strengthened by adapting their stock to the requirements of the service, and so forestalling competition from other quarters.

So far we cannot congratulate ourselves. The first batch of horses sent home as a result of the mission of the imperial officers, consisted of only sixteen from the North-West, in the vicinity of Pincher Creek, and thirty-nine others purchased in Ontario, principally around Cobourg. These were shipped by the *Carmona*, and are to be followed in a week or two by another consignment.

Speaking of their comparative want of success one of the purchasing agents mentions various defects in our system of raising horses, which are the very points that we have been urging ought to receive the constant and most serious attention of our breeders. Speaking of defects he says that the farmer and his men overdrive and overtask the young stock. The farmer thinks nothing of putting a three year old (and in many cases it had been noticed even at two years) in a team alongside an aged horse, and driving the pair along the road thirty or forty miles into town and the same distance back; is it surprising to think that such a thing ruins the young horse and brings out curbs, spavins, splints, ringbones, ridebones and the many other ailments a horse is heir to. In the ranches we understand there are some excellent brood mares to be found and some promising young stock coming on, but more care is required in weeding all out and getting rid of the too small, the two leggy, and the unsound ones.

If a proper strain of good, sound and thoroughbred, with bone, action, color and size be only selected, a most invaluable class of horse can be raised. Care will have to be taken to lessen the present system of blemishing with the large brands used on the ranches; indeed, the best classer of colt foal should not be branded, but arrangement should be made to graze them in enclosures, to handle them quietly while young and growing up, to do away with the present system of rough treatment, lasooing, catching and then the broncho riding. Care and attention bestowed on these horses will in time produce animals full of size, heart and muscle which with good manners will command high prices in the European market, in fact as many pounds as the horse is now fetching dollars in the North-West.

## Cavalry Saddles.

(From the Broad Arrow.

T is difficult to obtain any minute particulars about saddles prior to the establishment of standing armies, as no reference is made to them as a question of equipment before the time of Marshal Saxe, who, no doubt, in consequence of sore backs, etc., proposed one of his own construction. This saddle, of which there is a drawing in Major Luard's Dress of the British Army, is simply two sideboards with an iron or steel arch in front, and a sheepskin over all with a surcingle. It is doubtful whether it was ever adopted in the French service, but the idea was good, because the seat was low and the framework light. In principle some of the South American saddles are the same, viz., two sideboards made of hide and stuffed hard with a species of rush, and joined together. After this the Hungarian pilch saddle was generally adopted throughout the armies of Europe, while more recently the English army adopted the Nolan saddle, with the more modern innovation of the iron in place of the wooden arch and cantle. This is the present saddle now in use in the English cavalry, with the exception of a few which have been recently tried by the 10th Hussars at Aldershot, the product of the joint wisdom of the committee appointed with Sir F. FitzWigram, late cavalry inspector, president, and which, in one field-day, on the Fox Hills, gave 86 sore backs out of the total strength of 290 horses of the 10th! Let us now consider the modern English cavalry saddle of the universal iron arch pattern. If asked to point out the bad points of this saddle we should say: 1st. The sideboards are too far apart. No doubt this was to leave plenty of roon for the panels, and to allow ventilation, but this is a great error, as when the boards are very far apart you do not utilize all the bearing surface of the horse's back. "The tree should not be extended beyond the surface, where it has to support pressure, and this being exercised chiefly in a perpendicular direction, it is not only useless but absurd to extend it too far down the ribs later-2nd. The seat is too flat and broad, which prevents the man gripping the horse; it also brings him too far back. 3rd. The introduction of iron at all is a mistake, since if the plates are thin they open, and the saddle slides forward under the weight; if thick, to obviate this, you get too much weight, besides which there is a strain continually going on between the iron and the wood. The great point to be considered is to have the tree right to begin with, and not adapted to the horse's back by stuffing.

It may appear strange that it has been so difficult to obtain a good military saddle when the requirements have been so well known, but such is the case. No doubt prejudice and other matters peculiar to the

service are answerable to a great extent. We will now proceed to enumerate the essential points of a good saddle, and in a subsequent article we will try to place before our readers a description of a saddle which seems to fulfil all the conditions which we are about to lay down, and which has been tried by the cavalry of a country with entire satisfaction to the committee of officers appointed to report on it. First, then, a saddle for military use should be as light as possible consistent with strength. 2nd. It should fit uniformly on the horse's back without unequal pressure on any part, and having a fixed and easy seat for the rider. 3rd. It should remain in the place in which it is placed at first, without the use of either crupper or breast-plate. 4th. The under surface of the saddle should have, as nearly as possible, the same relation to that part of the back it is intended to occupy as a mould does to the cast that is taken from it, except that it must not touch the backbone. A well-made English hunting-saddle fulfils nearly all these conditions, and, consequently, sore backs in a well-regulated hunting stable are unknown. Why, then, are sore backs so common with the military saddles? Simply because, owing to a false and unscientific method of carrying the kit, wide panels are attached to the saddles. It is evident, therefore, that to effect any improvement the kit must be carried in such a way that panels shall not be required. Some twelve years ago Major Dwyer, of the Austrian service, wrote a book on saddlery and bitting, which was the first book which we believe ever went scientifically into the subject. The book was thought by many persons in England to be too abstruse, and treated the horse too much as a machine, but to horsemen, as apart from mere riders, the theories put forward were very clear and simple. The principles of saddling advocated by Major Dwyer were those of the Austrian cavalry, and consisted not only in carefully fitting the saddle both to the horse and rider, but also in considering their equilibrium. Now, the idea of a general balance of rider and horse was nothing new in military equitation, but the Austrians were evidently the only European nation who systematically followed up the rule. Our own cavalry have not done so, the man usually not being in the centre of his saddle; while we alone among nations have stuck to the antiquated system of equipment, viz., the huge valise and old panels. To show that the principle of correct saddling and fitting of equipment was carefully attended to in the old days, we may here quote some remarks of General De Brack's from his work on Light Cavalry, 1809:—"When a saddle fits a horse well, neither crupper nor breastplate is required to keep it in its place, therefore these must not be drawn too tight so as to impede the movements of the horse and occasion useless friction." The difficulties that General De Brack had to contend against were very great, as the cumbrous and useless equipment were still universal throughout Europe, and even the continuous hard service of the First Empire failed to do away with these anomalies which the English cavalry still stick to. He continues, "The art of carrying kit lies in three things—1st, To take only what is absolutely indispensable; 2nd, To distribute the weight evenly; 3rd, To afford the rider the greatest possible facility of managing his horse, and to derive the greatest advantage from its powers (General Rule). The man and horse are but one; we must always try that the centres of gravity of these two must be one also, and carefully determined; for this purpose the weight must rest centrally on its support." This is precisely Dwyer's arguments, only sixty years older. The arrangement of the seat for the proper distribution of the rider's weight is of equal importance with the correct fitting of the under surface. Three-fourths of the time and trouble that are devoted in the riding-school to endeavoring to get the men to sit in a uniform manner might be spared, and the desired result more easily obtained by properly adjusting the saddle to the horse and rider instead of forcing the latter into a contest with a mechanical difficulty that requires a constant execution of muscular power. In English saddlery, except in the case of web-drawn saddles for officers, made by good makers, care is not always taken in determining the seat, and blocked leather seats are nearly always bad. The girth is another point of equal importance, and in the next article we shall point out in our opinion the place at which it should be attached to the saddle, and the texture of which it should be made, merely premising that at present both are the very worst that could be devised in the British cavalry. We shall also point out what we consider the best arrangement as between the vexed question of blanket or numnah.

## The Shoeburyness Team again.

AITHOUGH the visit of our artillery team to England is now an old story, we cannot resist the opportunity of bragging a little about them now and then, and consequently make no excuse for offering our readers the opinion of the the *Volunteer Service Gazette* on their merits. Speaking of the results of the competition it says:

"The meeting has been marked by two incidents of special interest the presence throughout the two weeks of Colonel Armstrong's splendid team, and the attendance of Lord Wolseley at the prize distribution.

<sup>\*</sup>Major Dwyer's book on bits and bitting.