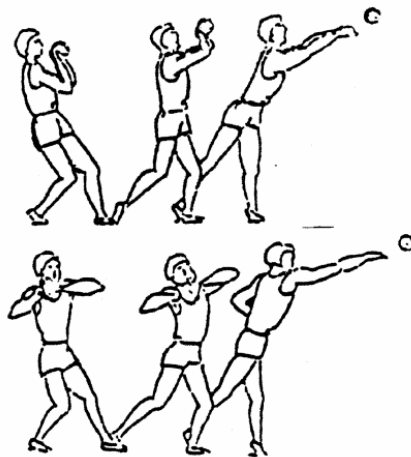


LEARNING THE GLIDE SHOT PUT TECHNIQUE: FROM THE BEGINNER TO THE ADVANCED ATHLETE

By Lothar Altmeyer, Klaus Bartonietz, and Dieter Krieger

1. Frontal Throws forward upward from a stride position:

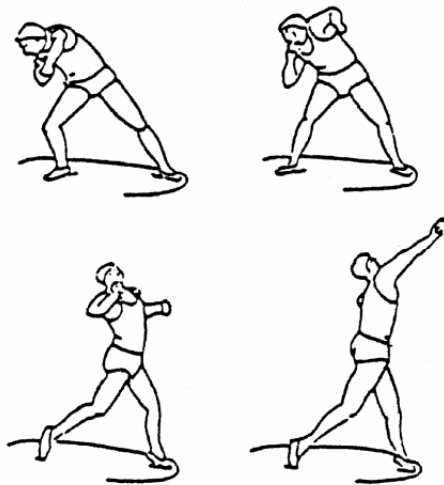


- Pay attention to:
 - Use point of orientation (e.g., rubber cord, about 9 feet high)
 - Put with right and left arm.
- Points of Observation
 - Shift center of mass over the slightly flexed rear leg
 - Begin your extension from the rear leg
 - Brake and lift on left
 - Keep both legs grounded
 - Steering function of the head: look forward- upward
- Learning of the Extension through Frontal Throws

- Two-handed puts from the straddle position forward-upward
- Two-handed puts from a half-squat forward- upward
 - elbows outside
 - accelerate from the legs
- Correct holding of the shot
 - Shot should rest on the middle three fingers, supported by the thumb and little finger on either side
 - Imagine you'd pick an apple
 - Place the shot close to the chin on the shoulder

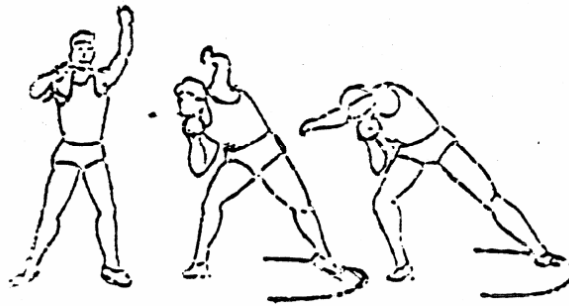
2. Learning of the Standing Throw

- Single-handed puts from the full squat forward and forward-upward (explosive body extension).



- Take a medium power position (foot distance 24-32 inches)
- Shift center of mass over the right leg
- Turn the trunk 90 degrees to the right
- Left side forms a straight line
- Look backward and point backward with your left arm
- Left leg is only slightly bent

- Initiate the put with a stretch-turn movement of the right foot in the throwing direction
 - Lift your body over a fixed left side, then fix the hip area
 - Release the shot while legs and arms are fully extended
- Imitation of the standing throw.



- With and without partner help
 - Concentration on the turning of the right side while upper body stays back
 - Standing throw over an extremely extended left leg (feel the bracing and lift function)
 - Thrust the right hip forward to a rubber cord
- Imitation of the lifting work of the right leg with a weight on the shoulder



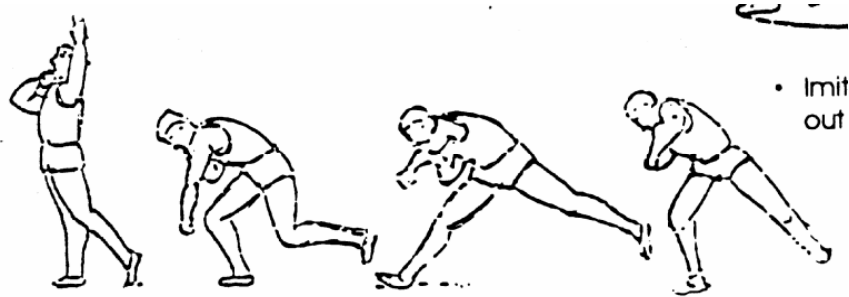
- Jumps from the power position (active ankle extension)
- Standing throw with different weights

3. Learning the Glide

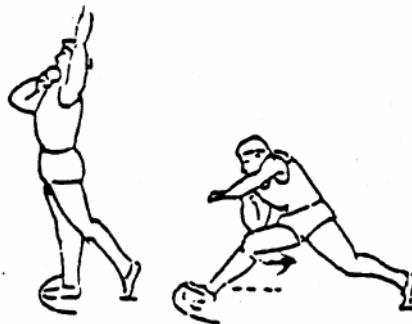
- Glide up to the power position

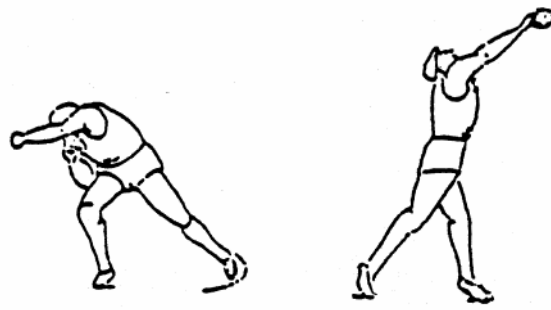


- From the starting position

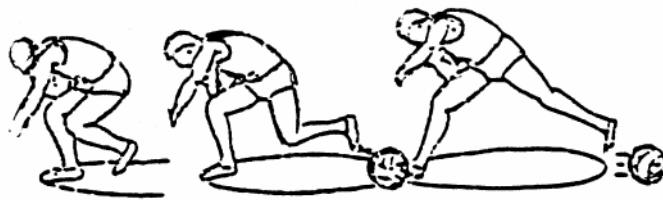


- From the initial position
- Begin the gliding movement with an active extension of the left knee and hip joint
- Flat push-off right over the heel exercises
- Starting position; flex your knee and shift your center of gravity forward so that you have to step out of the circle.
- Starting position: kick left leg, then drive into a wide power position (half-splits), right foot is now on heel, left foot is close to stop-board, upper body remains over right leg; now pull right leg explosively in the middle of the circle, land on toe; finally lift ankle and bring hip forward

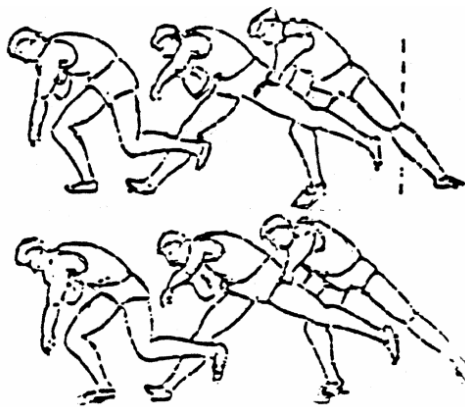




- Improving the swinging leg
 - Imitation of the swinging leg with and without kicking away an object



- Sequential gliding with an active landing on left



- improving the push-off of the right leg
- Imitation of the glide over a 20-inches wide mark (flat push-off over the right heel)
- Glide with a stressed push-off over the heel (ball stands on a board, two inches high)

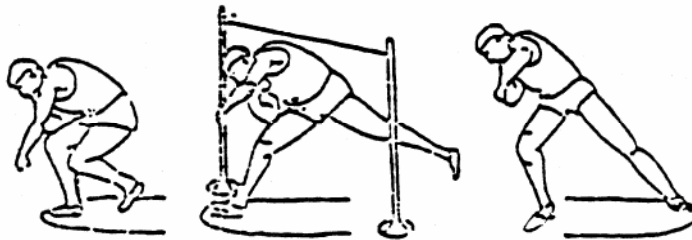


- Glide with weights on your back, weight-vest

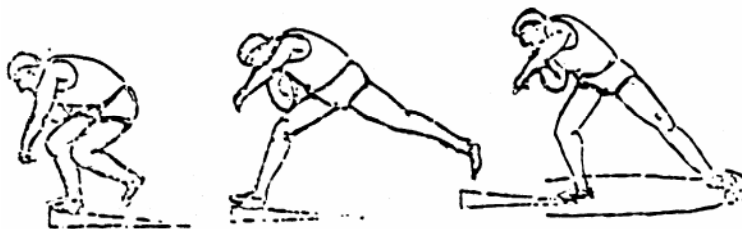


4. Perfecting the Glide

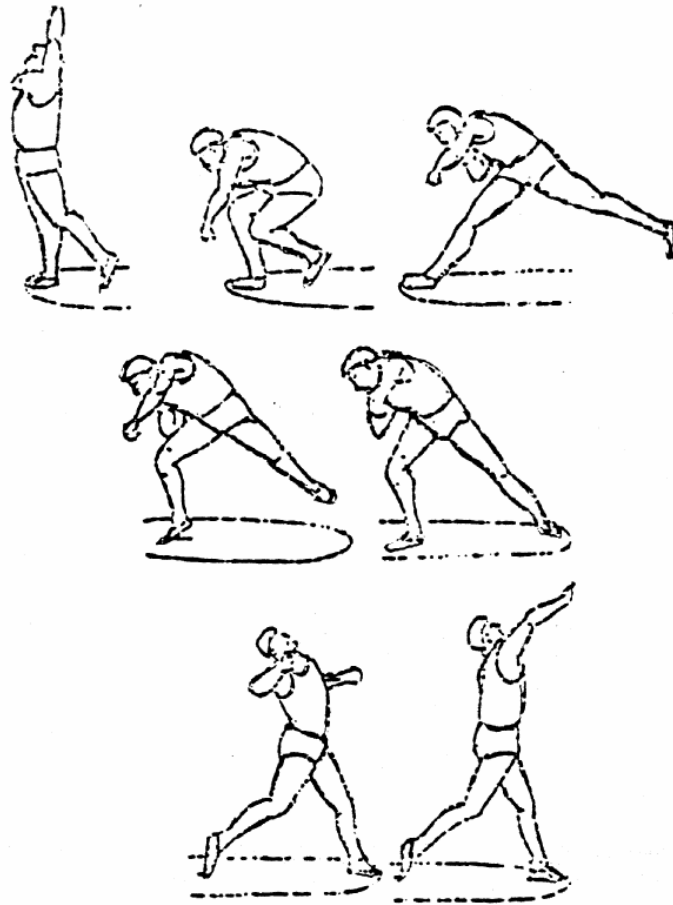
- Glide from a low starting medicine ball held back
 - arms fully extended,
 - upper body held back
- Glide below a rubber cord



- Glide from an elevated position (concentrate on a fast planting of the left foot)



5. Learning of the Full Throw



- Pay attention to:
 - Practice the full movement under the aspect of an optimal dynamic structure
 - Then pay attention to certain movement details
 - Use light weights
 - Try to steadily increase the speed
 - Concentrate on a fast transition phase

6. Full Throws with a Break in the Power Position

- Don't do this exercise too often because it lacks rhythm
- Before you stop in the middle
 - you must have worked on right against left;

- then go back into power position and do a standing throw after having corrected your position

7. Full throws stressing the landing rhythm right- left

- Start working on right immediately after having landed on right ball, even before left foot has been planted
- Plant your left leg fast and actively
- Keep your left side fixed

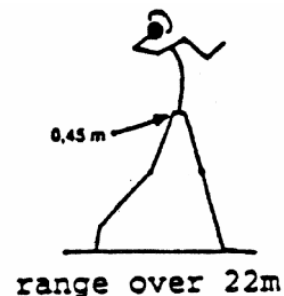
8. Use different weights

9. Full throws with eyes closed

The power demands for the bracing action of the left leg in shot put and discus throwing are almost 3 times the level of the right leg. Therefore, the efficiency of the right leg is at first a problem of coordination while the left leg requires more strength. But in reality the thrower makes no difference between coordination (skills) and ability (strength), as there is a unity between them. We must take it into consideration in the training process:

- ***No technique without power.***
- ***No power without technique.***

Without effective leg work there is no high performance. The necessary internal working conditions for the main muscle groups (e.g. the level of pre-tension) can also be judged from the external picture of motion:



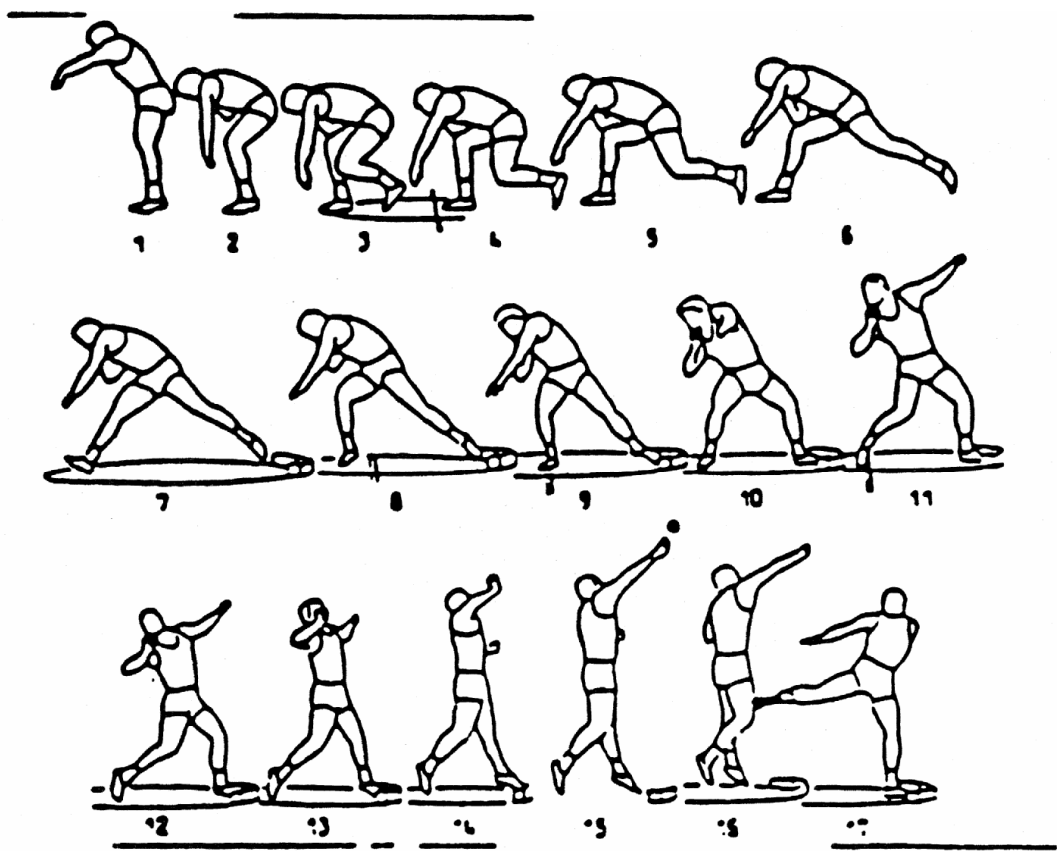


Figure 5: Body position at the greatest tension and path of the right hip joint (interval "planting the right foot - maximal tension" in throws of Ulf Timmermann (Bartonietz, 1990).