

**HORSE-BREEDING; BEING THE GENERAL
PRINCIPLES OF HEREDITY APPLIED TO THE
BUSINESS OF BREEDING HORSES, WITH
INSTRUCTIONS FOR THE MANAGEMENT OF
STALLIONS, BROOD
MARES AND YOUNG FOALS, AND THE
SELECTION OF BREEDING STOCK**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649141425

Horse-breeding; being the general principles of heredity applied to the business of breeding horses, with instructions for the management of stallions, brood mares and young foals, and the selection of breeding stock by J. H. Sanders

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Edited by Trieste Publishing Pty Ltd.
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J. H. SANDERS

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TABLE OF CONTENTS.

PREFACE	3
CHAPTER I.	
GENERAL PRINCIPLES OF BREEDING.—General Laws of Heredity— Causes of Variation from Original Types—Modifications from Changed Conditions of Life—Accidental Variations or “Sports”—Extent of Hereditary Influence—The Formation of Breeds—In-Breeding and Crossing—Value of Pedigree— Relative Size of Sire and Dam—Influence of First Impregna- tion—Effect of Imagination on Color of Progeny—Effect of Change of Climate on the Generative Organs—Controlling the SEX	9
CHAPTER II.	
BREEDS OF HORSES.—Thoroughbreds—Trotters and Roadsters— Orloffs or Russian Trotters—Cleveland Bays—Shire or Cart Horses—Clydesdales—Percherons—Other Breeds	68
CHAPTER III.	
STALLIONS, BROOD MARES AND FOALS.—Selection of Breeding- Stock—General Management of the Stallion—Controlling the Stallion When in Use—When Mares Should be Tried—The Number of Mares to be Served—Effect of Age on the Fertility of the Stallion—Effect of Age on the Quality of the Get— Percentage of Foals to Mares Served—Management of the Stallion After the Season Closes—Effects of Castration on Stallions—Fighting Between Stallions—The Brood Mare— Causes of Barrenness in Brood Mares—The Productive Period in Brood Mares—Time of Foaling and Period of Gestation— General Suggestions as to Food and Nursing—Feeding the Young Foal—Weaning the Foal—Effect of Exercise on De- velopment—Breaking the Foal—Views of Dr. Reynolds, of Liverpool, on Horse-Breeding	131

CONTENTS.

CHAPTER IV.

DISEASES PECULIAR TO BREEDING-STOCK.—Hygiene of the Eye—
 The Eye as Affected by the Teeth—Unbilical Hernia in Young
 Fools—"Scourge" or Diarrhoea in Colts—Strangles or Dis-
 temper.—THE STALLION.—External Injuries—Inflammation
 of the Penis—Inflammation of the Testicles—Cancer of the
 Penis and Sheath—Protruse or Paralysis of the Penis—Scrotal
 Hernia—Waterbug, So-Called—Excessive Venery—Non-emis-
 sion of Semen—"Prouliness," So-Called—Sexual Sluggishness
 —Spermatorrhoea—Vesicular Eruptions on the Penis—Foul
 Sheath—Masturbation—Cryptoreids (Ridlings, So-Called).
 —THE BROOD MARE.—Barrenness—Nymphomania Tumors
 Within the Vagina and Uterus—Leucorrhoea, or So-Called
 Whites—Colt-Pounder, So-Called—Oedema During Pregnancy
 —Superimposition—Heat During Pregnancy—Laceration
 of the Rectum—Abortion—Difficult Parturition—Laceration
 of the Perineum..... 201

PREFACE.

A very large proportion of the matter contained in this volume was prepared for publication several years ago when I had more leisure to study and write upon the topics herein considered, and when I was fresher from the field of practical experience than now. Much of it has since been printed in fragments at various times, some of it in the form of editorial articles for the monthly journal that was so long under my management, some in essays or addresses at meetings and conventions of breeders of live stock, and still other portions of it in the weekly stock-breeders' paper that for more than three years past has occupied my almost constant attention. A little more than four years ago I thought myself about ready to gather up the fragments that were already prepared and give them to the public in book form; but other and more pressing duties intervened, and it is only within a few months past, having been relieved from official duties that had for three years claimed all the time that I could possibly spare from the management of THE BREEDER'S GAZETTE, that I have found leisure to look over and arrange the

matter which has been gradually accumulating for so long a period. I give it now to the public, realizing that, in common with all human effort, it must needs be far from perfect, but with a feeling of satisfaction in knowing that the work has at least been conscientiously done; and that such parts of it as are not derived from a knowledge bought with my own personal experiences have, for their foundation, the teachings of others who are regarded as eminent authorities in the specialties upon which I have quoted them. To the introductory chapters, wherein the general principles of breeding are discussed, I have given much thought; and I am confident they may be studied with profit, not only by horse-breeders, but by all who are disposed to investigate the laws which govern the transmission of hereditary qualities from parent to offspring, whether it be in the human species or in the lower orders of animal life. In the descriptions of breeds I have endeavored to be judicially candid and fair; to "nothing extenuate nor set down aught in malice;" and where controverted points have been touched upon, while I have endeavored to state my views plainly, and to sustain them by such arguments and facts as to my mind are conclusive, yet I have tried to do so in a manner that would not prove offensive to those whose opinions and conclusions may differ from my own.

Aside from the introductory chapters on the general principles of breeding, which are applicable alike

to all breeds and all varieties of live stock, I have endeavored to make the work a practical guide to the management of the breeding stud—a book which any farmer or farmer's boy, or any novice in the business of horse-breeding, may read and study with profit. In the course of my long experience as editor of a live-stock paper, covering a period of about sixteen years, the constantly recurring questions that have been sent in for answer have served to direct my attention especially to the points upon which information is most frequently sought, and these points I have endeavored to most fully answer in the pages which follow.

While I have not intended that this book should in any sense be regarded as a veterinary work, yet I have thought I might add greatly to its practical usefulness by incorporating with it the material portions of several articles, prepared at my request, by Prof. James Law, of Cornell University, N. Y., and previously published under my direction, wherein he treats of some of the diseases to which stallions, brood mares and young foals are especially subject. And I have also added a number of pages of matter of a similar nature, prepared especially for this work by N. H. Paaren, M. D., State Veterinarian of Illinois, whose high scientific attainments and many years of extensive practice have especially fitted him to give valuable counsel upon such topics.

In the belief that the book will be found interesting to all students of the science and art of breed-

ing, and especially helpful to those who have the care and management of breeding studs, whether on a large or small scale, it is given to the public with a full consciousness of the fact that it does not contain a tithe of what might profitably be written or said upon the subject.

J. H. SANDERS.

CHICAGO, Feb. 1, 1885.

CHAPTER I.

GENERAL PRINCIPLES OF BREEDING.

It is stated in Holy Writ that "God made man a little lower than the angels," and by common consent the horse is voted next highest in the scale of created beings. It will not be inappropriate then, in a treatise mainly devoted to the breeding of this, the noblest of the brute creation, to discuss some of the general principles which govern the transmission of hereditary qualities from parent to offspring and which are beyond a question substantially the same throughout animal life. Through the practical application of these laws to the business of breeding domestic animals, which for many years past has so largely occupied the attention of intelligent men in Europe and America, the great mass of our agricultural population have become familiar with their inexorable power and force; and with a knowledge of the immutability of these laws has come a realization of the stern fact that the human species furnish no exception to their operation.

The passage in the Decalogue, which declares that the iniquities of the fathers are visited upon the children unto the third and fourth generation, is clothed with a new and startling significance since it has come to be generally understood that this declaration is a concise statement of the operations of a physiological law, from which there is