The shape of the right hand (The loose fist as model)

As already pointed out, the fist can be the ideal model for the hands, generally speaking guitarists with problems might have disregarded this important fact.

As we see in Figure 22 the little finger 'escapes' from the others and becomes rigid. This makes the finger unbalanced and pointing in the wrong direction with the palm tensed. Besides, it separates the other fingers, and the hand as a unit loses its energy.

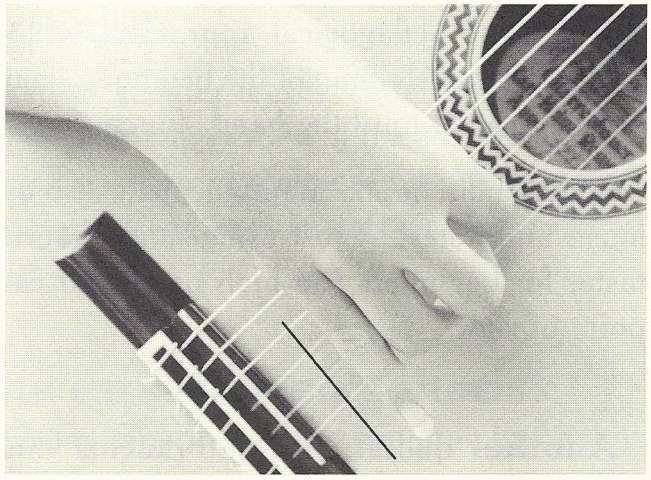


Figure 22

Shaping the right hand from straight fingers to a global shape can never lead to good results.

Needless to say, when the little finger of the right hand is extended, the functions of the other fingers are impeded, because it pulls the annular to a position of half extension, half flexion. At the same time the middle and the index act in almost full flexing. This multi-directionality is the main cause of lack of equilibrium, instability and diminished coordination and speed of the fingers.

In any technical situation, the annular and little finger of the right hand can avoid a lot of tension when they are unified. This is particularly necessary for rhythmically precise arpeggios or for tremolo playing, or the sonoric balance of block chords.

The thumb tends to fall naturally, and is never pushed into the palm.

Together the index and the thumb form a circle viewed from the side. (Figure 23). Keeping this circle can be a "guarantee" of the good functioning of the flexor muscles of the fingers. Disregarding this very basic form by extending the fingers would harm the muscular equilibrium of forearm, palm and fingers.

This permanent extension, as an integral part of the right hand position of a guitarist, can disturb the free movements of the flexors which are, as we know, much more active than the extensors.
In fact this disturbance is a result of the simultaneous activity of the flexors and extensors of the fingers; two antagonist muscular groups. (See also multidirectional movements of the fingers, Chapter 2, page 19).

To convert a "separated" little finger into an attached one, begin with a relaxed fist, with the fingers held loosely together. Now open the hand to an almost round, globular shape. This has to be repeated patiently many times. When doing this exercise, look in the mirror and check whether the fingers are together or not, as if you were concealing a tennis ball in your hand.

Keeping the fingers together has to be done without any pressure, yet the 'hidden ball' has not to be 'seen' at all. To check the exact feeling, we can cut an oblong piece of paper (2 cm x 6 cm) and place it between the annular and the little finger. This piece of paper has to remain between these two fingers, but at the same time another person must be able to move it up and down easily.

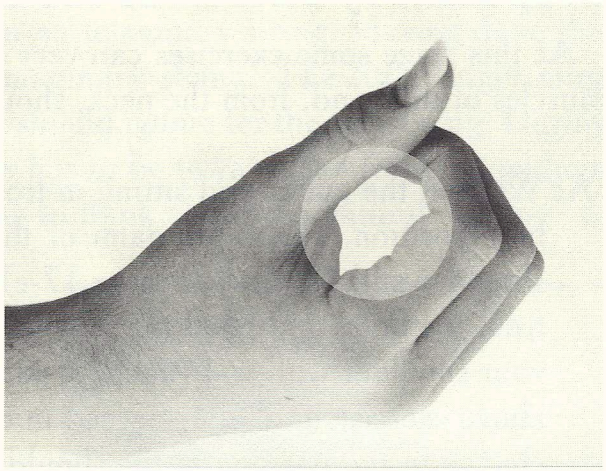
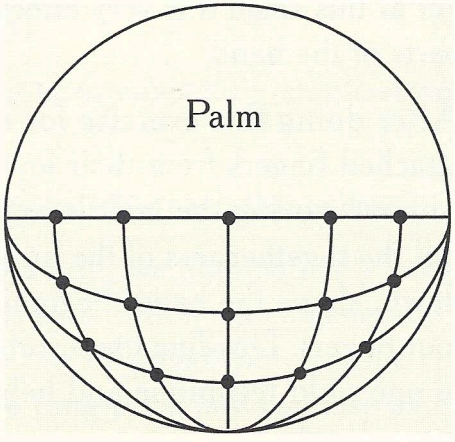


Figure 23

The right hand as a "Microglobus"

The general shape of the right hand in guitar playing remind us very much of a globe. This analogy might help when using the globus as a model.



Preparatory exercises for the right hand

At this stage some exercises can very much help to achieve the right tonus of the muscles of the hand, from the neck, shoulder to the fingers.

A: Without the guitar and sitting in front of a mirror, bring both shoulders to their best position. Place the palm of the left hand on the area between the right shoulder and the neck (Figure 17-e). Give it a gentle massage, remove the arm from the body and bend the elbow as if you were going to play - keep touching your shoulder with your palm. If you feel the shoulder rising, you should do the above exercise until you succeed in doing these movements without the slightest change in the position of the shoulder. This exercise is absolutely necessary for both, guitarists with bad habits and beginners.

B: Shape the right hand guitaristically (as explained in page 55) and touch it very gently with your left hand thumb and fingers, for confirmation of a soft tonus in its muscles, joints and tendons. This exercise can cause a very pleasant feeling in the hand which is essential for making good music (Figures 24 + 24a)

C: Now, hang the shaped palm and fingers from the wrist and move the fingers back and forth, without losing the sharp and relaxed sensation. The fingers, touching each other very lightly, must stay unified and together, in spite of the movements. Actually this movement is considered as wrong and anti-guitaristic, but at this stage it is very effective for loosening the wrist and relaxing the other parts of the hand.

D: After doing this exercise for some considerable time, begin to move the four attached fingers from their lower proximal joints near the palm in slow motion, without moving the middle joints at all. Constantly look in the mirror and control the togetherness of the fingers. Stop every 15 or 20 seconds, take your hand down, shape the hand, beginning from the fist and repeat the movements of the four fingers. Dividing these sorts of exercises into short periods prevents regressing to one's old technique and helps master the new elements in a shorter time and more deeply.

When you are sure that it works well, repeat the same exercise but without the index finger, as if you were plucking with m on imaginary string. Having done this for some time, alternate i and m on an imaginary string. The little finger must always be attached to the annular, which we should ignore for the time being. During this practice the direction of the movements has to be towards the forearm, without twisting the wrist to the right. One also has to think about the natural "falling" of the thumb.

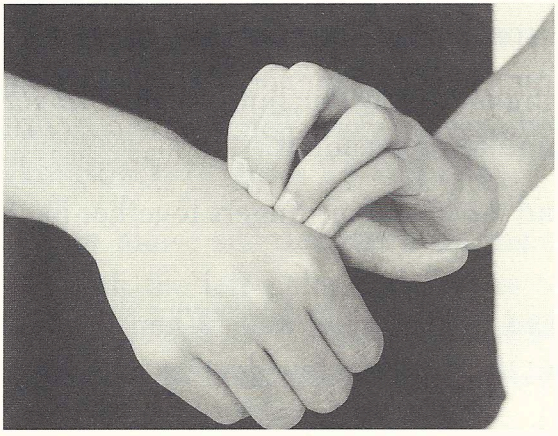


Figure 24

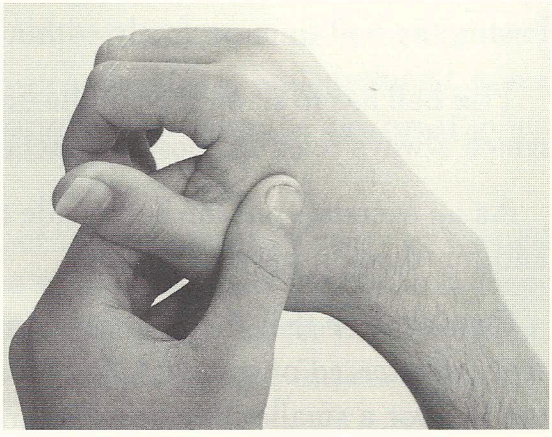


Figure 24a

Pingpong ball as an auxiliary tool

In shaping the right hand, its globular shape has been constantly emphasized as a primordial element.

As a "mould", a ping-pong ball can help tremendously to reach this shape.

When we place the right hand fingers around a ball, we automatically avoid the extension of the fingers. (As mentioned earlier it is a distortion which generally leads to disharmony and lack of maximum ability, in terms of speed, power, tone colours and the sonoric balance of block-chords). Using a ping-pong ball can also avoid the

unnecessary active use of the middle joints of the fingers. It stops the movements of these joints, and makes the fingers move correctly as will be explained in the next paragraph.

A ping-pong ball is generally compatible with a big hand. Medium or small hand sizes have to use smaller balls, otherwise the free movements of the fingers will be limited.

When using a ball, remember that the fingers must touch it very very loosely, allowing the ball to move freely within the global space inside the palm.

The ball has to sit on the middle finger and annular, lightly touching the little finger which always remains loosely attached to the annular alongside it.

As an exercise, put the ball inside the hand and move all four fingers together back and fourth as in playing chords.

Remember that the ball must only be touched in an "airy" way. When you feel that it is pressed or somehow "squeezed", extend the fingers a few degrees or change the ball for a smaller one or for a large marble.

When the fingers extend uneccesarily, the ball falls to the floor, and we run around the room after it.

Although running may be considered as a good "physical activity", it becomes a "penalty", for those who do not keep their fingers sufficiently "round".

Viewed laterally in these exercises, the index and the thumb always maintain the above circle. (Figure 23). The inner side of the high joint of the thumb must touch the lateral side of the distal joint of the index, otherwise, it means that the fingers are close to being extended, which is unnecessary and harmful.

Which are the best finger joints to use?

Each finger has 3 joints: proximal, or knuckles, middle joints, and distals (the farthest from the palm).

To 'understand' the movement of the fingers, a very simple experiment can be done. Turn the right palm upwards, now place the left thumb on top of it. Encircle it with the right hand fingers. When moving the four attached fingers from the knuckles towards the palm (flexing), you will feel several tendons and soft tissues in the right palm moving under the thumb. Now keep the knuckles still and move the fingers only from their middle joints. Suddenly the palm becomes stretched and the tendons and the soft tissues under the left thumb become very tense and strained. While keeping the left thumb on the right palm, move the four fingers from their distal joints. The change is tremendous. The palm muscles and its soft tissues react in a most stiff and unpleasant manner. This comparison between the distal and proximal joints can easily convince every player about the advantages in using the proximal joints (knuckles). (Figures 24 and 24a).

The above self-discovery, during the motion of the fingers has also to be carried out with the left palm and fingers touching the muscles around the forearm, near the elbow and then the wrist as well. The aim of this is to discover the smoothest, minimal and most unobtrusive muscular activity in the palm and fingers of the left hand. (Figures 25 and 26).

As mentioned before, the generator muscles of finger movements are mainly located around the forearm, therefore in this area slow and easy motion is preferable, for sustained periods. The motion of the thumb must also be felt, so as to bring its muscular contraction to the minimum needed.

As explained earlier, the muscles of the thumb originate in the middle of the forearm, and continue through the palmar area (thenar) to the joints of the thumb (Figure 8a). The rotation of the thumb is a result of the activity of different group muscles in the thenar area (rotators) (Figures 7, 8 and 9d).

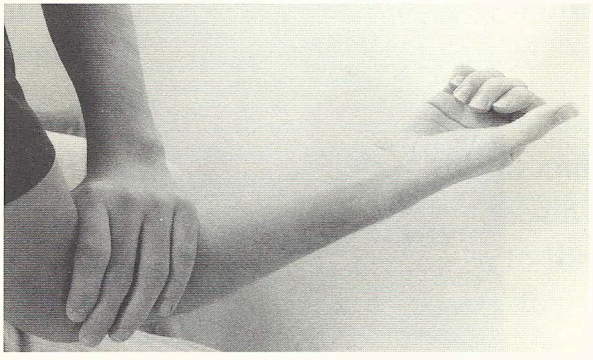


Figure 25

The contractions of the thumb muscles (abduction, adduction and rotation) have to be checked and reduced.

As in the previous exercise, touching the thumb muscles with the left hand fingertips tips while making oval movements from the proximal joint of the thumb can show whether the contraction of these muscles can be reduced to the optimal minimum. These movements are better carried out with the thumb moving in an anticlockwise direction and within the normal range and keeping it close to the round index.

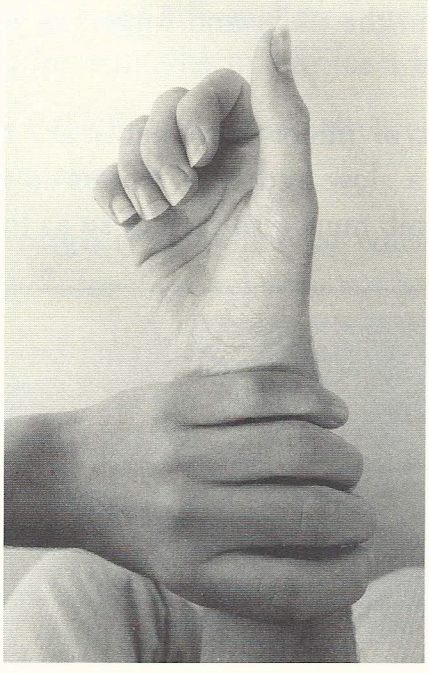


Figure 26

(Figures 26 and 24a)

After a complete and solid shaping, or (reshaping), the right hand it is now essential to bring it in its "prepared" state to the guitar and place it on the strings so that no further change or amelioration of its shape are needed. Any change resulting during or after contact with the strings is proof of its insufficient preparation, meaning a repeat of the previous exercise until satisfactory results are achieved.

The contact points with the strings

The top of the fingernails normally form a diagonal line. This natural line has to be preserved when placing the fingers on the strings. In the following diagram a diagonal line is shown (Figure 27), (See also Figures 23 and 28).

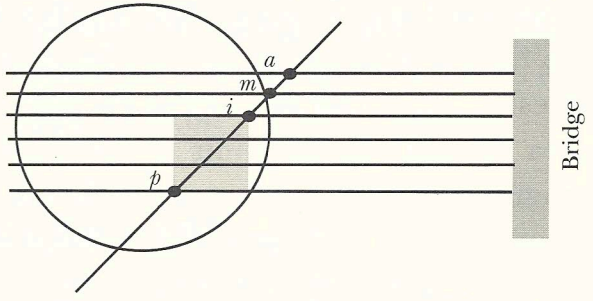


Figure 27

Keeping to the shaded square area, is of great importance for maintaining the appropriate shape of the hand and in providing a zone of free activity for the thumb and the index. Any shrinkage or deformation of this area produces a lot of pressure on the palm and thumb muscles. Additionally, it impedes the sonar and rhythmical balance of the index with other fingers in different sorts of strokes. For instance in block-chord playing, the index will tend to sound much weaker that the other fingers.

This phase has to be carefully prepared until total domination. Of course, after every preparation and contact, the right hand has to be lowered and left to hang loose from the shoulder, behind the guitar for a while. This should produce the highest degree of muscular relaxation in the neck, the shoulder, the arm, the forearm and the hand. Now repeat the same proceedure while maintaining the correctly achieved tonus of the muscles and freedom of elbow movement. Certainly, the natural position of the shoulder, a "long" spine and a "wide" chest are integral parts of this exercise.

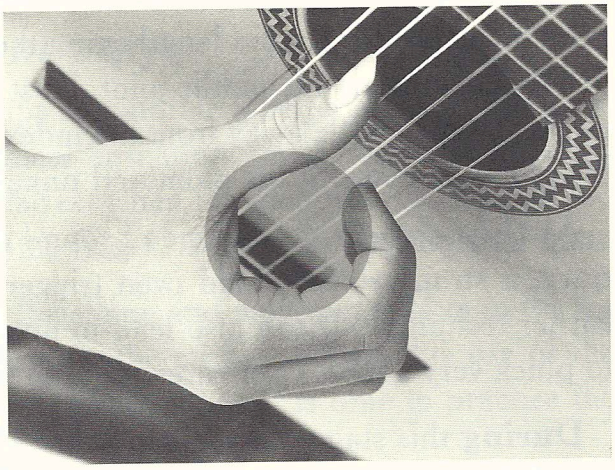


Figure 28

As we are dealing with "form", permanent visual contact with the hand is indispensable; needless to say that practising in front of a large mirror is mandatory.

Once every aspect of the above exercise has been mastered, one can then maintain the correctly shaped hand on the strings, closing the eyes, revising this bit by bit and adjusting very slowly the tonus and the contraction of the whole upper limb, beginning, even with the face muscles, the neck, the back, the shoulder, and down to the fingertips. Calm breathing with closed eyes creates an adequate atmosphere for a profounder and more conscious discovery or rediscovery of the body.
This phase can take 4-5 minutes.

Over-breathing can cause vertigo, by increasing the oxygen supply to the brain. Practising the above exercise, several times a day is most helpful, for experiencing and registering this very essential physical sensation as a model in our mind.

After this formation or reformation of the right hand is accomplished, it should now be applied to the guitar by playing, with rest stroke strokes, on the 1st, 2nd, and 3rd strings with m only, many times on each string, with one stroke per second. Continue to move the three unified fingers (m, a and the little finger) towards the forearm and elbow; avoid lengthening them by keeping an angle of more or less 110 to 120 degrees, in the middle joint. Rest the thumb as a leaning point on the the 5th or 6th string, a little away from the index finger, in order to prevent the distortion of the globular shape of the palm and fingers, and pressure on the thumb muscles.

At this moment the volume of sound does not have any importance. On the contrary, a strong sound could even trigger a regression, back into one's problematic earlier technique. It can also lead to unnecessary tension. Therefore it is important to pluck very gently, 'just caressing' the strings.

During this stage, the main concern should be freedom of movement and its correct direction; therefore playing almost "without sound" maintains the hand in its best position and even more importantly, prevents the "invasion" of unnecessary and superfluous muscular contraction.

This very quiet (and of course very slow) playing should be used not only for experienced players with bad technical habits but also for beginners. In this manner primary contact with guitar playing will be easy, pleasant and effortless.

Psychologically, this approach produces a very relaxed corporal sensation and also a friendly image of the instrument, minimising unnecessary muscular habits, wrong movements and anxiety. It is advisable, to begin any new technical element as well as new pieces in this manner. The atmosphere caused by this quiet and slow beginning allows the brain to better absorb of the movements and musical content.

In right-hand technique, every joint has its specific role. The most complicated tasks are given to the upper joints, (distals) because of their versatility in reacting

and changing to each different stroke. Contrary to the free stroke, in the rest stroke the upper joints have to be flexible and 'give way' to the resistance of the strings; otherwise the fingers can get caught in the strings, resulting in a thin sound and diminished speed. Moreover, flexibility of the upper joint in the rest stroke enlarges the contact area between the finger and the string, producing a rounder sound, especially suitable for slow to moderate tempi, and particularly in lyrical and mellow passages.

The importance of using the *m* only

Using only the m on the treble strings helps to maintain a better shape of the hand in the future. At the primary stages of technical formation, the problems of the right hand may begin with premature use of the index, when the medium is still unable to remain "attached" to the annular and the little finger, as a solid, round global unit.

This problem can be solved by adopting the shape and movements of m in the air during sufficient period of time, before plucking the strings. When this use of the unified medium, annular and little finger is mastered, then it is time to practise the alternative i m movement.

In this step by step approach, we reduce the risk of creating a dismantled and fan-like form in the right hand fingers.

Rest Stroke (Apoyando)

This stroke, attributed to Francisco Tárrega (1852-1909), can be considered as one of the most revolutionary technical changes in the evolution of the sound of the classical guitar.

As its definition suggests, a finger leans (apoyar in Spanish) on the adjacent string after completing the stroke.

These are several good reasons for using this sort of stroke.

The main reason lies in profiting from a large contact area between the fingernail

and the string. Free stroke (Tirando, which will be discussed in Chapter 7), uses only a small portion of the fingernail, namely its highest peak, in the middle. Therefore the sound is thin. But the rest stroke uses the maximum width of the fingernail, beginning with the left and ending with the right side.

Contrary to the brightness and "incisiveness" of the free stroke, apoyando notes have a grey, dark colour, which enlarges the palette of a guitar player.

In practising the rest stroke, as for any new element, we had better disregard the Olympic Slogan "Faster", "Stronger", "Higher", and work patiently, slower, weaker, etc. This approach prevents all sort of problems such as deformation and distortion in the shape of the hands, production of high muscular tension which creates an aggressive, harsh and "belligerent" image of guitar playing, an unpleasant sound and diminished control, etc., etc.

For practising rest strokes, use m only, on the 3rd string. The sound of this string is the "fatest" and thickest among the trebles and is the best sound model.

Starting from the left side of m (about 2 mm from its end), push the fingers diagonally towards the bridge (or the elbow). During this movement, use the flexibility of the distal joint, in order to enlarge contact with the string and also to avoid a "clash" between the fingers.

Plucking perpendicularly towards the rosette, transfers the contact to the peak of the fingernail and narrows the contact area. As a consequence the sound becomes thinner.

Just "caress" the string. Produce hardly any sound. At this stage smooth movements are our main objective, not the sound.

The diagonal trajectory of the finger is about a 2 cm slide along the string, beginning with the left and ending with the right side of the nail.

As the quality of sound depends on the size of the contact area, the rest stroke must be accompanied with some pressure on the string, a factor which also enlarges the contact area between the string and the fingernail, and also uses the elastic prop-

erty of the string for better projection.

Later on, when this movement is properly adapted, one applies more "weight" to the string to produce a larger contact area.

A carefully polished fingernail is most important. One could say that a perfectly polished badly-shaped fingernail produces a better sound than an unpolished fingernail with an "ideal shape".

Another benefit of applying "pressure" on the string is that it not only makes the strings vibrate as a "springboard", but it also augments the vibrations to the soundboard. The pressure of the fingers on the strings is transferred through the bridge to the sound board to make it vibrate more and accordingly be more responsive. The apoyando stroke with other fingers is later done in the same way.

Guitarists often refrain from discussing the various "cuts" or shaping of the nails. This can be a controversial subject. However, one thing that always has to be done before playing, is polishing the nails until not even the slightest roughness remains on the surfaces. The smoothness of the fingernails can best be felt only by checking them with the nails of the other hand, and not with the fingertips. We recommend shaping the nails to follow the exact outline of the fingertips.

Thumb playing

Thumb playing requires a lot of stability in the hand and particularly in the forearm. The motion of the thumb begins with its proximal joint near the wrist. Any movement in the forearm, pushing the thumb forward, could cause a lot of trouble in the future. The steadiness and stability of the forearm and the palm as a unit creates the best conditions for the activity of the thumb, particularly in rapid and prolonged musical phrases.

The fingernail has to be shaped in a way that helps the stroke to be smooth and fluent, but without it getting "caught" in the strings. This generally happens when the fingernail of the thumb is shaped with an angle on its left side.

Here, the stroke should be the rest stroke, and as mentioned before, almost without sound, (sotto voce), this allows a relaxed encounter with the string, an encounter of the highest importance at this stage. Fingers i, m, a, are stabilising factors when one places them under the 3rd, 2nd, and 1st strings, with firm and round top joints. These strings should make contact with the fingernails of the respective fingers.
(Figure 29).

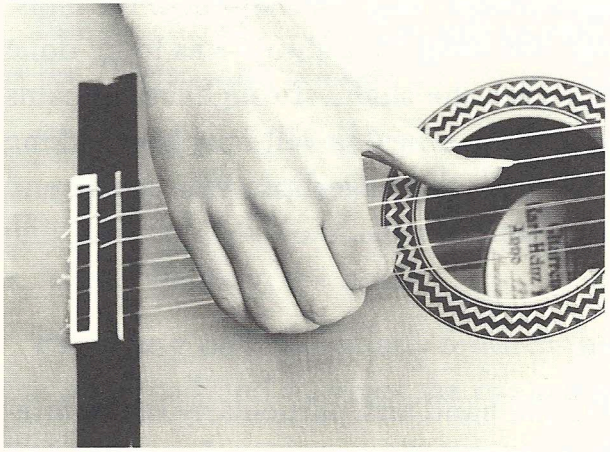


Figure 29

As mentioned above, the thumb and the index form a round shape, seen laterally. (Figure 28). A more oval shape than this causes unnecessary extension of the fingers, i, m, a, and disconnects the thumb, far from the bass strings (Figure 30). In this figure we notice also that the diagonal line of the p, i, m, a (Figures 27-28 and 29) has almost been changed to a vertical one.

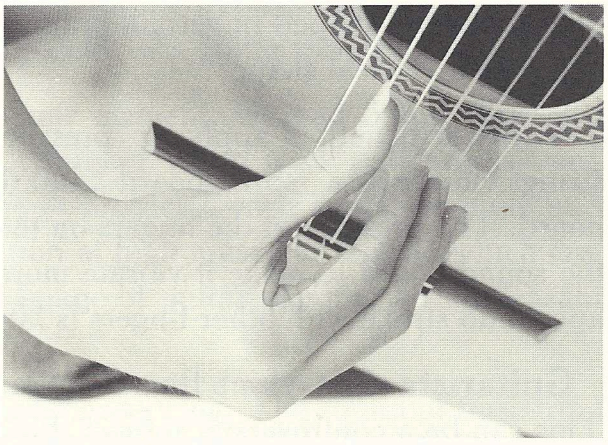


Figure 30

Each bass string should be plucked separately 10-15 times. Before changing strings let the arm hang down for relaxation. Play the next bass string, without rushing at a rate of 60-70 strokes per minute.

The height of the wrist plays an important role in the constitution of the thumb. This height is determined by the length of the thumb in question, so that the use of the left side of the fingernail is facilitated.

It is very important to control the height of the wrist. An exaggerated curve can be

fatal, first of all for the technical function of the fingers but also in the long term for the health of the tendons, ligaments and other biological components in this area.

The ideal position is a minimum curve, which still allows an easy plucking action of the thumb fingernail.

The shape of the left hand

Generally speaking, one major problem found in the left hand derives from too much pressure being exerted on the strings. Generally, in many cases a neglected or anti-natural position is noticeable.

Once more, the big question of the chicken and the egg makes it difficult to give an answer. Going back to the basic rule of keeping every muscle and joint in its optimum natural shape can guide us to a better positioning of the left hand.

The little finger appears again as a troublemaker, becoming rigid, out of periphery or 'focus' of the string. Its lack of roundness also has a negative influence on the other fingers, pulling them outside and causing a jumpy and unstable hand. This little 'fugitive' finger must always be kept round, exactly like the others.

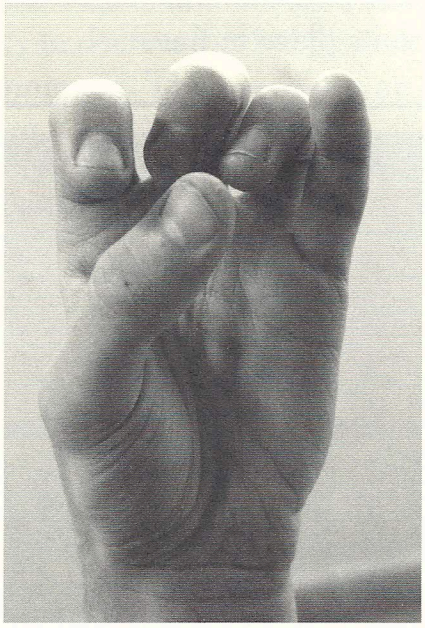


Figure 31

Usually the most important reason for an uncontrolled little finger is the inadequate positioning of the thumb behind the fingerboard, inside the palm. (Figure 31).

As an experiment, hold your left hand out, very relaxed with the palm upwards and all the fingertips bent in the same line and the thumb in its normal place to the left (Figure 32). Now move the thumb towards the second finger. Of course without fixating the other fingers, you will see the little finger jumping out of line and taking the 3rd finger with it (Figure 31). Moving the thumb back to