

DEVELOPMENT OF THE TOPLINE

Part I

By Heike Bean with Sarah Blanchard

Moving calm, forward, and straight; remaining supple, relaxed, obedient; being submissive, engaged, collected, and brilliant; demonstrating freedom and regularity of the paces, and lightness of the forehand: these are the demands of a dressage rider (or driver) upon his horse.

We hear and learn that dressage is the most "natural" training of the horse. We are told that everything we ask the horse to do, he displays on his own at one time or another: extensions, flying changes, piaffe, passage, etc. Is this really true? When we see a horse display any of these movements, for how long does he carry on? For three, five, or maybe ten minutes? Is he bending, is he calm and relaxed? Does he fulfill any of our other requirements for dressage?

The only time we see a horse move at all on his own is when he is excited for some reason—whether it is from fear, playing, fighting, showing off, or just to show his relief after being locked up for a period of time. As soon as he gets rid of excess energy, he will just stand there, and begin to eat or gaze around.

What we ask a horse to do, therefore, is really not in his nature, especially when we ask him to carry or pull an additional load. True, the exercises we ask for are within the natural ability and range of motion of his skeleton and muscles, but he really has no interest in executing them our way, for a prolonged period of time, on command.

This means that the trainer must gradually and carefully educate the horse's body and mind to submit to our demands. The trainer must always be very careful never to ask anything of the horse that he can't do at his stage of training. But the trainer can't just let the horse be, either—he can't let the horse have a loose rein and do what he wants to do, hoping the horse is smart enough (and motivated enough) to know what to do and eventually develop his abilities by himself.

As we all know, dressage is the systematic gymnasticizing of the horse's body, and the gradual development of his mind. But in

order to be successful, a trainer has to know exactly what he is working on, why, for how long it is beneficial, what is too much for the horse to handle, and exactly what is the next goal.

Every time a horse is worked, especially in the ring, he is also being trained—whether the rider intends so or not. Every turn, every transition the horse must negotiate will be a new learning experience for him, positive or negative, depending on the guidance given by the rider. And herein lies a big problem, and danger. So many riders who are new to dressage—and also many who believe they know what they are doing—really don't know what harm they can do to a horse through a lack of understanding of the basic principles.

There is "road" training to be followed, and one expression of this is the development of the horse's topline.

THE TOPLINE

The main and essential goal for every riding and driving animal is correct development of the topline. The topline of the horse is, basically, the spine and its attached ligaments and muscles, stretching from the poll to the tail.

A green horse's first reaction, when asked to carry or pull weight, is often to throw up the head, hollow the back, and travel around turns with the head to the outside, leaning over the inside shoulder. The horse does not know—and really doesn't care to learn—that the best way to deal with the burden of rider or cart is to relax the neck, lengthen the topline, step under with the hind legs, and use the back muscles.

All this must be explained to him, gently and in stages, but thoroughly and consistently.

Development of the topline requires the correct use of the proper muscles in the neck, along with the correct use of the proper muscles in the back. The *longissimus dorsi*—the all-important back muscle—starts at the base of the neck, and the only way the horse can relax, strengthen, and use

his back muscle is to stretch, relax, and properly use the neck.

RELATIONSHIP OF THE NECK TO THE BACK

The neck is a very long part of the spine. It is also the most flexible part of the topline, and therefore the most evasive and difficult to control. Since it is always the foremost part of the horse's body, and the rest of the spine must follow the neck, it is tremendously important that the neck is fully relaxed and correctly aligned with the rest of the spine.

STIFFNESS IN THE BACK CANNOT BE REMOVED UNTIL THE NECK IS RELAXED

Any tension or resistant curvature in the neck and any resistance in the jaw—no matter how slight—will affect the whole horse. Also, many trainers concern themselves only with the hindquarters (the "engine" of the horse), and tell the rider, "Don't worry where the neck is, just make him go forward. Everything else will come by itself." This may be true, once the neck is stretched, straight or relaxed, but any tension in the neck results in tension of the back muscles, and that blocks any effective forward motion. The horse may be able to go faster, but not more forward. Simply driving the horse forward won't take care of the problem in the neck.

It is true that everything that goes wrong in front has to be "pushed out" from behind, and problems with the neck can never be corrected without an increase of the driving aids. However, if the horse has no understanding about what he is to do with the bit, and what he is expected to do with the increased energy from behind, he will either run away, get more tense, or—even worse—begin to buck or leap in the air to escape what he cannot handle.

THE SIX PRINCIPLES

There are six German words that fully describe the principles, goals, and essence of

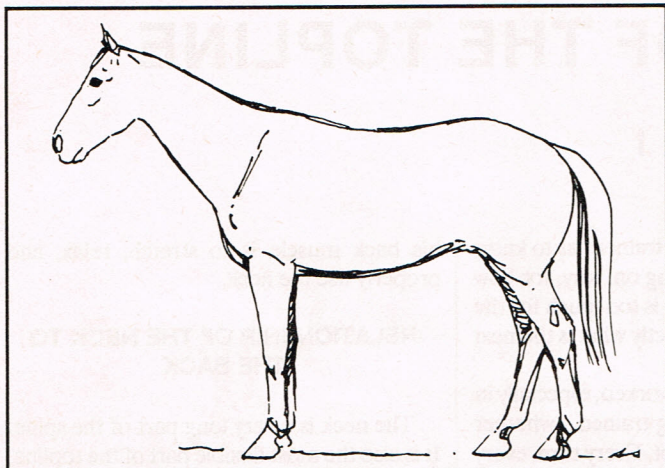


Fig. 1 - This horse's "upside-down" or ewe neck, set low into the shoulders, makes it difficult for him to learn to balance and use his back muscles correctly.

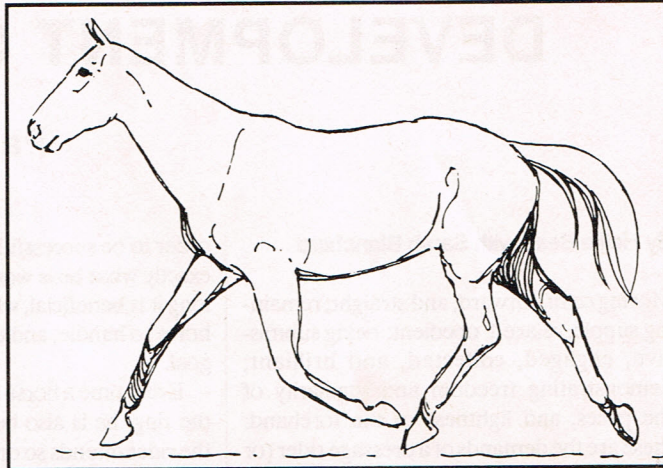


Fig. 2 - The same horse, moving freely. Notice the lack of muscling in the topline and the bulge at the bottom of the neck.

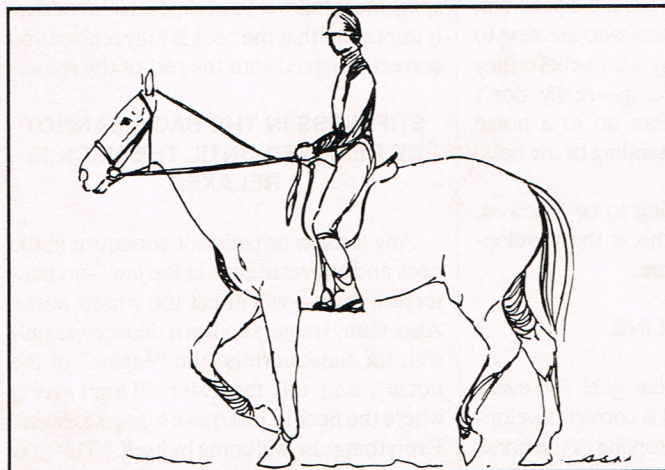


Fig. 3 - The ewe-necked horse under saddle, with the rider not attempting to influence the horse's way of going.

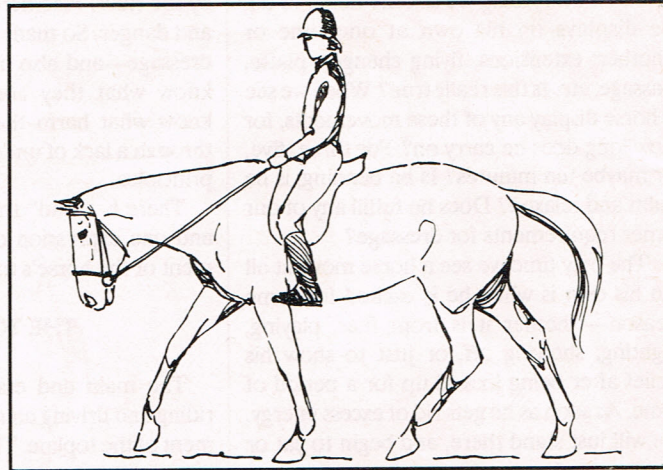


Fig. 4 - The same horse with a rider who is actively asking for the topline to be stretched downward and forward. Rebuilding the muscles of the topline is not an easy task!

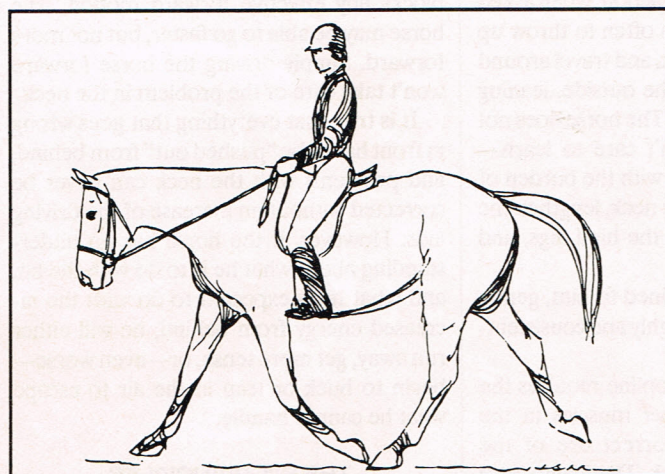


Fig. 5 - The same horse working on the bit, with some engagement.

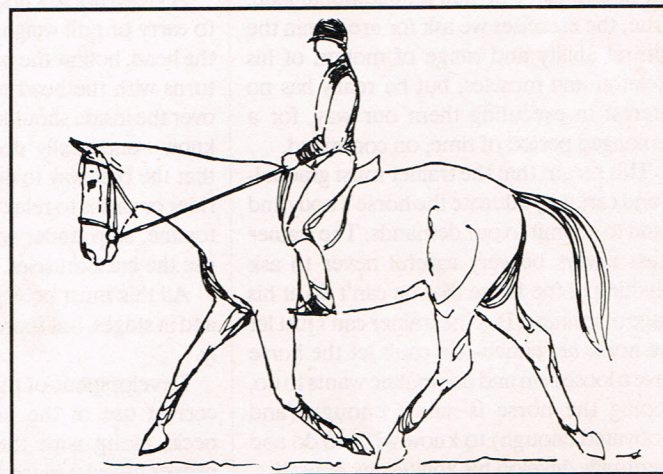


Fig. 6 - As the rider asks for more engagement, the horse can begin to move in a higher frame, and is now working at about Training Level.

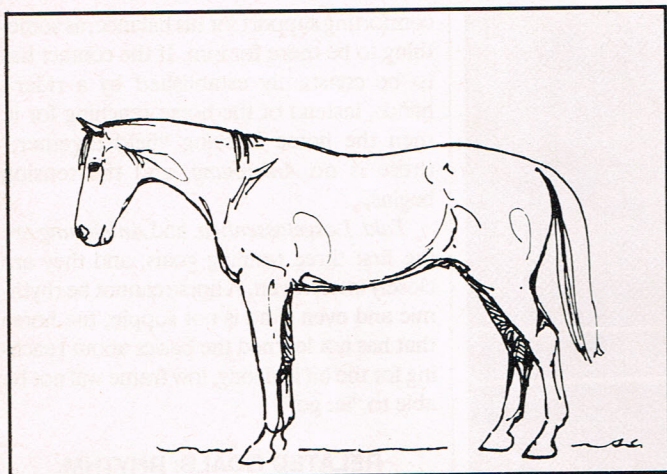


Fig. 7 - A horse with good neck conformation; note the naturally stretched topline.

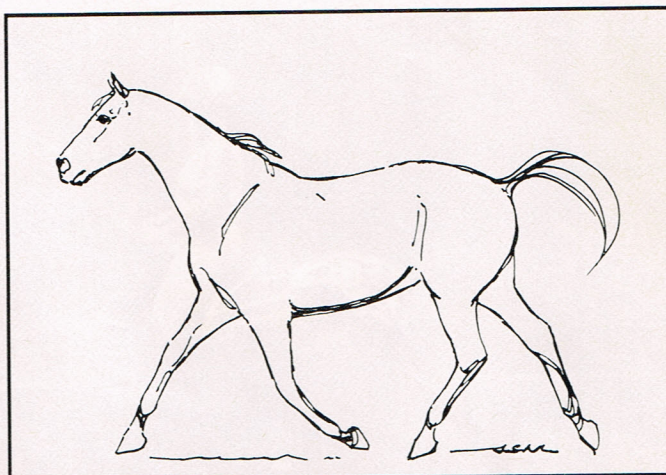


Fig. 8 - Moving freely, this horse can balance and move in a somewhat higher frame than the ewe-necked horse, without having to use the muscles of the lower neck to compensate for a lack of topline.

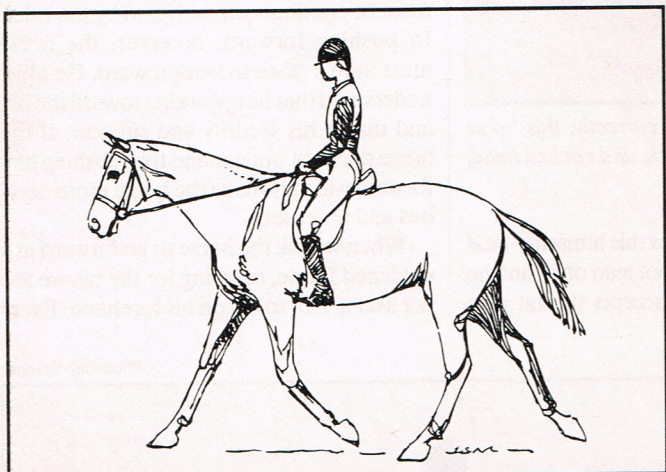


Fig. 9 - The same horse, under saddle, with a passive rider. Compare the topline to that of the horse in Fig. 3.

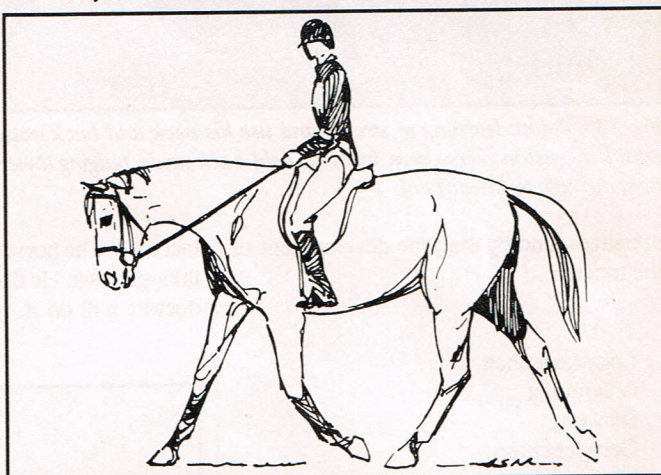


Fig. 10 - Stretching comes easily for the horse with the well-constructed topline.

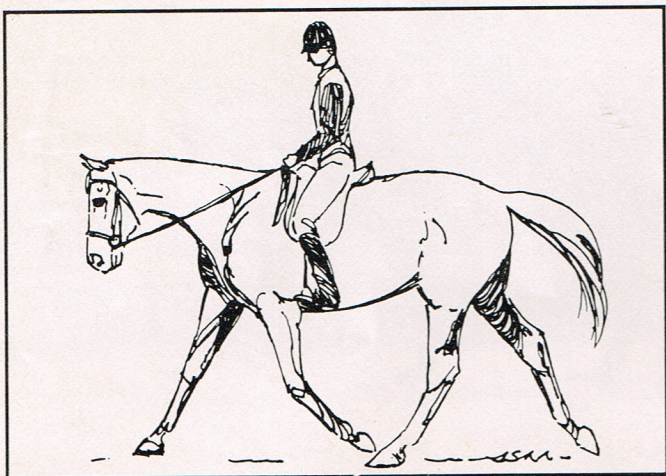


Fig. 11 - As he continues to strengthen the correct muscles, this horse will begin to balance in a higher frame...

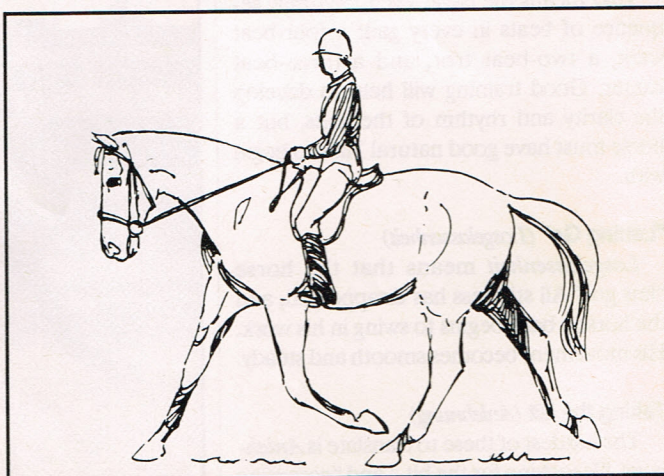


Fig. 12 - ...and finds it comfortable to reach a beginning Training Level frame.



Fig. 13 - Before learning to stretch and use his neck and back muscles correctly, this horse exhibited tension everywhere, from his held-back stride, bulging lower neck, and cocked head, right through to his stiff tail.

dressage—and by that, the development of the topline:

Takt
Losgelassenheit
Anlehnung
Schwung
Geraderichten
Versammlung

Rhythm of the Steps (*Takt*)

Takt means the clear, even, rhythmic sequence of beats in every gait: a four-beat walk, a two-beat trot, and a three-beat canter. Good training will help to develop the clarity and rhythm of the gaits, but a horse must have good natural *Takt* to begin with.

"Letting Go" (*Losgelassenheit*)

Losgelassenheit means that the horse "lets go." All stiffness has disappeared, and the horse's back begins to swing in his work. His movement becomes smooth and steady.

Taking the Bit (*Anlehnung*)

The hardest of these to translate is *Anlehnung*. "Reaching for the bit," and "accepting the bridle" are inadequate; when a horse has achieved *Anlehnung*, he looks for the bit, stretches towards it, and takes a secure con-

tact on it. The horse does this himself—he is taking the bit. He does not lean on it, and he doesn't pull on it. He accepts the bit as a

comforting support for his balance, as something to be there for him. If the contact has to be constantly established by a rider's hands, instead of the horse reaching for it, then the horse is being "held together," there is no *Anlehnung*, and the tension begins.

Takt, *Losgelassenheit*, and *Anlehnung* are the first three training goals, and they are closely interwoven. A horse cannot be rhythmic and even if he is not supple; the horse that has not learned the basics about reaching for the bit in a long, low frame will not be able to "let go."

RELATED GOALS: RHYTHM, LETTING GO, AND TAKING THE BIT

In training, the hindquarters of the horse must be continuously activated by the rider. In pushing forward, however, the horse must have a place to work toward. He must understand that he is working toward the bit, and that is his security and support. If the horse does not understand this, pushing him forward will only make the horse more nervous and confused.

When we ask the horse to go forward in a stretched frame, reaching for the bit, we are not asking him to fall on his forehead. Every

Photo Deb Granger



Fig. 14 - The same horse, after extensive work with sidereins and consistent downward stretching. He is relaxed, confident, stretched over his topline, and has lost the resistant bulge of the lower neck.

trainer's concern is to avoid riding the horse onto his forehead. Often, however, people assume that every horse traveling in a long, low frame has fallen onto the forehead. The horse will definitely carry more weight on his forehead during this stage of training, but the only way to strengthen the horse's hindlegs and convert pushing power to (eventually) carrying power is to bring the hindlegs as far as possible underneath the horse's own weight. This can only happen when the topline stretches, and in the beginning the topline can only stretch down and to the front; the green horse doesn't have the strength to stretch and carry himself (and a rider) in any other way.

USE OF SLIDING SIDEREINS

Beginning development of the neck muscles can be easy or difficult, depending a great deal on the basic conformation of the horse and the skills of the rider. With a poorly built horse or a less-than-accomplished rider, it can be extremely frustrating to try to develop the low head and stretched topline that is so important. Many horses simply refuse to put their heads down, and many riders have never learned the firm, consistent, and subtle use of the aids to accomplish this.

This is where a pair of sliding sidereins will be particularly useful to assist the horse in learning how to lower the head and neck and stretch the topline. With the support of these sidereins, the horse can find his own balance, and he is encouraged to reach forward and down without the harsh restriction of the fixed sidereins, and without being bothered by the jerky motions of an inept rider's hands. The horse with conformation problems—ewe neck, short neck, heavy jaw, bulging muscles at the bottom of the neck—soon learns to relax and let the sidereins work for him. The green rider, also, gains confidence and experience when the sidereins are used, because he can feel what it's like when the horse moves more correctly, without worrying about his own less-than-perfect hands.

Work under saddle with sliding sidereins can be very beneficial to the green horse, but it mustn't be overdone. Ten to fifteen minutes is enough for the first few sessions, as the horse is learning to use new muscles that he may not be comfortable with. Many horses, of course, never need the help of the sidereins or any other training aid; and

others will need them for quite a long time as a support during their early training. Once the horse is reaching and stretching down to the bit on his own, and traveling in a relaxed, confident, forward manner, the sidereins can be gradually lengthened, and then taken off entirely. If incorrect riding or an interrupted training schedule causes the horse to revert to wrong use of the neck muscles, use the sidereins again. It's far easier on both the horse and rider to use this helpful training aid than to try to fight your way into a correct frame.

If properly used, in the appropriate length,

these sidereins will never pull a horse into a frame he is not able to work in. They will not make a horse hold himself. They will, however, help to build the proper muscles at the top of the neck while the muscles at the bottom of the neck will go slack with disuse. Through this development, you can watch the muscles of the back and hindquarters grow from week to week.

What is the proper length? Sidereins are adjusted correctly when the horse is no longer working through his lower neck. That means that he does not use the bottom of the neck to work against the bit. Care must

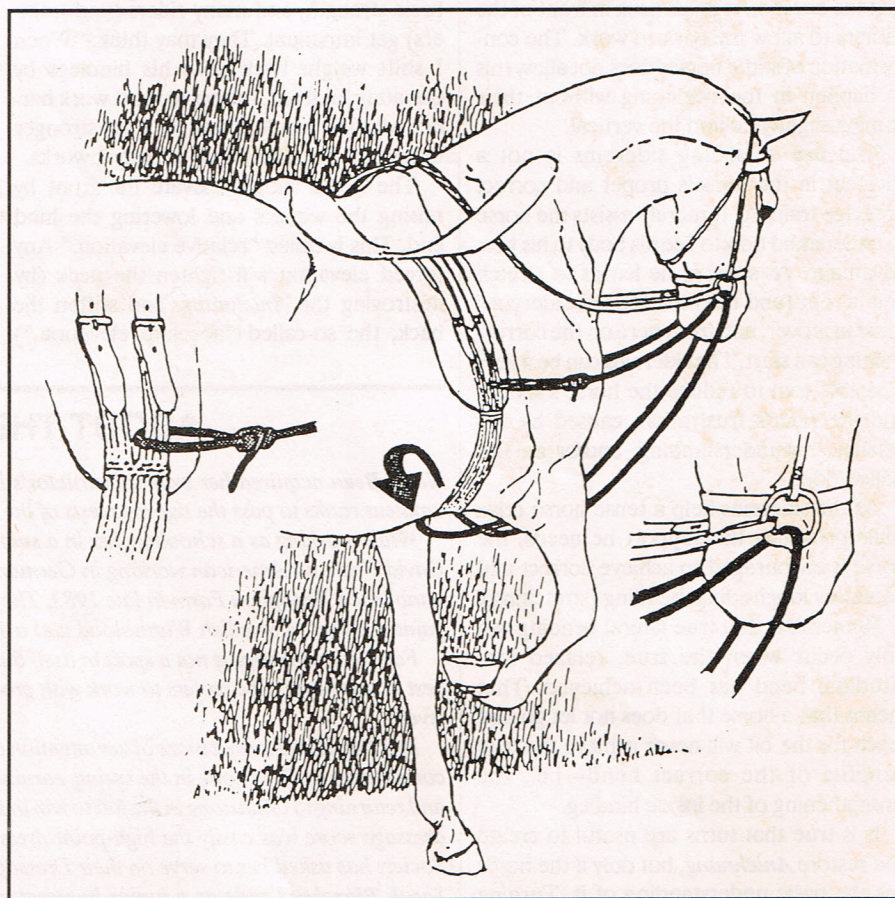


Fig. 15 - The sliding sidereins loop around the girth beneath the barrel, slide through the rings of the bit, and are attached at the billets of the girth.

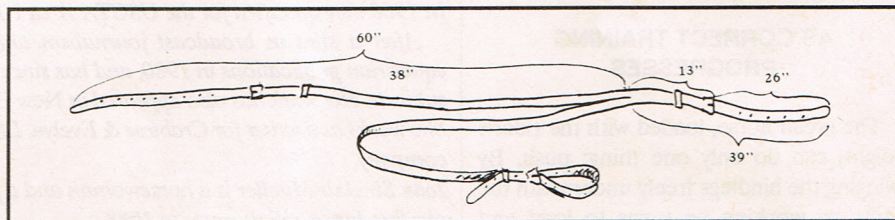


Fig. 16 - This is what the sliding sidereins look like. The total length is 99 inches.

be taken that the sidereins are adjusted longer for the walk than for the trot, especially in the beginning of the horse's training and at the beginning of each training session. The sidereins should also be lengthened immediately when the horse gets the message and begins to stretch the topline on his own.

If a horse with a low-set neck and thin throatlatch brings his head behind the vertical in this beginning stage of training, there is no reason for the trainer to worry—unless the horse also avoids bit contact. It is not desirable for the horse to come behind the vertical at any time in training, but we must remember the priorities: The first priority is that the horse stretch his neck in front of the withers to allow the back to work. The conformation of some horses does not allow this to happen in the beginning without their coming slightly behind the vertical.

The use of sliding sidereins is not a shortcut in the horse's proper and correct dressage training. It merely assists the horse to understand how to use his body to his best advantage. As soon as he learns to stretch and accept (and like) the bit, the sidereins' mission is over, and from here on the correct training can start. The sidereins can be a very desirable tool to reduce the horse's misery and the rider's frustration, caused by imbalance, misunderstanding, and/or an unskilled rider.

As the sidereins help a tense horse relax while providing the support he needs, the horse is encouraged to achieve correct and necessary longitudinal bending (stretching).

Remember that true lateral bending can only occur when the true, relaxed longitudinal bend has been achieved. That means that a horse that does not let go and reach for the bit will never achieve the true benefits of the correct bend—i.e., the strengthening of the inside hindleg.

It is true that turns are useful to create and restore *Anlehnung*, but only if the horse has the basic understanding of it. Turning and forced bending, by themselves, do not automatically teach the horse *Anlehnung*, as many people seem to assume.

AS CORRECT TRAINING PROGRESSES

The green horse, loaded with the rider's weight, can do only one thing: push. By swinging the hindlegs freely underneath the body, by working on turns to load and strengthen each hindleg separately, and by

combining this work with frequent transitions, the hindlegs are forced to take up some weight, and eventually they increase in strength. With a stronger hind end, the horse will be able to shift more weight onto the hindlegs and move in a higher frame. The degree to which this shifting takes place, of course, will depend on the individual horse's conformation and temperament.

Only good work can make this happen. When it does happen, the horse himself will want to move in a higher carriage. Unfortunately, this is where the majority of training mistakes occur. It often seems to take an awfully long time for the horse to gain his basic strength, and many riders (and trainers) get impatient. They may think, "When I shift weight back onto his hindlegs by elevating his front, the horse must work harder with the hindlegs and he'll get stronger that way." No. This is not the way it works.

The horse should elevate the front by raising the withers and lowering the hind end. This is called "relative elevation." Any forced elevation will tighten the neck (by destroying the *Anlehnung*, and stiffen the back, the so-called "absolute elevation.")

The withers will be pushed down, the hind end cannot reach under any more, the haunches lose their flexibility, and the horse is really working on the forehand—even though his head and neck are higher. Severe resistance follows: cocking the head, bucking, leaping, roaring, or stalling.

These first three elements of training, *Takt*, *Losgelassenheit*, and *Anlehnung*, must be firmly established before *Schwung* (impulsion), *Geraderichten* (straightness), as well as *Versammlung* (collection) can be achieved. ¶

To be continued next month.

Editor's note:

For more information about the use and construction of sliding sidereins see "Education to the Aids: Basic Leg Yielding", *D&CT*, August 1988, pp. 3-7, and "Sliding Sidereins", *D&CT*, December 1988, pp. 20-21, both by Heike Bean with Sarah Blanchard. Back issues are available for \$3.50 each, postage paid, from *D&CT, Circulation*, 211 West Main Street, New London, OH 44851.

ABOUT THE AUTHORS

Heike Bean acquired her trainer/instructor's license in West Germany by rising through the amateur ranks to pass the rigorous tests of the government licensing board at an early age.

While working as a schoolteacher in a small town south of Munich, she met and married David Bean, an American working in Germany. They moved to Hampton, Connecticut, and established Xenophon Farm in late 1983. They brought with them Heike's two red and white paint geldings (a Swedish Warmblood and a Trakehner cross).

For Heike dressage is not a sport in itself but rather the only logical training to bring-up the best in any horse. She prefers to work with problem horses instead of competing at the higher levels.

In 1989, Heike turned more of her attention to combined driving, winning the Training Pairs competition at Gladstone in the spring, earning the top score in Preliminary Pairs at Myopia, and returning to Gladstone in the fall to win in Preliminary pairs. In each case, her paint team's dressage score was easily the high-point dressage score at any level. The American Driving Society has asked her to serve on their Dressage Committee for 1990.

Sarah Blanchard rode as a junior huntseat under the tutelage of Victor Hugo-Vidal, Jr. in Stamford, Connecticut. Coming to dressage and combined training as an adult, she has raised, trained, and competed locally with four generations of homebreds, and (with Heike's assistance) now competes her Appaloosa/TB cross gelding in combined training and dressage. In 1988 they qualified for the USCTA Area I Training Level Championships.

After a stint in broadcast journalism and public relations, Sarah began to write for equestrian publications in 1980, and has since produced thousands of articles on a variety of subjects. Her work has also appeared in New England Farm Bulletin and Yankee Magazine. She works as a writer for Crabtree & Evelyn, Ltd., an international toiletries and gourmet food company.

Joan Sinclair Mueller is a horsewoman and a professional artist and illustrator. She became our free-lance collaborator in 1988.