

Manual for Acrobatics: Handstand, hand to hand, banquine

Part1

Handstand

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 - 2 Body tension exercise
 - 3 Developing correct tuck/extension
 - 4 Headstand
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Part2

Hand to hand balancing

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- 1 Standing, facing same direction
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- 3 Flyer standing on knees

- 4 Base sat on bench
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- 6 Facing, flyer on base' knees
- 7 Facing, base on bench
- 8 Counter-balance, facing
- 9 Facing, 1 arm
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2. Balances with base lying

- 1 Knee to knee
- 2 Shoulder stand
- 3 Shoulder stand on feet
- 4 Sitting on hands
- 5 Shoulder stand without knee support
- 6 Standing on hands, arms bent
- 7 Standing on hands, arms straight
- 8 Standing on 1 leg, 2 hands
- 9 Standing on 1 leg, 1 hand
- 10 Standing on hands, arms straight
- 11 Standing on 1 hand, arms straight

3. Balances with base kneeling

- 1 1 foot stand, facing same direction
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- 3 Standing on shoulders, step from bench
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4. Methods of getting to shoulders

- 1 Mounting from side (basic method)
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- 4 Preparation for lift to stand
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5. Angels

- 1 Front angel
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Areas of Contact

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- 1 Flyer in handstand
 - 1 Handstand, base lying, from shoulder stand on feet
 - 2 Straddle jump to handstand, base lying, bent arms
 - 3 Handstand base lying, arms straight
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 - 5 Handstand on shoulders, free
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9. Basic technique of pitch

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10. Mounting to stand on hands	
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3	
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1	1 arm handstand preparation
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Part 3**Banquine****1. Safety**

- 1 Catchers safety
- 2 Flyers safety
- 3 Group safety

2. Catchers stance and grip

- 1 Stance
- 2 Grip

3. Getting the flyer onto the platform

- 1 Jumping on
- 2 Stepping on

4. Timing exercises for pitching

- 1 Exercise 1
- 2 Exercise 2
- 3 Exercise 3
- 4 Exercise 4
- 5 Exercise 5

5. Balancing drills**6. Trampoline exercises****7. Basic platform pitches**

- 1 Pitch to stand on floor
- 2 Pitch to sit in cradle
- 3 Somersault dismount from cradle
- 4 Somersault to sit in cradle
- 5 Somersault to return to platform
- 6 Cascade
- 7 Courbette

8. Pitching from 'stage'

- 1 Getting into position and practising the tempo
- 2 Pitch to stand
- 3 Somersault to stand
- 4 Pitch somersault to stand on platform

Manual for Acrobatics, Handstand, hand to hand, banquine



Part1/ Handstand

1/ PREPARING FOR HANDSTAND (BASIC SKILLS)

Posture training

- Lie flat on back with lower back and backs of hands pressed to floor.
- Repeat lifting legs from the floor maintaining back flat to the floor.



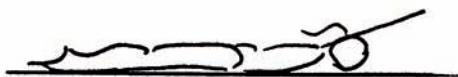
Body tension exercise

Lifting arms above the head maintaining the correct position of the lower back and pelvis.

- (Can be done against the wall to begin).

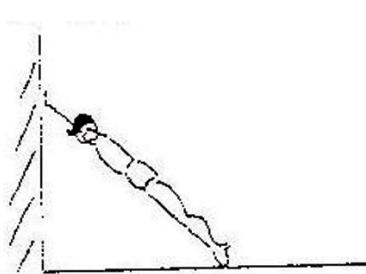


Lying face down lifting the arms off the floor (extension through the shoulders and not the lower back).



Body tension exercise:

- Maintain straight position of body
- Keep shoulders extended
- Push against the wall
- Progress by moving the feet further away from the wall.



Developing the correct tuck-extension technique

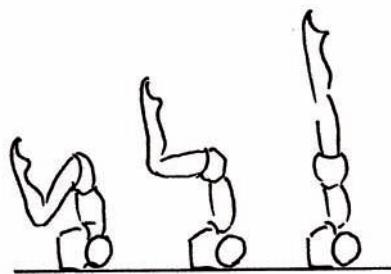
- Lie on the back, lift the feet and bring the knees up to the chest keeping back flat on the floor. The lower leg must be kept parallel to the floor.



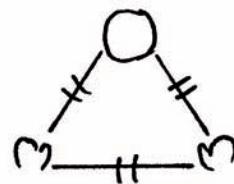
Part1/ Handstand

Headstand:

- Begin with tuck progressing to straight body. The headstand allows the student to concentrate on the correct position of the back and pelvis without having to worry about the balance.

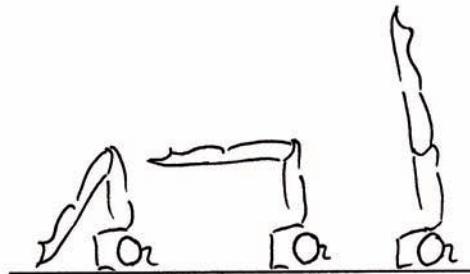


- The head and hands should form an equilateral triangle.
- The legs should extend with the lower leg perpendicular to the floor, as when extending on the back.



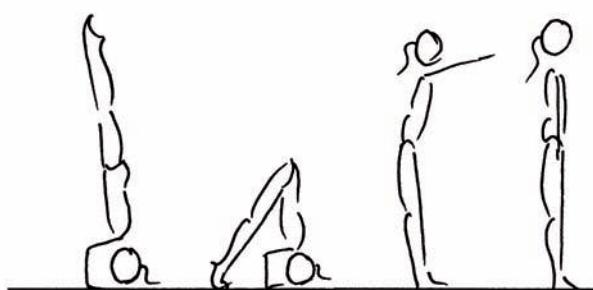
Variations on headstand

Pike to headstand



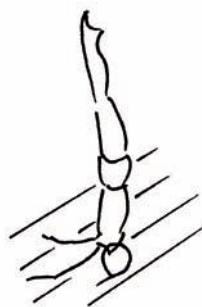
Pike down from headstand

- Head stand – arms wide
- Straight arms
- Balance on back of hands



Headstand wide arms

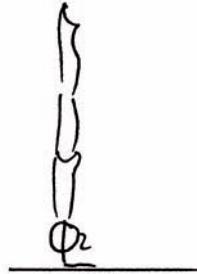
- Balance on back of hands



Part1/ Handstand

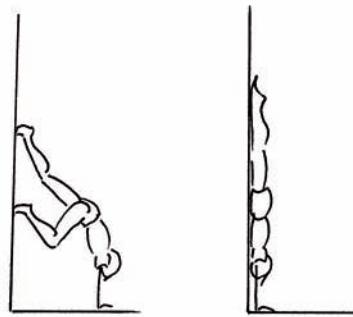
Elbow stand

There are three advantages to this skill
 1. It allows a transition from balancing on three points to balancing on two
 2. You can work on the position of the body without putting pressure on the wrists
 It can also be used for preparation for contortion balances.



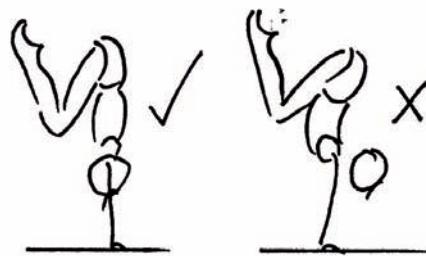
2/ BEGINNING HANDSTAND

1. Front support position, walk the hands in towards the box until the back and arms are vertical and in line. Lift each leg to correct handstand position and then both legs with support.



2. Handstand facing the wall
 Start in high front support, walk the hands back to the wall
 Forehead and toes should be touching the wall

3. From squat, tuck to bent leg handstand
 I. The back position should be as per earlier headstand without an arch.
 II. Use the legs as much as possible to avoid fatigue during the session.
 III. The hands are placed so that the index fingers are parallel, with the fingers slightly bent, to allow the weight to be spread across the whole hand. The shoulders must be positioned directly over the centre of the hands.



Lunge to handstand

There are two different approaches to this skill:

1. Short step (Only relevant for hand balancing)
2. Long step (Relevant to dynamic skills as well)

The short step technique allows the student to put the shoulders in the correct position as soon as the hands have been placed on the floor.

Part1/ Handstand

The long step is a more advanced technique as the body is swung into position. It ensures the shoulders are extended. It can also lead on to dynamic tumbling moves such as handspring.

3/ LIFTING TO HANDSTAND

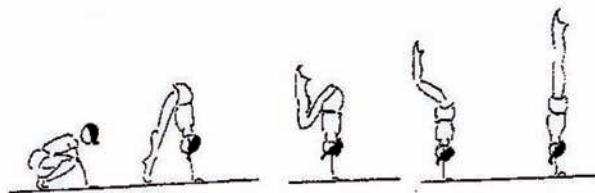
Technique

Whatever the shape the performer intends to lift handstand there are certain techniques that must be used. It is essential to keep the body and limbs in as close a proximity to the line of balance as possible. Consequently, the shoulders are brought over the hands and the hips lifted to a position as straight as possible in a vertical line from the centre of the hands. When straddling, the legs should be split as wide as possible so that they don't move too far out of this line. Consequently, the flexibility of the hips is of great importance.

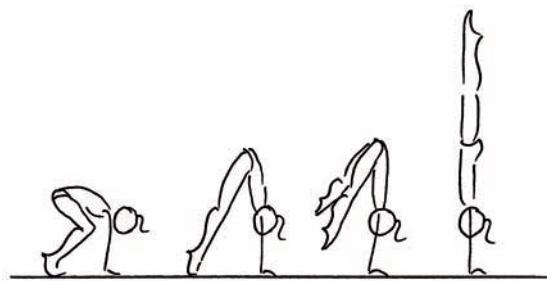
Beginning to lift to handstand

Before using strength to lift to handstand, the student should train the correct technique and positions of the body by performing the same moves with the legs assisting to "jump" to handstand. This can be performed three ways:

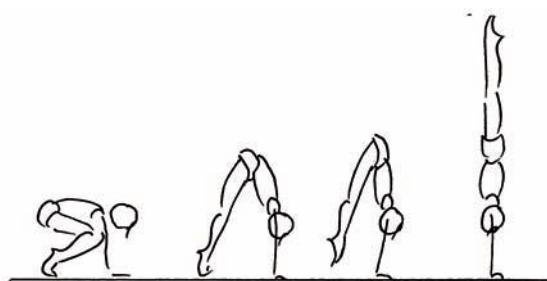
1.Tuck to handstand



2.Straddle to handstand



3.Pike to handstand

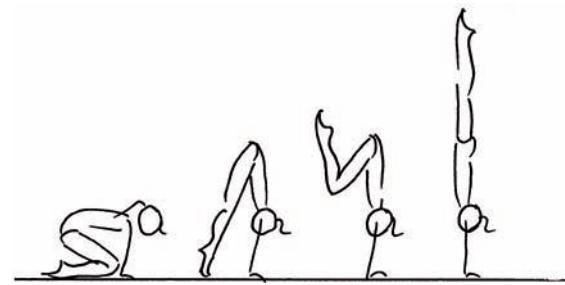


Part1/ Handstand

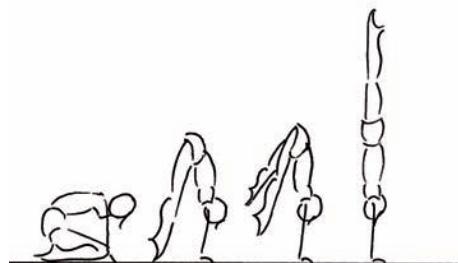


Preliminary exercises to Train Lifting to Handstand

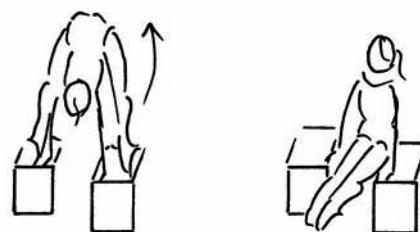
Tuck to handstand from knees



Straddle to handstand from knees

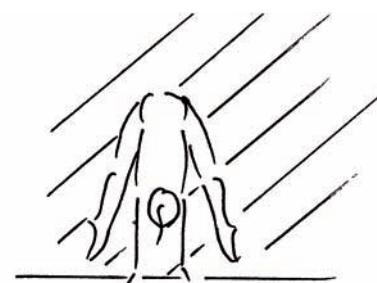


From straddle stand, lower to - lever between boxes



Straddle fold on hands, against wall

- The shoulders should be fully extended
- The feet are held away from the wall



Half lift

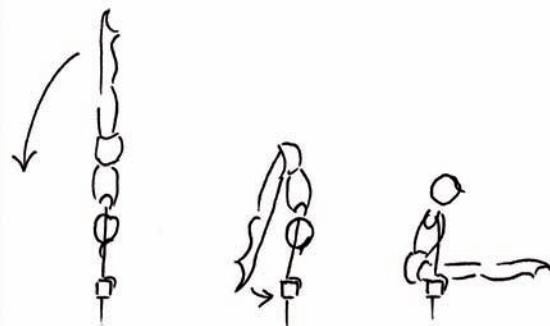
- (i) From front support
- (ii) From straddle
- The feet are drawn towards the hands
- The body is folded as tightly as possible
- Slow return to 1st position



Part1/ Handstand

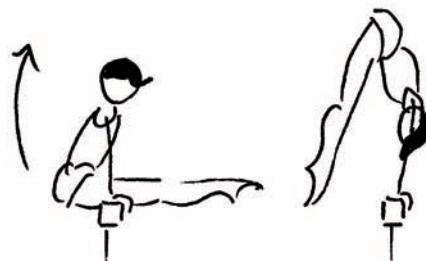
Lower to - lever on sticks or boxes

- The descent should be slow and controlled



Half lift from - lever

- The skill is complete when the feet are above hand level
- As above the body should be as tightly folded as possible



Assisted lift to handstand

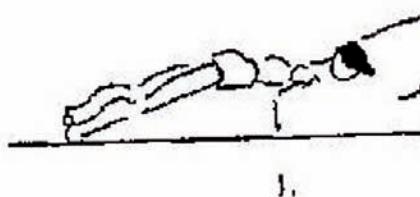
- This can be done with the supporter sitting on a chair
- Care should be taken to make sure the technique is correct



4/ ONE ARM PLANCHE (CROCODILE)

Stages for learning

Get into crocodile position but leave the toes on the floor
- This allows the student to focus on the requirements and position of the upper body



Part1/ Handstand

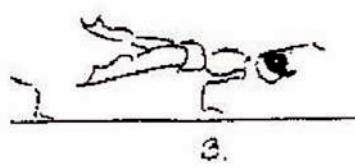
2. Crocodile with both hands on floor

- This time the feet are lifted to feel the correct position of the lower body



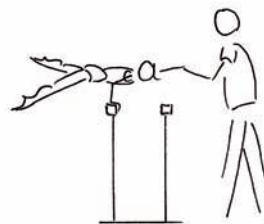
2.

3. Full crocodile position



3.

- The teacher can support across the waist and under the leg
- Alternatively the student can be balanced by holding one hand as shown



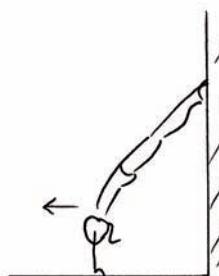
Teaching Points

- Push down on the supporting hand to lift the shoulder
- Contract the muscles of the lower back and buttocks on the opposite side to ensure horizontal balance.
- Practice on a box top and place the hands forwards as for handstand, rotating the body 90° into the planche

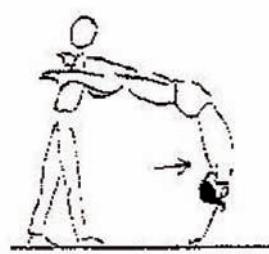
5/ MEXICAN HANDSTAND

The Mexican handstand can be developed in two ways:

- Use the wall and increase the range of movement slowly
- Use the toes to balance
- The most important part of the move is the return to normal handstand



- The teacher stands behind the student and assists them towards the correct shape.
- The student should press the shoulders back as the feet move further forwards

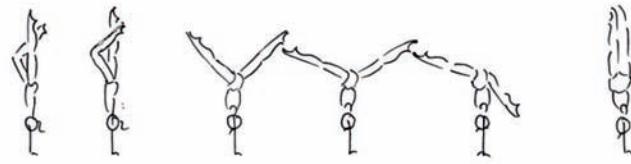


Part1/ Handstand

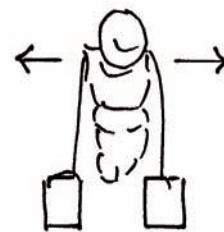
6/ ONE ARM HANDSTAND

First exercises

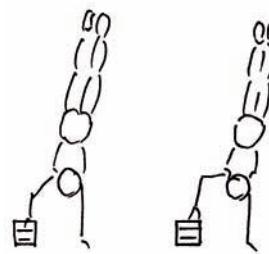
- Practice different movements of the legs while in handstand
- Also perform handstand twisting the hips to improve proprioception



- Partial transfer of weight can be practised in front support
- The shoulder must not be lifted or leaned too far to either side
- The blocks are removed merely by flicking the fingers

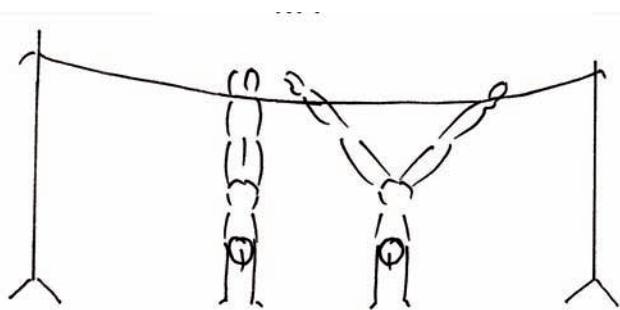


Practise weight transfer by placing three blocks under 1 hand



Training without a teacher

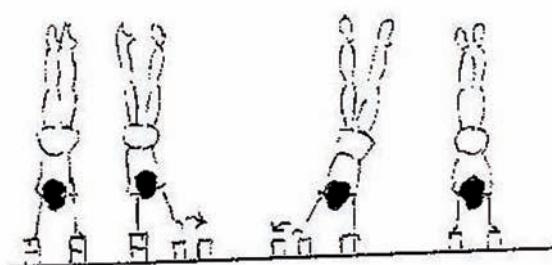
All of the training exercises above can be performed without a teacher by using a rope. This is preferable to using the wall, as the wall will stop you if you overbalance and allow bad body positions – the rope will not. The performer will also know if the body is twisted because only one leg will touch the rope.



Training with Blocks

Stepping down from blocks

- Perform handstand on blocks and then push blocks away 1 by 1
- The blocks are cleared by transferring the weight from side to side
- The student should end up in handstand on the floor

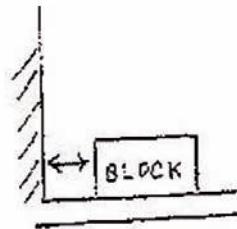


Part1/ Handstand

Teaching Points:

- I. Ensure student does not over extend through the shoulders, only the elbow should move while the shoulders stay fixed.
- II. Make the movements slow and controlled.

- When using the wall for a learning progression, place the blocks 5cm away from the wall. This is the optimal distance to achieve the correct shape

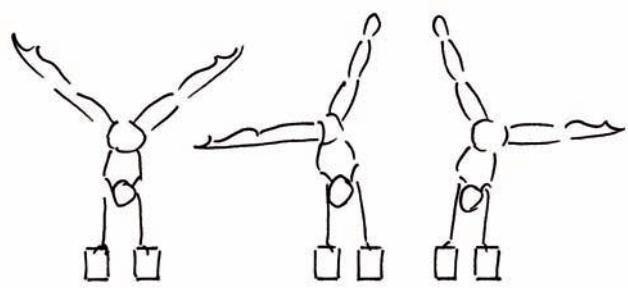


To find the position for the one arm handstand:

- Tuck to Handstand
- Open legs slightly
- Shoulders should be extended into correct position
- Begin to transfer weight from one side to the other
- Avoid movement of the shoulders
- When the legs are together, the head moves away from the shoulder to achieve the correct position for balance
- During the beginning stages, the instructor should touch his hand on the student's leg when explaining positional changes to help improve the student's awareness of their body position
- (The arm should be moved slowly to avoid a transfer of angular momentum)

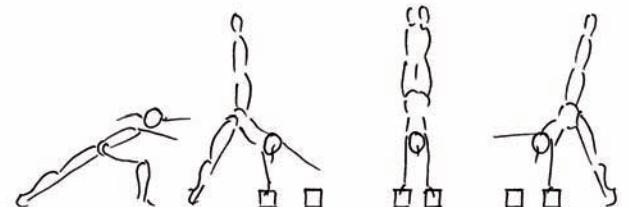
Learning straddle one arm handstand

Practise straddle handstand leaning each way



Cartwheel against the wall

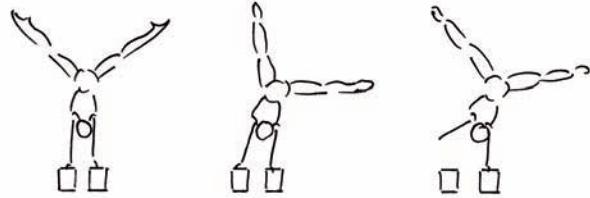
- Pass through 1 arm handstand on the way up and again on the way down on the other side



Part1/ Handstand

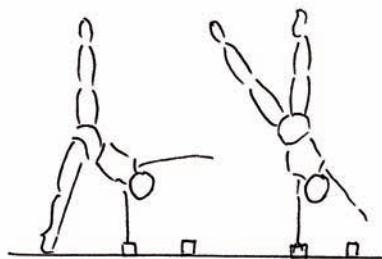
Finger balance

- Tilt the hips sideways in handstand and extend through the shoulder
- Release hand, use fingers for balance
- Return to handstand
- Repeat opposite side



More advanced exercises and related movements

Kick to 1 arm handstand



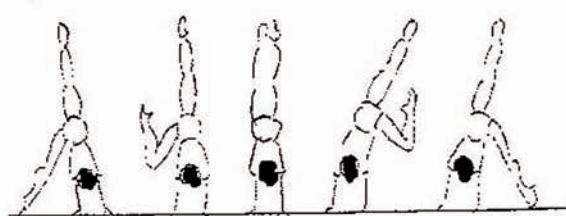
Teaching Points:

- I. Start at a diagonal
- II. Position feet at a distance where the shoulder is over the hand to begin
- III. The free arm should be positioned diagonally with the shoulder close to the ear
- IV. This is easier than 1 arm handstand as it is only a transition
- V. Increase time in 1 arm handstand by transferring weight to 2nd arm later and later
- VI. Descend the same way

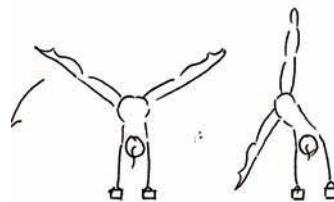
7/FLAGS

Rocking from side to side

- The aim is to get the foot to the floor
- Start with the leading leg bent to make it easier
- The more flexible the student the less strength is required

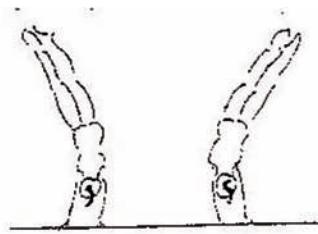


Repeat above, lowering leg in straight position



Advanced exercise for flags

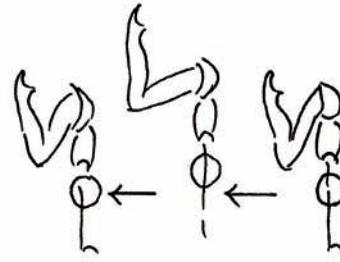
- Against the wall, bend sideways as far as possible each way
- Flexibility is essential for this exercise



Part1/ Handstand

8/ JUMPS IN HANDSTAND

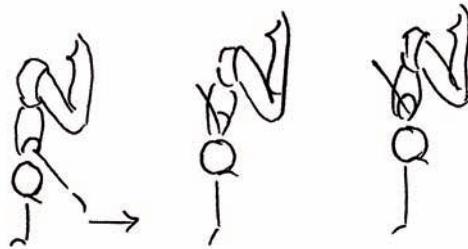
Jumps on two hands



Teaching points:

- I. The jump is made by the depression and elevation of the shoulders at the same time as the extension of the legs.
- II. The student should begin by going slightly off balance and jumping backwards

Jumps on one hand

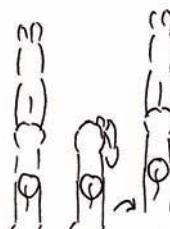


Teaching Points:

- I. Begin by sliding rather than jumping
- II. There is a natural tendency to turn this should be fought, try to make a zigzag before advancing into a straight line
- III. For turning begin with small angle turns in a large circle eventually progressing to turning on the spot
- IV. Turn in the direction of the back and not the stomach

Jump from 1 hand to the other

Jumping sideways in handstand

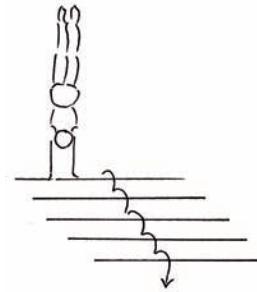


Hopping in a circle on one arm



Part1/ Handstand

Handstand, jumping down steps



Part2/ Hand to Hand Balancing

INTRODUCTION:

Acro-balance skills work much better if each partner has already had a basic grounding in individual acrobatic skills. They should understand the basic principles of acrobatics/gymnastics e.g. body tension and extension, poise, body control, good body shape and good posture.

Important considerations:

- In weight bearing skills it is usually advisable for the base to be heavier and stronger than the top. This is not essential but the closer the pair are in weight and stature then the more limited the skills and the higher the potential for injury.
- It is essential for the pair to have good communication and build a physical ‘rapport’
- It is essential that performers only progress in line with their physical capabilities, progressing too quickly, especially if the physical preparation has not been done can result in injury and lack of achievement.

Simple pair balances

1/ Counter-balances

The following series shows the various steps to forward and backward counter balances. These can be completed or missed out if the students don't need them.

Counter-balance facing same direction, both standing

- First concept of counter-balance
- Partners must get used to countering each others weight



Counter-balance base kneeling

- Gives the feeling of standing on the thighs as the height is similar



Counter balance top on knees

- 1st stage to getting the flyers weight onto the base
- Be careful of the bases knees



Part2/ Hand to Hand Balancing

Counter-balance, base sat on bench

- The weight can gradually be taken off the bench as confidence grows
- Allows a stable base for the flyer to step onto



Free counter-balance

- The base holds the flyer at the hips and lifts
- The flyer places her hands on the bases wrists and presses
- The flyer should be placed onto the legs with control
- Flyer must maintain body tension



Counter-balance facing, base kneeling

As per above with flyer facing forwards



Base on bench



Complete counter balance, backwards

- This can be done by stepping as shown or by jumping as above with flyer facing forwards
- Once the flyers feet are stable then both partners lean back



Part2/ Hand to Hand Balancing

Backward counter balance one arm

- Begin with the arms crossed
- Both partners use the same hand to hold
- As the flyer steps on the base bends the knees



Counter balance with foot behind catchers neck

- Start from normal face to face counter and flyer places 1 foot behind catchers neck
- The corresponding hand can be left in contact until the balance is stable
- Flyer must keep the hooked foot strongly flexed



2/ Balances with base lying

Knee to knee

- Flyer starts with feet either side of catchers head and with catchers hands on flyers ankles
- Flyer leans forward to take weight on catchers knees and base lifts flyers legs



Shoulder stand

- From stand, flyer places hands on catchers knees leans forwards and catcher takes flyers shoulders as flyer lifts to shoulders stand



Shoulder stand on feet

- Base begins with legs bent and straightens when in balance
- Both partners must press hard on the hands until the balance is achieved



Part2/ Hand to Hand Balancing

Sitting on hands

- Begin with flyer standing straddling the base waist
- Flyer leans back and base takes the weight
- Flyer must maintain tension



Shoulder stand without knee support

- This can either be done from candlestick or as shown
- The base helps the flyer to balance with the feet until stable
- The flyer grips in front of the forearms of the base



Standing on hands, arms bent

- The flyer uses the base' feet to balance until stable
- The base' forearms must be vertical
- The base grips the arches of the flyers feet
- Some like to place 2 fingers at the back of the heel



Standing on hands, arms straight (1)

- From bent arms, base pushes arms straight
- Flyer needs to lean back slightly to stay on balance



Standing on hands, arms straight (2)

- Starting with the flyer standing on the base hands on the floor, arms bent
- The flyer makes a small jump and the base lifts her to straight arms



Part2/ Hand to Hand Balancing

Standing on 1 leg, both hands supporting

- Transfer from 2 feet
- The base supports the leg with the 2nd hand on the flyers ankle



Standing on 1 leg, 1 hand

- A development from the above
- Requires strong support from the base and good body tension from the flyer



Standing on hands arms straight

- This can be achieved by straightening from bent arms or jumping from the floor as shown
- The above is more difficult but requires less effort from the base



Standing on 1 hand arms straight

- Transfer from 2 feet
- The flyer leans across until the weight is on the correct foot
- Base takes foot in both hands then releases when stable



3/ Balances with base kneeling

- 1 foot stand facing same direction
- Flyer steps into this from the side
 - Balance is maintained using the arms



Part2/ Hand to Hand Balancing

1 foot stand facing opposite direction

- Balance maintained using the hands
- Flyer steps on from the front



Standing on shoulders (step from bench)

Preparation for 2 high
If the base has trouble with the knees then he can kneel up rather than sitting on the heels



Standing on shoulders

- A stage further to 2 high



4/ Methods of getting to shoulders

These are four basic methods of getting onto the catchers shoulders without flight.

Basic method, mounting from side

- Base remains upright in plie
- Flyer must get her weight over the base as soon as possible
- Base helps the flyer by pressing hard through the arms
- Once the flyer is stable the base straightens his legs and brings them together.



Mounting, foot on catchers calf from behind

- As the flyer pushes from the back foot the base straightens his back leg to help propel the flyer onto the shoulders
- Flyer must try to get the weight over the base as soon as possible



Part2/ Hand to Hand Balancing

Lift from hands at front

- Base must squat as low as possible to ensure a strong lift from the legs
- The flyer remains straight until the base is standing arms straight, then lifts the hips to stand
- The flyer helps by jumping



Preparation for lift to stand from front

Lift to sit on hands



Half turn from floor

- The flyer must jump and put her weight onto the base' hands as soon as possible
- Base squats in order to allow the flyer to get above him and to use the legs to push



5/ Angels

Front angel

- The catcher places hands on the flyers hips (best balance position is found through experimenting)
- As the flyer jumps, hold the catchers wrists for more support, the catcher lifts the flyer into support



Back angel

- Once again the catcher must find the best position of the hands for balance
- While the pair are trying to find this position there should always be a spotter standing behind
- The flyer jumps as the catcher lifts



Part2/ Hand to Hand Balancing



6/ Leg Holds

Arabesque

- Normal 'stage' pitching position
- The flyer starts with her hands on the base's shoulders
- Once the weight is over the base, he then transfers the other hand to the flyers thigh
- The flyer then releases and lifts the chest



Alternative arabesque



7/ Standing on hands:

Stepping from shoulders to hands

- The base extends the arm to receive the flyers foot
- The flyer transfers the weight to this foot and then pushes with the other foot
- The base receives the other foot with the arms still extended, then settles to the shoulders



At this point we need to look a little closer at the points of contact between catcher and flyer. The following chapter was written as an article for the British Gymnastics technical newsletter, Gymcraft. The author was Fabrice Berthet from the Ecole Nationale des Arts du Cirque in Chatellerault.



Part2/ Hand to Hand Balancing

AREAS OF CONTACT

By Fabrice Berthet, drawings by Isabelle Ponsot

This article is about the nature and quality of the main areas of contact between the Base and the Flier. During early training it is extremely important to work on both static and dynamic techniques to perfect these contacts.

- Obtain the greatest area of pressure
- Give a stable platform to the flier
- Control and anticipate a lack of balance
- Understand how to transfer force in an efficient manner
- Adapt and personalize the areas of contact to suit both parties

Hand to Hand Contact

The main point of pressure is on the central part of the palm (fig 1). This point is at the top end of a straight line passing through the wrist, elbow and shoulder. The fingers are spread around the hands allowing a stable hold and it minimises the imbalance by way of controlled pressure.

The thumb, the little finger and the third finger squeeze the palms together one against the other. (This will get rid of any empty spaces between the hands.)

The first and second finger control front and back movement by way of pressure on the base of the forearms.

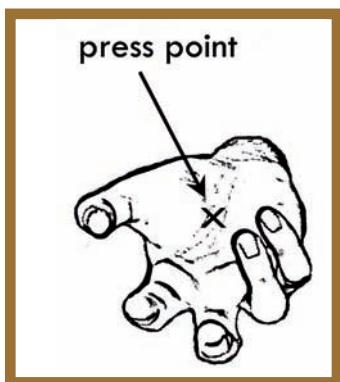


fig1

The flexion of the wrists is between 45° and 60° (fig 2 & 3). This positioning favours the alignment of the elbows and shoulders of the Base and the Flier. The contraction of the fingers should not in any way modify the angle of the wrists.

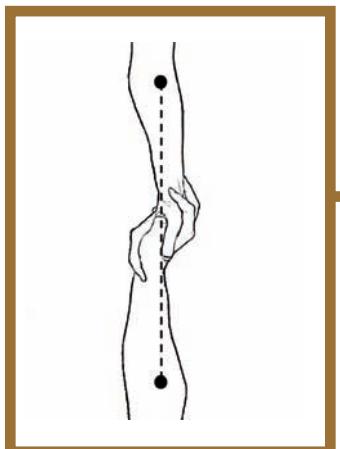


Fig 2

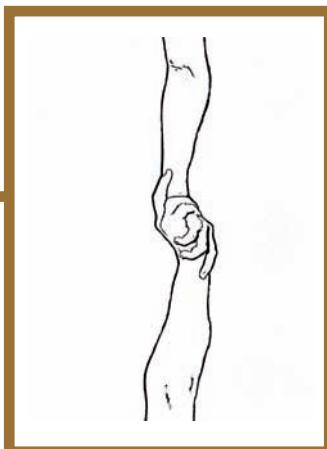


Fig 3

Part2/ Hand to Hand Balancing

Consequences

- For the Flier, handstand training is practiced on sloped sticks in order to make it as real as possible.
- When the angle of the wrists is moved, there is a loss of alignment and therefore a loss of stability in the contact. When the angle approaches 90° (fig 4), or at the other end of the scale towards 0° (fig 5), the position of the body of the Base and/or the Flier, may change as a result. (example closing the shoulder angle, will cause a pronounced hollowing of the body, and a forwards movement of the Flier's shoulders) and therefore, creating a lack of efficiency to the balance. We often notice this type of error when the Base is pressing from bent arms to straight arms (example fig 4 to fig 5, the Base lifts by pushing with the wrists, there is a change of angle).

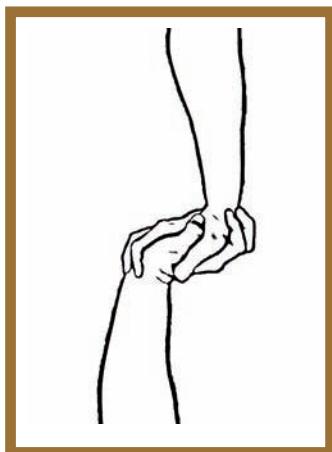


fig 4

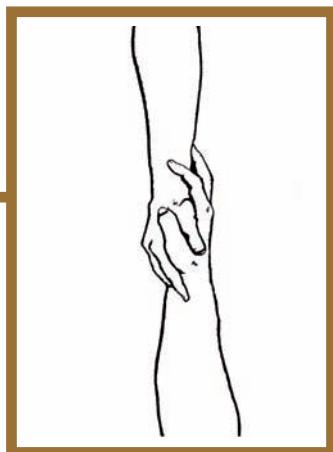


fig 5

The position of the hand is the natural extension of the forearm (fig 6). Holding this position avoids sideways movement of the point of contact (fig 7 & 8).

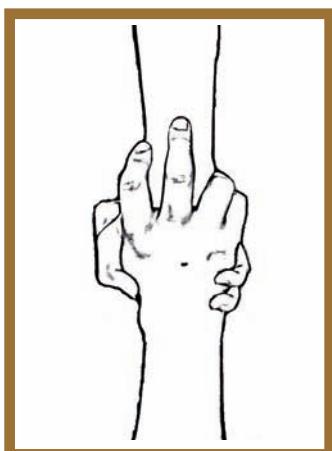


fig 6

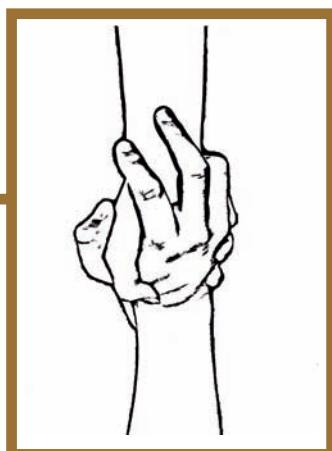


fig 7

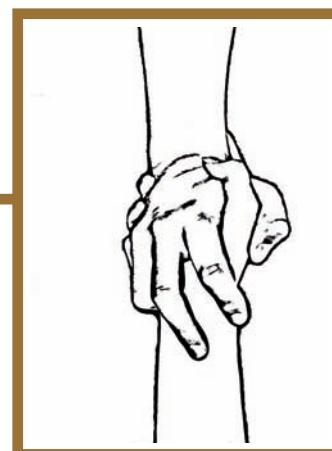


fig 8

Consequences fig 7 (most frequent)

- For the Base: an inwards tilt of the hands causes a slight flexion of the arms and a slight backward movement of the shoulders, therefore there is a hollowing of the back and a rotation of the contact.
- For the Flier: an inwards tilt of the hands causes a forwards rotation of the shoulders.

Part2/ Hand to Hand Balancing



Consequences fig 8

- An outward tilt of the Base's hands causes a slight flexion of the Flier's arms.



Hand to hand contact during a lift in a static routine or a throw in a tempo routine.

The positioning of the Base's arms is very important in order to give the Flier the best form of support. We often find two different positions (fig 9 & 10)

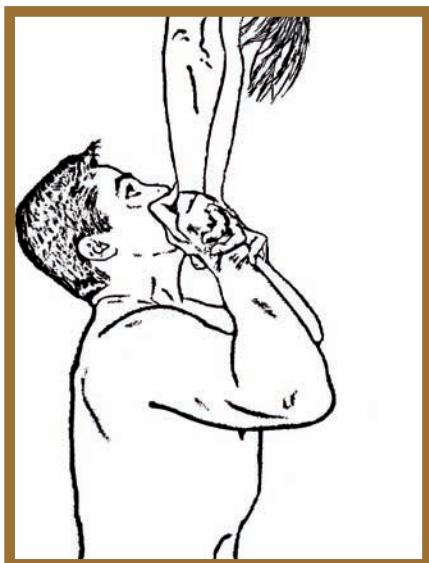


fig 9

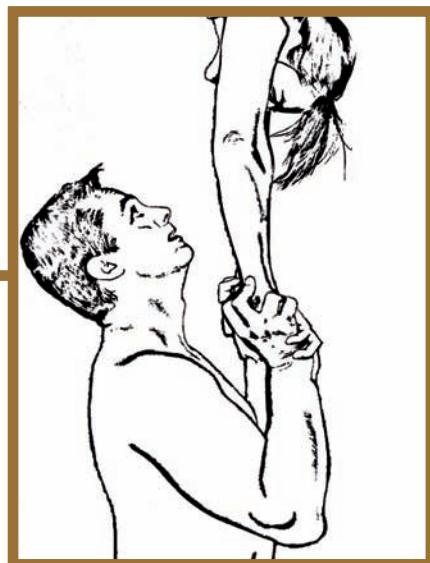


Fig 1



Consequences

- fig 9, keeping the elbows horizontal, in a slightly open position allows the hand to hand contact to be maintained straight above the Base's chest. During the throw, all the forces exerted pass through the same vertical axis making this action highly efficient.

- fig 10, the lower position of the elbows causes an outwards rotation of the Base's wrists and a consequent hollowing of the back. During the lift or the throw, the Base's back is hollow, which causes a break in alignment of arms/chest at the end of the technique. This transfer of force results in a lack of stability for the Flier.



Contact hand to foot

The mechanical principles and all the positions shown earlier regarding hand to hand contact are the same for hand to foot.

The main point of support is on the central part of the palm (Base) and the foot (Flier).

The angle of the Base's wrist is identical. The Flier's foot is slightly extended to get alignment between his knee and the Base's elbow (fig 11).

Part2/ Hand to Hand Balancing

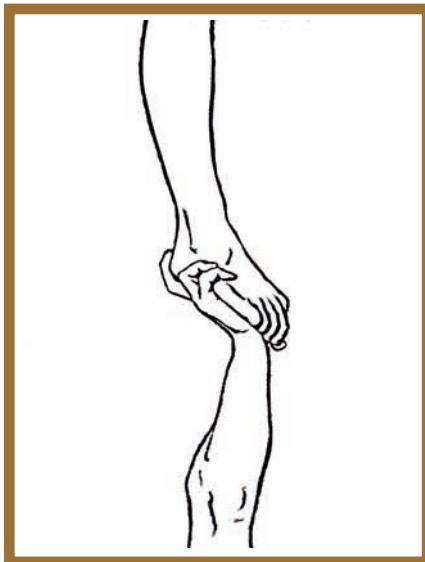


Fig 11

Consequences

- The Flier must get used to a standing position with the heels raised (example: standing on sloping sticks while keeping the body weight above the central part of the foot without leaning forward).
- If the angle of the hands approaches 90° , the Flier's weight is over his heels, his chest will lean forward, thus breaking the body alignment. If the angle approaches 0° , the Flier loses his forward support, bends his knees and falls forward.

The fingers are spread around the foot allowing stability, maintaining contact by squeezing. The Flier's toes are pressed against the wrist of the Base (fig 12).

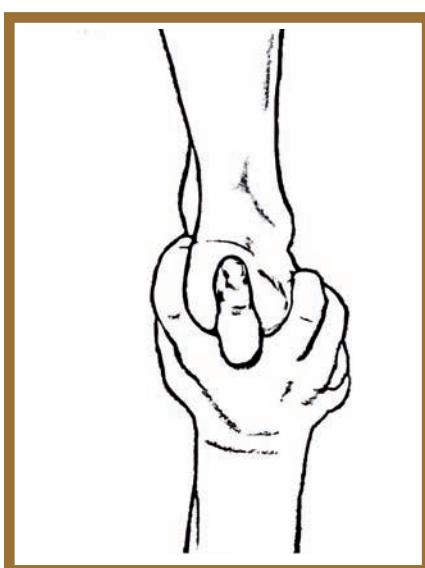


Fig 12

- The thumb, the first, third and fourth fingers grip the foot against the palm.
- The second finger is placed in the centre of the heel. This allows the heel to be held whilst giving a large area of support for the foot

Part2/ Hand to Hand Balancing

As for hand to hand contact, it is important to avoid sideways movement of the hands (Base) and the feet (Flier). Sideways movement often causes the Flier to lose balance.

Hand to foot contact in throws (Tempo)

Usually we find two types of contact during throws:

1. The hand supports the back of the foot. The fingers are directed outwards, only the thumb is placed inwards. The ball of the foot rests on the Base's shoulder (fig 13).

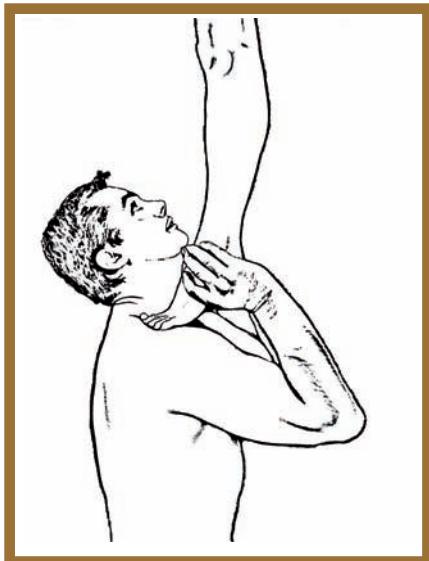


fig 13

2. The hand supports the whole foot. The fingers are spread in 3 directions (the thumb inwards, the first and second finger on the front part of the foot, the third and fourth finger outwards). The front of the foot rests on the first finger, the second finger, and the Base's shoulder. (fig 14).

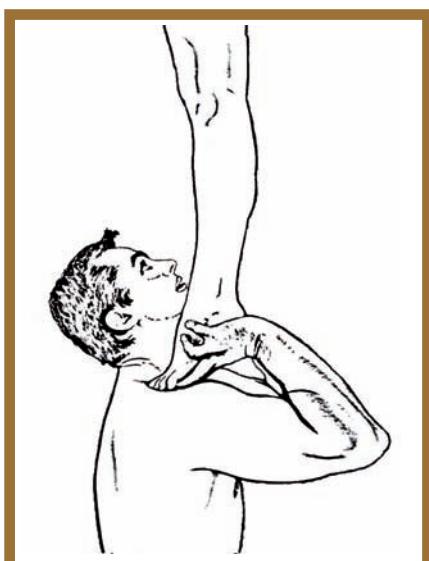


fig 14

Part2/ Hand to Hand Balancing

Consequences

In these 2 cases, the direction of the hands has a direct effect on the position of the elbows.

fig 13, the elbows move towards each other and go lower than horizontal. During the Base's lift, this movement is accentuated and the Flier is in support on his heels.

fig 14, the elbows are slightly open and stay horizontal. During the Base's lift, the position is kept and thus the Flier gets the maximum support.

Consequences at the end of the throw.

If the start position is fig 13, the end of the throw looks like fig 15.

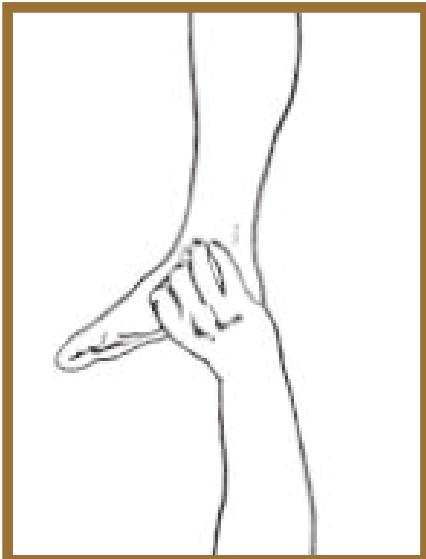


fig 15

The Flier is supporting on his heels and cannot push with the front of his foot. The Flier's alignment is broken (example: hips forward and hollow back).

If the starting position looks like fig 14, the end of the throw is similar to fig 16.

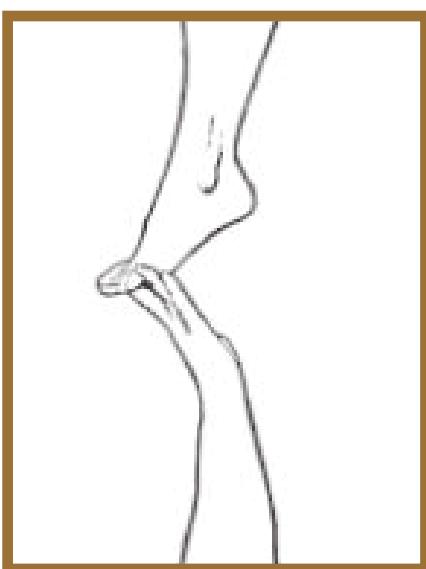


Fig 16

Part2/ Hand to Hand Balancing

The Flier can push right through the extension of the toes; therefore he can control his body position and his flight.

Some specific exercises.

For the Flier:

Balance on sloping sticks, alternately clenching and relaxing the fingers

Standing (on 1 or 2 feet) on a wobble board (board for ankle rehabilitation)

For the Base: With elastic strands curl the wrist.

For both:

With soft balls (juggling balls) or with specific climbing equipment, practice clenching and relaxing fingers without moving the wrist.

These exercises improve the strength of the wrists, fingers and ankles. It is important to differentiate between the separate actions of the wrist and fingers during certain exercises. The most important thing is the harmony between the Base and the Flier during these skills.

In conclusion

The technique of these contacts has a direct effect on mastering skills. Evidently, the higher the level of performance the more important is the quality of these contacts.

This article concentrates mainly on preparing pairs or beginner groups. It is extremely important during this period to concentrate on the strength of the contact.

More advanced acrobats can afford to relax their grip, thanks to the perfection of their alignment, and the knowledge they have of working together.

The quality of these contacts is obtained by the simultaneous action of the partners. The movements of one have consequences for the placement of the other. The Base and the Flier need to feel a strong bond in the grip of their hands and feet in order to progress and modify their position. Further more, there is an increase in confidence between the two.

It is therefore necessary for the coaches and acrobats to spend a lot of time in understanding these contacts. Their improvement is based upon an exchange of sensations and analysis of the effects of each others movements. Beyond these purely technical criteria, the experience of the partners brings a familiarity of grip, therefore improving the unity of the group.

The principal contacts are not the only considerations during early training. Other aspects are to be taken into account to guarantee a strong support:-

Technical precision

- Muscular strength (above all the Base)
- Visual cues
- Isolation of different parts of the body
- Inner feeling

Of course, other techniques of contact exist, which can be developed in further articles (example: hand to head contact, the grip called "banquine" for women's group and men's group etc).

Part2/ Hand to Hand Balancing

8/ Handstands

Handstands Base Lying, Bent Arms(Stage 1)

- This is a useful preparation for handstand
- From the shoulderstand on feet the base bends his legs and starts to tip the weight back on to his hands
- The base can help to maintain the balance with the feet.



Straddle Jump to Handstand (Stage2)

- This can be done either straddled as shown, tucked or piked.
- It is essential that the flyer is used to performing this skill on blocks and sticks before attempting this



- Base begins with bent arms and then straightens as the flyers centre of mass comes over the hands



Handstand on shoulders

- This is a simpler form of handstand starting from a pitch from 'stage'
- As the flyers centre of mass moves over the base' shoulders the hands are taken to the flyers upper arms to add stability



Handstand on shoulders (free)

- A more advanced form of the above without the support from the base' hands
- The balance should first be gained with the base holding the arms, and then released when stable



Part2/ Hand to Hand Balancing

Handstand, jump from Shoulders, arms bent

- The stability of the base is most important
- The timing of the flyers jump and the base' push is critical
- The base arms are extended to begin and then settle once balance is achieved



Preparation for handstand from Shoulders

- half lift



Handstand on straight arms

- This is a more advanced form of the bent arms handstand and should not be attempted until the former is consolidated and stable
- There should be a straight line from the base' feet to the flyers feet



Chest roll to handstand

- This is a nice way of getting to handstand but it is not easy to stop the momentum of the roll



Part2/ Hand to Hand Balancing

Before attempting handstand on the base the flyer should be highly competent in handstand. One exercise for helping balance is shown below.



Basic pitching techniques

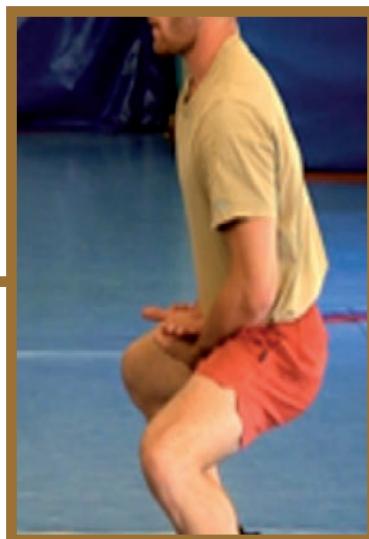
9/ Basic technique of pitch:

Pitch stance

The position of the base when pitching is personal and each individual must find a technique and stance that is comfortable and effective. Most pitchers like to keep their legs together or fairly close. This allows them to support the hands with the thighs. The only drawback of this method is that the back has to be bent forwards placing pressure on the spine and the extent of the knee bend is restricted by the flexion of the ankles. It is also possible to stand in a classical plie position with the feet wide and turned out. This allows the back to remain straight and is more stable in the bent leg position. However it does not allow the support of the thighs on the hands and there is a danger of the flyer slipping through.



Pitch stance with legs together



Plie style pitch stance

Part2/ Hand to Hand Balancing

The hands can also be placed together in different ways, however, the most popular fashion is to place the back of one hand into the palm of the other and lock the thumbs together.



Methods of practicing and timing the pitch

Timing the lift

- The flyer should straighten the body and allow the pitcher to lift upwards



Using the legs and the arms

- Here the base straightens the legs and lifts the arms
- The flyer must stand up straight keeping the weight over the hands of the base



Tempo jump for direction and timing

- This is a direct progression from above
- The pitch is taken a bit further until the flyer leaves the hands
- The jump should be straight upwards
- The base should catch the flyer at the hips on landing



10/ Mounting to stand on hands:

Pitch to stand on hands facing base

- This is also a direct progression from above
- The top hand of the base and the pitching foot of the flyer should correspond so that the foot doesn't actually have to leave the hand
- Notice how the base is standing up until the moment the flyer is put into stand, when he squats



Part2/ Hand to Hand Balancing

Pitch half turn to stand

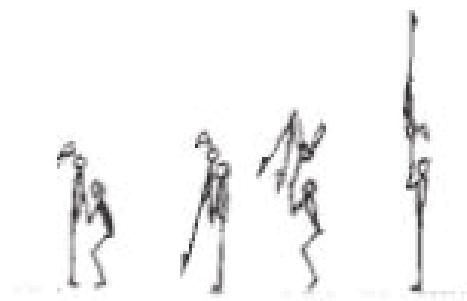
- As above the hand and foot must correspond
- The flyers weight must be above the base' hands during the turn



11/ Mounting to handstand

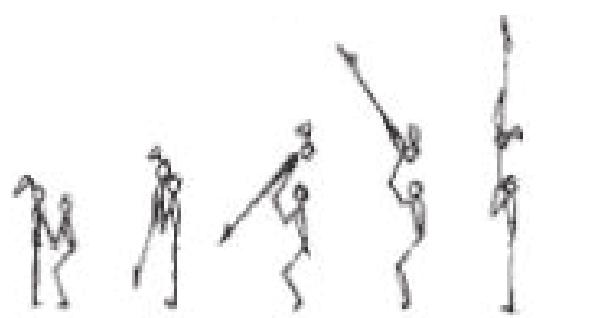
Forwards mount to handstand (straddled)

- Start by lifting the flyer to support above the head
- Then use half lift as from shoulders above
- Flyer must raise hips sharply from the floor



Forwards mount to handstand (straight)

- Base can help the flyer by pushing on the hips from position 3
- Requires strength and good body tension from flyer



Forward mount from behind base

- Base must get the hands in position for support as soon as possible
- Flyer must get the shoulders and hips over the point of support as soon as possible



Preparation for tuck through to handstand



Part2/ Hand to Hand Balancing

Same action with pike



Tuck through to handstand

- The pair must be comfortable with lifting to support on the hands
- Flyer must fold very tight to avoid kicking the base
- As the flyer squats through the base straightens the arms then settles



Swing through legs and tuck to handstand (cannonball) (Part 1)

- This is an advanced move and should not be attempted without the correct background and the presence of an experienced teacher



Cannonball (Part 2)



12/ Movements for the base

Roulade (1st half)

- Turning right, the left leg is crossed over the right and the left arm remains extended as the right one bends
- The right elbow then forms a support
- The left elbow is supported on the base' side



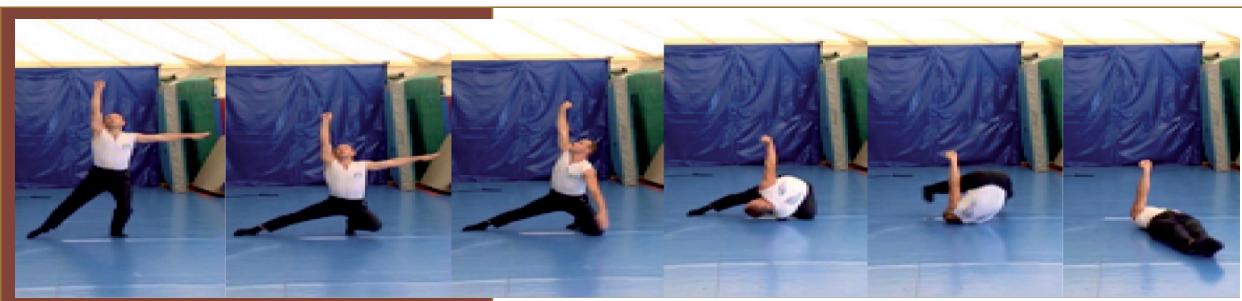
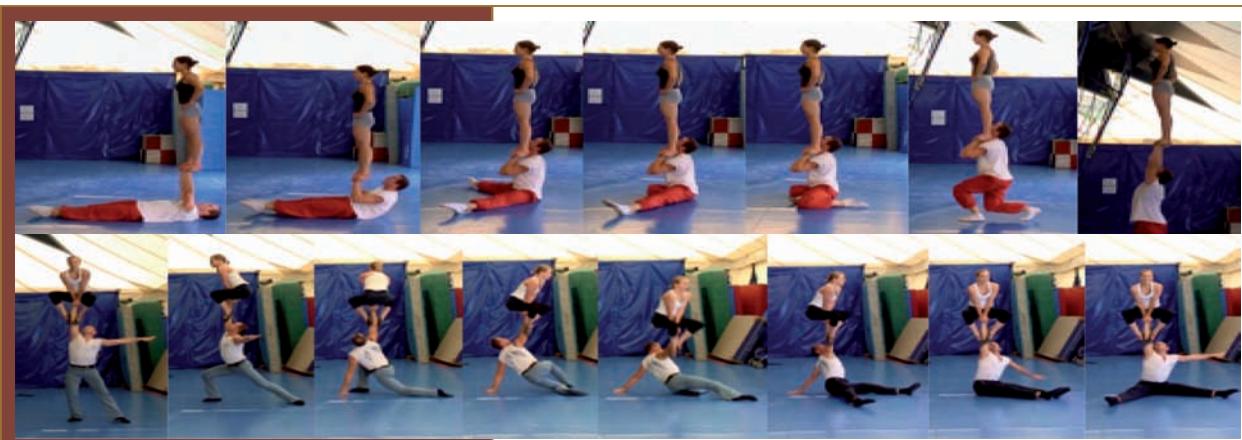
Part2/ Hand to Hand Balancing

Roulade (2nd half)

- The right leg is bent out to the side to form a support for the turn
- The right arm is extended and then placed on the right hip
- As the turn continues, the left elbow forms a support and the right arm continues to extend, followed by the left as the move is completed



Moving from lying to sitting to stand and back:



13/ Beginning one arm handstand

It is an obvious pre-requisite that the flyer must be capable of holding 1 arm handstand on blocks and sticks with no problem. The base must also be strong enough to be able to hold the flyer on one hand.

1 arm handstand preparation

- The flyer's weight is transferred to one arm
- The flyer bends the other arm as the base straightens his
- Weight is gradually taken from the non-supporting hand
- Both sides are trained



Part2/ Hand to Hand Balancing

Development from above



- The arm action for the flyer is exactly the same as above when the catcher is lying.



14/ Flighted movements

All of these movements are advanced and should not be attempted unless the pair are very strong in their basic skills and balances. Begin using a lunge system for support. When ready this can be taken off and the teacher can hand spot the skill.

Part2/ Hand to Hand Balancing

Half back somersault to stand on shoulders



Pitch from stand on shoulders to handstand (Cascade)



Pitch from handstand back to stand (Courbette)



Front somersault dismount



Back somersault, shoulders to shoulders



Back somersault hands to hands



Part3/ Banquine

BANQUINE

The basis of Banquine or platform pitching is a group of minimum three people, with two or more bases or catchers and a flyer. The catchers form a platform with their arms and hands which the flyer uses as a take-off position for various somersaults and other tricks. Most Banquine groups also include some balancing and at an advanced level somersaults are performed from two high balances on the platform. Much of the material performed in circus is also shown in the sport of Acrobatic Gymnastics.

1/ Safety:

Obviously the flyer is presented with the most danger during the performance of this discipline and so his or her safety must be of paramount importance to the catchers. However, there are also inherent dangers for the catchers if the preparation is not correct.

Catchers safety implications:

1. Correct posture is necessary to avoid potential back injuries. It is also important to avoid painful clashes of head that the body is kept upright especially during catches. Some pairs offset their feet to avoid clashes.
2. Correct pitching technique is also very important, the strongest muscles should be used and good timing is essential.
3. Progressive and correct physical conditioning should play a large part in the training of the catchers. Insufficient strength will lead to injury on the part of the catcher and potential dangers for the whole group.
4. It is the catchers role to ensure the safety of the flyer. They must be aware of that at all times.

Flyers Safety Implications:

1. The flyer should not try to balance themselves but should allow the catchers to do it.
2. He or she should have excellent acrobatic experience and aerial awareness.
3. The flyer should be aware of the catchers at all times and have respect for them.
4. All skills should be developed and perfected in rebound situation such as a trampoline before transferring them to the pitching platform.

Group Safety Implications:

1. All new skills should be developed gradually and through repeatable stages.
2. Communication between the members of the group is essential.
3. The group should have set signals for timing etc.
4. Basic exercises should be practised every day for warm-up to develop timing and coordination of the separate members of the group
5. Whenever necessary safety devices such as lunges, spotters and safety mats must be used.

Part 3/ Banquine

□ 2/ Catchers stance and grip.

Stance

When platform pitching, the catchers should stand with their feet forming the four corners of a square. Feet should be slightly wider than shoulder width although this can be altered when one catcher is significantly taller than the other. In this case the taller one will have his legs wider to ensure a flat platform. They should also be turned out slightly, so that when the knees are bent they move outwards and not toward each other. (See fig 1) It is possible to have the feet offset to avoid clashing heads and knees. The upper body must remain upright throughout the pitching and catching process.



Fig 1 - Platform pitching stance

Grip

- ### □
- Each catcher holds his or her own wrist and the wrists of the partner forming a square 'platform' for the flyer to stand on. The conventional grip is with the thumbs around the wrist (on the bottom), but it is also possible to hold with the thumbs on top. This can be more comfortable for catching and throwing because as the arms are lifted above the head the thumb is pushed downwards. However, the thumbs round grip is generally thought to be stronger. An alternative possibility is to have the thumb on your own wrist on top and that on the partner's wrist at the bottom. The catchers should form a platform just big enough for the flyers feet, if the wrists are held too high up this creates a bigger platform but also leaves a hole in the middle.



Fig 2 - Platform grip – showing thumbs around technique

Part3/ Banquine

3/ Getting the flyer onto the platform:

This can be achieved in a number of ways:

The most efficient and popular way is for the catchers to plie to make the platform lower, the catcher places his or her hands on the shoulders of the catchers and jumps onto the platform. It is also possible to put the hands on the catcher's heads. Much depends upon the relative sizes of the group. The flyer jumps into squat on the platform and as the catchers straighten their legs the flyer straightens as well to stand.



Fig 3 – Flyer mounting

The flyer should have body tension but should not be stiff. Good posture is essential, the back should not be hollow and the legs should be straight but not stiff.



Mounting the platform by stepping on, the flyer can either use the catchers heads or their shoulders for support

4/ Timing exercises for pitching:

There are a number of timing drills and exercises. These should be practised constantly even when the group are quite experienced. They serve as a good warm-up and will guarantee the efficiency of the group.

Exercise 1:

During this drill the flyer remains still and the catchers bend and straighten their legs. The catchers arms stay in the original platform position and do not lift the flyer.

Exercise 2:

The flyer bends and straightens whilst the catchers remain still

Exercise 3:

The catchers bend into plie and the flyer bends as well, pushing back into platform position

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Exercise 4:

The catchers bend the legs and straighten pushing the flyer upwards and then back into platform position with the legs bent



Exercise 5:

This involves a tempo action with the catchers bending the legs in preparation for the pitch and then returning to platform position immediately followed by another pitch to high arms which is held. So the catchers hold the flyer at arms length. This can then be repeated again.



5/ Balancing drills:

1. With the flyer standing on the platform the catchers must put him or her off balance and then move to regain balance.
2. As a preliminary balancing drill for the flyer the catchers hold a weight lifting bar between them and the flyer stands on this. The catchers must keep the balance.

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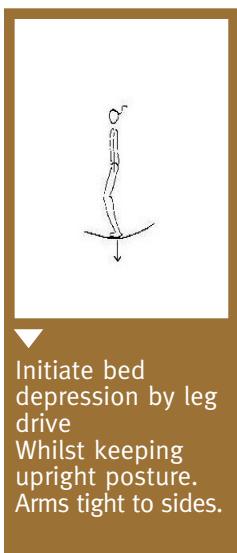
Progress to holding the bar on the shoulders.

6/ Trampoline Exercises

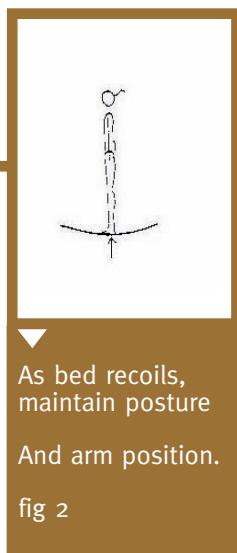
Any potential flyer for a Banquine group if they don't have a solid background in trampoline then they should spend a lot of time practising on it. Not only is it a great way to improve your aerial awareness, which is of great importance to the flyer but it can also help develop the correct posture, timing and technique for take-offs and landing. Following is a series of exercises on the trampoline devised by Jack Kelly, a UK National coach for trampolining. The exercises will help any flyer to understand the technique of takeoff , training the correct posture at the same time.

Exercise 1 (Fig 2)

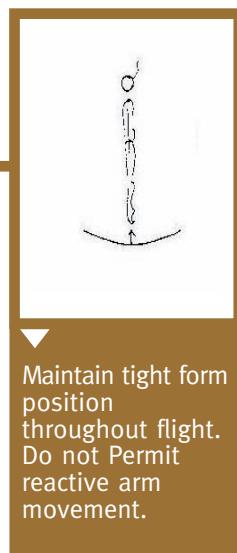
In order to develop an appreciation of arm efficiency ask the gymnast to try jumping with their arms held tightly by the sides of their body. As the Joni Mitchell song says "You don't know what you got till it's gone!" This is an excellent exercise for teaching an appreciation of correct posture, balance and optimum tension throughout the take off and landing phases as well as focusing attention on the value of the arms currently out of use. No reactive arm movement is allowed and the performer should be stopped as soon as any arm movement is detected. The exercise exposes any small loss of balance due to postural inaccuracy which will cause the gymnast's arms to break away. Aim for three sets of ten bounces and a percentage score can be given for accuracy with the results recorded in order to map progress and provide motivation.



▼
Initiate bed depression by leg drive
Whilst keeping upright posture.
Arms tight to sides.



▼
As bed recoils,
maintain posture
And arm position.
fig 2



▼
Maintain tight form
position
throughout flight.
Do not Permit
reactive arm
movement.

Exercise 2 (Fig 3)

To test the effectiveness of a straight arm swing, stand upright on the trampoline with the knees locked so that no leg push is possible. Start rotating the arms in small but vigorous backward circles. You will find that a correspondingly small but distinct reaction occurs in the bed causing the body to rise and fall. As this reaction continues, gradually increase the size of the arm circling, making sure that the rhythm is sympathetic to the bed's reaction time. The principle is similar to gradually building up height on a child's swing. It is essential that the knees are locked so that no assistance is given by the leg action. Ideally the feet will be kept flat with no toe pointing so that the only height gained comes from the rhythmic work of the arms. The coach needs to check that the performer maintains a "long" arm throughout and should be alert for an elbow bend developing at the bottom of the bounce. As the well timed rhythmic arm circling continues to grow

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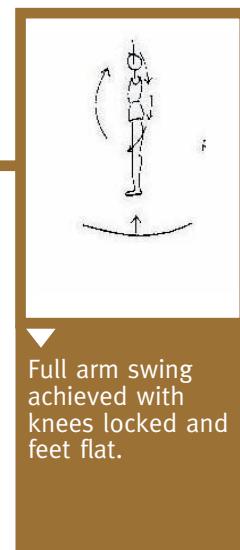
larger, the height above the bed will increase until the arms are reaching directly above the head. Aim for ten jumps after the full arm swing has been attained. Stop the gymnast if any leg action is detected and coaches will find that this is best monitored with gymnasts wearing shorts or a leotard. Once again the ten bounce format permits the allocation of a percentage score for monitoring purposes.



▼
Keep the knees locked and start from a still bed with small vigorous backward arm circles.



▼
Keeping knees locked and feet flat, gradually increase height and vigour of the arm swing in time with bed reaction.
fig 3



▼
Full arm swing achieved with knees locked and feet flat.

7/ Exercise 3

Begin as in exercise 2 with the knees locked and using only the arms to gain height, gradually introduce a push with the legs until full jumping height is attained then continue for another ten jumps. Stop the gymnast if the arm action ceases to be long and rhythmical. Again the ten bounce format is for monitoring and specificity. Although I have stressed the "circular" action of the arms, this is an over simplification because as the arms gradually reach higher, the limb track becomes more elliptical. Indeed it is highly undesirable to maintain a circular path as this will cause the arms to start their downward journey too far behind the line of the body causing the legs to swing back in flight creating an arch in the back often followed by a reactive piking prior to landing with risk of instability once contact has been regained. (Fig 4)

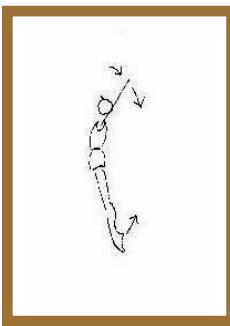


Fig 4

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Equally unacceptable is the stopping of the arms at the top of the jump followed by a reactive forward motion causing a dishing during the descent phase (Fig 5)



Fig 5

The arms should therefore return from the highest point only slightly behind the line of the body to maintain the integrity of the long arm swing concept but without creating either of the unwanted reactions described (Fig 6).

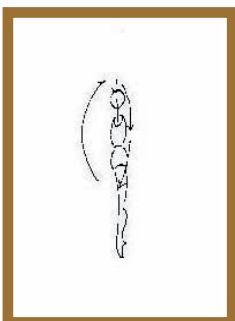


Fig 6

In my next article I will look more closely at the work of the arms during somersault take offs and landings with a particular focus on the contentious matter of "arm setting".



Basic Platform Pitches

Pitch to stand on floor

This should be practiced first with the flyer jumping from a box or similar platform, so that the catchers can master the correct catch technique.



Preliminary exercise for perfecting the catch technique on the arms of the flyer. This allows the performer to control her jump and remain balanced for the catchers to practice.



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In the picture sequence above the group use a tempo preparation before bending for the pitch. Notice that:

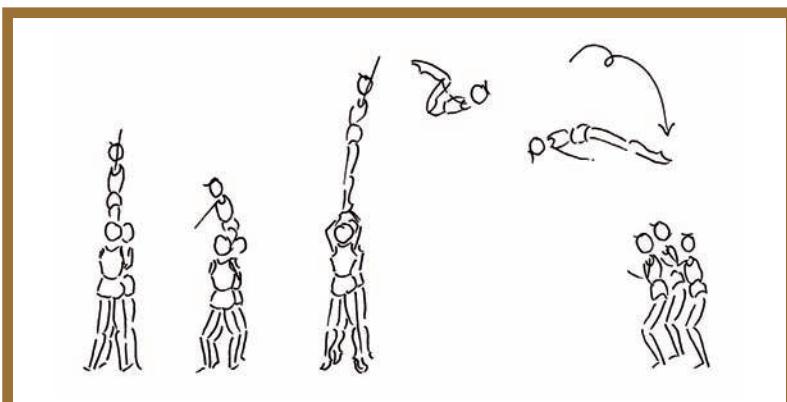
1. The upper bodies of both catchers remain straight and upright throughout the pitch and the catch
2. Both catchers are prepared to receive the flyer right from the moment she takes off, with the arms above the head.
3. The catchers take the flyer at the wrist and the upper arm to ensure stability on landing.

Pitch to sit in cradle



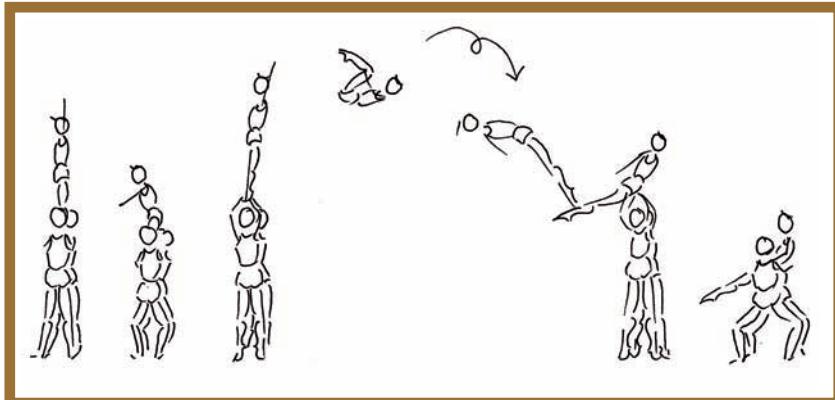
In this skill, the flyer is caught by the catchers with one hand under the upper leg or knee and the other at the waist or just below. In this example the catchers are bending the knees far more than the trio in the earlier examples. This is probably because of the difference in size and weight of the flyer and the need to put more energy into the pitch.

Somersault dismount from platform



Part3/ Banquine

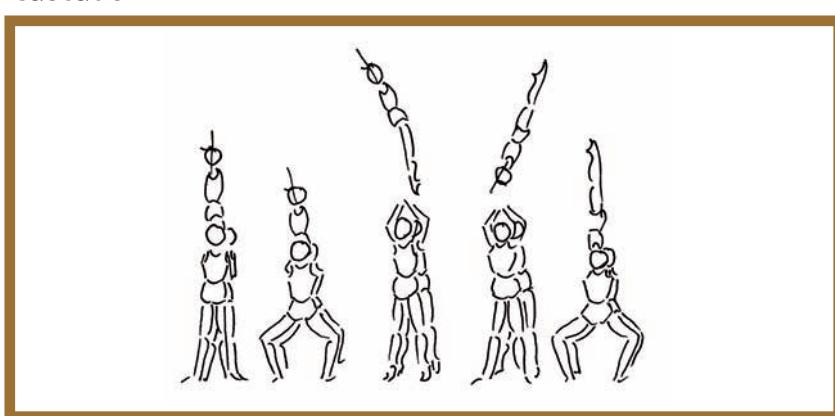
Somersault to sit in cradle



Somersault to return to platform



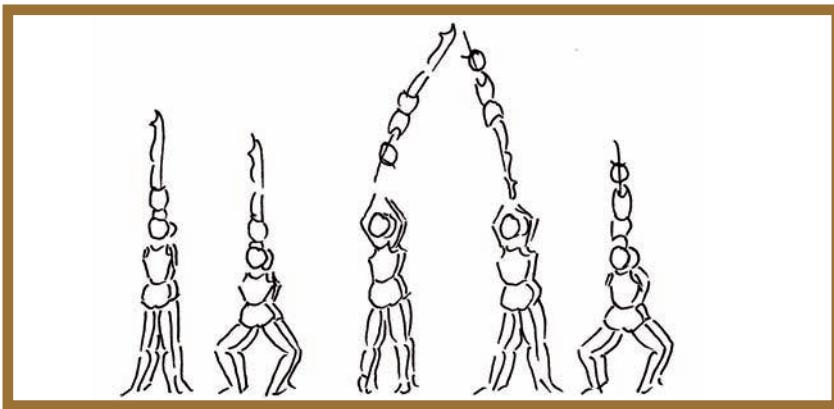
Cascade and Courbette: Cascade



Cascade entails jumping from stand into handstand. Obviously, the flyer must be strong in handstand

Part3/ Banquine

Courbette



Courbette involves the opposite of the Cascade and the flyer is pitched from handstand to stand

8/ Pitching from “stage”

This form of pitching involves the catchers standing side by side. The flyer puts one foot into each of the cupped hands of the catchers, with the hands either on the catcher's heads or the shoulders. As with the pitches from platform the tempo and timing of the pitch needs to be practised and perfected before progressing to more difficult skills. The technique for pitching from this position has already been discussed in the acrobalance section, but the type of skills performed from this pitch are different to those of acrobalance and therefore a number of different hand positions are open to the pitchers. During the practical sessions at the FEDEC module in Turin we experimented with a different hand position with some success. Imagine how each catcher gets their hands into the position to make a platform, by holding their own wrist. This in itself can make a good position for pitching from stage, as the hands can be lifted right above the head without splitting. It also provides a good base for the flyer's foot.

Getting into the position and practising the tempo:



Part3/ Banquine



As is clear from the pictures the flyer is helped into position by the catchers with the catcher on the right lifting the leg as the foot is in the left catcher's hands and guiding it into the cupped hands. The catchers straighten as if to throw and the flyer uses the support of their heads for balance, making sure that the weight stays over the catchers.

Pitch to stand:

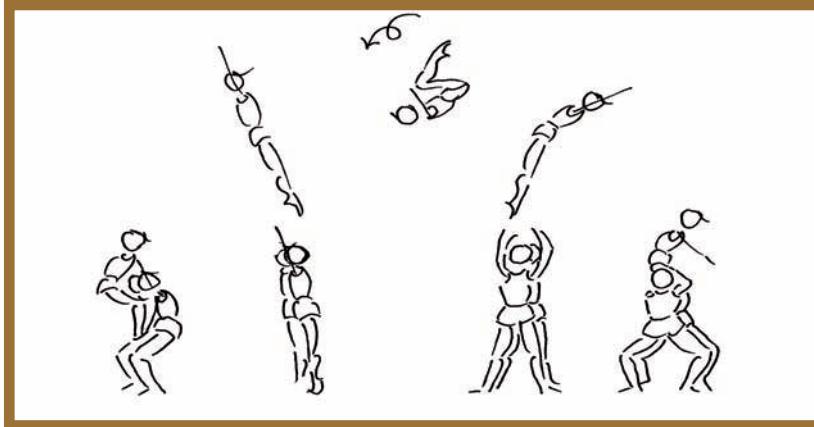


The same tempo action as above is followed by the flyer releasing the heads of the catchers standing up and being pitched in a straight jump directly upwards. The landing is caught by the catchers in exactly the same way as from the platform.
Somersault to stand



Part3/ Banquine

Pitch somersault to stand on platform



This involves pitching the performer from 'stage', the catchers must then turn and make a platform ready to receive the flyer. It is important for the flyer to jump directly upwards and not lean back.