The thumb and fingers each have three joints. The same names are used for the joints of both the right and left hands. **CAUTION:** Be sure to accurately distinguish between a joint and a segment. A joint is the point at which the thumb or finger bends — a segment is either the section between two joints, or (in the case of the tip segment) the section beyond the tip joint.

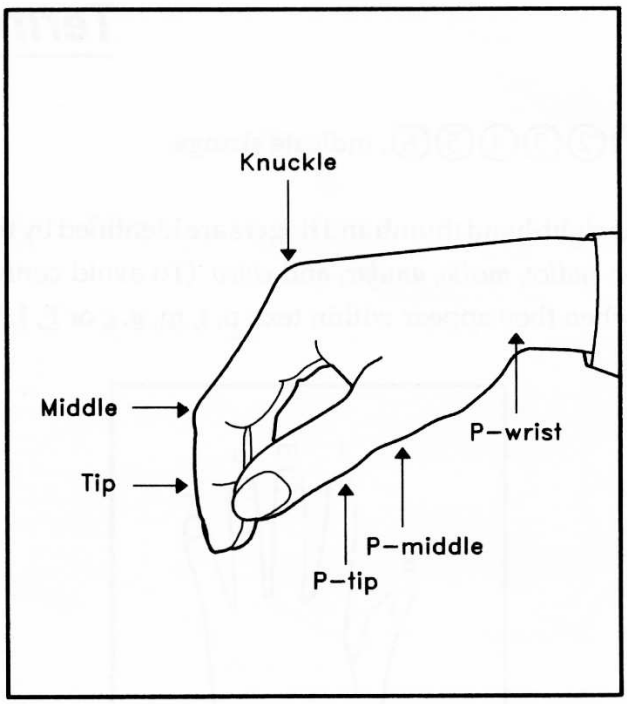

Figure 18

These directional terms are used for right-hand and wrist positioning.

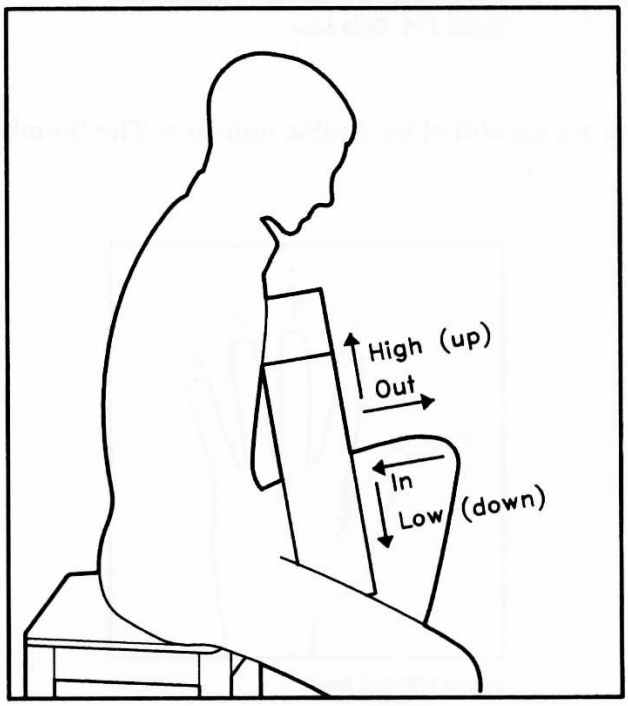

Figure 19

The midway position of a joint is the approximate midpoint between the comfortable limits of flexion and extension.

The midrange movement of a joint is approximately the middle two-quarters of the range between the comfortable limits of flexion and extension.

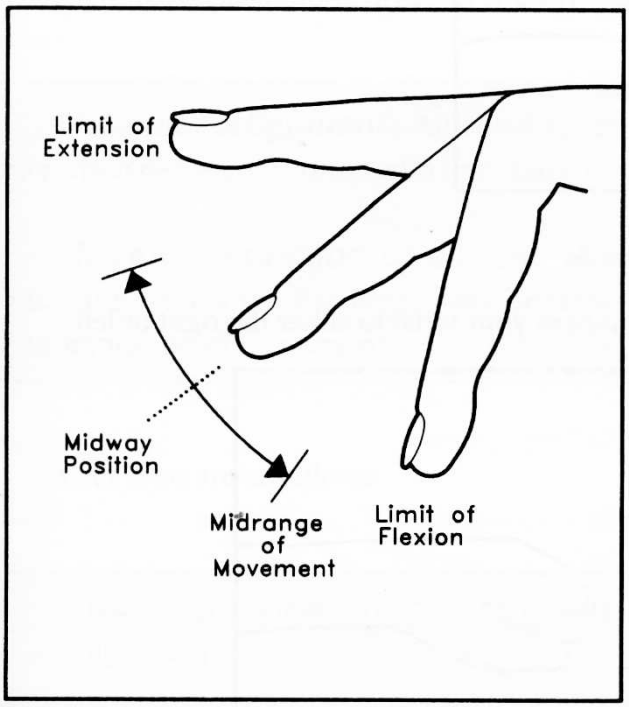

Figure 20A: Positioning and range of movement at the knuckle joint.

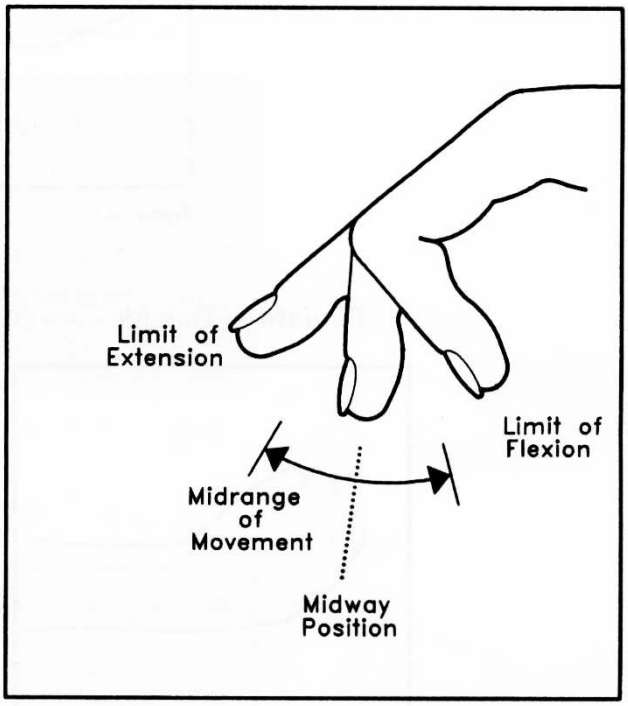

Figure 20B: Positioning and range of movement at the middle joint.

Arch: The result of flexion at your wrist joint.

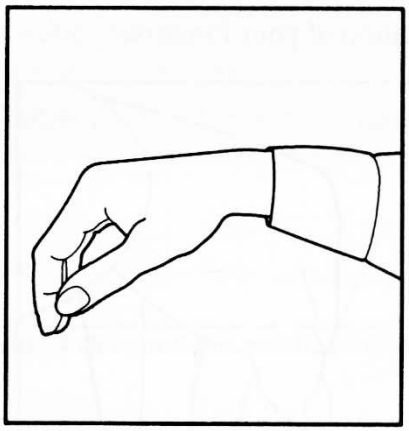

Figure 21

Training the Right-Hand Fingers

The following illustrations show the movements for rest-stroke and free-stroke with the fingers:

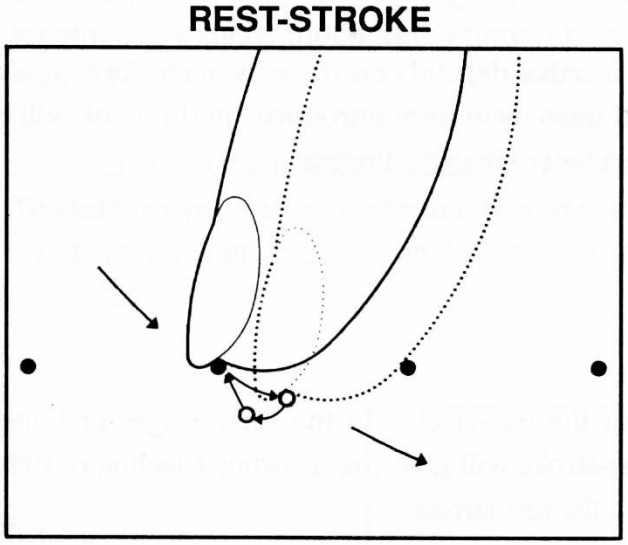

Figure 29A

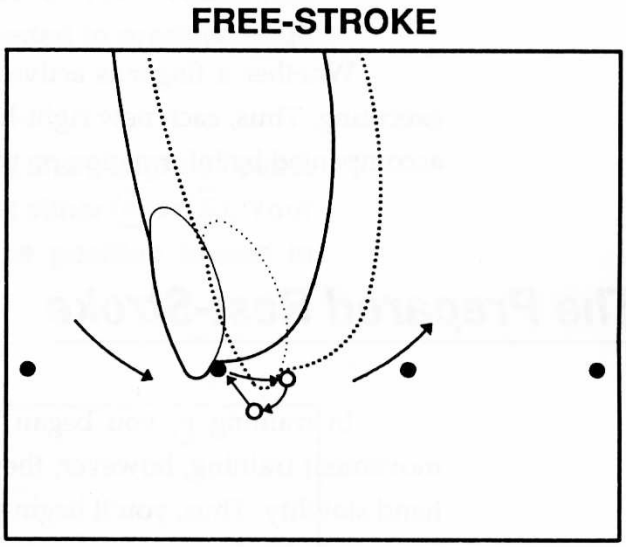

Figure 29B

In training your right-hand fingers, you should concentrate on discovering the most effective hand positions and finger movements.† This will enable you to develop the coordination essential for accuracy and a desirable tone.

Training the Inactive Fingers

In right-hand movement forms, an ***inactive finger*** is any finger which isn't involved in the process of either sounding or preparing to sound a string. Depending on how it's trained, an inactive finger can either assist or severely impede the movement of an adjacent active finger. Thus, during any right-hand movement form, inactive fingers should always be considered:

†Before beginning, make sure your nails are adequately shaped for right-hand finger training. (See "Nail Contours and Suggested Shapings," pp. 24 – 27.)

Proceed as follows:

❑ **With your body and the guitar in proper position, place your wrist, hand, and finger joints in the position described on pp. 34 – 35.**

❑ **Without changing the midway position of the finger joints and wrist, position your hand over the strings. Place the left tip of i (very close to the nail) firmly against ①. (If your nails aren't yet of adequate length, use only as much of the fingertip as needed to produce a full sound.)**

❑ **Keep the middle (and tip) joints of m, a, and c slightly flexed. To stabilize your hand, place the tip of p against either ④ or ⑤. Your wrist, hand, and fingers should now be in the position shown in Figure 30:**

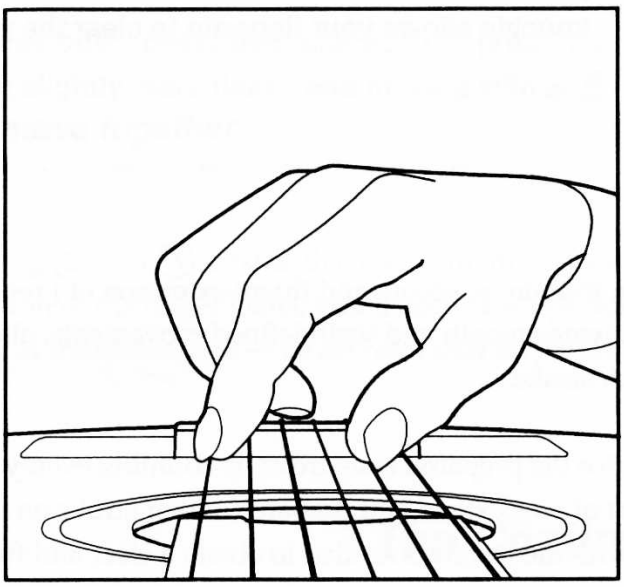

Figure 30

❑ **While holding your hand steady, sound ① with i by flexing both the knuckle and middle joints. Keep the tip joint as firm as necessary to produce a good tone. Your finger should come to rest firmly against ②. *As inactive fingers, m–a–c should be kept flexed a little past midway and slightly moving with i.***

❑ **With your hand properly aligned with your forearm, the slanted left edge of the nail will contact and cross the string diagonally.**

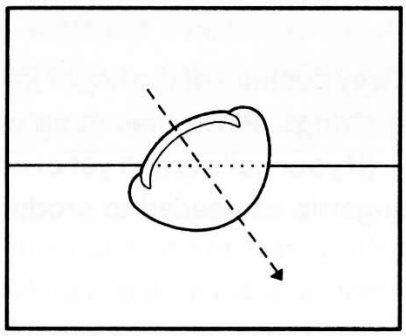

Figure 31 (Viewed from above.)

❑ **Extend i back to ① and prepare another stroke. Limit extension to the amount needed to reach the string. (Notice that middle joint extension must be briefly delayed until a slight extension of the knuckle allows your fingertip to clear the vibrating string.)**

≈ ≈ ≈ ≈ ≈ ≈ ≈

As in training p, secure and fluent extension of i requires special attention. You need to cultivate smooth and well-defined movements, allowing a sufficient pause to prepare each stroke.

Practice the prepared rest-stroke by counting evenly in twos — sound the string on the count of one; extend and prepare another stroke on the count of two. Make sure you move with the firmness needed to obtain a clear and full-bodied tone.

While slowly repeating the prepared rest-stroke, listen closely to your tone. If it's harsh, the cause may be one or any combination of the following:

- **Your nail is too long.**
- **Your nail is too pointed.**

CORRECT FREE-STROKE POSITION

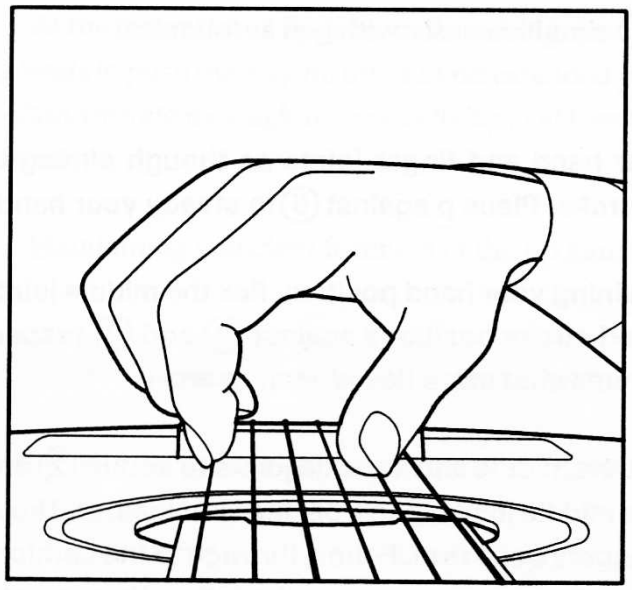

Figure 33A

INCORRECT FREE-STROKE POSITION

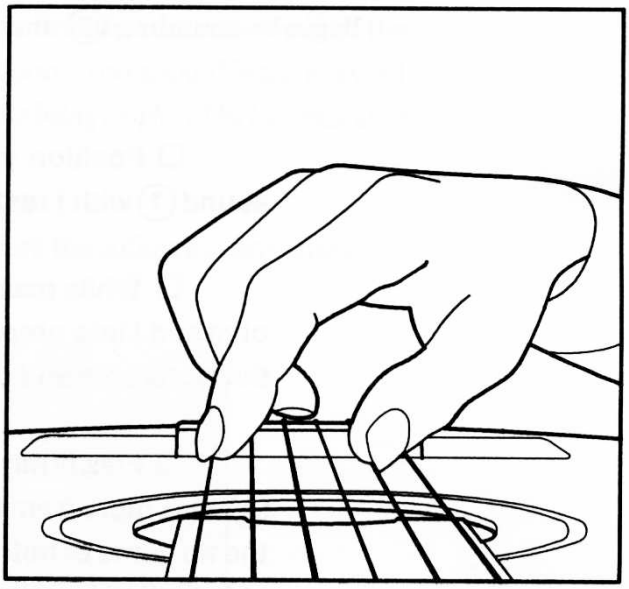

Figure 33B

Your aims for developing free-stroke with your fingers are as follows:

- **To keep the middle joints sufficiently flexed and the tip joints sufficiently firm for the fingers to clear the lower adjacent strings.**

- **To move and follow through mainly from the middle joints, with a slight follow-through at the knuckles.**

Bear in mind that your eventual goal is the smooth legato of the continuity-stroke. While the prepared-stroke is essential in the beginning, as you gain security with the movement, you should gradually lessen the pause needed to place your tip and nail firmly against the string.

You'll find musical examples for developing i–m and p alternation in *Part Two*, p. 54 and pp. 64 – 65.

I–M–A Free-Stroke

The most effective way to begin training a is with the i–m–a free-stroke. A naturally tends to move with m, so i–m–a is simply a matter of adding a to your already secure i–m movement.

In any movement form involving a, always position a for maximum leverage. In free-stroke, the middle joint of a should be flexed in its powerful midrange position when a contacts the string:

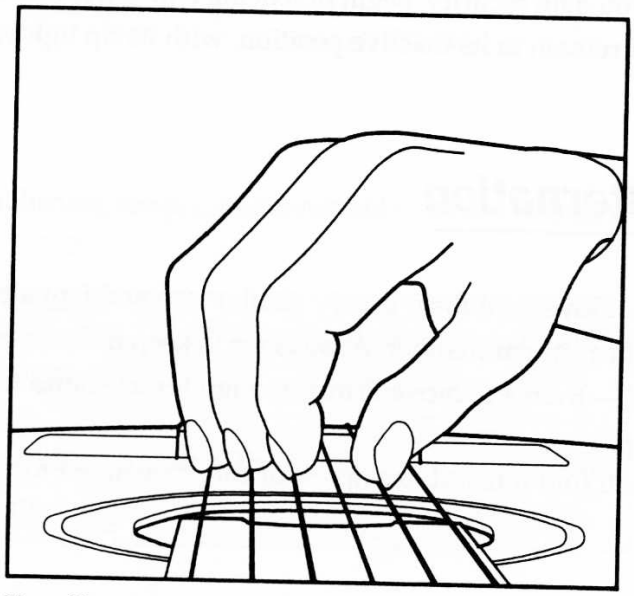

Figure 34

To allow a to assume its optimum position, m and i must operate in the flexion side of their midranges.