



EQUESTRIAN LIFE
exclusive

Curb bit becomes horse-friendly

The double bridle has been well established for centuries, but now contemporary knowledge and testing methods have seen the creation of a version that makes it more horse-friendly.

PHOTOGRAPHY BY **PATRICK VARNEY & TONY UYTENDAAL**
TEXT TRANSLATED FROM GERMAN BY **TONY UYTENDAAL**



Designer and engineer,
Fritz Stahlecker

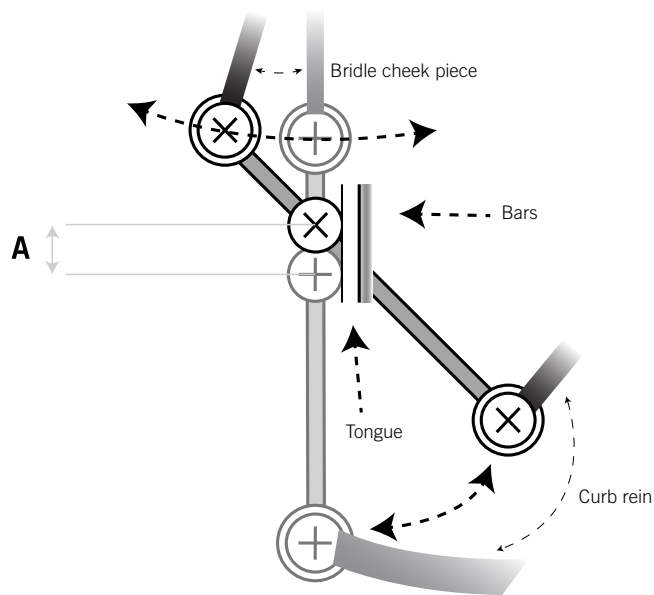
DESIGNED AND ENGINEERED by experienced German rider and Dressage trainer, Fritz Stahlecker, the HSH-Centre-Curb Comfort Bit, optimises the traditional curb bit by removing the common problems associated with its use with a double bridle.

Respected Australian dressage trainer, Tony Uytendaal, has brought this latest version to Australia after testing it on several horses in Germany last year.

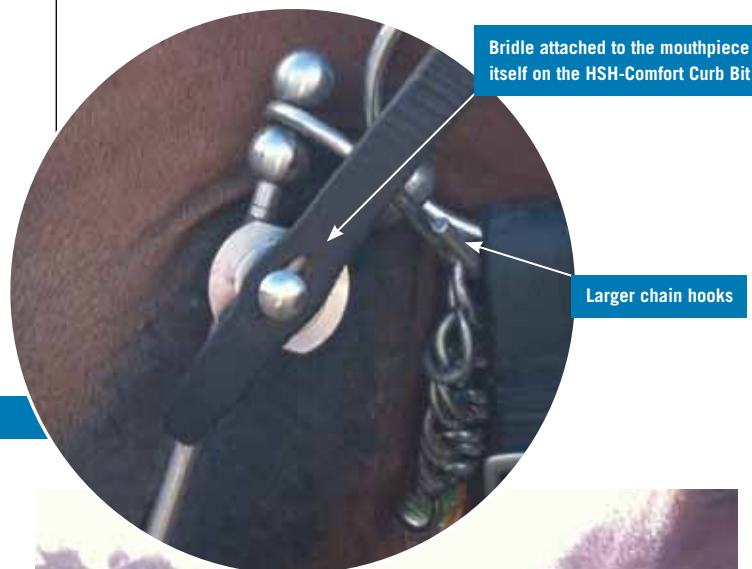
The HSH-Centre-Curb Comfort Bit addresses unsolved problems arising from using two bits; the lack of room in a horse's mouth; tongue pain caused

by the port and discomfort caused by the collision of the curb and snaffle bits.

This re-engineered bit has been put forward to German dressage officials as a potential future option for riders who choose to make use of it. Fritz Stahlecker says that the revised curb is not a new invention, but simply a modification of what is already used and accepted. The end goal is to make fine riding easier, while allowing the horse to be the 'judge' in terms of comfort. »



Picture 1 TRADITIONAL CURB BIT



» The story started centuries ago when the old French masters of dressage such as De La Gueriniere [1688-1751] and De Pluvinel [1552-1620] combined the curb bit with a cavesson for training and educating horses. Later, the well-schooled horse was ridden with only the curb bit and the cavesson was no longer required as an aid. The snaffle [or bridoon] bit was not added to the curb until after the French Revolution [1789-1799]. Both bits complement each other well and have independent functions - the curb bit is used for longitudinal flexion and neck carriage and the snaffle for lateral flexion. The combination of both bits in one bridle enables the rider to finetune the horse's head and neck carriage. Fritz Stahlecker says that while the concept is brilliant, in practice there are some flaws that have not been recognised and until now have remained unaddressed.

Thanks to modern testing methods, however, these common problems have been identified and improvement to the double bridle design results in a more horse-friendly approach.

THE COMMON PROBLEMS ARE:

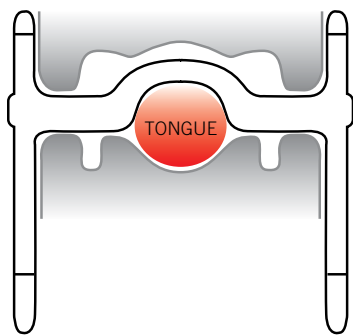
1 LACK OF ROOM IN A HORSE'S MOUTH

Modern horse breeds often have smaller mouths than their historic counterparts. When a horse has a small mouth, by adding the snaffle bit to the curb bit, lack of room becomes an issue. As the curb reins are used, the mouthpiece of the curb bit moves two centimetres up and down in the mouth. By engaging the curb reins, the mouthpiece rises and when the hands release, it also drops down again. This means that the curb inevitably collides with the snaffle bit. Also, not even the best hands can guarantee that the snaffle remains constantly positioned in the middle part of the curb bit. Many horses take a long time to get used to this disturbance. Some never do. Now they will never have to.

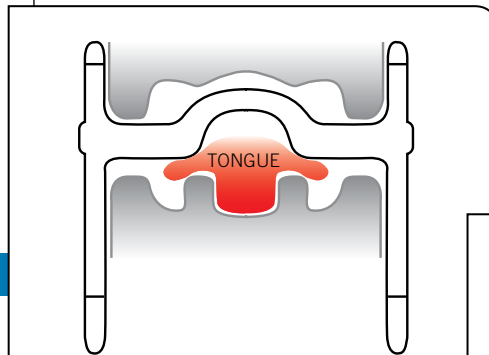
The up and down movement of the curb bit is due to the way the bridle is attached to the top ring of the curb bit. (see picture 1). A simple solution (see pic 2) shows the ideal way of attaching the bridle directly to the mouthpiece itself. Small extensions have been added to the ends of the mouthpiece and the leather cheek pieces are attached to these. This eliminates the up and down movement of the curb bit. Instead, it now remains constantly in the same position - exactly where we want it to - and it no longer conflicts with the snaffle. The result is up to two centimetres more room inside the horse's mouth. The horse feels more comfortable and accepts the double bridle more readily.



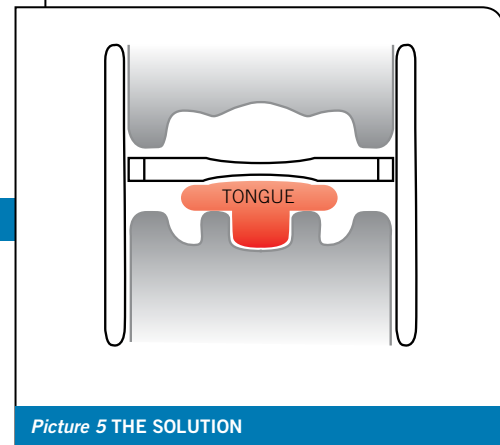
Picture 2



Picture 3 THE ASSUMED SITUATION



Picture 4 THE REALITY



Picture 5 THE SOLUTION

2 TONGUE PAIN CAUSED BY THE PORT

Current literature on equitation assumes that the port in the mouthpiece is large enough to allow the size of the tongue to fit, so that pressure is exerted only onto the horse's bars and not onto the tongue (see picture 3). Anatomically, however, that is not possible. The distance between the bars is a lot smaller than we imagine. In thoroughbreds, for example, the distance seldom measures more than 3.5cm. However, the tongue is considerably larger and wider than that and there is no doubt it overlaps the corners of the port. Therefore, the port can't spare the tongue with the result that whenever the reins are picked up, the edges of the tongue are squeezed painfully between the bars and the mouthpiece – the opposite to the desired outcome. (Pic 4 shows the actual results of what is happening in the mouth.) In picture 5, the consistent even pressure of the HSH Centre-Curb Comfort Bit is illustrated.

3 THE WRONG WORKING ANGLE OF THE CURB BIT

The combination of the curb with the snaffle causes another problem. To prevent the upper cheek bars of the curb from interfering with the snaffle, the curb bit is designed to be at a 45 degree angle. This means the curb puts strain on the tongue in an upward slanting angle, rather than a desired 90 degree angle.

Evidence now shows that the tongue is more bulged above the curb than below it. This effect causes another disadvantage – added back pressure on the bars and increased jamming of the tongue.

One solution to this problem is to minimise the functional angle of the curb bit. The HSH-Centre-Curb Comfort Bit makes this possible through the central mount of the curb bit, the relatively short placement of the upper bars in relation to the muzzle and a modified mount for much larger chain hooks. The functional working angle can be reduced to just 10 to 20 degrees, making it almost perfect. This minimises strain on the tongue as it is getting close to a perfect 90 degree angle. A port-less curb can be used without any fear that it will interfere with the snaffle and there is no pressure on the edges of the tongue. The final factor is that the curb chain no longer pushes against the curb or snaffle bits. The hook of the curb-chain is made rounder and longer, so it won't push into the snaffle-bit anymore.

Fritz Stahlecker says that as the inventor of the HSH-Centre-Curb Comfort Bit, he intended to start a discussion on the design and use of the curb bit and double bridle. An engineer by profession with a life-long passion for the art of Dressage, the now 87 year old is a noted Dressage trainer. "We need to know what is going on inside our equine sport partner's mouth. The double bridle

“The HSH-Centre-Curb Comfort Bit can translate the smallest movements of our hands to the horse's mouth.”

is the most important instrument for the rider. No other bit allows us to ride with more sensitivity and refinement and understanding the mechanics of the bit will improve our riding style," he says. The HSH Centre-Curb Comfort Bit, he says, can translate the smallest movements of our hands to the horse's mouth. It asks for steady contact and 'can improve even the softest pair of hands'.

The HSH-Centre-Curb Comfort Bit is not about re-inventing the wheel. Rather, Fritz Stahlecker says, it has been devised to optimise the existing concept and improve a widely accepted design. The overall aim, he says, is to facilitate horsemanship and good riding. "The horse will be the judge."

The testing results are so far promising. Tony Uytendaal has tested the bit on 10 horses in Australia and says it has surpassed his most optimistic expectations. "Every horse that I have test ridden with the HSH-Centre-Curb Comfort Curb Bit has quickly reacted favourably to it," he says. **EQ**



FOR FURTHER INFORMATION If you would like to know more contact Tony Uytendaal at tony.uytendaal@gmail.com. First published in Reiter Journal. Details translated with the permission of Fritz Stahlecker. Copyright Equestrian Life 2012