Trick Marionettes

The trick marionettes described in the following pages are chosen partly because they are particular favourites of mine, and also because they display between them most of the mechanisms found in trick puppetry. Here are seen practical applications of vertical, horizontal, tip up, and irregular controls; puppets with freely moving joints and puppets moving in a restricted plane.

JUGGLING PUPPETS

These are among the easier of circus puppets to make and manipulate, and three varieties are described here. In the first only one ball is used, but although this may not strictly be called juggling, the trick is most effective. As the ball is thrown into the air and caught by each hand in turn, it rises higher and higher and may finally disappear. In a comedy act, the ball can stay out of sight for as long as the operator wishes, and then return unexpectedly. A second juggler uses two balls which are thrown up alternately giving an illusion of juggling although the balls do not actually change hands. In a third trick two balls are again used, but in addition to the movements of the previous trick, they may be bounced on to the puppet's forehead and left foot.

These three tricks are described in stages, but in performance the movements are continuous and flowing. Practice in front of a mirror shows the manipulator what is actually happening; this is not easily seen from above.

Juggling puppets should be made with heads slightly tilted back, and eyes raised as if to follow the movement of the balls. The type of jointing used in body and legs is open to choice, but the arms should be as flexible as possible. I find that a string joint at shoulder and elbow works well here, while leather hinge joints at the wrists stand up best to the wear and tear of jerking hand strings. The balls can be made from table tennis balls, split and weighted inside with plastic wood, and the palms of the juggler's hands should be lined with felt to deaden sound.

The main control bar of the juggler is of standard type, so the puppet may walk, bow, or jump about in addition to doing his tricks. The juggling movements are controlled by a detachable hand bar (or bars) whose strings pass down through the balls to the puppet's hands, forehead or toes.

Figure 79a

1 The hand bar is shown in position on the main control, with the ball resting in the juggler's hands. Strings from each end of the bar run through the ball to the palms, while a third string from the centre of the bar is attached to the ball itself.

2 When the juggler is walking the hand bar should be detached and held forward to allow free movement of the knee strings.

3 The centre string of the hand bar is looped over its hook and the bar sharply tilted to the right, throwing the ball from one hand into the air.

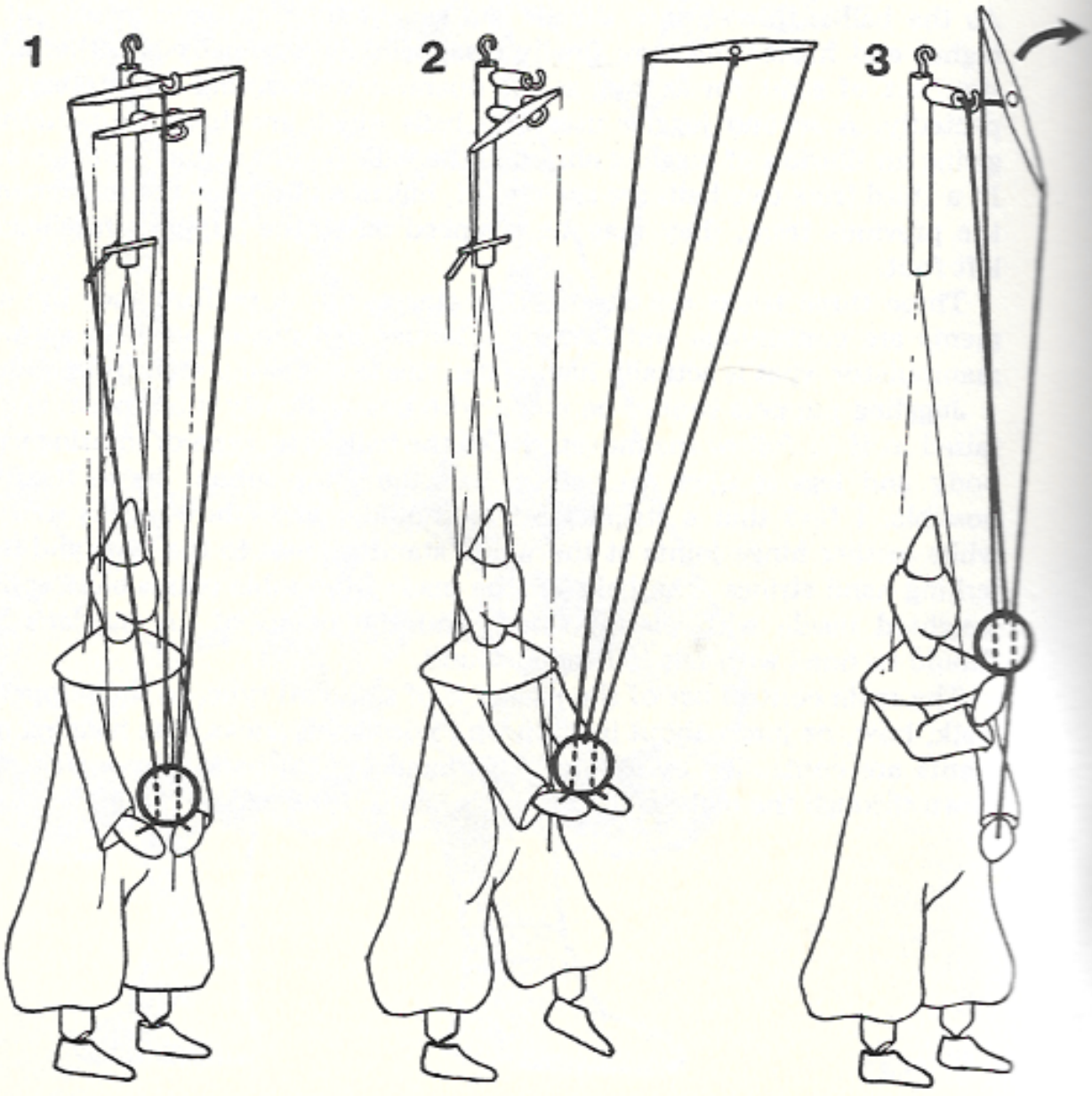


Figure 79b
4 As the hand bar is levelled and moved forward, the centre string draws the ball into the air. The further forward the bar is moved, the higher the ball rises.
5 The hand bar returns close to the main control and is tilted to the left, raising the left hand to catch the ball as it runs down the taut string.
6 The left hand is lowered, and the ball falls back to its first position. The sequence can now be repeated in reverse starting with the left hand, or the ball may be thrown into the air by both hands together.

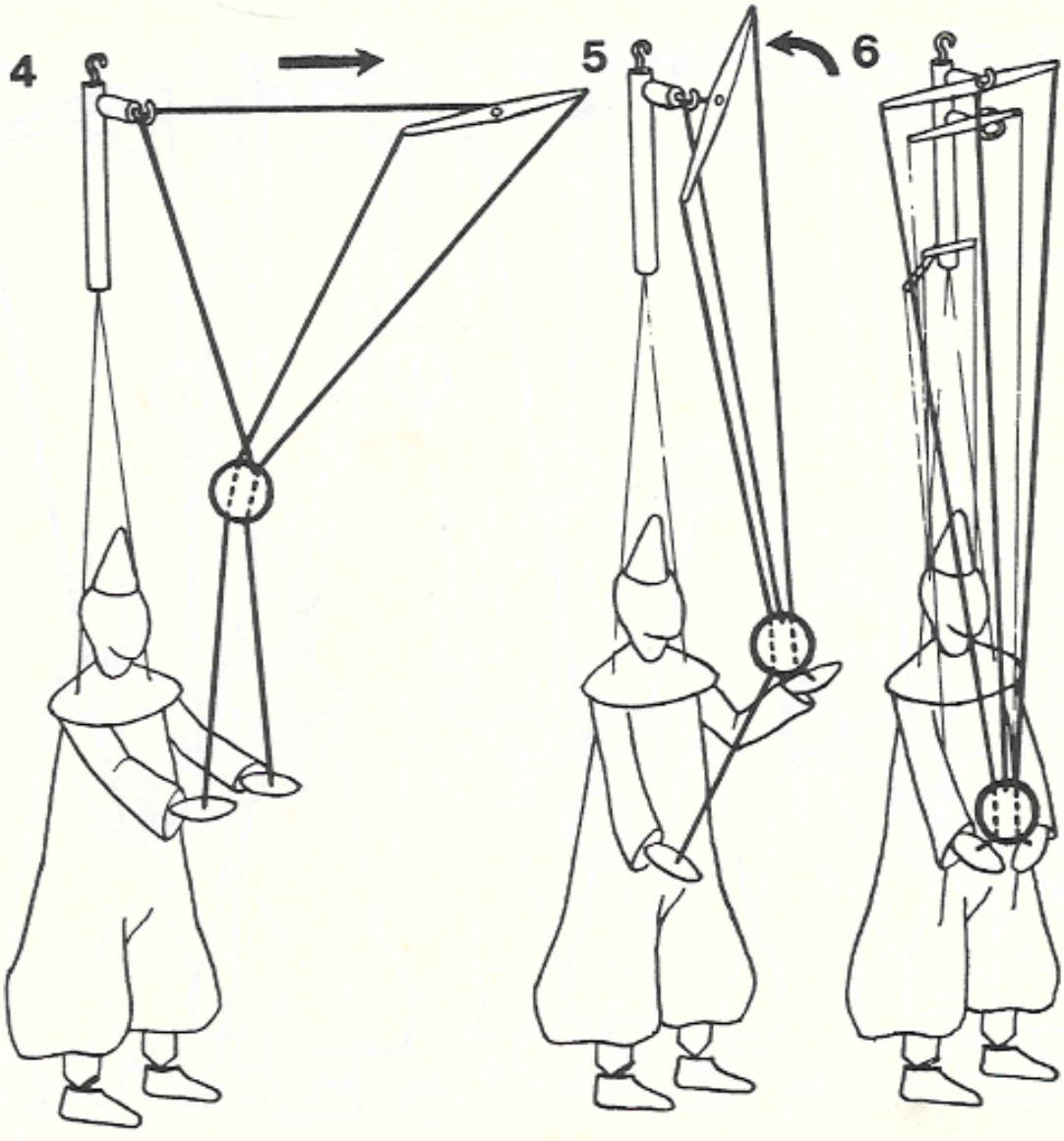


Figure 80

1 In this second trick two balls are used. Strings from the ends of the hand bar are threaded through each ball to the palms of the hands.

2 When the hand bar is jerked sharply from side to side, each ball is thrown into the air in turn, and falls back down its string into place.

3 If the hand bar is turned end-on towards the audience, the balls appear to be thrown from hand to hand.

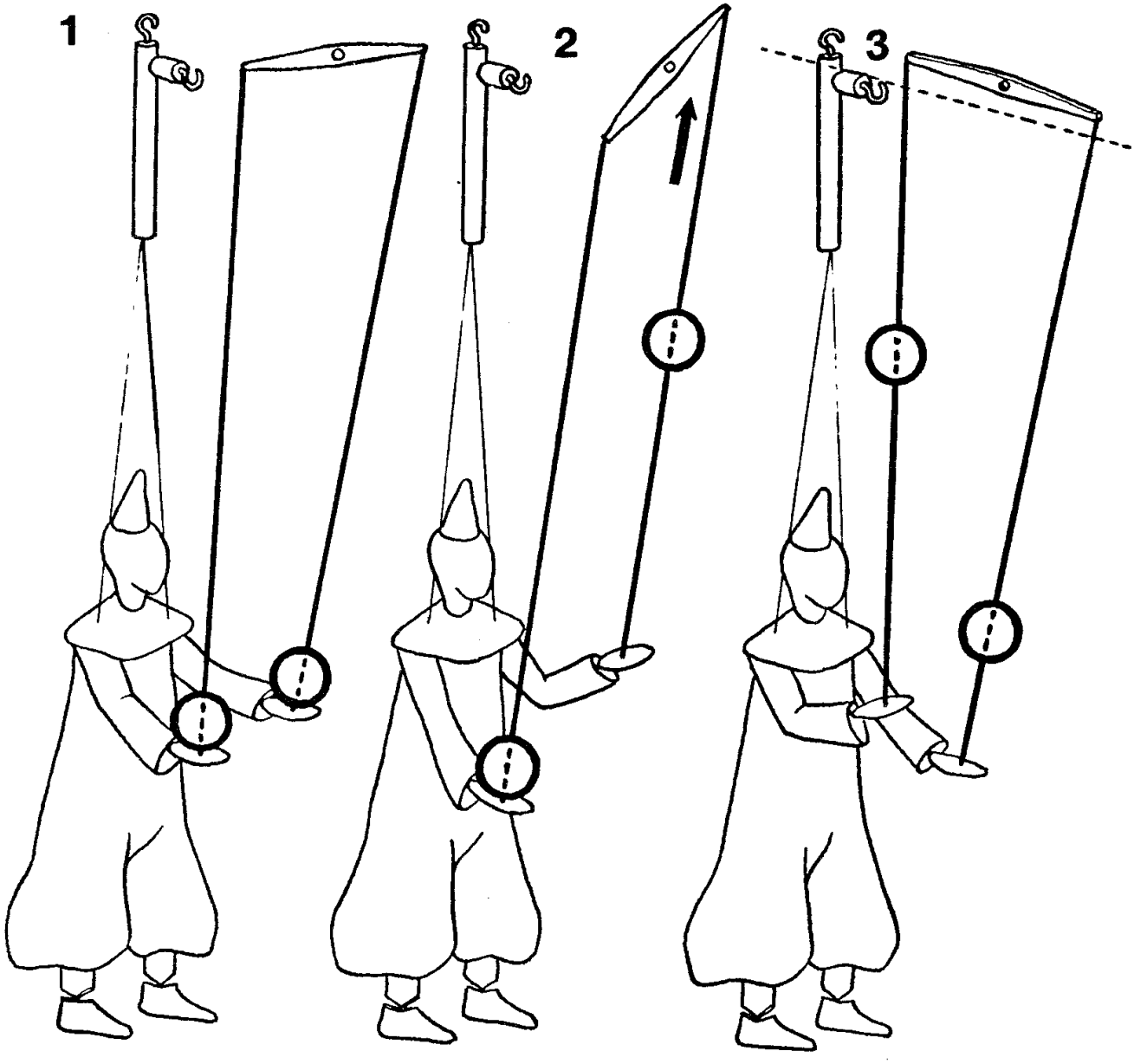
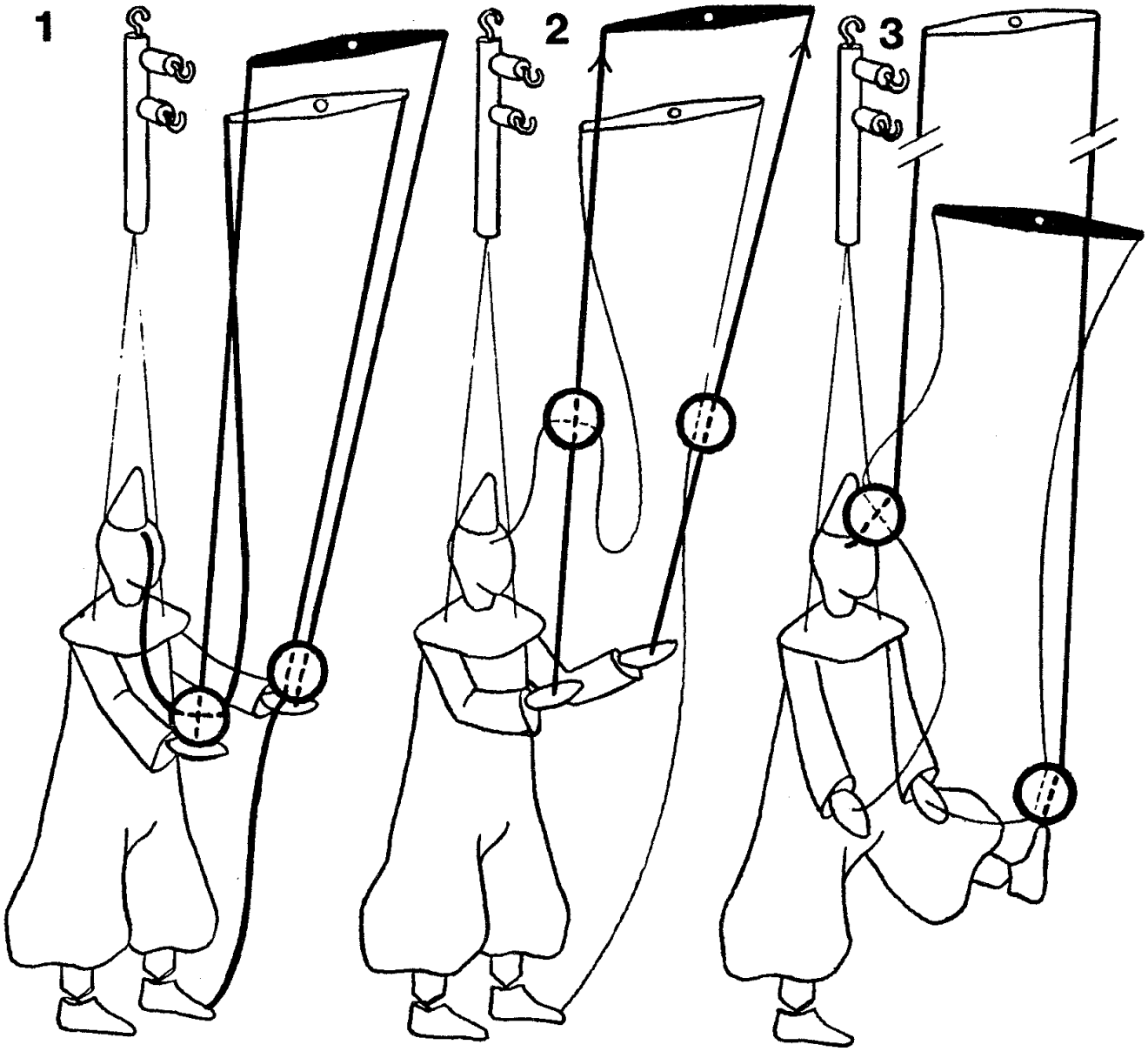


Figure 81

1 A third juggling trick uses an extra bar with strings through each ball to the puppet's forehead and left foot. Since the two bars are held in separate hands, the puppet, after making his entrance, must be supported by a second manipulator or hung from a bracket over the stage.

2 A sharp jerk on the hand bar sends both balls into the air.

3 The hand bar is lowered, the second bar raised, and the balls run back down the taut strings onto the juggler's forehead and left foot. The ball on the foot returns to the left hand by reversing the same movements, while the forehead ball returns by its own weight.



TRAPEZE ACROBAT

The acrobat described here makes his entrance hanging by his hands on a spinning trapeze which is lowered from above. As it reaches the ground he bows to the audience, and rises into the air again as the trapeze begins to swing, raising and lowering his legs to increase the arc of movement. After several swings he raises his feet to the bar, releases his hands, and hangs by the feet alone. Still swinging he returns to the hand hold position and raises himself waist high to the bar, alternately raising and lowering himself by the arms. Finally, from the toe hold position, he rises to stand on the still moving bar.

This puppet is simply constructed and moves in a vertical plane only. From shoulder to finger tip the arms are made in one piece, the palms of the hands being curved to fit round the bar. The shoulders pivot on a wire shaft through the chest, and the head, neck and upper body are made in one. The waist is a leather joint which bends forward only, as backward movement is limited by a canvas strip joining the chest and stomach. The thigh joints should allow no sideways movement, and although the knees may be jointed, the legs can be made in one piece from the thigh joint to the toes which are pointed downwards.

The trapeze is made from an upper and lower wooden dowel bar joined on each side by lengths or rigid wire. The wire ends are turned in and fixed to the lower bar allowing no rotation, but are looped and free swinging from grooves in the upper bar.

The main control bar is irregular, being T-shaped and exactly half the height of the arobat himself from toes to finger tips when he stands with arms raised. The lower end of the T-bar is fixed to the centre of the upper trapeze bar, and when not in use the control is hung in position number 4 of the following diagrams (*figure 83b*). From each side of the cross stroke of the T-bar strings of equal length pass down through holes in the lower trapeze bar to screw-eyes in the palms of the acrobat's hands, and on his toes. The toe strings pass in front of the upper trapeze bar, the hand strings behind.

A fifth string runs from the top centre of the T-bar down behind the trapeze to the top of the acrobat's head. For most of the time this string hangs loose, but should be measured to be of equal tension with the hand strings when the acrobat is in position 5 (*figure 83b*).

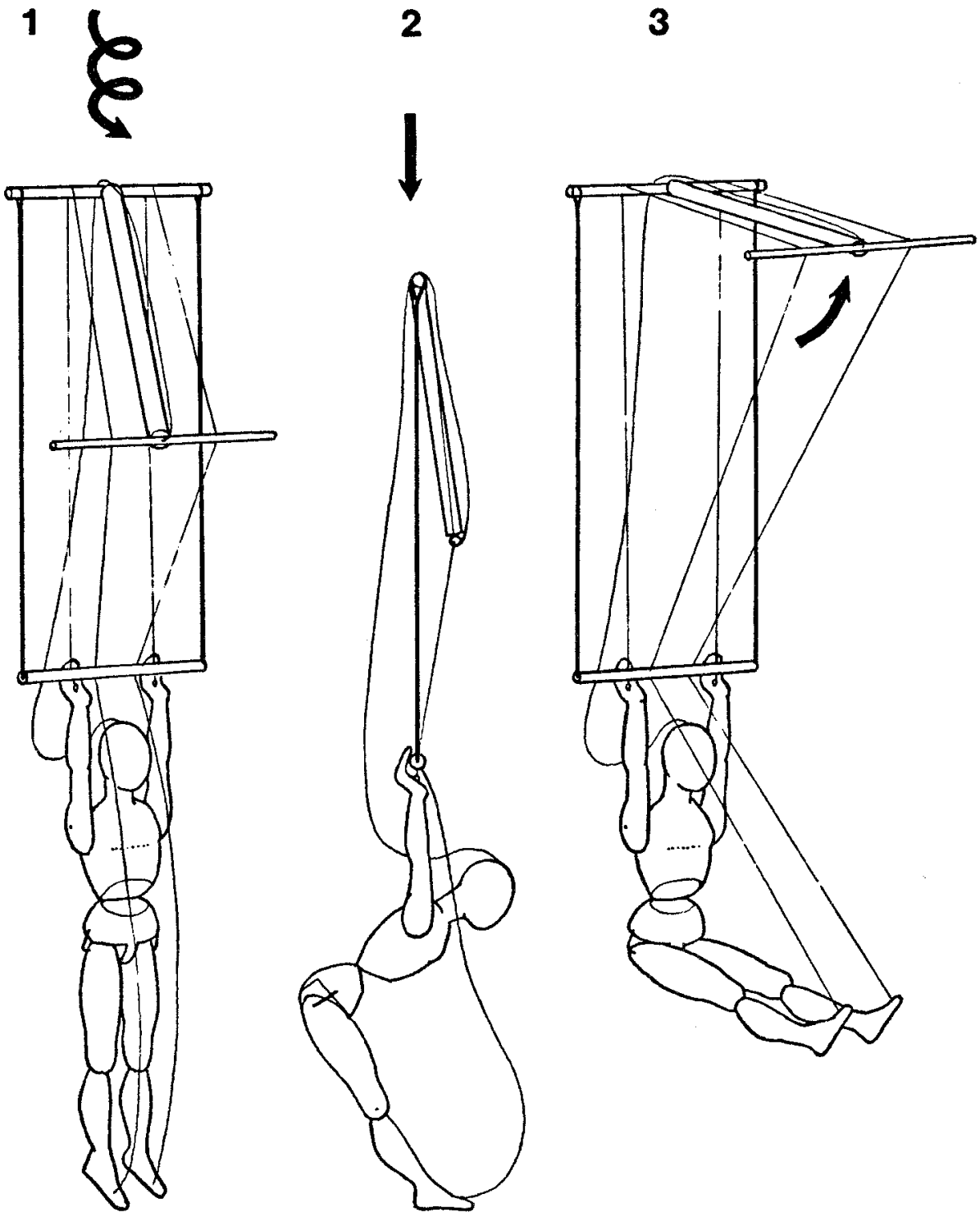


Figure 83a

1 With the T-bar control bent forward to its limit, the acrobat makes his entrance in this position hanging from the trapeze hy his hands. The trapeze is spun round on a string loop, and lowered from above to the centre of the stage as if descending from the top of the circus tent.

2 As the puppet's feet touch the ground, the trapeze stops spinning and the string loop is discarded. The trapeze is lowered still further and the acrobat makes his bow facing the audience. The extended toes push the body backwards at the thigh joint, and the head bends forward between the shoulders.

3 The trapeze is lifted into the air and turned sideways.

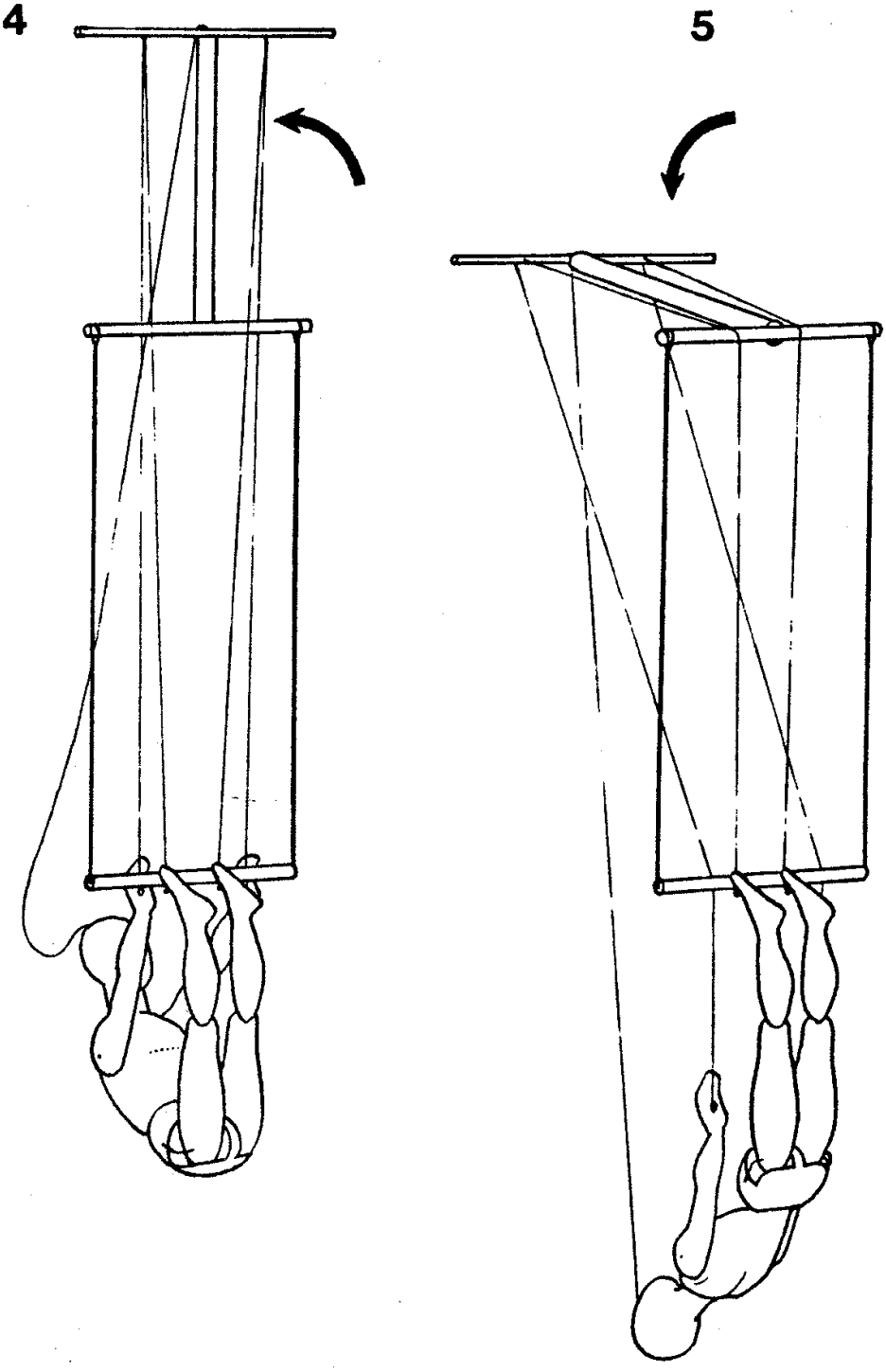


Figure 83b
Alternate raising and lowering of the T-bar to mid position raises and lowers the acrobat's legs, giving momentum to the trapeze as it begins to swing from side to side. From now on the operator continues to support and swing the trapeze with one hand, and move the T-bar control with the other.
4 With the trapeze still swinging, the T-bar is raised upright, bringing the acrobat's feet up to the level of his hands.
5 As the T-bar is bent backward to mid-position, the acrobat's hands drop away from the trapeze, and he is left hanging by the toes alone. This is the only position of the T-bar control in which the head string is stretched taut.

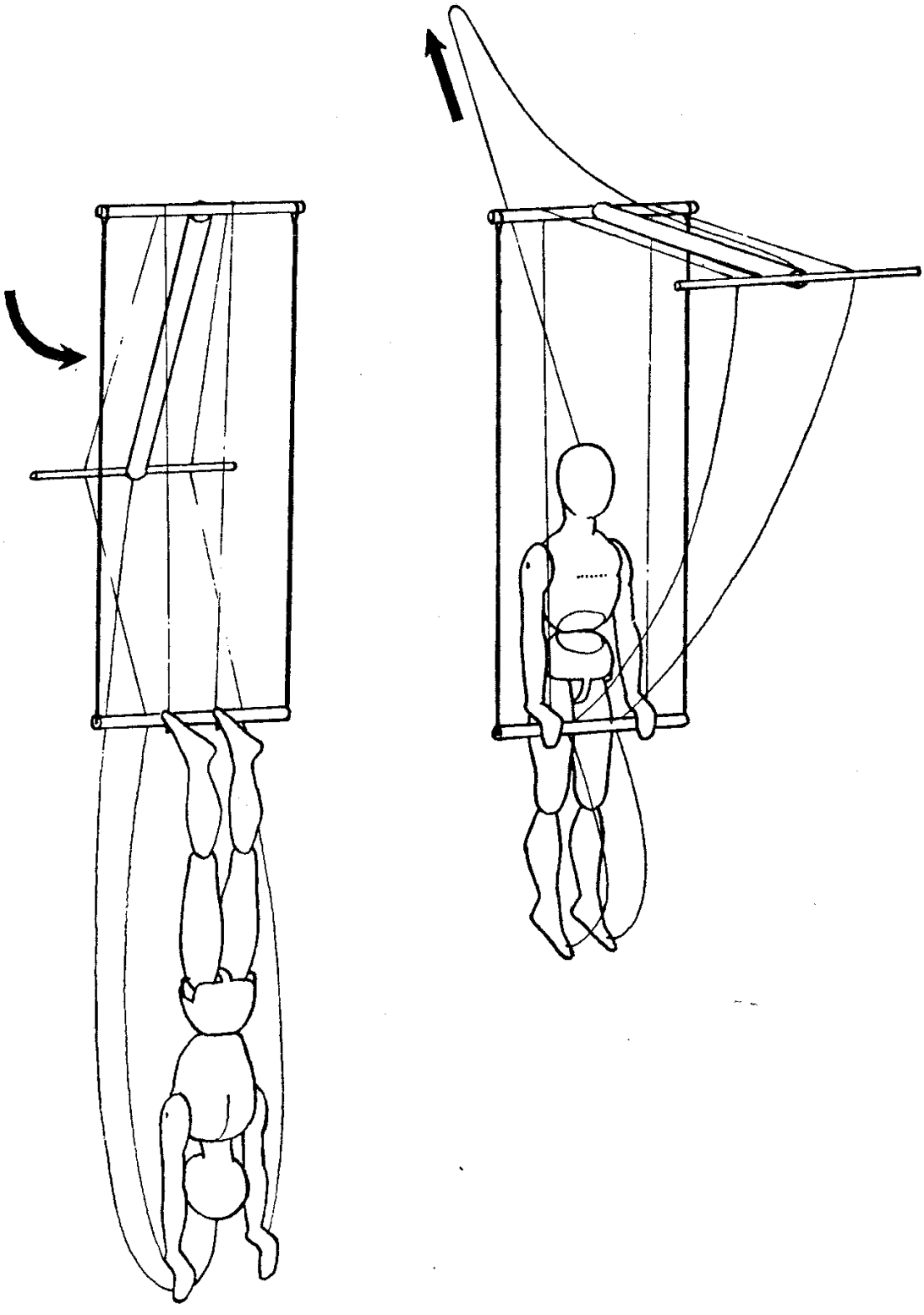


Figure 83c

Figure 83c

6 With the T-bar bent fully backwards, the acrobat's hands stretch down beyond his head. While the trapeze continues to swing, all these movements may be reversed to bring the acrobat back to his original position, hanging from the trapeze by his hands.

7 Here, starting from position 3, the head string is raised until the acrobat balances his weight on the trapeze with his arms. His hands slide round to the top of the trapeze bar pushing the handstrings to one side. While the operator raises the head string his other hand must support and swing the trapeze, keeping the T-bar in position at the same time. The head string may also be used when the acrobat is in position 5 raising him to standing position on the trapeze bar with his hands by his sides! This is not easy to do, as the foot strings must be loosened slightly (by raising the T-bar to a vertical and slightly forward position) before the feet will slide round to the top of the trapeze bar.

TIGHT ROPE DANCER

I have combined in this circus puppet the movements of a ballet dancer and a tight rope walker. The progression of the traditional tight rope walking marionette along his rope is never very convincing as neither foot can pass the other and the result is only a sideways shuffle. The series of hops and turns on one toe by which the dancer moves appear to me much more natural.

The tight rope dancer makes her entrance on a rigid wire previously stretched between two fixed points out of sight of the audience on either side of the stage. With arms undulating before her, and one leg raised sideways she crosses to the centre of the rope in a series of hops on one pointed toe and moves into an arabesque position, bending forward from the hips with one leg raised high behind her. Returning to her entrance position the dancer hops to the far side of the tight rope, lowers her arms and leg and spins round on one toe in a pirouette; as she spins faster and faster, her arms and free leg rise sideways, and her skirt flares round about her. Crossing and re-crossing the tight rope the dancer hops on one toe, pirouettes, and poses in arabesque, until finally returning to the centre of the stage she sinks down with one leg stretched along the rope and the other hanging below, leaning forward from the waist to lay her arms and head towards the outstretched foot. Combinations of these movements carried out to music can make an effective and artistic performance.

The dancer is made with each leg in one piece from thigh to extended toe. The thigh joint of the leg which is attached to the wire is a leather hinge with forward movement only, while the other leg is rounded at the thigh and moves quite freely on a short wire loop between two screw-eyes. The pelvis section on this side is cut away at an angle to allow the leg to move freely upwards, downwards, forwards, backwards and to the one side. The waist joint is hinged to move both forwards and backwards, while the shoulder joint is a loose string joint. The elbow and wrist, being visible, are tongue and groove jointed, the wrist moving both forwards and backwards with the palms of the hands downwards. The toe on one of the dancer's legs is attached to the tight rope by a thin wire loop long enough to allow the hopping movement, and curved backwards so that the leg may be extended along the tight rope. The wire loop is fixed to the toe in a way which allows

the dancer to rotate on the rope while the loop stays in position (see *figure 88*).

That part of the main control bar which supports the weight of the dancer is of standard design, but the detachable hand bar has side struts providing strings to the mid forearms as well as to the back of each hand. This bar allows a very fluid movement where wrists may be lowered at the end of raised arms. The single leg bar string to the dancer's free foot is quite irregular, being a loosely hung swinging rod closely related in length and movement to the leg which it controls. This bar is held in position between the fingers of the manipulator's supporting hand, leaving the other hand free to hold the hand bar.

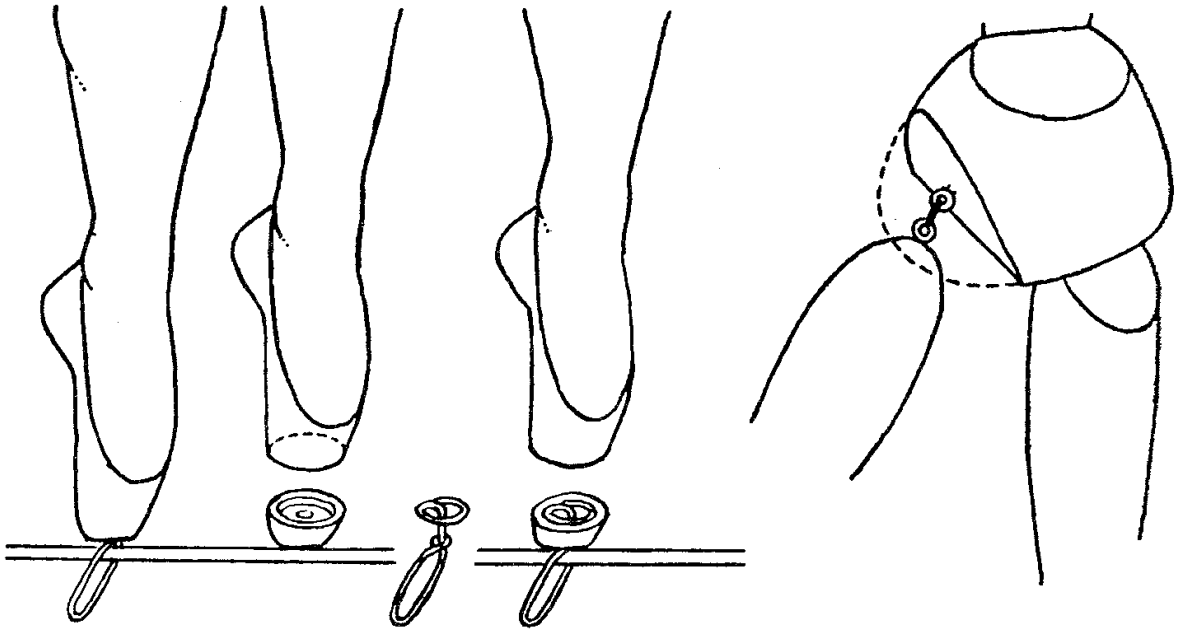


Figure 88 Dancer's toe and hip joint

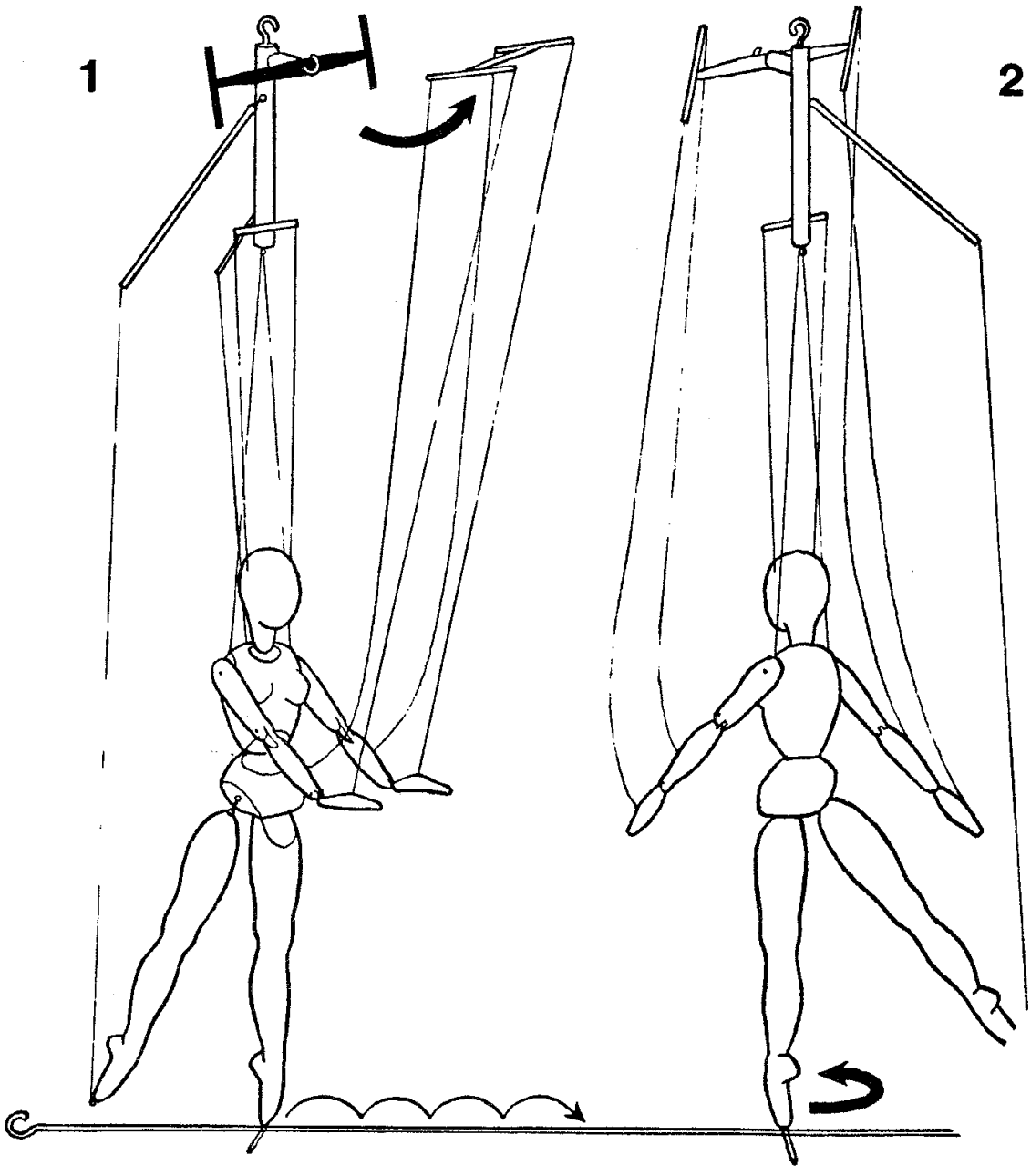


Figure 89a

1 Before the dancer makes her entrance the end of the tight rope wire is passed through the loop at the bottom of the dancer's foot and fixed in place. The hand bar is detached and tilted so that the hands are raised and the wrists dropped. When the hand bar is rocked the arms undulate from the elbow.

2 In the pirouette the hand bar is replaced and the foot bar hangs free. The whole main control bar is spun round by its hanging hook, and the dancer's arms and leg swing outwards with the movement.

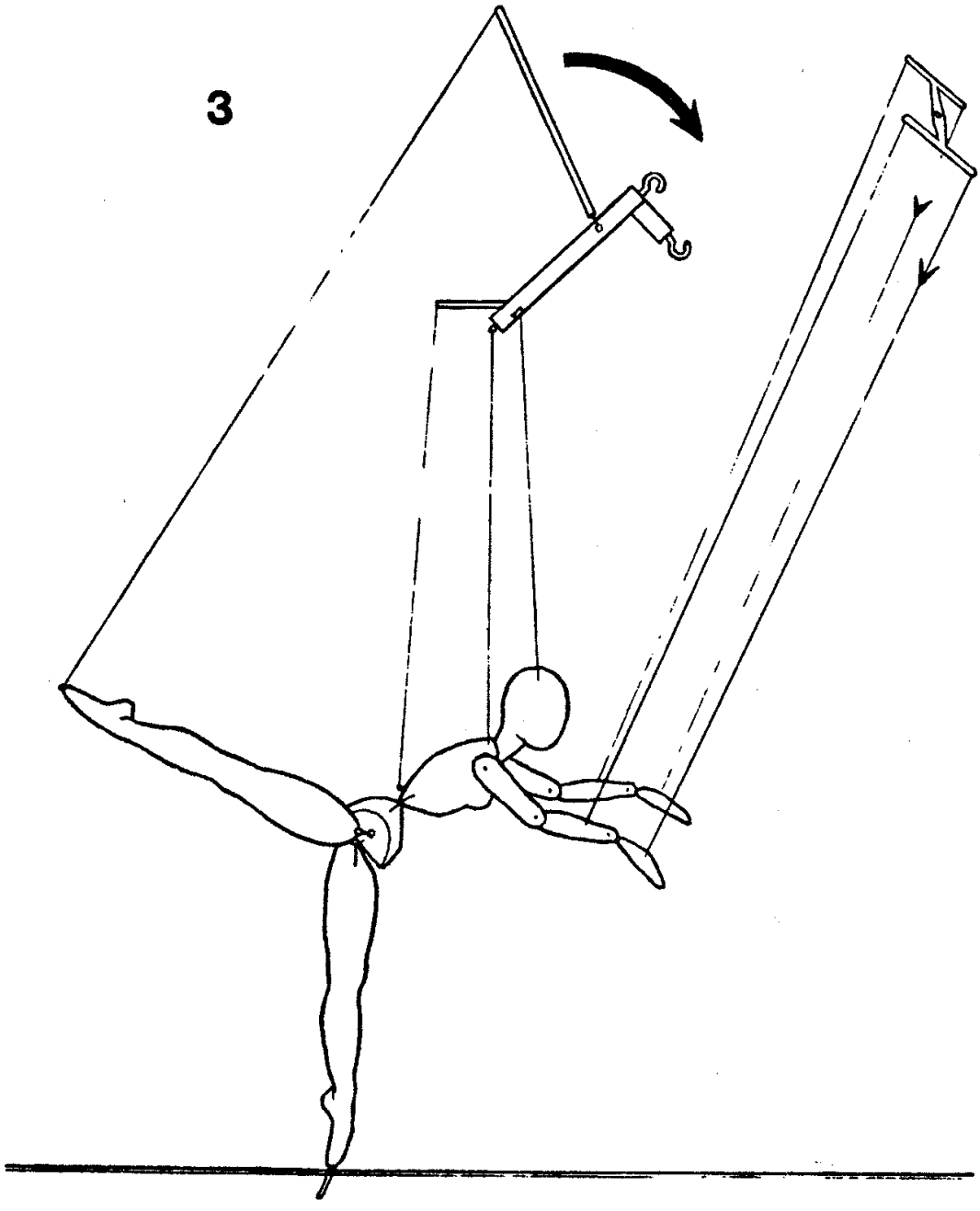


Figure 89b

3 In the arabesque position the main control bar tilts the dancer forward from the waist and the leg bar raises the free leg high behind. The hand bar moves forward to stretch out the arms, and is tilted so that the wrists are raised and the hands hang downwards. In this position a careful manipulator may turn the dancer slowly round on one toe, always remembering that the dancer in arabesque position looks best from the side view. Also, starting from this position, the dancer may be raised erect, and the free leg swung round sideways until it stretches forward in front under raised arms.

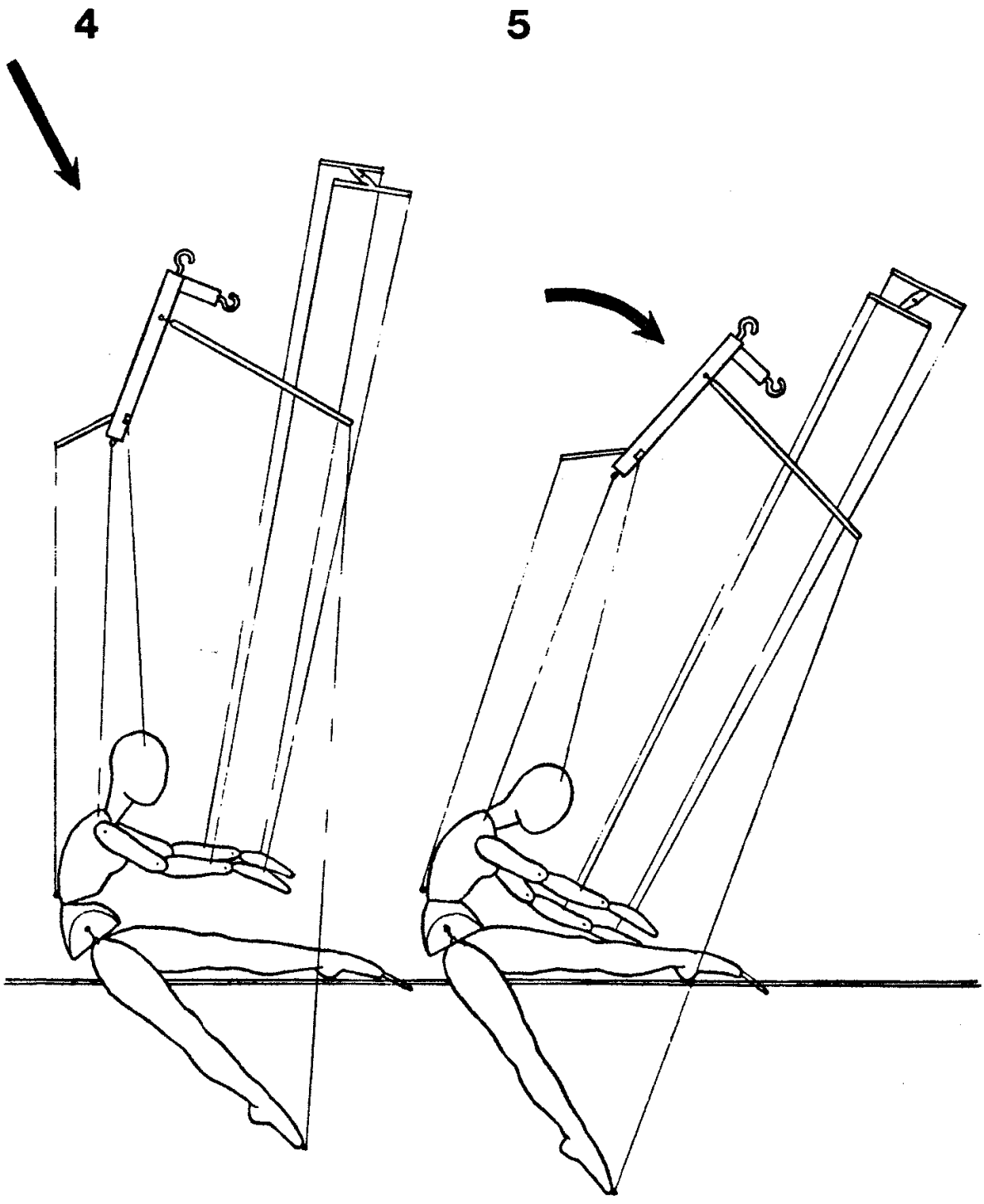


Figure 89c

4 The main control bar is lowered so that the dancer's attached leg lies along the wire and the free leg hangs downward. If the dancer is placed so that the wire passes between the division of the legs, she should stay firmly in place. The hand bar moves forward to stretch out the arms towards the dancer's foot.

5 The main control bar is tilted forward and lowered further until the tight rope wire is supporting most of the dancer's weight.

WEIGHT LIFTER

This is one of the most intricate and entertaining of the circus puppets. The weight-lifter can walk onto the stage, lay his dumb-bells on the floor, and if the hand strings are long enough, rise from a kneeling position and bow to the audience. He can then lift up his weights and, with the appearance of tremendous effort, alternately raise and lower them from a kneeling or standing position. Further stringing makes it possible for this puppet to lie on his back, pass the dumb-bells from his hands to his feet, and raise and lower them with his legs.

The exposed limbs of the weight-lifter demand more careful carving or modelling than is necessary for a puppet in clown's costume. Circus tights of white stockingette cover the joints, but for appearance sake knees and elbows should be made with the concealed hinge described in an earlier chapter. To prevent unnecessary movement all other joints should be firm tongue and groove hinge joints, with a close leather hinge at the waist. The thigh joints, also leather, should be made slightly loose so that the feet move a little apart in raising the dumb-bells. The shoulder joint can be either a close knotted string joint, or it may pivot on a wire shaft passing through the body from side to side.

The main control bar is of standard type with a detachable hand bar and extra foot bar to carry out the weight lifting movements. The wooden dowel shaft of the dumb-bells is pierced vertically for hand and foot strings which pass through it to screw-eyes in the palms of the hands and at the toes. The weights should be heavy enough to remain still on the floor when the hand strings are moving through them.

The presentation of this puppet should be based on the slow and deliberate movements of the real life performance, imitating the stance of the body, and the final quick thrust of the arms as the weights reach the above head position. The feeling of effort can be exaggerated by an accompanying drum roll and final clash of cymbals.

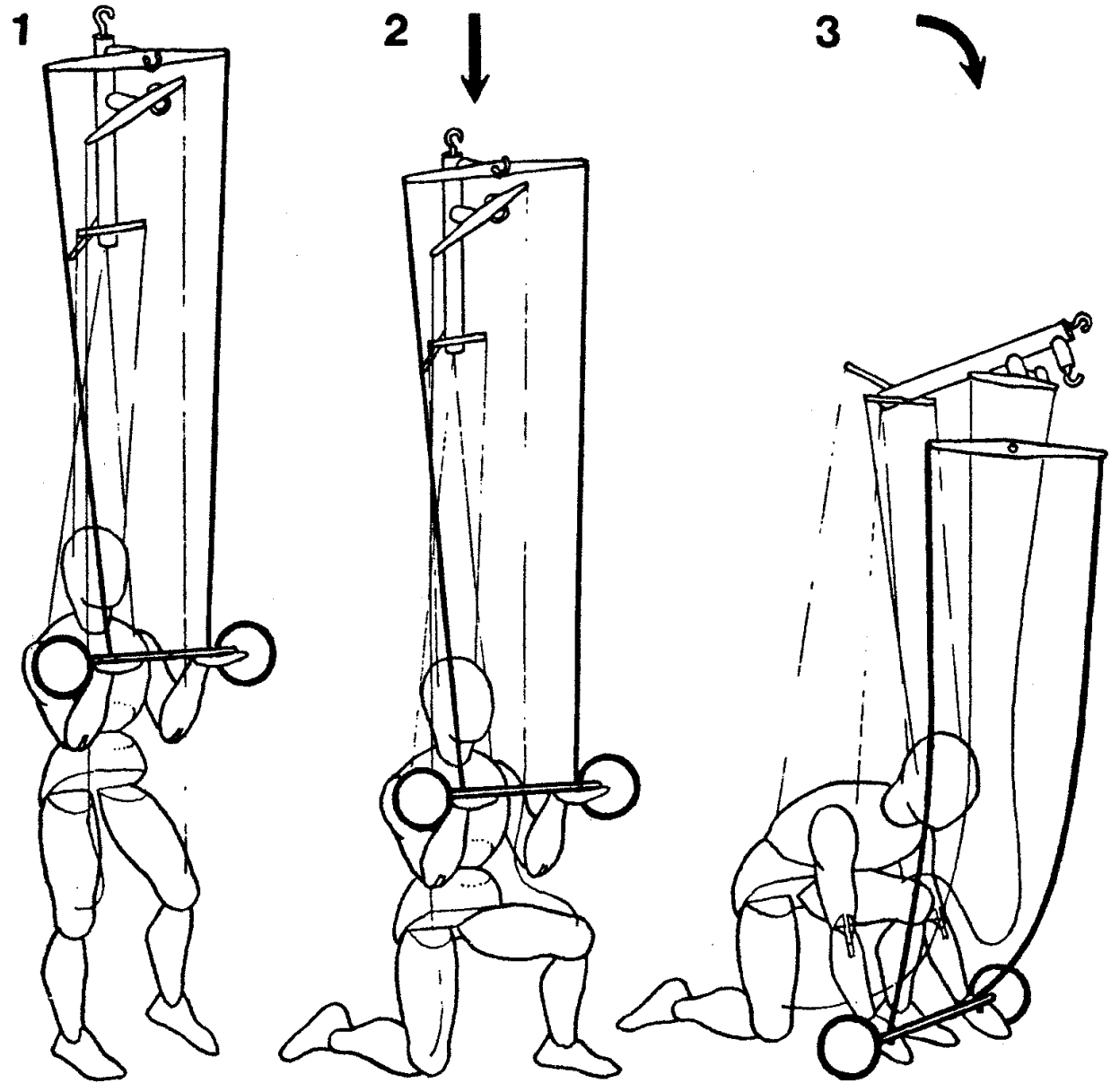


Figure 91a

1 The leg bar is worked by the thumb of the supporting hand as the weight-lifter walks onto the stage to make his bow. With the hand bar in position on the main control, the dumb-bells are held at mid-height.

2 The leg bar is tilted to bring one knee forward, and the whole puppet is advanced and lowered into kneeling position.

3 The main control is tilted so that the puppet leans forward from the waist. The hand bar is detached and lowered so that the hands reach the floor, and the dumb-bells rest on the stage.

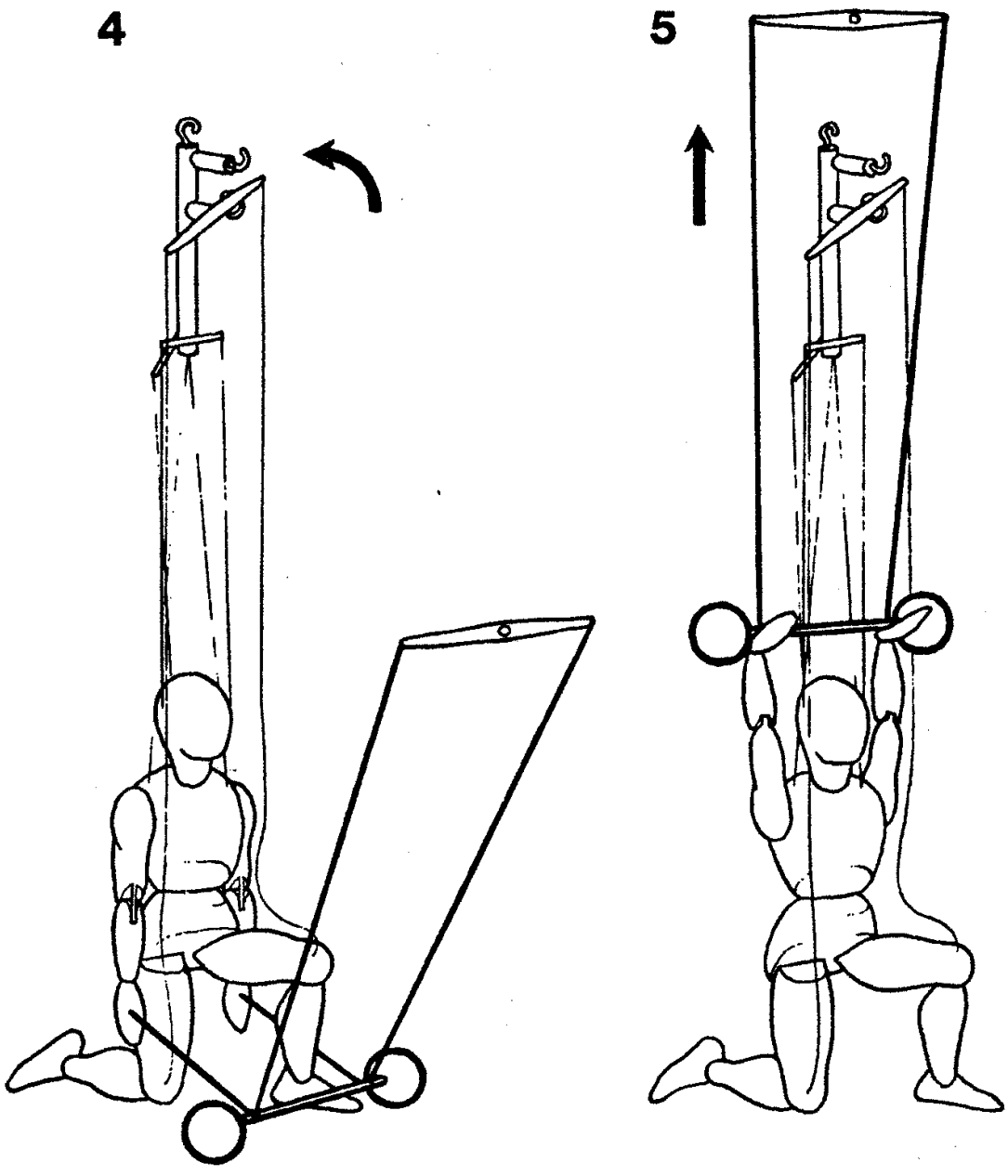


Figure 91b

4 With the hand bar still lowered, the main control is straightened, and the puppet's arms fall back to his sides. The dumb-bells remain in position as the hand strings run through the holes in the shaft.

At this stage the last two movements are repeated as the weight-lifter leans forward to pick up the dumb-bells which return to his hands as the hand bar draws the strings taut once more.

5 The weight-lifter has now returned to kneeling position, and as he kneels or stands the hand bar alternately raises and lowers his weights.

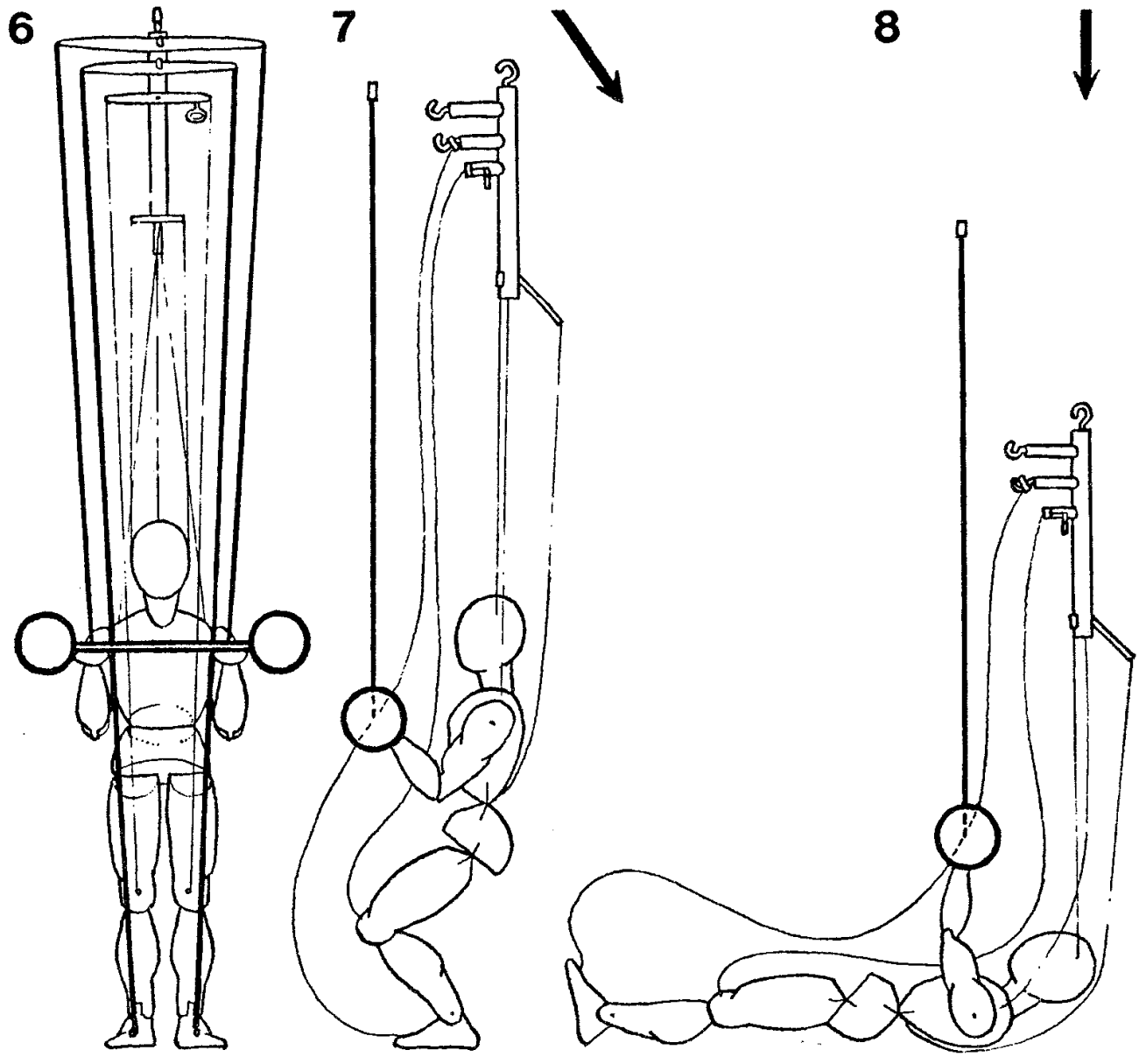


Figure 91c

6 The addition of a foot bar with strings running to the toes through the shaft of the dumb-bells between the handstrings increases the variety of movements which the weight-lifter can do. If the puppet is to be able to perform from a kneeling position, the foot-strings should hang slightly loose when the weight-lifter is standing.

7 The hand bar is detached and held forwards, while the main control bar is lowered and moved backwards.

8 The puppet is now lying on his back, with head slightly raised. The hand bar is used to alternately raise and lower the dumb-bells.

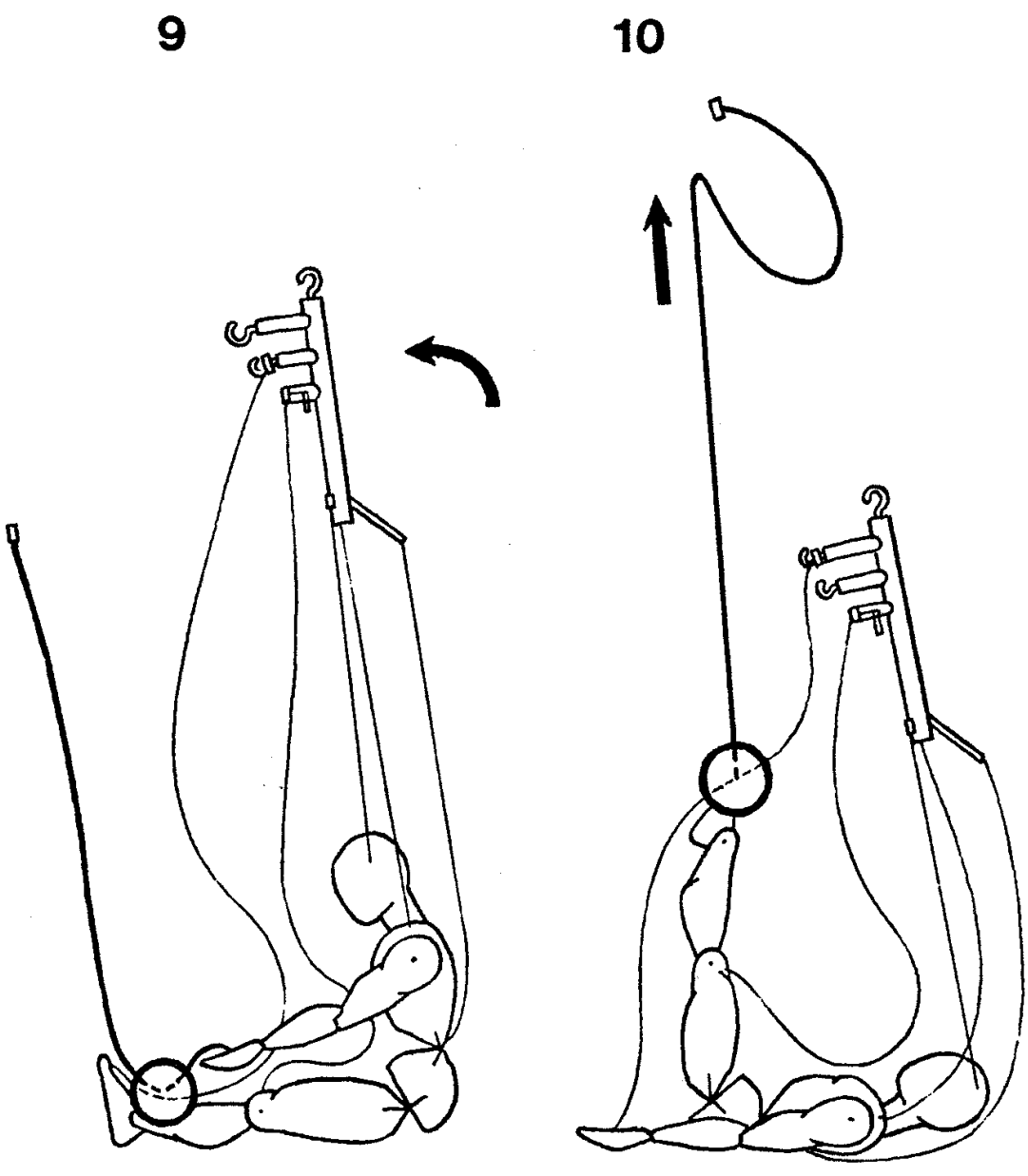


Figure 91d

9 The main control bar now raises the weight-lifter from the waist. The hand bar moves the arms forward, and a slight jerk and loosening of the hand strings tips the dumb-bells on the puppet's toes. This exchange must be carefully done so that no loose strings fall round the ends of the weights.

10 The loosened hand bar is replaced on the main control and the foot bar is detached and raised so that its taut strings hold the dumb-bells in position on the feet. As the weight-lifter lies back, the leg bar alternately raises and lowers the dumb-bells.

HAND BALANCING ACROBAT

The hand-balancer makes his entrance in a series of jumps, standing upright on his feet. He bows to the audience, bends over from the waist to place his hands on the floor, and balancing on his palms, slowly raises his legs until his feet are straight up above his head. In this position he raises and lowers himself a few times by bending and straightening his elbows, and raises and lowers his feet, or kicks them alternately above his head. Finally, moving one hand at a time he walks round the stage on his hands.

This puppet is designed to move in one plane only with no sideways movement except at the neck. Both hands and feet must be weighted, and if the puppet is clothed in clown's costume, wooden dowel limbs may be used with leather hinge joints throughout. The waist, thigh and ankle joints move freely backwards and forwards, but knee, wrist and elbow bend in one direction only. The shoulder joint rotates on a wire shaft passing through the chest from side to side.

The main control bar is a tip up control. A detachable foot bar with strings to the insteps is placed behind the base of the main bar, and a wire lever with strings to the back of the acrobat's hands is placed in the front centre. Head strings from a fixed bar at the top of the main control support most of the puppet's weight along with a string from the base of the main bar which runs to the acrobat's back. When the main control is tipped forward the index finger of the supporting hand raises the hand string lever forward between the head strings (A). This stringing is irregular but quite simple, and avoids the complication of knee strings for upright walking movement.

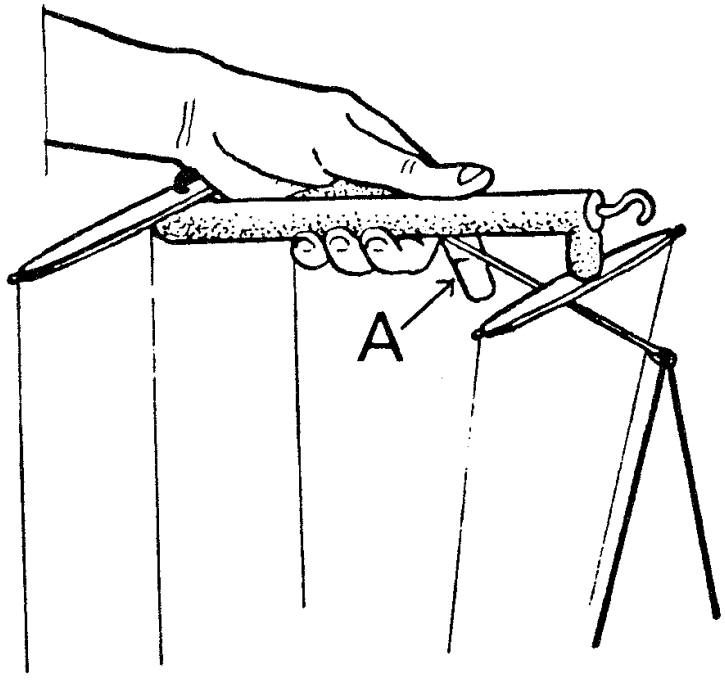


Figure 93

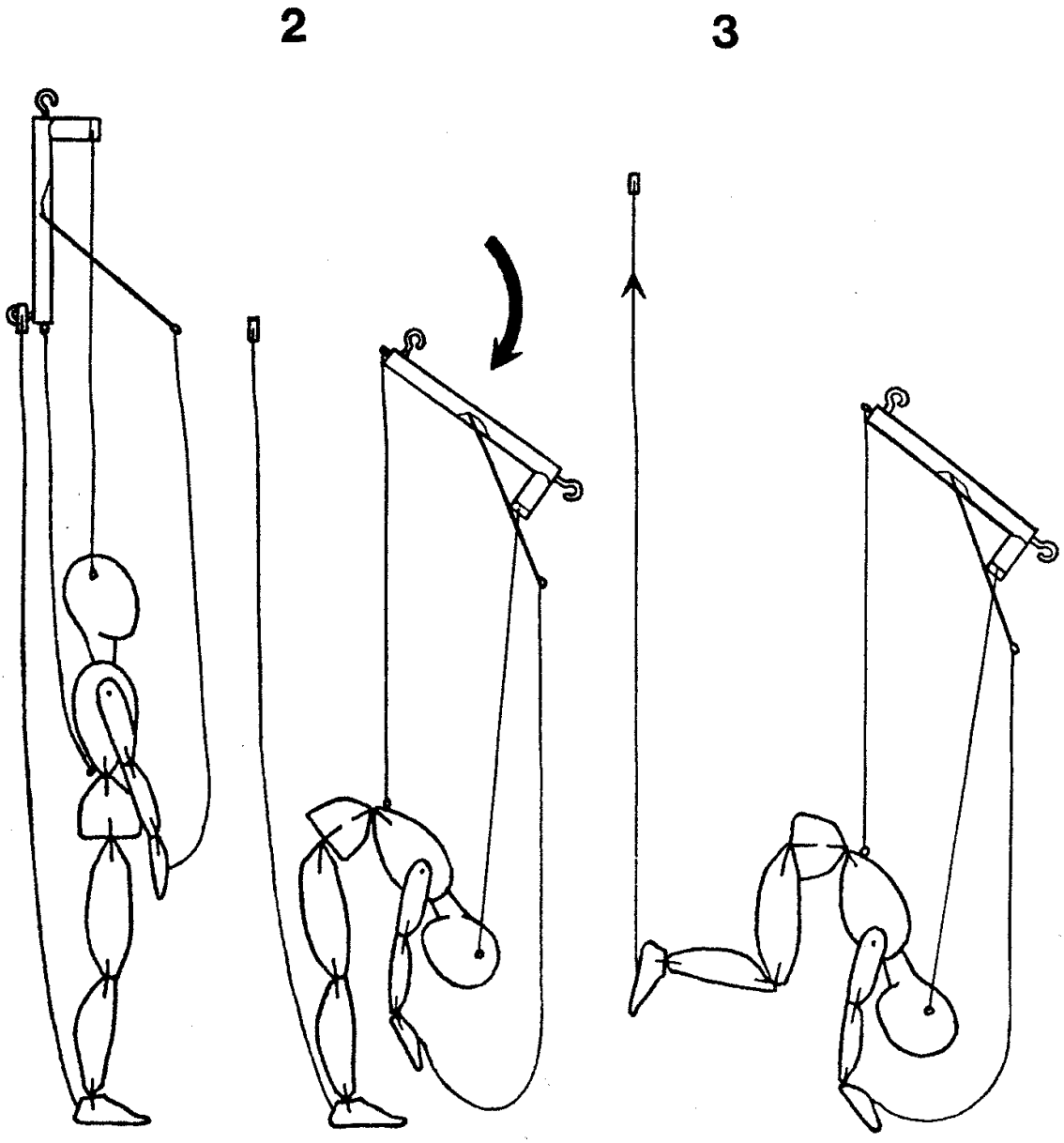


Figure 94a

1 In the normal standing position most of the weight is taken by the head strings. The hand string lever lies in resting position with its strings hanging loose.

2 With the leg bar detached, the main control is tipped over to allow the top half of the puppet to bend down. The hand string lever is moved forward between the head strings by the index finger of the supporting hand.

3 The weighted hands of the acrobat touch the ground and the leg bar is raised, bringing the feet up. The acrobat settles on to the palms of his hands.

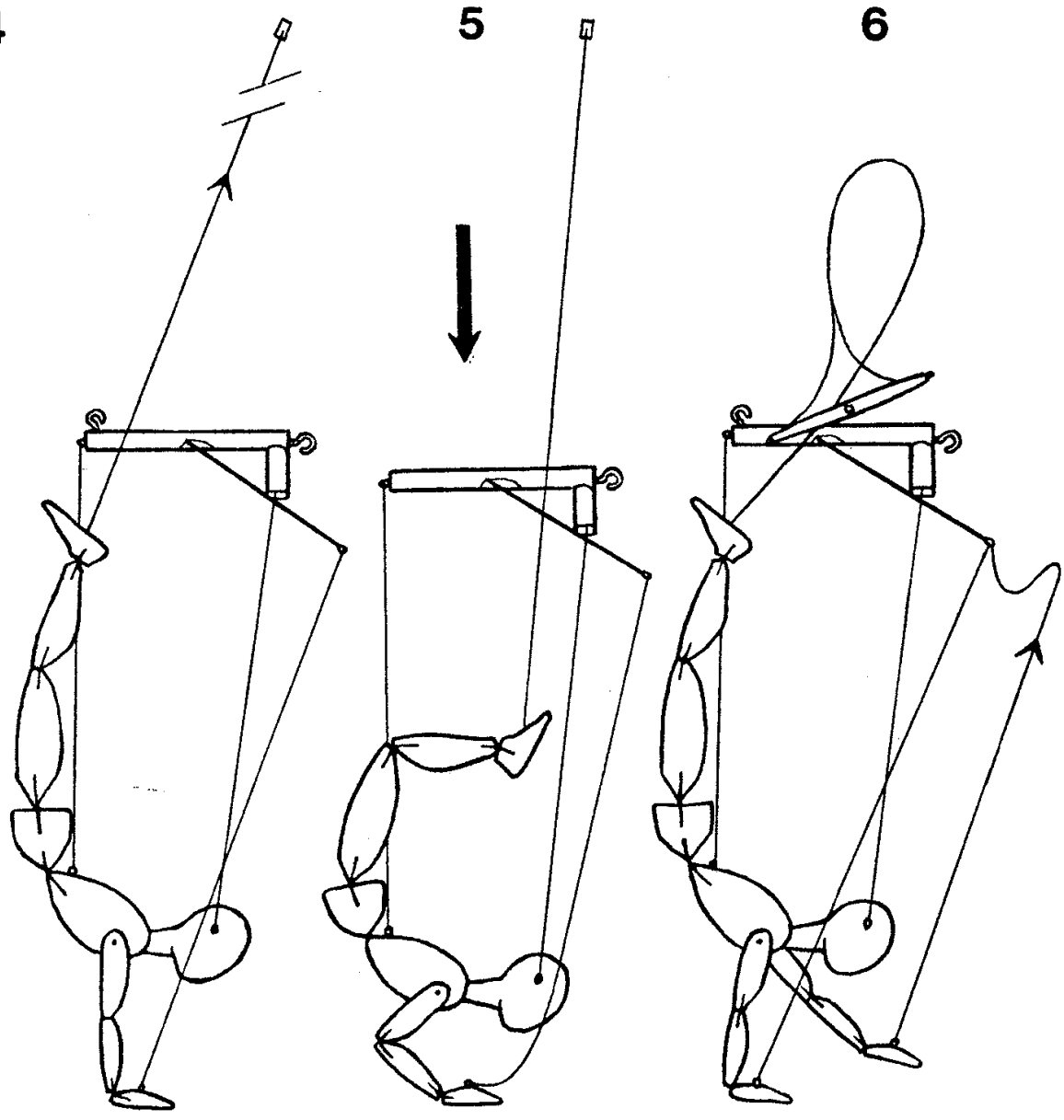


Figure 94b

4 As the leg bar rises further, its strings pass on either side of the main control bar, and the legs on either side of the back string. The main control is levelled, lifting the head and reversing the arch of the back.

5 Movement of the main control makes the acrobat appear to push himself up and down on his hands. The leg bar may be used to raise or lower the legs or to make them kick in turn.

6 The foot bar and its strings, keeping the legs extended, are gathered into the supporting hand, while the free hand moves the hand strings alternately as the acrobat walks forward on his palms.