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Friday, June 4, 1886.

LIEUT.-GENERAL SIR FREDERICK FITZWYGRAM, BART., M.P.,
in the Chair.

A RESERVE OF HORSES.

By Colonel F. G. RAVENHILL, R.A., &c., &c.

ONE of the most widely accepted principles in the requirements of modern war is the necessity for a rapid mobilization of all arms.

In this country we have our regiments, batteries, and troops of the 1st Army Corps, the establishments of which are kept up, to a certain extent, in a matured state of preparation for active service.

Then we have the troops forming the 2nd Army Corps, for which certain defined establishments are laid down, with a third section of our forces belonging to no particular army corps, which are on the lowest scale so far as their strength goes.

As regards the personnel of the Army, we have our dépôts for men with reserve forces, and to supplement these an organized Militia and Yeomanry, with thousands of Volunteer artillery, engineers, and infantry, certain medical staff and hospital corps.

To supply material we have our arsenals, magazines, dépôts, and stores for arms, ammunition, camp equipment, and clothing, with a highly trained though numerically small Ordnance Store and Army Service Corps for their issue.

But with regard to any reserve of horses—or even procuring the same—there is no provision, and our organization under that head is altogether deficient; for though an impress of carriages and horses is sanctioned for the transport of baggage, &c., by the Army Act of 1881, no machinery exists for its application.

Hitherto we have blindly calculated on our own country being able to furnish us with horses in time of need—but even in peace-time these resources fall altogether short of the ordinary commercial requirements, as shown by the Board of Trade Returns, from which it appears that, exclusive of Ireland, in the past decades our imports and exports of horses have been as follows:—

	Imports.	Exports.
From 1876 to 1885 inclusive	177,058	51,127
" 1866 " 1875 "	80,603	41,264
" 1856 " 1865 "	20,829	34,539

The Returns only give the five years previous to 1856—

From 1851 to 1855 inclusive	21,936	11,875
Then for the year 1851.....	3,443	1,526
" 1841.....	339	4,538
" 1831.....	1,063	718

The greater part of these importations have been from foreign countries, whereas if once the trade were properly developed with our Colonies much of that supply might come from our own Colonial stock.

I have had reason to think that Ireland has been falling short in its supply, and learn that during the year 1885 there were no less than 2,487 horses imported into that country, showing that even there the supply does not equal the requirements—it is true that the exportations have been very large, reaching to almost 25,000 during each of the last two years.

The consequence has been that when a sudden demand for horses has set in, we have been at our wits' end to know where to find them suitable for war purposes, and have had to take any supplies procurable.

On reference to the latest War Office Returns it appears that the number of horses required to complete the full establishment of regiments of cavalry, batteries of artillery, engineer troops, infantry, and general transport of—

The 1st Army Corps is 11,483 exclusive of 1,571 Officers.		
The 2nd Army Corps 11,483	"	1,571 "
Or a total for two		
Corps d'Armées .. 22,966	"	3,142 "

The number of horses in the possession of Government for this financial year, exclusive of those in India, is shown as 14,151; but from this must be deducted 1,200 employed at other stations abroad, reducing the number at home to 12,951 horses.

From this last number must be deducted those too young, too old, also the sick and lame, or allow 20 per cent., say 2,580

Leaving a total effective of 10,371 only,

or about 1,100 horses under the number required for one army corps, and 12,600 for two, exclusive of Officers' horses.

Where lines of communication have to be maintained 2,773 additional horses are required for each army corps, making a total deficiency for the two of 18,100.

For the completion of only two army corps with their lines of communication there is a deficiency, as shown, of 18,100 horses; and in addition there should be a reserve to feed the waste of one campaign, 40 to 50 per cent., or say 9,000 more: in the Crimea our waste amounted to 80 per cent. per annum.

The men for one army corps could be mobilized in three weeks;

but it would take a much longer time to procure the horses necessary to complete even that one small fighting body.

In 1882 it took seventeen weeks to procure 1,700 horses, which was below the numbers required to complete the establishments.

At the same rate it would take 170 weeks to complete the establishment of horses for two army corps—and we should still have to provide for the remaining requirements.

It is true that delays arose in the arrangements, which may not recur in the future, but in the absence of any well-matured organization the purchasing of suitable horses in any numbers must necessarily occupy a considerable period.

By the latest Census Returns it is shown that there is a total of horses in—

Great Britain and Ireland of	3 millions.
Of which there are employed in agriculture ..	2 ,,
And privately or in trade about	1 ,,

After deducting those too young or too old, the too small, too big, and those unsound or otherwise unfit, there would be only 70,000 horses available; in this number are included the high-fed London carriage horse and the well-stalled hunter. Could they be purchased, or, if they could, are they suitable to the exposure of active service? My calculations reduce the number to less than the 70,000.

To admit of rapid concentration some well worked out scheme of supply is essential for success, and in considering the question it must be remembered that horses to go on a campaign should be seasoned, if not duly trained in a military sense.

If our cavalry is to scout and outflank an enemy, or our horse artillery is to be capable of making forced marches and rapidly moving to the front to hold positions in support, we require a body of horses available which are full of keep and muscle—with heart for their work, as we cannot expect green, fat, unformed animals direct from the graziers or dealers to be able to make long marches or gallop to the front with our telegraph wagons and signalling parties. This opinion of the necessity existing for seasoned horses where hard work is required of them is supported by the experience of the largest employers in the kingdom to whom I have referred; and even for their steady work a period of preparation is found necessary.

Some of the leading jobmasters.....	say 2 months.
" " cab-owners	" 2½ "
" " omnibus companies	" 1½ to 2 months.
" " railway " ..	" 3 months.
" " carriers	" 2 to 3 months.
" " experienced veterinary surgeons.....	" 3 to 6 months.

Our great want in war has always been that of riding and horse artillery horses, a certain number of ordinary draught and pack horses, with other beasts of burden, have been procurable. That

Wellington was in constant want of horses is evidenced by his despatches, the following extracts illustrating this :—

Wellington to Lord Castlereagh, 22/6/1809.

"I hope you will send the remount horses soon. I have given to the 14th and 10th Light Dragoons 95 horses from the Irish Commissariat, and believe I shall give some to the other regiments. This arrangement and the draft from the 3rd Hussars will keep up the regiments for a short time; but it is inconceivable how fast the horses of both cavalry and artillery fall off."

Wellington to Lord Castlereagh, 27/6/1809.

"The brigade of heavy cavalry, which has not yet done a day's duty, is obliged to leave here nearly 100 horses, and the brigade which has been to the northward is so much reduced that they are happy to take 110 horses of the Irish Commissariat. I hope, therefore, you will send us the remounts as soon as you can."

Wellington to Lord Castlereagh, 25/8/1809.

"The English have about 2,500 cavalry left. I shall be very glad if you will send us the remount horses, and any regiment of dragoons that is to come, as soon as possible; the best thing to do then, probably, would be to draft the horses of one of the regiments to complete the others, and send that regiment home dismounted. It would be very desirable also to send us 600 or 700 sets of horse appointments."

Wellington to Lord Liverpool, 5/2/1811.

"Recommends Government should buy 50 to 60 horses at from 40*l.* to 50*l.* a-piece for Officers to purchase. If they went into the ranks the only loss would be the difference between 40*l.* and 30 guineas—the ordinary price."

Returns Nos. 1 and 2 enclosed with Despatch to the Duke of York,
10/2/1813.

5,175 horses present, 1,070 deficient; the 4th Dragoon Guards, 9th Light Dragoons, 13th Light Dragoons drafted home, so as to reduce men to 5,119 (from 6,245).

Hitherto when an emergency has arisen, we have had to supplement our island resources with Spanish, Barbs, Syrians, Flemish, and Colonial horses. All will remember in the Crimea what a large proportion of our riding horses were foreigners, with an inconceivable number of mules in draught, which are but poor substitutes for our home-bred horses, and if they had had to do any continuous marching, would have hopelessly broken down.

Foreign nations have foreseen these deficiencies, and have their Officers and cavalry mounted on Irish and English horses, and are

we to be exposed to meet these well-mounted troops under disadvantageous circumstances on small Asiatic stock? for in a charge, weight combined with blood will tell.

The great foreign Powers have always a certain surplus of horses in hand during times of peace, which, on the outbreak of war, are drafted from the Service into reserve squadrons. Why should not we partially adopt some such arrangement?

Gentlemen, the great struggle which took place on the Rhine in 1870 between France and Germany demonstrated the effect of the most perfect organization and preparation, and the want of it; the result of the latter was attended with overwhelming defeat and humiliation.

Is Britain to lay at the conqueror's feet for want of preparation and forethought? Is it conceivable that we should be given several weeks to provide horses for one Army Corps, a work which ought to be done in a few days? Now is the time to form and complete the requisite organization—now is the time to prevent disaster!

The question then presents itself, where and how are we to maintain or procure the necessary number of horses?

(1.) Government could increase the number in each regiment and battery, say 20 per cent., which would insure the establishments of the few corps kept up to 1st Army Corps strength being efficient; this would entail the maintenance of 2,300 horses more than we have at present. I am informed that the cost would be about 24*l.* per head per annum, or 55,200*l.* for the whole, to which must be added the original cost of the horses, say 98,550*l.*, being a total of 153,750*l.* for the first year; in subsequent years the cost would amount to 69,300*l.*, including 5,520*l.* for the keep and 14,100*l.* for the purchase of renewals. This does not include cost of extra stabling, pay and clothing &c., of extra men, which would be considerable.

(2.) We might have depôts where young stock, purchased at from two to three years of age, might be reared, thereby enabling the breeders to realize their money earlier; but this would not insure a supply of seasoned horses, and would entail considerable outlay and a costly maintenance.

(3.) A proposal has been made by one or two Officers, who have thought the matter out, to form a reserve by passing horses through the ranks of the mounted branches on a short service system, selling all such as are over ten years of age, but registering and holding a lien on them up to fourteen or fifteen, thus being able to take them back at a price to be fixed on a decreasing ratio according to their age. Such a system would entail the outlay of much money, and would have a tendency to impair the efficiency of the mounted troops through the loss of their horses whilst still in their prime.

(4.) A further idea, somewhat the same as the last, only not so wholesale, is to sell out from the Service all mares over ten, holding a claim on them; but as these mares would obviously be used for breeding purposes, they could not be considered available or fitted for active service, and the same objections as given by me in the last case would hold good in this.

(5.) It has been proposed by some to give a subsidy to such of our Yeomanry as may be willing to receive it, for allowing their horses to be called up when required on the condition that they provide for themselves other efficient troopers within a given time.

Objections to this may be urged, that many of the horses the Yeomanry are mounted on are said not to be their own; if such is the case, it is a matter for correction.

It is also thought that you would be taking the horses of the Yeomanry just at the time when their emergent services might be required.

(6.) It may be urged that the Army Act of 1881, sect. 115, previously referred to, affords the opportunity of impressing, in case of an emergency, every description of conveyance and of horse, whether it be kept for saddle or draught; but it is not clear to me how the law stands, as to whether the purchase or only a hiring is contemplated; and whether the conveyances and horses could be used out of the United Kingdom; so far as I can learn, no registration of available carriages is kept up at police stations, no provision is made for the purchase of the same; and it is to insure some measure of this kind being adopted that I am addressing you to-day.

(7.) Another scheme is to register every horse plying for public hire in the United Kingdom, for which we partially have the machinery in the hands of local authorities, as the owner of every public vehicle has to procure a licence; and whilst this is being done, the horse might be inspected, and, if found fit, classified, the proprietor being subsidized annually; if his animal is at any time required by the State, the full value at that time to be given for it; in case of dispute arising, the price to be settled by arbitration. There are objections to this, as it would fall on one class of people. The number of horses thus obtainable would be limited and would not be very serviceable.

(8.) Colonel Keith Fraser, in an article on Army horses in the "Fortnightly Review" of October, 1884, suggested that some system of registration should be adopted for every horse or pony offered and suitable for military work. For this purpose and to meet the necessary outlay, it is suggested that the horse-tax, as it existed up to 1874, might be re-established; the money thus levied, which then amounted to 450,000*l.* a-year, would more than cover the estimated cost of registration, subsidizing brood stock, and a considerable balance would remain available for the Treasury. Under the Act proposed all horses registered for sale to Government should be exempted; if found necessary, a small additional subsidy might be given. The value of the horse at the time of registration would be recorded. Should this amount appear to the Government Inspector to be excessive when the horse is required to be purchased, the amount to be paid would have to be determined by arbitration, in the event of his not being able to come to terms with the owner. Objections may be made by the revenue officials to this class of tax, on account of its many exemptions, but I may instance the existing dog-tax as one having such.

Returns of horse-owners claiming exemptions would be forwarded by tax collectors to the District Government Inspectors, who would take periodically an opportunity of arranging to see the horses and judge of their capacities for registration.

No unsound stallion or mare, nor such as are quite unfitted from hereditary causes to breed a troop horse, should be exempted from paying the tax. On the other hand, every stallion or mare that is made use of for breeding purposes of good hardy colours, of a certain age and standard, and which are, in the opinion of the inspectors, fitted for getting troop horses, should be subsidized with a considerable annual premium.

Good mares are becoming very scarce, and proposals have been made to tax them when exported; but if a Government subsidy were given annually to such as are kept for brood, it might keep them in the country and do much to re-establish the breeding of good horses at home, a branch of national industry now rapidly declining.

Some may say that the amount required will be so large no Government could entertain it, but I would not propose to subsidize the fat, sleek mare of 15·3, running in a London brougham, or the good 15·3 huntress still carrying fourteen stone across country, until such are made use of and are still fitted for throwing a suitable foal; indeed should either have foals at foot, or the owners be in possession of a "service" certificate.

If 10*l.* a-year were given for each good suitable mare, I fear we should not at first register 1,000; this would be done at the comparatively small outlay of 10,000*l.*; premiums varying from 100*l.* a-year to 30*l.* might advantageously be presented to the owners of all suitable stallions, the larger premium being given to the best and largest T. B. stock, adapted for getting a hunter class of horse, on a descending scale down to the pony stallion fitted to improve the breed of baggage ponies. If we found 200 such stallions in the country, whose owners would be willing for them to serve at a small fee, and which have been serving as such for the preceding twelve months, it would be as many as we should find good and suitable. This could be done at an expenditure of 20,000*l.*, or a total cost of 30,000*l.* a-year to improve the breeding of the all-round useful horse required for military purposes.

The animals for which exemption might be claimed at the time of paying the tax would have to be submitted for inspection, and if found fit a refund order would be furnished.

Many Officers on half-pay, excellent judges of horses, with retired army veterinary surgeons, might be found all over the country, who, on receiving extra pay and their travelling expenses, could perform the duties. Fifty such groups of inspectors might be necessary, as many horses would be submitted for inspection, and large numbers found unfit. This might be done at a cost of, say, 60,000*l.*, with the expenses of two deputy inspectors, one for the north, including Scotland, and one for the south of England, to include Ireland, an Inspector-General with his staff, say, 33,000*l.*, or a total of 80,000*l.*

We should require at least 33,000 horses to be registered to obtain

23,000 effectives for two Army Corps; allowing 1*l.* each for remission of tax and a subsidy, the cost of this would be 33,000*l.*, or a total of, say, 113,000*l.*

If 30,000*l.* were expended annually in premiums for suitable stallions and mares, it is considered that for 143,000*l.* this feasible scheme might be carried out, whilst the horse-tax if renewed should bring in, as it previously did, 450,000*l.*

Arrangements for the breeding subsidy might, if desirable, be placed at the disposal of the Royal Agricultural, the Caledonian, the Hibernian, or other kindred Societies.

The large repositories all over the United Kingdom, being more or less public places, present the space and means for concentrating the horses when purchased, the accommodation being paid for at market rates, thus avoiding any clashing with other Government arrangements in barracks. The animals, which would be classified at the time of registration, would be sent off as soon as possible by rail to their different depôts.

Every horse-owner when summoned to the rendezvous would have to deliver his animal safe at the repository centre.

Thus out of all the hack-horses and ponies at a place like Weymouth say, perhaps half a score of riding, a score of draught horses, and a score of baggage ponies, might be found suitable for the Service; on their being delivered by their owners and purchased, their general numbers would be branded, their description taken, and they would be forwarded—

Artillery to Woolwich.
Cavalry and }
Transport.. } to Aldershot.
Engineers to Chatham, &c.

Before concluding this address may I be permitted to diverge slightly from my subject—"A Reserve of Horses"—to the general question of "the Supply of Army Horses," which was ably put before you last year in this Institution by Colonel Russell? I regret that my duties on that occasion prevented my taking part in the discussion that ensued. I can bear testimony to the fact that the difficulties of procuring a supply of suitable horses for the Service as urged then are very great, and, in place of diminishing, are annually increasing; there is the gravest difficulty surrounding the subject as it at present stands, our whole military operations, as I have already pointed out, would be delayed, crippled, and paralyzed in case of war for the want of efficient horses.

This want was prominently brought before the nation by Wellington; the same cause almost brought on us a national disaster in the Crimea. Lord Rosebery's Committee of the House of Lords in 1873, after a careful investigation, urged the Government of the day to take some steps in the matter.

The subject was again prominently brought to the notice of the public by Colonel Keith Fraser in an able article in the "Fortnightly Review" for October, 1884. He said then, "It is evident that by

taking every available Government animal it would be barely possible to supply a sufficiency of horses for the cavalry of one such corps," and he added, "there is no reserve of horses."

The insufficiency of our cavalry when ordered to Egypt in 1882 was also prominently brought to notice by Colonel Fraser in the same article, and I may here remark that to complete the small force of artillery then sent out we had to deplete of their serviceable horses almost every battery left at home, whether of horse or field artillery.

Thirteen years since Colonel Valentine Baker, in a lecture delivered in this Institution, urged an increase of horses, and asked for the establishment of a system of reserves to be readily drawn upon if wanted.

In 1884 the late Inspector-General of Cavalry, Sir Frederick Fitz-Wygram, Bart., brought the subject before the House of Commons. He urged an increase in the number of squadrons to each cavalry regiment, and a slight increase in horses has been made.

The present Commander-in-Chief in India, Sir F. Roberts, Bart., drew attention last autumn to the great dearth of army horses.

Supported by the weight of these authorities, it is to be hoped the Government and the country may now take up the whole question. The tax proposed would fall on those who use horses chiefly for their recreation; as a result of such taxation the breed of horses should improve and numbers increase, and the taxpayer would thus indirectly become a gainer, whilst the establishment of horses for army purposes would be placed on a satisfactory footing.

Procuring sufficient men and for keeping up our front line is a simple question of money, so also ammunition, guns, and other supplies are speedily turned out by the aid of machinery, but a sufficient supply of horses is not now procurable, and until a horse is five years old he is not fit for the Service.

I cannot too strongly urge the early initiation of some such system of registration as the one I have brought forward.

If it were at once adopted it would be several years before our own country could supply the requisite numbers. In the meantime, if it is to be placed in anything like a proper state of defence we must look to our Colonies, tap and try their resources, and obtain what we can from them.

A Reserve of Horses.

Renewal of horse-tax should yield annually.....	£450,000
Cost of reserve registration and work annually ..	£80,000
Remission of tax and small subsidy on reserve horses annually.....	33,000
Remission of tax and good subsidy for breeding stock annually	36,000
	<hr/>
	£143,000
	<hr/>
A reserve would be formed, and horse breeding placed on a sound footing, and the Treasury would gain annually.....	£307,000

General Sir C. P. BEAUCHAMP WALKER, K.C.B.: Having read yesterday a copy of Colonel Ravenhill's lecture with very great interest, I turned up this morning the rough notes of a somewhat long Report which I wrote to Lord Rosebery's Committee in 1873, and which I prepared with great care after communication with the Inspector-General of Remounts in Berlin, and with the Civil Statistical Departments which have a special branch for the subject of horses. Before adverting to the few notes I took from that Report I would remark that, as regards the import and export, I was told by Herr Metzel, who was then the Chef de Bureau of the Inspector-General of Remounts, that a very large number of the horses exported from England to Germany were German horses which had been sent to England and brought back and sold in Germany. He assured me the number was very appreciable. As regards No. 3 of certain proposals which Colonel Ravenhill mentions, I may state that this system prevailed in Hanover, that of short service of horses, and it was found to answer very badly, they came back almost entirely unfit for use. Another point on which I would remark is the fact that very few of our agricultural horses would be of the slightest use for artillery purposes, they are too heavy and clumsy, whereas in Prussia particularly, where the soil is much lighter than that of England, and a much better bred class of horse is used for all purposes, there is no difficulty whatever in taking teams from the plough and putting them into the ranks. I particularly remember at the great parade which took place in Berlin of the Artillery of the Guard before the commencement of the war of 1866, the then General Officer commanding the Guard pointed out to me that three-fifths of the horses had six weeks previously been at the plough, and all I can say is the whole ninety guns marched past and only one horse kicked over the traces. In that country the horses are driven for agricultural purposes in exactly the same manner as they are in the artillery, namely, on the pole, and there is not the slightest difficulty in adapting them to the purpose if required. I thought in looking over my notes perhaps a few points might be valuable here. There are six ways in which in Prussia in 1873 the breeding of horses was encouraged; first by the establishment of three principal breeding studs, viz.: at Trakehnen, in East Prussia, at Neustadt, in the Mark Brandenburg, and at Grudlitz. These were originally established for the purpose of supplying horses to the Royal stables, but since that time they have been very much devoted to the production of stallions for breeding. The second point is the establishment of county studs, I think twelve or thirteen depôts for stallions, which at stated periods of the year make their round, and return again to their depôts after the work has been done. The third is that prizes are given for approved stallions, the property of private persons. The fourth, that loans without interest have been made to private associations for the purchase of stallions. The fifth that prizes are given at race meetings—I conclude on the same principles as our Queen's Plates; and the sixth by money grants to parishes for the maintenance of pasture lands for young horses. This is a very small sum, indeed, in fact it only amounts to about 150*l.* a-year. We probably all know that the system in Germany is to buy horses at over three years of age, to let them go to the stud depôt where they remain at least a year, if not sixteen months, where they are carefully looked after and tended, and are then sent to their regiments, and no horse really enters into the squadron till he is five years old; in the Guards it must be as much as five and a-half years. The remounts at the time I speak of cost the State about 28*l.* The annual waste allowed is one-ninth of the troop horses and one-fifth of the Officers' horses. But by far the most important part of Colonel Ravenhill's lecture is the manner in which he has adverted to the registration of horses which is most carefully carried out in Germany, and was during the whole time of my long service there an object of great admiration, because I had two opportunities of seeing how very quickly a great army could be mobilized under that system. All horses in the country were registered, the only exceptions being the horses of the members of the reigning German houses, the horses of foreign embassies and legations, Government officials who keep horses for public service, and the contractors for the Post Office. There is no great injustice committed by it because everybody is under the same condemnation. The horses are taken at a very fair price, very much commensurate with their real value, and no horses are

taken which it can be proved are of such exceptional value that it would entail a great disadvantage on the owner if they were taken from him. I think some system of the kind might very well be introduced in England, and I hope the lecture we have now listened to may have the effect of drawing attention to the question.

Colonel KINGSCOTE: I had not the pleasure of reading Colonel Ravenhill's lecture but only of hearing it, and I did not quite gather from him at what age the horses were to be reserved, whether at two or three years old, whether they were to come into Government hands first, or at what period of their life they were to be reserved. I do not know whether he will kindly tell me what his idea is upon that. As regards a reserve of horses, there is no doubt it would be a most advantageous thing if it could be done efficiently for the Service, but I am afraid there are very great difficulties in the way of reserving horses, and that when they were wanted they would not be forthcoming in the way we could wish. Giving a subsidy, so much on each horse, might help, but I cannot think that that would bring you any very efficient service, that they would not be fit to put into harness for artillery purposes. Certainly if they were worked in omnibuses and such conveyances you might get them, but then the public would cry out and want their omnibuses just the same whether we were at war or whether we were not. I think the first thing we want is to breed the horses; that is the thing we require, and to which I should really like to see Government aid given. I think that by a comparatively small subsidy very much assistance might be rendered in that way. I should like to see adopted what in a minor way I am glad to think the Royal Agricultural Society is going to undertake, namely, to give prizes for stallions to cover at low prices, the prizes given being 200*l.* a-piece, so as to encourage people to buy good stallions, and to perambulate certain parts of the country covering mares at a low price. That, I think, is a step in the right direction, but then it only occurs in one part of the country where the Royal Agricultural Society is holding its show that year. We want that system all over the country. And I would go beyond that. I would give in future years prizes for mares with foals got by those stallions. You would then give an encouragement to farmers and others to breed horses, and if the money were given by the Government, you might in some way register those foals, and I do not think it would be any hardship to say the Government should have the first claim upon them between two and three years old at a certain price. I have always had an idea that that could be done, and I believe that would encourage the breeding of horses more than anything, and till we do that I am afraid that even giving subsidies and numbering horses for the reserve will not be of very much use. I think that is the right direction in which to commence. Of course as regards Colonel Ravenhill's idea of registration of reserve horses, that might be carried out more easily afterwards, but I am afraid we should be leaning upon a broken reed if we were to trust to that entirely, and not commence by trying to stimulate the breeding of horses.

Mr. GILBERT: I was unfortunately prevented from being present to hear the commencement of the lecture, but I concur with much that I have heard, also with the remarks of Colonel Kingscote. I was speaking on the subject of horse-breeding at a large meeting held in the show ground at the Royal Agricultural Show at Preston, at which Colonel Ravenhill, I believe, was present, and I was met with two or three questions, one being, "It is very well to advocate the breeding of horses, but would the prices at which the Government purchased horses ever encourage the farmer to set about the business?" I replied that the ambition of all breeders should be to produce horses that were much wanted in England, namely, superior sized animals which shall command a ready sale at remunerative prices to the breeder, and that they should be able to look to the Government as purchasers of what I may call "misfits," that is, horses not exactly fit for hunters or for carriage purposes. To my knowledge very many horses that are imported are not such as we can breed in England, but we are obliged to put up with them to meet the continual demand for carriage horses. I cannot quite follow the suggestion that has been made of a Government subsidy, but I am sure it would not meet with favour. We are much indebted to the Royal Agricultural Society for the liberal resolution which they have carried to encourage horse-breeding, they

having voted a sum of money for thoroughbred stallions, to be given at spring shows, five premiums of 200*l.* each and a gold medal. Although the Royal Society has struck a bold line in offering these five premiums, a line that was started by the Hunters Improvement Society two years ago, little good can be done in a country like England unless the example be followed by the other Agricultural Societies. I hope that before long the money now given for Queen's Plates will be devoted to the same purpose, viz., as premiums for thoroughbred stallions suitable for getting half-breeds. The other day I was reading a book, written nearly a century ago, on the breeding of horses, from which it appeared that in one division of Yorkshire alone there were over 100 thoroughbred stallions located for serving mares for breeding half-bred horses. Therefore, unless supported by the Agricultural Societies throughout the kingdom, the attempt of the two societies just mentioned will be but a small one. I am afraid I have said but very little to encourage my friend Colonel Ravenhill, than whom there is no one better qualified, from his practical experience, to make suggestions on this subject, but I will more carefully study and think over his lecture, and if I can be the means of furthering his object in any way or in increasing the number of horses to meet our requirements in England, I shall be only too pleased.

Sir THOMAS GROVE, Bart., M.P.: Sir Frederick Fitzwygram has called upon me, but I am afraid I can throw no light upon this matter. I have been for a great many years in the Wiltshire Yeomanry, and formerly I had the honour to hold a commission in the same regiment with Sir Frederick Fitzwygram. One suggestion that has been made is, I think, well worthy of consideration, viz., that if the money now paid by the country for Queen's Plates in little petty races all over the country was applied to encourage the breeding of horses, which might be available for cavalry or artillery purposes, it would be a very great advantage. These petty races in our country towns do more harm than good: they demoralize the population. Betting men come to those towns, they spend no money there, but go back after having fleeced the poor agricultural farmers, who are far from rich at the present moment. That is one suggestion which I think well worthy of attention. There is no doubt that at present we do not get horses in sufficient quantity or quality to be available for military purposes: what we have are either unsuitable for artillery purposes, or else they are weedy animals that would not be sufficiently strong to carry dragoons in the field, whose weight in marching order comes to 20 stone. Where I live we have a small society which keeps three or four well-bred stallions, the object being to get horses sufficiently strong or sufficiently well-bred to carry medium and heavy weights with hounds or dragoons, or to go into the artillery. One great difficulty is to get horses with sufficient breeding action. It is more difficult than anything in the world to get horses that are really good hacks and have good action for carriage purposes. There has been a very great falling off here; we have been in the habit of getting as stallions broken-down thoroughbred horses, which are no good for races, and which have no action and have not strength enough either to get hunters or sufficient action for good carriage horses. If we could improve that and get a better class of stallions, I am quite certain we should get a much better class of horse to carry dragoons, or to be used for artillery service. I am very sorry I cannot throw any light upon the subject, and I do not exactly know why General Sir Frederick Fitzwygram called upon me, except that I was an old friend of his and hold a commission in the Wiltshire Yeomanry as Major and Lieutenant-Colonel. We have some very good horses in that regiment, which is 400 strong, but I am afraid the price the Government now offers for cavalry remounts will not as a rule induce the yeomen to sell their four-year-olds. I know some years ago we had much better horses, but at present we have not enough horses of sufficient quality, as the farmers find it pays better to breed cart colts, as they can earn their keep when two years old off, and a good four-year-old cart colt is worth from 40*l.* to 60*l.*

Mr. JACON WILSON: I can say with the greatest sincerity I did not come here with the smallest intention of being otherwise than a listener. This is a subject, however, in which I along with my friends Colonel Kingscote and Mr. Gilbey have for some time past taken considerable interest, and for the last eighteen months we have been sitting upon the Special Committee with reference thereto. I feel that

this is a subject which you may have to penetrate very far before you can touch the true origin of the scarcity of horses. Speaking from an agricultural point of view, it must be borne in mind that the diminution in the supply of horses has arisen in a great measure from the improvement by drainage and other processes of the grass lands of England, whereby the farmers of England were enabled to produce beef and mutton more profitably than horses. Matters, however, now are somewhat changed, and I cannot help thinking that with the increased demand for horses it may be in the interest of the farmers to direct their future attention to meeting that demand. I heard the gallant gentleman Sir Beauchamp Walker say that the cart horses of England at present would be of no service for artillery purposes. Well, with all due submission to his greater knowledge, I must submit that there is a class of light cart horse in England, especially in the north of England, of the Clydesdale cross, famous for good shoulders and very good action, and perhaps Colonel Ravenhill will bear me out that in some parts of Cumberland and the Borders such horses do exist. I know from my own experience that such mares covered by thoroughbred horses have produced very good animals, and I myself have sold a horse five years old for 300 guineas, bred from a light cart mare with very good action. What I maintain is this, that the class of mare which perhaps for agricultural purposes cannot be used for breeding Shires or Clydesdales, may with very great advantage be used for breeding something else. I am not prepared to say what. If a man does not breed a weight-carrying hunter he may breed a valuable carriage horse, and if he does not breed a carriage horse he may then have the advantage of falling back upon a supply of remounts, and I regard the supply of remounts as a very great boon indeed to the horse-breeding community of this country. So far as the Royal Agricultural Society is concerned they have, I am glad to say, recognized their responsibilities in this matter, and they feel that it is their duty to give a lead to the rest of the country, in the hope that they may be supported either by the Government or by some other outside source. It is no use waiting for the Queen's Plates money to be given us, or for the Government to make a special grant in the first instance. If the Government of the day see that there is some machinery by which this object may be carried out, they may possibly then be induced to take the matter up, but until we give them a lead I believe nothing will take place. The great object the society has in view is this, to bring into the service of the country a class of horse which at present is not seen—a horse which is a stage above the ordinary scum of the racing stable which is going about the country at this moment, disseminating that which is bad as well as that which is very little good, and also below the standard of the race-horse sire—a class of horse which generally at present is purchased for foreign Governments, and which I think it a great misfortune is allowed to leave the country. It is not for me to tell the military gentlemen present what the great advantage of registration would be. Theoretically it seems perfect, but I am bound to say it does not sound very English. We do not regard parental legislation as a rule with very great favour in this country, and I think that the same feeling would apply to the reserve of horses. I sincerely believe now as a commencement has been made which I hope may be followed up by Colonel Kingscote's suggestion of giving prizes for the produce of these valuable horses, which I believe will be purchased by special individuals for the special purpose (and even at high prices) as a good investment, that the result will be a very great improvement in the supply of horses for cavalry, artillery, and for general purposes.

The CHAIRMAN: Surgeon Lambert is with us to-day, and perhaps he can tell us something about the Irish horses, a point in which the cavalry are most concerned, because they are very good riding horses, though they have very few draught horses.

Inspecting Veterinary-Surgeon LAMBERT: I did not come prepared, Sir Frederick, to speak on the subject, but I was first in Ireland in 1839, and then we could get cavalry horses for 25*l.* and 30*l.* quite as good as they are now when the price is 40*l.* and upwards. I was associated with General Sir Drury Lowe, the present Inspector-General of Cavalry, in buying horses in the north of England in 1878, at the time of the so-called Russian scare. There we had to buy all sorts of horses, and one point that struck me, which I think has not been touched on to-day, was that

had we been able to give for the horses we required 5*l.* or 10*l.* more, we could have got at least three times the number we did. We had the same experience in Dublin in 1882, when in response to advertisements large numbers of horses were brought to the barracks, but the owners refused to sell scores and scores, just for the sake of 5*l.* which they wanted more than we could afford to give, or rather more than was the Government limit. I think in time of war or emergency, when large numbers of horses are required, it would pay the Government to give a little more money than they have hitherto done in such circumstances, and then they would get far more horses than they otherwise would.

Mr. GILBERT: I omitted to mention one fact alluded to by one of the speakers, who mentioned the superior quality of the German farm horses for military purposes. I do not know whether he takes the type of the English cart horse from the horses seen at our London spring shows, which are the heaviest and the best we possess in England. Very much depends upon the soil where the horses have been bred and located; the shire horse reared upon light lands soon becomes a smaller and more active animal, possessing at the same time the good quality of bone, well-formed flat legs and sound feet. I should like to have the pleasure of showing the gentleman who doubts the activity of our shire horses, two animals that I keep in the country for station and carriage work. It may be thought strange that I should use cart horses for that purpose, but I prefer them to the foreign horse, which is only too frequently soft and unfit for quick work, for they can do with the greatest ease nine or ten miles an hour, and that day after day. There are many hundreds of light mares in the country of precisely the same type, and what I maintain is—I have expressed these views in a short pamphlet on the subject—that if these mares are carefully selected and mated with a good sound thoroughbred horse, they will produce the class of riding and driving animals so much wanted in this country.

Colonel PHILLIPS, *h.p.* 4th Hussars: I can support what the lecturer has said with regard to the scarcity of horses, for having had the command of a regiment for the last four years I find we are utterly unable to get horses over three years old, and consequently the country is put to the expense of those horses being fostered and kept in our stables with all the risk and chances of their not maturing. I know from talking to farmers and asking them why they do not breed horses that we can buy, the same answer has always been given to me that it does not pay them at the price that we give. When we sent two cavalry regiments to Egypt in 1882 nearly all the other regiments were unhorsed. I know I gave 100 horses myself and, taking my remounts, the result was I had about 150 left for parade. I had to buy remounts, and I suppose for every two four-year olds that I bought I had to buy 28 three-year olds, and although we did not buy the three-year olds until October, still they were fit for nothing until the following spring. If any of our regiments were ordered into the field we should find to bring them up to a war footing that we required at once 200 or 300 horses, and they are not to be got. I was on the Central London Committee in 1882 with Colonel Ravenhill and Sir Frederick Fitzwygram, and I know that although we were giving 50*l.* or 60*l.* we could not buy 100 horses. The figures that have been given to us to-day show that the horses are not to be got in the country, and I doubt whether except by compulsion you could buy them at all. Of course if all the horses were registered, we might know that we had them in England, but still as no one keeps extra horses, people would not like to part with them even if they were paid 100*l.*, and if you give only 40*l.* or 50*l.* the horses simply would not exist. I know that the whole time that I have commanded a regiment I have had to buy three-year olds and to make the best I could of them. I therefore entirely support what the lecturer has said as to the scarcity of horses.

Lieutenant-Colonel INOE, late 6th Dragoons: I came here, Sir Frederick, for information, but as you have been good enough to ask me to give my opinion I may say that I think the registration of horses would be a very difficult thing to carry out in this country, for the reason that the people whose horses you would register would be a class of people who would always be changing horses, so that you would never be able to get at them. As a matter of horse-breeding in this country the great thing is to prevent the foreigners coming over and buying all our good mares. As I am in the habit of attending most of the fairs in England it seems to me that

there are plenty of horses to be bought, if the Government would pay the price for them, but the great thing is to prevent the foreigners, Messrs. Oppenheim and others whom I could mention, who come over and buy every mare and give a good price for them and so tempt the farmers to send them out of the country. I have a friend on my right, Mr. Martin, who has a large ranche and a quantity of American horses, and who I daresay would be able to give you more information than I can.

MR. MARTIN: I have been listening to this discussion with the hope of hearing something said upon a point upon which I am at present profoundly ignorant, and which strikes me as a most important point, namely, whether horses are to be got in this country at all. If they are to be got in the country, I am not in the position to make a speech to show you how they can be got from another country, because in that case I might be supposed to be acting in an antagonistic manner to the British producer. The question first to be decided is whether cavalry horses can be got at the price that the cavalry pay in England—first of all whether they are bred, and if so whether the people who breed them would part with them at that price. If I am justified in assuming, as I think I am, from one or two speakers who are evidently acquainted with the subject, that horses are not to be got, then I take a very strong ground, and I say that it would be very much better that the money of the English Government should go into the hands of their own Colonists than into the hands of foreigners. The whole question is bound up with that question of federation upon which you had a very excellent paper read only a few days ago—the Federation of the Colonies for mutual protection. Some six or eight years ago I was hunting buffaloes on the Foot Hills of the Rocky Mountains; I there found a very beautiful country, and I told members of the Canadian Government at the time, "this country is destined in the future to supply the remounts for the English cavalry." At the time I was looked upon as a madman; the winters in that part of the world were extremely severe and the whole thing was thought quite impossible. However, I was very much struck with the idea myself and I put it into execution. I have now got a couple of hundred horses running loose on the mountains, and I have also sent out some English thoroughbred stallions. I am not in a position to boast very much of the result at present, as I had to start with native mares, but they at any rate have certain qualities which would be peculiarly useful for cavalry purposes. They are not at all particular what food they get, they will eat anything they can pick up by the wayside and will stand an enormous amount of fatigue. They have legs and feet such as no one who has not been out of England could believe to exist; the feet are so hard and flinty that you cannot cut them with a knife, and their legs are something to dream about. But they have all the drawbacks of irregular breeding, they have a good deal of original barb blood, more than doubtful ewe-necks, heads put on wrong shoulders, in fact all the good and bad points of the barb, but of course it is a question for breeders who know the right way to breed whether by crossing them with really good horses you would ever be able to get suitable stock for cavalry purposes. My own opinion is that, given a naturally fine horse climate, it is really only a question of intelligence to be able to breed whatever you like. Whether one man's life is long enough to do it in is another thing. But one point which bears upon the question more particularly from my point of view is this, there must be some reason why the price of cavalry horses should be kept down to a very low point, I assume that there is a reason. A previous speaker who has bought largely in past years for the cavalry in England says that not many years ago they were to be bought at 28*l.*, and now you have to give over 40*l.* That is a very important question. Land in England is extremely valuable, the fee-simple varies from 25*l.* to 100*l.* an acre, and when you breed horses on valuable land they have to bear their share of rent and expense of production. I can quite conceive that except on the most inferior classes of land in England you could not breed horses and sell them as four-year-olds at 40*l.*, but if you cannot breed horses in this country at the price, you must then see where you can get them from or you must increase your price. If the price cannot be increased for practical reasons, and the supply to be obtained in England is not likely to be increased, and you have to look elsewhere, I merely suggest that you should look to the Colonies because we could produce them at the price, and I think it is merely a question of

taking the trouble in order to produce the animal required. I could myself at the present time land a four-year-old horse between 15·2 and 16 hands high in London, and anything that I got over 15*l.* a-head would be net profit, which is rather an important point. I hope that nothing I have said will deter anybody from making efforts to carry on the most magnificent breed of horse in the world—the horses that are bred in England, such horses as are not bred in any other country, weight-carrying hunters, and so on; but I do really think if it comes to this point that we are likely to be absolutely without cavalry horses in the time of need, that there are parts of British North America which could supply the article required at a reasonable price and deliver them in immense quantities in England within fifteen days. What the importance of this from the military point of view is you are better able to judge than I am; the price at which they could be produced would be such that everything over 15*l.* or 20*l.* would be net profit, and of course people breeding horses in a large way as a matter of business would take very much less profit per head than the farmer who, only breeding two or three in the year, would naturally expect to make something out of them. I think that is all that I can contribute to the discussion.

Major-General GOODENOUGH, R.A.: May I ask Mr. Martin what are the sires from which the native stock of mares of which he has spoken have sprung?

Mr. MARTIN: I think it is generally admitted that there were no wild horses indigenous to North America. It is supposed that the Spanish cavalry under Cortez when they came and conquered that continent let their cavalry horses run loose on their return home and that that is the origin of the present breed. Those were presumably barbs. At any rate the typical mustang that you have read about, but very seldom see, presents all the good and bad points of the barb—just what you would expect if the barb had been allowed to run wild for 200 or 300 years and breed promiscuously. Horses under such circumstances always have a tendency to degenerate. As civilization reached the west the best and biggest of those mares were caught and mated with the Kentucky stock which the Americans at that time were doing their best to develop. I do not think Americans have the most elementary notions of horse-breeding, and beyond putting a little more bone into the original wild stock I do not think they added in any way to their attractions. Later on there were a few English thoroughbred horses out there that were really good horses, and it was seeing a few colts got in that way that led me to try my experiment. I do not wish to say too much about it, I am not sanguine about it, you want two or three generations to carry it out. I got the best of these wild mares, I picked them as big as I could, drafted them off carefully, and by that means got the best brood mares that I could. I then put to them large half-bred sires, what you would call in England good-looking 16 stone Irish hunters, stallions, rather cobby horses but with plenty of bone and good shoulders. The shoulders are the weak point. The result is I am now getting more mares bred in that way which are admittedly the best in the country, but how they would compare putting them alongside English horses I do not know; you would probably call them very ugly. They have most marvellous powers of endurance. A man weighing 20 stone rode one of these horses 250 miles and back again within six days, out of which he spent one day in doing his business. The horse was under 15 hands high, and the only food it had was what it could pick up from the grass, it was a long journey and good water was scarce in places. These horses have extraordinary powers of endurance, and can do, as I say, an immense quantity of work on very insufficient food. I think in a year or two's time I shall be justified in bringing over a cargo of these horses as an experiment, and seeing what they really will fetch, for I think that a person's opinion about his own stud is not as a rule a very reliable one.

Lieutenant-General Sir MICHAEL BRIDGEMAN, R.A.: I am sorry I had not the opportunity of hearing the lecture, but I know generally the arguments that have been used. From my own experience of the tremendous losses that take place in a prolonged march and in the operations of war, and of the difficulty that there is in finding a sufficient number of horses in this country ready to equip an army, I think it is necessary that some steps should be taken in the direction which Colonel Ravenhill has pointed out, to arrive at some means for providing a reserve of horses, or of improving the breed of horses in this country. During a long residence in

India I have assisted by counsel and also by serving on Committees in improving the breed of horses, and during the last twenty years in which I have attended the fairs in the north of India I have noticed that there has been a very great improvement in the stock and in the colts and fillies which have been produced, due to the selection of the mares there being branded according to the different class for which they are considered suitable. In fact they have gone down so far as to arrange which kind of mare should be suitable for breeding mules, but with that just now we have not to do. The idea has been prevalent in India, and I have advocated it, that the stock should be purchased young, and that there should be grass-runs where the young stock could be kept and prepared for the Service. What I have to say is this, seeing what very great difficulties have taken place in purchasing at short notice a sufficient number of horses to equip an Army Corps it is necessary that some steps should be taken to secure the reserve advocated by the lecturer. I am sorry I cannot throw any further light on the subject, but there must be many gentlemen here connected with this country who can discuss the point, and suggest means which I am not capable of doing.

The CHAIRMAN: Gentlemen, the first question that strikes me is the supply of horses in this country, in other words the number of horses in this country. I believe there is an ample supply of horses in this country, ample in point of numbers, and as to draught horses ample in point of quality; but the question is not how many horses there are in the country, but how many can be purchased, that is to say, how many surplus horses there are over and above the absolute requirements of the trade of the country? Of course, you can buy a horse when a person is willing to sell a horse, but when, as in the case of war, the country is drawn upon heavily for horses, you will find people will not sell their horses at any price whatever, if they lose their trade by so doing. You can always buy 4,000 or 5,000 horses in this country without very much trouble. I think I may say during the Egyptian War we had no very great trouble in getting about that number of horses in the country. Colonel Ravenhill says we took eighteen weeks about it, but the fact is the Government were rather chary in finding money, as they were not certain whether the war was going to last. The question is, how many horses can you buy? In the course of the investigations made by the Committee which I was on, we made various inquiries, amongst others we referred to the London Omnibus Company. That company has 8,000 horses, and they said they could afford to sell about 2 per cent. of them. Doubtless, if we had offered somewhat more than the horses were worth, we could have bought a considerable number from the London Omnibus Company, because they could have replaced those horses easily; but supposing the country was pretty well drained of horses, they could not be replaced, and I believe you would very soon reach a point at which you could not buy horses at any price whatever, because people will not part with that which is essential to their trade. I think one of the gentlemen who spoke said that if during the war we had given a few pounds more for horses, we could have got a considerably increased number. Possibly at the outset of the demand you might, but my belief is, that when you have once drained the market of the surplus horses, no matter what price you offer for the horses, you will not be able to get them. To revert again to the London Omnibus Company, they could sell you as many as they could afford to sell, as long as they could replace them; but their trade lies in those horses, and they will not sell what is essential for the purpose of their trade for any sum of money you might offer. I feel convinced myself that the difficulty in mounting the cavalry corps rests, not in the insufficient number of horses in the country, but in the impossibility of buying those horses, and I believe very much the same difficulties occur in every foreign country. We very often hear that there are horses to be bought more cheaply in one place than another, but I think you will find that neither in foreign countries, nor at home, are any large number of horses kept over and above what the trade of the country requires. We do not want unbroken horses for the purposes of war; we want horses 5, 7, 8, or 9 years old which can be put into harness, and worked at once. I believe that the number of horses which you will find in any country in the world over and above the requirements of the trade of the country, are, comparatively speaking, few, and hence I look upon it, that you will have the very

greatest difficulty in getting any large number of horses under any purchase system. The Germans do it by registration, they do it by taking horses when they want them. The Indian Government possibly might take horses when they want them, but in a free country like this, it would have to be a question of buying the horses from the individual owner. Something has been said about the registration of horses, and I believe one or two gentlemen have said that would be a fallacy, that you would not get the horses when you wanted them. You could not go round, and have a monthly inspection to see whether the horses were there or not, and as this is a free country, and people buy and sell their horses when they like, I look upon registration as a pure fallacy. Now, about the number of horses in this country. I think Colonel Ravenhill agrees with me that the great failure in case of war would not be with regard to draught horses, but riding horses. The trade of the country is increasing year by year, and, therefore, probably the number of draught horses is increasing year by year. There are many more draught horses in England in this present year than there were in 1876. But the number of riding horses I believe to be steadily decreasing, and the reason is because farmers and other people who used to ride to market, and ride about the country, now nearly invariably come in by train or drive. In the neighbourhood in which I live there is a very good-sized market, everybody either drives in or comes by train. I don't think there are half a dozen farmers who ride into market at the present day, whereas forty years ago 80 per cent. of them came in in that way. Another reason why riding horses are falling off in point of number is this. The public as a rule are not very good judges whether a three-year-old is likely to prove what they want when it becomes five or six years old, and the larger and coarser horses that show a good deal of size and bone at three years old are what the public as a rule will give the most for; and consequently they are what breeders endeavour to breed. I am sure Mr. Lambert will agree with me that in Ireland you can buy horses best suited for troop purposes for about 25*l.*, while the coarser animals fetch readily 35*l.* or 40*l.* in the market; and that being the case, the breeder will look, not to the ultimate value of the horses, but to what will answer his purpose best to breed for selling at the earliest date at which you can sell the horse. There have been several questions raised about the price of troop horses, and whether the cavalry give a sufficient price for them; I need not tell you that neither the cavalry, nor anyone else, will give more than what they can get the article they want for. I am under the impression that, as a rule, our cavalry regiments are well mounted, and that being the case, I don't see that the Government require to give any higher price than they are now giving, but I am going to ask Colonel Ravenhill whether I am correct in stating the price which is paid to the farmer by the contractor for the R.A. and R.I.A. horses has not been always very considerably under the contract price, or, in other words, the price which the contractor receives from the State. I am perfectly prepared to say, speaking of some few years back, that having gone very frequently to the Irish market, and having selected horses which I have sent the dealer to buy (because that is the best way of doing it), that in the regiment, before we went to India, the average price paid in Ireland by the dealer was not above 25*l.* at the outside. The Government paid 40*l.* Therefore, it is not so much the price given by the Government, as the fact that the dealer would buy the horses as cheap as he could. And I think I may say as regards three-year-olds and four-year-olds that the Irish farmer looks upon the troop price as about the best price he is likely to get for what is known in the Irish market as the "long-tails." That being the case, I don't think any increase in price would be of the slightest possible use as regards troop horses. A statement has been made that farm horses are too heavy; I don't think you can help that; the fact is the horses in a county become heavier or lighter according to the soil and the grass. Nothing that you breed down in Lincolnshire would prevent the horses getting heavy, while if you breed in Ireland, nothing will prevent them becoming light and well-bred. I, therefore, do not think much can be done in the way of getting more riding horses in that direction. There have been several remarks made about the value of good stallions taken about the country. There are two sides, however, to that question. If the Government are giving subsidies to one class of stallions, they will starve other and pretty good horses out of the market, but still, I believe, it would be an advan-

taguous thing if a premium were paid to every stallion travelling the country, which the Board of Selection in the district thought worth keeping for breeding purposes, and it should be a condition that the horse stood for service at a moderate sum. Practically the Government certificate that he was a good sound stallion, and that owing to the Government subsidy he could serve mares as cheaply as the commoner brutes going about the country, would be very useful to the breed of horses. I am afraid that you will find that all through the country the cheapest stallion is the one employed. If you have one at 20s., and another at 40s., nearly all the trade goes to the one at 20s. It is an evil, and the only remedy I can see would be to subsidize the good stallions, so that they might offer to cover at the same price as inferior animals. Mr. Wilson made a very sensible remark, namely, that the reason why horse-breeding had fallen off was because, on account of the drainage of land and other causes, it was possible to rear beef and mutton more profitably than horses. I believe that is a great cause of the alleged failure of the breeding of lighter horses. Farmers will do what is most profitable, and they would be fools if they did not; it is absurd to expect them to do anything else; but I quite think now that beef and mutton have gone down considerably, and horses have gone up considerably, that, therefore, we may look to a more active breeding of horses. It has been suggested that an export duty should be put upon good mares. There cannot be a greater fallacy than that. If you want to discourage breeding, put a tax on the export. No man in his senses would think that good breeding, or a good race of horses, or a numerous race of horses could be propagated in a country by extinguishing the best demand for those horses. Some gentlemen have alluded to the value of the army demand for horses. A regular demand for horses, of course, is of value, but an irregular demand such as the Government would have to make on the outbreak of war or anything of the sort will never lead to breeding horses. It is a casual demand, and I believe whenever a war breaks out, you will have to resort very largely to foreign countries for the horses you want, because nobody will breed on the chance of a demand which may not occur once in twenty years. The Committee which sat some time ago, of which I was Chairman, recommended very strongly that all foreign markets should be tried. We often hear very wonderful tales about what foreign horses can do. There is scarcely a person comes home from abroad but says that in the particular Colony in which he has been, the horses do fabulous distances, and on very little food. I do not say in all cases the statements are erroneous, but I have seen something of foreign countries, and I am prepared to express my opinion that the value of many of the foreign breeds is exceedingly overrated. I have owned some of the best Arabs in India, but I have never known an Arab which would do a long day's journey as gaily, and come in as well, as a very ordinary Irish hack that you can buy for 25*l*. In illustration of what I have said, some years ago, when I was first Inspector-General of Cavalry, there was a Hungarian Committee which came over to London and offered to find 10,000 horses to be delivered in the London Docks at 35*l*. a-piece, to be only accepted in the London Docks. They were guaranteed to be 15·2, and generally five or six years old. At that time there was a ring formed by the Irish dealers who said that they could not find four-year-old horses, and they doubted whether they could find three-year-olds of good quality at Government prices. As I knew that to be pure nonsense, I recommended the Adjutant-General to accept the offer of the Hungarian Committee so far as buying a certain number of these Hungarian horses. Eventually a Committee, of which Mr. Collins, P.V.S., was one, was sent out to Buda-Pesth to buy 700 horses. What was the result? Instead of being able to get 10,000 horses all warranted 15·2, five and six years old, the Committee stayed there two months or two months and a half, and they brought home not 700 but 430 horses, very few 15·2, most not over 15·1, a considerable number 15, and some 14·3, and that was all they could get with two and half months' hard work in a country in which they were told they could get 10,000 horses all 15·2. The Government are going to send out to try the Canadian market, but I am afraid Mr. Martin won't have his horses ready by that time.

MR. MARTIN: Not at the price. I can sell everything I breed on the spot locally at 200 dollars.

The CHAIRMAN: I understood you to say you could land them for 15*l*. at Liverpool.

Mr. MARTIN: I could sell them in England for 15*l.*, and everything I made over that would be net profit; but that does not affect the fact that I have sold all I have bred on the spot for 200 dollars.

The CHAIRMAN: Colonel Ravenhill has made a proposal to carry out a scheme which consists largely of a scheme for the inspection of reserve horses, and he expects to get the money to defray the expenses of his scheme of inspection by putting a tax upon horses. His figures no doubt will bear out what he says, but I think any tax on horses would be beyond all question an evil; I am quite certain it would do more harm than good. I do not think a system of reserves can be carried out for the reasons I believe I gave at first, namely, that you find people change their horses and you cannot inspect them sufficiently often. The yeomanry have been spoken of as a source of possibly remounting the cavalry. Well, I am afraid you will find a very large proportion of the yeomanry are not the owners of the horses which they ride, and that being the case, you would not get very much out of them. One or two remarks have been made on Government breeding and Government studs, and the value of that. I believe the experience of all Government studs is that they are a failure. Breeding is a specialty, and you require a body of men who can mate horses and mares together. It is a specialty, and when you are dealing with Government money, you are very likely to go on with a man perfectly honest and conscientious, but who does not possess the specialty, and the consequence is it will be a failure. It is also a failure for another reason, namely, the cost of breeding in studs where you have to pay for the food is exceedingly great. The Irish breed of horses is mainly produced by the small farmer class. He is a man with seven, ten, or twelve acres. He keeps an old mare for plough work; the mare is covered every year, and there is a foal; the foal runs about the grass and practically costs him nothing till it has become three years old, when he gets 25*l.* or 30*l.* for it, and he thinks he is exceedingly well paid. But the moment you keep horses and feed them in excess of the leavings of a farm, you will find their expense very much larger than 30*l.* The Indian Government many years ago had a very large horse-breeding establishment. I dare say many gentlemen who have been in India know what the Indian studs were. When I was in India some years ago the Government asked me what I thought their horses cost. I went round one or two of the studs, and I said I thought they cost upwards of 100*l.* a-piece; that seems rather an astonishing amount of money for a remount. Years rolled on: I came home, and when I went out again I found they had had a Committee on the Indian Remount Establishment. They had appointed two Officers who were in favour of the studs and who wished to keep down the cost as much as they could, and two who wished to run up the cost, and an umpire. Those of the Committee who wished to keep down the alleged cost had to admit an average cost of 135*l.*, the others ran it up considerably more, and I believe you will find almost all horse-breeding establishments are and must be, for the reasons I have given, if not a failure, at least excessively expensive. I must confess I look upon this subject, notwithstanding Colonel Ravenhill's lecture, as one in which I am almost in a state of despair. I do not see how we are to get the horses we want for the purposes of war. Colonel Ravenhill has not at all exaggerated the number of horses an Army Corps would require; in fact, he takes it at about the lowest estimate. It is quite certain we cannot get those horses in this country; I have great doubts whether we could get them in any other country, unless you do as foreign countries do. If you like to stop the traffic in Regent-street and single out and appropriate all the horses that pass down, of course you will get your horses for an Army Corps; but while it is as at present, I do not see how we are to meet the want of horses for war.

Colonel RAVENHILL: After what has passed, I shall keep you a very short time. Colonel Kingscote was good enough to remark that I had not stated the age at which the horses would be registered or bought; that is a matter of detail I did not enter into in the paper, because I say in it they would be registered if found fit. Of course no horse, unless he is of a fit age for cavalry purposes, would be registered. You would not register a small thing two or three years old; you would register nothing till it was absolutely fitted for cavalry purposes, and then I should propose to subsidize them. With regard to omnibus horses, of course they

are most valuable. The horses that ply for public hire about the country are well seasoned, well kept and fit for work, and those are the horses we want to get at by some means. Of course if we get an Act of Parliament to press every horse in the country, we know that there are heaps of horses in England, but no one wants to see the London carriage horse and the horses out of the different conveyances in Regent-street taken up. It is to provide in some other manner for this in an equitable way that I have made my proposition to-day. I think, on the whole, that this paper has conduced to a satisfactory expression generally. I knew perfectly well when I thought of making public such an idea as reimposing the horse-tax, it would meet with opposition from some—how could it be otherwise? But unless some measure is taken, it is impossible to say to what straits we are not coming in the matter of horse supply, not only for the Army, but for the country in general. Several gentlemen who have been kind enough to address the meeting to-day—Mr. Wilson, Mr. Gilbey, Colonel Kingscote, and others—can bear me out that nothing I have said here to-day is too strong to impress on the public the absolute necessity of something being done, and I do hope that this paper and the discussion of it may lead to a some feasible outcome. There is one other point I should like to touch upon, that is with regard to the prices to be paid. Sir Frederick Fitzwygram spoke of the prices paid by the contractor. It is true the contractor used to pay a very much smaller price than he received. I take it now that the contractors do not get quite so much out of it. It must be remembered, although the contractor makes his own arrangements with the farmer and breeder and gets a higher rate from the Government for the horse he delivers at the dépôt, still that difference in price is an insurance on the part of the Government that the contractor shall provide the horse safe and sound, shall deliver him all right, and in case of the horse having to be returned, the contractor has to take him back. The farmer could not possibly take up that risk. I have been all over England, and have had men buying for me in Norfolk, Devonshire, Yorkshire, Wales, and I have gone to a fair in Ireland where I have found them and other dealers from all parts of the globe congregated and bidding one against another. It is not that the horses are bred and produced in Devonshire, Norfolk, and so on; but the fact is that these very horses that the men show to me as the produce of their own county are bought wherever they can get them, and nearly all the well-bred horses we see about the country in England come from Ireland. There are very few horses bred in Yorkshire. I hope the breeding will improve, that the numbers will increase, and that what the Royal Agricultural Society has been good enough to do will have a good effect, but more money is wanted than they could possibly afford to give. I am extremely obliged to you for the patient way in which you have attended to this paper, and to the Chairman for having so kindly presided.

The CHAIRMAN: Gentlemen, it only remains for me to ask you to give a very cordial vote of thanks to the lecturer for what I think I may call his able and instructive lecture on this very difficult subject. If Colonel Ravenhill cannot show very distinctly how he would provide a reserve of horses, I do not think the failure rests with him, but in the difficulty of the subject. I believe he has put forward his views extremely well, and I hope that something may come out of them. I think you will all join with me in thanking Colonel Ravenhill very heartily.