

NOT PUBLISHED.



OBSERVATIONS

ON THE

BREEDING OF HORSES,

WITHIN THE PROVINCES

UNDER THE

BENGAL ESTABLISHMENT,

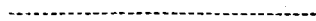
SUBMITTED TO THE CONSIDERATION

OF THE

PRESIDENT AND MEMBERS

OF THE

BOARD OF SUPERINTENDENCE.



BY

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Superintendent of the Honorable Company's Stud.



Simla :

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To raise, within the British Provinces, Horses for the use of Calvary, instead of depending on exterior supply, was the main object for instituting a Public Stud.

This principle, sound in policy, was adequately followed in practice.

A body of Indian Mares, purchased by contract, and the most part unfit for the purpose, formed the basis of a Home Stud.

Small Arabian Horses, selected by a Country Captain, and ill calculated to make amends for the deficiency of size and strength in the Mares, were employed as Stallions.

Horses and Mares of other countries were received as gifts, and were also boought, with but little nicety of selection.

English Horses, some excellent, other indifferent, were subsequently added.

Unison of parts is not more essential to the efficiency of an army, than good composition to that of a Stud.

From the discordance of such a motley assemblage, as constituted that in question, expectations of success could be indulged in only by minds so sanguinely inatent on the accomplishment of ends, as to overlook the fitness of means.

And the slow progress of improvement arises in great measure from this originally vicious composition.

Indeed the History of the Stud down to this present day, displays little more than a succession of expedients to palliate the mischevious effects of this radical error.

The stud was established as Possah, on a nook of ground elbowed in by Indigo planters and native cultivators, and encompassed in great degree by low grounds.

Its real merits were security from an enemy, and a moderate price of grain and labor.

The management of the Institution was given to an Officer, active, upright and Zealous, but unfortunately little acquainted with matters relating to Horses.

To establish a Stud of a moderate size, so as to preclude a necessity for subsequent alternations attended with expense and regret, requires a combination of no ordinary talent and experience.

In this country, new to a Stud on a European model, and of which the superior Officer was new to his duty, some error was inevitable.

Even under circumstances the most favorable in a country familiarized to the pursuit, the expectations of Horse breeders generally exceed the value of the produce realized.

Here, unforeseen difficulties produced embarrassments, which were met by a change of measures.

In further progress further embarrassments arose.

Change followed change with such rapidity, that the Board of Superintendence, not fully comprehending their objects, lost confidence in the Superintendent, who felt himself in turn but ill requited for his activity, integrity and zeal.

Discussions and altercations impeded the course of Public business.

A support, neither wholly granted not wholly withheld, paralysed the powers of the Superintendent, and converted devotedness and energy into apathy and disgust.

Half measures created degradation in arrangement, and inefficiency in result.

On taking charge, I found a brood Stock, rich in numbers, wretchedly poor in quality.

A system, simple and beautiful in theory, complicated and deformed in practice.

The former Superintendent, tremblingly alive to every danger that menaced the existence of the Stud, beheld in the slightest expense the crush of abolition.

This morbid sensibility brought ruin on the public buildings, entailed large expense on the State, and involved his successor in perplexity.

Yet the motives were pure, the intentions excellent.

My own experience in the History of Studs fully apprised me of the nature of mischiefs unknown to the highest authorities, and of which the effects still press weightily on the establishment.

Had pride, had duties of obligations and of gratitude towards my employers not interposed, I had shrunk from hazarding reputation in a task more than Augean.

It long remained a moot point, whether it were better to sweep all away, and begin anew with fresh materials, or to select and reject.

Considerations of expense, and ignorance of the Horse resources of the Country forbade the first plan, and determined the propriety of keeping the best of the stock, till means of procuring still better were ascertained.

The Stud consisted of three branches, viz., Home, Nisfee and Zumeendaree.

The first, in buildings on the Stud lands contained Stallions, Mares and their produce, till the later was of an age fit for the army, the market, or for breeding.

The second, signifying partnership, consisted of Mares, the property of the Stud, covered by its Stallions, and boarded with farmers living in its neighbourhood.

The produce, when of age, was valued; half the estimated worth was allowed to the farmer, half was retained for the use of the Mares.

The produce was kept at the Stud, till of a proper age for disposal.

The third, Zumeendaree or native branch, consisted of Stallions being placed in the country at a distance from the Stud, to serve the Mares of the farmers.

Its produce.

The desirable produce was purchased, and kept at the Stud.

Home branch.
Composition indifferent.

The composition of the Home Stud was materially defective; but this branch had, notwithstanding, produced some fine Horses.

Its advantages, in security and good form of produce.

Its advantages consisted in securing all the desirable produce, and in developing greater perfection of form, by greater care.

Its disadvantages, great expense from inseparable causes.

Its disadvantages are great expense in the first cost and continual repairs of buildings, establishment of servants, keep of Mares and Foals, loss by barrenness, slipping of Foals, congenital deformity of produce, and diseases of the first periods of life.

General practical conclusion.

It is liable to the danger of loss or extinction from contagious diseases, and concentrates rather than diffuses the practice of breeding.

Nisfee branch, composition worse than that of the Home branch.

It is adapted only to a small number of choice Mares, but from circumstances, cannot immediately be altogether dispensed with.

Its produce.

The Nisfee Stud, by far more numerous, was still more defective in the quality of its Mares.

Its advantages and disadvantages.

And its produce was frequently injured by mismanagement.

In appearance little expensive, it contains the principle of defusion in a degree, and also security of Stock.

But affords not a due stimulus to exertion, as the contractor is sure of profiting by the contract, whether well or ill performed.

Leading to degeneracy in form and deficiency in size, it is in reality more expensive than it seems.

General practical conclusion.

Though beautiful in theory, it possessed not in practice a tendency to improvement, and therefore no longer exists.

Zumeendaree, or Native branch.

The Zumeendaree branch was still more extensive.

Composition worse than that of the other branches.

Its Mares were generally bad,—its Stallions of all characters, but generally indifferent.

The Mares were for the most part small, the Stallions large. Experience in breeding has proved that the reverse practice is much more successful.

Altogether however, the produce was better than could

have been expected from a union of Parents so ill assorted, and was much improved by care and good keeping on the part of the breeders.

The Zumeendaree branch, moderately frugal in its establishment, contains the true principle of diffusion, by affording to the farmer a larger return of profit on his capital and labor, than any other kind of occupation.

Its advantages considerable.

It enables the breeder to pay rent for much more land than he occupies, gives means for additional domestic comforts, and holds out (under an extension of a modified system with assistance from the State) a rational prospect of realizing the views of Government.

But it has several defects; the most striking is, that it gives no positive certainty of return of produce.

But its disadvantages great.

For though by contract and in justice, Government ought to have the refusal or chance of pre-emption, yet practically this is not the case. The produce is accorded to the first, or rather to the most opportune customer, notwithstanding the price from the Stud is always more liberal than that obtained from an individual.

Insecurity of produce.

Middle men, or little dealers from cheap grain districts, have found it more profitable to *feed* than to *breed Colts*.

These have Agents, who, ever on the watch for the necessities of the breeder, procure to their employers a profit far outstripping the outlay and risk on the purchases they make.

The farmers from short-sightedness and avarice, breed from their old Mares as long as they can; and when compelled to change, employ Fillies unsaleable from defects or disease, rather than those of good promise.

Bad Mares employed.

Thus the public Stallions are given to Mares frequently unworthy, and the improvement from such a cross is gradual and slow, instead of being immediately considerable; and hence the number of good Colts, in proportion to the Stallions employed, is generally small.

Improvements slow. Return of produce small.

If to this be joined the more serious evil of districts being deprived of a large portion of the improved Fillies, instead of their being annually added to the breeding

Improved Fillies carried off.

stock, some more direct interference than that hitherto practised may seem expedient.

Along with Colts to many parts of India.

In fact the Zumeendaree system breeds for a large part of British India, a portion of Boondelkhund, and of the Dukhun.

Laws prohibiting exportation unadvisable.

Yet notwithstanding the loss sustained by the State in Colts and Fillies, or more correctly perhaps, the delayed accomplishment of its views, prohibitory restrictions on sales are to be avoided.

They would prove expensive in execution, nugatory as to the intention, oppressive in their operation, and mischievous in their result.

In an island, produce accumulates under circumstances favorable to breeding; but in a continent, with a long and pervious frontier, it is not easy to prevent clandestine exportation into neighboring countries, where it bears a higher price.

Exportation to be combated by an early active agency, and a good price.

To this mischief, the natural result of scarcity, no other safe remedy on the present Zumeendaree plan can be proposed, than a good price, and extreme activity in purchasing the best stock *at a very early age*.

This practice was followed last year with advantage.

System of breeding applicable to India defined.

Of all systems of breeding, that is most applicable to this country, which with frugality combines the principle of diffusing the spirit of effective and of permanent breeding amongst the subjects, whilst it offers to the State the certainty of obtaining the desirable produce, on equitable terms

Its probable practicability with assistance from Government; but without it, interior supply precarious.

Such a system is perhaps practicable with assistance from the State; but without its aid in procuring Mares as well as Horses, the progress of obtaining and of maintaining an *interior* supply of really good animals will always be expensive, slow, and precarious.

Causes which have retarded improvement.

Original faulty composition, abuse or mistakes in purchases, local inaptitudes, from site and from habits of the natives, exportation of improved Fillies, and losses by casualties, diseases, and accidents, have retarded the progress of the Stud generally.

But the Stud has much improved the breed of Horses in certain districts; of which, abundance of the most respectable evidence could be adduced.

Last year it has been acknowledged (See Report of Com. 1813) that the body of Colts taken to Benares was not only the best ever sent from the Stud, but from any other quarter—and the price paid by public competition for those Horses sold at Calcutta, is an obvious testimony of value.

The Fillies are on the whole better than the Colts.

And now that the expense in new buildings is nearly concluded, and it possesses a better Stock than at any former period, the Stud, even on its present footing, would soon be in train of progress for repaying its debts.

The improvement of its produce guarantees this result.

The Stud has hitherto been an experiment restricted in sense, restricted in action.

Its real object is to spread a better breed of Horses, through such parts of the British Provinces as are most fit for that purpose.

In this view, it loses its local insulated character, and assumes one of more general importance.

It becomes a branch of political economy imposed on the Government of Hindoostan by a peculiar necessity.

It cannot be shaken off without eventually endangering its interests.

In asserting this as a political dogma, I may venture to say I speak advisedly.

The History of Hindoostan in relation to what is past, confirms the fact—See Tareekh Ghuza of Chungez Khan—Khumbaet Raja's Horses—Sooltan Ghyas-ood-deen Bulbun—Sooltan Ala-ood-deen Ghoree—Rise and fall of the Tuemoor Dynasty—Rise of the Murhuttas—Contrast of Sir Eyre Coote and Lord Lake's Campaigns.

The events now passing in all the Horse breeding countries North of the Indus, confirm it prospectively.

Convinced of this truth, convinced of the urgency for enlarging the plan of operations, to realize the utility

Yet great improvement has been effected in the breeds of Shahabad, Ghazecpoor, &c.

As acknowledged by the Com. 1813.
And further proved by public sale at Calcutta.

The Stud, even on its present scale, would gradually return the outlay.

Its object is to diffuse Horse breeding.

Which cannot be neglected without danger.

As proved by reference to Indian History.

Hence a necessity for a comprehensive plan.

expected from the breeding system, and the indispensableness of better parent stock, I have indulged in a range of idea and of project suitable to such an object, though perhaps not equally compatible with the limits of a confined establishment.

The Stud though beneficial to the farmer, has been too expensive to the State in proportion to its produce, and too small for its object, from a defective System.

The Stud has been highly beneficial to the farmer, it has been less productive to the State.

It has always been too expensive in proportion to its return of Stock, and too small in relation to the object it has had to accomplish.

Its system has been defective.

Should be a depôt for Colt bred by farmers.

Instead of the Stud being a large breeding establishment, it should be literally a depôt for Colts bred in the districts, and a point whence the management of their details should emanate.

Theoretical speculatists in Horse matters are not less common than in politics.

All who affect knowledge in this branch, talk of extending the breeding system, as an operation requiring little more than will and effort.

Though but few have taken the trouble, or have had the means of appreciating either the whole of the system or of its instruments.

The present Superintendent was appointed by the Honorable the Court of Directors to the Stud, as a situation, which would enable him, by due diligence, to raise his judgment to that pitch, whence he might gain a commanding view of the object in all its parts and connections.

He has served an apprenticeship of five years to Stud business, and has spared no personal pains in procuring information.

A diffused system of Horse breeding supposed practicable, though not without difficulty, from want of good parent Stock, ill habits of the natives, &c.

His conviction is, that though difficulties may attend diffusing a system of Horse breeding, it may be accomplished by vigorous exertion.

The principal difficulty lies in the want of good breeding Stock, both male and female.

One, not much inferior, is to be found in the habits and prejudices of the natives.

Other difficulties derive from the annoyance of insects, from mismanagement, and from diseases brought on by peculiarities of soil, climate, and food.

And experience drawn from History proves that there exist causes of rapid decline in the breeds of Horses, not yet sufficiently analysed.

Their effects however impose on the State, or on its agents, the obligation of detecting and of removing them, or at least of counteracting their influence.

It is evident that to keep up the breeds of Horses in Asia, furnishing Stallions by Sovereigns to their subjects, has always been indispensable.

This indeed has been the general practice in Europe, except in islands or in countries under free political constitutions.

And in some instances even the rulers have been compelled to distribute Mares as well as Horses.

Had this latter practice been adopted with due combination of plan in the origin of the Stud, it would have saved much money and time.

The term "improvement of breed" has been unhappily applied; for it generated an idea, which, though good in the abstract, has perhaps somewhat retarded the progress of amelioration, although it did not altogether arrest its course.

Seizing upon the race of the country, as the natural Stock on which improvement ought to be engrafted, it did not sufficiently stop to enquire whether this breed was really worth improving.

Such an enquiry would have shewn that the indigenous race, diffused over the whole of that immense tract of land, comprised betwixt the Sea and the North-western, betwixt the Indus and the North-eastern Alps, was only a race of Ponies, good indeed in quality, but smaller than the Welsh Pony, the Scotch Galloway, or the Irish Hobby.

All other breeds were only acclimated productions of exotic sires imported expressly, or having conduced to

There exist causes of decline not thoroughly understood.

Stallions from the State indispensable to keep up the breed in India.

In establishing breeds, good Mares also have been given.

This would have been beneficial here, instead

of attempting to improve the

breed of the country, which

is only a race of Ponies, commonly very diminutive.

Larger breeds are from Stock of foreign origin imported for the purpose.

or stolen, or dispersed after battles or invasions.

establish breeds accidentally, by being dispersed after invasions, or battles.

These centres of breeding, at all times but thinly scattered in proportion to surface, have latterly, by political and natural causes in succession, with few exceptions, been reduced to mere points.

A breed was formed near Buxar after the battle, in 1764, but was nearly lost before Government Stallions were placed in that district.

Thus when the Stud was first formed, there was in the British Provinces only one of these points, which was established near Buxar, by the dispersion of Horses and Mares after the defeat of the allied armies of the Nuwab Wuzeer and the Nuwab of Bengal by Major (afterwards Sir) Hector Munro. And the greatest portion of the Mares of this breed was taken away, or had died, before Government Stallions were introduced into the districts.

Converting an extensive race naturally small into one fit for military purposes, is an operation tedious, expensive, and difficult.

To raise the height of a whole breed of Ponies spread over a most extensive tract of country, is an operation in itself requiring much time.

But when to a certain height are to be joined the qualities of corresponding increase of strength and beauty of form, &c., it is obvious that to time, much labor and pecuniary support must be superadded.

The habits of the natives rather unfavorable to the pursuit.

The natives of this country are not easily moulded into new habits.

This want of ductility has been a great obstacle in addition to others, arising from the nature of the pursuit.

But it may perhaps be overcome to the degree required, and the native breed of Horses be raised and improved.

However profiting by experience, it would now be well to follow two lines of breeding, or rather to combine measures, so as to cause them to proceed with equal pace.

Two modes of breeding recommended, consisting, 1st, in transplanting a new race, and 2ndly, in improving that of the Country by Stallions and by castrating small males generally.

One consists in transplanting a really good breed as central points of diffusion, the other in improving the native breed by giving good Stallions to small Mares and by castrating all the male produce.—See letter of Superintendent, 9th October, 1811, proposing the alternative of an annual tax.

A system thus combined, and carried into effect with energy, unless counteracted by some very powerful causes, ought, in no long period, to raise a body of Horses in quality and numbers, commensurate both with military and domestic demand.

Close scrutiny into the affairs of the Stud, both internal and external for two years, excited doubts and questions of various nature, which could only be settled by a more enlarged view of the Company's provinces.

The History and inspection of breeds of Horses supposed indigenous or admixed with foreign blood; in the plains and in the mountains; within the British provinces and in the Nepal and Murhuttu borders; the diseases of Horses, frequency, causes, and the treatment followed by the natives; the vegetables used in feeding Horses, and their effects; topography as affecting the health of the Horse and its security; present composition of the Cavalry; comparison betwixt Horses formerly and those now admitted, as to form, constitution, &c., collecting opinions of officers as to the kinds found to have been most suitable to the service; as to the effects of castration, &c., formed some of the principal objects of this journey. And other matters relating to my mission, such as the Studs of Europeans and of Natives, attracted also their share of attention.

The general results of observation were submitted to Government, both by document and in person.

These laid the foundation of a second journey to secure Parent Stock.

To realize this object, Government furnished a credit of two lakhs of Rupees.

Details of Stud business detained me so long at Poosah, that I was shut out of Rajpootana by disturbances and from the Lukhee Jungul, by an adverse season.

The best foreign Horses for Military purposes I met with, were clearly traced to the countries bordering the Oxus.

Urged by this fact, by the hope of gaining permission to visit these regions in quest of Horses and Mares, and

Superintendent having doubts of the system of the Stud being good, endeavors to settle them by examining breeds of Asiatic Horses within his reach and many other objects connected with his mission.

Observations collected in the first journey, 1811, submitted to Government.

Second journey, 1812.

Credit of two lakhs of Rupees..

Superintendent prevented entering Rajpootana, &c.

Endeavors to ascertain the countries

which produce the best Horses for Military use and determines on three

lines of route being examined, viz.,

first, through the Lukhee Jungul to Buhawalpoor; second, through Kabool to Bokhara; and third, across the snowy mountains to Chinese Tartary.

The 1st and 2nd assigned to trusty persons, the 3rd reserved for himself.

Letters written by the Supdt. to the King of Bokhara, Prince of Bulkh, King of Kabool, &c., requesting permission to purchase Horses in their countries, and despatched by Meer Izzutoollah, an intelligent Native, furnished by the Resident at Delhi.

Supdt. risks exposing himself to the charge of inconsistency, by deviating from his first line of route.

even of reviving the ancient North-western Horse trade, I set on foot more minute enquiry.

But the contradictions which obtained respecting Horse matters, in every country beyond the Company's provinces, betrayed an ignorance scarcely conceivable; an ignorance wholly at variance with the interest usually excited amongst Englishmen, when Horses are in question.

I resolved therefore to explore three lines of route to Horse Countries, viz., one through the Lukhee Jungul to the left bank of the Indus; a second through Kabool to the banks of the Oxus, and a third across the snowy mountains to the reported Horse districts of Chinese Tartary.

The two former were allotted to trusty persons, the last, supposed fraught with more difficulty and danger, was reserved for myself.

Embarrassments of various shapes enveloped the second and third of these projects.

For letters were required to the King of Kabool and his Wuzeer, to the Prince of Bulkh and Khooloom and to the King of Bokhara and Sumurquand.

But the Resident at Delhi, with every manly wish to co-operate, could not write officially to these Sovereigns.

Relying on my motives, I requested each Prince would grant me permission to visit his country; and to give the request more weight, despatched a native of good talents, figure, address, and attainments, to present the letters.

This man I owed to the kindness of Mr. Metcalfe, whose conduct in furthering the objects in view is above all comment.

In regard to myself, I had to face the charge of uncertainty of view, of deviation from the performance of a tour I had represented as necessary.

At every risk, I preferred prosecuting the great public object of ultimately procuring Parent Stock, to the private, though more prudent motive of saving appearances of consistency.

For the line to Punjab was still open, but accounts received from the best authority gave little promise of practical good resulting from its immediate prosecution.

And I feared that Runjett Singh might refuse a second permission to pass through his States, should answers from the North-West render such a request expedient.

Thus, for ulterior and greater views, I determined to decline this journey at that moment.

Mr. Hastings believed there were good Horses to the North of the Indian Caucasus.

A Hindoo Priest of my acquaintance, who had traversed those countries, vouched for its truth. An old Pundit, who had likewise been there, added his personal testimony in support of his opinion, and offered to conduct me to them.

I hoped to ascertain the fact on the spot, and return by the left bank of the Sutlej in due time for completing a tour in the Lukhee Jungul.

Detailed accounts of my views were transmitted to Government, on whose liberality I threw myself for this act of irregularity.

Common measures, I foresaw, would inevitably fail, and by uncommon ones, I risked situation, life, and character.

I endeavored to pass over the snowy mountains which separate Tartary from India, on foot, and (the motives must extenuate the act) under the garb of a Hindoo Priest.

I succeeded in the enterprize, but failed in its object. I had penetrated the country about a degree of latitude too low for the Horses I was in quest of, and after having conciliated the Chinese Governor, had the mortification to find, that through a misplaced confidence of my old guide in a fancied friend, I could not proceed in the direction I wished, without exposing to extreme risk the lives of persons, who, confiding on my discretion and word, had become my sureties.

The foot of a European had never before pressed the snows of the Himachul in this direction.

What was experienced in difficulty, in anxiety, in danger, is now immaterial.

Reasons for this conduct.

Mr. Hastings' opinion on Horses beyond the snowy mountains, confirmed by a Fuzgeer, and a Pundit, who offers to be the guide.

Supdt. hoping to ascertain the fact, and to return in the season for visiting the Jungul, transmits his reasons for the journey, and

traverses the snowy mountains.

Finds the Horses of the Oondes too small. Conciliates the Chinese Governor.

The disagreeable part of reflection is softened by the liberal, the benevolent expressions of the Right Honorable the Governor General in Council.

Accidentally failing in the primary object, when I had surmounted the principal difficulties towards attaining it, I had a glimpse of political relations, which, from recent events, are no longer perhaps of importance.

And I gained a near view of a commercial intercourse, which, if duly cultivated, might perhaps tend to repay some of the past expenses of the Stud, may furnish a new and long wanted material to the British manufacturer, and may give employment, at their own houses, to the reduced, to the infirm, and to the indigent.

Commercial inter-
course with Central
Tartary.
Shawl-wool trade with
the Chinese Tartars.

Pressing necessity for
procuring good Parent
Stock obvious, from that
of the Stud and of the
country in general.

To the procuring of good Parent Stock every other consideration in Stud concerns is subordinate.

The loss in the Stud mainly originates from the first bad step, the faulty composition of the Stud at its outset.

Ever since I examined the Stock of the Stud, and of the country in general, I have been fully convinced that no solid permanent advantages would be realized till this error could be retrieved.

Upon the means of doing this my attention has been perseveringly fixed, and it is now in a degree recompensed in the prospect of success conveyed through the offers of protection and of civility, sent to me by the King of Kabool and his Wuzeer, and by the Prince of Bulkh and Khooloom.

The original letters with their translations I beg now to submit to the Board.

This result proves the influence of the British name. It evinces also the practicability and consistency of projects sometimes regarded as visionary speculations, the fruit of heated fancy, rather than the legitimate offspring of reasoned combination.

Possessed of Parent Stock, arrangements may be executed, which, for want of such instruments, were heretofore of no practical value.

King of Bokhara re-
fuses permission. Prince
of Bulkh invites.

King of Kabool sends
a passport.

Arrangements conse-
quent on the attainment
of Parent Stock,

The structure and character of the Stud may undergo a change, which, in reducing its expenditure, shall increase its efficiency.

No longer a weighty experiment, it may become a general productive branch of political economy.

At present the Stud may be considered as the fulcrum of a lever, by which the momentum of breeding is to be directed from the East to the West; and perhaps it should be met by another breeding system, proceeding from the West towards the East.

By this double operation, in the lapse of some years, a line of breeding country might extend from Hurdwar to the right bank of the Great Gundhuk.

Guarded on its Western extremity by Military Stations, confined to the East by an unfordable river, flanked on its Southern frontier by the Jumna and the Ganges, and on its Northern face by a stupendous range of mountains, it is little accessible by an enemy in any part of its boundary.

Secure from invasion, it presents in site, climate, and products, many facilities for the pursuit.

Circumstances seem imperiously to urge the necessity of an extended system of *interior* Horse breeding.

Dearth and disease, in a degree nearly approaching famine and pestilence, have committed widely extended ravage amongst the human race in those countries of India whence the supplies of Horses have latterly been obtained.

As affecting the Horse breeding districts, I may quote the evidence of Meer Izzut-oollah and Hidayut-oollah in the year 1812, and of Captain Wyatt at the close of 1813.

Meer Izzut-oollah, prosecuting enquiries respecting Horses, reported that in the districts of Dhun and Ghep many Horses were actually dying from want of food, and that the farmers, oppressed by the Sikhs, were giving up the pursuit of Horse breeding.

Hidayut-oollah, who traversed by my instructions the Lukhee Jungul and the sandy desert of Beekaner and

may wholly change the character of the Stud.

Extension recommended towards the West and also from the West in an Eastward direction.

Boundaries of a safe Country defined.

The policy of more extensive interior breeding proved by the dearth and disease which have afflicted the principal breeding countries on this side the Indus.

Horses starved to death in Dhun and Ghep (districts of the Punjab) reported by Meer Izzut-oollah, 1812.

Great scarcity of Horse provision in the Datetree Jungul and the desert of

Beekaner asserted by
Hidayat-oollah, 1812.

Similar accounts from
Guzzerat.

Scarcity also in Raj-
pootana, 1812.

And in the Horse
Countries on this side of
the Indus.

The Katheewar with
its varieties. Kuchh,
Bhoj, Thulla, Kandesh,
was the finest Horse in
India, for Military use.

And so abundant
in the reign of Sooltan
Ghiyasooddeen Ghoree,
that his Naib in Guz-
zerat sent him 3,000 as
a present.

This breed latterly has
much declined.

Breeding has much
suffered in Rajpootana.
Fairs of Chaudkheree
and Pokhur des-
troyed.

The army of Doorra-
nees in Kabeol, and that
of Ranjeet Sing, in the
Punjab, render the pas-
sage of Horse mer-
chants to and from
Toorkistan more unsafe.

Buhawulpoor, found many villages entirely deserted, and in tracts, which during common seasons furnished Moth* (on which Horses are there fed) at the rate of eight or nine maunds per rupee, it was reduced to only as many seers.

The Board have, I understand, reports from Captain Wyatt little more favorable.

If to these testimonies be added the great emigration from the Rajpoot States into the Western British Provinces, it will appear that scarcity has visited a great extent of the country to the North of the Indus, particularly famed for breeding Horses.

The breed called Katheewar, raised by native Princes at great expense, through Parent Stock imported from the countries bordering on the Red Sea and the Persian Gulf, produced the best and finest Horses in India for Military purposes. And at periods, when breeding was much encouraged, these Horses were procurable in great plenty.

For a Governor of Guzzerat sent three thousand as a present to a Moghul Emperor. But within the last twenty years, the breed has much declined both in number and quality, and is now in danger of being lost.

And according to the accounts given me by Bhuwanee Shunkur, the injury done to the breeds of Rajpootana cannot be repaired, except by many years of tranquillity.

The concentration of the forces from Khorasan, Bulkh, Buduksban, and other Southern and Western dependencies of the Doorraanee Empire on the right bank of the Indus, cannot have diminished the price of Horses in those countries, or have rendered the passage of common Horse merchants to and from Toorkistan more safe or more inviting.

And it is not easily conceivable that Ranjeet Singh's preparations to contend with the Doorraanee Cavalry, abstracted even from the late scarcity in the Punjab, can have lessened the demand for Horses either here, or in

* Phaseolus Aconitifolius—found only in India.

the neighboring Lukhee Jungul, where he possesses no inconsiderable influence.

Pressure of distress may indeed have driven upon the market from suffering countries, Horses in such number, as to have given the momentary semblance of plenty. But with such general evidence of desolation to infer real plenty from a sudden glut, is almost as little reasonable as to expect an increase of the products of human industry from a wasted human population, or to impute wealth to the wretch who pawns his garments to satisfy the cravings of hunger.

Real plenty only springs from surplus Stock, a state diametrically opposite to that which obtains as to Horses^s in any part of Hindoostan. The truth seems to be, that in the countries on this side of the Indus, the breeds of Horses being with few exceptions rapidly on the decline, and no increased intercourse having been opened with those on the other side of that river, the scarcity of *good* Horses in Hindoostan is generally felt.

It is possible that recruitment of Cavalry may be conducted without much difficulty in time of peace, but in time of war, it is equally possible that an active determined partisan may give it serious interruption.

By depending on *exterior* supply, the State suffers a drain of treasure, is exposed to the chance of accident.

On the policy of raising an *interior* supply little doubt can exist, provided the country be not wholly unfit for the purpose.

That it is not so unfit, is proved by general experience, and by the quality of the Horses drafted last year. That it is particularly favorable may be matter of question.

But though the propriety of the principle be admitted (taking circumstances of country as they are) on the system for reducing it to practice, difference of opinion may be indulged.

The Stud has existed nineteen years; —it has raised good Horses; but they have been few in relation to its

Horses driven upon the market by distress in breeding districts, an indication of future scarcity.

Horse breeding on this side the Indus is rapidly declining. Importation of Horses from the North West not increased.

Recruiting of Cavalry in peace not particularly difficult; may be interrupted in war.

External supply expensive and precarious.

Internal advisable.

The country though not wholly unfavorable, is perhaps not particularly favorable to Horse-breeding.

Difference of opinion as to system.

The Stud having existed 19 years, and its return not adequately great.

age, in relation to its expense, and its influence has been confined to narrow limits.

Gives proof of past and prospect of future difficulty.

Shows the necessity of measures better suited to the object.

These facts exhibit a qualified success; exhibit also a proof of past, an indication of future difficulty.

To the mere frugalist the retrospect may furnish a theme of declamation against expenditure, to the self-important theorist an ample field for speculative reform, to the eager contractor a waking dream of golden harvest; but to the comprehensive mind of an enlightened statesman, it will present only the future necessity of proportioning means to ends.

Furnishing Parent Stock to farmers considered almost essential to success.

Reasons for this conclusion, in past expense, from bad Stock both in the Stud and in the country generally, and consequent slowness of improvement.

The expediency of Government aiding farmers with good Mares and Stallions, is assumed as nearly essential to success.

The grounds of this position consist in the expense and waste of time, heretofore incurred in the Stud through bad Stock; in the scarcity of good Mares through the country generally; in the slowness of improvement through such a medium, even when not interrupted, and in the interruption almost inevitable from competition.

Sources whence Mares have been obtained, viz., England, Arabia, and Asia.

This leads to a display of the accessible sources of Parent Stock. *Mares* have been obtained from England, Arabia, and from various parts of Asia.

English Mares good, but few, and high priced.

The supply of Mares transmitted by the Honorable the Court of Directors, is highly useful, but unavoidably scanty, and accompanied with heavy expense.

England must be considered as a source available principally in regard to quality; and Arabia falls within the scope of the same observation.

Breeding having been pursued with more steadiness and success in the Lukhee Jungul, and adjoining desert than elsewhere.

In the line of country, beginning with the Lukhee Jungul, and running through the Desert of Beekaneer to Buhawulpoor, Horse breeding has been pursued with greater steadiness and success than in most other parts.

Its population far removed from Cities, and confined to small, fertile spots, insulated by an expanse of sand, has found more profit by raising Horses, Camels, and other Cattle, than by the occupations of general agriculture, or of trade.

On the other side the Indus, this is the only source whence any considerable body of good Mares can be collected at a moderate price; but this collection can alone be made with safety by competent persons, visiting the breeding villages, and selecting Fillies. For, if Mares be bought from dealers, the purchase may lead to loss and disappointment.

It is proved that Indian Mares are less prolific, and have a shorter period of fertility than those of more Northern climates. This important fact is little known to Europeans; but natives, well aware that it is unprofitable to persevere with brood Mares, which have missed to the Horse two seasons in succession, always sell them. And the Stud has much suffered from Mares that have proved sterile at a very early age. In this matter I have been more than once deceived, and see no future security, except in the purchase of Fillies.

Through the Desert the road is tolerably safe by the influence of the Resident at Delhi, with the Rajhas of Pateala and Beekaneer, and the Nawab of Buhawulpoor; but the local difficulties are considerable.

Hindoostanee dealers usually confine their excursions to the farther border of the Lukhee Jungul.

The countries beyond the Indus, which most abound with Horses, extend from Kabool Proper to the North and West, including the dominions of Meer Quleech Ulee Khan, the Chief of Bulkh and Khooloom, and Meer Umeer Hueder, King of Bokhara and Sumurqund. In these are to be found Mares at a reasonable rate. Represented as strong, healthy, fruitful, well-tempered, and living to a great age, they are perhaps better adapted for breeding in Hindoostan than any other procurable.

From Toorkooman Mares, crossed by Arab, Iran, and Irak Stallions, a race of Horses is raised near Khooloom, under the patronage of Meer Quleech Ulee Khan, said to be well suited for Military purposes.

This Chief has a large Stud of his own, and his Cavalry amounts to 12,000.

This country may furnish Mares at moderate price. But they are only to be bought with safety in the breeding villages whilst Fillies.

Indian Mares in general shy Breeders.

Are sold by farmers after having been empty for two years.

The Stud has suffered by purchases of Mares young and healthy, but which have not bred.

Road through the Desert not particularly dangerous under precautions; but difficult from want of water.

Hindoostanee dealers seldom venture beyond the Jungul.

The countries which most abound with Horses, are those of Bulkh and Khooloom on this, and Bokhara and Sumurqund on the other, side the Dghon, Umoo or Oxus.

The Mares of Toorkistan are represented as well adapted for breeding.

An excellent race (Moojunus) from these crossed by Arabian and Persian Horses bred at Khooloom, by Meer Quleech Ulee Khan, Chief

of Bulk and Khoom.
loom.

Sources whence Stallions have been drawn, viz., England and Asia.

Thorough-bred Horses of repute soon repay their cost in India.

And last longer than those imported whilst Colts.

The Arabian Horses at the Stud worn out.

Katheewar and Lukhee Jungul Stallions most useful and preferred by farmers to English half bred Horses from being first employed amongst them (1764) and having (till 1781) gradually become the Standard of Taste.

Certain characters compensate for gross deformity in other parts.

Particular form and direction of ears and shape, and carriage of neck essential to beauty in the opinion of the natives.

May be disregarded in a Home Stud.

But in breeding through the farmers must be observed; otherwise the Horses, however excellent, will not be made use of, and worthless animals possessing the desired qualifications be substituted to the injury of the breed.

The *Stallions* now at the Stud have been drawn from England, Arabia, and Asia generally.

The supply from England, considerable in itself, is small relatively to its object. Thorough-bred Horses, which are strong, handsome, and have gained great celebrity on the Turf in England, soon repay their original cost in this country.

They seem also to last longer by coming with their constitution formed and inured to fatigue than Colts which arrive before they have completed their growth.

The Arabian Horses now on the Stud Register are nearly worn out, and some are only fit to be given away.

Katheewar and Lukhee Jungul Horses will be most serviceable for the Mares of the farmers.

They are preferred by breeders to English half-bred Stallions.

This preference may have had its rise in these castes of Horses, originally employed as Stallions, possessing certain predominating forms, which by degrees have been acknowledged as essential to beauty. Long entertained, they are now adopted as standard characters of national choice, and are capable of covering gross deformity in parts more important to action, or to strength of constitution.

In the judgment of a native breeder, nothing can compensate for an imagined defect in the shape and relative position of the ears, in the figure, proportion, and carriage of the neck. In European estimation of the Horse, qualities of real merit are associated with certain ideas of beauty, of action, and of solidity of form.

And prepossessions of natives, resting upon a difference in the turn of the ear or in the shape and length of the neck, may be thought altogether unworthy of notice. Indeed, as far as the composition of a Home Stud is concerned, characters exciting predilections of favor or raising prejudices of antipathy amongst natives, from mere distinctions of caprice, may be safely disregarded. But if it be desirable to diffuse the pursuit of Horse breeding amongst

farmers, every thing should be done to encourage, nothing to disgust.

Hence the characters of public Stallions, to be employed on their own Mares, become an object of great importance.

For if these Horses be selected in consonance with the received predilections, they will be eagerly sought after ; if in opposition, neglected.

In a word, a judicious purchase of Parent Stock for diffusion, requires an accommodation to the prepossessions of the natives.

And the predilection, innocent in itself, involving no extraordinary difficulty in conforming to its character, is convertible into an actively efficient instrument for promoting the spirit of breeding.

Of North-Western Horses as Stallions, I speak with diffidence. The best I have seen were from Koordistan.

After Parent Stock shall have been procured, the next step will be through it to connect the interest of the farmer with the benefit of the State, on such principles as shall lay a secure foundation for an adequate and permanent supply of really good Horses.

It has been shewn that the Home Stud is too expensive, and does not extend the practice of breeding.

That the Nisfee branch extends, but does not improve the race, and that the Zumeendaree branch, though it extends, is insecure, and subject to be checked. That each has its inconveniences.

To obtain the security of the produce and the perfection of form given by the Home Stud without its expense, the diffusing principle of the Nisfee branch without its degeneracy, and to couple with these an uninterrupted accumulating extension of the Zumeendaree branch, have long been objects of anxious solicitude on my part. As tending to their accomplishment, I submit the following sketch :—

1st. That Mares be given by Government to farmers, for the purpose of breeding, along with a due proportion of Stallions to serve also the native Mares, and to be maintained by the State.

The characters of predilection easily learned ; and being found in good Horses are highly beneficial in encouraging breeding.

Most advantageous disposal of Parent Stock considered.

The Home branch too expensive, the Nisfee not adequately improving.

The present Zumeendaree insecure.

To remove the disadvantages of each system and unite the advantages desirable. Proposed

by distributing Mares along with Stallions to farmers,

under engagements to return produce on equitable terms.

2nd. That the whole of their produce be tendered, when twelve months old, to the Superintendent, or his Assistant, to select such as may be desirable, and to rate them in the class to which he may think they belong, in a scale of prices corresponding with their respective merits, and previously made known in its several amounts to the breeders; the highest price being 140 Rupees.

To keep the Mares well, and not to alienate them under a penalty.

3rd. That the farmers engage to keep the Mares well; to give them to the Horse prescribed; to bring them to an inspection muster once a month; never to sell, pledge, lend, or in any other way engage or alienate them, under a fine of double the cost of the Mares, leviable summarily under bond and judgment.

Circles of 25 Mares, &c. Establishments, Assistants, &c.

The Mares to be placed in circles of twenty-five, to each of which, one Stallion, one Horse Keeper or Nalbund to be attached. One native Register Keeper to four circles. One European Assistant (Subaltern Officer?) with one Jemadar and two Hurkarus to sixteen circles.

Indifferent produce not to be purchased.

The produce, which may appear not desirable, to be left with the breeder.

Desirable to be sent to Depôts.

That selected, to be kept at convenient Depôts, till the Colts be of an age fit for drafting to the Army, or elsewhere.

Colts of proper age to be drafted to the Army, &c.

Fillies to be returned to the Districts.

The Fillies at two years and a half old to be returned to the Districts in new circles, on the same terms with their Dams.* Although the Mares be given as an accommodation to the farmers, yet the State must retain the power of preventing abuse in treatment, or by alienation.

Precautions to prevent abuse or alienation of Mares.

* The price of 140 Rupees, it is hoped, will operate as a premium of encouragement.

And I would submit also, that silver ornaments for women, to the value of at least twenty-five Rupees, be given annually, as a prize to the farmer, who may rear the best Colt or Filly in a circle; and that this be formally announced. In villages, the care of brood Mares and Colts principally devolves upon the women and children. I very much regret that during the continuance of the Nisfee system, this idea did not occur to me. It might have been an agent of no small importance.

To guard against the first, I see no measure more effectual than resumption; against the second, than levying the fine agreed upon, with the precaution of cutting off one ear of the Mare, to make her unsaleable.

For this plan, I have reason to believe the farmers in the Eastern portion of the breeding line before mentioned are prepared; but perhaps it may not be altogether easy to get it well introduced in its Western extremity.

As when I spoke of the Nisfee system to the farmers in Rohilkhund, their expectations were extravagant—and I am aware that the price for Colts in that Province, and in the Doab, must be larger than in the lower Districts.

The influence of the Magistrates, Collectors and natives of rank, would be useful in leading farmers to commence the system, and also in pointing out proper persons as breeders.

And I should be wanting in respect to those gentlemen of the Civil Service, whom I consulted upon this subject in 1811, were I not to avail myself of this renewed opportunity of acknowledging the readiness with which they offered every assistance in their power to forward the project of Horse breeding.

It is possible that farmers may not be willing to engage in the new plan without an advance of money, on the plea of the Mares requiring to be kept nearly two years before they can obtain the first return of their labor.

In this, however, if the persons be well selected, the advance required moderate, and its return secured with interest, I see no formidable difficulty.

Other obstacles may arise in its execution. Something, after all possible combination, must be left undetermined.

Every plan I have yet revolved is open to objection.

Amongst other speculations it occurred (1811) that diffusion might be promoted at a frugal rate if good Stallions were placed at the disposal of those Magistrates and Collectors who, fond of Horse themselves, would from public motives encourage Horse breeding amongst the farmers of their neighborhood.

Resumption. Fine.

Disfiguring the animals.

This plan may be acceptable in the Eastern District, but in the Western doubtful.

Reason.

The influence of Magistrates, Collectors and natives of rank, useful in introducing it.

The former gentlemen expressed their readiness to assist in 1811.

Probable objections of farmers

may be surmounted.

Other obstacles may arise in its progress.

In 1811, diffusion of breeding thought likely to be frugally and actively promoted by public Stallions being placed at the disposal of certain Magistrates and Collectors, for the use of the Mares of the neighborhood.

And the produce reach the Army through the Commissariat.

These conclusions erroneous. For the Civil Servants could not spare time for the superintendence, without detriment to their own departments, whilst the best produce would become the prize of speculators, and the worst be offered to the Cavalry.

The Commissariat, with every possible merit, cannot obtain Horses at the age of admission worth more in the market than the Cavalry allowance.

But Horses of higher value produced by Stallions kept at the expense of the State, would neither improve the breed in the British provinces, nor be obtained by Government, but fall to the lot of neighboring Chiefs and of individuals giving more than the regimental price.

And, although the produce might not, by passing through the Stud, demonstrate the total amount in utility of the Stallions thus employed, yet proceeding through the Commissariat, it would not be less beneficial to the Army.

Closer examination, longer experience disturbed both the premises and the conclusion.

The supposition that these gentlemen could abstract from their own Department, with convenience, the portion of time necessary for well conducting this new occupation, was erroneous.

And that the desirable produce would find its way through the regular channel to the Army, was equally unfounded.

The best would be seized by speculators, the indifferent would be tendered for the service.

In the present scarcity of good Horses, it cannot be otherwise.

The meritorious exertions of the Commissariat are to the fullest extent acknowledged. But their powers are limited. They cannot procure Horses at three years old worth more in the market than the prices allowed by the Service. Yet Horses of higher marketable value than 400 or 450 Rupees might be raised through the means of Government Stallions.

And Government, in bearing a portion of the expense, have a claim to a portion of the benefit originating from their measures.

If I understand rightly, it is desirable to improve the quality of the Horses of Hindoostan, as well as to increase their numbers.

But Government, by adopting a loose general system without checks, would become the direct instrument of raising, at a heavy expense, superior Horses for neighbors and individuals, of rearing middling and inferior animals for public use.

To secure the desirable produce for the Service (I put the fact roundly, and without fear of refutation), the State must interfere by purchasing it at an early age.

This must be a branch of business committed to public servants, responsible for its being carried on solely on the public account.

The nature of the country and of the market, from the political circumstances of India, forbids it to be dispensed with for some years.

Placing good Mares in the Districts justifies the measure of *placing with them good Stallions also*, which, without the former, and of course limited to native Mares, would constitute a project, in expense certain, in expediency doubtful.

An active collection of the desirable produce both from the transplanted and the Zumeendaree Mares is ensured by the plan I have the honor to suggest.

Decidedly good produce from the former will compensate for any loss which may occur by unequal purchases from the latter branch.

And as long as one Parent is good and the other indifferent, so long must the produce selected at a tender age, by even the best judgment, be unequal and sometimes create disappointment.

It was a subject of consideration (1811) whether the pursuit of Horse breeding might not be more speedily diffused by small Stud, in suitable parts of the country, than by one or two large Establishments. Had this been discussed when raising an interior supply of Horses was first deemed expedient, the decision would have turned simply upon the proof of several situations being equally well adapted for the business. For, every thing else alike, the greater facility of diffusion must have been in favor of small Stud placed at considerable intervals, in a long line of country. The question now rests upon several points, of which the most prominent is expense. Stabling for a large body of Horses has been erected at Poosah, at Hajee-poor, and at Ghazeepoor. New stabling would be required at every small Stud, and a European Officer must reside at the Establishment; so that great expense would necessarily be incurred.

Good produce bred by farmers only obtainable by being bought when very young, through public servants employed expressly to procure it.

Transplanting Mares justifies placing Stallions in new districts, a measure otherwise doubtful.

Collection of produce from both countries ensured by the new system.

Produce of good Mares may cover loss, from purchasing that of small Mares and large, Stallions.

If breeding might not be spread more quickly by several small Stud than by one or two large ones?

In the beginning, small Stud would have promoted breeding more quickly.

But now, from stabling erected at each, and more being required at every small Stud, such a plan would be expensive.

Govt. may buy Colts cheaper from native breeders than they can breed them in Studs, besides having a choice.

Expense of raising the same in small, as in large Studs,

And though diffusion be more quickly effected by small than by large Studs, yet as this is provided for by the system of circles, small Studs become unnecessary.

Healthiness of Poosah from an acute disorder in 1810, the Kumree, the Bursatee, Strangles, and frequent casualties amongst foals, questioned.

Horses in certain situations reported free from diseases.

The Nepal and Murhutta frontier contrasted and compared with the intermediate country, whence it appeared that no situation was wholly exempt from diseases, that partial views had produced mistakes, but that some situations were more healthy than others, and that sandy and dry situations were the healthiest.

I hold that Government will never breed Colts in Studs as cheaply as they may buy them from native breeders. Besides, a purchaser takes only what suits him; a breeder must take his chance of the produce, be it good or bad.

A given number of Colts would cost the State the same sum, whether bred in small Studs or in large ones.

If the preferable propriety of breeding through the natives, and of rearing in depôts be admitted, the subject is apparently narrowed to the mere point of diffusion. And that being provided for by the system of circles, I submit whether this practice may not advantageously supersede the adoption of small Studs.

There is however another important point bearing somewhat upon this question, and deserving the deepest attention. I mean the wholesomeness of Poosah, in regard to Horses, compared with that of other places. A very prevalent disease amongst the Stock at the Stud, 1810, the frequency of the paralytic complaint called Kumree, of the hot weather sore called Bursatee, the violence of the Strangles, the large number of casualties in young Stock, led me to fear that the salubrity of Poosah in regard to Horses had been over-rated.

Reports of situations in which diseases in Horses were little common, required to be examined on the places themselves.

The country skirting the foot of the Nepal Hills, and the Murhutta frontier, afforded two lines of the strongest contrast obtainable.

Their inspection, along with that of the intermediate country, as far as Delhi, furnished some general results.

It appeared that no situation, in which Horses were kept in considerable numbers, exempted them from the diseases that obtain in the middle Provinces.

Erroneous conclusions of exemptions had been drawn from small numbers of Horses, and from views taken only at one season of the year.

But great differences as to frequency, nevertheless, do exist, and very much of the healthiness of Stock depends upon situation.

It seems proved that the more sandy and dry the soil, every thing else alike, the more healthy are its Horses.

But it must be observed also, that these Horses are generally fed with coarse dry grass, the produce of lands not subject to inundation.

And not only are they more free from disease, but their movements are more elastic, more vigorous, and better sustained.

The contrast betwixt the bounds and curvets of the Murhutta Charger, and the drawling, wearied progression of the Calcutta Arab, is scarcely conceivable.

Not prone to generalize from a confined number of facts, I cannot but fear that many parts of the Honorable Company's Provinces are less congenial to the constitution of the Horse than the country South and West of the Chumbul. It admits of strong doubt whether Poosah be as favorably situated for a Stud, as was formerly represented. With the experience I now have, I certainly would not recommend it for a *new* Stud. But with the conviction on my mind that as far as stock, accommodation and food are concerned, it has never yet been in so fair a train for succeeding as at the present moment [I mean as far as a Home Stud can succeed]; with doubts that any situation can *immediately* be found possessing the advantages it has *gradually* acquired; with doubts that Horses, in any situation within the British Provinces, will be exempted from disease, when assembled in considerable numbers, I dare not encounter the responsibility of recommending a measure of such certain expense as the *abrupt* removal of the brood Stock, without a clearer prospect of not encountering similar evils in another place.

I think Kumree not so common as it was; I am sure that diseases in the joints are much less frequent. I am willing to hope that the former may still be lessened by

Perhaps the hay grown on dry soils contributed to it, as well as to the movements of the animals being more vigorous.

The Murhutta Horse much more active than the Calcutta fed Arab.

The Western part of India seems more favorable to Horses than the British Provinces.

Poosah apparently not so healthy as was reported, and would not be chosen by Superintendent for a new Stud; but as its establishment of Stock is better than heretofore, and its acquired advantages are considerable, it is thought not advisable to attempt an abrupt removal of the brood stock.

Kumree thought not so common, enlargement of joints less frequent, and Bursatee, it is hoped, may be lessened by Stable

management, maintained
by European Grooms.

The expenses of the
Stud within the last 5
years incurred,

1st.
By buildings.
2nd.
By transfer of Gan-
jam stock.
3rd.
By increase of the
Home branch.

Decayed condition of
buildings: First Division
of Ganjam Stud bad,
Second of young stock
reported better, but really
inferior.

Increase of Home
Stud necessary.

Though expensive, yet
not to be done away
with hastily.

Valuation of live Stock
lowered, Mares sold.

Reasons for reducing
valuation given to the
Board.

Reasons for selling
Mares to breeders at re-
duced prices.

Difference between the
cost and sale price not
lost, but plumped

a different mode of feeding, and that Bursatee may be re-
duced by a more strict Stable discipline introduced and
kept up by English Grooms, a measure long advocated,
and of pressing necessity.

The principal expenses of the Stud within the last five
years may be referred,

1st. To the erection of buildings.
2nd. To the transfer and keep of the Ganjam Mares.
3rd. To the greater amount of keep incurred through
the Home Stud being much increased.

The ruinous state of the old Buildings rendered the
first article of expense unavoidable. Of one portion of
the Ganjam Stud, the transfer was ordered before I took
charge; that of another subsequently, with my decision
in its favor, grounded upon an erroneous representation
of its value.

The increase of the Home Stud was forced upon me by
a choice of difficulties; and expensive as it is, this branch
cannot safely be dispensed with till another system shall
have been settled on a basis of permanent productiveness.

Within the above period also the return of Assets has
been apparently diminished, by my having lowered the
valuation of live Stock, and by my having sold a large
body of Mares rated high in the books, at small prices.

In diminishing the valuation, I may have erred; but I
acted from motives thought correct, and submitted to the
Board.

In selling the Mares, when actually replaced by others
stronger and so far better, on an establishment then too
much crowded, the objects were,

First, to prevent further expense in erecting Stabling
for their accommodation and in keep, and

Secondly, to promote the productiveness of the Districts
by placing Mares with persons professing a desire to breed
Horses, but having not the means of giving high prices
for brood Stock.

Thus, the difference betwixt the prices rated in valuation
and those obtained, ought not to be considered as wholly

lost, but rather as a principal expended in promoting the Zumeendaree system.

And this will form, according to the rate of valuation, a very large sum, inasmuch as about 700 Mares have so been disposed of since the year 1809-10.

But this value must be taken with great abatement in regard to efficiency, as many of the first division of Ganjam Mares were very old.

Yet a great proportion cannot fail to be useful, if retained amongst the farmers; but had I anticipated so great a scarcity of Horses generally on this side of the Indus, I would have recommended that all the Mares should have been *given* under restrictions, to prevent their being carried off. Sale by public outcry was thought a test of inclination for the pursuit, and of ability to maintain the Stock, and its produce.

If Mares of a description inferior to that desirable have ever been kept upon the Establishment, the measure was one of necessity, not of choice.

No one has felt the defectiveness of the Stud in this respect more than myself; a defectiveness which seems to have escaped notice before it was announced by me, or, of which at least the previous records afford little proof.

The number removed shews to how great a degree drafting has been carried; but caution must be observed in future. If excellent Mares cannot yet be obtained, those somewhat inferior must not inconsiderately be put to risk. With good Stallions, by far the greater proportion of the Mares now at the Stud, will give better Horses than those commonly obtainable. In proof, General Officers of Cavalry apply for permission to purchase Chargers from amongst Stud produce, appropriated for the use of Troopers. The fabric of the Stud, imperfect as it may yet be, has been reared at great cost. Vacillation in Horse matters is expensive and hazardous. When a right path is clearly seen, it should be as decidedly followed.

With energy and patience, this path will be discovered, and the State be recompensed for its exertions!

The amount *nominally* large, 700 Mares being so sold.

But not *really* so great, as many were old and defective.

Still a large portion may be useful, if not carried off.

It might have been better to have *given*, rather than to have sold these Mares.

Sale considered as a test of disposition and of power to follow Horse breeding.

Defectiveness in Mares formerly not dwelt upon.

Great drafts have been made, others in contemplation, but gradually, for the present Stock will give better produce than the Horses commonly obtainable.

Increasing value of produce shewn by General Officers applying for Chargers.

The Stock of the Stud collected at great expense, and should not be put to hazard by hasty measures.

It is highly probable that with energy and steady patience, success will be attained. But Parent Stock is essential, and may be acquired gradually by importation, and by Fillies bred in the Stud and Districts.

But one measure, vitally involving the future success of *interior supply*, consists in obtaining Parent Stock of adequate quality, in adequate numbers. Suddenly perhaps this cannot be effected; but I conceive it practicable, at no very remote period, by importation and the accumulation of Stud and District bred Fillies.

Without better Parent Stock, there may exist temporary spurts of success, but there can be no permanent efficiency.

Difficulties of no slight magnitude attend the acquisition of foreign Parent Stock; but to a due combination of means and perseverance, they are not insuperable. It demands outlay of capital; it demands agency. Much Treasure has been frittered away on confined plans. It were now more wise that one large sum should be laid out with judgment on a system of expanded efficiency. And if, within a fair period under due management, this should not be adequately productive, doubts of ultimate success, under any plan, may reasonably be entertained. As yet, the practicability of interior supply has not been put to such an issue. The extent of a sufficient system must depend upon the amount of the annual demand for Horses. Thus, suppose six hundred Horses to be wanted annually as a remount for the army. It becomes necessary to ascertain what number of brood Mares and of Stallions will be required to furnish such a body of Horses, perfectly fit for the Service. This again depends in a great measure upon the fitness of quality of the Parent Stock. For, if all these be good, a smaller number will be necessary than if some be good and others bad. However, even on the first supposition, a larger body will be required than in England, because more Mares will remain empty, and because there will be more waste produce. Thus, I would allow from six to seven Mares for two Colts to attain three years of age, in a state completely suited for the service, or in the gross, two thousand Mares and sixty-six Stallions. But if the amount of Mares be grounded upon the proportion of Standard Colts with other requisite qualifications,

Good foreign Parent Stock not to be procured without considerable outlay, and active judicious Agency.

Project of interior supply not yet been fairly tried.

Supposed Annual remount six hundred Horses.

Amount of Parent Stock required to produce them depends much upon its quality, but larger than in England, to give an equal number of Horses.

ordinarily produced by such District Mares as are commonly brought to Government Stallions, the number required would be immense. Neither of these extremes should be taken; as it is not likely that such a body of excellent Mares as are included in the first supposition, can be procured at the start of the experiment, or that the whole would be as indifferent, as the general mass of farmers' Mares. Let it be presumed more probable that the number brought forward would be in equal proportion good, bad, and indifferent. According to this composition, I consider six Mares necessary to give one unexceptionable Colt at three years old, or a general amount of 3,000 Mares, with 120 Stallions, to raise 600 Army-Horses. To an English Horse-breeder, this may seem an extravagant proportion of Parent Stock; but when thrown into classes for which large deductions must be made, it may prove not so highly over-rated as it appears at first sight. For instance, let one-third of the whole number be struck off as not breeding, another be considered as throwing Fillies, and the last as giving Colts. Thus, the general number of Colts dropped would be 1,200, of which, it is presumed, one-half would, at three years old, be fit for the Service. On the whole, it is more desirable that there should be an excess than a deficiency. Let it be considered how the above number can be provided. I will suppose the Stud to supply 700, the old Districts 800, and that 500 be purchased, making 2,000, or more than one-half the general amount of mares. The deficiency remains to be furnished by the Districts. By its nature, a calculation in breeding is exposed to uncertainty; but the difficulty of approaching a true result in this instance is increased, by neither the Mares of the old Districts nor those of the Upper Provinces having yet been counted and registered.

It has indeed been stated that 1,000 or 1,200 Mares in the old Districts were annually put to Government Stallions; and it was understood that these were of standard height. And the late President, Mr. Graham, whose

Calculation from Mares.

Good, bad, & indifferent.

May appear extravagant to an English Horse-breeder, but large deductions must be made.

Mares provided from the Stud; the old Districts; by purchase, and from the new Districts.

Old Districts reported to contain a thousand good Mares.

luminous minute will ever remain a proof of the interest he felt in this branch of service, assumed this statement as correct. Reasoning upon the matter as it appeared, that gentleman placed little dependence on the Zumeendaree system, because its produce was never accounted for satisfactorily. And Mr. Trant, the actual President, following his steps, has adopted the same conclusion. This conclusion was legally drawn from the premises admitted. But the premises were hypothetical, the conclusion erroneous. The number of Standard Mares borne upon the return has never existed, but upon paper. The farmers, the Nalbund, the native writer in collusion imposed on the Superintendent, whose report led Mr. Graham into error. I have had proof of the fact. The farmers had an object in getting their Mares, such as they were, covered at the least possible expense. The Nalbund had an object in obtaining a Horse which afforded him a comfortable livelihood without risk. The writer had an object in keeping a place of little labor. A list of a certain number of Standard Mares was however necessary to be shewn to the Superintendent annually. This, drawn up with all due formality, was handed to him by the writer. And some Mares were exhibited in the neighborhood of the Stud. But the Superintendent could never find a reasonable proportion of good Colts. Imposed upon in the beginning, the delusion was continued. And having missed one opportunity of seizing the real state of the case, I am not surprized that a second was never afforded. Indeed, it is scarcely practicable to obtain a just idea of the state of the breeding Districts from a single inspection of their Mares. For at one season their number and quality seem tolerably respectable, at another so wholly contemptible, as scarcely to warrant leaving a Stallion amongst them. I have resolved to remove a Horse on the expiration of the season, and have then found a better muster than at many other Stations. Marriage ceremonies, or religious duties, or village disputes, or law-suits, or sowing or reaping, or Mares being heavy in foal, or having just

But this was not correct.

Imposition practised by servants in the list furnished to the Supt.

Number of Colts not proportioned to the list.

Difficult to procure exact lists.

in foal, or having just foaled (for a reason is never wanting.) are urged in excuse for not bringing Mares known to be in the neighborhood. In December, I deputed my private Munshi to use his utmost exertions in obtaining an exact return of the District Mares. He writes that he cannot discover the truth. Whatever be the motives of the Natives for not bringing the whole number of their Mares for inspection, it may be taken as a rule for future practice, that if the Mares of a new District be not examined, counted, and registered before a Government Stallion be accorded them, an accurate Register can never be procured afterwards.

If they be not taken before Stallions be given out, they cannot be got afterwards.

Report stated that the Provinces of Doab and Rohilkhund contained large bodies of tolerably good Mares. Anxious, by personal examination, to ascertain a fact so desirable, I took such measures as were conceived best suited to the purpose. Amongst others it was announced in the neighborhood of Barelee, that if good Mares were exhibited, Stallions would be provided. In this matter, a deservedly popular Magistrate was particularly active. But both the numbers and quality disappointed expectation. And I was not more successful in other places, although the farmers seemed desirous of resuming the business of Horse-breeding, represented as being particularly profitable, and as having been much followed about forty years ago. The search was continued at Hurdwar, in the hope of meeting better proof in Colts, raised in the Districts, and brought to the fair. Here I was again disappointed, the best Colts being uniformly represented as having come from the Lukheef Jungul, or the country west of Delhi. It was thought the Puthans of Rampoor might have purchased the young stock. But generally they declared that their Colts were also brought from the Lukhee Jungul. Altogether the impression made on my mind was, that the reports of the numbers and quality of the Mares of these provinces had been over-rated. And the decline of the fair of Butesur seemed to give additional evidence in

Mares reported to be numerous in the Provinces of Doab and Rohilkhund, but were not found so by Superintendent.

who thinks they have been over-rated.

The Western seem better adapted for breeding than the middle Provinces.

favor of the supposition. It would afford me much satisfaction to discover that I have been mistaken; and that instead of a few tolerably good Mares being scattered over a wide expanse of country, they are to be found assembled in sufficient numbers, to justify Government Stallions being placed amongst them without the expense, which would attend forming new circles of transplanted Mares. For, on the whole, the country appears better adapted for raising Horses than the middle or Lower Provinces. But, considering the small return of produce from the *past* diffusion of Stallions amongst farmers, Mares *alone* I think it prudent to ensure a certain benefit from public Stallions *in future*, by allotting to each a body of transplanted Mares, possessing qualities which admit of no doubt.

But if their Mares be not numerous and good, Government Stallions and transplanted Mares may be placed perhaps more advantageously within a smaller compass.

Yet should the Mares of the Upper Provinces be either not numerous, or not of so good quality as to give a fair chance of their first produce being fit for the Army, it becomes a question whether Stallions and circles of transplanted Mares may not be managed better, and at less expense, within a smaller compass.

Hence an account of the Mares of these Provinces is desirable, and might be procured by the Civil Officers of Barelee, Moradabad, &c., directing farmers to bring them to specified places to be inspected.

Hence it forms a preliminary measure of prudence to ascertain the numbers and quality of the Mares of the best breeding Districts, in the Provinces of Doab and Rohilkhund. I submit therefore that the Magistrate or Collector of Barelee, Moradabad, Koel and of other Civil Stations within the provinces above-mentioned, be requested to direct the farmers of the neighborhood, in which Mares are said to abound, to bring them to specified places to be inspected by him.

The object to be clearly stated, and the disposition of the owners, to take certain prices ascertained.

The advertisements to the farmers should distinctly state that the object of their being assembled is to learn whether there be Mares now of a good quality amongst them, to induce Government to encourage Horse-breeding, by furnishing Stallions at the public expense.

Descriptive Registers taken by the Magistrate, would include the present and future Stallions.

And if so, whether the owners of the Mares be willing to give the refusal of their produce to a Government Agent at twelve months old, at a scale of prices established according to the quality of the animals, as, for instance, those of the first-class Rs. 140, 2nd Rs. 120, and 3rd Rs. 90.

The class to which they may belong to be determined by the Agent.

The number of Mares of 14 hands 2 inches presented on the days of inspection, to be stated in a descriptive register taken in the *presence of the Magistrate or Collector, and verified by him.* The register to designate in appropriate columns, the number, color, age, height, marks, owner, abode, Purgana, distance from Barelee, Moradabad, Koel, &c.

Such lists, it is presumed, would afford a criterion, by which the propriety of placing Stallions in the Upper Provinces might be determined.

In recommending Captain Wyatt's journey to Guzerat, the main inducement was to procure Katheewar Stallions. But such accounts as have been received from that gentleman, hold out only a slender chance of his succeeding in this object, and render it unsafe to place dependance upon it, to the exclusion of supply from other quarters.

In the foregoing remarks, the purchase of five hundred Mares and a body of Stallions is included. I would rate the latter as amounting to a hundred, that there may be a number in reserve until others can be raised. With much attention bestowed on this subject, I have only been able to find two distinct sources of supply, *viz.*, the country from the Lukhee Jungul to Buhawulpoor or Balochistan, and that to the North-West of Kabool. After the great loss of money and waste of time to which contract-purchase has led, recourse will not, I presume, again be had to so dangerous a medium. And, after what has been urged respecting purchases of Mares from dealers, this mode must appear equally hazardous. Whatever be the event of the undertaking in regard to success, there is no more eligible method of procuring stock of proper quality than that of seeking it in the country where it is raised by an European agent, whose character is deeply interested in the result.

A too great anxiety to discover a new source of supply subjected me to a disappointment in comparison to which privations and dangers were trifles. But this error, though

Captain Wyatt's journey to Guzerat to procure Katheewar Stallions.

Five hundred Mares and a hundred Stallions required.

Two sources of supply, *viz.*, Lukhee Jungul and country beyond Kabool

Contract purchase dangerous.

Purchase by an European Officer interested in the result submitted.

Superintendent led into error by over anxiety to find a new supply. This has not disturbed the principle, nor unfitted

him for performing this duty.
See letter of Government.

it suspended a journey then in progress, has neither disturbed the admitted utility of its principle, nor, I trust, unfitted me for completing its performance. For, though Government did not approve the deviation from the line I had originally sketched, the Right Honorable the Governor General in Council has been pleased to express "that the general confidence which Government has always been accustomed to repose in you, remains unimpaired." Mr. Secretary Adams' letter, Political Department, December 26, 1812.

Good Horses have become more scarce since 1812.

Superintendent anxious to be employed where he may be most useful.

Thinks the Stud business can be conducted by Captain Wyatt and Mr. Gibb.

If the purchase of Parent Stock through me seemed expedient in 1812, the increased scarcity of really good Horses in 1814, gives accumulated force to the measure. Though solicitous to avoid the slightest appearance of the parade of profession, I must even at the risk of incurring it, request to have it remembered, that *in whatever manner I can be of most use to the object of my mission* I am anxious so to be employed. The *place*, the *designation*, are matters of indifference. To my judgment, however, it appears obvious, that the business of the present Stud may be effectively carried on and extended in a right direction by Captain Wyatt and Mr. Gibb, with the aid of younger Assistants. That temporarily relieved from my present duty, I may be much more usefully engaged in laying the foundation of a new breeding branch.

Produce of the Stud increasing.

The Stud from its present stock of Home branch Mares, and from those lately placed in the Upper Districts (amounting to above 700) will speedily possess a body of Colts much more numerous than at any former period.*

and by drafting Fillies into the Stud will increase still more.

And by giving to farmers Fillies raised within the Districts and at the Stud, upon the conditions already mentioned, the general productiveness of both the old and new Districts, will be placed upon a basis of greater security than has hitherto been known in any part of India, whilst the expense of the Stud itself will be diminished.

* The Ghazeepoor District furnished in the year 1811 53 Colts, in 1812 42, and in 1813 177.

To give full effect to the powers of the Stud in producing Foals, and in extending the breeding system amongst farmers, I submit;—

1st. That Institution be divided into three branches, *viz.*, Poosah, Hajee poor, and Ghazee poor.

2nd. That the business of breeding, collecting and rearing Colts to a certain age, belong to the two former, and that of preparing them for the Army and the market to the latter.

3rd. That Captain Wyatt take charge of Hajee poor with the Ghazee poor Distict, comprehending the breeding villages on the right bank of the Ganges, and the Doab, or tract between that river and the Dewa or Gogra.

4th. That Mr. Gibb take charge of Poosah, with the adjacent countries of Serissa and Tirhoot, and that part of the new line included betwixt the left bank of the Ganges and the Hills, the Gundhuk and the Gogra.

5th. That an Assistant be allowed to each.

6th. That a draft of Fillies, two and a half years old, and of the least valuable Mares to the number of two hundred from Poosah and Hajee poor, be placed in the new District in circles, accompanied by strong suitable Horses, according to the plan before mentioned.

7th. That a second draft of Fillies (reserving the best) from eighteen months to two years and a half old, be placed with farmers in the new District, on an allowance of two Rupees per head per month, for their keep, till they be fit for the Horse, when they are to become the property of the farmers, subject to the conditions before mentioned.

8th. That Fillies from both Studs of the ages mentioned, (article 7) till the end of the year 1815, be drafted every six months to the new District exclusively. Subsequently, that they be divided between the Northern and Southern, or new and old Districts, in circles of 25 in the former, and at the Stations of Stallions, in the number of 12 and 13 alternately, in the latter.

9th. Than when the District system shall appear in the opinion of the respective Officers, formally reported to

Submitted that the Stud be divided into three branches, *viz.*,

Poosah, Hajee poor, and Ghazee poor.

Allotment of business.

Captain Wyatt's charge.

Mr. Gibb's charge.

Assistants.

Draft of Fillies, &c., into Districts.

Second draft of younger Fillies.

And drafts every six months.

When system succeeds Mares to be drafted, also

the Board, to be so far advanced, as to afford a *fair and reasonable prospect* of succeeding, the Mares of both Studs to be gradually reduced by drafts of 25 at a time to each District. The drafts to be taken in the proportion of three Mares from Poosah to one from Hajee poor. It is presumed that a trial of two years, made through a judiciously selected body of farmers, will prove whether they be sufficiently interested to bestow upon the Cattle the attention necessary. If this attention be not steadily and generally given, it will be useless to persevere. Some other mode of disposing of the Mares should be adopted.

young Colts to be kept
at Studs.

10th. That the Colts collected from the Districts be kept till two years old at the Studs, under the influence of which they were respectively raised, and be designated accordingly in the Register and descriptive Rolls.

2 years Colts to be sent
to Ghazee poor.

11th. That all sound Colts above two years old be sent from each Stud to Ghazee poor, to be gently exercised and ridden before they be despatched to the Army, or to the market.

Europeans required at
Studs.

12th. That a European Groom be added to each branch for the purpose of instructing Native Syces, and of introducing a more perfect system of Stable discipline; and that a European be also employed at Poosah and at Hajee poor, as a general Store-keeper.

Emulation betwixt
Stud Officers desirable.

An increased trust, and an increased opportunity for displaying zeal and talent, will necessarily excite a manly and laudable emulation betwixt the Officers at the head of each branch, to have its home business executed with the greatest exactitude, efficiency and frugality practicable, and that of the Districts conducted with the diligence and activity required, to ensure attention to the Stallions and Mares, to secure the desirable produce, and to extend and give stability to the system.

Reduction of expense
immediate.

Immediate reduction of expense will follow the drafting of the Fillies and Mares proposed to take place immediately and by periodical succession. And should the Fillies be well fed, the Stud will be freed from a large expense in future. Suppose a Filly of the first quality at 12 months

old to cost Rs. 140, her keep for a year and a half Rs. 36, in the whole Rs. 176, adding the prize Rs. 25 or Rs. 201 with incidental expenses will make a total of Rs. 211, when given to a farmer for breeding. No plan can be more frugal, provided the Filly be really well fed. But it must be confessed that the Fillies were not generally well fed, either in the Nisfee system belonging to the Stud, or in that, the private property of Major Frazer, and which was under his immediate care at Hajee poor. At this moment there are Nisfee bred Fillies little more than half the bulk naturally belonging to their age and breed, from their being badly fed when very young. And to those persons who have not seen the produce of small Mares by large Horses, keeping such Fillies might seem a waste of money. But though stunted, they will be valuable in the Districts and throw foals of good size, yet inferior of course to those animals of equal original merit, better reared. Should the Fillies be ill kept by the farmers, the value of the District plan both in cheapness and prospect of improvement will be much diminished. For such a neglect would necessitate their being fed at the expense of the State, either in stables or in paddocks, till of an age to be given out. Stable feeding is expensive, and at the Stud there is not sufficient room for paddocks of a size suitable for large bodies of animals. Besides, neglect of the Fillies would be no favorable indication of attention to the Mares, and if these be ill fed likewise, though they may breed, yet degeneracy in their produce will be one consequence, and premature wearing out of the dams themselves, another. Unable to discover in a largely diffused system any more cogent inducement to good attention than the ultimate possession of the animals, I am willing to hope that the influence of natives of respectability may prove a useful auxiliary. The aid of natives of rank in encouraging Horse-breeding, has, I think, rather unaccountably been either over-looked or under-valued. They have it in their power to promote the pursuit amongst their farmers and relations, and would feel flattered if called upon personally to exert

Plan frugal if stock be properly kept.

Hope of possessing the Mares an inducement to keep them well.

Influence of natives of rank may be useful.

Meer Jaffeer Shah, a respectable Moosulman, and Joolal Singh, a Hindoo Zumeendar, have offered to point out trust-worthy farms and to overlook the Mares.

Their letters are not aware of it being intended to give Mares, but prepared for their being sold at low prices for the accommodation of breeders.

Shah Ahmed Ulee Khan and Hindoo Zumeendars of large property have personally declared their readiness to co-operate.

The advantage of some title from the King of Delhi to Meer Jaffeer Shah submitted or that the Suplt. be empowered to hold out this remuneration, in case of his efforts being considerable and successful.

The Stables and Riding School at Ghazee-poor having been prepared, submit that Mr. De B'Chang be relieved at Hajee-poor.

themselves in the cause. Impressed with a persuasion of their ability to be useful, I have endeavored to interest some of those who have property in the lower District. And in consequence, a respectable Moosulman, Meer Jaffeer Shah, and a Hindoo Zumeendar, Joolal Singh, are ready to afford every aid in their power. They have each offered to point out farmers worthy of being entrusted with Mares, and even to superintend occasionally their conduct. And I beg leave to lay their letters to me on this subject before the Board. Private motives may be imputed to them, as an increase of influence, or even indirect pecuniary benefit. Disinterestedness certainly little belongs to the character of the natives; however, these persons are even now wholly unacquainted with the project of giving, and believe that Mares are to be sold for diffusion, under restrictions, at stated prices. And on this idea, have offered to become securities for the payment of the purchase money of about fifty Mares, and for the fulfilment of the contracts by certain individuals. Meer Jaffeer Shah first entered into the cause at my private request, influenced perhaps by my declaring that if, through his means, the people in the new district should become successful Horse-breeders, I would publicly acknowledge his merit. In consequence of his representations, other Moosulmans and Hindoos of large landed property *personally* at the last Hajee-poor Fair, declared to me their willingness to forward the diffusion of Horse-breeding, after the example of Meer Jaffeer Shah. The matter is important, and I beg to submit that if Government would be pleased to allow of some title being granted by the King of Delhi to Meer Jaffeer Shah, it might have great influence upon him and upon others who will take his conduct as their guide. Or, should such a step be thought premature in this stage of the business, I request to know whether I may be authorized to hold out this remuneration as probable, in the event of his exertions proving satisfactory. The Stables and Riding School at Ghazee-poor, have long been prepared, but a succession of causes with which the Board are fully

acquainted has detained Mr. De L'Etang at Hajipur. It is submitted that this gentleman be relieved, and take upon himself the charge to which he was appointed, as there is now a considerable body of Colts requiring a degree of exercise, which cannot as safely be given, as under his care.

I have had the honor to present to the Board a sketch of a project of Horse-breeding on a very extensive plan, and which, from being particularly advantageous to the farmer, may in time become popular. Increase in number, improvement in quality, moderateness in price, and permanency in practice, have never been lost sight of in its construction. Breeding Colts by means of the natives, and rearing them at the expense of the State, have been insisted upon as necessary for obtaining Horses of good quality, at a reasonable rate. Diffusing the business of Horse-breeding by the assistance of the State in Stallions, by brood Mares, and by a fair price, have been considered likely to ensure good produce, adequate number and permanency. The two former points may be looked upon as established, the latter as subject to doubt. I have advocated the practice of *extensive diffusion* amongst the natives, as multiplying resource, as diminishing chances of injury, whether of natural or political origin. But it remains to be seen, whether *diffusion* in its most advantageous form have not a *less extensive range* than my reasonings or plans may have suggested. For I have projected a general breeding line from the Great Gandhuk to Hurdwar. This must, however, be taken in a comprehensive and not in a literal sense, that is, as a line of Stations at irregular and considerable distances, and not as an uninterrupted series of villages, each more or less occupied in breeding Horses. Great chasms must occur, as for instance by the intervention of the State of Oude, and of other tracts not eligibly situated for the pursuit. It was represented as *one* line in the view of security from inroad, but in relation to the direct object, it would have been more suitable to have stated it as broken in its

Objects of foregoing plan.

Increase, improvement, moderate price and permanency.

The latter doubtful. Extensive diffusion why desirable.

But may be carried too far.

Breeding line.

Consists of an upper and lower portion.

centre, and thus consisting of a lower, and an upper portion. In the lower portion I recommended the experiment of diffusion to be tried immediately, because the Stud actually possesses a body of Fillies and of Mares applicable to the purpose; because it will reduce expense, and put the principle to the test, whilst Parent Stock be collecting either for following the same, or some more eligible plan in the Upper Provinces. Restricted diffusion, if not a contradiction in terms, may seem to imply a dereliction of the principle held up as that most congenial to circumstances. This, however, is not so in reality, but it is incumbent on me, in advancing facts and arguments, to support a proposed system, not to suppress those which may shew its weak parts. A heavy responsibility attaches to projecting a plan of such importance to the public interest as is the raising an *interior* supply of Horses for the Army.

The Stud, from a small beginning, grew to a considerable bulk in animals and expense, before its constitution was found to be radically defective. Had more time, more foresight, more combination been employed in the outset, there would probably have been less necessity for new measures at the present moment. It becomes therefore now more especially necessary, to examine with severity, the principle upon which a new practice is about to be founded, that must involve considerable expense. It may be asked whether great diffusion may not be accompanied with great inconvenience. And whether a modification between the confined and expensive Home Stud, and a system so widely extended as that which has been submitted, may not, in relation to the *Upper Provinces*, be better adapted to the public interest than either the one or the other. To the first query it may be answered that an extended line of breeding system certainly requires a corresponding line of Agency, to superintend the Stallions and to watch and to collect the produce. That much time will be absorbed in travelling from one breeding point to another, if the produce be collected by one person, as ought to be the case for some time. And in this manner, as well as in

Diffused system fit for the latter.

Reasons.

Less diffused system perhaps preferable in upper portion.

Reasons.

Expense.

conveying it to the Depôt expense must be incurred. To guard against misapplication of good Stallions to bad native Mares, it is proposed to attach to each Horse a certain number of transplanted good Mares. To this there seem objections. For, if a farmer grow tired of the pursuit and neglect the Mare given to him conditionally by Government, or if from ignorance she be suffered to get out of condition, the only remedy is to resume the animal. I say the only remedy, because direct abuse or mismanagement would be proved and punished with equal difficulty. The Mare resumed and out of condition must either be disposed of at once, on the same terms to another farmer, or be kept by the State till her condition be re-established. In the former instance a suspicion of her constitution being bad, or of her being barren, takes possession of his mind and checks his exertions. Fearing an inadequate return for his labor, he acts so as to deserve it. Thus, a Mare valuable in herself, but degraded by mismanagement, may be lost to the State unless carefully fed, and this involves expense and loss of time. I speak from what I have seen in the Nisfee plan, as the result of ignorance, or mismanagement, and even of contractors sometimes throwing their Mares purposely out of condition, rather than acknowledge with candor that keeping them longer would be inconvenient. Agreements with penalties on breeders suffering their Mares to get out of condition were insufficient to ensure steady attention. Small fines were disregarded, large ones could not be levied, because the benefits on the contract were only moderate, and the contractors poor. And to have raised their profit so as to have justified a large fine, would have destroyed that frugality on which the merit of the Nisfee system mainly rested. Besides, the practice of diffusion could only proceed upon the basis of encouragement; to have attempted it through coercion would have been equally futile and oppressive. It was conceived that an increased profit would give steadiness of attention. This was tried and failed. Unsteady in its progress as at its commencement so

Injury done to Government Mares.

As in Nisfee plan.

Which was always unsteady.

the Nisfee plan continued, till the contract was finally dissolved.

Europe Horse-breeding is *lasting*.

In India *fugitive*.

Most important point, and requiring strict investigation.

In most parts of Europe, when Horse-breeding has been once well established, the pursuit is ordinarily continued for a long period, unless interrupted by some great local or national calamity. But in most parts of India, Horse-breeding, on the contrary, has had a character *remarkably fugitive*. Different periods in the History of the Moolhummudon Emperors of Hindoostan show the facility, nay the rapidity which breeds of Horses have declined, the difficulty with which they have been maintained. And the uniformity of the effect, proves the uniform prevalence of the cause. This *want of permanency in breeding* is well worth investigating. It bears importantly upon the question of preferableness of system. It shows most clearly that in former plans something of essential consequence has been overlooked or neglected. If stability be not given, *interior* Horse-breeding will be illusory. Existing only for a short period, it will in fact be only a more expensive, protracted form of foreign supply.

In India Horse-breeding appears to be somewhat lasting on mountains, somewhat flourishing in grassy wilds* and in the oasis † of sandy deserts. This would induce an idea that it is not happily associated with agriculture, and if this supposition were founded, it would operate against the system of diffusion through farmers. But it must be taken with allowance. Perhaps Horse-breeding ought to be a *business of itself*, and might be more successfully carried on by a people, almost exclusively devoted to the pursuit, in a wild country, than by those who have long made farming their primary occupation. Were it desirable to raise a body of cows, or of sheep, or of goats, to almost any amount, it would, in comparison with Horses, be speedily effected, because the *agents* are at hand. Castes of people are set apart for these vocations. But there have been no castes appropriated exclusively for breeding Horses.

Castes of meat-herds, sheep-herds, and goat-herds.

But no castes of Horse-herds.

* Murhutta country.

† Beekaner, Buhawalpoor.

The Horse was no favorite with the Hindoo law-givers,* or they might not have known this animal in its most attractive forms. This neglect, in my opinion, has had more weight in preventing Horse-breeding becoming popular than the influence of climate, of food, or of situation. Horse-breeding has, as far as I can learn, ever been looked upon by the Hindoos as an adventitious, casual pursuit, unprescribed, and permitted rather than authorized. A Hindoo Rajah possessing a large tract of Country, under the Moolhummudan Government, was compelled to maintain a body of Horse for purposes of police, of defence, and of compelling payment of revenue from refractory tenantry. He found it advantageous to raise Horses by keeping brood Mares himself, or by his farmers, and relics of the custom are still found with some of the border landholders. But now relieved from such necessity in general, the great landholders of the interior find it less troublesome to buy the few Horses they require, for convenience, or parade, than to breed them. Diffusion of wealth amongst the middle orders of landholders has created no marked desire for possessing Horses. The peasant enjoying full protection in his person and property, and living near his market, finds perhaps a surer return in the produce of his field than in Horse-breeding, or rather, one that demanding less constant care is better suited to his natural indolence. A spirit of Horse-breeding is indeed occasionally excited by a view of the profit returned in a good Colt. But a continued series of success is required to support it. Under a reverse it makes no struggle, but languishes and disappears.

It is not mixed with religion.†

* They were probably aboriginal of the plains of India, for if they had come from any Horse country, they would have brought with them some proof of that fondness for the Horse which is found amongst its inhabitants.

† The Hindoo hierarchs considered the sacrifice of the Horse as the most noble, the most purifying, next to that of man himself, and yet they did not make breeding Horses a business of caste. Did this omission originate in advertency? Were all fine Horses bred in other countries?

This omission unfavorable to the pursuit.

Hence Horse-breeding casual, fluctuating, and fugitive.

Wealthy Hindoos formerly kept brood Mares.

Now buy and do not breed Horses.

Horse-breeding not mixed with religion.

Would flourish if prescribed by the Brahmuns.

Were a Brahmun to discover a reading of the Shastras prescribing the pursuit of Horse-breeding to some widely diffused caste of Hindoos, and this were credited, it would only be necessary for Government to find the first materials, and to collect the produce. By an impulse once given through religious authority, the supply would keep pace with the demand, and stability would be ensured. But as things are, *the fugitiveness of the race* throws a doubt upon the lasting success of every plan of breeding, save that perhaps, which retains a property in the Mares. The whole subject involves much difficulty. In Europe, demand may create supply through the want being made public, but in India though the raw material be at hand, the mode of working it not difficult, and the profit certain, more still is sometimes required. Prejudice must be uprooted, or neutralized, or satisfied. In England, Stallions are kept for the use of the public, by individuals of all ranks, from the Prince to the farmer. No feeling of indelicacy is raised by earning money in this manner. But no Moosulman of reputation, no Hindoo of respectability will keep a Stallion for hire. Shame deters the former, caste prevents the latter taking money for such a purpose.

In England Stallions are kept for hire by persons of rank, in India only by people of the lowest order.

Stallions kept for hire by wealthy land holders would much promote permanency of breed.

Yet the Moosulman is a slave to licentiousness, the Hindoo to the desire of wealth. Could the *practice of keeping Stallions for hire* be introduced amongst respectable landholders, it would contribute to *increase breeding* and to *give it permanency*. Their interest would induce them to encourage amongst the farmers an occupation directly beneficial to themselves. But hitherto I have aimed at this in vain. Several have promised, but all have shrunk from the performance, even when they have been offered the loan of Horses belonging to the Stud.

Stallion-keepers, Rajpoots and Moosulmans.

A caste of Rajpoots, a dissipated class of Moosulmans are now the keepers of Stallions for hire. When not furnished with good Stallions from the State, they purchase Horses

Or, was it supposed that Horse-breeding could not flourish in India, or was unnecessary? If there exist a clue which could lead to the cause, the research would be not devoid of interest.

on their own account, and barter their services for trifling fees in specie, food and clothing. But *never* having the means of buying *good Horses*, and being greatly *deficient in judgment*, such animals as they do procure, *accelerate the ruin* of the breed. Under the Moolhummudan Government, Horses were given from the Emperor's Stables, as stallions. Nobles and wealthy landholders distributed also old or lame Horses of high caste for the same purpose, and some even maintained one or two, at their own expense, for the Mares of their relations, retainers or tenantry. The same custom is continued by the Sikh Chiefs and by the Murhuttas. And a few respectable natives in the British Provinces occasionally allow the use of a Horse to the neighboring farmers *gratis*, but the practice is almost worn out. By the present Zumeendaree system the State is placed in the predicament of *continually supplying* public Stallions, or of leaving Horses to be *supplied by Nalbunds*. If the supply of Stallions keep not equal place with the increase of breeding, the check will un hinge the confidence and damp the exertions of the breeders. And the prime cost of good Horses is heavy, the waste is great.

Stallions given by
Moolhummudans.

If Government abandon the supply, the Nalbund will come forward with his Horse, and by his means, a race, improved at great Public expense, will become dwarfed into Ponies in two generations. Thus the case comes to this issue. Either a supply of public Stallions must *continually* be furnished or the *improved breeds* will be lost.

And Horses must on the present system be constantly furnished by the British Government, or the breeds will soon be lost.

The Moosulman Nalbund was called from the western into the middle Provinces by Bulwunt Singh, and his race has remained there ever since. The Hindoo Nalbund is an interloper. In the Western Provinces he is of the Bhat or Bard caste. In the lower, called Oobdesee or foreigner, he is a Rajpoot of inferior caste, of ruined fortune or blighted character.

Nalbunds or Horse
keepers.

Nalbunds receive the same fee for a Mare of 13 hands as for one of 15. For negotiating the sale of a Colt for 50

Fees.

Rupees, as for one of two hundred. Thus, all their interest turns upon the *number* of Mares brought to their Horses and the *number* of Colts they sell for the breeders.* They have no interest in improving the *quality* of the breed. Hence they take no pains to prevent *improved* Fillies being carried off. Hence they care not how bad their Horses are, if by being favorites with the farmers, *many* Mares be brought to them,—and hence, when left to themselves, they invariably *ruin* the breeds of Horses in India.

But the *permanency* of good breeds is essential to interior supply.

But to *secure permanency* to breeds of Horses when *improved* to a desirable *point*, is essential to the success of *interior supply*. If this *permanency* cannot be acquired, it would be wise to put an end to farther expense in Horse-breeding.

If not attainable it would be politic to abandon Horse-breeding, and to secure an *interior supply*.

It would be more advantageous to employ the money expended on this object in opening a direct intercourse with the Horse-breeding countries, and in securing a safe passage for Agents, or Horse merchants by treaty † with the intermediate States. And it would be politic, in a decided manner, to encourage breeding in Jungul and the desert of Beekaner.‡

But all North-Western Horses cannot bear hard work in the hot months in India.

Examples in the reigns of Sooltan Mulmood Ghuznuwee.

But it is important in a military view to reflect that there are few breeds of Horses *raised* in the North-West, which can work with vigor during the hot months, in India. Sooltan Mulmood Ghuznuwee was obliged to withdraw his foreign cavalry from service during the hot season, whilst his nephew, with a body of cavalry, reaped in the country, constantly kept the field.

* At the late fair at Hajepoor, there were more than three thousand Horses, the greatest part bred in the Districts. Of those I could not find *one in a hundred* fit to buy. This fact proves *attachment to numbers* and *neglect of quality*. It points out also a necessity for rendering the public Stallions more useful to the State.

† The result of the late missions leads to a belief that this is not impracticable.

‡ As to Horses brought by sea, the freight of each from the Persian Gulf will be two hundred Rupees, and if stowed close during bad weather, some will probably be farcied and glandered, as occasionally happens to Arab Horses imported at Calcutta.

Sooltan Babur, who was partial to Toorkee Horses, always allowed two to each Trooper, to lighten their work in the hot weather. The Nuwab Sirbuland Khan in the reign of Furrokh Siyur gave three Horses to each Trooper, and was always victorious. When the pay of the Trooper was reduced in the reign of the latter Emperor so low that he could only afford to keep one Horse, Usud Khan, the old Wuzeer of Alumgeer, exclaimed, "Alas! in a short time the Murhuttas will conquer Hindoostan, for their cavalry will be superior"!

And in regard to the Lukhee Jungul, it must be remembered also, that it is always exposed to a sweep from the Sikh Cavalry.

That a *supply of Cavalry Horses* can be raised by the *diffused system* proposed, I have little doubt, but I entertain great doubts of *its permanency*.

Referring to the necessity of *providing Stallions* by the State, to the probable expediency of providing a certain number of Mares also, to the expense of collecting produce on an extensively diffused system, and to the want of permanency in the breeds of Horses in India, I am led to examine the relevancy of a plan on a more limited scale. The principles of breeding through the farmer, of rearing by the State, belong to both; the difference consists in extent, probable expense and permanency. Facts seem to show, that amongst Hindoos no occupation has yet reached a high degree of perfection, has even had a permanent character, which has not been carried on through the channel of caste. Though there be no *caste* of Horse-breeders, yet, under patronage of Government, a *Colony* of Horse-breeders may supply the deficiency. The famine-stricken districts might perhaps furnish the means. The Bhuttees, or inhabitants of the Lukhee Jungul, first Hindoos, then Moosulmans, now followers of Nanuk, have been sufficiently plastic in matters of religion, and perhaps may be equally ductile on other subjects. Their Chief, Rana Lukhee, settled in the Jungul in the reign of Sooltan Mahmood

Sooltan Babur.

Furrokh Siyur.

Anecdote of Alum-
geer's Wuzeer, Usud
Khan.

The Lukhee Jungul
accessible to the Sikh
Cavalry.

The diffused system
may give a temporary
supply, but its permanency
is doubtful.

A more limited system
suggested through a Colony
of Horse-breeders
from the famished countries.

The Bhuttees

guz under Rana Lakhee (son of Jauhanera) in the reign of Sooltan Mahmood Ghuznuwee and became Moosulmans and Horse-breeders.

Latterly their Horses have declined.

And they themselves have suffered from dearth.

Submitted that a tract of waste land belonging to Government, in Hariyana, be appropriated to Horse-breeding, and that Horse-breeders be invited to settle upon it by leases of land rent-free.

Centre for enclosures, and forage; and broad exterior belt for Horse-breeding villages.

Raising Horses might be more useful than a money rent.

The Bhuttees might perhaps become settlers.

The Resident at Delhi in 1811-12 saw no objection to the project.

Suppl. directed by Government to present a plan, but wanting positive

Ghuznuwee, and became a Moosulman. He established 360 villages, and having procured a great number of Tazee Horses, ordered his subjects to commence Horse-breeding; an occupation their descendants have continued steadily ever since.

Their Horses, like those of every part of India, have declined both in quality and number, since the decline of the Moohummudan power.

Within the last three years, these people have suffered much from scarcity.

Government, if I understand rightly, have, at their disposal, extensive tracts of waste land in Gorukpoor and Hariyana.

Suppose a district of a suitable description in the latter Province, for instance, were set apart for the purpose of breeding and rearing Horses, and it were properly notified that persons of any country who had been in the habit of breeding Horses should have leases or grants of land, rent-free, on condition of their bringing and keeping good Mares, and as long as they should continue so to do.

Suppose the centre of the Estate appropriated for buildings, enclosures for Cattle and Forage, and a broad exterior belt given up as the site of Horse-breeding villages, each under a head Zumeendar, answerable for their Police.

Perhaps such an appropriation might be more useful to the State than a money rent from the same surface under cultivation.

The Bhuttees, latterly better acquainted with the British character, under an assurance of protection, and of meeting with a steady price for good Colts, might become settlers.

The Resident at Delhi, to whom the project was submitted, merely as a suggestion in 1811-12, saw no objection to it being acted upon.

And on it being mentioned in the same manner to the Board, I was directed by Government to present something specific on the subject. But without having inspected the

country as to its fitness, I can go no farther with safety than offer an outline of a measure. To attempt detail might produce error.

Reports from individuals who have resided in Huriyana represent it favorable to the health of the Horse, favorable to Horse-breeding, and its latitude and vicinity to the Lukhee Jungul, render this probable.

But reports and analogies must be verified by severe inspection of the country itself, and of its animals.

If it be really more favorable than any part of the British territories I have seen, this will compensate for many other inconveniences, as the loss by Foals dropped weak, by those which die when young, by those which are blemished, in a word, by waste produce, is seriously large, in the middle Provinces. As a frontier, Huriyana has both disadvantages and advantages. The former are obvious. But though a frontier, it is not far distant from Military Stations, and in the only direction, perhaps, whence danger could come, there is one considerably in advance.

As being not greatly distant from the Jungul, the migration thence would be neither tedious nor expensive. With a motive so imperious as scarcity, with temptation so strong as land, and encouragement in their usual occupation, perhaps little more than a proper notice would be requisite to obtain settlers. I speak from what I have seen; from the value the subjects of neighboring native powers attached to the Justice, the protection and the benevolence of the British Government.

On the immediate advantage of having villages inhabited by persons, who, for many generations, have followed the business of Horse-breeding, there can be only one opinion. To such the pursuit would be a primary object, and not an *appendage to farming*, as at present. Objections may lie to the character of the Bhuttees, which is said to be thievish, but this is also that of the inhabitants of Bhojpoor, who breed the best Horses in the Upper Districts.

local information, can only submit a suggestion.

Huriyana said to be healthy for Horses.

If so, will make up for many inconveniences, as the loss by waste produce in the middle Provinces is immense.

Huriyana, as a frontier, has both inconveniences and advantages.

Inducements to foreign settlers are strong, and the benefits of living under the British Government fully valued by the subjects of the neighboring native powers.

The Bhuttees as having been Horse-breeders would be particularly useful, said to be addicted to thieving, as also are the inhabitants of Bhojpoor who are the best breeders in the Upper Districts.

posed in Huriyana.

By purchasing Colts better Horses may be had, but whether cheaply, depends upon the fitness of the Country.

Colts of the Jungul Beekaneer and Buhawulpoor might be kept at Huriyana. Puthans of Rampoor at present obtain a large number.

They sell the best to the Dukhun and offer the others to the Cavalry.

A Colony in Gorukpoor might not be as healthy or have settlers quite as fit for the pursuit.

Nisfee system might succeed with them.

The Bhuttees have been mentioned as particularly desirable, but of course it is not meant to exclude Sikhs, or other persons, who may have been engaged in rearing Horses.

After breeding Horses in the Company's own Provinces, the measure next in advantage consists in obtaining a command over the best Colts of the nearest breeding countries. For such Colts are frequently to be obtained at 10 to 18 months old, for low prices, and will, when three years old, form Horses far more valuable than any that can be procured of the same age, for the Army price. But whether this may prove a cheap method of providing Horses, will depend upon the healthiness of the country for Horses, and the price of Horse keep, as well as upon the original cost and judicious selection of the Colts. However, from Huriyana, an influence might be extended into the Lukhee Jungul and even to Beekaneer and Buhawulpoor, that would give a fair participation at least in the best produce of these countries; and for this I have laid a foundation. At present the Puthans of Rampoor obtain a large portion of the Colts of the nearest Districts, the best of which they sell in the Dukhun, and the remainder is employed in the service of Native Chiefs, or is offered to the British Cavalry. What I learned from the Horse-brokers of the Jungul and other sources, led me to believe that, with due management, the purchase of the best Colts of these countries might be effected; and this acquisition would form a very useful appendage to the Huriyana branch.

In Gorukpoor a Colony might be formed with more convenience perhaps than in Huriyana. But it is feared that the country is not equally healthy for Horses, that the settlers procurable are not equally fit for the pursuit. For in Gorukpoor the breeders would be Zumeendar Brahmans, Rajpoots, Mishurs and other classes of Hindoo husbandmen, or Moosulmans; persons, in fact, who take up Horse-breeding occasionally, and as a secondary object.

With these the Nisfee system might succeed more completely than heretofore, or than any plan hitherto adopted

Because holding land would ensure more attention to the stock, and this would prevent degeneracy for a time. But through *such breeders* improvement could not be steadily progressive, could not be permanent. It would last no longer than whilst actively supported by Government. Left to itself the breed would disappear, even if the Mares were given to the farmers; for apprehension of disgrace would prevent respectable men keeping good Stallions for hire. As soon, therefore, as the Government Stallions would be worn out, the indigent Nalbund would bring forward his bad Horse, and *degeneracy must follow*.

but improvement would not be perpetuated.

The Nalbunds would spoil the breed.

To remove the Nalbunds would not remove the evil. Other people of low castes would supply their place. The same cause would produce the same effect. The breed would perish.

Let us take a summary retrospect of what has happened respecting Horse-breeding in India, under the Moohummudan Emperors, under Hindoo Rajahs, under the British Government.

Retrospect of Horse-breeding as patronised

The Moosulmans tried it on an extended scale, and if they left the breeds to themselves, even for a short time, found that they invariably declined, as in the beginning of the reign of Sooltan Ala-ood-deen Ghoree, after the death of Feroze Shah, and in late days, after that of Hafiz Rahmut.

by the Moosulmans

The Khumbaet Rajahs formed a breed, the Katheewar, at an expense almost exceeding belief. This has lasted longer than many others, from local circumstances, and from its former extension, but now touches upon its ruin.

by the Khumba Rajahs,

The race established by Rajahs Bulwunt Singh and Cheyt Singh, after having been maintained by fairs, and by annual importation of Stallions and Mares for 17 years, left merely faint traces of its former existence, only 15 years after the accustomed support was withdrawn. The Honorable Company have encouraged Horse-breeding or 19 years, and there is, unfortunately, no reason for

by Bulwunt Cheyt Singh,

and by the Hon. Company.

supposing that the improvement in breeds effected by them is likely to be more lasting than that produced by their predecessors. Arguing from events which have passed under my own eye, I fear its decline would be even still more rapid, and that if left to themselves, the breeding Districts would, in a few years, be as completely stripped of good Horses as if none had ever been raised within them. At present, *improvement* is maintained in points, by continued, by expensive exertion; *degradation* proceeds generally and steadily; without expense, without effort.

Horse-breeding hitherto *fleeting*.

By proofs from History, by events now passing, the *fluctuating*, the *fleeting* character of Horse-breeding, up to the present day, is sufficiently made out. The fact itself shows the right method of managing Horse-breeding never yet to have been adopted. It indicates the necessity of taking better measures, or the policy of quitting the pursuit. It is conclusive against the mode, but not against the object. Through a different mode the object may be attained. But the effect must be traced to its cause. This, clearly detected, will develop the principles on which an efficient system of Horse-breeding may be securely founded. The debasement, the destruction of breeds of Horses are traced to practices the result of prejudice in Zumeendars, and this again to the want of a *Horse-breeding caste*.

New measures necessary to secure its permanency.

Cause of decline and destruction of breeds.

Remedy.

If then the destroying principle originate in the want of a *caste*, the preserving principle may be found in a proper *substitute*. And if a *Caste* of Horse-breeders cannot be created, a *Colony* of Horse-breeders may supply the deficiency. Thus though denied the powerful agency of the former, one little less available may be found in the latter.

A Colony of Horse-breeders likely to raise an improved breed.

For next to *caste* the possession of land has the most powerful influence on the native of Hindoostan. And if a *Colony* be placed in a favorable situation; if the *Colonists*, properly selected, hold an interest in the soil, only

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through Horse-breeding, all the desirable consequences of *caste* will ensue.

Continual occupation in one remunerative pursuit, at the same suitable place, will gradually bear down every prejudice that may now oppose progressive improvement. Respectable landholders will find it their interest to keep Stallions for hire, and a sufficient and permanent supply of good Horses will be secured to the State.

To render improvement progressive, and to give an adequate and certain supply of good Horses.

WILLIAM MOORCROFT,

Supdt. of the Honorable Company's Stud.