AGRICULTURAL MEMOIRS;
OR
HISTORY
OF THE
DISHLEY SYSTEM.
IN ANSWER TO
SIR JOHN SAUNDERS SEBRIGHT,
Bart. M. P.

BY
JOHN HUNT,
AUTHOR OF HISTORICAL SURGERY, AND ANATOMICAL REFLECTIONS ON THE FORM OF ANIMALS,
&c. &c. &c.

Salus populi suprema lex esto.

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PRELIMINARY OBSERVATIONS,

or

INTRODUCTION.

WITHOUT attempting to investigate the cause of that general prejudice which has been so long established against the necessity of reading that part of a book which is called the preface, I shall, for the purpose of avoiding all such difficulties and dangers, endeavour to give a more extensive view of the subject under that liberality of discussion which will with more propriety claim the title of an Introduction.

The apologies which are frequently made for appearing before the public are in general so unconnected with the real motives
of the parties, that I shall not presume to follow the examples of my predecessors; the flattering approbation of their superiors, the kind solicitations of their friends, and sometimes a modest wish to instruct the ignorant, have all been urged on similar occasions; but whatever may be the merits of the question, if popularity should be thought necessary there is not a doubt but success may be insured. For this purpose it will only be necessary to flatter some of the leading characters of the day, and declaim in florid language in favour of the prevailing follies of the age; but this can only be done by those who have no opinions of their own either to offer or defend, who, for the sake of private interest, have given up the cause of truth; for though the fair goddess of hypocrisy is always disposed to smile upon her votaries, yet no one, who has the least regard to his reputation, will ever stoop so low to bow before her shrine.
I shall not presume to conjecture what can be the motives of those, who at this time are vainly attempting to oppose the Dishley System, but it is my humble opinion that although this establishment was the work of one individual, it is now placed upon such a firm and extensive basis, that it is more than all the societies in the world will be able to destroy. If I had never before expressed my sentiments on this subject, I should not have thought myself so particularly called upon on this occasion; or if I did not consider myself the first who ever mentioned Mr. Meynell's fox hounds as evidence in favour of the Dishley System, or what, in the technical language of the Agriculturist, is called breeding in- and-in, I should not have considered myself under the necessity of standing forward in my own defence.

I am ready to acknowledge that my name has not been mentioned, but the question
which naturally presents itself to our consideration will be, why the declaration should be made, and the source of information so studiously concealed? I do most sincerely believe that plagiarism is one of those sins which I have never yet been guilty of; but if I had made use of either the language or the sentiments of another writer without a reference, I should have expected to meet with such reflections as such conduct has an undoubted claim to.---

At the same time that it must be acknowledged that the opinions of former writers may, in many instances, be referred to with great advantage, yet there is too much reason to believe that long quotations are frequently made from ancient writings and high authority, for the sake of ostentation; but if the information of modern times is thought worthy of attention, it is no less necessary that the origin should be known. If Sir John Sebright had thought fit to ex-
plain from what authority he obtained his information respecting Mr. Meynell's fox hounds, the public would then have been able to form a more correct opinion on the subject. If his information was obtained from my Anatomical Reflections it ought to have been acknowledged, or if it came from any other quarter it would have been an act of public justice to have made it known.

I do not presume to boast of my knowledge either of sheep or fox hounds; but having waited on Mr. Meynell in my professional capacity for more than thirty years, and having in the last ten years had frequent conversations on this subject, I flatter myself that so far as respects the evidence of facts, it would be difficult to obtain more satisfactory information.

Sir John Sebright has observed that "Mr. Meynell's fox hounds are likewise quoted
as an instance of the success of this practice:” that is, breeding *in-and-in*, but not a word is said respecting the authority from which the quotation has been taken. If then I was the first and am the only writer on this subject, under the present circumstances I shall certainly claim precedence; and if no other explanation should be given, I shall have the honour of boasting, on the authority of Sir John Sebright, that what I have already published has now become the subject of conversation in some of the first circles in the kingdom.

So long as this subject remained in the hands of the practical agriculturist, it was to the evidence of nature alone that the parties could appeal; but the literati having taken possession of the field, theoretical speculation is now opposed to the evidence of nature, and the dark regions of philosophy presented to our view, whilst sophistry
receives the retaining fee to disguise the light of truth. To those who have never yet had the gratification of observing the hallucinations of philosophy, it will be necessary to mention that there is frequently a great degree of treachery in what is called philosophical investigation, sometimes in consequence of the experiments being inaccurately conducted, and sometimes by attempting to illustrate one subject by another, which have not the least analogy in nature. It is not the empty title which constitutes the philosopher; nor is it the display of an extensive apparatus which is to insure success, but whilst the former may serve as a cloak to ignorance, the latter may contribute to accomplish the disguise; but for fear it should be said that I am expressing my sentiments with too much freedom,
I am happy in the present opportunity of meeting with language more expressive of my own opinion than all I should be able to urge upon the subject, and I am ready to acknowledge that every observation is so particularly applicable to my purpose that if I wished to place the pedantry of philosophy in a conspicuous point of view, it could certainly not have been done to more advantage. The learned writer here alluded to has, for the purpose of exposing the folly of such vain pretenders, with great propriety observed, that "A mere antiquarian virtuoso, who aspires to no higher praise than that of collecting names, dates, and inscriptions, is to be estimated on the same scale of merit with such as call themselves physiologists, from being in possession of a green house, or hortus siccus, and a room full of stuffed birds, shells, and stones; or with those who lay claim to the dignified title of natural philosophers, from being ca-
This class of philosophers, we must acknowledge, is very extensive, but what must we say to those of an inferior order who are not capable of playing these little tricks, and who also call themselves philosophers; but here it will be necessary to distinguish between the repetition of old experiments and the making of new ones, and yet I have known some great pretenders fail. Before any person can with accuracy repeat an experiment already known, it will be necessary that he should be well acquainted with the instruments he may have occasion to make use of; but to construct a new experiment and conduct it with accuracy, requires a knowledge of the subject beyond what the majority of mo-

* See the History and Antiquities of Claybrook, by the Rev. A. Macaulay, M.A.
dern philosophers have to boast of. The truth is, that there is less difficulty in procuring a philosophical apparatus than in obtaining a knowledge of the use of it.

"Something there is more needful than expense,
"And something previous even to taste—'tis sense
"Good sense, which only is the gift of Heaven,
"And though no science, fairly worth the seven."

But perhaps the learned reader here will ask, what has all this to do either with Agriculture or the Dishley System? To which I shall beg leave to answer, that if we take a view of the different orders of society, we shall not always find those who boast the most of their learning and philosophy possessed of the greatest quantity of common sense. The experiments which were made by Mr. Bakewell were plain, self-evident, and satisfactory; whilst all the

evidence of philosophy, which has been brought forward on the opposite side of the question is unnatural, mysterious, and unintelligible.

My learned Friend, the late Doctor Darwin wrote a book on the Philosophy of Agriculture, but I believe it would not have been difficult to discover which was the best acquainted with the subject, had he met with Mr. Bakewell in the fields; and whatever the learned may say to the contrary, if John Breedon (who was shepherd to Mr. Bakewell), knew more of a sheep than any other person, I see no reason why he ought not to be ranked with the first philosophers of the age.

Having here had occasion to mention the name of this very celebrated naturalist, I should think myself guilty of an important omission, if I were not to give his opinion
respecting the breeding of Poultry, as this is a subject mentioned by Sir John Sebright, Mr. Pitt, and many other writers against the Dishley System.

It certainly must be considered very fortunate for our present purpose, that John Breedon was fond of game-cocks, and very much excelled in his breed of poultry; in which he was no less ambitious to excel than Mr. Bakewell was in his breed of sheep. Now the information which I have to communicate came from a gentleman who was very intimately acquainted with Mr. Bakewell and who was at that time very frequently at Dishley, and whose name is now well known in the agricultural world.

This gentleman informed me that he had frequent opportunities of conversing with John Breedon on this subject, who with
that honest exultation which would serve to shew his attachment to the cause, whenever he exhibited his poultry, would boastingly exclaim, these Sir, I tell you have been bred *in-and-in* for more than twenty years.

I have no doubt that instances do frequently occur where breeds of poultry have degenerated, but this must be for want of management and not in consequence of breeding *in-and-in*. It is not by promiscuous intercourse, though limited to the same family, that improvement is to be insured; but by judicious selection alone that success is to be obtained. This method of improvement succeeded with sheep and other animals under the management of Mr. Bakewell. The same method succeeded with fox hounds under the penetrating eye of Mr. Meynell. And John Breedon’s success in the breeding of game cocks gives equal
evidence of the purity of the principle, and
of his accurate knowledge of animal nature.

In Sir John Sebright's letter we meet
with a number of curious observations re-
specting the blood of the father and the
blood of the mother, with the different dis-
tributions which are supposed to take place
in the different gradations of family con-
nexion, to which if I was to reply in the
blind language of anatomy, I should say
that the whole was an error loci which so
far exceeded the laws of nature that it could
not be explained. But as Doctor Parry has
expressed himself on this subject with a
degree of animation far beyond the natural
heat of the human blood, the question has
become much more deserving of our atten-
tion; but as the discussion would in the
present instance trespass too long upon our
time, I shall only beg leave to state the
question in the words of the learned author,
who, with that liberality which will perhaps be considered the legitimate offspring of the connected sciences of Medicine and of Agriculture, informed the public that "The word blood is nothing more than an abstract term, expressive of certain external and visible forms which, from experience, we infer to be inseparably connected with those excellencies which we most covet."

Such then is the opinion of Doctor Parry respecting blood, and what he has said on the subject of generation is no less worthy of attention; but if we were to compare the opinions of Doctor Parry with those of Doctor Darwin and the writings of Spallanzani, we should find that the theories of generation, like the loves of the triangles are all pointing in different directions. It is not my intention to insinuate that any of these learned speculations are likely to lead to
any important practical information; but as the subject has been taken up by the learned, it is necessary that some of the opinions of the learned should be generally known; but what makes the opinion of Doctor Darwin more particularly interesting is, that the breeding of sheep seems to have been one great object of his attention. But, not content with the improvements of modern times, the learned Doctor has thought fit to carry his researches to the early periods of the world; and the conduct of Jacob with respect to the improvement of his flock is admitted as important evidence on this occasion. And, though I have no doubt but this history has in general been considered miraculous, yet the learned writer now before us, is more disposed to attribute the effects to natural causes. But, as Doctor Darwin was so very partial to experimental philosophy, his inferences would have been much more satis-
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factory if the experiment had been repeated under his own inspection; and if he had succeeded as well as Jacob did six thousand years ago, "The wonderful effects of the imagination both in the male and female parent,"* which is the grand principle that he wishes to establish, would no longer have been doubted. But, it seems as if the Doctor thought better to depend on what Moses had said upon the subject than to repeat the experiments himself; perhaps it was not convenient to him, or it might have been impossible to have met with the same kind and varieties of sheep of which Laban and Jacob's flocks had been composed: but, as there are great numbers of modern agriculturists who are equally enthusiastic in experimental enquiry, it may not now be thought too late, and it is impossible to say what improvements might

be made in the breed of sheep and cattle, if this grand principle could once be established.

Before we proceed any further in these theoretical speculations, it may be necessary to observe that the principal object I have in view, is to prove, by examples from some of the first writers on those systems of anatomy and physiology which are connected with the practice of physic, that the breeding and feeding of domestic animals is not to be explained upon similar principles by which we attempt to investigate the nature of disease.

In all such cases it will be necessary to distinguish between the parade of philosophy and a knowledge of nature, and to explain how those arts which bear the names of anatomy and physiology are applicable to the subject now before us. The blood was
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distilled by Haller, and the different parts of the animal body have been both roasted and boiled for anatomical purposes, but it is my opinion that if a Dishley sheep was first injected and then dissected, the lungs put into one bottle and the liver into another, with such an exhibition of all the organs of digestion and generation as would form a museum of anatomical preparations, our knowledge of the subject would not be in the least improved; and I have no doubt that the fat haunch which Mr. Bakewell was accustomed to preserve in pickle would prove the most instructive exhibition which the subject could afford.

It will not be necessary in the present instance to draw any minute comparison between the anatomical theatre and the slaughter house, but will be sufficient for my present purpose to observe, that the late Doctor Hunter has represented the
slaughter house as an instructive source of anatomical information; but in whatever light these subjects may appear to the scientific agriculturist, it is in the slaughter house that we must expect to meet with the most satisfactory evidence of good and wholesome food, and as this is a subject so intimately connected not only with our national prosperity, but even with our existence as a people, it is a duty which we owe to our country to make the Salus Populi the first object of our attention. I shall not presume to say that if the Leicestershire breed of sheep were to sink into oblivion, that an immediate famine would be the inevitable consequence, but I shall not hesitate to give it as my opinion that if our supply of animal food were to be diminished in any considerable degree, the present state of population could not be supported.

I am ready to acknowledge that it is more the business of the politician than the
physiologist to determine what is the degree of population which would be most consistent with the happiness of Great Britain; but as the increase of population and the improvements in agriculture must of necessity be connected with each other, it will certainly become the first duty of the agriculturist to make the most of the produce of the soil; and with respect to myself, I shall beg leave to observe, as the Salus Populi has been the grand object of my life, that in a political view of civilized society, it is my opinion that the preservation of health is of no less importance than the destruction of disease. And if patriotism is not an empty name, it certainly will be reasonable to conclude that so long as the power, the dignity, and the prosperity of a country can be supposed to depend upon the health and happiness of a people, that the sacred character of the patriot will appear in no less splendour in the agricultur-
ist, who supplies the poor with wholesome food, than in the soldier who defends his country with the sword: and though the happy times may yet be far distant, when "they shall beat their swords into ploughshares and their spears into pruning hooks," still so long as agriculture and patriotism continue to be so intimately connected with each other, I cannot see any reason why those who excel the most in agriculture should not be ranked with the first patriots of the age.
AN

HISTORICAL DESCRIPTION

OF THE

DISHLEY SYSTEM.

If we look back to those distant periods of our history, when the number of the inhabitants of this country was not sufficient for its protection against the invasion of foreign powers, and then take a view of our present state of population, at a time when Great Britain is capable of bidding defiance to the world; every true friend to his country must acknowledge the importance of all those agricultural improvements, which may in any degree con-
tribute to supply the different orders of society with the necessaries of life.

I shall not presume to examine the different opinions which have been given by political writers on the subject of population, or attempt to show whether the improvements in agriculture have regularly corresponded with the state of population at different periods, but satisfy myself, in the present instance, with observing that if these improvements had not been necessary, they would not have taken place, as it is not reasonable to suppose that the public would be disposed to pay for improvements which they had no occasion for. The first grand improvement which took place in the fields of agriculture was the gradual introduction of Inclosures, which, after having contributed to the fertility of the soil, prepared the way for the improvement of Domestic Animals, and was immediately suc-
ceeded by the establishment of the Dishley System.

For the purpose of conducting the grand business of Inclosure, the private interest of all those who were in possession of landed property, may with great propriety be referred to as the *primum mobile* or first actuating principle; in addition to which, the united agency of the first abilities was called into action, and the power and wisdom of Parliament gave a sanction to the whole.

The next important step in agricultural improvement had not such patronage, it was the offspring alone of Individual Genius, whose enlightened understanding was equal to the accomplishment of the vast design, and who, after an age of unexampled industry, lived to see his System become the admiration of the world.
One of the most important consequences of inclosure has been to convert the arable field into luxurious pasturage; to diminish the quantity of grain and increase the quantity of herbage; but here let me ask, what would have been the advantages of the change, if Mr. Bakewell had not directed the attention of the public to the improvement of those animals which were to feed upon herbage, and convert the luxurious vegetation into food for man? I will not say that, like Nebuchadnezer, we should have been driven out to eat grass as oxen; but it must be evident that, without sheep and oxen our grass would have been of little value; and there cannot remain a doubt that those animals will prove the most advantageous to the agriculturist, and of most importance to the people; which will, on a certain quantity of herbage, produce the greatest quantity of food for man.
Much indeed might be said respecting the advantages of Inclosure; and if that had been the leading object of inquiry the improvements in cultivation and the increase in produce would have certainly become the first subjects of our attention; but whatever were the improvements which Mr. Bakewell made, respecting the cultivation of the soil, I shall, for the present, pass over that part of the subject, for the purpose of illustrating the most splendid part of his character, respecting the improvement of Domestic Animals.

Before the time that Inclosures became general and the people had all things common, or more strictly speaking, when the right of common was more extensively enjoyed; if a man could purchase a flock of sheep his prosperity was secured. I do not pretend to say that by such a speculation he had insured a twenty thousand pound
prize in the state lottery, or that, like the ambitious citizen, he had planted the kernel of his plumb; but I know of several instances where, by such a speculation, the future prosperity of their families was secured and their fortunes made. I have repeatedly heard Mr. Bakewell mention that a sheep was the most profitable of all domestic animals, and furnished by far the greatest portion both of the necessaries and luxuries of life. But the rose is accompanied with the thorn, and the honey is not always to be obtained without the sting; and though the sheep has long been considered an emblem of innocence, this inoffensive animal will also furnish the instruments of contention. I have no doubt but the reflections of the moralist will be here recollected, where in defending the cause of the sheep, it is so justly observed.

"For sure revenge may rest contented
"Since drums and parchment were invented."
But here it will be necessary to observe, that it is only against the abuse of such important productions of nature, that either the moralist or the satirist has expressed his censure, and though their misapplication may sometimes be productive of fatal consequences, yet their intrinsic value must still remain the same.

But, whatever may have been the opinion of other writers, I shall still contend that, in the two instances above alluded to, the productions of the sheep must be considered inestimable so long as the records of property and the rights of civilized society shall be thought worthy of attention.

I am well convinced that it would be a difficult task to form an accurate estimate of all the valuable productions of a sheep, but if in Spain they are considered an object of great value, where they are kept for
no other purpose than their wool, it would be difficult to estimate their importance in this country, where, in addition to their wool and many other articles, the sheep are found to be the most profitable kind of animal with respect to food. But this is not the case with respect to the sheep of Spain, as it is well known that the best pasturage which this country will afford, cannot make a Merino sheep to be fit for food.

Before Mr. Bakewell's time, the sheep, even in this country, were much below that state of perfection in which nature would have placed them. When a flock of sheep were pastured in the open fields, they were fouled on the fallows, more with a view to improve the land than for the accommodation of the flock; and at that time their propagation was promiscuous, without the least attention being paid to the improvement of the breed.
But there was a circumstance of much more importance in the practice of former times which contributed to their degeneracy and degradation, as the avaricious proprietor thinking that the most early advantage was the most certain, with care selected those which were most disposed to fatten to be the first which should be led to slaughter.

Under such an irrational system degeneracy must prove the inevitable consequence, in addition to which it will also be necessary to mention the impoverishment which must take place for want of a sufficient quantity of food. As poor as a sheep in a fallow field was long known as a proverbial expression, though now rendered obsolete by the many changes which have taken place, and perhaps by none more than the Dishley system.
If we look back to the origin of the Dishley system, we shall find that the time will nearly correspond with that period when Inclosures became general in this neighbourhood, when an important revolution was established in the fields of agriculture. It will not be necessary on this occasion to refer to the records of parliament for the dates of the respective acts, such fastidious accuracy would be more characteristic of the vain pedantry of the law, than illustrative of the subject now before us.

It will be reasonable to suppose that Mr. Robert Bakewell, for so at that time he must be called, had made considerable improvements in the breed of sheep during the life of his father who died in the year 1772, at which time the son was about forty years of age. I am sorry that I cannot mention his age with certainty but I
have reason to believe that it is not accurately known. I have been informed, on good authority, that his sister, who contributed so much to the dignity of their domestic establishment, was born in the year 1732, and as Mr. Bakewell was somewhat older than his sister if we place him in the year 1730, we shall be sufficiently accurate for the present occasion. I have been told that old Mr. Bakewell was accustomed to boast of the improvements of his stock, but whether this had become an object at Dishley before his son took an active part in the management of the farm I cannot pretend to say.

It is now about fifty years ago that the late Mr. Robert Bakewell set his first ram to Mr. Wilbore, of Illson-on-the-Hill, for sixteen shillings the year; which was about twelve years before his father’s death.---This bargain was made in the presence of
Mr. Fowkes, of Roadley, with whom I have frequently conversed upon the subject.

If this then was the first ram that was let by Mr. Robert Bakewell, I shall beg leave to mark this as the commencement of the Dishley system; and as the inclosure of the lordship of Loughborough took place about that time, the origin of all our dates will be brought back to that auspicious period when his present Majesty took possession of the throne.

Believe me, courteous reader, it is not with any intention of placing this important subject on a political basis that I have brought the present investigation to this sublime epocha, but as I consider the improvements in agriculture one of the most splendid ornaments of the present reign, I think it becomes a duty of the historian to have it recorded under what Monarch Bakewell lived, and when he died.
Having thus marked the origin of the Dishley system, I wish I could with equal certainty point out its progress to perfection, as I am well convinced that it would require a much larger extent of traditional information than I shall ever be able to obtain. But tedious as we may consider the progress of infant years, I well remember that some time after the death of his father the late Mr. Bakewell declared, before a good friend of mine, that the business was still in its infancy, and for the purpose of showing what was Mr. Bakewell's opinion of the subject, at the time above alluded to, I hope the following anecdote will not be thought unworthy of attention.

It was in the year 1776 that my good friend, Sir William Gordon, became landlord to Mr. Bakewell, and though I cannot accurately mark the time when the conversation, here alluded to, took place between
them, it will be reasonable to conclude that it could not be in less than two years after his arrival at Garendon. There cannot be a doubt but some time would be necessary for the arrangement of his agricultural establishment before he could have any thoughts of improving his stock, and as I well remember that much was said upon the subject, both before and after the bargain was concluded, I shall beg leave to conclude that it was about the year 1778 that the conversation took place between Sir William Gordon and Mr. Bakewell.

Sir William Gordon was too well acquainted with great public characters to let such a man as Mr. Bakewell pass unnoticed. Mr. Bakewell had at that time been complimented with the patronage of some of the first characters in the kingdom, and no one, who was acquainted with the parties, could for a moment suppose that the foun-
der of the Dishley system could escape the observation of one so highly interested, at the same time that the subject had become the admiration of the world.

It is not to be supposed that Sir William Gordon, who had just resigned his high political situation at the court of Brussels, could so soon become an enthusiast in the pursuits of agriculture, nor can I admit it to be supposed that either vanity or ambition became dictator on this occasion; his object was to pay a compliment to Mr. Bakewell, and take an early opportunity of giving him some liberal demonstration of his civility and attention.

For this purpose Sir William Gordon took a bull of Mr. Bakewell, for which I think he was to pay him fifty guineas; and it was in consequence of a conversation which afterwards took place between Sir
William and Mr. Bakewell, that Mr. Bakewell made the observation which I am about to notice. I shall not attempt to record all the ingenious representations and splendid embellishments with which Sir William was accustomed to decorate the many learned orations I have so repeatedly heard on this important subject, but by the conclusion, which was a repetition of Mr. Bakewell's original observation, the climax was made complete.

As Sir William Gordon was frequently disposed, from motives of civility to Mr. Bakewell, to make the Dishley system the subject of conversation, he took this opportunity of expressing his astonishment at the high prices which were then given both for bulls and rams, and I have no doubt but his observations were accompanied with some satirical reflections on the enthusiasm which even then prevailed. But as this
conversation was particularly directed to Mr. Bakewell, it became absolutely necessary that he should give his opinion in reply.

To a man of Mr. Bakewell’s good sense and enlightened understanding, not a doubt could remain respecting the answer which would be expected, and the language in which it ought to be conveyed. His language was in general pointed and perspicuous, and accompanied with a countenance strongly expressive of the dictates of his mind; and I have repeatedly heard Sir William say, that he never should forget his address and complaisance, when with a smile of benevolence expressive of the respect he wished to pay to Sir William’s opinion, and a countenance strongly marked with the confidence he had in his own, he with the most respectful dignity gave this answer; when rising from his chair, he said,—“Sir
William, both the subject and the prices may perhaps appear new to you, but you may depend upon what I now say, that the business may still be considered in a state of infancy, and I hope, Sir William, that you will live to be convinced of the truth of my opinion."

Such was the conversation which then took place, correct in sentiment if not in word the same; and I could now produce living evidence in support of what I have here related. But it is impossible that I should much deviate from the original, as I have so repeatedly heard the conversation repeated by Sir William at the distance of nearly twenty years from the time when it first took place, to which he, in general, added this conclusion: and here I am a living evidence of the accomplishment of what Bakewell so many years ago foretold. But, in addition to this unadorned description.
Sir William would sometimes embellish his conversation with such rhetorical decorations as could not be in the power of language to describe; but here it will be worthy of observation, that every expression which he made use of, appeared to flow spontaneously from those pure sources of elocution which gave the most unquestionable evidence of his conviction of its truth. To some these observations may appear of less importance than they do to me; but they will serve as marks both of time and character; and if I had no other motive I should be sorry to lose the present opportunity of expressing my respect for the memory of one who was once so much my friend: And as the connexion between the different orders of society is a subject of no less importance, in a public view, I shall beg leave to give it as my opinion that few instances have occurred where the landlord and tenant possessed more reciprocal esteem or had a higher opinion of each other.
But it will here be necessary to remember, that it was in the year 1778 that Mr. Bakewell declared the business to be in its infant state, and if we take a retrospective view of the different periods, and the subsequent progress towards perfection, I should think that the opinion then given by Mr. Bakewell, will, at this time, meet with general approbation.

At the time this conversation took place Mr. Bakewell had brought his breed of sheep to great perfection, and though he might then anticipate many additional improvements, which afterwards took place, it would have been impossible, with all his sagacity, to have foreseen in what degree the opinion of the public would ever have coincided with his own.

From this period the Dishley system moved forward in regular progression; and
though Mr. Bakewell never lost an opportunity of improving his breed of sheep from other quarters, yet it must be evident that after his own breed of sheep had obtained a decided superiority over all others, it was only by family connexion or what has since been called breeding *in-and-in*, that any additional improvement could be obtained; and though this was not the basis on which the first improvements were established, yet it must be looked up to as the grand principle which gave a complete finish to the whole.

In the early part of the business Mr. Bakewell searched every flock where there was a probability of meeting with such sheep as merited his attention, and if he met with any that were likely to improve his own flock he was certain to make them the object of his choice. His success did not depend either upon crossing or of breed-
ing in-and-in, but on his accurate knowledge of the nature of the animal; what he thought best generally proved so, though, in many instances, contrary to the opinion of those who thought themselves competent judges of the subject. Perhaps in the instance here alluded to he might be blamed by Sir John Sebright for disguising his opinion, but, like an accomplished general, Mr. Bakewell did not wish to have his intentions known before his success had been secured.

If our knowledge of the animal economy was reduced to scientific certainty, there would no longer remain a difference of opinion, and the superior abilities of Mr. Bakewell as an agriculturist, or of Doctor Darwin as a physician, would, under such circumstances, never have been known. The first principles, in both instances, would have been established, the prescription al
ready written, and the method of practice on all these important questions previously determined. If the first principles of the breeding system had already been established it would not have been necessary for the board of agriculture to have made application to the science of anatomy for information; but it unfortunately happens that the science of anatomy, like the science of agriculture or the science of medicine, is only yet a name, "Stat nominis umbra." Our knowledge of all these subjects is at best imperfect, and he who can penetrate the farthest into animal nature, and form the best opinion, is most likely to succeed.

It is not to be supposed that Mr. Bakewell was always right in his conjectures, or that every experiment he made answered his intention, for which reason it would have been imprudent to have declared, on all occasions, the object he had in view.
In the early part of Mr. Bakewell's life, when he was searching the country for such sheep as he thought best calculated to improve his own flock, he made a visit to Mr. Wall, the predecessor of Mr. Chaplin; and it must appear evident that at this early period Mr. Wall had formed a high opinion of his own sheep, as there was one in particular which he valued at fifty guineas. The price certainly was high, but the imaginary value and supposed perfections of the animal depended alone on the opinion of one who had but little knowledge of the subject. In all probability Mr. Wall thought this the best sheep in his flock, but Mr. Bakewell was of a contrary opinion; the question is not so much which was right and which was wrong, but whether each had not an equal right to enjoy his own opinion? Mr. Wall valued one of his sheep at fifty guineas and another at five, and Mr. Bakewell gave him his own price of
fifty-five guineas for the two, after which Mr. Bakewell had an undoubted right to make use of that which he thought the best. He gave the preference to the five guineas, and by that sheep much improved his flock, whilst Mr. Wall continued to breed from the relations of the fifty guineas sheep, in consequence of which his flock degenerated.

If in a practical point of view we meet with such endless variety, on subjects of taste and questions of opinion, yet, in the present instance, I think it reasonable to suppose that it would not be impossible to point out those first principles on which the standard of perfection must ultimately depend. On many subjects where the refinements of taste may be supposed to influence the opinion, caprice or early prejudice may have considerable influence; but if, in the present case, perfection is the object, the difference of opinion must depend
alone on what are thought to be the first principles of perfection. I have been told that the sheep which Mr. Wall valued at fifty guineas was a very coarse and ill-formed animal, from which it must be evident that either caprice or early prejudice had given a bias to his mind, or that he did not possess sufficient knowledge of the subject, but on questions of such delicacy the first rate abilities may sometimes err, and I cannot see any reason why it was necessary for Mr. Bakewell to declare his private opinion until the experiment had been fairly tried.

I shall not presume to conjecture for what reasons it has happened that some of the first characters of the present age should have been so ready to write in opposition to the Dishley system, or betray such jealousy of Mr. Bakewell's fame, but as so much has been said upon the subject I shall
endeavour to place the merits of the question in a clear and conspicuous point of view.

In the first place then I shall beg leave to observe, that it is the public character which has the greatest claim to our attention, it is the method of improving the breed of domestic animals which we wish now to investigate, it is the agriculturist and not the man. But as it unfortunately happens that we meet with many animadversions which may be thought by some a reflection on the individual, it would be a breach of public justice if such insinuations were permitted to pass without notice, refutation, or reply.

"No one can deny (says Sir John Sebright) the abilities of Mr. Bakewell in the art of which he may fairly be said to be the inventor. But the mystery with which he
is well known to have carried on every part of the business, and the various means which he employed to mislead the public, induce me not to give that weight to his assertions, which I should do to his real opinion, could it have been ascertained."

In the first part of this quotation the abilities of Mr. Bakewell are acknowledged, and he is complimented as the author of all the modern improvements in the breeding of domestic animals. But when we are told that mystery was made use of and various other methods employed to mislead the public, I am at a loss to know how to reconcile the two opinions, as the argument appears to me so completely mysterious that one part seems to give the direct negative to the other.

No, Sir John, Mr. Bakewell was too confident of his own powers to condescend
to deal in mystery, he was too proud to stoop to the necessity of disguising his opinions, and so far from attempting to mislead the public, the great business of his life was to convince the public that his methods of improving the breeds of domestic animals were founded on the first principles of nature. If Mr. Bakewell ever attempted to mislead the public we must first acknowledge that he was himself mislead, as there cannot be a doubt that the first object of his ambition was, to become the leader of the agricultural world, and to induce the public to follow his example.

If, as Sir John Sebright says, that no one can deny the abilities of Mr. Bakewell in the art of which he may fairly be said to be the inventor, I cannot understand in what manner he can be supposed to mislead others, by inducing the public to follow his example.
But so far from dealing in mystery, or attempting to mislead the public, every person who was acquainted with Mr. Backett must be well convinced that it was one of his greatest pleasures to point out the object which he had in view, and explain the principles on which his system was established.

If prudent reserve and dignity of character are to be construed into mystery, then, indeed, Sir John Sebright may be right, and I, of course, be wrong.

But in the conducting of a business of such importance, which required such accuracy of private judgment and such minute attention, it was not likely that the instructions which such a person would give to his servants could, with propriety be made the subject of general conversation; or that his private conversations with
John Breedon, respecting the perfections of particular sheep or the method of improvement, should be exposed.

The general principles on which he acted were the proper subjects for public discussion, and on questions of this nature Mr. Bakewell was not reserved. But the practical part of the business depended, alone, on his own private judgment, and was a part of the subject to which the public could not have a claim. It is not to be supposed that every experiment which Mr. Bakewell tried would prove successful, and though many of his agents must have been acquainted with his views, it certainly would have been equally imprudent in any one of the parties to have boasted of premature success. It is the business of the babbling world to pester society with laboured orations respecting the difficulties with which they have been surrounded.
and then to plead the impossibility of attainment as an apology for their disappointed hopes; but, in Mr. Bakewell’s conduct, we shall meet with the direct reverse, as it was only the advantageous side of the question which was given to the public whilst the difficulties were concealed.

But it was not to Mr. Bakewell alone that these reflections were confined, the principles of consanguinity were considered too sacred for violation, and we shall find that every person who either thought or spoke on the opposite side of the question was suspected either of ignorance or inattention.

In those auspicious days when the Genii both of Natural History and of Anatomy shone with meridian splendour, when the animal economy was the grand object of investigation and new discoveries were dai-
ly presented to our view, we shall find, on reference to the enlightened page, that the respective authors were frequently engaged in vain contention, for their claims to all the discoveries that they had made. But, in this paralytic age, when the genius of Arts and Sciences seems lost in soporific torpor, and the discoveries already made are sinking into obscurity, it is still more necessary that the few claims we have to boast of should be carefully defended.

For this purpose I have already endeavoured to prove that I was the first who ever presumed to mention, in print, the opinion of Mr. Meynell on the subject of consanguinity, and as his name has also been called in question, I consider myself bound by public duty to defend those opinions which I have already mentioned.
Sir John Sebright introduces this subject by observing that, "The authorities of Mr. Bakewell and Mr. Meynell, being generally quoted when this subject is discussed, I have stated why I have rejected that of the former altogether, and that the latter, in point of fact, never fairly made the experiment."

If Sir John Sebright had wished to gratify me with the recollection of my friends, he could not have paid me a greater compliment than by introducing the splendid character above alluded to; and if I were to mention the name of my friend, Mr. Meynell, without paying the grateful tribute of respect to his memory, I should consider myself guilty of a crime of which I hope never to be suspected.

I shall not presume to conjecture more, of what was said between Mr. Meynell and
Sir John Sebright, than what the latter has thought fit to acknowledge; nor is it necessary that we should extend our views into the regions of speculation and uncertainty, as the plain evidence of facts, with which Sir John Sebright has favoured us, will be sufficient to determine the point in question. In the first place, then, we are told, that Mr. Meynell and Sir John Sebright did not both attach the same meaning to the term, and this I have no doubt was true; for though the meaning which Mr. Meynell attached to the term is perfectly plain and intelligible, even according to Sir John's own description, yet, on the other side of the question, I am sorry to say that Sir John has not been quite so fortunate, as I think it would be impossible to understand his own meaning even by his own description.

Sir John Sebright observes that Mr. Meynell said, he frequently bred from the fa-
ther and the daughter, and from the mother and the son, which Sir John does not consider as breeding *in-and-in*. Sir John then informs us, that Mr. Meynell sometimes bred from brother and sister, which Sir John observes, "is certainly what may be considered close." But after this description, Sir John, in the very next page, asserts that "Mr. Meynell never fairly tried the experiment."

Mr. Meynell bred from father and daughter, from mother and son, and from brother and sister, and if this was not a fair trial of the experiment, it is much to be lamented that Sir John did not explain the meaning which he himself attached to the term, and inform his readers how the experiment is to be fairly tried. Sir John asserts that Mr. Meynell never fairly tried the experiment, and yet, in his own comments on Mr. Meynell's statement, he says, that
"Much farther than this the system of breeding from the same family could not be pursued with safety." But what is meant by this last word, I do not understand; for if there could be any danger, which must be considered the opposite to safety, the nature of that danger ought to have been explained.

For my own part I cannot conjecture what could be the danger, or how the method of breeding *in-and-in* could be more completely tried, and I have no doubt but when Sir John Sebright made the application, that Mr. Meynell gave the three statements above mentioned as a full and satisfactory answer.

But before we quit this part of Sir John Sebright's argument, I shall beg leave to add one word more in favour of Mr. Bakewell, for, though we meet with many dark
reflections in one page, we shall find this splendid genius of agriculture as highly complimented in another; in which we are expressly told, by Sir John Sebright, that "Mr. Bakewell had certainly the merit of destroying the absurd prejudice which formerly prevailed against breeding from animals between whom there was any degree of relationship." And if we had no other evidence to depend upon, it must appear unquestionably evident, from this single observation, that Sir John Sebright has given all the merit to Mr. Bakewell which I now contend for, and has marked the objections to consanguinity with all the opprobrium of prejudice and absurdity.

From what has already been said upon the subject, it must appear evident that Sir John Sebright has repeatedly expressed his approbation both of Mr. Bakewell and the Dishley system; but perhaps it will be said,
in reply, that he has also said as much on the opposite side of the question, and this I am ready to acknowledge, but what does all this prove, more than that Sir John had not made up his mind on the subject, or that he had no opinion of his own, or that, wishing to accommodate both parties, he had endeavoured to keep his balance even, or, if I may take the liberty of making use of Sir John's own language, I might say that "the breeder as well as the rope dancer, to preserve his equilibrium, must correct his balance before it is gone too far, and then not by such a motion as will incline it too much to the opposite side."

This must certainly be considered the happy medium, and will perhaps be admitted as the best apology for the ambiguity that we meet with respecting the merits of the Dishley system.
But before I quit this very interesting investigation, I cannot resist the temptation of once more asking the question, where, or on what occasion, Mr. Meynell's fox hounds have been quoted as evidence against the objections to consanguinity? Sir John Sebright's letter to Sir Joseph Banks is dated August 1, 1809, which was about three years after the publication of my Anatomical Reflections on the Form of Animals, in which I mentioned Mr. Meynell's fox hounds as concurring testimony in favour of the Dishley system, and for the purpose of introducing the Quorndon Hunt with all the grace and dignity with which that celebrated establishment has been so long conducted, I was happy in the opportunity of alluding to a conversation which took place on the subject of consanguinity, between Doctor Darwin and a gentleman whose name I did not then think necessary to mention, though at the same time the
allusion was so strong that it could not well be doubted. That gentleman was the late Mr. Meynell, and it is my opinion, that two more splendid characters never ornamented human nature.

It was in this conversation that the question of consanguinity was discussed, when Mr. Meynell with all that critical accumen which so strongly marked his character, pointed out his long experience on the subject in the improvement of his pack, referring ultimately to Doctor Darwin for his opinion, when the Doctor, in that kind of aphoristical language in which he was accustomed to express his sentiments, immediately replied, "It is certain, Sir, that there is no such thing as incest in nature."

Such, then, was the result of this conversation, and such the opinions which I have before recorded, and when we reflect
on Doctor Darwin's celebrity as a philosopher, and Mr. Meynell's enlightened understanding, the sanction of their concurring testimony must certainly be considered the highest compliment that could be paid to Mr. Bakewell's knowledge of animal nature.

If accuracy of discernment, if extensive information and dignity of character can be supposed to have influence on the public mind, this must certainly be looked upon as the united opinion of the most enlightened agriculturist, one of the best informed philosophers, and one of the most accomplished gentlemen of the age.

To doubt the accuracy of Mr. Meynell might justly be considered as the addition of a new miracle to the dark shades of infidelity. If Sir John Sebright had been more intimately acquainted with Mr. Meynell he
would not have called his accuracy in question, and the only apology which can be made on this occasion, is to suppose that the short conversation which took place between Mr. Meynell and Sir John Sebright was not sufficient to give all the information which Sir John was solicitous to obtain. The question, with respect to theory, is clear and perfectly intelligible, if Sir John had not been so unfortunate as to disguise the subject with practical speculations. It is not to be supposed that because Mr. Bakewell and Mr. Meynell succeeded by breeding *in-and-in*, that family connexions should always prove infallible in the hands of those who do not understand the practical part of the subject.

It was to Mr. Bakewell's accurate knowledge of animal nature that we must look back for the basis of his system, and to this alone we must attribute his success; his
knowledge of the perfections and imperfections of a sheep was such as, in all probability, never will be equalled; and with respect to Mr. Meynell’s knowledge of a foxhound, it would be an insult on the sacred character of the Graces to have it, for a moment, called in question,

If I were to indulge my inclinations in attempting to express my sentiments on these two celebrated characters, we should be in danger of having our attention diverted from the subject now before us; and I might perhaps be accused of deserting the fields of agriculture, for the purpose of consecrating a mausoleum to the memory of my friends.

For splendour of imagination, energy of mind, and powers of intellect, it is more than probable that their superiors have not been known, nor do I think Mr. Bakewell
inferior to any philosopher of the age; for though the sphere in which he moved might be thought more distant from the solar rays, the light which he reflected had no less attention from the world.

To suppose that characters so great had not their imperfections, would be to say as much as if they were not men. But, before we proceed any further, let me here beg leave to ask whether, for preserving the purity of the biographic page, it is always necessary to add to the character of the philosopher the imperfections or follies of the man? On this occasion perhaps it will be said let Johnson rest in peace, but if he could come forth and answer for himself, where then would all his commentators hide their diminished heads? When Johnson died biography ran mad, and, if we may depend on the evidence of modern times, there is too much reason to believe that the frenzy still prevails.
Few people were better acquainted with Doctor Darwin than I had been for the last twenty years of his life; I knew him well, and should have been proud to have paid my tribute of respect to his memory, not only as a philosopher and a physician, but should have been no less happy in recording his private virtues, if I had not been prevented by the abortive effusions of a female pen; and, in the present instance, shall not say more upon the subject than, whenever I may have occasion to refer to his opinion, I shall always be proud of the opportunity of expressing the respect with which I once viewed him, not only as a philosopher but also as a man.

But his memory has already been sufficiently emblazoned, and the genius of biography rendered paralytic by the stroke. No one who was not perfectly acquainted with the first principles of the practice of physic
and the different branches of philosophy connected with the science of medicine, could do justice to the subject; in addition to which it would also have been necessary to have had some knowledge of his manners and private conversation.

From the time that I first became intimately acquainted with Doctor Darwin, which was in the year 1781, I was favoured with his friendship in a very eminent degree, and though none could more admire the splendid parts of his character, I had at the same time an opportunity of observing some of his imperfections, which, in the present instance may, in the language of Mr. Addison in his criticism on Milton, with equal propriety be compared to spots in the sun. But perhaps there is no character without its mixture of light and shade; the question then will be, whether, in the present instance, their quanti-
ties were such as to make the light appear to the most advantage.

If I were to attempt to delineate the character of Doctor Darwin either in the light of a philosopher or a physician, the work must prove as boundless as his expansive mind, his powers of intellect were such as are but seldom met with, and the splendour of his imagination, on some occasions, gave a fertility of thought that would far exceed the superficial evidence of nature. I will not presume to say that, in every instance, this attentive observer of the operations of nature was perfectly correct, but his character as a philosopher has long stood high in the public opinion. The learned work which he published on the philosophy of agriculture may not perhaps be considered applicable to the subject now before us, as it was the vegetable world which, in that instance, was the principal
object of his attention; but in a former work, under the title of Zoonomia, we shall find a chapter on generation containing many observations particularly applicable to the point in question. I have no doubt but that many of this learned writer's opinions will be objected to as theoretical and speculative; but when we make our appeal to the authority of Mr. Bage- well and Mr. Meynell, it is to their accuracy of observation and practical knowledge of the subject that we refer as the basis of this system, and the opinions of Dr. Darwin, which I have no doubt also originated in the evidence of nature, will give the sanction of philosophy to all their practical observations. With such high authority in my favour, and the evidence of nature still before me, not a doubt can remain respecting the ultimate result of the point in question, but for the purpose of uniting the three opinions and placing
my evidence in the most conspicuous point of view, I should wish to have the successful experiments of Mr. Bakewell considered as the basis of my system, to which the Quorndon hounds would form an ornamental column, and the opinions of Doctor Darwin surround the capital as a finish to the whole; and as a sanction to the Dishley system add this inscription on the basis:

*Exegi Monumentum aere perennius.*

It would be difficult in many instances to account for the origin of vulgar errors, but the general opinion which has so long prevailed respecting the influence of consanguinity, appears to me the most repugnant to all the evidence of nature. When animals are left in a state of nature, the sexual intercourse takes place without distinction, and because it has been found necessary to make some regulations with regard to do-
mestic animals, it has been erroneously supposed, that degeneracy would be the consequence of family connexion. If some regulations had not taken place with respect to sheep and cattle, we should frequently have been under the necessity of living on bull beef and tup mutton, but, in the article of venison, as the buck is superior to the doe, such regulations are not thought necessary, and though they are left more in a state of nature we do not find that degeneracy is the consequence. If we were to attempt to investigate the origin of the objections to consanguinity, there is every reason to suppose that they might be traced back to those regulations which it has been thought necessary to make in civilized society, respecting the impropriety of family connections among the human species, on which I shall not now presume to give an opinion, any further, than by observing, that at the same time, that by
the canons of the church, marriage is forbid between second cousins, it must appear rather singular that first cousins are not included. But the canon in my opinion is too plain ever to be questioned, for as the offspring of the three sons of Noah could not go further than first cousins, if first cousins had not been permitted to marry immediately after the flood, the inevitable consequence must have been that population must have ceased. And if we were to examine all the evidence which might be brought forward on the subject, we should find that it is a question to which the Divine Author of Nature has not prescribed the bounds.

Here then let me advise the learned sceptic to pause awhile, and if any doubts should arise, let him first consult the concurring evidence of nature, before he vainly attempts to hazard a reply, as, of neces-
sity, he must either admit the basis of my argument, or deny the existence of the flood.

At that auspicious era, so truly ornamental to the annals of Great-Brittain, when humanity reared her standard in this country and the slave trade became the object of discussion, we were told by some blind enthusiasts that the Blacks were an inferior order of animals and were said to be the descendants of Cain, observing at the same time that "God having set a mark upon Cain and his offspring," the black mark would continue to the end of time, forgetting that they were all reduced to one family by the flood. Whilst the more enlightened philosophers clearly demonstrated on the plain evidence of nature that the difference in colour in the human species depended alone on the climate and local circumstances,
But the happy period is now arrived when those sanguinary monsters in human form, must lose their lawless power, when the free-born African, on the same principles as the free-born Brittan, may claim the rights of nature, and with equal if not superior hope look forward to that state of happiness in which the rewards of patriotism are so sublimely represented as part of the joys of Heaven,

"Where slaves once more their native land behold,"

"No fiends torment, no christians thirst for gold."

If then such changes have taken place in the human species we may cease to wonder that we meet with such varieties in sheep. But if all the different varieties propogate together, we must conclude that they are all of one species, and were in all probability, originally the same; as we cannot add to the creation, the omnipotent
Author of Nature having given an irresistible fiat to the bounds.

I am ready to acknowledge that it would be impossible to trace the different varieties of the same species of animals to their first origin, or to prove what time it would take to produce the same kind of animal under the same local circumstances: but if any one was to say that the character of the Merino sheep is not marked by local circumstances, I should consider the observation as great an absurdity as if any one was to attempt to prove that a Spaniard and an Englishman were not originally the same, or that Adam was not the common parent of human nature. But the sheep of this country as well as those of Spain were worse than if they had been in a state of nature, as their degeneracy was increased by the treatment they received.
It is to Mr. Bakewell that this country is so much indebted for the great improvements which have taken place within the last fifty years; but why any individual or any set of men should wish to deprive us of the great improvements which have been made on the breeding of sheep and other domestic animals, it would be difficult to explain.

It is not to Sir John Sebright alone that we must look for opposition, as we shall find that there are very few writers on the subject who do not appear ambitious of plucking a feather from Mr. Bakewell's plume.

If we direct our attention to a work called a General View of the County of Leicester, in which it would be reasonable to suppose that we should meet with a correct representation of the question now
before us, we shall find some of the most sacred characters that have appeared in the fields of agriculture labouring to obscure the light of truth.

In the first place, then, I shall beg leave to solicit the candid reader's attention to the opinion of Mr. Ferriman, who says that "It seems to have been the practice of the associated breeders, of late years, and I believe is was that of Mr. Bakewell to put those sheep together, which were most perfect in shape, without regard to affinity in blood."

Such then is the commencement of this very singular declaration, in which we are told that "It seems to have been the practice of the associated breeders, &c." It is the ambiguity which I here complain of, for if the learned writer had understood the
subject on which he thought fit to give this strange opinion, he certainly would have expressed himself in plain, perspicuous, and intelligible language, and, instead of observing that it seems to be the practice of the associated breeders, he would have told us in plain English what was the practice of the associated breeders on these occasions.

But why this learned writer should say, "I believe it was the practice of Mr. Bakewell, is still more unaccountable," when it was well known to be the practice of Mr. Bakewell long before the society of associated breeders first was formed, and consequently to say that "It seems to have been the practice of the associated breeders or that I believe it was the practice of Mr. Bakewell, may justly be compared to cloathing the naked truth with a cloak of impenetrable darkness, or perhaps with
more sympathising delicacy, I might have said, that it is like the pure vestal taking the awful veil.

But there is another expression which would, if possible, add to the obscurity now before us; which is, where the time is fixed to late years; and as this observation is limited to the associated breeders, it is as much as to say that it was not so originally in Mr. Bakewell's time. From which it will appear that all Mr. Ferriman has said upon the subject can only be considered as a complete chaos of contradiction and absurdity.

The next observation which I shall beg leave to make on this curious exhibition of agricultural literature would have been, if taken separately, rather more coincident with the Dishley system, but, if we are to include the whole, it will only contribute to add to the general confusion.
We are first told that "their forms may, by this means, be most readily preserved and improved." In consequence of which it must here be admitted that, so long as improvement continues to be the grand object which the breeders have in view, this last observation must be looked upon as a full acknowledgment of the advantages of breeding in-and-in. And if improvement and degeneracy had not been so nearly connected with each other, we might have supposed that this learned writer had been defending the Dishley system, if, after we had been informed that "at first, perhaps, it might not do much injury in other respects," we had not met with this unfortunate conclusion: "But if it is persevered in, it will, no doubt, in time, abate the vigour, weaken the constitution, and shorten the natural term of their lives," which is all given in his own sacred ipse dixit, in direct opposition to the incontrovertible
evidence of old Dame Nature, and the high authority of Mr. Bakewell without a single signature of one of the Leicestershire breeders in his favour.

If I may take the liberty of making use of the expression, there certainly never was a time when the empiricism of agriculture had ascended so near to the summit of perfection; but, in the present day, we shall find that wherever science sinks, empiricism must take the lead.

If this learned writer had any hopes of establishing his opinion in direct opposition to what he acknowledges to have been the practice of the associated breeders, he certainly ought to have produced some satisfactory evidence on the opposite side of the question, but so far from having any evidence to produce, he does not seem to have the least plausibility of argument in his fa-
vour. In the former part of his description he acknowledges what is the practice of the associated breeders, but, in the conclusion, he says that the Leicestershire breeders (which there is every reason to suppose are personally the same), have partly admitted "that if the practice above alluded to is persevered in, it will, in time, abate their vigour, weaken the constitution, and shorten the natural term of their lives."

It would be impossible for me to prove that the Leicestershire breeders have never given their sanction to these opinions, as it is not to be supposed that I have seen every publication on the subject; but, till I do see some publication sanctioned with the signatures of the Leicestershire breeders, I shall take the liberty of giving it as my opinion that this divine writer has said more for the Leicestershire breeders than they will be disposed to subscribe to.
On a subject of such importance, if this learned author had wished to have paid that tribute of respect to the Leicestershire breeders which, from the nature of the subject, they must have an undoubted claim to, he certainly would not have made this bold assertion without recording the names of the parties. But such is the ambiguity of every part of his description, that it would be impossible to find a single page without a number of contradictions. In one place we are told that "it is partly admitted," which is as much as to insinuate that this being the opinion of the learned author the Leicestershire breeders will ultimately give their full assent. But as I have never yet met with a single instance of a Leicestershire breeder who was the least disposed to favour the opinion of degeneracy, I never can suppose that the Leicestershire breeders would subscribe to such opinions, except I had an opportunity
of being witness to the declaration, or had the acknowledgment in their own handwriting.

The next argument that we meet with is no less curious, nor is the evidence more to be depended upon, as this must also rest on the learned author's bare assertion; or perhaps I might with more propriety have said, that the validity of his opinions must depend alone on his own misrepresentation of the subject.

The object of this learned writer, in the present instance, is to prove that the new Leicestershire breed of sheep are an inferior race of animals. For this purpose, after asserting that breeding *in-and-in* will abate their vigour, weaken their constitution, and shorten their natural lives; we are told the old Leicestershire rams, those rough, coarse, hardy animals (they say), will retain their
vigour, and continue to perform an almost unlimited quantity of business to nine, ten, or even twelve years of age.

If this, then, was the opinion of this learned writer, I hope it would not be thought unreasonable if we were to ask for some satisfactory examples, as evidence in his favour. But what appears the most objectionable in this learned argument is, that instead of making an appeal to the sacred evidence of facts, he not only introduces the Leicestershire breeders as evidence against themselves, but immediately represents their evidence as unworthy of attention.

It is not on his own experience that this learned writer has established his opinion, but we are told that they say so and so, by which we are to understand that such is the opinion of the Leicestershire breeders.
But it must appear very singular that the Leicestershire breeders should have been so communicative on the subject after the same writer, speaking of the ram society and associated breeders, has in his own behalf declared, "I find that there is but little knowledge to be drawn from them, and even that little must be admitted with extreme caution." The truth is, that the Leicestershire breeders have never yet exposed themselves to such contradictions and absurdities, and have displayed more prudence and common sense than this learned recorder of their fame.

Let us here, then, set the Leicestershire breeders free from all suspicion and suppose this learned writer the only author of his own opinions. What proofs does he bring at last of the boasted powers and prowess of the old Leicestershires or the degeneracy of the new?
In behalf of the old Leicestershire it is asserted that they will retain their vigour and continue to perform almost an unlimited quantity of business to nine, ten, or twelve years old. But not the least conjecture is given respecting the amount of these unlimited numbers. I know it is not to be expected that this learned gentleman should be able to give an estimate of infinity, and it would be equally unreasonable to suppose that any gentleman should have a greater number of sheep than he knew how to estimate, but if the numbers could be counted it certainly would not be difficult to ascertain how many were barren and how many productive, and by this means I should think the unlimited number might be known. On the opposite side of the question it is admitted that the light bred, pampered, delicate, new Leicestershire, though their business is limited, often serve more than one hundred ewes in a sea-
son, but there is no proof given that a new Leicestershire ram might not have served two hundred if the number had been unlimited; and, as we have no proof that the unlimited number amounted to one hundred, it must be evident that neither the unlimited number nor the limited number can be admitted as evidence on either side of the question.

I am ready to acknowledge that it has always appeared very singular to me, that so many writers who have thought fit to express their sentiments on this subject could ever have supposed that deformity should prove friendly to propagation. But what must appear far more irrational and repugnant to all the first principles of Nature is, that beauty and perfection should ever be admitted as one of the causes of sterility or impediment to that approximation which is necessary to the protection
and support of animal nature. I shall not presume to conjecture what could be the motives of this learned writer for the high opinion which he has been disposed to form of those rough, coarse, hardy gentlemen, which seem to have been so much the objects of his partiality; but I should be glad to know whether a similar race of rough, coarse, hardy ladies, would have the same claim to his approbation? The truth is, that from some motive or other, the ladies are left out of the question, and though it would be impossible to say what those motives were, it might perhaps be considered a point of too much delicacy to question the fertility of beautiful females for fear that the analogy might unfortunately be carried to animals of a higher order; and though it is the lamb like tribe to which our attention is, on this occasion, principally directed; yet as all those animals,
which the first writers on natural history have placed in the same order of classification, bear a strong resemblance to each other, I should think that it would be reasonable to suppose that beauty and perfection would in most instances lay claims to a general sympathy through all the different orders of animal nature. I shall not in the present instance attempt to mark the distinctions which a certain sagacious old lady, Dame Nature, has made between the dictates of instinct and the passion of love; but, to those who have paid attention to this part of the animal economy, it must be evident that there is a predilection even in the brute creation. But if the powers of intellect are not taken into consideration, and instinct alone is to determine the point in question, I should then say that if beauty, perfection, health, and strength of constitution are dependant on each other, that it is on these accomplishments that the point
in question must ultimately depend. I shall not pretend to say that little animals are always the most perfect, but there cannot remain a doubt that there is a certain proportion between the two extremes which must be considered as approaching nearest to perfection. But I hope this learned gentleman will not contend, that "The old Leicestershire rams, those rough, coarse, hardy animals" are the best examples to be met with, or those which come the nearest to this standard of perfection.

I shall not presume to fix the standard of perfection, but instead of joining unlimited powers to those rough, coarse, hardy animals, I should think it irrational to suppose that an animal must of necessity be weak in constitution because it is small in body, as it appears much more rational to suppose that with a given quantity of constitutional power the animal functions
would be better performed in a small animal than a large one.

For these reasons and many others which might be brought forward, on this occasion, I shall give it as my opinion that the new Leicestershire breed of sheep are not less fertile than those rough, coarse, hardy animals above mentioned. I have no doubt that great disappointments with the Leicestershire sheep have sometimes taken place, but here it will be necessary to observe that when great prices have been given, every failure becomes an object of attention, whereas on the opposite side of the question a few barren ewes would not be noticed. But when the new Leicestershire rams are sent to a distance, it is not with Leicestershire ewes that the connection is to be formed, and not by Leicestershire graziers that the business is to be conducted. I do not pretend to suppose that they will not meet
with every care and attention, but it is to be
remembered that sheep, as well as other
animals, are influenced by habit and lo-
cal circumstances, and that their change
of situation and method of treatment is di-
rectly contrary to that state of nature in
which the rough, coarse, hardy animals
are permitted to remain. In the first
place it is to be observed that I do not
admit of their sterility, but if the fact were
proved, I should then say that it did not de-
pend on breeding in-and-in. If this learned
gentleman had directed his attention to the
method of treating both males and females
during the breeding season, the first feed-
ing the rams for exhibition, and afterwards
reducing them for business, might with
just propriety have been urged as the cause
of debility. But when we meet with such
splendid descriptions of the high bred,
pampered, delicate new Leicestershire, I
must acknowledge that the language ap-
pears to me so perfectly similar to those popular declamations on the subject of impotency, that if they had been anonymous, I should have thought that I had been reading the works of that great ornament to his profession the learned Doctor Solomon, who must certainly be considered the Esculapius of Liverpool, if not one of the most celebrated physicians of the age.

But after all that has been said against the new Leicestershire breed, instead of supposing them to be a degenerate race of animals, I shall give it as my opinion that, so long as they are able to bear such extreme vicissitudes of luxury at one time, and reduction at another, we shall be compelled to acknowledge the unlimited powers of their constitutions. And, with respect to the females, if it were possible to suppose that the small, plump, soft skinned, light boned, well proportioned animal could, in
consequence of possessing such properties, be less prolific than such long legged, large boned, dry skinned, thin meager monsters, which possess little more power than what is necessary for their own support, I should certainly rather attribute the defect to mismanagement than suspect the state of the constitution. But the fact has not yet been proved, nor have we yet been furnished even with a single shade of evidence in support of the conjecture. I am well convinced that the management to which both the males and females are subjected may all be considered as gross insults to the pure dictates of nature. The preposterous use of teasers may certainly be considered as great an insult to the females, as the feeding and reduction is to the males, and would both afford a happy source of ridicule to the prolific pen of an able satirist; and the very reason why I can suppose that it has escaped this learned gentleman's observation, is to suppose it is a
disgraceful method of proceeding with which he had not been previously acquainted.

To those who are not intimately acquainted with the great variety of opinions which have appeared on this important subject, it will here be necessary to observe that if some writers have limited the cause of sterility to the imperfections of the males, that Sir John Sebright includes both male and female in the same description. But for the purpose of avoiding all suspicion of misrepresentation, I shall give the part verbatim, where Sir John says "I have tried many experiments by breeding in-and-in upon dogs, fowls, and pigeons; the dogs became from strong spaniels, weak and diminutive lap-dogs, the fowls became long in the legs, small in the body, and bad breeders."
In this statement the strong spaniels are said to be converted into weak and diminutive lap-dogs, but as the fowls became long in their legs, instead of becoming diminutive; it is reasonable to suppose that they must have increased in height, from which it must appear to be a kind of contradiction, that the same cause which make fowls become long upon the leg, should make spaniels diminutive; but they have not the honour of being considered diminutive spaniels, of which they are supposed to retain the character, but are said to be reduced to the lowest order of animals, which have been long known by the name of lap-dogs; but whether they are admitted to be short legged lap-dogs or long legged fowls, they must of necessity all be bad breeders except the pigeons, which are reserved as an exception, in addition to which we are afterwards told that the sheep having become small in size are also bad breeders.
In this statement both males and females are equally implicated, in consequence of which there is too much reason to be apprehensive that even the celebrated Balm of Gilead would not ensure success.

The experiments we are told were tried on dogs, fowls, and pigeons, and the dogs and fowls are said to become bad breeders, but this is not said to be the case with respect to pigeons. Not a word is said about this billing and cooing tribe that seems to imply the least accusation of sterility. But for the purpose of making the argument complete, if these are not said to be bad breeders, we are told that they are incapable of rearing their young.

If it were thought necessary to prove that they were "incapable of rearing their young without the assistance of other pigeons kept for that purpose," it certainly
must first be necessary that they should have young to rear. But that young pigeons should be put out to nurse or wet nurses kept for their protection, is a question of too much importance in natural history to be permitted to pass without attention.

I have no doubt but many of my rustic readers will smile at the recollection of some of the pleasing anecdotes they have heard related in their youth respecting pigeons' milk, which has for ages past served as a subject of amusement on the first of April. But to the philosopher this question will appear in a different point of view, and not, like the representation of the unlearned, depend on a superficial knowledge of the subject. I believe it will be right to give credit to every writer who publicly gives his opinion on any subject, by supposing that he is well acquainted with all that has been said by his predeces-
sors. But for fear the opinions of Mr. J. Hunter should not be generally known, I shall here beg leave to introduce what he has said upon this important question. I should be extremely sorry to have it thought it was my opinion that the evidence of anatomy might on all occasions be admitted as satisfactory: but, without anatomy, the subject now before us must have remained in obscurity. The evidence here alluded to, will be found in a work published by Mr. J. Hunter, under the title of Observations on certain parts of the Animal Economy, in which he has given a full description of this subject in a section, On a secretion in the crop of breeding pigeons for the nourishment of their young. The whole of this section is well deserving the attention of the curious, but I should think myself guilty of a great omission if I did not give, in his own language, that part which most merits our attention: where
this anatomist says—"I have, in my inquiries concerning the various modes in which young animals are nourished, discovered that all of the dove kind are capable of supplying, from their own bodies, the nourishment proper for their offspring.---The young pigeon, like the young quadruped, till it is capable of digesting the common food of its kind, is fed with a substance secreted for that purpose by the parent animal; not as in the mammalia by the female alone, but also by the male; which, perhaps, furnishes this nutriment in a degree still more abundant." We are then informed that, "during incubation, the coats of the crop in the pigeon are gradually enlarged and thickened, like what happens to the udder of females of the class mammalia, in the term of uterine gestation. It is likewise evidently more vascular than in its former state; that it may convey a
quantity of blood sufficient for the secretion of the substance, which is to nourish the young brood for some days after they are hatched."

Now, as we are afterwards informed that this secretion does not continue longer than till the young pigeon is eight or nine days old, it is only for this short period that a wet nurse can be of service, and if we are to consider the difficulty of transferring the first instinctive impulse of parental affection, I should think it impossible within that time to obtain the end proposed. For if there is any instinctive connexion between the parent and the offspring, in such cases, it must certainly take place immediately on the appearance of the young one from the egg, as it would be impossible for the young to live long without food; and as the crops both of the male and female pigeon undergo the change during the time
of incubation, it will be necessary that the instinctive sympathies, both of the parents and their young, should observe a perfect coincidence with each other. But perhaps I shall be told that if the eggs were consigned to the care of the foster parents, that all these difficulties would be removed, and the reciprocal sensations take place in proper order; but if we admit the possibility, it would then be necessary that the foster parent should be in a corresponding state for incubation, and sympathize with the parties, like wet nurses in the human species. But as the time is not specified in the statement given by Sir John Sebright, when either the eggs or the young should be placed under the care of the foster parents, I think there is great reason to suppose that the experiment has never yet been fairly tried. For if the eggs were given to the foster parents before the time of incubation, I should then say that we had no evidence to prove
that the original parents of the eggs had not only the power of hatching them, but were no less capable of bringing their offspring to maturity.

The truth is, that their fecundity has not been questioned, and as their inability to provide for their offspring, or deficiency of pigeon's milk has not been proved, I shall think it reasonable to conclude that this supposed degeneracy in the billing and cooing tribe has never yet been sanctioned by the evidence of nature.

If then these experiments on dogs, fowls, and pigeons, are to be admitted as evidence against the opinions of Mr. Bakewell and Mr. Meynell, it would be time to conclude that both evidence and argument must cease. I will not pretend to say that it would be impossible to convert a spaniel into a lap-dog, if the approbation of the la-
dies could be first obtained, but I never can suppose that a few spaniels and lap-dogs could be admitted as evidence against a pack of fox hounds which had been bred in the same manner for nearly fifty years, and when we take into our consideration the improvements which were made by Mr. Bakewell in the breed of sheep, the public must acknowledge the superiority of the evidence, whatever may be the opinion of those who are determined to argue on the opposite side of the question. In the present instance we have only spaniels, lap-dogs, fowls, and pigeons, and though the object is to prove that sheep will degenerate by breeding in-and-in they are not included in these experiments, such evidence must in every point of view appear imperfect, and may justly be compared to the visionary offspring of a heated imagination, when placed in opposition to the pure and substantial evidence of nature.
It has always been my opinion that the question of consanguinity is too self-evident to admit either of doubt or uncertainty, and yet I have ever found it difficult to meet with two people who have formed the same opinion on the subject.

If what is called breeding _in-and-in_, which is the language of the agriculturist, is expressive of family connexions, the breeding from father and daughter must certainly be included in this definition, even though Sir John Sebright may be of a contrary opinion. But whatever may be the opinion either of the learned or unlearned, on this important subject (_Indoctum doc-tumque fugat_), I shall beg leave to give it as my opinion that breeding from father and daughter is breeding _in-and-in_, and, without any additional apology, proceed to give the following statement as additional evidence in favour of the Dishley system.
In the year 1776, Mr. Paget, then of Ibstock, took a ram of Mr. Bakewell, which was known by the name of P, for which he gave at least ten guineas, Mr. Paget thinks the sum might be rather more, perhaps fifteen, but could not recollect with certainty. The price at the time was considered high, and there cannot be a doubt but Mr. Paget would select some of his most perfect and beautiful females for the seraglio of this grand plenipotentiary of the Dishley cause. In two years afterwards Mr. Paget again made use of the same ram with thirty of the best females he could select from the offspring of the former connexion, from which it will appear that in the year 1776, Mr. Paget bred from the Dishley P, with thirty of his own daughters. This experiment, against the prejudices respecting consanguinity, having succeeded, and the offspring answering the highest expectation of the parties; the same
family connexion was continued and the experiment repeated without any variation in the year 1777. The success of the second experiment was equal to the first, by which all doubts respecting the influence of consanguinity were finally determined, and the propriety of breeding in-and-in established on the unquestionable evidence of Nature.

It will here be necessary to observe that these experiments were not made either by Mr. Bakewell or Mr. Meynell, and consequently must be considered an important addition to all the former evidence on this subject. Sir John Sebright acknowledges that Mr. Meynell bred from father and daughter, but Sir John does not consider that as breeding in-and-in.

It is not my intention to cavil about words, or dispute about the propriety of
the term, I suppose the language originated at Dishley, and was intended to include those family connexions which, before that time, were considered repugnant to the dictates of Nature. But if Doctor Darwin had not given it as his opinion that there was no such thing as incest in nature, I should as certainly have acknowledged this to be an incestuous connexion, as I believe that Lot ever committed incest with his daughters.

If the objections to consanguinity may now be considered as having met with a full and satisfactory reply, we are not to consider the labours of Mr. Akewell in the fields of agriculture to be here exhausted, and I most sincerely wish it was in my power to trace all his improvements with equal accuracy, but on this part of the subject I fear I should meet with great diffi-
culties in searching for information; and as so much has been already said upon the subject by other writers, it is probable that a complete history would, by some, be thought unnecessary. The objections to consanguinity might with propriety be considered a subject of scientific investigation, on which the anatomist or physiologist might give his opinion without presumption, whilst the practical parts of the subject must depend alone on practical information.

I shall not presume to say how far Mr. Bakewell excelled in the management of a farm, but it is well known that the improvement of stock was the grand object of his life, in which he seldom failed. I am ready to acknowledge that the history of Mr. Bakewell’s life must still remain imperfect, but I shall endeavour to point out a few important circumstances which may
serve to mark the progress and illustrate the perfection of the Dishley system.

For this purpose, the letting of the first ram, in the year sixty, may with propriety be considered the commencement or first public exhibition of an attempt to improve the breed of sheep: but as it was not the breed of sheep alone which engaged Mr. Bakewell's attention, we shall find that, in the year sixty-six, he went with Mr. Paget, of Ibstock, to see Mr. Webster's cows, at Canley, in Warwickshire, a village a few miles from Coventry. I will not take upon myself to say whether it might be considered a fortunate circumstance that these gentlemen did not meet with Mr. Webster at home, for as Mr. Bakewell's object was to see the stock, it is probable that, in the absence of Mr. Webster, he would think himself more at liberty to make his observations. For ambition had, at that early
period, sown the seeds of jealousy in the fields of agriculture, and there was some reason to be apprehensive that Mr. Webster would not have been disposed to part with any of his stock to Mr. Bakewell, though at the same time he had not the least objection to deal with any other person. But, for the purpose of avoiding all these difficulties, it was thought prudent, after Mr. Bakewell had inspected the stock, that a friend should be employed to purchase what he thought most worthy of attention. I do not know whether this business has ever yet been laid before the public, but if it has before appeared in any of the periodical publications on this subject, many of these facts might still remain unknown. I hope it will not be thought necessary, on this occasion, that every source of information should be explained, but I have been told that six of Mr. Webster's cattle were bought by Mr. Cully, that Mr. Bake-
well had four out of this friendly purchase, as it certainly was a friendly act of Mr. Cully to obviate the influence of jealousy, and at the same time contribute to the accommodation of both parties. Whether Mr. Bakewell had his choice or not I cannot tell, but the other two were disposed of to Mr. Fowler, one of which was afterwards known by the name of the Brindled Beauty, but I have been told that Mr. Fowler made more of the two than Mr. Bakewell did of the four, which will serve to prove that Mr. Bakewell did not always take the lead; but whether this success of Mr. Fowler’s depended upon accident or superiority of conduct I will not take upon myself to determine, or whether what is called good luck had not considerable influence must still remain a question, and yet, after all, Mr. Bakewell had certainly much to boast of, as it was from one of the cows included in this purchase, that the fa-
ous bull, called Twopenny, was bred. This Twopenny was the father of Mr. Fowler's Shakespear, which was the father of Mr. Paget's Shakespear, which was sold by public auction, at Mr. Paget's sale, at Ibstock, in 1793, for four hundred guineas. Such a price at that time was considered enormous, but such is the improvement of stock within the last eighteen years, or such the depreciation of money, or such the influence of paper currency, that a thousand guineas is now thought no more of than four hundred was at Mr. Paget's sale. Under all these circumstances it perhaps would be difficult to form an accurate estimate—either of the comparative value, or the progress of improvement, the first will form a question of finance, and the latter must be left for the agriculturist to determine. This single example will then serve to shew the improvements which took place, in the breed of cattle, between the
years 1766 and 1793, which must certainly be considered the most important interval of Mr. Bakewell’s life. But his attention was not limited to sheep and cattle, as we shall find that he was equally ambitious of improving the breed of horses as he was of improving the breeds either of sheep or cattle, and in one extensive plan, to take in all those domestic animals which come under the farmer’s care.

It is much to be lamented that the dates of many very interesting periods of Mr. Bakewell’s life cannot, with accuracy, be obtained, and I have heard of many applications which have been made for this purpose without success. For my own part, I do not presume to boast of accuracy, and have in general depended alone on such traditional information as I have accidentally met with; at the same time I am well convinced that the descriptions I have given
are unquestionably true, even though names and dates may frequently be wanting.

If then it should be thought necessary to fix the date when Mr. Bakewell undertook his journey to the continent, I should give it as my opinion that it was between the years of sixty and sixty-six; but if this statement should not be perfectly accurate I have no doubt but the mistake will be soon corrected, as the learned author of the School for Scandal has long ago informed us that “If a man should be so unfortunate to make a mistake, he is certain to meet with some good natured friend who is sure to tell him of it.” On this I fix my hopes and expectations not doubting that my mistakes will soon be known and all my errors properly corrected. But setting aside all doubts and difficulties, with respect to time, I am sorry it is not in my power to give any satisfactory information respecting
the form and perfections of those Flander's mares which he brought with him to this country, and the only object which I can have in view, on this occasion, is to convince the public that the improvement of the breed of horses was also a part of Mr. Bakewell's original plan.

I am ready to acknowledge that I have frequently been highly entertained with the convivial history of this journey to the continent, but as I never could obtain any satisfactory information respecting the nature of the animals Mr. Bakewell made choice of, or meet with any rational account of his method of proceeding, I hope it will not be thought necessary that I should mention all the little anecdotes which I have heard related on this occasion.

It is not in my power to say in what manner Mr. Bakewell proceeded in the im-
provement of the breed of horses; the number he had to choose out of were much more limited than those of sheep, in consequence of which he might not have the same opportunity of continuing the same family connexions. But here it will be particularly deserving of our attention to observe that Sir John has never mentioned horses in his catalogue of examples against breeding *in-and-in*. When I wrote my Anatomical Reflections on the form of Animals, I mentioned a number of instances of some of the first-rate blood horses having been bred *in-and-in*; and if any one should still entertain the least doubt upon the subject he may be certain to meet with every satisfaction which the most accomplished scepticism could require, either by referring to the gentlemen of the turf, or by an appeal to that sacred book called the Racing Calendar, which may so justly be considered the standard of perfection.
But if, on a question of such importance, we may be permitted to indulge conjecture, I shall beg leave to give it as my opinion that Sir John Sebright being well convinced that this was the general practice, with respect to horses, he would in consequence be apprehensive that the evidence would tell against him.

The breeding of horses is in general conducted by men of great abilities, who are well acquainted both with the perfections and imperfections of the animal, in consequence of which they seldom fail; and as Mr. Bakewell was perfectly acquainted with the subject, there can be no reason to doubt but he would procure the best horses that could be met with, whether from his own stock or any other quarter. He went to Flanders for mares which must, in the first instance, be crossed by English horses, but, after all, his improvements must depend on
his knowledge of the animal whether he made use of crosses from other quarters, or in consequence of giving the preference to his own stock, he bred in-and-in.

But whatever were Mr. Bakewell's methods of proceeding, his ultimate success in the improvement of the draught horse has long been known. If Mr. Bakewell had not succeeded he would not have had the honour of exhibiting the black horse before his Majesty; nor would his Majesty have thought either Mr. Bakewell or the black horse worthy of his attention, if the high reputation of both had not been previously known. I do not really know what compliment Mr. Bakewell received on this occasion, but as the horse's portrait has been taken and his fame repeatedly recorded, I think it is not impossible that the history of the Dishley horse may, at some future period, be read with no less admiration than
the history of Bucephalus is at the present day.

I shall not presume to suppose that Mr. Bakewell would appear as great as Alexander when mounted on Bucephalus, nor do I think it likely that he should be mounted; but, for the purpose of recording Mr. Bakewell's knowledge of horsemanship, I shall here beg leave to mention that his accurate judgment of animal nature made him perfectly well acquainted with the subject. If Alexander in the full activity of youth was so fortunate to manage a horse that was accidentally frightened at his own shadow, much more may be said of Mr. Bakewell, who, at an advanced period of life, not only conquered a vicious restive horse, but, without the assistance of either grooms or jockies, taught this horse to obey his verbal orders with as great attention as the most accomplished animal that was ever
educated at Astley's school. Mr. Bakewell was accustomed to say that his horse could do any thing but speak, and I have no doubt but if Captain Gulliver, who was well acquainted with the language of the Houyhnhnms, had been living, that the abilities of this animal would have been better known.

The method which Mr. Bakewell made use of to conquer this vicious animal was never told, even to his own domestics. He ordered his own saddle and bridle to be put on this horse, which, at that time, was thought to be ungovernable, when he was prepared for a journey of two or three hundred miles, and, that no one might be witness to the contest, he led the horse till he was beyond the reach of observation; how far he walked, or in what manner this great business was accomplished was never known, but, when he returned from his
journey, the horse was as gentle as a lamb, and would obey his master’s verbal orders on all occasions. When what are called irrational animals, are taught such strict obedience to the commands of those of a superior order, it is, in general, supposed to be the effect of fear; but Mr. Bakewell never made use of either whip or spur; when on horseback he had a strong walking-stick in his hand, which he made the most use of when on foot; he always rode with a slack rein, which he frequently let lie upon the horse’s neck, and so great was his objection to spurs that he never wore them. It was his opinion that such animals might always be conquered by gentle means, and such was his knowledge of animal nature, that he seldom failed in his opinion, whether his attention was directed to the body or the mind.

If by this last expression I should unfortunately have raised a new chain of ideas in
the mind of the thoughtful reader, it is with great reluctance that I am obliged to leave him to his own reflections, and, though there has always been supposed to be an important difference between the human mind and that of brutes, it is much to be lamented that the difference has never yet been accurately determined. What I contend for is, that in whatever point of view the question could be placed, Mr. Bakewell was master of the subject.

To those who have never contemplated the imbecilities of human nature, or attempted to estimate the extensive influence of that passion for novelty which has so long and so universally prevailed, the opposition which has been made to the Disherley system must appear irrational in the extreme; but when the irresistible charms of variety are once admitted as an object of attention, our wonder then will cease. It
is on this principle, and this only, that I wish to account for the grand coalition which has been formed in favour of the Merino cause, and to justify, if the expression is admissible, the great exertions which have been made to induce the public to believe that the Merino sheep would prove the most profitable animal both to the agriculturist and the country at large. But in this land of liberty, where private interest operates without restraint and the utmost limits of competition become the criterion of perfection, there cannot be any rational cause of apprehension or fear that the public interest should be in danger of falling a sacrifice either to the selfish views of avarice, or the warm pretensions of ambition. It is only on the basis of private interest that the public opinion can be established. If the Dishley breed of sheep had not been profitable to the first speculators, they never would have become an object of public
attention. It would not have been in Mr. Bakewell's power to have induced the public to approve his new breed of sheep if he had not in the first place proved that they were by far the most profitable animals of the kind. It was on this principle that the Dishley system was first established, and for the want of which the Merino cause must fall. It may be in the power of gentlemen of large fortune, by their united efforts, to support an unprofitable cause for a little time. But it will not be in their power, for any length of time, to induce the public to play a losing game, and I do not think that the zeal of these gentlemen is so great that they will like to bear the loss. If a feast of Merino mutton, given once a year, would serve to pay the piper, the Merino cause might, for a few years, be supported; but if these voluptuous epicures, after they had feasted on Merino mutton, should be under the necessity of taking a
number of Merino rams at the same prices as the Dishley now command, I should be apprehensive that the second year these Merino feasts would not be so well attended. I do not by this pretend to insinuate that the door of hospitality has not always been open to the Dishley cause as well as the Merino, but here it will be necessary to distinguish between plain hospitality on the one hand and vain ostentation on the other. But Mr. Bakewell never had it in his power to purchase approbation with a bribe, and it must be evident that he could not have succeeded if he had not convinced his first connexions that their own private interest and the public interest were inseparably connected with his own.

The Merino cause is sinking if not sunk already, and as it originated in the hot bed of political prostitution, it will, in all probability fall into obscurity with the other
follies of the day. In Great Britain "it must be so," but the situation of France is widely different, where the Merino cause is much more likely to succeed, and from which I have no doubt this country will reap a great advantage,

I shall not, in the present instance, presume to give my opinion respecting the proud indolence of Spain, or the active industry of Great Britain, but shall only beg leave to give it as my opinion, without any reference to that political authority to which I shall ever bow with the most profound respect, that the strength of a nation must depend upon the number of the inhabitants, and that the wealth of nations and quantity of active industry, are to be estimated by each other.

The French decree respecting the Merino sheep, which is dated the 8th of March,
1811, seems to have created a wonderful alarm; and, for the purpose of guarding this country against the danger, the learned secretary of the Merino Society has given a translation. But it unfortunately happens that in this imperial decree not a single word is said about mutton, or the necessity of providing for the increasing population of France. I have examined the translation with great attention, but cannot find a single observation on this part of the subject. We are not informed whether the population of France is increasing or the contrary, or whether they have a quantity of animal food sufficient for their support; but as we are informed by Doctor Parry that the Spaniards are supplied with beef and pork from France, and with mutton from the sheep of Africa, it will be reasonable to suppose that in France they have more animal food than they have occasion for, or, like the Spaniards, do not think the Merino mutton fit
for food; and as the Spaniards have their mutton from Africa, there is every reason to conclude either that the French have not mutton sufficient for their own consumption, or that the mutton of France is no better than that of Spain.

I must acknowledge that it appears rather singular that Doctor Parry, who has been making such great exertions in favour of the Merino sheep, should say so much against them. I will not presume to give my opinion respecting Doctor Parry's knowledge either of wool, manufactures, or commerce; but when we look up to Doctor Parry as a physician, it would be the extreme of illiberality to suppose that he did not know what was fit for food. In this I shall suppose that the learned Doctor must of necessity be right, and, as it is a professional question, shall beg leave to give it in his own language, where he in-
forms the board of agriculture that, "so little, indeed, are these sheep considered as an article of food, that though immense flocks of them pass through or near Madrid twice every year, the beef and pork of that capital are supplied from the neat cattle and pigs of France, and the mutton from the sheep of Africa."

If then the quantity of animal food in France is greater than the present state of their population has occasion for, it must be evident that it is wool alone which is their object, without any attention to the carcase, as an article of food; but if we look at the opposite side of the question, we shall find that in Great Britain we have not more animal food than we have occasion for, and consequently the loss to the public would be an object of great importance, if we were to give up our mutton for the sake of growing fine wool. It will also
appear evident on the face of the decree, that in France there is an immense quantity of waste land belonging to the crown, which in all probability could not be better employed; but whatever may be the objects of this decree, or whatever advantages France may derive from the accomplishment of the plan, instead of this being any inducement for us to follow their example, this imperial decree will give the direct negative to the introduction of Merino sheep into Great Britain.

In the first instance it must be evident that the general produce of fine wool will be greatly increased; and as France will supply her own manufactures from the produce of her own soil, the quantity now purchased by France from Spain will be no longer wanted, in consequence of which the quantity on the market will increase and the price diminish in proportion.
This reduction in value is not only anticipated but foretold by the Minister of the Interior Montalivet, who drew up the report, and it must appear evident to every one who is disposed to take a rational view of the subject, that if the Merino establishment should take place in France, to the extent which is proposed, the value of fine wool would sink so low that it would not be worth the attention of the English agriculturist, even if the mutton was no longer made a part of the consideration.

But it will not be necessary to go to France for information, as the opinion of Sir John Saunders Sebright will furnish us with an answer to the whole. At the same time I am ready to acknowledge that it is rather unfortunate, even in the summing up the evidence, that Sir John and I cannot perfectly agree. On this part of the question we are told that if the Merino breed
should be generally introduced into this country, that fine wool would become cheaper and mutton dearer. Now, with respect to the price of fine wool, there cannot be a doubt but it would diminish in value in proportion as the quantity increased, but why mutton should become dearer is a part of the question which remains to be explained.

If the Merino sheep could produce the same quantity of mutton as the Dishley breed, I cannot see any reason why the mutton should become dearer; but if the Merino sheep, which are not considered fit for food in Spain, should not prove more palatable in this country it will then be evident that our mutton must diminish in quantity in proportion as the number of Merino sheep increase. The statement then will be, that if the Merino breed should be generally introduced, fine wool would be-
come cheaper, and Leicestershire mutton dearer. As for Merino mutton it could not become dearer in consequence of the general introduction, but must of necessity become cheaper, if it was possible to reduce the value of that which Doctor Parry informs us, is not fit for food; for whatever may be the present value, if the increase in quantity would diminish the price of Merino wool, the same cause would also diminish the price of Merino mutton.

Let France and Spain, then, grow fine wool whilst we are reaping the advantage, and Great Britain continue to supply her own manufactures with coarse wool, and feed her increasing population on fat mutton at the lowest price it can be procured.
A

POSTSCRIPTIVE APOLOGY

FOR THE

Liberty of the Press.

IF the preface is to be written after a work is finished, it must certainly be considered a postscript, even though it may be placed next to the title page; and as what was written last will appear to most advantage in the sequel, I shall beg leave to place this address to the reader in the order in which it issued from the pen. Indeed it has long been my opinion that if what is, in general, intended for the preface, was to be introduced as an apology at the conclusion, this part of a book would be more
frequently read, and the author have a better opportunity of pleading his own cause and speaking in his own defence. But when the reader is called upon to admit the preface as an apology, before he is acquainted with the merits of a performance, we may with equal propriety expect a judge to pass sentence before the cause has been tried, or the evidence brought before the court.

When any new dramatic work is brought before the public, we meet with prologue instead of preface, to which an epilogue is afterwards added as an apology. But in many of these cases, we shall frequently find so little connexion with the subject that the two addresses might either be united or transposed, without the least violation of propriety or decorum. I will not pretend to say that a prologue and preface are exactly similar; as the former is only in-
tended as an introduction, whilst the latter includes both introduction and apology. But the great misfortune is, that both are too frequently written, in compliance with custom, without the necessary connexion with the work which they are intended to explain. But I have no doubt that the true reason why a preface is so seldom read is, because it has not sufficient interest to command attention. If then by writing a preface the object of the author is to bespeak the indulgence of his readers, whenever the preface is not read he must be disappointed in his views. The truth is, that every work must ultimately depend upon its own intrinsic merit, a good book wants no apology, and a bad one merits none.

The humility of an author may sometimes excite pity, but will never command respect; and he who is obliged to solicit the indulgence of the public; or ask the
compassion of his reader, is not fit to command the pen. All my writings have been severely criticised, but not more so than I either wished for or expected. For my own part I have ever considered criticism as a mark of attention and respect when conducted with liberality, and though I have sometimes met with a little severity, the learned reader will reollect that I am not the first who has been gratified by the smart.

If an author meets with attention from the public, it is all, in the first instance, that he can lay claim to, the rest must depend upon the merits of the work.

The first time I made my appearance in the fields of agriculture, it was for the purpose of paying my respects to Mr. Cline, and sure never was any poor devil so buffeted for his presumption; but if such great
characters will condescend to take the hum-
ble walks of rustic life; it would be strange
indeed to let them pass and never make a
bow.

It is in this point of view that I hope the
splendid author now before us, and all
those gentlemen whose opinions I may have
occasion to call in question, will look upon
all the observations which I already have
or may afterwards think necessary to make
on this subject. The study of Anatomy
has been one great object of my life, and
though I never boasted of my knowledge
of agricultural subjects, yet it would ap-
pear rather singular if some little informa-
tion had not been obtained, when placed
so near the blaze of the meridian sun.

All that I contend for, in the present in-
stance, is the privilege of paying my re-
spects to those who have thought fit to
address the public on any subject with which I am acquainted, at the same time that I think the right cannot be questioned in such cases where I have already given my opinion.

If any person wishes to know the opinion of the public on any question, it can only be obtained through the medium of the press. The information which we vainly search for in conversation is at best imperfect and uncertain, whilst what has once appeared in print is unchangeable for ever. But it unfortunately happens that the refinements of the present age have given the direct negative to the introduction of any rational subject into conversation, and such is the delicacy of modern times, that if I were to attempt to introduce the grand horned Merino in company with one of the Dishley breed, and presume to give my opinion respecting their compa-
rative perfections, I am well convinced that a general smile, if not a vulgar laugh, would be immediately raised against me.

In consequence of these prejudices, and many others that I shall not now take the liberty to mention, it has long been my opinion that the pleasures of conversation were sinking into obscurity, and that it is only through the happy medium of literature that any rational connexion in society can be maintained.

In private conversation the discussion must be limited, and the question greatly influenced by the leading prejudices of the parties before whom the argument is conducted, nor do I think that the boasted liberality of convivial society is likely to promote the freedom of enquiry. As for what is in general called public speaking, the less that is said upon the subject the more
free we shall be from the danger of reflecting on the elocution of modern times. But perhaps it will be considered a happy circumstance, that there are so few who are capable of saying a single word in public, for if all, who have the wish, possessed the power of speech, instead of the present prudent method of reading a few observations which have been previously written and placed in the crown of the hat for fear of incumbering the head, our public meetings would be a scene of general confusion. But we may cease to wonder, when we hear of warm debates and violent opposition in such large assemblies, when we find that similarity of opinion and perfect unanimity is not to be insured even at a Merino feast.

For these reasons, in addition to many others, I shall now beg leave to conclude, that it is in the open fields of literature
where agricultural information may be displayed to most advantage; and, if any difference of opinion should prevail, where the question may be debated with equal satisfaction to both parties.

LOUGHBOROUGH,
Sept. 18, 1811.

FINIS.