he should be fed and watered regularly with healthy solid and fluid, and that the object to be kept in view in feeding is to strengthen and nourish the body and keep it healthy. These are the elementary principles involved in all discussions on feeding.

I have already spoken of feeding youngsters, and have expressed the belief that they cannot be too liberally fed in their first two years of life, especially if being worked. I have had very satisfactory results with colts by feeding ground oats and steamed ground oats and barley. But both with colts and horses good grass and hay is essential to perfect health.

I have said to give the colts all they can eat up clean, but it is not so easy to fix the quantity with horses. Horses differ in the amount of food they do best with, just as they differ in the amount of work they require. No absolute rule can be laid down. One horse may keep right almost on hay alone, while another will require ten or twelve quarts of oats a day in addition to keep him right. The only rule I can formulate is to give the horse in training all that is necessary to keep him stout and strong. A horse, to be in proper track condition, will carry a certain fair amount of flesh, and if you reduce him below that he will become weakened.

I am aware that some horsemen do not believe in feeding cracked or ground food, but my experience convinces me that a limited proportion of it is beneficial in all cases and quite essential in some. Horses that are inclined to bolt their oats and horses in whose dung is observed whole grains will, for obvious reasons, get more nourishment from broken than from whole grain. Unmasticated food can afford little nourishment, and when a horse will bolt his oats without masticating it he should be given it in the broken form.

A word as to bran. I once gave it up altogether,

and substituted boiled oats, with a little oil-meal in it, for horses that did not sweat out freely and scrape well. However, for the past few years I have used considerable bran with good results. Good, clean bran, well-scalded, may be used judiciously to great advantage where a horse's bowels seem to need a little loosening.

Quality is the great essential in food. The horse's stomach is small, comparatively speaking, and it follows that he will not thrive on food the nourishment in which is a small percentage in ratio to the bulk. All food, then, should be clean and free from dust and must, as well as being good in itself, of whatever variety. The most nutritive food for horses in training, as I have said, are oats, hay and grass, and no other is ever necessary or advisable as food. Sometimes, however, a little feed of parsnips or carrots will tempt a horse whose appetite is not on edge to eat, and they have a cooling and regulating effect on the stomach.

See to it then that the hay and oats are sound and healthy, and of the best quality obtainable. You cannot save a cent by buying inferior food because it is cheap. That is false economy. The oats should be dry and sound, the grains full and plump, and be carefully cleaned before fed. Of hay there are legions of varieties, differing with climate, but every novice knows good, clean, sweet hay when he sees it.

The importance of good water is as great as of good food, and every one who has had any experience in horse-keeping well knows that a change in water is generally resented by the horse, and, therefore, the

best results will follow the use of not only pure water, but the same water all the time if possible. I have observed that a horse does best with his home water. He acquires a taste for it, and is quick to detect the difference of the water he is offered away from home. It may seem the same to the trainer, may be chemically the same, but the horse will detect a difference. This only illustrates one of the thousand little influences that may interfere with the trainer's work. The water should be of average temperature, and never given when very cold.

Referring to the quality of food, and the influence of climate, a little digression may be pardoned in order to speak of our California advantages and disadvantages in training and keeping horses.

First let me declare briefly that the climatic advantages of California are much exaggerated by many. We can grow colts more rapidly than any other section, for they are never chilled, never feel the stunting influence of wintry skies, but live in a land of warmth and sunshine. The usual time of foaling in California is about the most favorable of the year, when the grasses are at their best, and the youngster gets a start in life which sends him right along. Nevertheless, I believe I can go to Kentucky and have better results in the end, in spite of the fact that many of the Eastern people attribute all our success to climate. My horses have generally been better in the East in summer than at home. Our winters are superb barring the rainy season—for training, but the drawback comes in the dry, parching summer, when the grass, in a great part of the State, is dried up. It is

then difficult to keep the system of the horse in training right. The blood becomes heated, and the whole organization in a condition in which so slight a thing as a "hit" or brush may cause a break-down. The feet become dried, and, though some theorists believe that a horse's feet should be allowed to dry up and contract, I have found my horses go lame whenever they were allowed to drift into that condition. I have known good trainers to start out in the spring in California with large stables of horses fit and well, and have them all go wrong. Our tracks are hard and flinty, and this, in addition to the natural and obvious truth that when the system is feverish and disordered, it is unable to throw off even slight troubles, accounts for the fact that a larger percentage of horses "go wrong" in California, in summer, than anywhere else. Our greatest advantage here is that we can work longer, and work at any season—but for that very reason many horese are overworked. I have no desire to underestimate the natural advantages of this beautiful State, but I object to all the credit for what we have done—which is mainly due to the blood we have, and our methods of training—being given to "climate." With the same material I could do at least as well in the East; and if I owned Electioneer and thirty or forty selected mares, and wished to breed and train horses to break all records. I would locate in Kentucky or Tennessee in preference to California for that purpose.

With regard to our grasses we have no advantage over the sections I have named. Alfalfa I have not had a very wide experience with, and such as I have has not been very satisfactory. It does very well for brood-mares and youngsters; but it is a washy grass and affects the kidneys of horses in training. At least such has been my experience. Alfierilla, commonly called "filaree" is a rank-growing grass that horses are very fond of, and that I consider far preferable to alfalfa for turf horses. The natural wild-oat of California provides excellent forage, and the animals take much to burr-clover after it is ripe and dry. The natural herbs of California afford forage of the richest and most nutritious kind, and for ordinary horse ranching no country can rival it—but for breeding and training horses for the turf I am somewhat skeptical as to our advantages over "the blue-grass region."

CHAPTER XXIII.

THE DAILY PROGRAMME WITH A HORSE IN TRAINING—THE MORNING MEAL AND EXERCISE — CARING FOR HIM AFTER WORK — RUBBING, BLANKETING AND BANDAGING — TEMPERATURE OF STABLES — CLOTHING — MUZZLES — HOODS — GOOD MEN FOR RUBBERS — BOOTS — SOME SPECIALLY GOOD PATTERNS OF BOOTS — TOE-WEIGHTS—SELDOM NECESSARY AND MUCH ABUSED—THE PERFECT TROTTER WILL NOT WEAR THEM.

Now LET us briefly outline the daily programme with a horse that is taking strong work.

I make it a rule to give horses in work three meals a day. It is a very good plan to keep a bucket of water in the box over night; but if this is not done, give him a drink the first thing in the morning. Then feed him two or three quarts of oats, according to what sort of a feeder he is, and no water for at least two hours after feeding. By this time the sun, we will suppose, has got well up, and the morning is clear and bright. After he has eaten his breakfast, he is to be nicely cleaned off, legs rubbed, feet cleaned out, and if possible given a walk in the dew. Now we will hitch him up, and give him a gentle jog of a few miles, after which we bring him in, unharness him, and as a rule bandage his legs. Now he is walked a while, then the bandages removed and his legs hand-rubbed,

and rebandaged if he is being given lots of work. After he is well rubbed out, his feet washed, and he is walked in a light sheet until quite dry, he is "done up" for the morning. It is not well to keep him tied up longer than is necessary for it is irritating and annoying to the horse, and gives him no chance to rest. I would never tie up a colt, except when he is being cleaned or harnessed. It is harder on him to stand for two hours with his head tied up than to take his track work, and the incident fretting and worrying is injurious.

After a reasonable time we are ready to work him, and on the track we give him his work for speed in the manner described at other places. After he has taken his work we bring him in, give him a few "swallows" of water, remove the harness, throw on the blanket and then take off his boots. The next thing in order is to scrape him off lightly, taking no more time than is necessary. It requires care and judgment here, for while you must not let a draft blow on him, or allow him to get cold, if you keep him too warm he will scrape a second time, which is undesirable. Clothes enough to prevent taking cold is all that is required.

I have noticed horses too heavily clothed after work seem to get heated through and through show distress by panting.

After the scrape a body-wash should be applied. The following I have found very good:

Compound soap liniment	16 ounces.
Liquid ammonia	2 ounces.
Tincture cantharides	2 ounces.
Tincture opium	2 ounces.

Mix. and add about two ounces of this preparation to one pint of water and one pint of Pond's Extract of Witchhazel. This should be quickly poured and rubbed over the loins and muscles of the shoulders. after which the legs are bandaged, and he is clothed in a blanket and usually a light hood, though if the weather be fine and warm the latter is not necessary. Now walk him slowly for about twenty to twenty-five minutes, letting him stop occasionally if he wants to. When he is nearly dry take him in and rub him out. Avoid any more rubbing than is necessary, and have it lightly done. Hard rubbing irritates the horse, and in high training condition is indeed painful. The practice of throwing heavy clothing over the loins is one I cannot approve of. With a sound horse it is needless, and indeed I think has a hurtful tendency.

As above directed, the legs are to be bandaged whenever the harness and boots are removed, and the lotion applied. To put on a bandage right is quite a nice thing. A great many in bandaging the legs leave the heels or under part of the ankles exposed. Now, the lower part of the ankle needs the support furnished by the bandage just as much as the upper portion of the joint and leg. The object of the bandage is to "brace" the ankle and tendon until they are thoroughly rested after the strain of fast work. The bandage should be wrapped well down around and under the fetlock. The bandage should be set moderately tight and should be left on from one to two hours.

Now you have him dry, he has been brushed and cleaned thoroughly, and is ready for dinner. Give him

a moderate drink and the usual two or three quarts of oats, with a fair feed of sweet, good hay, and let him eat and digest his dinner as best pleases him.

After dinner the rubber will have the harness, boots, sulky, etc., to attend to, and a good boy will take pains to keep these always cleaned and in good shape, for this is a very important factor in their preservation and wear, as well as in their direct bearing on the horse's work. After these details have been attended to, the horse is given a walk and a little grass; then the box is cleaned out, the horse again rubbed off, his feet attended to (to which I refer below), fresh bedding put in and his regular clothes put on, and he is all through with for the day, excepting his supper.

Writing here in California, where we never have any trouble in keeping our horses warm enough in winter. perhaps I have neglected, in discussing the conditions sought in stabling, to refer to this phase of horse keeping that confronts breeders and trainers, in a region where the winters are more rigorous. In speaking of clothing, it may be touched upon. At all seasons of the year our nights are cool in California, but they are never cold. Hence, it is easier here to keep the horse in a uniform temperature than in the North and East. I need not say that horses must be warm enough, or they cannot be kept in good condition. They will not, on the same amount of food, thrive if cold. It is, I am sure, an indisputable fact that all animals can be kept thrifty and strong on less food in a comfortable temperature than in one where they are chilled. I am not altogether sure that artificially heated barns will, at all times, prove wholly satisfactory. I think horses must be more liable to contract colds, going out of a heated barn into the cold midwinter air of our Northern States, but, as I have had no experience in this direction, I cannot speak positively on the point. A temperature of about sixty degrees is high enough for health; and the reader in a northern region will appreciate from his own experience, without my reminder, the importance of duly providing for the horse's comfort in winter by stabling and good clothing.

For this country I like a linen blanket, with a lighter blanket over it, and it seems to suit all sorts of weather. In winter it keeps cold out—or rather keeps the natural warmth in—and in summer it does not get sweaty, keeping the horse's coat nice under all conditions.

The hood is an article of clothing that I am not sure is ever absolutely necessary, and, to say the least, should be little used. For sweating out the throat, or for any purpose that a hood answers, I prefer a jowl-piece. The use of heavy sweat-hoods is, I am sure, often weakening and injurious, and, if used at all, it should be with great-discrimination and care.

Muzzles are an invention in horse-wear that are an unmitigated evil, and if every trainer were of my mind the harness-makers would soon forget how to make them. That there are gluttons among horses we all know. They will drive their heads to the bottom of a bucket of water, and take chances of breathing through their ears rather than draw back; they will try to swallow three quarts of oats in one gulp, will gorge on all the hay, straw or anything eat-

able in sight, and even in their sleep will dream of hay-stacks. With such a horse I would far rather regulate his feed carefully, bed him with something he cannot eat, or even tie him up. In a rare case the muzzle might be used on a gluttonous colt, but they are hardly ever necessary, and their use hardly ever excusable.

I do not conceive it necessary, nor a profitable use of space, to go through all the details of stable equipments and describe the simple uses of such utensils as brushes, combs, towels, sponges, etc. Whatever curry-combs may have been invented for, they should not be applied to a horse's skin, but only to the brush. Corn brushes are labor-saving devices in cleaning, but are more irritating than the softer kinds, and are apt to show their work in thinning out the mane and tail. The towel, backed up by sufficient and willing "elbow-grease," should do the principal work in cleaning the horse.

The importance of having good rubbers, and the difficulty of getting them, are things that confront every trainer. Cheap rubbers are a poor investment, and they are always to be had, while the competent ones are scarce. An inferior or a vicious rubber will render ineffective the best efforts of a trainer. They should be sober and competent men, good-tempered and kind, and should show a pride in the horses they care for. Such men generally soon graduate into the driving ranks, for as a rule they are intelligent, and naturally adapted to handling horses. At Palo Alto we have one rubber to care for three horses; while out campaigning one looks after two horses.

BOOTS. 263

An important—a very important—part of the equipment of the training-stable is the outfit of boots. Of the ordinary harness I need not speak, as good harness, well made, strong, light, perfectly fitting and pliable can be bought for a good price in any city in the country, from dealers of local repute. The same may be said of sulkies—the Caffrey and the Toomey sulkies being the best. But concerning boots more extended remark is in order.

The necessity of booting I have already referred to emphatically enough, and I have furthermore already remarked upon the importance of having boots that fit properly. No horse or colt will fall to hitching and hobbling if he is properly protected with boots, unless he is sore, or over-hurried. The boot is a precaution against possible injuries that may come to the truest-gaited and most honest of horses; and it gives the horse confidence to strike out fearlessly. No judicious or experienced trainer will ever attempt to work colts without first properly booting them.

By far the best boots made in this country are those turned out by J. A. McKerron of San Francisco. He has experimented and worked tirelessly, and has perfected many an improved boot now in daily use all over the country. I have studied the making of boots considerably myself, and some of the improved McKerron boots are practically of my designing, among them being about all the varieties of "swivel boots." I will, with the aid of cuts, describe some of these that I have found most serviceable.

The Marvin Bell Quarter Boot, No. 68, is an improved quarter-boot, and especially suitable for young-

sters in their earlier work. It has a buckskin roll at

the top, and I have never known it to chafe a colt. I may say that I am partial to the bell style of quarter-boot.

This boot No. 36 is a front ankleboot, which I first had made for Bonita. It is made of white felt,



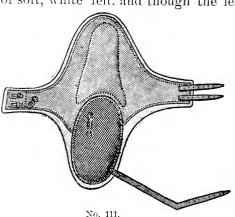
with leather cap, and has a buckskin roll on top for the purpose of holding up a roll.

This hinge quarterboot (105) is provided with steel plates and is a splendid boot for a hard hitter. The parts



No. 105.

coming in contact with the foot are of soft, white felt, and though the leather backing is



stout, and the steel plates make it an invulnerable protection, it does not chafe or hurt the foot.

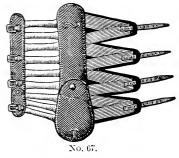
No. 111 is a knee and arm boot designed by me for Gertrude Russell. She struck there, and I failed to suc-

ceed in protecting her with any boot then extant.

BOOTS. 265

For a very hard knee-hitter a steel plate may be put in the cap.

The Caster Buckskin Shin Roll, No. 35, is very effectual for a horse that hits under the knee, and is a boot well worth trying



in gaiting a horse.

Like the bell quar-

ter-boot, it often gives the horse confidence, and also proves a good substitute for weight in balancing.

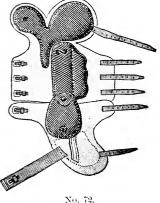
Cut No. 67 shows the pattern of the best front shin-boot I have yet used.

It has rolls and swivel, does not interfere with the action; while affording full cord protection, it keeps

the legs comparatively cool.

For a horse that hits his hock or rear shins, the combined hind shin, speed-cut and hock-boot shown in Cut No. 72 will afford ample protection.

Though the majority of horses need only quarter, toe (or "scalper") and shinboots, there are hundreds of different varieties, each of which may at some time



come into play, but these here described will meet all ordinary emergencies.

What I have already said renders it unnecessary to add much more on the subject of toe-weights. Like hoods and muzzles, they may be in rare cases beneficial and even necessary, but they are so much abused that it is a conviction with me that it is the safest plan to discard them altogether. The time is surely coming when toe-weight trotters will cut a small figure on the turf, and toe-weights will gradually be abolished. So I may say that I am opposed on general principles to the use of toe-weights, but if I had a horse that would not trot in any other way, or a pacer I could convert in no other way, I would, as a last resort, try toeweights. I would exhaust every other resource at my command before putting on the "murderous toeweights," and if I had to use them I would discard them just as quickly as possible after they had served their purpose. I would try the horse without them every little while, so that whenever he would go without them they could be finally cast aside. As I have already said, they are in the majority of cases used unnecessarily. They are adopted as a remedy for evils that can best be met by removing the cause, and as horses becoming unbalanced by being urged beyond what they can honestly do, hitching, etc., from hitting themselves, or from any of the many minor causes that tend to unbalance a horse's action. Toe-weights have undoubtedly made some trotters, and have been valuable in converting pacers to trot, but the perfect trotter should go without them; and the trotter that trots fastest, carries his speed the furthest and lasts sound the longest will, in the majority of cases, be the horse that trots without metal encumbrances on his toes. I

cannot but believe that had Maud S. never worn toe-weights she would have gone even faster than she has. Had she been educated from her youngest days to trot naturally balanced there is no doubt in my mind that she would have been a greater mare than she was on the turf, even though that be saying a great deal. So my earnest advice to the reader is to train up his colt without any artificial balancing, assuring him that the naturally balanced youngster will on the turf have a great advantage over the rival that has to lift even a quarter of a pound of lead on each front toe at every step. In the stress of battle this handicap is bound to tell before the wire is reached in the last heat.

CHAPTER XXIV.

STOPPING THE FEET — CARING FOR THE LEGS — THE SOAKING TUB — INJURIES RESULTING FROM HOT-SOAKING—
THE COMPOSITION OF THE HOOF — SHOEING — THE
ELEMENTS OF THE EXTERNAL ANATOMY OF THE FOOT—
THE WALL, THE SOLE, THE FROG AND THE BARS—
THEIR FUNCTIONS — THE WALL THE BEARING PART—
THE ANGLE OF THE FOOT AND PASTERN — EFFECTS OF
HIGH AND LOW HEELS — LEVEL AND BEARING TO BE
PRESERVED — STICK TO NATURE — THE SHOE — TRIMMING AND NAILING — EXPERIENCE WITH TIPS.

When we put our horse away after work, in the last chapter, we had done everything but attend to his feet. They should be carefully cleaned and washed out, and stopped up with clay. The use of such filth as cowmanure, etc., is not only disgusting, but it breeds diseases of the foot, such as thrush and canker. We avoid, in all cases, the use of oils on the hoof. The cooling, cleansing, and moistening effect of washing is all that is necessary to keep a healthy hoof in good condition. Oil will spoil any hoof, make it brittle, and generally demoralize its texture.

This brings us to a consideration of the care of the feet and legs, involving some remarks on the subject of shoeing. It is the custom in almost all books on the horse to include long technical and theoretical dissertations on the foot and how it should be shod. I have

no intention of following this example, for I do not think the ordinary reader cares to wade through more than the plain and practical observations of a trainer—observations which he can follow, understand and appreciate. Every horseman should have a good general knowledge of the anatomy of not only the leg and foot, but the whole structure of the horse. However, for scientific instruction on that branch of the subject, the veterinary schools and the standard veterinary works are the proper sources of information. I shall only refer to these matters sufficiently to make myself understood.

The care of the legs, so long as they remain clean and free from inflammation, is a comparatively simple matter, but, after trouble begins, the trainer may be prepared for vexation of spirit. Just here I do not propose to speak of the treatment of injuries or unsoundness, having some remarks to make on these subjects later on, but will confine this chapter to the care of the horse in a normal condition. Proper booting, as I have said, is the first essential, then handrubbing and bandaging. After work this leg-wash will be found an excellent application:

Sugar of lead	2 ounces.
Laudanum	2 ounces
Water	1 quart.

Rub this well in around the joints, and along the tendons; then bandage with a pliable bandage of a rather open or porous texture. Be sure that the bandage covers the joint properly, as directed in the previous chapter; and, while it should be set moder-

ately tight, it must not be tight enough to interfere with the circulation, and should not be left on long enough to allow the leg to become heated—certainly not over two hours—but the time will, in a great measure, be governed by the conditions, the weather, etc. I have found this lotion excellent in hardening and keeping hard and clean the legs of horses in strong work. But, perhaps, after all there is no lotion or no treatment so cooling and beneficial in effect as a walk in the dewy grass of early morning.

I am much opposed to the use of the soaking tub. Soaking horses legs and feet in hot water is certainly injurious, though the practice is much favored by trainers. As far as the legs are concerned it opens the pores, relaxes everything, and causes them to fever-up quicker every time it is resorted to, until the whole mechanism of ligament and cartilage is ripe for breakdown. As to the feet, can you imagine that to keep a horse's foot immersed in hot water, for quite a prolonged period, can have a good effect? I know that it is demoralizing to the foot. The texture of the horn it destroys, and renders brittle and hard. The horn of a horse's foot is "a series of small tubes cemented together by a natural glue having such adherent power as to bring them into a compact mass nearly as dense as whalebone." As Mr. Joseph Cairn Simpson very correctly argues: "The outside of the wall is naturally protected from imbibing moisture by a thin covering of enamel which, when in a natural state, is an absolute protection against the ingress of water. . When the enamel is rasped away as high, oftentimes higher than the 'clinches,' when the knife and rasp have cut off the ends of the tubes, the natural guards are rendered unless, and water is freely admitted. The tube is softened, the material which gave it elasticity and strength is replaced by that which has neither property; and, when that is dispersed, there is a collapse of the tubes, and, per consequence, contraction. This is the result of soaking so far as the wall is concerned. . . . The injurious effects of hot water on the wall can be summarized briefly, as follows: Exclusion of the natural material for keeping the tubes in proper shape; replacing that by a fluid which is rapidly evaporated by heat, and which has a tendency to change the texture of the horn from a tough, strong body to one that it makes hard and brittle."

The idea that soaking in hot water is necessary to keep the hoof in the tough, elastic natural condition is erroneous. Cleansing and washing the foot in cold water will not interfere with the hoof, and will have a cooling, grateful effect. The natural secretions of a healthy foot afford all the "moisture" necessary to keep it in normal condition when the horse is kept in a proper manner. No one is more opposed to allowing horses' feet to become unnaturally dry than I am; and for that very reason I have insisted that our California summers are difficult periods in which to keep horses in training sound and well of foot. But the remedy is not in the soaking tub. It is inexcusable with a well, sound horse. normal foot that is washed and cleaned as I have directed, and that often feels the damp, cool earth, and the dewy grasses, will need nothing else to keep it healthy.

To treat of shoeing thoroughly would involve a minute consideration of the anatomy of the foot and leg; and even to treat it with that brevity which this work necessitates, a superficial consideration of the formation of the foot is necessary.

The celebrated English authority, Fearnley, very properly remarks that the majority of writers on the foot have erred in considering it in isolation, or by itself, instead of as a part of the whole. It seems clear to me that to intelligently study shoeing the foot must be considered not by itself, but in its relation to the whole structure.

Certainly the effects of bad shoeing or of indifferent care of the feet affect the ankles and tendons directly, and as far as shoeing is concerned, the foot proper cannot be considered without reference to these parts.

The external anatomy of the foot may for our purpose be considered in three divisions: 1. The wall, or outer crust, from the coronet to the sole. 2. The sole, which Saint Bel defines as "that part which covers the whole inferior surface of the foot excepting the frog." 3. The frog, the insensible, spongy, triangular body in the center of the foot.

The wall, "the circular boundary-wall inclosing the internal structures," extends from the coronet, (the border-line where the skin joins the hoof, which is technically called "the line of the coronary band"), in an oblique direction to the bottom of the foot, terminating in "a circular projecting border." This is the natural bearing part of the foot, and to it the shoe is nailed. Bracy Clark declares that the slant of the foot from the toe to the coronet should form an angle

of forty-five degrees with the ground surface; and another noted writer sets the average depth of the foot when ready to receive the shoe at three and one-half inches from the coronary line to the toe, and the depth of the heels he sets at from one and one-half to two inches. The wall is thicker in the fore foot at the toe than at any other part, averaging there about three-eighths of an inch; at the quarters, about midway from the toe to the heel, the wall is from one-quarter to three-eighths of an inch thick, and at the heels about the same.

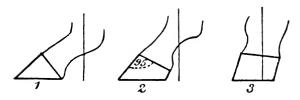
The bars are a continuation of the wall, extending therefrom at the heels, obliquely into the center of the foot between the sole and the frog, "constituting two inner walls or lateral fences between that body and the sole." In a state of nature they bear some pressure.

The natural function of the frog is that of a cushion, and being spongy and elastic, when called upon to bear weight it spreads, and to accommodate this action the wall expands from the quarters back. Indeed, the structure of the foot is such that even if the frog sustains no pressure, the heel must spread at every stride when the weight comes upon the foot. You can imagine then what the effect must be of shoeing a horse so that the heels are held rigidly to an unyielding shoe.

We have seen that the wall is the natural bearing part of the foot, and the frog an accessory. The bearing of the shoe should be wholly on the wall, not on the sole, and the ground surface of the wall is the only part that should ever be pared. This is the part that like the human nail grows exuberantly, and must be pared down every time the horse is shod. The knife should never be used on the sole or frog.

What we may call the angle of the foot is a very important consideration, for the slant or obliquity of the pastern must very materially depend upon that of the hoof. It needs no elaboration to show that if the heel be extremely high the pastern must be very straight, and if it be very low the pastern will be very oblique.

Fearnley, the noted English authority to whom I have referred, treats the fore legs as the weight-bearers, and the hind legs as the propellers. Practically this is



true, but whether in the trotting-horse the fore leg has strictly no other function than weight-bearing, I am not entirely sure. However that may be, it is the weight-bearer, and Fearnley fixes the coffin-joint as the focus of weight in the foot. If the foot be either too high or too low at the heel, if the proper angle of the ground surface with the line of the coronet be changed, then it is obvious that the focus of weight will be disturbed. It will be thrown either too far forward or too far backward, just as it would be thrown on one side if you put on a shoe two inches thick on one side and a half an inch on the other. The importance then of keeping the foot properly leveled is

SHOEING. 275

readily apparent. The cuts on the next page illustrate the idea. Fig. 1 showing the effect on the pastern where the heel is too low; 2, the proper angles of foot and pastern, and 3, an excessively high heel; the joint thrown forward, and the natural spring of the pastern lost.

You observe that if the heel is allowed to grow unduly high, the inclination is to knuckle; if it be too low the direction of weight is thrown backward, and the strain on the back tendons can be imagined. The great aim is to preserve the natural level, and through it the proper bearing and balance.

We trim our colt's feet and shoe our horses every three weeks, which will be found as long a period as the feet can be allowed to go unattended to with impunity.

In all my studies and methods in training I never forget to keep in sight a due regard for what is natural. Shoeing is unnecessary to the horse in his wild, natural state; it is artificial and unnatural, because the domesticated horse is kept in an artificial and unnatural state. It must, therefore, be regarded as a necessary evil. But the foot of the horse, unprotected, will not stand the battering of turf-training; therefore, the prime and sole object of shoeing is to afford the wall of the foot protection against the terrific concussion of fast trotting on more or less hard tracks.

The next consideration is to make that protection as light and uncumbersome as consistent with efficiency. So, at Palo Alto, we shoe our horses all pretty much alike, with a plain, light, simple shoe, such as is shown

in the cuts, ranging in weight from say, eight to fourteen ounces. I like very well what is called a half-



TYPICAL PALO ALTO SHOE.

shoe. The toe concaved on the ground surface will not throw dirt against the horse's belly, which is sufficient to make some unsteady, while the concavity on the upper surface prevents it from bearing on the sole. We generally have the shoe drop off at the heel; i. e., we

concave and half-convex

begin about an inch from the heel to champer it off to

a tapering end.

My explanation has been mainly directed toward making clear the reasons for preserving the natural level and bearing, and the necessity of non-interference with the expansion and contraction of the hoof from the quarter to the heel, according as the foot bears weight or is



INSIDE OF SHOE.

relieved of it. The levelling I have already spoken of; in the manner of nailing the shoe, the freedom to expand must be preserved. We, as a rule, put in

TIPS. 277

six nails, three on either side, but never put a nail back of the widest part of the hoof—the quarters—thus leaving the heels free.

The foot should be so trimmed that the frog will lightly touch the ground, but take little or no weight. It is one function of the frog to keep the heels open and healthy; if it become wholly inactive, it, as a noted writer puts it, "melts away and allows the heels to come together." On the other hand, I do not believe it can, in track work, take any considerable weight without injurious results ensuing. In the natural state the frog was, beyond dispute, intended to bear a considerable amount of pressure, to break the shock of concussion on the wall, but I am not prepared to believe that it is equal to the emergency of standing any appreciable share of the shock in hard track work.

As to the substitution of tips for shoes I will sav that on some soils and on some feet they may be used to advantage. But my experience has been that they are not suitable as a rule for track-work. I have given them a very fair trial, and have found that at least on our gravelly soil they fail to sufficiently protect the feet of horses in training. The tip, as all know, is a plate extending around the toe from quarter to quarter and set in or inlaid in the wall flush with the ground surface of the rear part of the hoof. I found that the hoof behind the tip wore away so much faster than the tip that soon all the pressure came on the toe, the level of the ground surface being destroyed, and eventually the toe, as a natural consequence, turned up. To reset the tip often enough to preserve the level would soon necessitate cutting up into the sensitive part of the foot. In short, I found that on our tracks the heel wanted some protection as well as the toe. On a soft soil for jogging, for a horse not in hard training or for a horse with contracted heels, they are excellent, but are inadequate protection as a rule in the wear and tear of constant track-work.

In shoeing, the aim is to keep the foot elastic, yielding and natural. Be careful with the knife, cutting only the horn of the wall. Leave the frog, the sole and the bars alone. They will care for themselves. When the foot is properly leveled, then fit the shoe to the foot; not the foot to the shoe.

Shoeing, like everything else, should be looked at from a common-sense standpoint. There are no wonderful and unrevealed mysteries about it. Keeping in view what nature intended, remembering that the sole purpose of shoeing is to afford protection, the simpler the better; steering clear of quack smiths that know it all and recklessly slash and rasp—these are the most important precautions to be kept in view concerning shoeing.

TRACKS. 279

CHAPTER XXV.

TRACKS—SHAPE AND TREATMENT—THE EGG-SHAPED TRACK
—THE CUSHION—READY FOR RACING PREPARATION—
THE COLT MUST BE GOING SQUARE—CHECKS AND BITS
AGAIN—OBSERVATIONS OF JOHN SPLAN—HIS EXPERIENCE WITH FANNY WITHERSPOON—DRIVING WITH &
WATCH—THE PREPARATION FOR RACING—A WEEK'S
DAILY PROGRAMME DETAILED—PRESERVING SPEED
WHILE CONDITIONING THE HORSE TO CARRY IT—TREATMENT VARIES WITH DIFFERENT HORSES—THE IMPORTANCE OF PROPER JOGGING—THE TRAINER MUST NOT
TRUST DETAILS TOO MUCH TO HIS STABLE ASSISTANTS.

Having discussed the stable care of the horse we are working, we will now return to the track.

In speaking of the necessary facilities for training we cannot omit some remark on the track itself. For racing of course the regulation track is best; but for a home training track I like an egg-shaped one, so planned that the stretches come to and go away from the barn. I have already spoken of the habit occasionally contracted by colts of turning out toward the track-gate every time they pass it in their work, and the reason of my recommendation of an egg-shaped track, with the short turn near the stables, is obvious. Going on the stretch away from the barn the colt goes straight about his business; coming down the stretch toward the barn he brushes fast and willingly.

You are fortunate if you can have a soil and can build a track that need not be harrowed. Tracks that become deep and heavy are bad for training. The colt strains, the sulky draws hard, and the action is interfered with. The horse should trot on a smooth surface, where the sulky and the weight it carries draws as lightly as possible. The track that can be kept in order by simply scraping and sprinkling is the best. The aim is to have the track smooth yet springy, to have it clean without being hard, and elastic without being clinging.

At Palo Alto we wet the track every night and harrow it every morning. We try to have as little dirt as possible on its surface, and yet not have it hard enough to jar. Last fall we had our track in such shape that only sprinkling and scraping was necessary. This was brought about by plowing, manuring, then plowing the manure under, after which it was sown with rye. When the rye was about two feet high we plowed it under, not very deeply, and then shaped up the track. The rye was sown December 10th and plowed under March 1st.

The great point in track building is to get a perfect cushion—one that is smooth, springy and clean, where there is a certain amount of yielding when the foot strikes, but yet no softness of surface.

To the point where we branched off track work to consider stabling and stable care we will now return. The colt was going smooth and true and was perfectly balanced, or else you had failed to rightly interpret and apply my instructions; for, though it is a repetition of what has already been said, if he became

unbalanced, hitched, and got rough in his gait, the proper remedy was to go back to a rate at which he could go square. I cannot too often or too emphatically declare the necessity of preserving true balance. Every revolution should be as smooth and true as a perfectly balanced wheel that runs with little expenditure of driving power—not like a wheel with a big side to it, that is only kept laboriously revolving by constant driving. Development ceases at that point where truly balanced and regular action is transformed into the jerky hitching, irregular way of "getting there" that we so often see.

You can, with little practice, judge whether a horse driven by another is trotting square by listening to the foot-falls. The sound of a fast, well balanced trotter's steps mark time as regularly as the swinging of a pendulum. Time is beaten, one, two, three, four—smoothly and accurately, with the intervals strictly regular.

Checks and bits have a good deal to do with balancing the horse, and the less restraint or annoyance these appliances give the horse the better. I like plain bits. If you cannot control a horse with a plain bit, you have a small chance of making a trotter of him at all. Such bits as the "Perfection," "Rockwell," etc., I consider pernicious contrivances. There are cases where a horse has improved with a severe bit, but they are exceptional. With what extreme measures have achieved I do not quarrel, but I do argue against using artificial and unusual appliances unnecessarily, and this applies not only to bits, checks, shoes, weights, etc., but to every thing connected with training.

John Splan, in his work, "Life with the Trotters," has, among many good things, these remarks, which are well worth quoting:

"My experience has been that no horse can be successfully driven with anything like a severe bit. I never saw one that was broken of the habit of pulling in that way. If you put a severe bit in the horse's mouth and pull on it, it makes him mad and irritates him; the further you drive him and the harder you pull, the more he will pull against you. When I was a boy almost every trotter I saw would pull in a disagreeable manner when being driven at top speed. the present time I cannot think of one horse that is anything like first-class, that pulls enough to make it disagreeable for a man at any time. . . are a great many horses that will not take kindly to an over-check, and if you insist on using it on them it will sooner or later spoil the horse's disposition to a great extent. The plainest case of the kind that ever came into my hands was Fanny Witherspoon. had been trained for a number of years, and always with an over-check. I trained her myself for over a year in the same manner, but with very little satisfaction, as she seemed to continually have some trouble with her mouth. In talking the matter over with my friend Hickok he advised that I try her with a check bit, side-check, and nose-band attachment. I did so, and in the shortest time imaginable the mare showed a very marked improvement in her driving."

When a horse seems to be irritated and fights the bit or check, he cannot improve. It may take some experimenting to find out what will suit him, but the quicker he is suited the better. Why some horses like an over-check and some a side-check, and why certain bits must be used on certain horses, it is often hard to explain; but the one fact confronting the trainer is that the mouth must be kept right and the head rigged with check and bit which the horse will not resent and fight, if satisfactory results are to be accomplished.

The quotation from Splan, with which I wholly agree, reminds me of another remark in his book, from which I must dissent. That is where, in speaking of condition, he states that if you get a horse in condition he will have his speed. That is all right if you have a trotter already made when you get him, but it does not hold in educating horses to trot. You can put a horse that has not been taught to trot fast in perfect condition, but condition and speed are not the same thing, though each is essential to a great performance. You must get the speed before condition can carry you to the wire in 2:20.

It is well to learn to drive by the watch, provided you don't try to beat it. It improves a man's judgment of pace, and hence teaches him to rate more evenly. The only danger is that the driver will test the horse's speed too often by the watch. Let it be your guide, but not a competitor with your horse. I consider it indeed essential to good and exact training that the driver practice rating by the watch, for he will not only learn to rate better himself, but the horse will learn to trot evenly at almost any rate of speed desired within his limits.

With these general remarks, we may proceed to consider the colt's preparation for a race, presuming that he has shown speed enough in his brushes to justify the belief that he will do himself credit in public.

The question is, how fast is it necessary for him to go to win? At Palo Alto we do not think we have very much to "bank on" unless the colt can show us quarters in thirty-three to thirty-four seconds, but a man need not be discouraged because his three-year-old cannot quite do that. To illustrate our method of preparation for races, however, we will suppose the colt can show a quarter in thirty-four or thirty-five seconds, that he is going level and right, and that he has his engagement to meet in three weeks from Monday. Sunday with me is always a day of rest, for horses and men. Even if I race on Monday, Sunday is the same, and I have found it good policy to keep it in this way, not to speak of moral obligations.

Monday, after the usual morning programme, we will jog him from five to eight miles, according to age (usually not over five in the case of a two or a three-year-old), on the track or road. A jog on a good road is very beneficial, as it breaks the monotony of trackwork, and is in a measure interesting to the colt. Tuesday, at the accustomed time, jog him say about three miles—just enough to have him empty himself and get warmed ready for work—and then put on his quarter-boots and give him three or four brushes of about a quarter of a mile each, finishing all strong, and the last one about up to his limit. The next day, Wednesday, we will jog about three miles again, the jogging always being merely for the purposes named, and after scoring a few times give him a mile in about

2:37. We are now, it must be remembered, in prescribing this work, supposing that the horse under preparation can speed a 2:20 gait; but at whatever rate he can go the reader will see that we approach his limit slowly and cautiously. This mile in 2:37 or 2:38 will be easy for him, but he should be asked to come the last quarter fast. Now, after unharnessing and a light rub-out, put on a blanket, remove his boots, hand rub his legs, and then walk him in a sheet for say twenty minutes. Then put him in the sulky again, score up four or five times until he is good and ready to "go." and send him a mile in say 2:33 to 2:35, finishing strong as before. Then properly care for him as already described in a previous chapter. body wash there given is very good, and I have also found a lotion of arnica. rum and water to be excellent for the muscles after work. There are dozens of preparations for this purpose perhaps equally as good as the two I have given, and important ingredients in most of them are witch-hazel and arnica, which are always beneficial on strained or work-sore muscles.

On Thursday our horse will only require a light jog for exercise, neither far enough or fast enough to tire him in the least. On Friday, after the usual warming up jog, give him three or four quarters—one fast enough to keep his speed at an edge. On Saturday we will jog him smartly for two miles, say, and then work him four miles at regular intervals—that is, at intervals of twenty to twenty-five minutes. The first mile should be in about 2:38 or 2:40, the second in 2:30 to 2:32, the third say in 2:26 to 2:28, and the fourth in 2:23 to 2:25—always finishing fast and strong.

Repeat this programme the following week, and up till Wednesday of the week before the race. That day he will be worked out a couple of miles, on Thursday will get a light jog, and on Friday three or four fast quarters—and be sure he has his speed. If he has, and is well, you are ready for the fray on Monday. object of the course of work he has been given is to condition him to carry his speed full miles and yet not to dull any more than possible the fine edge of the speed we worked up to in our brushes. I have found that after a horse loses part of his speed it comes back slowly. He should not have work enough to dull his speed, drill him down, or take the vim out of him. Keep him feeling good. A horse never gets track-sick until he is abused—overwork is abuse, though it may not be intentional abuse—and as soon as he shows track-weariness, and loses the ability and the desire to brush as fast and strong as ever, the note of warning I have already sounded so frequently is in order again: Ease up, for you are overdoing it.

The preparation, like every other detail in the training, needs, I need not say, discriminating judgment. No rule can be laid down to suit every horse. The above course is not meant as a rule always to be strictly followed. It simply outlines the general plan on which we prepare our horses. At every stage of training and preparation the trainer's judgment must come to his aid, and guide him as to what to do, how far to go, and when and how to do it. Just as horses differ so must the application of a system be elastic.

Few trainers do much jogging, leaving that to the boys; but I will say that I would always rather do my

own jogging, and always do it with horses that I am especially preparing for important performances. It may seem a very simple matter, but it is one of great importance. Mouth, gait, temper, are all directly involved. To turn out a masterpiece of work in training the one hand should do all the driving. You can be sure the horse feels the difference. This preliminary work should be done smoothly and steadily, and at a smart, lively jog. Attention to details is the great thing in training as in all other branches of human endeavor. The man who gets in the sulky when the horse is ready to work, drives him his mile and repeat, and leaves all the rest to the rubbers to do, if they will and how they will, may have an easy and pleasant time in this life, but he won't break many records.

CHAPTER XXVI.

THE MORNING OF THE RACE—PRELIMINARIES—STARTING AND SCORING—GOING FOR THE HEAT—WHAT TO DO BETWEEN HEATS—COOLING OUT—WHAT TO DO IF THE HORSE DOES NOT COOL OUT PROPERLY, AND IS DISTRESSED—STIMULANTS—FEEDING IN A RACE—HAVE EVERY THING READY BEFOREHAND—MUD SHOES—ATTEND TO BUSINESS, AND AVOID TRICKS—LAYING UP HEATS—DRIVING REQUIRES NATURAL FITNESS—JUDGMENT OF PACE—THE STEADY HORSE HAS THE ADVANTAGE—THE EXIGENCIES OF A HEAT—KEEP COOL, AND STAY WITH YOUR HORSES.

The night before the race and the morning of race-day give the horse his usual feed. After breakfast jog him three or four miles. After coming in from the jog give him a little water and a light feed of hay that he will eat up clean. I do not like muzzles, as I have said, but if you have a "gormandizer" you can now muzzle for a little while, and leave him alone to rest. If he is a gentlemanly and dainty horse, that is above chewing his bedding, the muzzle is not, of course, necessary. About eleven o'clock give him his usual dinner, and about one you can take him out and jog a couple of miles; then drive him a good strong mile, at some point opening him right up, to see that he has his speed. By the time you have cooled him out the hour for the race will have arrived, and if it is your first

race the clanging of the judges' bell will probably strike you with a thrill. But keep cool, and go about it just as if you were going to work out your horse. Take him out and jog him until warm, score or brush sharp once or twice, and go to the stand, weigh in and get your position. Now the field goes down to score, and it is always well to co-operate with the starter and endeavor to prevent delay. There is no other thing connected with the trotting-turf, barring the "jobs," that does so much to render it unpopular as the tedious delay and repeated scoring that is so common. So do not be an obstructionist on the score.

Now we are ready, and as we are not working the pool-box, but have our hearts set on winning the race, we will attend to that business from the word "go." I have had horses (and among them Palo Alto in his four-year old form) that required a heat in company before they were ready to go after the money, but they are the exception. In the heat do the best you can to get to the front, and if the horse can win it within himself don't pump him out any more than is necessary to safely win, and leave the artistic but somewhat deceptive pastime of driving head and head finishes, when you can as well win by a length or so, to other smart gentlemen. After the heat take your horse to the stall, or better yet, if the air is balmy and dry, under the shade of a tree; take off his harness and boots, scrape him easily and quickly, lightly rub a little of the water off him, and then throw on a light blanket and walk him. Give him a swallow of water occasionally, but not much or not too often, and after he has walked a while if he will scrape, scrape him out

a little. Then apply one of the body washes I have recommended over the loins and back and the muscles of the shoulders and forearms, as well as those running down under the flank. Now walk him again in the blanket, and by this time he ought to be thoroughly blowed out and ready for another heat. If he has, however, failed to scrape well, and seems unduly distressed after the heat, sponge him over with tepid water. In some cases I have seen cold water do just as well. This will almost certainly relieve him.

Another very good application I have found with horses that showed distress is warm water and Medford rum, with a little salt added, applied all over the muscles. Sometimes a horse will get all "corded up" in the muscles, and seem to be in a measure paralyzed. Hot applications are the surest relief. Splan recommends blankets wrung out of warm water, and laid across his back and shoulders. I consider this treatment good.

As to internal stimulants, I do not believe in them as a rule. In the case of a very tired, or apparently beaten horse, they may be used to advantage occasionally. Brandy and whisky are the most commonly used, and one is probably as good as another.

The treatment above described should be repeated after each heat, and if all goes well the horse should be none the worse for the race. After the race is over take him to his stable, and do him up in much the way I have recommended that he be treated after work, with perhaps a little more attention and care. The day following the race he will not require any exercise beyond a walk in the morning and evening. Rest is what he

most requires, and if he has had a hard race take off his shoes for a day or two, walk him in the dew, give him a little grass, and in general treat him so that he will be thoroughly rested and refreshed. Then resume work as before, at fast brushes, to improve his speed, and gauge your work at distances by your engagements.

Between heats feed your horse. Jack Feek says that he finds nothing better after a horse has gone two or three hard heats than a quart or two of good, clean oats, and I am inclined to agree with him. I have found oatmeal gruel excellent, though some horses will not eat it. As a rule, however, you can get your horse accustomed to it; and in that case you should have it ready before the race. He will not require it at first, but after the second or third heats give him a little. It is a mistaken idea to suppose that a hungry horse can trot and last through a hard race. Certainly he cannot trot on a full stomach, but he must have sufficient nourishment to keep him strong. If you have ever felt the weak and "gone" feeling of trying to work on a thoroughly empty stomach, when hunger gnawed, and the body was tired, you will not ask a horse to trot a long race without moderate tastes of food and water.

Preparation is half the battle in every thing. You should go to the races prepared. See that not only your horse is right and ready, but that every thing, harness, boots, shoes, sulky, rubbers, and all other belongings, are ready to answer the requirements of a contest that may be lost through some little thing being overlooked. Have a kit of tools with you in

case the horse throws a shoe, and have mud shoes in case you may have to trot the race over a muddy track. For mud-trotting I use a convex shoe with a toe and heel calk. The shoes should be fitted to the foot and all ready to nail on in case they are required.

Make it a rule to have every thing ready, and be ready yourself, not only for the day of the race, but for the call of every heat. It is policy to get out promptly, and act in such a manner that the judges and the people may see that you wish to trot the race promptly, squarely, and win it if you can without trickery or "jockeying." A writer tells us "how to talk to the judges." I would say, do not talk to them at all. Speak when you are spoken to, and don't waste your breath and show your lack of balance by saying "smart" things, making unnecessary complaints, advising the judges, etc. If you are compelled to make a complaint, make it in courteous, plain, and gentlemanly terms, and get through as quickly as possible. In the midst of a race and in the judges' stand is neither the time nor place for a driver to deliver a lecture. If he must talk let him take some more appropriate time. It is a good deal more difficult to know how not to talk to the judges than it is to talk to them. I have occasionally come in for pretty "bad deals" at the hands of starters and judges, but I generally found the old rule to apply: "The least said, the soonest mended."

On the subject of laying up heats I may state it is seldom necessary, and should never be done unless you are sure it will materially better your chances of winning the race, and you will not find this to be the case so often as some seem to think. Sometimes a horse, as I have remarked, will not do himself justice until he trots a heat or two in company, and in that case the practice is justifiable. Again, if you believe that one or two horses in the field may have more speed than you have, it will sometimes prove good policy to let them go out and fight one another for a heat or two, after which you can go at them with an advantage. But these are exceptional cases. To have every thing to my liking, I want the horse ready to go right out for the money. In general, if you can win at all you can win in straight heats; and that is the clean, straightforward way to do it, if possible, besides being very much better for your horse. In four cases out of five when heats are laid up they are laid up with reference to the pool box. The motive is generally not to make surer of winning the race, but to influence the betting, and this very thing has in a measure tended to disgust the public with trotting. On the question of betting I need not speak. has nothing to do with training. If a man wants to bet on a horse-race and bets his own money, I cannot see that he does anything wrong. No moral or civil law is offended. But the trouble is that too many make winning the race a secondary consideration to winning in the pool-box, and therein is a great wrong. The first duty of a driver in a race is to win if he can, and the man who goes out with the idea of laving up heats and working the pool-box uppermost in his mind, and making the matter of winning races subordinate considerations, is simply betraying, deceiving and robbing his employer. I am for honesty in the sulky, first, last, and all the time.

If you are confronted with the possible situations which I have indicated, or throw a shoe, or meet with other mishap, where it is necessary to lay up one or more heats, do it right. If you drop so far back in the first quarter or half that you will have to drive fast in the last half to save your distance, you have not gained anything. Get away well with the field and drop back gradually, say about twenty vards in each quarter, so that you will land safely inside the distance flag after going an easy, evenly rated mile well within your horse's capacity at every stride. I have seen very clever "generalship" result in laying up heats so neatly that the flag fell in front in place of behind the horse, and that is, I should judge, rather annoying. Sometimes "generalship" and "jockeyship" may win the race, but I advise the young trainer to trust neither to his own "smartness" nor to "luck," but rather to the speed and condition of his horse. That is what wins races.

Drivers are born, not made, and it is impossible to teach a man so that he can get up behind a horse and drive him well unless he has the natural gift; and only this, with experience, makes a good driver. You want a steady, firm hand, and yet a light one. You want a firm hand, but not a rigid, unyielding one, for a certain ease is necessary to give the horse confidence. If the driver be nervous and unsteady the horse will soon know it, and his steadiness will be affected by it. Never take more hold on the horse than is necessary to give him confidence and to hold him steady and

safe. A good driver must be a good judge of pace and of distance, cool-headed, with presence of mind, and able to take in a situation at a glance and act upon it instantly. He must be ready to see an advantage the moment it presents itself, and seize it the moment he sees it. All this, as I have said, cannot be learned—there are certain qualities of the brain and the hand that must in a degree be natural to the man, though they may be perfected by acquirement. A driver may be good when going at a 2:40 gait, but the same man may be all at sea when going at a 2:16 gait. The difference in results that will follow a move at a 2:20 gait is marvelous.

Judgment of pace is very essential in a good driver; without that he is always liable to misjudge what he · is really doing. He may go a quarter or a half at a terrific gait, and thus take more out of his horse in going a moderate mile than another driver would take out of him in going a fast mile by even rating. I teach my horses to rate evenly—that is, to have them carry any desired rate of speed steadily. Driving with the watch will, as I have said, improve judgment of pace, but so many drivers indulge in trying to beat the watch that I am diffident about recommending it. However, if a man uses it with discretion, and by its help accustoms himself to gauge the pace he goes, and to rate evenly, it is an invaluable aid. Moving in a jerky, spasmodic manner-making a sudden rush here, and easing up there—is bad policy. Many a horse is thus beaten in slower time than he is capable of trotting if properly rated.

I consider John Splan one of the best judges of pace we have on the turf. As an illustration of this, I may recall the performance years ago at Chico, California, between Rarus and Goldsmith Maid. Splan and his friends had bet that 2:17 would be beaten, but the first heat the mare seemed tied up and only finished the mile in 2:19½, Budd Doble declaring that she was "wobbling all the time." After the next heat Doble repeated this, when Splan said, "She has wobbled as good a mile as ever she did in her life," and when the time, 2:1½, was hung out, it showed that he judged the pace they trotted well.

In speaking of training the colt I have warned the reader against the fallacy of "teaching him to break and catch," and I can only repeat here that what you want to do is to teach the horse to trot without breaking. A steady horse, other things being equal, will wear down the horse that "breaks and catches" several times in a mile. Sometimes a horse seeks relief in a break, but as to the ultimate benefit of "resting breaks" I am skeptical. During the war I was in the cavalry service, and an old frontiersman taught me if I had to ride all day the least tiresome way was to sit still in the saddle. I could ride twenty hours in one position, while a companion, shifting positions and trying to rest himself, would thoroughly tire. think the steady horse makes the mile with greater ease than the one that engages in the rather violent exercise of "breaking and catching." A driver of judgment and experience will soon learn to detect the signs of a coming break by watching the horse's head, and there is the direction to keep your eyes in. It is far better to anticipate the break, and by steadying him prevent it, than to let him break and then catch him. But I have known drivers of long experience that never seemed to have learned this.

There are hardly ever two heats trotted alike, and it is vain to endeavor to direct how to meet the thousand different positions and contingencies that will confront you. Your native "generalship" and intuition, your natural quickness to perceive how to take advantage of vour position, and how to work into a good position, must be your guide. I have often found that a man in second position can hold his place without much loss of ground, but there is no place quite so comfortable as showing the way and rating to suit yourself. I need not say that the way to "get there" is to go straight and steady, and that seesawing in and out is the best way of getting very little good out of a great deal of hard work. However, just how to act and manage in the exigencies of a heat can only be learned by actual experience. In short, in starting keep your proper position, and try and get away well; in the heat attend to "getting there" with a little to spare for the finish: between heats attend the horse right, and at all times keep cool.

I make it a rule when out racing to stay always at the track with my horses, and am the last man to see them at night and the first to see them in the morning. It has, besides being a proper precaution and an assurance that nothing is neglected, a good effect on the stable-men. The driver who goes out on a campaign is not on a pleasure excursion, if he attends properly to business, and I recommend to all young trainers the rule I have followed with regard to staying with the horses.

CHAPTER XXVII.

COMMON INJURIES AND AILMENTS AND THEIR TREATMENT—
HORSES THAT TROTTED AFTER BREAKING DOWN—TREATING FILLED LEGS—IODINE—A FAVORITE REMEDY—
CURBS—CRACKED HEELS—DISTEMPER—THRUSH—
QUARTER CRACK—TENDER FEET—THE LOCKIEPAD SHOE
—SPLINTS—SPRUNG TENDONS—A GENERAL CAUTION.

It is the practice in almost all horse-books to add what I may call a Veterinary Department, and if these departments that find a place in so many works really taught what they are supposed to teach, there would no longer be any use for veterinary surgeons, for every one would know how to cure every equine ailment without professional aid. Now, I have no intention of following the usual example, or encroaching on the sacred soil of veterinary science but there are certain ailments and injuries to which horses in training are peculiarly liable, and with which every trainer must himself cope, and with the treatment of a few of these I propose briefly to deal. With all due respect to the professional veterinarians, there are some troubles for the cure of which I would rather trust to the treatment of an experienced and competent trainer than to that of the average veterinary surgeon. The reason is, that the trainer is almost constantly treating and caring for the mishaps and ailments peculiar to trainINJURIES. 299

ing, while with the veterinary surgeon these forms of injury or disease are only occasionally met, and he has no reason to specially study them any more than any other one of the thousand ills that equine flesh is heir to.

Many horses have trotted creditable races and taken fast records when practically broken down. Smuggler "had a leg" all through his great campaign of 1876. It was an enlarged or "filled" foreleg, and he was lame of it the greater part of the time. People said that every race would be his last, and it would not have greatly surprised me to have seen him break down entirely after any fast heat. His campaign must be esteemed all the greater on that account. Other horses have done great things for me after they had gone wrong. We supposed Palo Alto to have been broken down after his four-year-old campaign, and it was with "fear and trembling" that we endeavored to train him last spring. But he stood up through great races, and went a mile in $2:12\frac{1}{4}$, faster than any stallion ever trotted previous to 1889. Sallie Benton had a strained suspensory ligament when she made her record of $2:17\frac{3}{4}$. Fred Crocker had a bad tendon when he lowered the two-vear old record to 2:251. Elaine gave way in one of the rear flexor tendons, and trotted her races with the tendon supported by a rubber bandage about four inches wide and five feet long, wrapped about the leg, and fastened with a rubber strap. Bonita, too, was a virtually broken down mare before she was retired, and Occident's traveling gear was "out of fix" before I ever trotted him. I only cite these cases to show what patient patching-up and care may accomplish, and I could add to the list many less noted cases.

There is usually no warning of a break-down. The first thing you know some morning you will find a leg filled, tender to the touch, feverish, and painful when the horse walks. The first thing is to get the fever out. This we usually accomplish by hot fomentations. For fevered legs I have found this lotion very good:

Acetic acid1	gallon.
Sal ammonia4	ounces.
Tincture asafetida2	drachms.

Mix: Use one ounce of the mixture to one quart of water, or witch-hazel—the latter preferred.

A bandage wet with a solution of sugar of lead and laudanum is effective, keeping the bandage on for a reasonable time and leaving it off for about the same time, alternately.

My favorite treatment is, after the fever is reduced, to apply iodine freely. The iodine will cause a slight blister, but it cannot be used in connection with showering the leg—a very cooling and beneficial treatment—or with bandages. It is useless to attempt to work a horse while there is any swelling or fever in the leg. It is very difficult to locate trouble in the tendon, and nothing can be done until the inflammation is reduced, after which I have found iodine as good an application as any. I have often tried firing horses, but with little success. I have never found them as good again.

I use iodine very freely in training, both on the well and the ailing. I apply it lightly to the legs of colts, and know that it helps to keep them right. For this purpose you must not apply enough to cause fever, or to blister, for that will defeat your object. After properly applying it, in time a little scurf may appear, but so slight that a few days let-up and a wash or so will clean it off. I have been told that iodine will dry up the natural fluids of the joints. Long experience has failed to show me this. When I began working the gelding Clay, I found him knuckling and trembling on all his legs. I iodined him so heavily for three years that during that time he never was free of the scurf raised by the drug. At the end of that period his ankles were clean, sound and straight. I have used it for twenty years, both as a cure and as a preventative, and have never found it to injure an animal. A little practice will show how to judiciously apply it. Begin easy, and apply it without much rubbing, and be careful not to use enough, or rub it in enough, to cause the leg to become feverish.

When a horse springs a curb with me I first get the inflammation down in the usual way and then iodine it severely. I then let him up in his work, but jog him to keep him in as good condition as possible. I have generally found curbs to yield to this treatment. A curb is the least objectionable form of undsoundness. I do not believe that what we usually call a "crooked" or "curby-shaped" hock is any more liable to develop actual curbs than a perfectly straight one. At least, in my experience I have found as many faultlessly shaped hocks to throw out curbs as the "crooked" ones. Manzanita has an elegantly shaped leg and perfect hock, but she threw out a curb as a two-year-old. I treated her with iodine, kept on working her, gave

her a two-year-old trial of 2:25, and cured the curb into the bargain.

If the above treatment fails to have the desired effect, the next resource is a regular blister. I have found Gumbaldt's Balsam a very satisfactory blister, and have also had good results from a mixture of lard and red iodide of mercury, in the proportion of seven parts of lard to one part of the iodide of mercury. In applying a liquid blister it is not necessary to clip the hair or grease the leg. The amount of rubbing largely governs the degree of severeness of any blister. apply the mercury blister I clip the hair, apply the ointment, rubbing it with the palm of the hand for about five minutes, adding more in the meantime as the leg absorbs it. Then I let it take its course until the scab comes off, and grease the leg, which will preserve the color of the hair. Should this prove ineffective, after every trace of the first blister is gone, I repeat the same treatment. I do not believe, however, in indiscriminate blistering. It is to be resorted to sparingly. "Blister and turn out" is a very common recipe, and often a successful one—and in many cases the success is really due to the rest, but is credited to the blister.

Cracked heels are annoyances that every trainer encounters. The causes of this form of trouble are various, and the cures are as numerous as the causes. Sometimes bandaging may cause the eruption; standing in a damp place and failing to properly dry the legs after being washed in a common cause. That cracked heels are sometimes traceable to bad condition of the blood is also true, and some horses seem

chronically subject to the trouble. Whatever the cause may be, cracked heels seriously interfere with training. The heels become inflamed and tender; the skin cracks, and these sometimes exude blood; and in bad cases there is swelling and extreme sensitiveness, especially when the fetlock joint is called into action. Of course the horse shortens his stride, and is dainty with the legs so affected. The treatment I have found most efficacious is an application composed of equal parts of Goulard's Exact, glycerine, and olive oil.

The parts must be kept clean and dry, and, as much as possible, the sweat should be prevented from running down over them. The application should, after wiping dry, be rubbed in. This ointment was used effectually on Goldsmith Maid, and I have found it good. Citric ointment is also sometimes used, and a mixture of equal parts of olive oil and ether is good. I have cured chronic cases with this. The following application I have also found good, and it is recommended by my friend James A. Dustin, of track renown:

Lard	poun
Sulphur4	ounces.
Camphor $\frac{1}{2}$	ounce.
Tannin1	ounce.
Goulard's Extract	ounce.
Charcoal2	ounces.

Mix.

Of course the horse's bowels should be kept in a normally free condition, but it must be remembered that the trouble is chiefly local and must be locally treated. It does not follow that the same treatment will relieve all cases; indeed, I have found the one

remedy fail to work successfully twice on the same horse.

"Distemper" is the usual name applied to various forms of a common epidemic of a catarrhal nature that usually makes a clean march through a stable, and may prevail in all degrees of severity, from the form of a light cold to that of a most distressing and dangerous The horse shivers and shrinks: his coat becomes rough and staring; the appetite fails; the mouth and eyes bespeak high fever; a cough develops; swelling may appear in the legs and about the head and neck. The throat is generally the point where the attack develops its greatest severity; and in some cases, as in that of Wildflower, the membranes of the nostrils may be so destroyed as to permanently interfere with breathing, and the body may forever carry the scars following eruptions all over it. You cannot well imagine a more woe-begone and demoralized creature than a horse in the grip of severe distemper.

The horse must be kept warm and clean, and if running freely so much the better. Sometimes we steam the head and throat and administer aconite—dose, fifteen drops in a little water, say every two hours, if the fever is moderately high. In very severe fevers we give the aconite every half-hour for a time. When it is deemed best to poultice the throat, a poultice of slippery elm bark, hops and oil cake is good. Some strongly recommend quinine for distemper. It is so varying, and in severe cases so dangerous a disease, that a veterinarian should be called if the symptoms indicate anything worse than a severe cold, unless you are somewhat accustomed to its treatment.

THRUSH. 305

Thrush, I have observed, very often goes in company with contracted feet. It is a disease of the frog, from which an offensive discharge proceeds. A not infrequent cause is standing in wet places where the urine lodges and the feet becomes soaked and saturated in filth. Another cause that may produce thrush is the filthy and senseless practice of stopping the feet with cow-dung or other unclean substances. First, the foot should be kept clean and dry, and as a good application I may recommend a weak solution of blue vitriol. Some use butter of antimony and others salt. However, the best remedy I have ever known was given me by Mr. William Moore, of Albany, a clever horseman and a gentleman. Here it is:

Red precipitate1	ounce.
Blue vitriol1	
Burnt alum $\frac{1}{2}$	ounce.
Powdered white sugar	onnce.

Mix, and apply daily to the affected frog.

Quarter cracks I believe to be sometimes caused by allowing the foot to grow long and the horn to become dried and hard, when the expansion of the foot at the coronet cracks the inelastic hoof below it.

For the cure of quarter-crack I cut the horn away on either side of the crack, leaving a V-shaped incision, the apex of the V being at the lower extremity of the crack. Then I cut away the hoof from a little in front of the crack to the heel. Now I shoe with a bar-shoe, this making the other side of the foot and the frog bear the weight, none of which comes on the region immediately affected by the crack, leaving it free to grow out without working. The foot must be easily

and carefully cut away without getting into the sensitive parts.

Tender feet, if naturally tender, are hardly susceptible to any treatment, though often a Lockiepad shoe will prove effectual. I consider the Lockiepad shoe a great invention, and whether the feet be constitutionally tender, or whether the trouble merely arises from a hard track, they are well worthy of trial. Almost every good appliance has its drawback, and the trouble with the Lockiepad is that you never know how much weight you are carrying, and in some cases a tendency to thrush may be caused by the pad. A horse so shod I stand in water, or wet the foot well twice a day, to allow the sponge to take up water. They must be often changed. The Lockiepad shoe should be taken off and the foot cleaned at least every two weeks. Then you can see how the foot is doing. If the slightest tendency to thrush is discerned, they must be cast aside. The Lockiepad shoe will certainly often prove good on a hard track, and will many times be found the remedy where a horse refuses to extend himself, for often a very slight soreness will "tie up" a horse. I used this shoe to advantage on Manzanita and Hinda Rose, the latter going a mile in 2:23 at Lexington, so shod.

For a horse sore from trotting on hard tracks I have found the following liniment excellent. For it I am indebted to my friend George J. Fuller, the famous driver of Patron:

Linseed oil	8	ounces.
Turpentine	4	ounces.
Oil tar	6	ounces.
Oil origanum	6	ounces

Mix. Apply with sponge around the hoof, over the bottom of the foot, and allow it to run in under the shoe, and into all the fissures of the foot. For a few days apply it twice a day and afterward once a day after work.

Splints I believe are most effectually treated by firing. I have found, as a rule, that if dotted with the firing iron soon after its appearance the splint will vanish.

Sprung tendons I have most successfully treated by resting, getting the fever down, then applying iodine, and later the sugar of lead and laudanum leg wash.

Only one word more on the subject of the scores of allments and injuries which beset the lives of horses in training. Don't try every remedy that is recommended, especially if dangerous ones. Try what some experienced man has found successful, and when you get a good thing keep a note of it for future reference.

CHAPTER XXVIII.

THE QUESTION OF BREEDING — THE IMPORTANCE OF FORM AND ACTION — ACTION SHOULD BE PURE — "LINE-TROTTING"—STRUCTURE OF THE STALLION — ACTION AND STRUCTURE OF DAM—GOOD MARES OR NONE—TROTTING BLOOD SHOULD BE GOOD — DEVELOPED SPEED — THOROUGHBRED BLOOD—MUST BE CAREFULLY SELECTED AND GOOD—ITS ADVANTAGES IN FINISH AND QUALITY, NOT IN GAMENESS—VIEWING THE QUESTION WITHOUT PREJUDICE—PRACTICES IN BREEDING—TIME TOR BREEDING THE MARE—EXPERIENCES WITH SPRITE, DOLLY AND FLOWER GIRL — TRYING AFTER BREEDING — FOALING TIME — AGE TO BREED MARES — NUMBER STALLIONS SHOULD BE ALLOWED TO SERVE—DANGERS OF OVERBREEDING.

On no other single subject connected with the trotting horse has so much been written as on breeding, and on no other do opinions so widely differ. I do not propose to theorize on the subject, nor to treat it exhaustively, as my main subject is how to train the trotter rather than how to breed him; but I may briefly throw together the conclusions that have formed in my mind from extended observations with trotters.

First, I hold there has been wide error, not, perhaps, in giving too much attention to blood, but in giving attention to blood to the exclusion of everything else. Form and action, I believe, have been too generally

neglected, and especially is this true of action. Although it may seem paradoxical to say so, the gait I would consider perfection in a campaigner would not exactly suit me for a stock horse. I would prefer for a sire a horse with abundant and exuberant action, both before and behind, one with perfectly true and square stroke, and without a touch of mixing. I do not object to a horse starting on an amble, but when he trots let it be a trot. I do not care how a horse is bred, nor how good he is individually, if his action is faulty he would not suit me for a sire. A foul-gaited horse will get foul-gaited progeny, and that kind can never hold their own with evenly balanced trotters. Action is not the only thing in a sire, but it is an essential for the absence of which nothing can atone. I believe that the chief reason why Smuggler has not been a greater success than he is as a sire, is because he had not the proper order of action. He had practically no hock action. I would expect of course the best results from Smuggler when bred to mares with excessive action.

BREEDING.

The truest kind of action is what we may call line-trotting. The horse does not sprawl to get his hind feet outside of the front ones. The hind foot goes low, and the fore foot is lifted just high enough to let the hind one go under, not outside of, the front one. I like a horse with a fairly wide chest, and the legs to stand well apart, and fall straight to the ground (not "both come out of one hole" like a saw-horse), and they should be especially well muscled. The idea that a narrow chest is favorable for speed, arose, I suppose, from the idea that a horse's hind feet must necessarily go outside of his front ones in trotting. It is certainly an error.

I need not go into any lengthy description of what the form of an ideal stallion ought to be—you all know it. He should be of fair size, with a good, brainy, intelligent head, a strong, sloping shoulder; a round barrel, with a strong, springy loin; quarters of great power, muscled well inside and out, strong gaskins and forearms; square-set hocks and knees, short cannons, strong pasterns of medium angle, and good feet. Some will argue that long cannons are just as good as short ones—that a horse with a long cannon will stride just as far as a short-cannoned horse. That may be true, but I hold that all the driving power is above the hock, all the muscles run from that point upward, and the horse with the longest thigh has the greatest driving power, and more leverage to handle the leg and foot.

In the dam I want also good action, but I would not be quite so exacting in her case as to having plenty of it, for, right or wrong, it is my belief that the sire generally controls the action. Sallie Benton's dam had very little action; Dame Winnie, the dam of Palo Alto, and Annette, the dam of Ansel, had not any to speak of, but they were mated with Electioneer, a horse of superabundant action. I would avoid a broodmare, just as I would a sire, with faulty action. Let what they have be square, true and good. I like a brood-mare of moderate size. The dam of Manzanita stood only 14.3; the dam of Bonita, 14.2. Beautiful Bells and Dame Winnie are 15.2; May Queen, 15 hands. I prefer mares of rather blocky build, and they should have good heads, tempers and dispositions. need not say that soundness should be exacted in the brood-mare, and of course the more perfect the general form the better. The idea that any thing will do for a brood-mare is a fallacy of bygone days. If I were breeding trotters I would have good mares or none.

In conclusion, I like the sire and dam to be developed trotters, and the faster they can go the better. If they are natural trotters, and have in training shown great speed, together with good form and balance, from mating them you are almost sure to get a trotter.

As for the trotting blood you have, of course the richer the better. The best test of trotting blood is how fast and how much it has trotted, and how many and how fast trotters it has produced. Any kind of blood is better than *unknown* blood.

As to thoroughbred blood in the trotter—that subject of endless discussion—I will try and give my views as briefly and as clearly as possible. Perhaps the best way to sum up my idea in a nutshell is to say that I want all the good thoroughbred blood that can be controlled. To say how much that may be is impossible. Electioneer may in some cases control fifty per cent—with some mares he might fail to do it—while some horses do not have the ability to control it at all. I believe that Mr. J.C. Sibley has put the whole thing in as concise and logical a form as possible in these words: "My judgment is that some horses will sire trotters from some thoroughbreds; that no horse can sire trotters from some thoroughbreds, and that some horses cannot sire trotters from any thoroughbred."

My experience has been, in training horses from thoroughbred mares, that their heads are as good as the average trotting-bred horse's head. This experience has been, it is true, mostly with the get of Elec-

tioneer, a sire with great brain-controlling force, and it may be that had I handled the same number of halfbred horses by some other sire I might have found it different. However, I am not telling what my experiences might have been, but what they were. The only "ugly" half-bred one I ever had to deal with was Gertrude Russell. She was ill-used and whipped, and after she came into my hands I got her fairly gentle, though she always pulled. As far as breaking is concerned, they made "good breakers." Palo Alto trotted in $2:12\frac{1}{2}$ and $2:12\frac{1}{4}$, with breaks in the mile, and you can not afford to make a very bad break to finish in 2:121. Ansel trotted a mile in 2:20, with a break in it. Gertrude Russell, Whips and Azmoor were good breakers. They would make a clear run and come back to the trot handily. The only bad breaker in the lot was Express, and he has improved.

The advantages of thoroughbred blood, as they seem to me, are that it gives higher finish, better quality of bone, better joints, and superior wind and lung power. I do not base my claims for thoroughbred blood on gameness. My belief is that gameness comes in great part from pure, frictionless action. It is practically a truth that speed makes gameness.

"There are thoroughbreds and thoroughbreds." Some thoroughbreds have more trotting action than others. In selecting a thoroughbred mare to breed to a trotting stallion we pay great regard to form, action and head. Some thoroughbreds are more brainy and level-headed than others, and from one of these of the right conformation bred to a stallion like Electioneer, of great brain and action-controlling power, the chances

of getting a high class trotter are good. I do not claim that you can get trotters as uniformly this way as by breeding from trotting mares, but you can, with the properly mated sire and dam, get horses of high class by this line of breeding horses, of great finish and hard, fine quality. We have, I think, demonstrated at Palo Alto that some horses at least can control the action of the thoroughbred, and where that can be done I have no hesitation in declaring my preference for a good dash of thoroughbred blood.

I endeavor to regard all such matters without prejudice. I have no quarrel with trotting blood, nor have I any fault to find with breeders who stick to trotting blood. But all candid men must admit that trotters come from all combinations, that there are more ways than one to breed them. I have no desire to argue that one way is better than another—I only insist that we have shown that high-class trotters can be bred with close and direct infusions of thoroughbred blood. I do not advise any breeder to sell his trotting-bred mares and buy half-bred or thoroughbred mares, nor do I advise him to patronize a stallion simply because he has thoroughbred blood. But what I do advise is, that when you find a good horse or a good mare, a horse that is a trotter, or a mare that is a producer, that has plenty of thoroughbred blood, do not let that scare you away from them, but rather value them the higher for it. My idea is to recognize merit wherever you see it, and when a stallion trots in 2:12\frac{1}{4}, or even 2:20, you need not fear that his thoroughbred blood will stop his progeny from trotting.

But, as I have said, it is no part of my business to

write about theories, or to take part here in the contention between the different schools of breeding. This work is more practical, and in pursuance thereof we will now suppose that you have selected your horse and mare, and are about to breed, in the fond hope of getting a Sunol or an Axtell.

Having settled upon the stallion and mare, I would mate them as soon after February 15th as possible. Every day of life is an advantage to the colt that is expected to trot young, and when the time is counted by weeks and months the advantage is increased manyfold. I believe the mare is better if worked some. If possible I would work her moderately while carrying the foal, at least in the earlier months of pregnancy.

We breed mares on the eighth or ninth day after foaling. Some will go out of use the eighth day. After the mare is bred we let her go out of use before breeding again. Whenever she comes in again we breed her, no matter how long or how short has been the interval. The season of 1888, after Sprite and Dolly were bred, we found that for three months they would take the horse any time they were bred. Dolly proved in foal, while Sprite failed. Some mares will certainly welcome the stallion's embrace after they are in foal, so that the mare's accepting the horse cannot be taken for a certain indication in all cases that she has failed to hold. A couple of seasons since we bred Flower Girl once, and shortly afterward decided to train her, so that orders were given that if she came in again she was not to be put back to the horse. came in use, and would have stood for the horse any day. After we worked her awhile she would occasionally go dead lame in one hind leg, and finally she proved to be in foal. The first season I came to Palo Alto, Aurora came into use early in March, and was bred. A few days later she slunk a colt, being in foal from a service the previous season; and we have since had a similar case. These instances prove that a mare may take the horse at almost any period of pregnancy.

Our practice is to breed in the evening. If horses are used in the morning they are excitable and restless all day; and mares also are cooler and calmer after an evening's service. I have no faith in artificial tricks to get mares to catch. Some throw cold water over the mare; another jabs an awl into her ear just at what he supposes the vital moment; another has a theory about the moon. All this is nonsense of the witchcraft order. If the mare fails to hold after three or four services, it is well to "open" her, to see that the mouth of the womb is in proper place and condition. Every breeder who breeds extensively should have a speculum, and acquaint himself, or have his foreman acquaint himself, with the condition and position of the genital organs of the mare, so that he can intelligently cope with any slight irregularity that may prevent conception.

After we breed the mares we turn them out in a paddock until they go out of use. Then they are turned in with the others, and a horse is led among them every day to ascertain which require attention. Our trial days are the eighteenth after being bred, then again nine days later, and again nine days after that. We carefully keep account of the trial days of each mare, and try her particularly then. We breed her whenever

she comes in, no matter what day; but if they do not "show," as I have said, try them especially on their trial days. After the fourth trial day, if the mare fails to "show," we conclude that she is all right. Still, with all these precautions, I have known them to come into use again, say ninety days later.

We carefully watch mares about due to foal, and have at the farm twenty-five large foaling stalls. As soon, of course, as the youngsters are able to move around, we take them out to make room for other mares "in an interesting condition." The day after the colt is foaled we turn him out a little while in the sun with his dam. The mare should be fed such food as will keep her bowels free, and the colt's bowels must also be got working. You may have to give him a warm water injection before he is an hour old.

I would not at first put more than three or four mares with foals in the same paddock. At first the mares are nervous, and will fight off anything that comes near; after the colts get older, of course, more can be put together.

Here we can leave the youngster, for you will remember that it was at this point that I took him up in my first chapter on training.

I do not believe in breeding mares under four years old; I think it stunts the mare's growth, and the colt is not so apt to be good. I think that while the mare is growing she needs all her strength, and cannot, without injury, give nourishment to the colt.

For a two-year-old stallion I think three or four mares are really beneficial. I would not give him more than six, and they should be well distributed over the season.

For a three-year-old stallion twenty mares should be the outside limit, and they should be well distributed, too.

A four-year-old stallion can comfortably cover thirty to thirty-five mares, and at five years old he should take a full season. I believe fifty mares furnish a heavy enough season for any horse to make.

I would especially guard against the dangers of overbreeding. We often wonder why the progeny of the same horse and mare differ so widely—why there are such variations between brothers and sisters. I believe if we could be sure that the sire and dam were always in the same condition, and always had the same comparative and relative vigor, we could breed with great uniformity. There is no doubt in my mind that the character of the colt is largely determined by the condition of the parents at the time of conception. If the sire's vigor be sapped by too much stud-service you can hardly expect the colt to be uniform with one begotten in a state of full vigor. I suppose the reader means, as a breeder, to aim at great results, rather than great numbers. To that end it is certainly enough to let a horse serve once a day; and indeed I would prefer that he is used only on alternate days, if practicable. Certainly, one good colt is worth ten ordinary ones; and if it be true, as I verily believe, that moderation in the use of stallions will result in better progeny, then it is very poor economy to yield to the temptation to overdo it. With all the care that can be exercised you will get enough common ones, but no one can doubt that the sapped condition that over-service produces must prove detrimental to a stallion's success as a sire.

CHAPTER XXIX.

NEARING THE END—A TRIBUTE TO ELECTIONEER—HIS BREED-ING, HISTORY AND CHARACTERISTICS—HIS SPEED—HIS ROLL OF HONOR AND RANK AS A SIRE—THE ELECTIONEER ACTION—THE ELECTIONEERS AS CAMPAIGNERS—GENERAL BENTON—PIEDMONT—NEPHEW—THE ST. CLAIRS—THE BELMONTS—THE MOORS—NUTWOOD—GUY WILKES—A. W. RICHMOND—AU REVOIR.

I have now covered almost all the ground contemplated at the outset of this work. I have given my experiences with the most noted horses I have driven; have told how they were trained; have elucidated, as fully and explicitly as it seems in my power, the methods of teaching colts to trot that have been so successful at Palo Alto; have explained how they are fed, kept, shod, worked and driven, and have given my views on the practical aspects of breeding. Taking up the colt at his birth, we have traveled, as it were, in a circle back to the starting point, and all that remains to complete the programme on which we started out is to devote a chapter to Electioneer and other horses and families of California.

A thousand things remain to be said, and dozens of topics of varying importance in "horseology" have been neglected; but no man has ever yet covered all horse knowledge in one volume, and I was not foolish enough to attempt to do it. I have striven to condense

the things of greatest importance concerning the trotting-horseman into a volume of convenient size, and trust that in a fair measure I have succeeded.

My greatest success, as the world knows, has been with the get of Electioneer, and while it would be but affectation to say that I am not conscious of having done considerable to help his reputation, I have no doubt he has done, in giving me the material I have had to work with, much for mine. So in this chapter a little tribute to him is only scant justice from me.

Electioneer is a dark bay horse, standing 15.2 hands high, and was bred by Charles Backman, at his stud farm at Stony Ford, New York. He was foaled May 2, 1868, and came to Palo Alto in the fall of 1876. His sire was Rysdyk's Hambletonian, the greatest progenitor of trotters, and his dam was Green Mountain Maid, "the great mother of trotters." over whose grave a monument stands at Stony Ford. She was by Harry Clay, 2:29, out of Shanghai Mary, whose lineage is enfolded in mystery, but whose blood must, from what she was and what her daughter was, have had a strain of sterling richness in it. Among Green Mountain Maid's famous children, besides Electioneer, are Prospero, 2:20; Elaine, 2:20; Dame Trot, 2:22; Elista, 2:22\frac{3}{4}; Mansfield, 2:26; Storm, 2:26\frac{3}{4}; Antonio, 2:28\frac{3}{4}. and Miranda, 2:31. She is the dam of more trotters that have trotted in 2:30 or better than any mare that has ever lived; and she also produced in Electioneer the greatest sire of trotters that has ever lived.

Electioneer, as his picture shows, is a stout and compactly built horse. I have above given his height at 15.2 measured at the wither. He is an inch higher

behind, and in this conformation many of his progeny follow him, notably Sunol. His head is well proportioned and of fair size, and is a model of intelligence and beauty. His brainy head accounts for the heads of his children—beautiful in shape and level in balance. He has a good shoulder, splendid barrel, faultless back, and simply the best quarters I ever saw on a stallion. There you see the perfection of driving power. His forearms and gaskins are heavily muscled, his joints clean and sound, and his legs and feet naturally of first-class quality. He is, in short, a stout and smooth horse of the solid type, combining in structure great power with elegant proportion and pleasing finish at every point.

As a three-year old he was broken at Stony Ford and worked some to wagon. Mr. Charles Backman, whose word is good enough authority for anything, states that he timed him quarters to wagon in thirty-eight seconds, with little work. To some this may be surprising; to me it is not, for I know his great natural speed.

Electioneer is the most natural trotter I have ever seen. He has free, abundant action; it is a perfect rolling action both in front and behind, and he has not the usual fault of the Hambletonians, of going too wide behind. Certain writers have said that Electioneer could not trot, and have cited him as a stallion that was not a trotter, yet got trotters. All the comment I have to make on this is that I have driven, beside Electioneer, a quarter better than thirty-five seconds; and though this may not be fast enough to suit the critics of Electioneer, I call any horse that can speed



ELECTIONEER.

faster than a 2:20 gait a trotter. He did this, too, hitched to a 125-pound wagon, with a 220-pound man—and not a professional driver, either—in the seat. In this rig he could carry Occident right up to his clip, and could always keep right with him; and it was no trick for the famous St. Clair gelding to go a quarter in thirty four seconds. Without preparation you could take out Electioneer in stud condition any day and drive him an eighth of a mile at a 2:20 gait. He always had his speed with him, and this is a characteristic of his sons, and to my mind one of great importance to breeders. That Electioneer could have beaten 2:20 if given a regular preparation is, with me, a conviction about which no doubt exists.

As a sire I believe him to be the greatest of all trotting sires. He began his stud services in California in 1877, his family beginning in 1878, and here is his roll of honor:

YEARLING.

Hinda Rose (fastest when made)2:36½	
TWO-YEAR-OLDS.	
Sunol (fastest to date)	
Wild Flower (fastest when made)2:21	
Bonita	
Fred Crocker (fastest when made)	
Bell Boy	
Carrie C	
Pedlar	
Palo Alto Belle	
Sphinx2:29½	
Del Mar2:30	
THREE-YEAR-OLDS.	
Sunol (fastest to date)2:10½	
Bell Boy	

Hinda Rose (fastest when made)2:19\frac{1}{2}
Palo Alto Belle
Campbell's Electioneer
Maiden
Manzanita
Rexford
Sphinx2:241
Hattie D
Grace Lee
FOUR-YEAR-OLDS.
Manzanita (fastest to date)2:16
Bonita
Antevolo
Palo Alto
Albert W
Albert W. (two miles)
Sphinx
Lot Slocum. 2:23‡
Gov. Stanford
Carrie C
Clifton Bell2:24½
St. Bel
Mortimer2:27
Egotist2:29
Ella2:29
Azmoor2:30
FIVE-YEAR-OLDS.
Lot Slocum
Gertrude Russell
Clay
Emaline
Cubic
SIX-YEAR OLDS.
Anteeo2:16\frac{1}{4}
Lot Slocum
Adair 2:17‡
Old Nick 2:23
Carrie C
2

I ask any man conversant with the records to answer me candidly this question: What horse has to his credit, from an equal stime in the stud, achievements that can be compared to these? There can only be one answer. No horse has ever before even approached the marvelous record of Electioneer in the stud.

The action of the Electioneers is characteristic. They are mostly prompt, round-gaited horses, and straight-line trotters. They do not have to "square away" or "strike a position" to get up speed. As a rule they are close-gaited; and very few indeed are of that class that are called "open-gaited." The majority of them do not throw the hind foot outside of the fore foot in trotting, but, on the line-trotting principle, "go under." They do not have to go a mile or so to get untangled; they trot low, have no waste action, and gather speed quickly and smoothly.

The statement so often made by those who know little about them, that the Electioneers are not game horses, sounds very absurd to one who knows how easily they trot, how great is their natural speed, and how perfectly they are balanced, carrying little or no weight. The same charge has been made against all families, and perhaps it is not worth repelling; but I may claim to know the Electioneers as well as any man, and as campaigners they are good enough for me. They are good feeders, cheerful dispositioned horses, that take their work well, and have the quality of race-horses. I consider them, in this respect, the equal of any of our trotting families. I have seen horses that lacked heart, and I have trained a faint-hearted horse, but I have yet to see the first Electioneer against which the charge can in justice be made. Wildflower and Manzanita were not bred from mares that would popularly be expected to throw game performers, but a gamer mare than Wildflower never looked through She would respond to every call to the last inch of her capacity. The same is true of Manzanita. She trotted frequently when out of condition, but when anywhere near at herself no horse of her age could beat her at any distance, and she would go on her courage to the extreme limit of her ability. Her four-year-old record was made in the third heat of a race, and stands unbeaten.

The Wilkes' are claimed to be the greatest of campaigning families; but a recent writer proved by tabulating the records that while the 2:30 trotters, by George Wilkes, won 34 per cent. of their races, the 2:30 trotters, by Electioneer, won 43 per cent. of theirs; and against 2:24 and a fraction, as the average record of the Wilkes', he found 2:22 and a fraction to be the average record of the Electioneers. These racing statistics certainly look as though the Electioneers raced successfully. Another writer, some time ago, exploded the exaggerated ideas that have been afloat about the opportunities of Electioneer. It has been said that "hundreds" of his get were trained and broken down at Palo Alto. The writer was given access to the Palo Alto books, and his tables made therefrom showed that at the close of 1888 the total number of foals bred at Palo Alto, and got by Electioneer, was 235; that 139 were trained more or less; and that of these ninety-one, or over 65½ per cent. had, under the watch, shown the ability to trot in 2:30 or better. These stud statistics show with what uniformity Electioneer gets speed, and what is better, early and extreme speed—and they furnish ample basis for my belief that he produces a larger percentage of animals naturally gifted with the ability to trot in 2:30 or better than any horse that ever lived.

The owner of a great horse in Kentucky—over the honored dust of both owner and horse the blue-grass

is growing—was wont to proudly call him "The Great Sire of Trotters," and the lofty distinction was not undeserved; but when Electioneer's days are done, justice will record that in his grave lies The Greatest Sire of Trotters.

Gen. Benton was what may be called an actioncontrolling sire. He was speedy himself, and transmitted high rates of speed. His force in controlling action is shown by the fact that out of the thoroughbred Dame Winnie he got Big Jim, 2:221, and out of other thoroughbred mares he got daughters that are producing speed. From the race-mare Waxy, he got Waxana, a mare that was never regularly trained, but could show about a 2:40 gait. By Electioneer she produced Sunol, 2:10\frac{1}{2}. The Bentons have about the average order of action in front, but behind they go low and wide, indeed somewhat "sprawling." They come to their speed quickly, but, as a rule, they were too growthy to train young. The blood of Gen. Benton will be valued more in the future than it has It carries speed, finish and resolution. daughters of Benton, I predict, will yet rank among the most fashionable brood-mares.

Piedmont, 2:17‡, is just beginning to make his reputation as a sire. He was a great race-horse, fast and game. It is the fortune of some horses to be over-rated on the turf, but Piedmont was always under-rated when he was campaigning. He won in 1881, in Chicago, the greatest race ever trotted between a lot of stallions, and he outlasted and defeated the greatest field of campaigning stallions that ever faced a starter. But even his trainer, Peter Johnston, had no idea he

was as good as he was that day. He had been set down so often by the elever men as "a duffer" that probably his driver half believed it. But he met Robert McGregor, Santa Claus, Hannis, the resolute Wedgewood, and the two-miler, Monroe Chief, fought for every heat, and beat them in the fourth, fifth and sixth heats in 2:174, 2:194, 2:21.

He is a rather large horse to exactly suit me as a stock-horse, and his get are so growthy that they don't take kindly to early training. But like their sire, they are good race-horses when you get them trained. They incline to be prompt and trappy-gaited, with much of the Almont order of action. Piedmont is the most intelligent horse I have ever known. I worked him some and could drive him at any gait desired by simply talking to him. He had far more speed than his record shows. I drove him with the lines laying on his back a quarter in 0:33, and I saw him driven a quarter in 0:32.

Nephew, the other aged Palo Alto stallion, will, I think, prove successful, though I have hardly had experience enough with his get as yet to speak fully. They show well in the kindergarten, and act like colts that will make early trotters. Such as have appeared on the turf have proved good campaigners, as would be expected from Nephew's breeding, he being by Hambrino, 2:21½ (by Edward Everett), out of Trotting Sister, by Alexander's Abdallah.

Of the other more noted Californian families, I need only speak very briefly concerning their general characteristics.

The St. Clairs are compact, smooth horses, gaited

much like the Electioneers, and they all had some degree of speed. They have good legs and feet, are easily kept, and are naturally hardy. The family of the old pacer, whose history I have already given, first came into notice as excellent work-horses. Railway contractors would take them in preference to any other breed for work.

The family of George M. Patchen Jr., 2:27, showed excessive knee-action, and indeed lots of action all around. A great many of them were gross, coarse horses; but judiciously crossed the blood is a valuable strain.

The Belmonts were in form more like trotting-horses than race-horses, and some of them did trot and produce trotters. Owen Dale and Don Victor both had a fair degree of trotting-action. The latter I saw trot a mile in 3:12 at twenty years old, and few thoroughbreds can do that. He was a fair race-horse, but was afterward used as a doctor's hack. Mrs. Marvin drove him in his late years, and found him a good road-horse. Williamson's Belmont, the founder of the family, was a thoroughbred son of American Boy, and was brought to California in 1853, and died in 1865. He left a great family, both as race-horses and general road-horses. This is a favorite strain in California, and a trotting-pedigree can have no better foundation to rest on than Belmont blood.

The Moor founded one of the greatest of California families—horses noted for good, clean, sound legs and feet, solid colors and excellent form. The Moors are uniformly trotters, and, as a rule, are game, resolute horses. They are generally built on the greyhound

order, the most objectionable feature being their heads, which are often large, and nearly always of the Roman order. Many of them are strong-willed and rattle-headed. The most noted descendants of The Moor are his daughter Beautiful Bells, his grandson Stamboul, and Sable Wilkes, whose dam was a daughter of The Moor. The blood of The Moor is a grand, speedy, fashionable strain in a pedigree, and one that is now widely appreciated. He died young, leaving few foals, but had in him the elements of greatness.

Nutwood spent part of his life in California, but had few good mares here. He left an excellent family on the coast, considering the number and class of mares he had. Like every family that has ever showed speed enough to excite criticism, the Nutwoods at first had the reputation of "stopping," and if it were true it would be no discredit to the horse, for that horse has not yet lived that can get uniformly good horses out of inferior mares. But I have not discovered the "stop" among the Nutwoods. Woodnut did not seem to stop to any great extent. The fact is that the Nutwoods are one of the very best trotting families we have, and his daughters are highly valued, and properly so, as brood-mares in California.

The famous Guy Wilkes is hardly yet old enough to speak of with confidence as a sire; but we all know he was a good race-horse himself, and in Lillian Wilkes, Regal Wilkes and Sable Wilkes he has got youngsters that mark him as probably one of the great coming sires. In the opinion of many good judges he is the best of all Wilkes horses.

I have had little opportunity to form an opinion concerning the Blackbird family. The A. W. Richmonds were certainly hardy horses, but there were not many natural trotters among them, though those that were good were real good. The famous mare Columbine, by A. W. Richmond, had considerable speed, and being the dam of Anteeo, 2:16½, and Antevolo, 2:19½, has the distinction of being the only mare that has ever produced two stallions with records of 2:20 or better.

This book would not seem complete without some historical sketch of the American trotting-horse, for the benefit of such of my readers as have not studied the subject from a historical standpoint. But I have traveled over a pretty long road, and, having endeavored to the best of my ability to do my part, I will hand over the history to my co-worker, Mr. Macleod, and thanking all my readers for the compliment of their attention, will, with the sincerest wishes for the trotting-horse and all his friends, in the present and the future, make my retiring bow.

APPENDIX. 331

APPENDIX.

THE TROTTING-HORSE HISTORICALLY CONSIDERED.

THE trotting-horse may in all propriety be designated the national horse of America, just as the thoroughbred race-horse is the national horse of Great Britain. In England the race-horse has reached his highest development, and if the race-horses of other countries have excelled, it has been in a great degree through the influence of liberal drafts of English blood. In like manner, but in greater degree, the trotting-horse is the national horse of America. He is distinctively and peculiarly an American production. In no other land has the trotter been generally bred; in no other land has he been brought to high development as a breed, nor in any other land has he been accepted and utilized as specially and superiorly adapted to the everyday uses of the people. It is true that Russia has her Orloff trotters; that writers speak of "Norfolk trotters" in England a century ago, and that in France, Austria and Australia native horses race at the trotting-gait, though they never approach the speed of the American trotter. Though vastly superior to any trotter of foreign origin-or perhaps it would be more correct to call him the only trotter of foreign origin—the Orloff does not hold the place in the sporting and business affairs of the Russian people held by the American trottingbred horse in this country. As to the "Norfolk trotters" of England, the more that is learned of them the less certain can we be that it is at all correct to regard them as a breed of trotters. It can of course be shown that some of them had speed at the trot far superior to that of the ordinary English horse; but this hardly entitles the variety to be called a breed of trotters, but rather, to be classed as suitable raw material from which, by selection and development through a series of generations, a trotting-breed might have been evolved.

It is to be remembered, in discu sing the trotter from the standpoint of the average American farmer, that he is something more than a racing-animal. He is the ideal horse of business and pleasure. No driving-horse in the world rivals the trotting-bred horse, and they range in size from the neatest style of light-harness animal to coaching stature. The horse best adapted to the uses of the American farmer, and the average American citizen who uses horses at all, is the one that, with other essentials, combines quick, far-reaching, well-balanced action with the endurance to sustain speed at high rates and long distances. These, too, are the qualities primarily required in a horse for racing purposes, and thus the blood best for the trotting-turf is the best blood from which to breed the horse of the road, the park and the boulevard—the horse for the lightest single driving equipage, for the family phaeton or for double harness. Qualities required for these eminently proper purposes are produced in the highest degree by the best trotting-blood. We can only determine what the best trotting-blood is by the measure of turf tests and turf history. The fact should not be forgotten by those who may have no interest in the American trotter in a turf sense that the value of the light-harness horse rests in a large degree upon the purity and quality of his blood, and that the worth of blood can only be determined by what it has accomplished under the turf test.

To persons accustomed to horses the differences of the various gaits are familiar, but to fix them clearly in the mind is a first necessity in studying the subject of breeding horses in which value depends on speed at a certain gait. The walk, the trot or the pace. and the gallop are gaits common to all breeds. The pace, or amble, is a gait kindred to the trot and is a faster gait than the trot. order of movement in the trot is left fore foot, right hind foot, right fore foot, left hind foot. Thus the left fore and right hind foot move in unison, striking the ground together; then in turn right fore foot and left hind foot complete the revolution, and, therefore, the trot is properly called the "diagonal gait." The pacer, like the trotter, moves two feet in the same direction simultaneously, then alternates with the other two, but in place of the fore leg and the hind leg of opposite sides, he moves in unison the fore and hind leg of one side, then the fore and hind leg of the other side. Thus we call the pace the "lateral gait." The difference of the gaits is not great; the mechanism is practically the The fact that the same animals pace and trot fast, that pacing parents beget trotting progeny, and rice versa, and that both gaits frequently seem natural to the same animal demonstrates that they are but variations of the same gait, occupying in the economy of action a place between the walk and the gallop. The fast gallop, or run, is an entirely different gait; each leg acts, as it were, independently. To begin the revolution the horse makes his bound with the left fore foot the last to leave the ground; then for a moment he is entirely in the air, with his four feet rather bunched, and when he strikes ground again it is first with his right hind foot; then a moment more, and he is poised on the left fore foot, as at the beginning of the revolution. It will be seen that this gait is wholly and radically different from the pace and trot; that the order of action, and, necessarily, the mental organization governing the method of locomotion and use of the limbs are different. Hence no one horse is, or can be, possessed of great speed at the gallop, and also great speed at the trot or pace. To possess great speed of either one of these two orders he must inherit speed of that order. Let us consider for a moment the original sources of crotting

Let us consider for a moment the original sources of crotting speed at home and abroad.

The Orloff trotters are the fastest of foreign breeds, and their history is therefore of interest. In 1772, Count Alexis Orloff, a commander in the Russian fleet, obtained from a Turkish pasha a large white Arab or Barb horse called Smetanka. From a Danish mare Smetanka got Polkan, and from a Dutch mare Polkan got Barss, the founder of the Orloff trotters. It will be noted that Barss was two removes from the Oriental horse, and carried one-quarter of his blood. The fact has been commented upon that Andrew Jackson, the founder of our Clay family of trotters, was similarly bred; that is, he was two removes from the imported Barb, Grand Bashaw, and, like Barss, out of a mare of unnamed blood. Count Orloff, it appears, bred the Barss blood upon itself, and a writer, speaking with the apparent assurance of one who knows, tells us that "the race became a distinct type in about thirty years, and since that period all attempts to improve the breed by fresh blood, whether Arab, English, French or Dutch have failed." This can readily be believed, for in our own horse history we find its corroboration and analogy. Count Orloff died in 1808, but his stud was kept intact until 1845, when it was broken up, the Russian Imperial Government becoming the owner of the greater part. The blood and performance of these horses have been carefully recorded. The

highest rate of speed known to have been attained by an Orloff was in trotting three versts in five minutes. A verst being $1{,}166\frac{2}{3}$ yards, it will be seen that the performance was at the rate of a mile in about $2{:}31\frac{1}{2}$. Though some specimens of the Orloff trotter were brought to the United States, meeting trotting-blood superior to their own, they naturally failed to leave their mark on our breed.

The only reputed trotters mentioned by English writers were certain horses located chiefly in the county of Norfolk. John Lawrence, the earliest writer who mentions them, and a most entertaining one, declares that "the renowned Blank may be looked upon as the father of trotters, since from his son Shales have proceeded the best and greatest number of horses of that qualification." One of the most famous of this tribe was Marshland Shales, a noted trotter that sold for over 3,000 guineas at auction in 1812, when ten years old. Records of the speed of these old English trotters are indefinite and uncertain, but it is said that a mare named Phenomenon trotted in July, 1800, seventeen miles in 56:00, and in the same month repeated the performance in 53:00. If this be true, this mare was the superior of any American trotter, not of her day alone, but for many years after her day. When we remember that this was at the rate of twenty miles in 62:20, and that it was not until 1849 that Trustee, in America, covered twenty miles in 59:354, the conclusion is forced upon us that the English had the material from which to build and evolve a great breed of trotters. That they have nothing equal to Phenomenon in these days is certain, and the cause of this retrogression is probably that the trotting instinct and action in the horses of the olden time has been submerged by repeated infusions of running-blood, just as the ancient English pacer disappeared before the tides of Oriental blood upon which the English thoroughbred is founded. and, indeed, only interest attaching to the Norfolk trotter is in the fact that it is practically certain that imported Bellfounder, the sire of the dam of Rysdyk's Hambletonian, the greatest of all American trotting progenitors, was one of this tribe. This horse was imported from England in 1822, and was a powerful animal with gigantic quarters, showy trotting action, and kindly disposition. Hambletonian bore much resemblance to him in form and disposition.

So much for foreign trotters—now as to the American breed. The imported horse whose blood played the most important part in founding the trotting-breed in the United States, was the grey race-horse Messenger. Ever since trotting-speed began to be considered a mark of

merit in the American horse, Messenger has been admitted the chief foundation on which the greatest trotting families have been built. But just as the English race horse was founded on Oriental blood, and in years of selection and development for a special purpose was bred to a point of excellence unknown to the Oriental, so the most unpretentious trotting-blood of to-day is superior to what the direct blood of Messenger was.

The speed-transmitting power of Messenger, if it could be now drawn upon directly, would be a weak and sluggish element in the swift and intense speed currents of to-day. Still none the less did it play its part as an original source.

Messenger was a grey horse foaled in 1780, bred by John Pratt of Newmarket, England, and, according to the English Stud-Book, was got by Mambrino, out of a daughter of Turf. Mambrino was by Engineer, son of Sampson, by Blaze, by Flying Childers, son of the Darley Arabian, a horse imported into England from the Levant, in the reign of Queen Anne. Turf, the reputed sire of the dam of Messenger, was by Matchem, son of Cade, by the Godolphin Arabian.

Messenger was a fair race-horse but was not strictly thoroughbred, and when we reflect what he accomplished in the production of horses of speed superior to any of their day at the trotting-gait, we are almost irresistibly forced to the conclusion that in the streams of unknown and uncertain blood remotely pouring into his inheritance some subtle influence was carried that favored the trotting-gait. Indeed this is not mere speculation, but history; for in Pick's Turf Register we find this statement concerning Mambrino, the sire of Messenger: "Mambrino was likewise sire of a great many excellent hunters and strong, useful road-horses. And it has been said that from his blood the breed of horses for the coach was brought nearly to perfection."

Messenger was imported to Philadelphia in 1788; was kept in Pennsylvania and New Jersey for the first six years of his life in America, and was variously kept on Long Island, in Dutchess, Westchester and Orange Counties, New York, and in New Jersey, until his death near Oyster Bay, Long Island, in 1808. As to what degree of trotting-action Messenger possessed we have no evidence; but this much is certain, that he left progeny noted for their speed and endurance on the road, and when in these descendants this road-gait was developed and intensified by use—and they were mated with a view to producing progeny superior in this special qualification to themselves—each generation naturally reached a higher plane of excellence than its predecessors.

Though in the second and third generations we find many descendants of Messenger noted as trotters in their time, and figuring frequently in the trotting genealogies of our day, it is incompatible with the purposes and extent of this article to consider any but the chief lines—those upon which the place in history of Messenger's blood as a source of the greatest trotting-families chiefly depend. His three most noted sons were Winthrop Messenger, Bishop's Hambletonian and Mambrino.

Winthrop Messenger was taken to Maine in 1816, and was the founder of that sterling race frequently spoken of as the Maine Messengers. He was a large, coarse horse, and was, I judge, very little appreciated in his time. Among the best descendants was his son Witherell Messenger, sire of Belle of Portland, 2:26. A daughter of Witherell Messenger, mated with a son of his, produced the famous Belle Strickland, 2:26. Six other daughters figure in the records as the dams of trotters with records faster than 2:30. Fanny Pullen, daughter of Winthrop Messenger, was a great trotter in her time, and to imported Trustee she produced the famous Trustee that trotted in 1848 twenty miles in 59:35½. He was the first horse to trot twenty miles within the hour; to this day only six have done it, and it is earnestly to be desired by every decent horseman that no horse will ever again be subjected to this cruel exaction.

Bishop's Hambletonian, originally called Hambletonian, was a bay horse, foaled 1804, bred by General Coles, at Dosoris, Long Island, and was by imported Messenger, out of Pheasant, by imported Shark. He was a race-horse quite nearly first class, especially at long distances, being successful at four miles. He was the best of all Messenger's progeny as a race-horse, if we except Miller's Damsel, the dam of American Eclipse. As a sire of trotters and trotting-progenitors he won distinction. One of the most gifted of early turf writers, who wrote with singular severity of this horse, conceded that "he got some excellent roadsters, good trotters," but probably in so speaking of the race-horse the writer meant to be anything but complimentary.

Among the progeny of Bishop's Hambletonian, the most distinguished on the trotting-turf were the famous Whalebone, and another early trotter of less note, Sir Peter. In 1830 and 1831 the former ranked with the best of his day as a long distance trotter, and has to his credit a performance of thirty-two miles in 1:58:05. Daughters of Bishop's Hambletonian produced Paul Fry and Topgallant,

both being by other sons of Messenger, and they were the first trotters of their time. The latter trotted three miles in 8:11 in 1829. The most noted progenitors of trotters left by Bishop's Hambletonian were his sons, Harris' Hambletonian and Judson's Hambletonian. The former sired Green Mountain Maid, 2:28½; Hero, pacing-record, $2:20\frac{1}{2}$, and others of less note. A son of his sired Joker, $2:22\frac{1}{2}$, and six of his daughters have produced trotters. Maj. Edsall, the sire of Robert McGregor, 2:171, was out of a daughter of Harris' Hambletonian, as was also Cuyler, Stillson, and other sires of note yet living. Judson's Hambletonian was less distinguished than Harris', but his blood enters into several lines, the most prominent being through his son, Andrus' Hambletonian, the sire of the trotting-mare, Princess, that, after meeting the best campaigners of her day, from the Pacific to the Atlantic, made still more firm her rank in the records as the dam of Happy Medium, one of the greatest trotting sires the world has yet produced.

Coming to Mambrino, in a trotting-sense the greatest son of Messenger, we reach the keystone of our subject, for from his loins came two lines, the greatest in all trotting-history. One son of Mambrino gave us the sterling Mambrino Chief family of trotters; another got Rysdyk's Hambletonian, far and away the greatest of all trotting-progenitors. The latter founded a trotting-family with which none can compare, and to which none approach, and his blood has, it is truly said, "raised the trotting-horse of America to the highest point of excellence." Mambrino Paymaster, son of Mambrino, sired Mambrino Chief, the founder of the Mambrino trotting-family.

Mambrino was a bay horse, foaled 1806, bred by Lewis Morris, of Westchester, New York, and was by Messenger, out of a daughter of imported Sour Crout. He never raced, and was so little valued that history loses trace of him for part of his career. He died in Dutchess County in or about 1831. He was a large, coarse, leggy horse, with well-defined trotting-action.

His son Abdallah was bred by John Treadwell. Salisbury, Long Island, and was foaled in 1823, his dam being Amazonia, a trotting-mare of unknown blood. He was an unattractive rat-tailed horse, of vicious temper, and was little valued at any time. So lightly was he thought of in Orange County, so a writer states, that he wintered one year with no better shelter than the leeward side of a hay-stack within sight of the spot where his son Hambletonian afterward lived in honor. Finally cast off, he was given to a Long Island farmer,

who sold him to a fisherman for \$35. The fisherman tried to harness him, but age had not subdued his ungovernable spirit, and he rebelled with such violence that he was turned out and diea of neglect and famine on the sandy beach of Long Island. This was in November, 1854. He had trotted a mile in 3:10, it is stated as a four-year-old, and considering that he never was broken, that this was his natural gait, it must be conceded he had some gift of speed.

Abdallah, as we have seen, got Rysdyk's Hambletonian out of the Charles Kent mare, by imported Bellfounder, a reputed Norfolk trotter, and the Kent mare's dam was One Eye, by Bishop's Hambletonian, son of Messenger. Besides this greatest of trotting progenitors, Abdallah got three trotters with records of 2:30 or better; many of his daughters produced trotters, and sires and dams of trotters, and others of his sons contributed in minor degrees to trotting-lines.

Hambletonian was foaled in 1849, and was that year bought, with his dam, by William M. Rysdyk, of Chester, Orange County, New York, who owned him until he died. He was a bay horse of excellent structure, but very plain, the large head and Roman face especially rendering him objectionable to the eve of the lover of form. Mr. Rysdyk never was anxious to show the speed of his horse, but that he possessed fair trotting capacity abundant evidence from many witnesses demonstrates. As a three-year-old he trotted in public in 2:48, and, considering the time and circumstances, it marked him as a great natural trotter. This world-famous progenitor died March 27, 1876.

Nothing but the record-book of the trotting-turf—the Year-Book—suffices to adequately credit the Hambletonian family with all it has accomplished on the trotting-turf, but to put the aggregate in brief form I may say that forty of the sons and daughters of Hambletonian have mile records ranging from the 2:17½ of Dexter to the 2:30 of Lady Augusta; more than one hundred of Hambletonian's sons have sired, in the aggregate, upward of 600 trotters, with records from 2:08½ to 2:30, and about fifty of his daughters are the dams of trotters ranging in speed from 2:12½ to 2:30. Hambletonian's sons are Alexander's Abdallah, Aberdeen, Dictator, Edward Everett, Electioneer, Egbert, George Wilkes, Happy Medium, Harold, Jay Gould, Masterlode, Messenger Duroc, Middletown, Sentinel, Strathmore, Sweepstakes and Volunteer. These are not only great sires, but most of them the heads of great sub-families. To follow these several

339

lines downward through successive generations with any degree of fullness would be wearisome to the reader and would involve an array of statistical tables not within the scope of this article. In general terms, however, it may be stated that the Hambletonian subfamilies founded by Alexander's Abdallah, Electioneer, George Wilkes, Happy Medium, Harold and Volunteer are the most highly esteemed, because the most productive. Alexander's Abdallah got Goldsmith Maid, 2:14, the greatest of campaigning mares, and he got Almont, one of the greatest trotting-sires of any age, and Belmont, little less noted, he having produced Nutwood, 2:18\frac{2}{4}, and Wedgewood, 2:19, both renowned on the turf and in the stud. George Wilkes was a king on the turf in his day, and to-day holds higher rank as a trotting progenitor than any other horse, living or dead, if we except Hambletonian himself and his greatest son Electioneer.

Mambrino Chief, the head of the family that ranks next to that of Hambletonian, was foaled in Dutchess County, New York, in 1844, and was got by Mambrino Paymaster, son of Mambrino, from a mare whose blood lines are lost in the "mists of the West." Mambrino Chief was a fast trotter, and he got six trotters that made records of 2:30 or better, the most renowned being the famous Lady Thorn, 2:18½, and his sons and daughters are successful producers of trotters. His best sons were Woodford Mambrino, 2:21½, Clark Chief and Mambrino Patchen, brother to Lady Thorn. The blood of Mambrino Chief, like that of the Clays, American Stars, and, it may be said, all other trotting branches, has reached its greatest triumphs when blended with that of Hambletonian and his sons and daughters.

The Clay family of trotters was founded by Andrew Jackson, a trotter of high class in his day. He was a son of Young Bashaw, a Barb imported from Tripoli in 1820. Young Bashaw's dam was by the race-horse First Consul, and his grandam was by Messenger. The dam of Andrew Jackson was a mare of unknown blood that, it is said, both trotted and paced. Andrew Jackson was foaled 1827, at Salem, New York, and died at Knightstown, Pennsylvania, in 1843. His most noted sons, as trotting-sires, were Henry Clay and Long Island Black Hawk, and some of his get were creditable performers. From Henry Clay we have the line of sires known through several generations by the name of Cassius M. Clay, and two other sons of Henry Clay, besides the original Cassius M. Clay, are known as trotters. Cassius M. Clay, First, got George M. Patchen, 2:25½, the most

famous horse of the Clay line and the founder of the Patchen family.

Other noted sires of the Clay line are Cassius M. Clay, 22; his son American Clay, Harry Clay, The Moor, and his son Sultan, etc. The dam of Old Henry Clay was Surrey, a Canadian trotting-mare of unknown blood. The whole Clay family has been charged with a lack of stamina, a charge unduly pressed and exaggerated, and some theorists imagine they find an explanation in the blood of Surrey. Be this as it may, Clay blood, as an auxiliary to Hambletonian strains, has produced the grandest results. Long Island Black Hawk was a trotter and a sire of some merit. The best line from him is through his grandson, the great Iowa horse, Green's Bashaw. The dam of Green's Bashaw was a half-sister to Rysdyk's Hambletonian, she being out of the Charles Kent mare by Bellfounder.

The next noted family of trotters, the Black Hawks, frequently called Morgans, properly originated in Vermont Black Hawk, a horse whose breeding has never been satisfactorily established, and is still seriously questioned. The generally accepted version is that he was got by Sherman Morgan, son of Justin Morgan, a pony-built horse of unknown blood, from whose loins came an excellent class of roadhorses. The descendants of Justin Morgan had the showy, trappy gait, conformation and other characteristics that find their counterpart in certain Canadian families, and after duly weighing all the facts presented as to his history, I think the most reasonable conclusion is that he was of Canadian descent.

Vermont Black Hawk, the true progenitor of the so-called Morgan family of trotters, was foaled in 1833, near Durham, New Hampshire, and, as I have said, is represented to be by Sherman Morgan. He was able to trot close to 2:40, but his reputed sire, if witnesses speak truly, "could not trot fast enough to go to mill." From Black Hawk comes the Ethan Allen family, the Gen. Knox family, and other less prominent lines. This trotting-line reaches its highest plane in the family of Daniel Lambert, son of Ethan Allen. Daniel Lambert must be ranked little inferior as a producer of speed to any horse that ever lived. His family has undoubtedly suffered through injudicious crosses. Had his blood been better reinforced with the Hambletonian strain, supplying certain essentials which in itself is lacking, better results would have been produced. It is important to note that Daniel Lambert's dam was a daughter of Abdallah, the sire of Rysdyk's Hambletonian, and from this fact, coupled with the knowledge

that he is infinitely a better horse than his sire, and moreover, far better than any horse of his family, the reader can draw his own conclusions as to what influence his dam exerted in making him what he is.

Now I have briefly outlined the four chief trotting-families—the Hambletonians, the Mambrino Chiefs, the Clays and the Black Hawks. Of course I have left innumerable minor lines untouched, but I cannot well complete a sketch of the principal elements entering into the trotting-blood of to-day, without touching upon the groups of families of pacing origin.

It is useless to discuss the origin of the pacing gait, for even as horses galloped and as horses trotted, so horses paced at a period "whereof the memory of man runneth not to the contrary." On the frieze of the Parthenon at Athens, the hand of the sculptor left timedefying evidence that the pacer was known in Greece when she was at the zenith of her glory, four hundred years before the Christian era. The bronze horses of Saint Marks in Venice were cast (probably about the beginning of the Christian era) in the pacing attitude. During the Roman regime in Britain, we are told that the ambulatara was "perhaps the universal and traveling pace of the Romans." Fitz Stephen, a monk of Canterbury, writing in the twelfth century, tells us that at Smithfield, then a suburb of London, on Fridays "shows were held of well-bred horses exposed for sale," and he adds that it was "pleasant to see the nags, with their smooth and shiny coats, smoothly ambling along." In 1558, Master Blundeville, one of the early English writers on the horse, said: "Some men have a breed of great horses, meete for the warre and to serve in the field; others breed ambling horses of mean stature for the journey, and to travel by the way. Some againe, a race of swift runners to run for wagers," etc. In the reign of Charles II a great impetus was given to racing, and continual importations of Eastern blood flowed into England. The race-horse was forming as a breed, and took the first place in the affections of Englishmen. Before the overwhelming tides of desert blood the pacer gradually became extinct in England, until John Lawrence tells us, in 1809, that "the people have lost all remembrance of the amble." Indeed, it is the popular belief, wholly untenable, however, that the pacer never was known to exist in England. At the time of the founding of the American colonies, the pacer was at least popular, if not esteemed patrician, as in the early days; and as the horse stock of the colonies came chiefly from

England, I think it is beyond question that in these importations came the ancestors of the American and Canadian pacer. The horses of Rhode Island, known as "Narragansett pacers," attained wide celebrity in the seventeenth century, and the pacer was the racehorse of the Rhode Islanders and Virginians of the olden times. They were one of the great staple products of Rhode Island at that day, and were largely exported. But in time, as the colonies grew in wealth, the pacer was scattered and crowded out by larger, better horses, a race more acceptably suiting the requirements of the people.

The names of the families of pacing origin most frequently encountered in the choice blood-lines of our modern trotters are the Pilots, the Blue Bulls, the Columbuses, the Hiatogas, the Copperbottoms, etc.

The originator of the Pilot family was a black pacing-horse that, according to tradition and tradition only, came from Canada, and was probably foaled in 1826. He is famous as the sire of Pilot Jr., a grey horse of much merit as a trotter and sire of trotters. The blood of his dam is unknown. He evinced the rare power to get trotters out of running-mares, and two of his fastest and best were out of mares so bred. Though he sired nine trotters with records ranging from 2·24 to 2.30, and although some of his sons, notably Bayard and Tattier, have proved successful sires, it is through the triumphs of his daughters as brood-mares that he is most esteemed. They are great speed-producers, among the produce of Pilot Jr. mares being Maud S., 2.08\frac{3}{4}, and Jay-Eye-See, 2:10.

The marvelous pacing-horse Blue Bull is the phenomenon of trotting-horse history. "A plebeian of the plebeians," got by a horse on whom the atrocious name the family bears was bestowed as a mark of opprobium, a cripple with not a line of distinguished blood to lend him worth, from ignominious uses he rose in his day, by sheer force of merit, to the front rank of trotting-sires. This remarkable horse was foaled in Switzerland County, Indiana, in 1854, and died at Rushville, Indiana, in 1880. He was wonderfully fast at the pacinggait, and even after being crippled could show great flights of speed. For several recent years he has figured as the sire of more trotters than any horse that ever lived, and it was only during 1887 that that honor passed from him to George Wilkes. Over fifty of his get have records ranging from 2 174 to 2:30. At present, while we can rank Blue Bull as a very great sire of speed, I am not very sanguine that the future will rank him a great progenitor. His own lack of breed-

ing and the lack of breeding in the mares to which he was bred are against the chances of his tribe taking high rank as a family.

Of the other pacing-families mentioned, the Columbuses are of Canadian origin. The original Columbus came from a town in the Province of Quebec "thirty or forty miles below Montreal." From this same mysterious region came St. Lawrence, another Canadian trotting-sire, and to the blood of that district is traced lines in many of our famous trotters.

The Hiatoga family traces to early Virginia pacing ancestry. The first noted horse of the line was taken to Fairfield County, Ohio, about 1840, is known as Rice's Hiatoga, and from him the trotting-family of this name is descended. The Copperbottoms, a noted pacing-family that figure in many trotting pedigrees, were, like the Columbuses, and probably the Pilots, it is believed, of Canadian origin. The original was, according to the Trotting Register, taken from Canada to Kentucky in 1812.

Another Canadian family that may or may not have been of kindred blood to those just named, but a family far superior to any other of Canadian origin, is that bearing the name of Royal George. The founder of this line was Tippoo, a horse whose blood is unknown. Tippoo's son, Black Warrior, got Royal George, and from this line a really good trotting-family has been produced.

A tribe that has held a foremost place in turf history as a cross for Hambletonian blood was that of American Star, a horse that flourished previous to and in the early part of the career of Rysdyk's Hambletonian. The pedigree of this horse is extremely doubtful, but he was a trotter of some merit. From great numbers of his daughters bred to Hambletonian, a goodly proportion of trotters came, but the family lacked the capacity to transmit speed potently from generation to generation, and its only standing, as a trotting line, rests upon what Hambletonian accomplished from its daughters.

I have traced at some length the foundation lines of blood from which the trotters of to-day are bred, and every well-bred trotter of this generation traces directly to one or more of these families.

Just when racing, at either the running, the trotting, or the pacing gait began in America is difficult to determine. It is reasonably certain that pacers were bred for speed and raced, notably in Rhode Island, in the last decades of the seventeenth century. Pacing races were held in and about Philadelphia, and were indulged in between the gentry of Rhode Island and Virginia early in the eighteenth

century. The first running races of which we have any trace in history were established by Governor Nicholls, and were held on Hempstead Heath, Long Island. In 1665, he established a race-course here, and ordered that a plate should be run for every year. (Be it remembered that there were no thoroughbreds in those days; Fearnaught and Jolly Roger, the best of the early importations of English thoroughbreds, did not see America for nearly or quite a hundred years after this, and they were among the first to come.) We find that, in 1669, Governor Lovelace, who succeeded Governor Nicholls, ordered races to be run on Hempstead Heath, but from that year to 1736 history, as to racing here, is silent. After this, racing at probably all gaits flourished until it seems to have become an evil. "There was no end," says one historian, "to scrub and pace-racing in all parts of the middle and southern colonies, and particularly on the good and shaded roads of Manhattan Island." In 1774, the Continental Congress, by resolution, practically forbid horse-racing; and, in 1748, the Legislature of New Jersey enacted a law restraining all "running, pacing and trotting-races."

The first recorded trotting performance in America was that of Yankee, at Harlem, New York, July 6, 1806. The time of the mile was 2:50, but the track was not a full mile. At Philadelphia, August, 1810, a "Boston horse" trotted the mile to harness in 2:48½, but the next best performance I find is in 1818, and then the time is only 3:00. To estimate the progress in speed made by the trotter in consequence of his being bred for his special purpose we must approximate his extreme speed at the beginning of the founding of the breed. If we take for granted that Yankee could trot in 3:00 in 1806, in contrast with the $2.08\frac{8}{4}$ of Maud S. in 1885, we have a difference of $0.51\frac{1}{4}$ in seventy-nine years. But it would be erroneous to conclude that the extreme speed capacity of the trotter of to-day is 0:50 to the mile over that of the trotter of eighty years ago. Improved tracks, appliances and methods have accomplished much. If we could approximate just how much of the improvement in speed is due to the improved tracks, appliances and methods, we could then give to improved blood its share of credit. Guarding, then, against the error of giving all the honor to superiority of blood, let us note, step by step, the improvement in the extreme speed of the trotter.

From the performances above noted I think it fair to approximate the extreme speed of the trotter previous to 1820, at 2:50 to the mile,

in harness. From that date recorded performances are plentiful, and furnish us a safe guide. In 1829, Topgallant went three miles in 8:11, and this sustained speed at the rate of $2:43\frac{2}{3}$ is certainly better than a mile in 2:40. In 1834, the black gelding, Edwin Forrest, went a mile under the saddle in 2:31½; in 1839, Drover paced in 2 28. In 1844, Lady Suffolk trotted, under saddle, in 2.26½, in the same year Unknown paced to wagon in 2.23. In the next decade Flora Temple trotted in 2:193, and in the next decade the marvelous pacing mare Pocahontas went the mile, to harness, in 2:17%. The stars of the following decade were Dexter, 2:174, by Hambletonian, and Lady Thorn, 2:181, by Mambrino Chief. In the next period, Goldsmith Maid, 2:14, by Alexander's Abdallah; Hopeful, 2:14%, by Godfrey Patchen; Rarus, 2:131, by Conklin's Abdallah, and Lula, 2:15, by Alexander's Norman, represented the limits of trotting speed. St. Julien, by Volunteer, trotted in 2:123 in 1879, but reached his limit, 2:114, the following year. In 1884, Jay-Eye-See, by Dictator, full brother to Dexter, astonished the world by trotting the mile in 2 10 but the next year Maud S., by trotting in 2:083, set a mark of speed in harness not since approached. The pacer Johnston, by doing the same task in 2:061, demonstrated that the lateral gait is still the fastest, and in the past year, 1889, the wonderful performances of the three-year-old stars, Sunol, by Electioneer, and Axtell, by William L., son of George Wilkes, show that progress does not lag. Sunol trotted in 2:10½, and Axtell in 2:12. Besides these we have Guy, trotting in 1889 in 2:103, and Stamboul and Palo Alto each in 2:121.

But we have been dealing in the performances of phenomenal animals. I will now, by taking the average of the five fastest performances for each decade since 1820, show what may fairly be called the extreme speed of the trotting-horse, and his gradual gain in speed since the beginning of fast trotting.

AVERAGE EXTREME SPEED.

1820 to 1830	2:42
1830 to 1840	9.951
1840 to 1850	0.001
1850 to 1860	2.203
1860 to 1870	
1870 to 1880	
1880 to 1889	$2\ 10\frac{1}{4}$

The question as to what rate of speed the trotter will ultimately attain has been much discussed, and some have assumed to fix the limit. This is the merest speculation. A concensus of the public opinion of horsemen in 1860 would have fixed the limit of the trotter's speed at Flora Temple's mark. When Ethan Allen, harnessed with a runner, went a mile in 2:15 men thought it would never be equaled, and the popular feeling certainly was that no horse could do it alone. Only a little over twenty years ago it was timidly that Hiram Woodruff ventured the forecast that Dexter would beat Flora Temple's record, but to-day a gap of eleven seconds is open between Flora Temple's record and that of Maud S., and upward of one hundred and forty horses have surpassed Flora's performances. In view of the fact that the trotting-breed is vet in its infancy, and that the average of extreme trotting speed is steadily advancing toward two minutes, it would be rather absurd to venture to fix a limit and a time when progress will suddenly cease. Of course improvement in speed becomes more difficult as the rate increases, but it will be noticed that the advance toward the two-minute goal has been just as great in the past decade as it was in the slower decade that preceded it. Both trotters and pacers have actually trotted fractions of miles at a two-minute gait, and I see no reason to doubt that the trotter will yet be bred that can sustain that rate for a mile. But no horse, thoroughbred or trotter, can sustain for a mile the speed he can show for a quarter of a mile, and when we see the two-minute trotter he will be a horse capable of trotting a quarter of a mile in from twenty-six to twenty-eight seconds.

Whatever may be the views of the reader as to the other influences of the trotting-track, he must admit that it has been the chief agency in bringing the American light-harness horse to that point of excellence which he has now reached. The love of the turf is deeply rooted in America as well as in England, and I think this devotion to "the sport of kings" is greatly due to the knowledge that the improvement of the higher kinds of horses depends mainly upon turf tests. "It is certain," says an old English writer, "that horse-racing was the means of converting the old lumbering horse of this country into the elegant, graceful and pre-eminently fleet animal of . . . the present century."

The value of the trotting-bred horse has been constantly on the increase, until now the breeding business is a vast interest to which unlimited capital is devoted. That the trotter should be in America a

more valued breed than his brother aristocrat, the thoroughbred, is natural. If the thoroughbred race-horse fails to develop the speed. stamina and disposition necessary to success on the turf he is almost worthless. He is a good racing-machine or he is nothing. But, on the other hand, the trotter, even if he lacks the capacities to success on the turf, is still, if bred wisely, valuable. For the family carriage, for the park, his versatile gifts make him profitable, even though he fails on the turf. Very seldom has a better test of the relative value of trotting and running (or thoroughbred) horses been offered than in October, 1886, when two great breeding-studs, one of thoroughbred and the other of trotting-horses, were dispersed under the hammer. At Louisville, Kentucky, the late John C. McFerran had founded and established the Glenview Stud, which rose to the front rank of "nurseries of trotters." At Jobstown, New Jersey, Mr. Pierre Lorillard's Rancocas Stud of thoroughbreds, the choicest in the land, is situated. Dispersal sales were held of these famous collections within a few days of each other, and the following averages were realized:

RANCOCAS THOROUGHBREDS.

Average for stallions	.\$6,390.00 . 1.422.27
Grand average for stallions and brood-mares	\$1,721.62
GLENVIEW TROTTERS.	
Average for stallions	\$12,780.00 1,678.00
Grand average for stallions and brood-mares	\$2,238.75

This was a fair test in 1886, but it does not represent the monetary supremacy of the trotter now, for it is an absolutely safe assertion to make that the value of choice trotting-blood has appreciated twenty-five per cent. in the past three years. A trotting-stallion, Axtell, has sold for \$103,000; Bell Boy sold at auction for \$51,000, and Stamboul at private sale for \$50,000. These prices for trotting-stallions represent the highest values ever reached by horses of any type in America.

In this sketch the writer has avoided minute treatment of either families or individual horses, or, indeed, any of the details of the subject, his purpose being merely to sketch in a general way, the foundation, evolution, and progress of the trotting-bred horse.

LESLIE E. MACLEOD.



INDEX.

Abe Edgington96, 97, 98, 99,	' ' Break and Catch '
100, 110, 111 Action309	Break-Down
Action	Breaking to Harness212, 213,
Advantages of Miniature Track,	214, 215
	Breeding
209, 210 Albert France160, 161	Broken-Down Trotters299
Alcazar	Brood - Mares, Form, Action
Alert	and Size310
Amount of Work	Brown, Horace
Annette310	Browne, S. A
Ansel	Brushing
Anselma114	Burr, Carl
Arol	,
Astral	Cæsar
August Haverstick104, 147	California Climate254, 255
Axtell	California Grasses255, 256
Azmoor	Campaign of 1885102
	Campaign of 1886
Babcock, F. G 79	Campaign of 1887 104
Balancing and Checking217,	Capt. Smith101, 111, 112
918 919	Carrie C101, 102, 103, 172
Bay Rose	Care with the Mouth234, 236
Beautiful Bells122	Carlisle
Bell Boy	Castalia104, 169
Belle Brasfield110, 111	Cavalry Service
Belle Hamlin103, 144, 145	Checking and Balancing217, 218
Belmont Family328	Charley Hogan
Benefit of Early Work230,	Chimes102, 103, 141, 170, 171
231, 232, 233	Clay (gelding)
231, 232, 233 Ben Hur	Clay (stallion)
Bentonian	Clay, C. F
Bermuda104, 170	Cleveland, Great Race54-72
Between Heats290, 291	Clifton Bell
Bitting213	Climatic Conditions238
Blanchard, David H46, 48	Clingstone
Blankets	Col. Bowers
Blistering	Col. Lewis
Bodine	Com. Perry 45
Body-Wash	Condition
Bonita101, 102, 120, 121, 122	Condition and Speed283
Boots263, 264, 265	Conley, Col. John W148
Bran 959	Converting Smuggler 36

350 index.

Cooling Out	Four-year-old Record Lowered,
Cracked Food	122, 146
Cracked Heels302	Fred Crocker100, 115, 119
Curb301	Fred Low
	Fuller, George, 136, 148, 149.
Dame Winnie154, 310	150 152 306
Daily Programme in Training. 257	150, 152, 306 Fugue
	1 ag ac 150, 100
Deck Wright104, 159	Geneva
Defiance	(1 D+ 01 00 01 100 200
Del Mar 104	Gen. Benton81, 89, 91, 100, 326
Del Sur101, 111, 112	Gen. Buford68
Dexter	George M. Patchen Jr328
Distemper304	Gertrude Russell
Doble, Budd 51, 52, 55, 57,	Goldsmith Maid 53, 55, 56,
61, 62, 63, 65, 68, 76, 109,	57, 62, 63, 64, 66, 69, 70, 71,
110, 160	73, 75, 109, 296
Doc108	Gould, Levi S
110, 160 Doc	Granby
Driving with a Watch283	Graves101
8	Great Eastern
Eagle Bird 103, 136, 137, 139,	Great Race at Cleveland54, 72
140, 148, 149, 150	Greenlander. 136, 139, 146, 147
Early Experiences in Training,	Green, Chas 44, 55, 57, 61, 63
30. 31	Ground Food252
Early Training. 182, 183, 184	010tina 1 00a
185, 186, 187, 188, 189, 190, 191	Halter-Breaking195
Toon Driving 998	Hamlin, C. J41, 171, 172
Easy Driving	
Elaine 100, 112, 113, 114, 299	Harry C
Electioneer81, 91, 99, 100,	Harry Roberts159, 160
319, 320, 321, 322, 323, 324,	Helen
325, 326	Henry W. Genet46, 47
Elvira 102, 167	Herzog
Emaline	Hickok, Orrin
Endymion	Hinda Rose101, 102, 103,
Express104	119, 122, 123, 124, 125, 141,
	168, 226
Fanny Witherspoon282	Hoods
Fasig, W. B., 171	Hopeful
Feeding	Horses in Motion94, 95
Feeding Colts211	Houston, J. B
Feet, Care of	,
First Lessons201, 202	Imitators
First Trotter	Injuries and Ailments298
Fleety Golddust 44	Iodine300, 301
Flooring	
Foal, Treatment of the193	Jay-Eye-See
Foot, Anatomy of 273, 274	Joe Brown 40
	Judge Fullerton51, 52, 53,
Form	54 55 58 80 81 89 84 88
Fortuna	54, 55, 56, 60, 61, 63, 64, 66,
Frank Middleton	69, 70, 71, 73, 74, 78, 100, 110

Johnston, Peter V 55	Norval
Judgment of Pace295	Nutbreaker103, 104, 169, 170
6	Nutwood
Lady St. Clair	
Lathrop, Ariel	Occident96, 97, 98, 99, 100,
Laying Up Heats292, 293, 294	101, 108, 109, 110, 111, 299
Leading	Old Methods of Training 183, 184
Leading with a Runner. 207, 208	Overbreeding317
Legs, Care of259, 269, 270	Overdoing It243
Leg Wash	Overwork
Libby S	Overwork
	Polo the The Stellion 100
Light Shoes	Palo Alto, The Stallion102,
Lillian Wilkes	103, 104, 132, 141, 143, 154,
Lily Stanley	155, 156, 157, 158, 159, 160,
Lorita104	161, 162, 299
Lucille Golddust55, 56, 57,	Palo Alto System Outlined 96
61, 63, 64, 66, 69, 70, 73, 74	Palo Alto Farm 81, 89, 92, 93
Lucy Fry	Patron104, 126, 132, 137,
	139, 140, 141, 147, 148, 149,
Mabel A	150, 151
Mace, Dan46, 55, 60, 61, 63, 74	Pedlar104
McKinney, H. D	Phil Sheridan 47
Maiden	Piedmont326
Maid of Clay	Pilot Temple 40
Mambrino Gift40, 41, 46, 47, 50	Preparation for Races. 280,281,284
Manzanita102, 103, 104,	Pride123
132, 133, 134, 135, 136, 137,	Princeton
138, 139, 140, 141, 142, 143,	Pulling and Side-Pulling236
144, 145, 146, 147, 148, 149,	T aming and side I aming
150, 151, 152, 153, 301	Quantrill's Raid
Manzanita-Patron Race147	Quarter Crack305
	"Quitters"137, 138, 139
Margaret S	Quitters157, 155, 159
Marvin, Chas., Biography. 17, 27	D D
Marvin, Mrs. Charles 25	Race-Day
Maybell,	Races, Management in289,
May Flower, Dam of Manzan-	290, 291, 292, 293, 294
ita	Racing in the Army21, 22
May Fly, Dam of Bonita121, 310	Rarus296
May Queen310	Reasons for Writing 29
Miniature Track 197, 198, 199, 200	Regulating Work224
Miss Russell	Rexford
Mohawk Chief89, 90, 100	Richmond, A. W329
Moor, The328	Rubbers
Muzzles	Rubbing and Cooling258
	Russell, Col. H. S39, 42,
Natural Gift, The Trainer's223	43, 46, 48, 49, 55, 78, 79
Nellie Benton	==, ==, ==, ==, ==, ==, ==, ==
Nephew327	Saint Bel102, 103, 104, 127,
Nettie	198 199 130 131 141
Vorlaine 114 192 165 166	128, 129, 130, 131, 141 Saint Clair 108, 120, 121, 327

352 INDEX.

Saint Julien	Three-Year-Old Record Low-
Sale of Smuggler 39	ered 125 126
Sallie Benton102, 126, 167,	ered
168 299	239, 240, 241
Sam Purdy	Thrush 200, 240, 241
Santa Claus	Thrush
Santa Claus	Toe-Weights226, 227, 266, 267
Severe Checks and Bits 281	Tom Rogers
Shoeing 272, 273, 274, 275,	Tracks279, 280
276, 277, 278	Track-Work, Beginning216, 220
Sheppard, Dr	Training for a Race284, 285, 286
Sibley, J. C129	Training Paddock197, 198,
Side-Pulling236, 237	199, 200
Size in Brood-Mares310	Trial Days for Brood-Mares,
Silverone 136, 137, 139, 140	315, 316
Smuggler32-80, 299	Trotting - Horse, History of
Soaking	the
Sontag Mohawk90, 310	Time of Breeding314, 315
So So	Turner, J. E
Speed, Speed, More Speed225	
	Two-Year-Old Record Low-
Speed and Gameness240	ered116, 117, 119, 177,
Sphinx102, 103, 104, 169	178, 180
Splan, John	
Splints307	Van Ness, Frank160, 161
Sport	Ventilation and Light250
Sprung Tendons307	Vermont Abdallah
Stables and Stabling248	Versailles 68
Stallion-Race at Boston 46	Vesolia
Stallion-Race at Buffalo 40	Victor
Stallion Record Lowered 53	Visit to Palo Alto 81
Stallions, Form and Action in310	
Stamboul	Wallace, J. H
Stanford, Hon. Leland81,	Water253, 254
82, 83, 84, 85, 86, 87, 88, 89,	Waxana
90, 96, 97, 98, 99, 110, 173	Waxy
Stanford, Leland, Jr102	Weaving
" S. T. H." 61	Weight
Sweating and Scraping Colts 221	Wellesley Boy 45
Sweetheart116	Whip, Use and Abuse of235
Sudie D	Whitestockings 21
Suisun 103, 104, 141, 170, 171	Wildflower101, 102, 118,
Sunol 104, 172, 173, 174,	119 120
175, 176, 177, 178, 179, 180	Wild Rake
Sutherland & Benjamin170	Wilton103, 156, 157, 158
Butteriana a Benjamin	Wilson, W. H
Tempest	Woodruff, Hiram182, 183
Tender Feet306	Work, Amount of242
Thomas Jefferson. 40, 42, 46, 47,50	Working in Paddock204,
Thoroughbreds at Palo Alto 92	205, 206, 211
Thoroughbred - Blood in the,	, 200, 1022
Trotter311	Yearling Record Lowered123

		4,	

0 / 1





