



# PROBLEMS AND SOLUTIONS WHEN SHOEING THE VETERAN EQUINE

FUCF Distartation





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# **ACKNOWLEDGEMENTS**

I would like to thank Mr P Stern F.W.C.F my mentor for help and guidance throughout this thesis, Miss N Hunt D.W.C.F for general support throughout, Dr A Coumbe MA, MBBS, FRCPath and Mrs K Coumbe MA, VetMB, CertEP, MRCVS for their guidance and anatomy knowledge.

Photos on front cover are: Top left is Milly. Bottom left is Jubi.

(See appendix pages 43 – 45)

Top right is Indi. Bottom right is Blacky (the oldest horse in my care).

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# **SUMMARY**

My thesis is based on twenty-five veteran equines aged between eighteen and forty-five of which some are retired and others still in full or part time work.

I have charted the facts that I feel are relevant to this study, which has been carried out over a period of two years.

I also discuss techniques of shoeing veteran equines, which I have used over the many years of dealing with them. Some of these techniques I have developed myself to minimise trauma to the animal and all involved in the shoeing process.

# INTRODUCTION

As a farrier for thirty years I have seen many changes along the way. I was brought up to respect and work alongside what we called horsy people. Now we have to work alongside people with horses.

The attitude and temperament of the horses has also changed, as more horses are used for pleasure rather than work as they were in the past.

Farriers have changed too, especially with the availability of the machine made shoe. I now speak to farriers who pride themselves on fitting twenty-five to thirty sets a day with an apprentice working alongside them.

This is all well and good **but** this type of shoeing does not allow for certain types of horses, the nervous or awkward type and the more mature horse i.e. The **VETERAN** as these animals need time and patience to enable us to shoe them.

It is the veteran horse that I have based my thesis on. For these care, time and special techniques are often needed due to the limited movement that occurs as the animals have grown older.

# **Materials and Methods**

I have gained the necessary materials for my thesis from the following sources:

**Existing Clients** (customers who have been on my books for any period of time over the last thirty years).

**Veterinary referrals** (any veterans that have been referred by veterinary practices due to individual problems).

**Customer recommendations** (veterans that have been recommended to me for individual reasons).

Colleague referrals (veterans that have caused concern when shoeing or trimming by colleagues and they have required additional advice).

Each veteran in this study has been treated as an individual case study. My methods for recording information were mainly interviewing the client, consulting with veterinary surgeons and use of a digital camera.

# What is a Veteran?

In the show ring the veteran horse or pony is classed as over sixteen, when I judge for the Veteran Horse Society. It can be a class in hand, ridden or a mixed class depending on entries. The judge will take into consideration its general condition, appearance and its ability to move. An experienced judge will want to see the veteran move in a straight line, then on a circle, followed by a close inspection of its body, paying special attention to any abnormalities found around the joint regions.

With modern medicine and technology as, with humans, the equine is now living longer than ever before. In part this is also due to the fact that their limbs, joints and vital organs are not being worn out with hard work, as was the case thirty years ago.

It is now quite common to be shoeing a horse or pony in its thirties and some claim to be in their forties, many still in light work.



Fig 1
NINA – a well-loved veteran family pony still shod and used regularly (see appendix). Nina is shod with deep-seated, quarter clipped, flat front shoes to give the feet plenty of cover but no sole pressure. Nina has always been shod this way and is comfortable, so no change to her shoeing plan is required.

# **Problems we Face in General**

As humans grow older, not only does their movement become restricted, but their attitude changes as well. They become more impatient and less tolerant. This I have found is **exactly** the same with the veteran equine. A dramatic attitude change takes place, which varies in age from animal to animal. This is noticeable in a number of ways: The horse that has never run back when shod will suddenly start to. The horse may start to drop down on the opposite fore leg to the one which is being held. The most common problem is slamming the hind leg down, when held in the shoeing position.

These problems will occur for a number of reasons and it is often the experienced farrier who will first become aware of the issue.

The difficulty lies in determining where and why there is a problem.

I feel the farrier must be aware when dealing with the veteran, that there are several potential distractions from the true underlying condition. Over the years I have found veteran horses react violently to shoeing which at first seemed to be joint related. Later it became apparent that they were losing their sight and on other occasions the hearing had been affected. Any sudden movement or noise would startle the animal causing panic.

There is a vast array of age-related problems that these horses and ponies face. These may be categorized in the following: joint related, muscle related, disease related, tendon, ligament and injury related.

# **Joint Problems**

#### **Joints**

The study of joints is called arthrology. A joint or articulation is formed by the union of two or more bones. Joints in the leg are usually synovial joints. The articular surfaces of the bones are covered with articular cartilage, which should be very smooth to reduce friction and minimise concussion. With the veteran the cartilage often becomes worn and in some cases virtually non-existent. This causes a bone on bone situation and dramatically increases friction and reduces movement in the joint. The veteran will react if the joint is over-flexed or extended, as pain will increase in the joint.

The joint capsule is in reality a tube that holds the two bones together, and is composed of two layers (outer and inner). The outer layer is dense and fibrous and anastomses with the periosteal membrane of the bone. The inner layer of the joint capsule is vascular. It is comprised of loose connective tissue and is classed as the synovial membrane. The membrane covers all areas of the joint except that covered by articular cartilage. The synovium forms the boundary of the synovial or articular cavity. This cavity is filled with a thick clear yellowish fluid (synovial fluid). The joint capsule weakens with age. The joint becomes swollen and painful limiting the veteran's free movement.

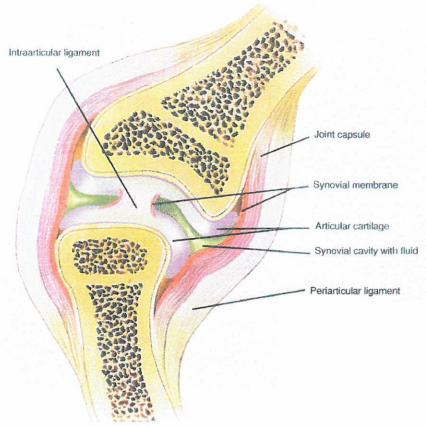


Fig 2 A typical synovial joint.

The main joints that are found to be affected in the forelimb of the veteran are the distal interphalangeal (coffin) joint, proximal interphalangeal (pastern) joint, metacarpophlangeal articulation, (fetlock) the carpus (knee) and the shoulder.

When picking up the forelimb for shoeing, especially if you are unfamiliar with the animal, you may well encounter a resistance from the joints mentioned when either flexing or extending them. There is a tendency for farriers to flex the joints beyond their normal range to make shoeing easier for themselves. Often it is a mistake to think the animal is resisting shoeing, but in reality the joints have lost their capability to function normally. It is far easier for both farrier and veteran when the farrier realises the animal's limitations. When you learn to recognise the signs and use certain techniques, the veteran becomes far more co-operative when shod.



Fig 3

LADY — a veteran in her mid thirties has a shoulder related problem and is unable to flex her joints for the normal shoeing position. The veteran should be able to find its own natural and comfortable stance before the shoeing procedure takes place thus reducing trauma and concussion on the joints (see appendix).

The carpus (knee) is composed of three joints: the proximal joint is the radiocarpal joint, a ginglymus joint, which opens to ninety degrees. The intercarpal joint opens to approximately seventy degrees and the carpometacarpal joint being an arthrodial type joint barely opens at all.

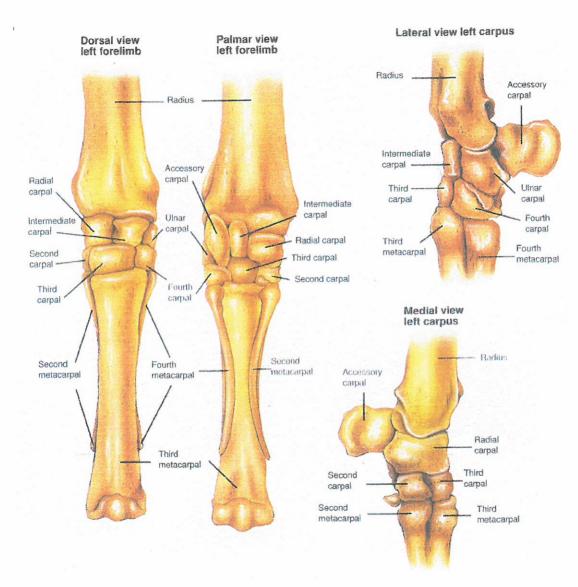


Fig 4 Bones of the carpus.

Many common injuries within the knee arise as a result of concussion or trauma. Many result in degenerative joint disease (DJD). This involves the joint capsules, synovial membranes and cartilage, which means that joint flexion becomes difficult for the veteran.

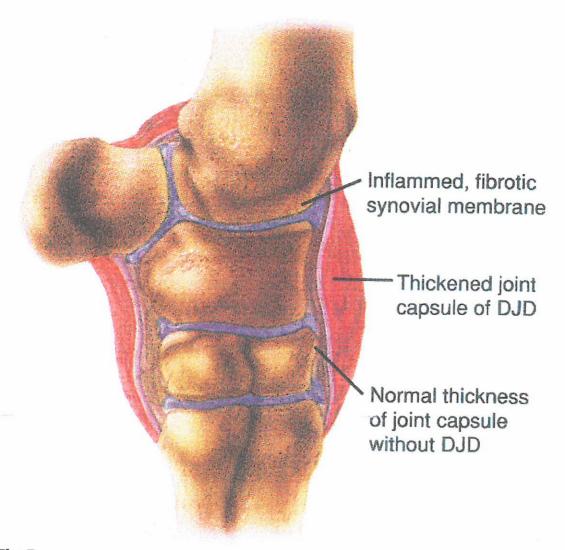


Fig 5
Thickening of the joint capsule and synovial membrane found with degenerative joint disease within the carpus.

Degenerative joint disease becomes more apparent with the breakdown of cartilage, and increased inflammation within the joint. You will start to see swelling around the knee and lameness will increase. Over a period of time, movement of the joint in some veterans is reduced and their gait is limited to a normal walking pace. This is usually due to the extensive arthritis within the knee joints in advanced cases.



Fig 6

MANX – a thirty eight year old, retired Master of Foxhound's hunter. He has virtually no movement within the knee due to DJD in its advanced state, which prevents the knee from bending normally (see appendix).



Fig 7
Dorsal view of Manx's knees. Right (off) fore severely affected with extensive joint swelling due to the trauma and concussion of hunting for many years.



Fig 8 Lateral view of Manx's right (off) knee (carpus).

The metacarpophalangeal joint (the front fetlock) is a ginglymus joint formed by the distal end of the third metacarpal bone, the proximal end of the proximal phalanx and the proximal sesamoid bones. The articular surface of the third metacarpal bone is cylindrically curved and is divided by the sagittal ridge, which articulates with the proximal phalanx and the sesamoid bones. The arrangement is similar on the hind fetlock properly called the metatarsophalangeal joint. The range of movement in this joint through flexion and extension amounts to one hundred and forty degrees in the normal horse.

With the veteran as with other joints the fetlock suffers dramatic changes over the years. DJD is high on the list again through trauma, concussion and other specific conditions such as osteochrondritis dissecans. The farrier best identifies this firstly in observation; a thickening from the fetlock down becomes apparent, often the fetlock and pastern joints have the appearance of blending into one continuous joint. Secondly the farrier will notice reluctance for the joint to bend when picking up the leg for shoeing. The veteran will resist any form of force if expected to flex beyond what is capable of the damaged joint. The farrier must be aware of the veteran's limitations and adjust their approach to the shoeing procedure as required.

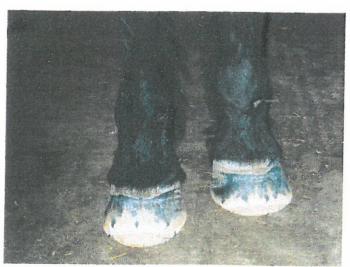


Fig 9

TOPAZ – a thirty two year old retired hack with DJD in both fetlocks. The lack of cartilage within the joint becomes apparent when the leg is flexed. Grating of bone on bone can be both felt and heard (see appendix).

The fetlock, pastern joint (proximal interphalangeal joint) and the pedal joint (distal interphalangeal joint) with the veteran are also prone to phalangeal exostosis (also known as ringbone). This can be caused over the years not only by trauma and concussion but also by poor conformation e.g. 'base wide' animals are said to be predisposed to changes on the medial side with the converse occurring in 'base narrow' horses. Ringbone is classified into four types: High ringbone - where new bone growth appears at the distal end of the proximal phalanx or the proximal end of the middle phalanx. Low ringbone - where new bone growth appears at the distal end of the middle phalanx and proximal end of the distal phalanx. Periarticular ringbone - where new bone growth is present at the end of the joint capsule. Articular ringbone where new bone growth is accompanied by osteophytes (a spur of bone on a joint margin that develops in association with intra-articular disease.

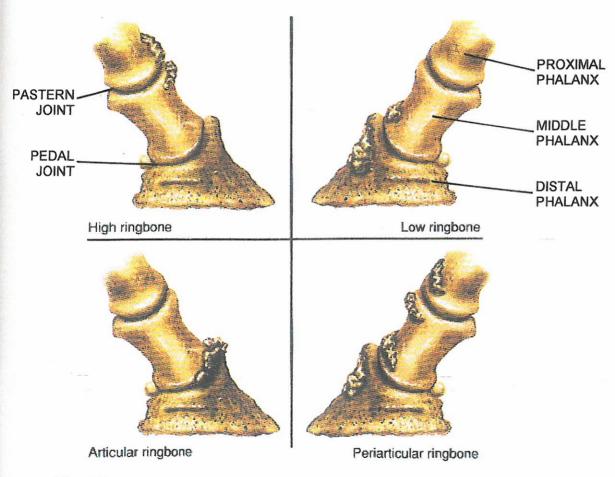


Fig 10 Different forms of ringbone.

Not all forms of ringbone seem to cause excessive lameness. With periarticular ringbone the veteran will often not show signs of being lame but with articular ringbone lameness is always present. The lack of flexion of the joints becomes apparent for both veteran and farrier.

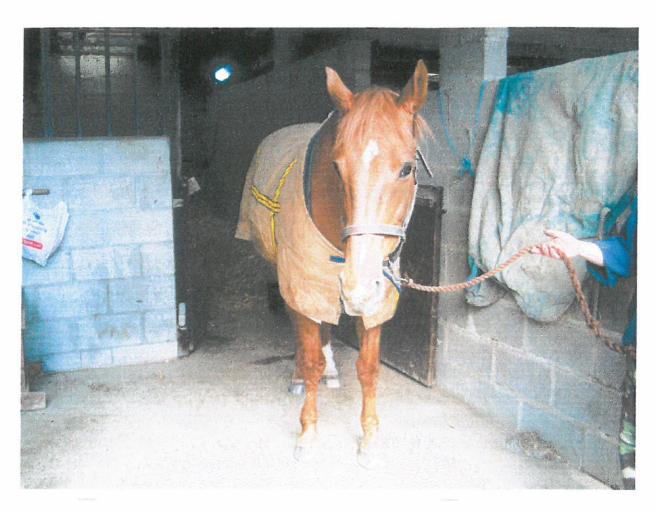


Fig11
GEORGE – is a retired twenty one year old point-to-pointer who has DJD in the off fore knee joint and high articular ringbone in both fore feet causing limited movement (see appendix).



Fig 12

George is shod with thick rubber shoes (Ollov), with the intention of reducing concussion through the joints, coupled with the fact he has low weak heels, and deep-seated sole bruising. Rubber shoes have limited use, and are difficult to fit, but suit George. This was after many attempts to keep him sound with traditional shoes, including bar shoes, wide webbed deep-seated shoes, and aluminium shoes. In my opinion the reason the rubber shoes work on George is the thickness of the shoes gives tremendous ground clearance keeping his heels off the ground.

# **Shoeing for Fore Limb Joint Problems**

Shoeing follows the well understood format of reducing trauma and concussion by trimming and balancing the foot, shortening the toes and easing the point of break over. This can be achieved by fitting a set toe, rolled toe or a natural balance shoe. The farrier must be aware of the lack of flexion and extension within the joint when trimming, fitting and nailing of the shoe. Each veteran should be treated as an individual case and discussed with both owner and the veterinary surgeon before shoeing.





Fig 13 Fig 14

Natural balance shoes may well benefit some veterans as in fig 13. In the picture on the left the shoe is machine made. The picture on the right (fig 14) shows a shoe hand forged by the author to fit a heavy horse. The horse in question has limited movement in the lower limbs and was dragging his toes excessively. Set and rolled toed shoes did not prove successful and it was decided to hand forge a natural balance shoe from half round, this allowed the horse to find its own point of break-over. This has proved successful to date.

#### The Hind Limb.

In the hind limb, the hip, stifle and hock joints cause most problems. The joint from the fetlock down may suffer many of the same related disorders as the forelimb, although these are not as common.

The hind limbs are the essential elements of propulsion in the horse. The muscles are larger and more powerful than those of the forelimb. The hock contains the most important joints in the process of propulsion, therefore with age sustains the most stress. The horse is unable to flex the hock without also flexing the stifle and the hip joints, therefore pain in any of these joints is often difficult to pinpoint when lifting the limb of the veteran.

Over the years both clients and I have referred many veterans to veterinary surgeons suspecting hock related problems, only to find after detailed lameness investigation, that the problems have been diagnosed higher up.

With the veteran a flexion test is not always necessary. It is usually obvious when attempting to lift the hind limb that there is a problem. I have noted over the years a veteran with a hind limb related problem would always lift the limb in a forward position making itself comfortable, before allowing the person under the horse to move the limb backwards to the position required for shoeing.



Fig 15



Fig 16
Two pictures to show how the veterans shown lift their legs in a forward position in anticipation of it to be moved back to the shoeing position.

The hock causes **great concern** when dealing with the veteran. This is composed of a number of articulations, their function is to aid in diminishing (reduce) concussion, these are as follows: Proximal – The Tarsocrural articulation consisting of the Talus and Calcaneus.

Intermediate – The Intertarsal articulation consisting of the Central Tarsal bone along with parts of the fused First and Second Tarsal bones.

Distal – The Tarsometatarsal joint consisting of the Third and Forth Tarsal bones and in addition the fused First and Second Tarsal bones.

#### Anatomy of the Hock

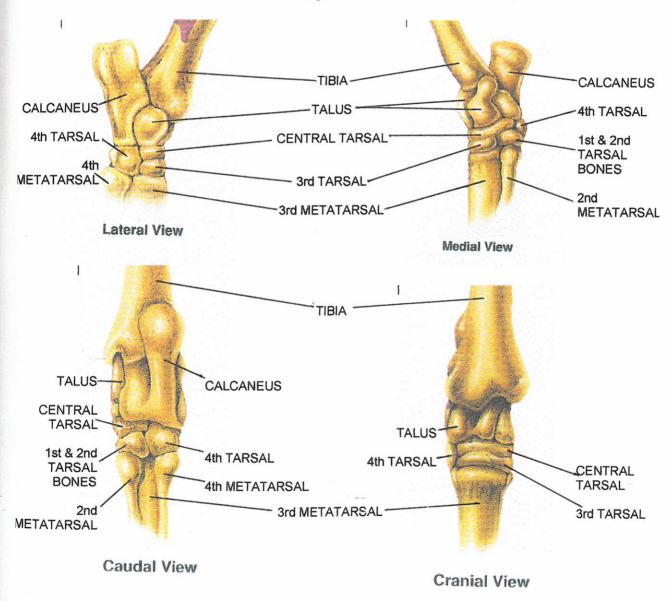


Fig 17

A sound understanding of the anatomy helps when shoeing the veteran, as the farrier can ascertain how much movement has been lost with general wear and tear over the years, and what bone changes have taken place. In my experience there are very few veteran horses that will not have suffered some form of deterioration within the hock area.

The most common cause of hind leg lameness with the veteran in general points towards bone spavin. This is defined as an osteoarthritis progressing to an ankylosing arthritis with D.J.D occurring (see appendix). This usually involves the distal intertarsal, the tarsometatarsal and the proximal intertarsal joints. The dorsomedial surfaces are often affected first.

The farrier or client may well notice a change in the shoe wear pattern. Heavy wear or dragging of the toes may become prominent (see Fig 18 and 19).



Fig 18 Heavy shoe wear.



Fig 19 Scuffed toe from dragging.

A lack of co-operation from the veteran when trying to shoe and often an attitude change is noticed as the veteran feels discomfort. This often seems more noticeable on one side. With experience a decrease in foot flight can be noticed when viewed laterally. Visual signs in the early stages are difficult to pin point but with more advanced cases become quite clear. Another frequent clue is stiffness that improves with exercise.



FLOSSIE – aged 23 has a classic case of bone spavin (hock osteoarthritis) on the right (off) hind (see appendix). I liased with the veterinary surgeon and after studying the radiographs and results of nerve blocks, it was decided to shoe Flossie with a traditional block heeled spavin shoe, due to ankylosing arthritis involving the tarsometatarsal joint. This has kept Flossie in work to date. As with all veterans the shoeing plan is revaluated after each visit.

# **Shoeing for Hind Limb Joint Problems**

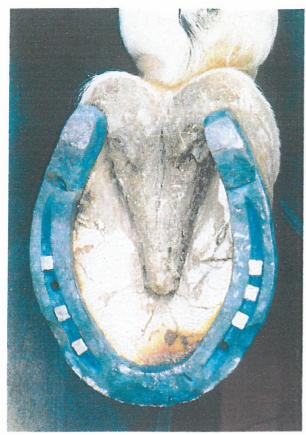
When shoeing — each veteran should be treated individually. Any early changes within the hock may be treated with just a rolled or set toe to ease the break over and help reduce trauma and concussion. More advanced cases can be shod with block heels. The height adjusted according to the severity of the spavin and size of the animal. Although the toe should be set or rolled, quarter clips may be applied as this helps keep the shoe in place, as veterans with spavin are prone to twist their limbs in foot flight adjusting for comfort and often spreading their shoes.

The format of shoeing may also follow the lines of lateral extensions, where the animal distributes its weight away from the dorsal medial aspect that is being affected onto the lateral aspect to alleviate the discomfort. This procedure from my experience is well worth considering if the spavin is diagnosed in the early stages. Most veterans I see are in the advanced stage and I find blocked heels more successful, mainly as weight bearing is toe loaded.



A plain stamped spavin shoe.

Fig 21



A hand 3/4 fullered spavin shoe.

Fig 22

Other hock related problems that may cause concern, with the veteran might include **curb** (tarsal planter desmitis). This is a sprain of the plantar ligament. The ligament travels distally from the point of the calcaneus along the plantar aspect of the hock. Conformation and trauma are a cause of curb and may well affect the veteran in the early years. Current thinking considers a curb to involve a complex of soft tissue swellings that occur on the distal plantar aspect of the tarsus.

Regarding the shoeing for curb, I have found the traditional method of applying a graduated shoe unsuccessful. As the veteran's limited movement can cause the horse to slip excessively, this can have the affect of increasing trauma and both veteran and rider lose confidence. Therefore it may be suggested that block heels be used in these cases, but then success will depend on the site of the original damage and the

# conformation of the animal concerned. I have noted poorer results in those with a sickle hock conformation.

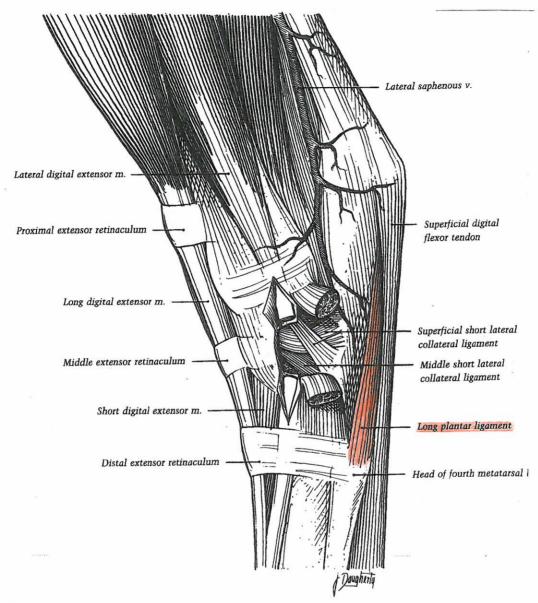


Fig 23
Lateral view of hock to show site of curb.

# **Techniques**

I would suggest that when trimming or shoeing the veteran, with joint or muscle related problems, the horse is not worked on straight from the stable, if it has been in for any period of time. The veteran will be aided by either turning out or walking from the stable for approximately five minutes increases circulation.

#### Stimulation

A gentle massage for one to two minutes on a joint can prove very effective. This is best done prior to flexing or extending the limb.



Fig 24
Applying a heat pad also proves effective; this is best carried out using either a wheat or cherry stone bag (these are available from health food shops), heated in the microwave for one minute. If a microwave is not available the use of a charcoal hand warmer is a good substitute.

Applying heat to a muscle or joint stimulates the nerves and helps increase the blood flow. It should be noted whenever applying heat whatever method used, keep the pad on the move over the chosen area, this stops any discomfort to the horse. Naturally the client should always be informed about this approach before carrying out the procedure.





Fig 26
Two ways of warming the hock with a wheat bag.
27

Whatever technique is used, the secret of success is keeping the veteran calm and comfortable. Since so many veterans are unstable on their limbs.

#### **Boot technique**

Resting the hoof capsule on your **boot** may be all that is needed to shoe the veteran without discomfort. Both trimming and the shoeing process can be carried out this way very successfully with practice (see fig 27 below).



Fig 27 Boot technique.

#### **Blocks**

I have found the use of wooden blocks the most successful way of dealing with problem veterans. Many of these have been referred to me with reputations of not being able to be trimmed or shod. I carry a selection of blocks that vary from off cuts to custom designed blocks shaped fit for purpose (see figs 28 and 29).

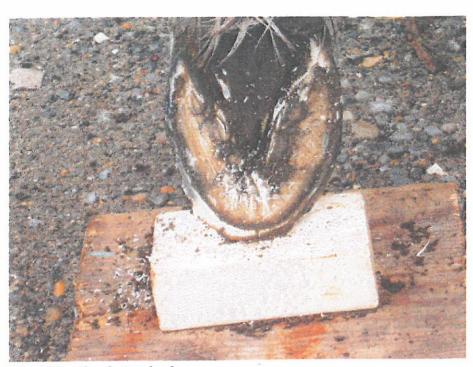


Fig 28 Block technique.



Fig 29 Block technique.

Wooden blocks have the advantage of keeping the veteran low but moving the legs into a comfortable working position. They also have the advantage if the veteran panics the leg is easily removed without any damage. Rasping a block also has the advantage of not damaging the rasp.



Fig 30
This is a relaxed veteran with extensive joint problems being trimmed using a custom shaped block.



Fig 31



Fig 32 Close up use of support blocks to rasp the feet.

A custom designed block made from a piece of wood 4" square, rounded off on all corners and shaped to a half moon on one side, The top has a recess to hold the toes and is very effective for many cases.

It should be noted that the veteran should be slowly encouraged to place the hoof capsule on any block. Time taken on this procedure pays in the long run. Once the veteran has gained confidence the procedure becomes easier.

#### The hoof jack

A modern design of foot stand has proved invaluable for veterans with shoulder problems, as the shoulder is kept straight and not pulled out laterally for working purposes. Also many veterans may bear all their weight on the farrier, when trimming or shoeing the hind limbs, the hoof jack can take all that weight and give confidence to the veteran. The stand is made of plastic, so if it were dragged under the horse, minimal damage to all parties would be done (see figs 33 and 34).



Fig 33 The hoof jack.



Fig 34 The hoof jack.

# **Health and Safety**

Health and safety should be always taken into consideration when dealing with veterans. I would suggest that the client or yard owner always be present, and an experienced handler on the head is essential with problem veterans.

Try to always have two experienced farriers at hand who know the procedure to be under taken. Making sure the shoeing area is clear of any obstacles that the veteran may jump or fall on is also important.

## **Shoes Fit for Purpose**

A selection of shoes that I have found useful when shoeing veterans.



Fig 35
A 3/4 Hand Fullered Set Toe is probably the most useful shoe for veterans, where joint movement has been reduced. It helps to ease the point of break-over, thus reducing trauma and concussion through the limbs.



Fig 36 Pattern bar shoe.



Pattern Bar: for use where the digital flexor tendons have been damaged, namely (Superficial Digital Flexor Tendon (SDFT) and the Deep Digital Flexor Tendon (DDFT)). The bar should be fitted at a height suitable to the injury following discussion with the

veterinary surgeon involved. This is in my experience is worked out by measuring the distance from the heels of the foot to the ground, when the horse is at rest. The bar height is gradually reduced as the tendons repair. The disadvantages of this shoe are that it is difficult to fit as the injured leg is usually heavily bandaged, and movement of the limb very restricted. Some veterinary surgeons feel they do not help optimal healing due to the change of foot position, however they usually make an injured horse much more comfortable.

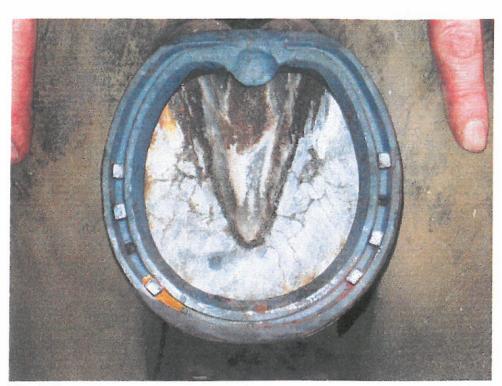


Fig 38

Concave Straight Bar: a very useful shoe for many age related problems. Used for general added support or where egg bars are frequently lost (often pulled off in the mud) or not suited. I have used this shoe for horses, which suffer from corns, low weak heels, deep-seated sole bruising, and toe or quarter cracks. Also useful for stabilising sheared heels. In my experience the straight bar is very adaptable and can be clipped in various ways depending on the problem you are faced with. The disadvantages are the extra weight of the shoe, they may be pulled off by the mud or over-reaching. Clients also have a problem cleaning the foot out properly.



Fig 39 Lateral extension.



Fig 40

Fullered Lateral Extension with rolled toe and quarter clips useful for conformation related problems i.e. toe in conformation (pigeon toed). The lateral extension helps equalise weight bearing

on the hoof capsule, and helps create symmetry and balance to the foot. Where the lateral aspect of the hoof has become weak with conformation or age related problems, I have found that the rolled toe eases the point of break-over and reduces trauma on the joints, and the clips help keep the shoe in place. The disadvantages are that they may be pulled off by other horses. They are often difficult to nail due to the lateral aspect of the hoof wall being weak, this is where the mediolateral balance has been lost.



Fig 41

3/4 Bar Shoe: useful for veterans with repeated corns (usually due to deterioration on the distal phalanx (P3)) especially in weak healed thoroughbred types. The shoe gives added support by redistributing the weight from the injured area by use of the bar. Suppurated (septic) corns are easily treated with this shoe. The disadvantages of the shoe are that the affected area is exposed to mud, gravel, flints etc. sometimes slowing the healing process.



Fig 42 Glue on heart bars



Fig 43

Glue on Heart Bars: excellent for laminitis and deep seated sole bruising, as there is no trauma or concussion on application. Also

useful where the hoof capsule has become too weak to nail a shoe on. This shoe gives the hoof a chance to grow. The disadvantages to these shoes are the cost to the client (many veterans are owned by elderly clients) and they may also be pulled off in muddy conditions, by the horse standing on itself with the opposite foot and over-reaching.



Fig 44

Fish Tail: useful for added support on weakened or damaged tendons. It has the advantage of extra caudal support and aids in recovery. I would suggest the shoe be used on horses on box rest or walked out in hand. From my experience when recovery is being achieved the shoe can be replaced with an egg bar or straight bar fitted excessively long caudally. The disadvantages with this shoe are that they may be pulled of in the box by the opposite foot or on the stable walls. This shoe is best fitted with a large toe clip.

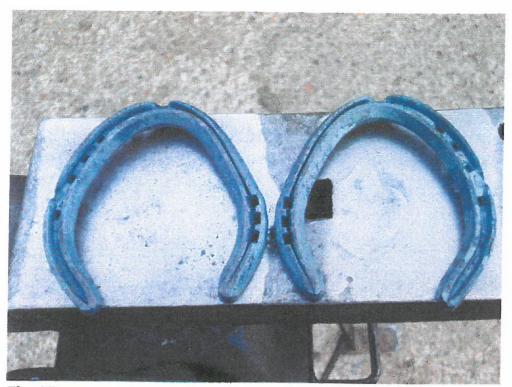


Fig 45 Preventers



Preventers: A traditional shoe, which helps correct and prevent damage to many anatomical areas. In my opinion, an underestimated shoe in modern farriery. Preventers can also be classed as brushing shoes, feathered edge shoes, speedy cutting

shoes etc. They all have the same function to prevent damage. It is useful to identify the area of the shoe that is causing the damage. To do this the hoof capsule can be either covered in chalk or engineer's blue dye, the horse can then be worked or turned out. After re-examination the area causing the damage can be easily identified by the markings on the affected shoe. The preventers can then be custom made for the individual horse.



Plain Stamped Egg Bar: probably the most used remedial shoe in modern farriery. I have found many uses for these including general support, corns, weak heels and sole bruising. They may also help with mediolateral balance and stimulation of the blood supply through the solar plexus. As with the straight bar they can be clipped in a variety of ways depending on the problem. The disadvantages are that they may be pulled off in muddy conditions or by over-reaching. They are also difficult to fit to excessively flat feet in my opinion.

## Conclusion

In my experience there are increasing numbers of veterans in the south east of England where my forge is situated. These present unique problems and challenges to the farrier.

I found that the most common problem is spavin (see appendix), and that other common problems are arthritis related. 90% of cases have multiple problems.

My recommendations when confronted with a veteran are:

- 1) Allow plenty of time for each animal.
- 2) Use directly applied heat to help ease arthritic joints.
- 3) Use custom made wooden blocks to stabilise the foot in a comfortable working position for all parties.
- 4) Make and use specialised shoes as appropriate.
- 5) Involve the client. Customer co-operation and customer education.
- 6) Make allowances for temperamental problems, which may be related to changes with advancing age such as blindness and deafness.
- 7) Liase with the veterinary surgeon.

Time taken is time gained. Impatient farriers will not be suited to the veteran. Understanding the limitations of the veteran's movement and their capabilities is essential. Finding a technique that suits all benefits all and remembering patience is a virtue. I would like to thank you for taking the time to read this thesis.



Poppy Becky and Topaz: happy and contented veterans from a rescue centre.

## **Bibliography and References**

Hickmans Farriery — J Hickman and M Humphrey — Published by J.A Allan and co Ltd London — Second edition 1988

Clinical Equine Anatomy and Common Disorders of the Horse — R.J Riegal and S.E Hakola — Equistar Publications Ltd Marysville Ohio USA — First edition 1996

Adams Lameness in Horses — T.S Stashak — Published by Lea and Febiger Philadelphia — Fourth edition 1987

Corrective Farriery — edited by S Curtis — R & W Publications (Newmarket) Ltd — First edition 2002

Scientific Horseshoeing — Prof. W Russell — Loose Change Publications Los Banos California — Tenth edition 1988

## **Appendix**

NAME	AG	E EQUINE FUNCTION	ACTUAL DIAGNOSED PROBLEMS	SUSPECTED OR NOT CONFIRMED PROBLEMS	
HONEY	24	Retired riding horse	Arthritis in the fore limbs	Spavin	Square toe shoeing in from hinds removed
BRACKEN	36	Family pony	Laminitis in front and muscle wastage		Wide webbed fronts seated out hinds removed
JUBI	26	Riding horse	Laminitis all- round and arthritic hocks	Spinal problems	Natural balance shoeing
FLOSSIE	23	Hack	Low weak heels in front and spavin	Ringbone	Rubber shoes in front with spavin hinds
MILLY	29	Riding pony	Arthritis and muscle wastage	Hock or stifle problems	Square toe shoeing
MADDY	26	Retired British team dressage	None	Shoulder problems	Quarter clipped fronts hinds removed
NDI	30	Retired family pony	Laminitis muscle wastage and spinal problems	Stifle problems	Wide webbed seated out front hinds removed
EDDY BOY	29	Rescued pony	Spavin and muscle wastage	Shoulder problems	Trimmed
IPPA GIRL	19	Rescued pony	Laminitis and muscle wastage		Trimmed for laminitis

MANX	38	Retired maste of fox hounds	J I TO COIL D	oal Spavin	Trimmed to
		horse	and ringbone		ease the point
BECKY	30	Rescued pony	Stifle problem and muscle wastage		of break over Trimmed
POPPY	29	Rescued pony	Laminitis		
LADY	34	Retired jumping pony	Carpal and shoulder DJD	Spavin	Square toe shoeing hinds removed
NINA FRIZZBEE	29	Riding hack	Laminitis and Cushing's		Quarter clipped fronts standard hinds
	34	Retired jumping pony	Grass cracks and spavin		Quarter clipped fronts with fille when required hinds removed
MARTY	27	Retired dressage horse	Ringbone and spavin		Square toe shoeing in front set toe hinds
TOBY	37	Retired dressage horse	Low weak heels shoulder problems and narcolepsy		Wide webbed seated out quarter clipped fronts standard hinds
CROZZIE	28	Riding horse	Muscle wastage	Navicular syndrome	Standard shoeing at present
PERRY	21	Eventer	Severe seedy toe		Deep seated quarter clipped fronts standard hinds
LACKY	18	Doding I o	Arthritic carpal joints (DJD)	Spavin	Square toe fronts set toe hinds
	1 1		Arthritis in most joints		Trimmed

32	Retired hack	DJD in fetlocks		Trimmed
21	Potirod naint	and laminitis		
	to pointer	DJD in the	Spavin	Rubber shoes in front hinds
23	Riding pony	Laminitis and spavin		removed Quarter clipped fronts with
19	Riding pony	Laminitis		spavin hinds Heart egg bar fronts hinds
	21	21 Retired point to pointer  23 Riding pony	21 Retired point to pointer  23 Riding pony  Riding pony  Riding pony  Ringbone and DJD in the carpal joints  Laminitis and spavin	21 Retired point to pointer  23 Riding pony  Riding pony  Ringbone and DJD in the carpal joints  Laminitis and spavin