

CHAPTER X

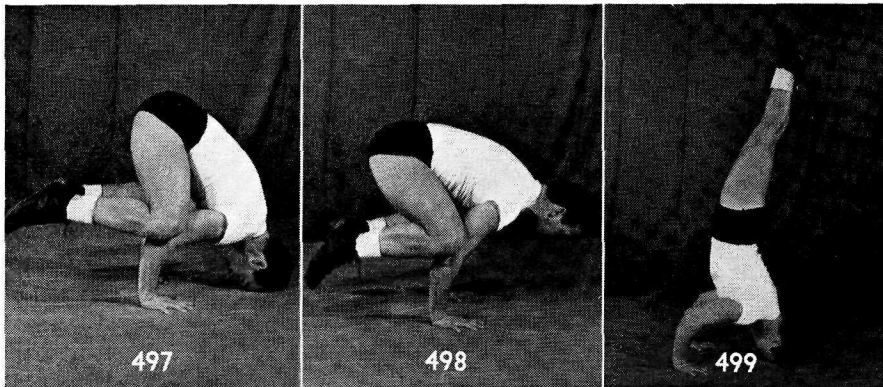
Balancing and Tumbling Activities

BALANCING

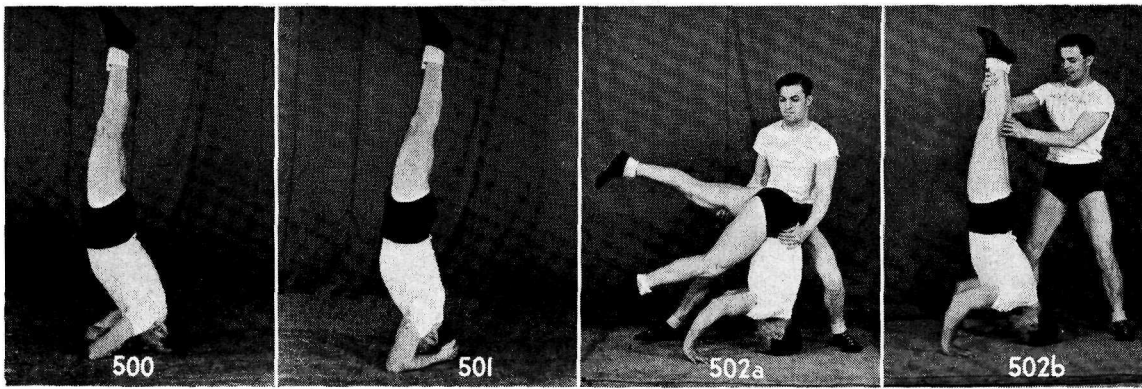
SINGLES

Balancing and Tumbling contribute to the development of coordination, strength, endurance and agility. The cadet should be able to proceed with confidence and safety since he will be able to fall properly if the emergency arises. For additional material on singles balancing and tumbling, refer to articles in the "Athletic Journal" and the "Journal of Health and Physical Education" by Hartley Price.

Squat Head and Hand Balances



- 497—*Squat or Frog Head Balance or Head Stand.*—Knees on elbows—Keep hips high—Rest head on hairline—Fingers pointed forward—Bend arms slightly!
- 498—*Squat or Frog Hand Balance.*—Knees on elbows—Bend arms slightly—Head up—Fingers pointed forward—Push knees against arms and arms against legs—When balanced, eyes are directed downward—Arch hands—Grip floor with finger tips!
- 499—*Head Balance.*—Rest head on hairline—Hands shoulder width apart—Head about ten or twelve inches in front of fingers—In kicking up one knee should be close to hand—Keep the other extended and back—Push off flexed leg as extended leg is kicked upward—Keep weight of body on hands—Body arched—Lift one leg at a time into position—Flex at waist in returning to starting position!

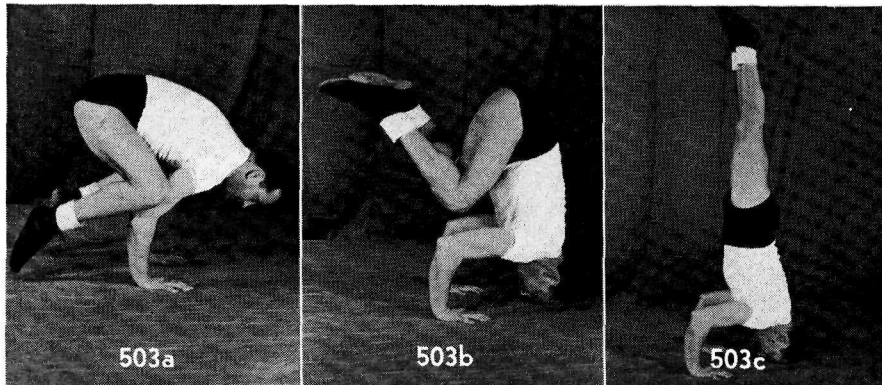


500—*Head Balance, Arms Folded.*—Keep weight of body on arms—Head on the mat at hairline—Arched back—Pointed toes!

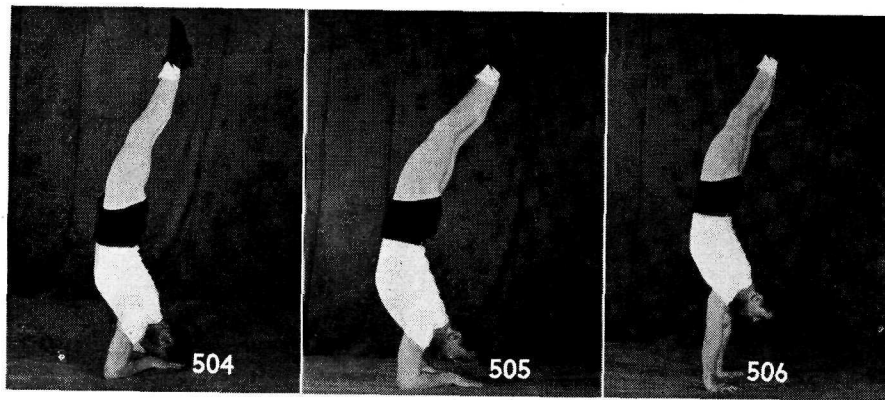
501—*Head Balance, Hands Behind Head.*—Lock fingers behind head—Forearms flat on mat—Keep weight of body on forearms—Heels in line with back of head—Arch back—Keep elbows at shoulder width—Flex at waist in returning to starting position!

SAFETY HINTS.—Keep the neck muscles tight—When off balance, tuck and forward roll—Work across the mat—In returning to mat, flex at waist—Do not return with body straight!

502—*Spotting.*—(a) Work with assistance at first—The beginner is almost lifted into correct position; (b) Keep the performer in correct position!



503—*Squat Balance to Head Balance.*—(a) Keep hips up; (b) Lower head to mat at hairline; (c) Keep weight on hands when going up!



504—*Elbow Balance*.—Form a cup with the thumb and forefinger of each hand—Hands flat on mat—Place forehead in cup on mat—Forearms flat on mat—Keep elbows at shoulder width—Weight back on elbows—Heels in line with back of head—Arch back—Point toes!

SAFETY HINTS.—In returning to mat flex at waist—Do not return in an extended position!

505—*Forearm or Tiger Balance*.—Rest on forearms—Fingers pointed forward—Head up—More weight on hands than in the elbow balance—Keep elbows at shoulder width—Try to make a right angle with upper arm and forearm—Back arched—Point toes!

SAFETY HINTS.—In returning to mat flex at waist—Do not return in an extended position!

506—*Hand Balance*.—Arms straight—Head up—Balance with upper back—Heels in line with back of head—Feet together and toes pointed—Fingers pointed forward—Slight arch in hands, rest mainly on fingers and heel of hands—Grip floor with finger tips—Push up with foot near hands rather than swinging upward with the rear foot!

★ ★ ★

507—*Teaching Procedure*.—Work in pairs—One coaches the other—Hold partner in correct position—Aid learner in bending and strengthening arms!

SAFETY HINTS.—In returning to mat flex at waist—Do not return in an extended position—If overbalanced, tuck and forward roll!

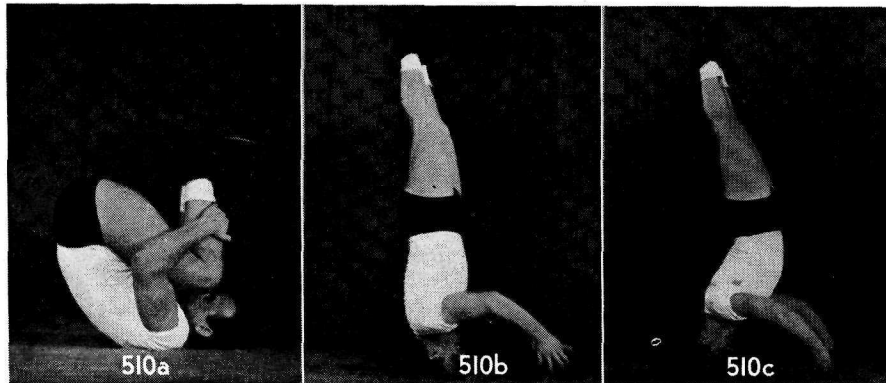
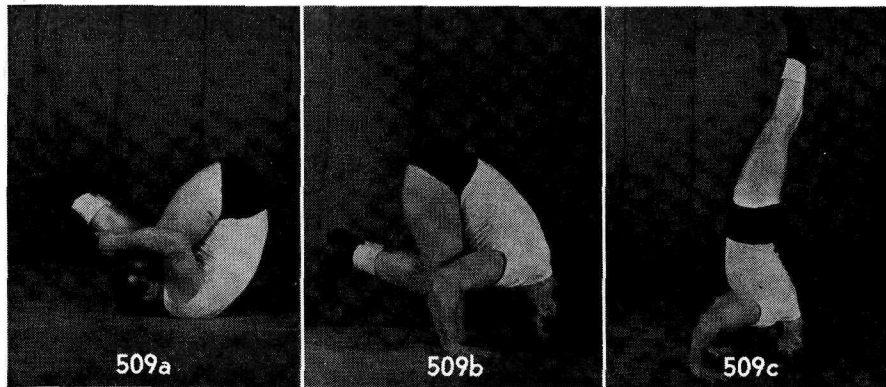
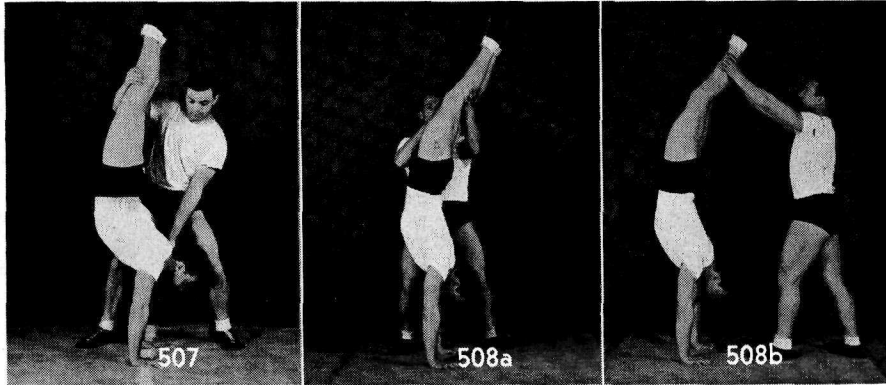
508—*Spotting*.—(a) If the performer tends to hold his position, spot from the side; (b) If the performer tends to move forward, spot from in front, one knee on his shoulder!

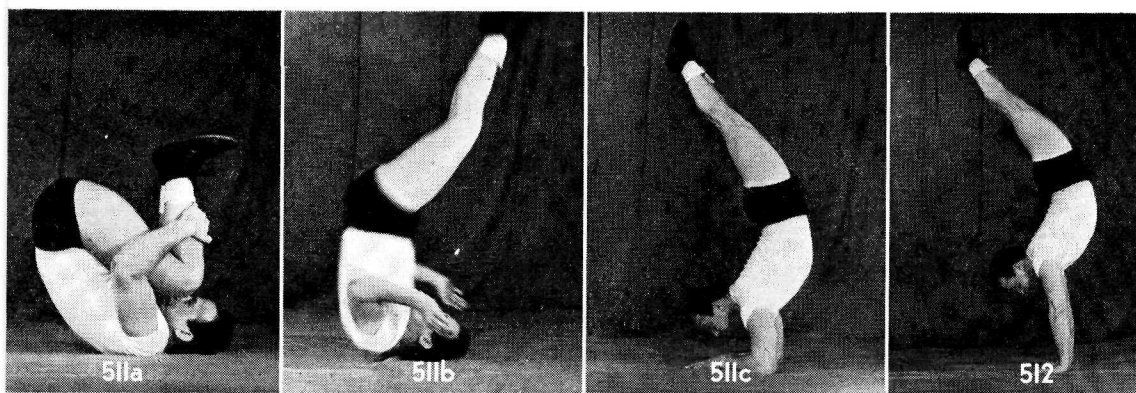
GENERAL HINTS.—Grasp one leg at a time—In returning to position, push down one leg at a time!

509—*Forward Roll to Head Balance*.—(a) Duck head; (b) Wait till you get on feet before kicking; (c) Execute slowly!

510—*Backward Roll to Head Balance*.—(a) Grab tuck—Chin on chest; (b) Roll to top of head before placing hands to the mat—Shoot the legs upward and arch back—A double touch with hands is helpful; (c) Place hands on mat two feet from the head!

SAFETY HINT.—If falling backward, duck head and roll!



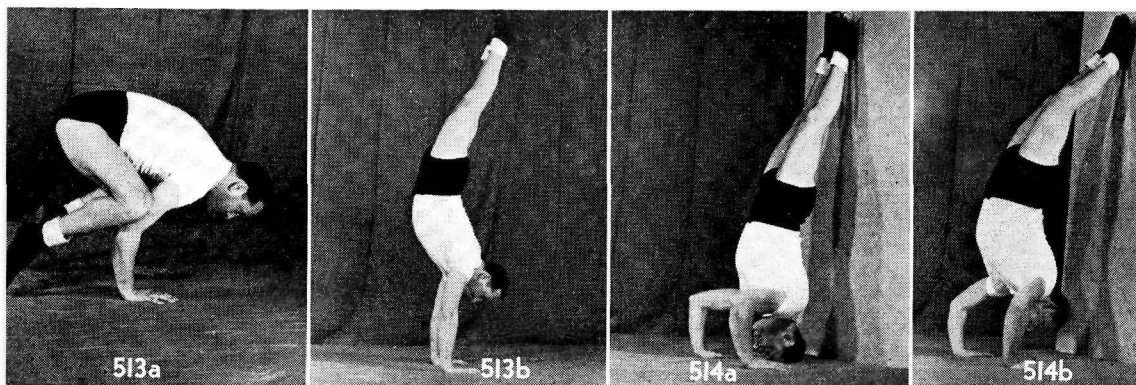


511—*Backward Roll to Forearm Balance.*—(a) Shoot feet straight up; (b) Keep elbows close; (c) Arch body—Toes pointed!
 512—*Backward Roll to Hand Balance.*

511—(a) Shoot feet straight up; (b) Push hard with hands!

512—Lift the head back forcefully!

Variations.—Press-Ups.

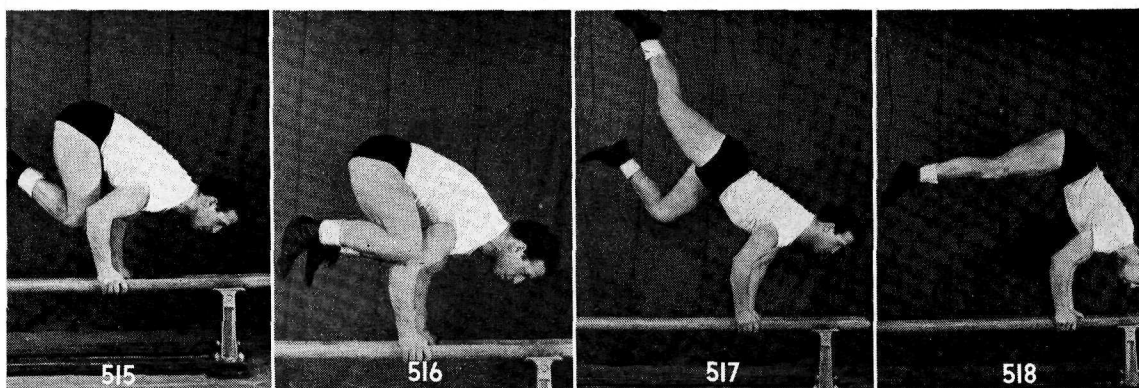


513—*Squat Balance to Hand Balance.*—(a) Keep weight forward—Hips high—Drop feet a little to get a beat; (b) Raise legs up to balance—Keep head up and body arched!

514—*Head Balance to Hand Balance against Bulkhead.*—(a) Bring feet back slightly to put weight on hands; (b) Push hard with hands and put feet back into position—Keep head back and up!

Variations.—Head Balance to Hand Balance.

Try all Hand Balances on Low Parallels.



515—*Tuck Up*.—Keep head up—Hips high—Shoot legs up and push with arms!

516—*Frog Up*.—Lean forward when taking knees off elbows—Keep head up!

517—*Kick Up*.—Keep shoulders forward—Keep head up—Bring back leg up to kicking leg!

518—*Pike Up*.—Keep legs straight—Bend arms slightly—Keep head up—Get hips up high before arching body!

SAFETY HINT.—Spot alongside and hold legs!

Doubles Balancing (See pp. 190-193)

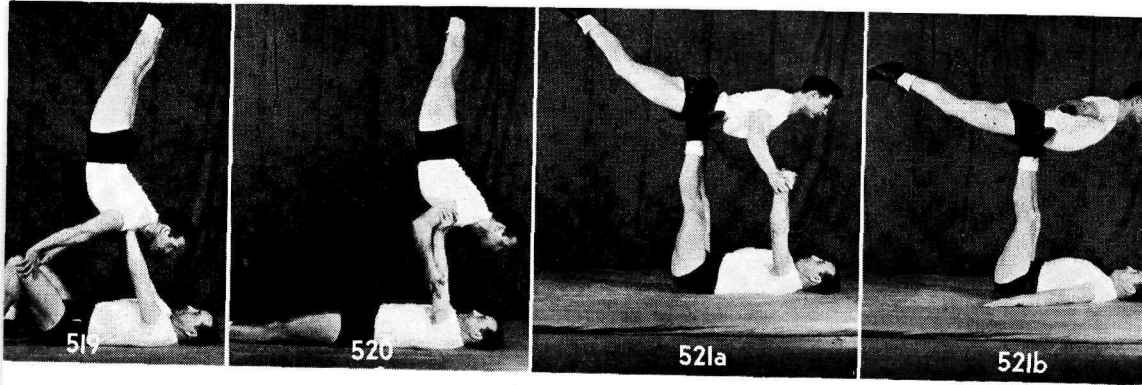
Triples Balancing (See pp. 194-197)

Suggestions for Advanced Singles Balancing

Press-up from forearm to hand balance—Straight leg, bent arm press to hand balance—Straight leg, straight arm press to hand balance—Dead press—One arm balance—Free planche (two arm).

Class Procedure for Balancing

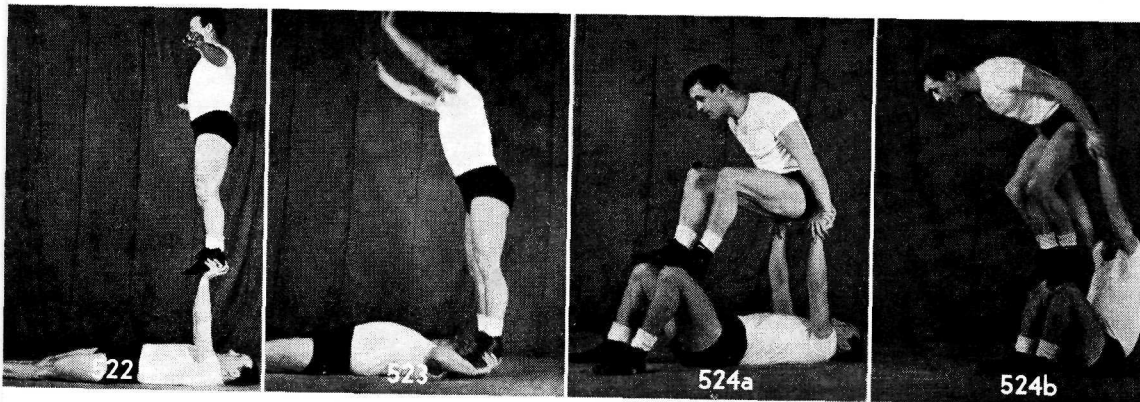
1. Work across mats.
2. Up and down together. (Command or set number of times at will.)
3. Progression of lead-up to hand balance.
 - a. Working in pairs each coaches the other. The assistant holds the learner in correct position. He aids the learner as he bends and straightens the arms. (Plate No. 507)
 - b. Kick up. Partner assists slightly.
 - c. Kick up against wall.
 - d. Put head on rolled mat and kick up to hand balance. This activity stresses the important point that the head must be back. For this activity there should be a spotter.
 - e. Kick up against wall. Try to bring feet back to regular hand balance position. (Plate No. 514b)
 - f. Independent hand balance.
 - g. Hand balance and forward roll when off balance.
 - h. Hand balance and snap down when balance is not attained.
 - i. Hand walk.



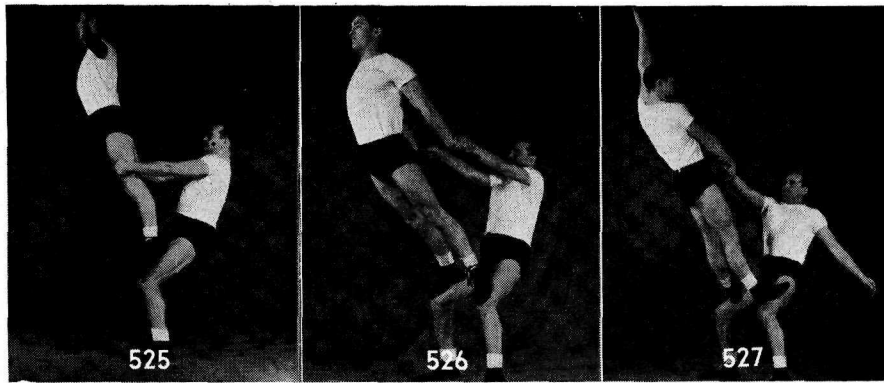
DOUBLES

Elementary Doubles

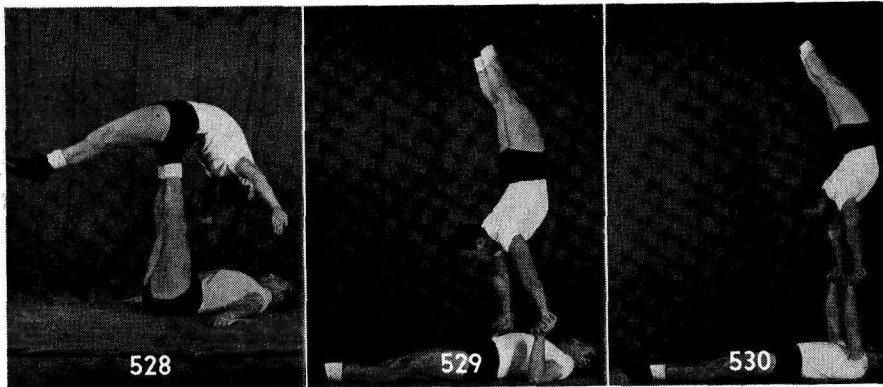
- 519—*Hand, Knee Shoulder Balance*.—Head up—Back arched—Elbows locked—All weight on bottom man's arms—Shoulder over shoulder!
- 520—*Arm to Arm Balance*.—Bottom man grasps inside of arms on biceps—Top man grasps outside of arms on triceps—Kick up or press!
- Variation*.—Top man releases shoulders.
- 521a—*Belly Swan Balance, Grasping Hands*.—Feet in groin pointing outward—Legs straight—Back arched and head up—Reverse grasp!
- 521b—*Belly Swan Balance, without Hands*.—Seek points of balance in groin—Hands, arms out straight to side—Look straight ahead!



- 522—*Foot to Hand Balance*.—Top man grasps bottom man's feet until balance is gained—Top man stands rigid—Bottom man does all balancing—Top man looks straight ahead—Bottom man grasps arch of feet!
- 523—*Jump to Foot to Hand Balance*.—Bottom man holds hands steady—Do not reach for feet—Top man places feet in hands—Top man jumps straight up—Do not lean forward—Bottom man does all the balancing!
- 522—*Foot to Hand Balance*.
- 524—*Jump Through to Knees and Pull Up to Balance*.—(a) Top man leans forward a little—Bottom man sits up; (b) Top man straightens legs and pulls up with arms simultaneously—Fan out easily to hold balance!



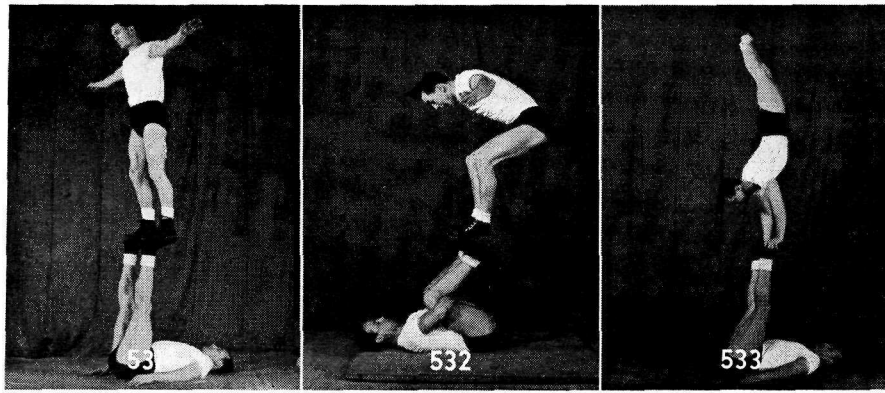
- 525—*Hold-Out (Top mounter stands on knees facing out)*.—Legs straight—Head up—Back arched—Bottom man grasps just above knees—Feet flat on floor—Bottom man leans backward—Mount to sit on shoulder!
- 526—*Hold-Out (Two hands, face to back)*.—Jump up to knees—Fan out easily—Top man arch back—Bottom man leans backward to counteract forward pull!
- 527—*Hold-Out (One hand, facing)*.—Grasp left hand on bottom man's neck—Step up to knees, facing in—Fan out easily—Top man body straight—Both men place left arms over head for balance!



- 528—*Back Balance on Feet*.—Top man lie on bottom man's feet—Bottom man puts feet in small of back—Top man arches and puts head back—Arms out to side!

Intermediate Doubles

- 529—*Low-Low, Hand to Hand, Elbows on Floor*.—Elbows to side on floor—Keep arms rigid and forearms perpendicular to the floor—Use comfortable grip and wrist angle—Top man kick up or press—Bottom man does balancing!
- 530—*High-Low, Hand to Hand, Kick Up, Press Up*.—Bottom man locks shoulders and elbows—Bottom man keeps tight grip—Control top man!

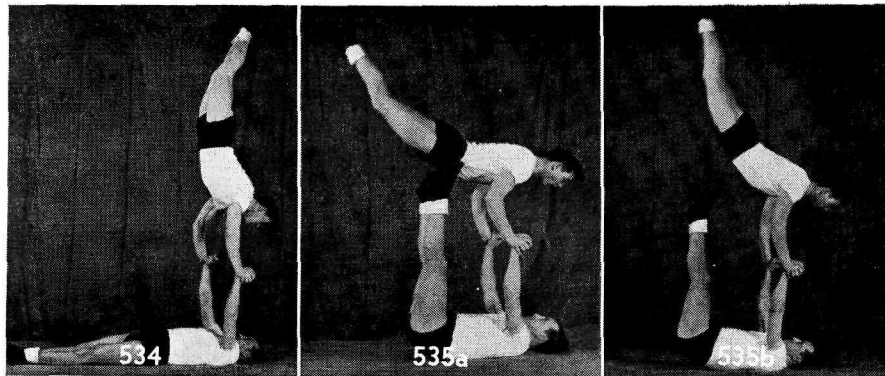


531—*Foot to Foot Balance*.—Mount from third man's shoulders—Feet eighteen inches apart—Top man keeps body straight—Legs straight—Keep soles flush!

Variation.—Face in other direction and mount from buttocks.

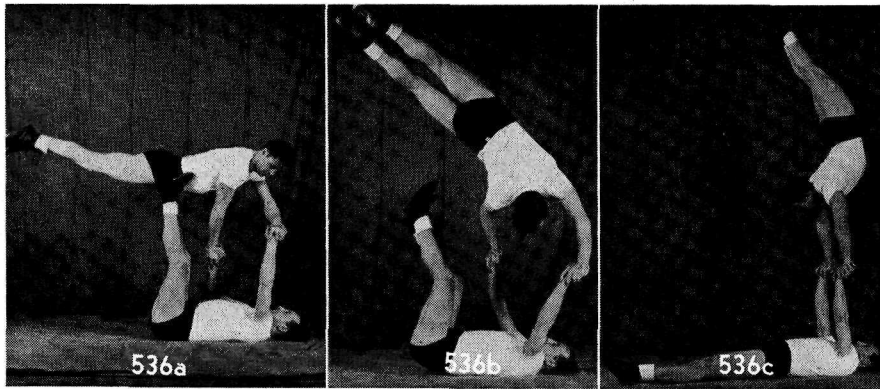
532—*Jump to Foot to Foot Balance*.—Top man takes a couple of steps—Take off from two feet—Keep eyes on the spot—soles of bottom man's feet—Not too much forward momentum—Jump high enough to come down on the spot—Bottom man keeps legs bent to absorb shock and reduce height of jump—Keep heels down and toes up to stop forward motion—When top man is balanced on bottom man's straightened feet, legs are straightened!

533—*Hand to Foot Balance*.—Top man grasps heels of bottom man, press to hand balance—Bottom man keeps legs perpendicular and rigid—Top man does balancing!



534—*Reverse High-Low, Hand to Hand*.—Top man grasps with knuckles on outside—Bottom man grasps with knuckles on inside—Bottom man keeps arms perpendicular and rigid—Top man kicks up or presses up!

535—*Belly Throw to Reverse High-Low Hand to Hand*.—(a) Feet in groin—Bottom man keeps arms straight and perpendicular—Top man whips legs a little when bottom man gives kick; (b) Bottom man bends legs slightly for throw—Throw up and slightly backward!



536—*Belly Throw From Cross Grip to Ordinary Low Hand to Hand.*—(a) Bottom man bends knees ready to throw—Top man leans and twists, keeping weight on hands; (b) Bottom man fights balance; Top man keeps body arched and head up; (c) High-low, hand to hand balance!

Suggestions for Advanced Doubles Balancing

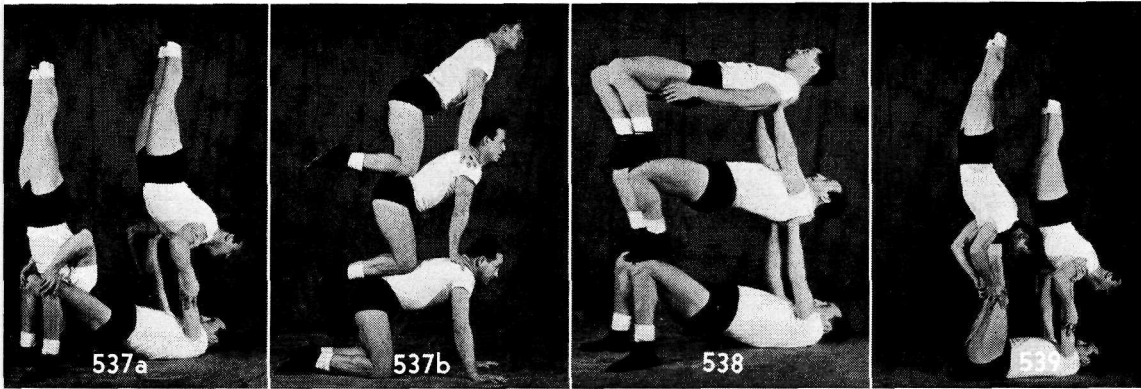
1. *Fairly Advanced Doubles Balancing.*—Back throw to ordinary hand to hand.—Roll down from hand to hand—Roll up to hand to hand: on chest, on knees, on shins—Curl down from hand to hand—Curl up from hand to hand—Half twist from belly swan to seat on feet or back balance—Shoulder-knee-full lever, feet as fulcrum—Chest to back, full lever, hands as fulcrum—Buttocks to back lever, hands as fulcrum—Foot stand on head, holding—Foot stand on head, free—Free shoulder stand on feet—Pitch to stand on shoulders—Foot flag.

2. *Advanced Doubles Balancing.*—High arm to arm: throw up, jump up and press—High hand to hand, press up—Get up, from low hand to hand to high—Get down, from high to low—Get up, one arm or chest balance—Slide down chest from high to shoulder knee lever—Seal or octave rolls both ways—Round-house to a high hand to hand—Cannon-ball to high hand to hand—Get down and get up, foot stand on head—Stand on knees, jump to small of back—Jump to stand on shoulder—Jack-knife hand to hand—Pitch to hand to hand—One hand to hand—Seal or octave rolls, foot to foot.

Possibilities of various doubles balancing routines are numerous and wide in scope. The skill and the comparative weight of the partners determine the relative limit.

A smooth sequence demands a mastering of all the fundamental hand balancing positions. A hand balancing routine demands endurance and stamina. The performers also should learn to take advantage of every opportunity to relax. The routine is most effective when the participants proceed slowly with their tricks. Spotting each other is very important until the trick is mastered.

TRIPLES

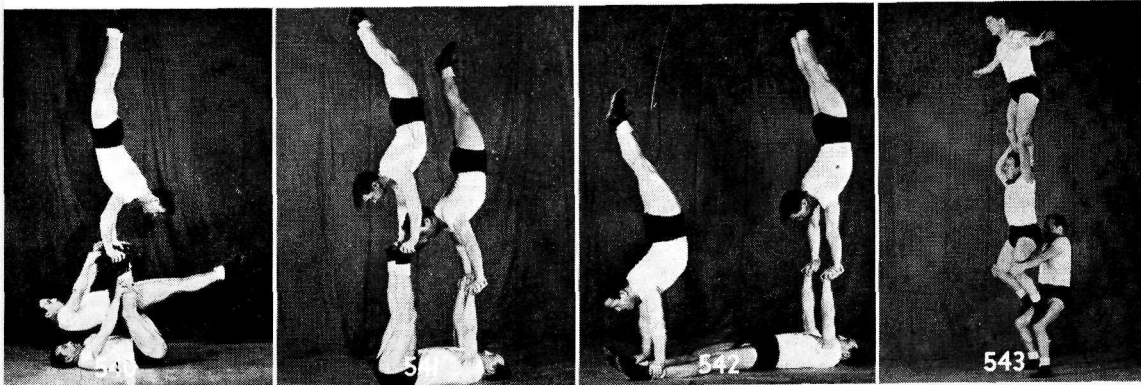
Low Understander or Bottom Man Lying Down

537a—*Arm to Arm, Shoulder Balance on Knees.*—Bottom man keeps body arched—Keep knees apart—Balancers keep bodies arched and heads up!

537b—*"Triple Decker" Hands on Ground and Deltoids.*—Lock arms—Keep body arched—Keep knees wide!

538—*"Triple Decker" Back on Ground, Hands on Scapula.*—Keep body arched—Lock arms—Keep knees wide!

539—*Arm to Arm and Shoulder Balance on Feet.*—Both topmounters hold positions—Understander arches back!

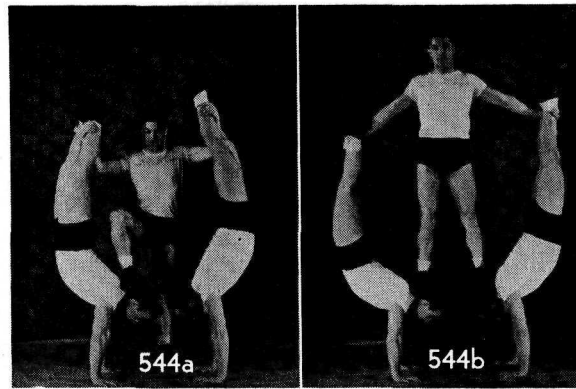


540—*"Father Time."*—Understander on back; middle man does a front lever between knees of understander—Topmounter performs a hand balance on feet!

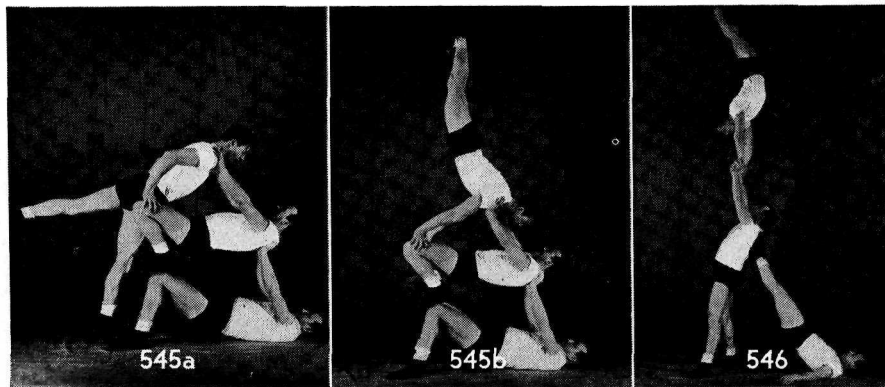
541—*Hand Balance on Feet and Low Hand to Hand Balance.*—Understander on back, feet up—Middle man kicks to a hand balance on feet—Top man does a hand balance on hands of understander!

542—*Variation.*—Hand balance on ankles and low hand to hand balance.

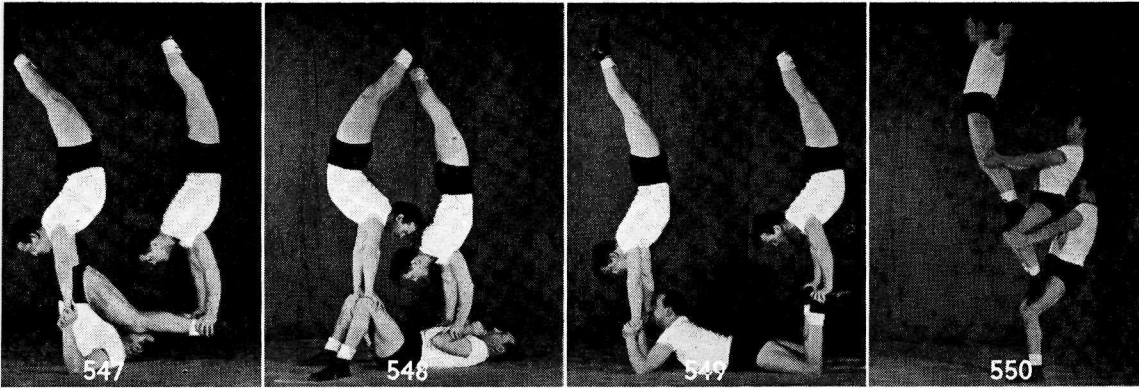
543—*Hold Out, Two High.*—Topmounter is on understander's shoulders before mounting on middle man's shoulders!



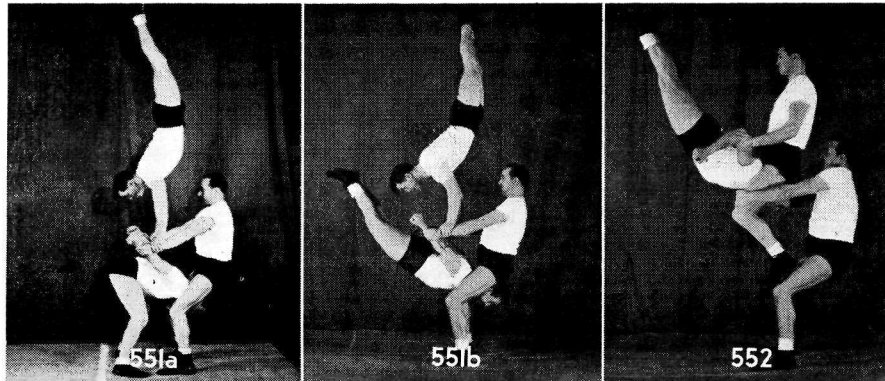
544—“Candle Stick” Double Hand Balance on Floor and Foot Stand on Necks.—
 (a) Middle man holds balance (uses arms); (b) Hand balancers about
 four feet apart!



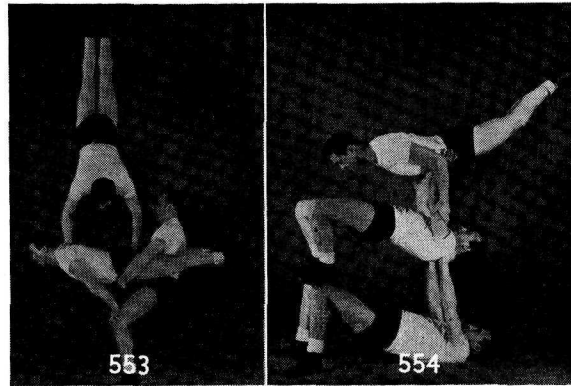
545—“Double Decker” and Knee and Shoulder Balance.—(a) Understander keeps
 knees apart, locks arms—Topmounter get shoulders over as far as possible;
 (b) Keep top man forward—Bodies arched!
 546—“Tepee” (Feet in Back of Middle Man and Hand to Hand).—Top man
 mounts to hand balance from bottom man’s hand!



- 547—*"Pretzel."*—Bottom man keeps hands close to back—Bottom man keeps toes hooked—Both top men kick to hand balance!
- 548—*Elbow and Knee Hand Balances.*—Both men kick up at same time—Bottom man keeps steady!
- 549—*"U" Pyramid.*—Bottom man keeps hands close to shoulders—Keep feet together and cup them—Hand balancers fight to maintain balance!
- 550—*"Double Holdout."*—Top man sits on middle man's shoulders—Bottom man lifts two men and each step out on thighs—Bottom man fights all the time for balance—Bottom man controls equilibrium by counterbalancing.



- 551—*"The Three Jacksons."*—(a) Topmounter holds hand balance first; (b) Middle man pushes out to a lever!
- Variation.*—*"The Three Jacksons"* on elbows (Shoulder knee lever and hand balance on elbows).
- 552—*Hold Out With Back Lever.*—Understander must counterbalance!



553—*Old Faithful*.—Middle man clasps legs around understander's waist—Hold arch—Lock elbows—Understander counterbalances—Topmounter presses hand balance!

554—*Double Decker, Belly Swan on Hands*.—Topmounter mounts on hands of middle man—Hold arch—Head up!

Suggestions for Advanced Triples

"Double Decker" and Belly Swan on hands—"Double Decker" and hand to hand—Standing three high: bounce up, climb up, lean to break—Hold-out on thighs and a high hand to hand—Two high on bottom man's feet—Two high and hand to hand—Triple decker, roll around to knees or back and build up to a three-high.

Triples Balancing is a gymnastic art in which three men execute pyramids of many kinds. These pyramids may be performed on the ground or on apparatus such as tables, chairs, etc. In this branch of gymnastics the human form is used to build pyramids which embody symmetry, strength, skill, endurance and agility. These tricks may be coordinated into smooth and continuous routines.

Triples depend upon the execution of certain basic fundamentals by the three performers: The ability to press hand balances, to execute front and back levers and to make fine adjustments of balance both in standing and hand balancing positions.

All new tricks should be spotted or guarded properly. Progression from the simple to the difficult is essential if injury is to be avoided.

PYRAMID BUILDING

Pyramid building is stimulating to any program of gymnastics and tumbling. It can be adapted to both the beginner and the expert in gymnastics. This training is especially valuable since it depends upon the cooperation and teamwork of every man in the pyramid. In addition, it provides a means of presenting a demonstration or exhibition which will further promote the gymnastic program.

Pyramid building takes care of all available men. The heavy men can be used on the bottom or the base of the pyramid. Average size individuals can be used in the middle and the lightest individuals can be used on top. In every case it is important that the individual selected has the necessary skill, strength and balance to perform his part of the pyramid with confidence.

For simplicity pyramids may be classified into two main groupings:

1. Ground pyramids or pyramids without apparatus.
2. Pyramids on various apparatus, such as parallel bars, side horse, ladders, tables and chairs, etc.

Ground pyramids may be designed on a straight line,* on a curved line, or with a round or square base. They may also be designed so that the pyramids might cross each other in the center. It is also possible to plan ground pyramids so that the pyramid is able to move. Such pyramids are called Marching or Walking Pyramids.

Various combinations of pyramids may also be formed such as:

1. Pyramids using the various apparatus together.
2. Pyramids combining ground and apparatus pyramids.

Planning Straight Line Pyramids

The shape of the pyramid is decided upon and then the men are selected who have the physical qualifications to perform the parts. The smallest number of men who may build an effective pyramid is three.

Pyramids may be formed by grouping the various combinations used in doubles and triples balancing** and group balancing into symmetrical patterns. A pyramid is designed by choosing one grouping as a center piece and by then placing end pieces on each side to make the pattern symmetrical.

Teaching Cues.—A sound base prevents collapse—Heaviest men at the base—Distribute load properly—Lightest on top—Every man should know exactly what he is supposed to do—Full cooperation and confidence in each other should be encouraged—The pyramid should be flexible so that small adjustments may be made without the collapse of the pyramid—Simplicity of design should be the rule—Building and dismounting pyramid should be done smoothly!

Signals for Building the Pyramid

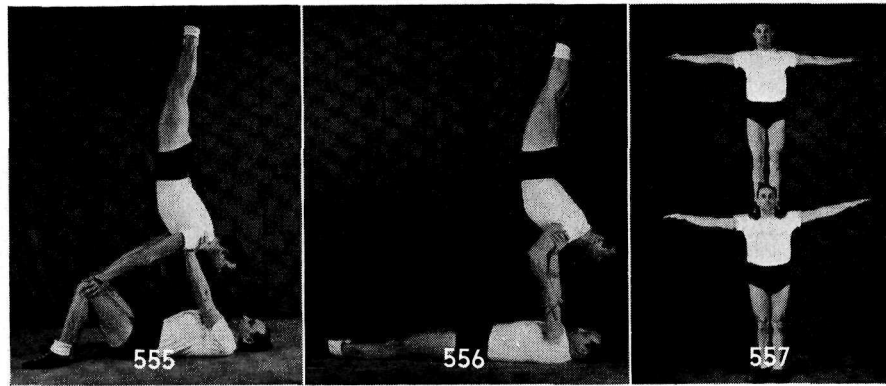
Start from a straight line with a given signal—Return to the straight line after each pyramid—The leader of the group will call the cue number to build the pyramid: Count 1, Bottom men take positions; Count 2, Top men take position ready to mount; Count 3, Mount—Everybody in position—Hold; Count 4, Dismount—Return to straight line on the double! Increase the counts when a large group is used—For a skillful group the counts may be reduced!

* This discussion will be restricted to straight line pyramids.

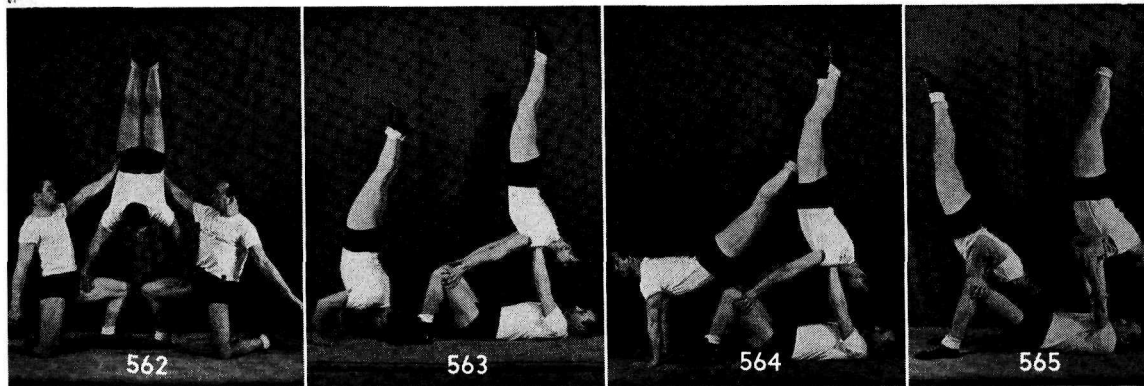
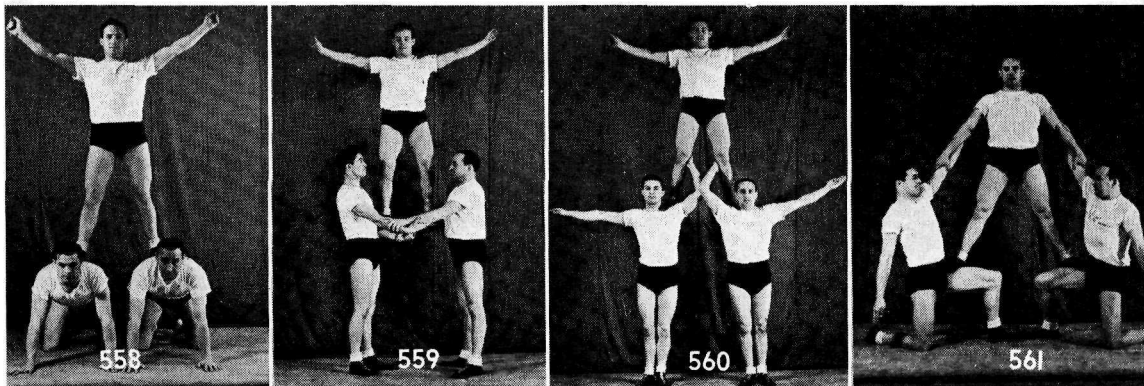
** See pp. 190-197, 312, 448 on Doubles and Triples Balancing.

Sample Pyramids

Sample Two Man End Pieces.

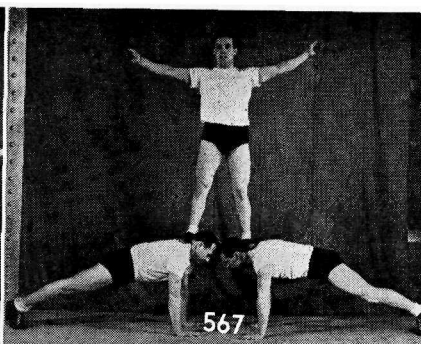


Sample Two and Three Man Center and End Pieces.

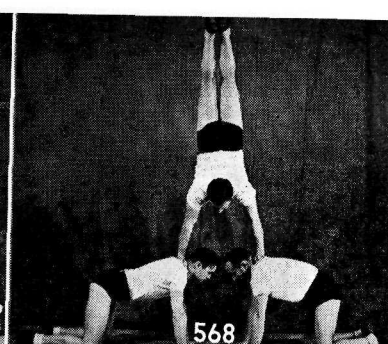




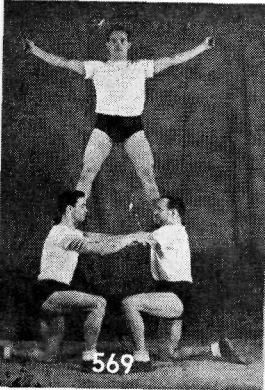
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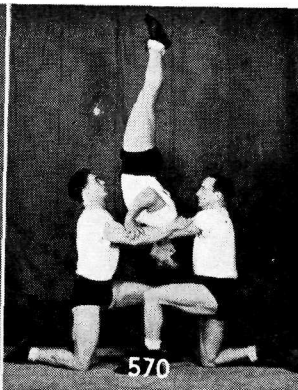
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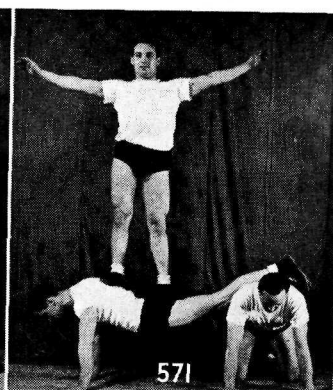
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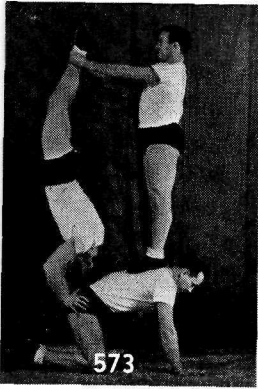
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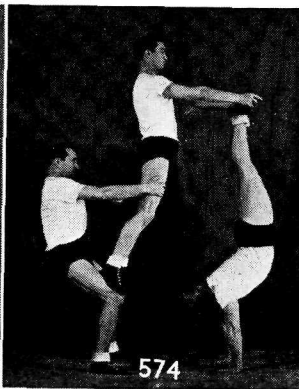
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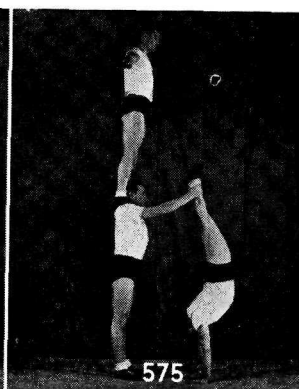
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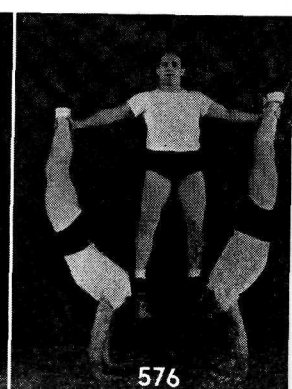
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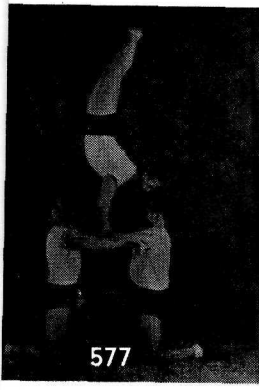
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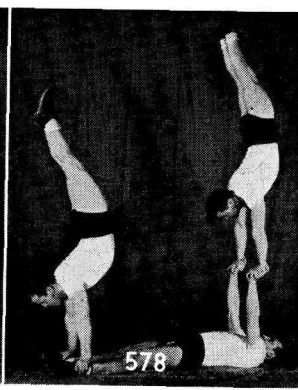
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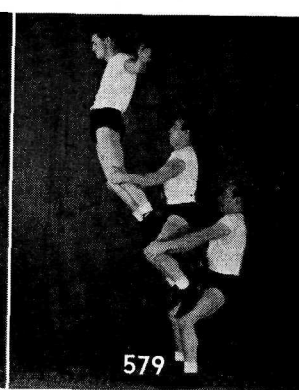
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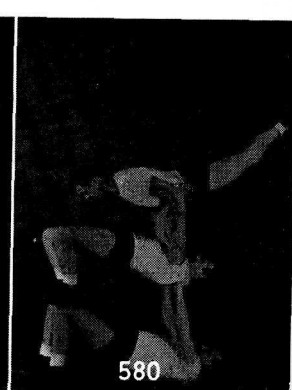
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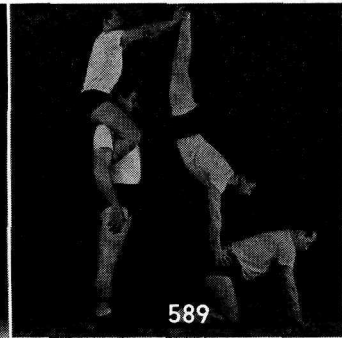
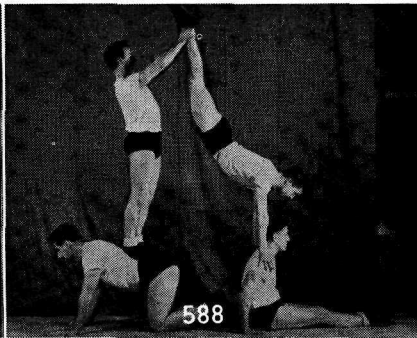
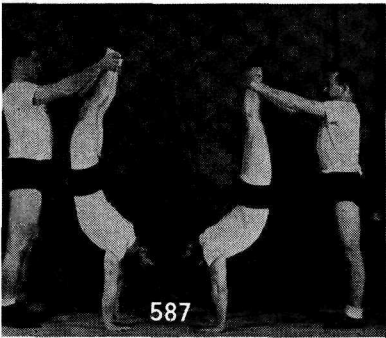
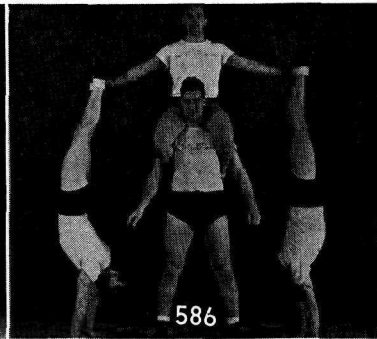
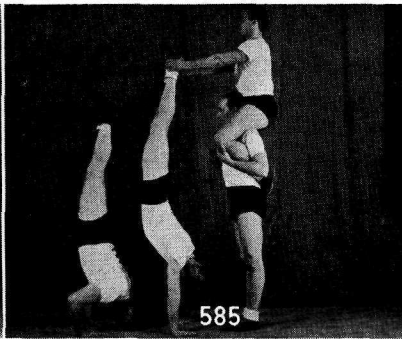
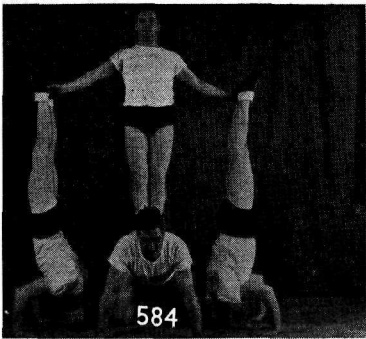
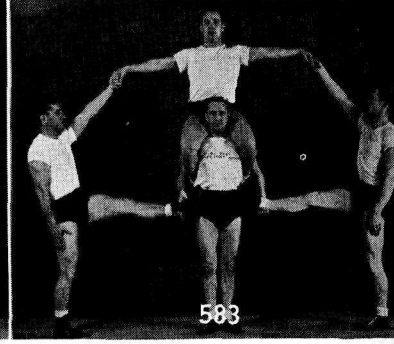
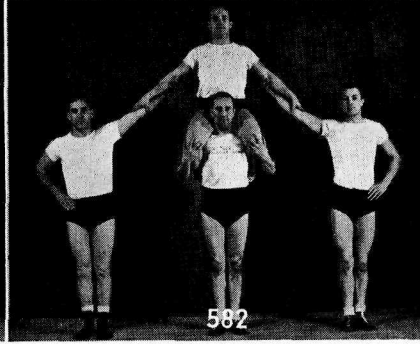
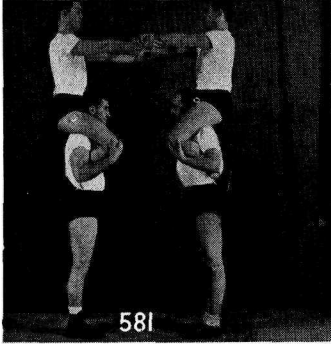


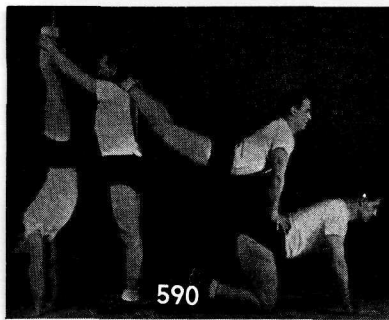
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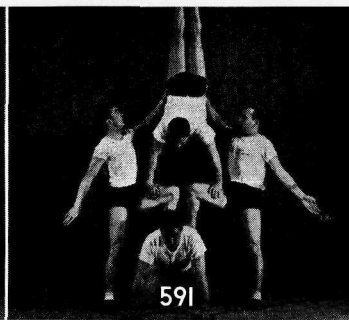
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Sample Four Man Center Pieces.





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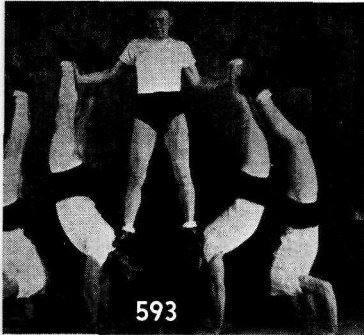


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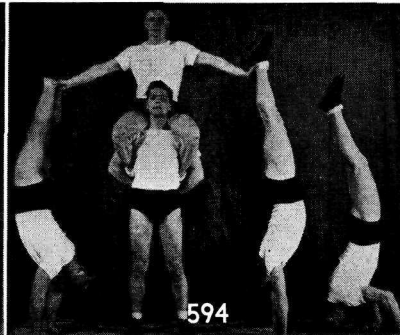


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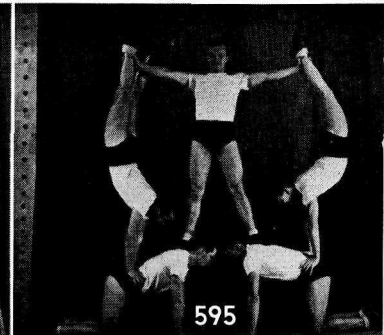
Sample Five Man Center Pieces.



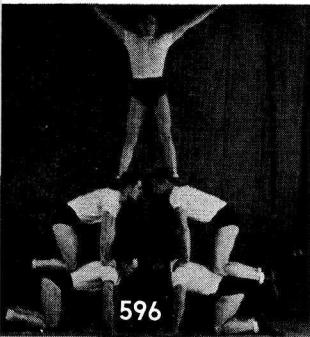
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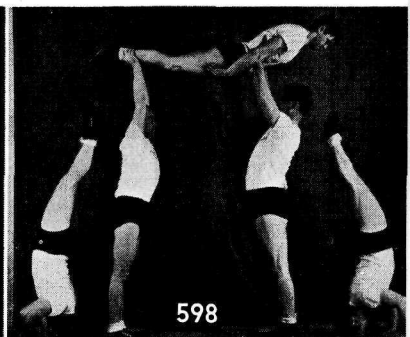
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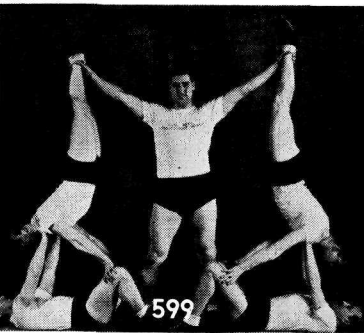
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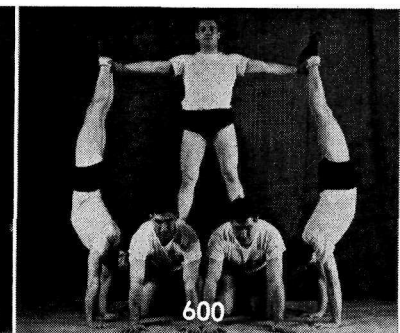
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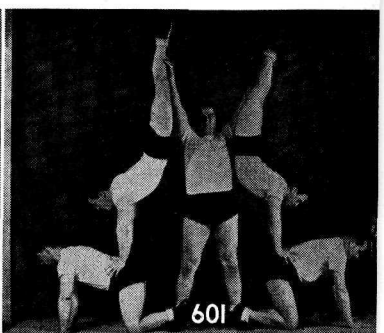
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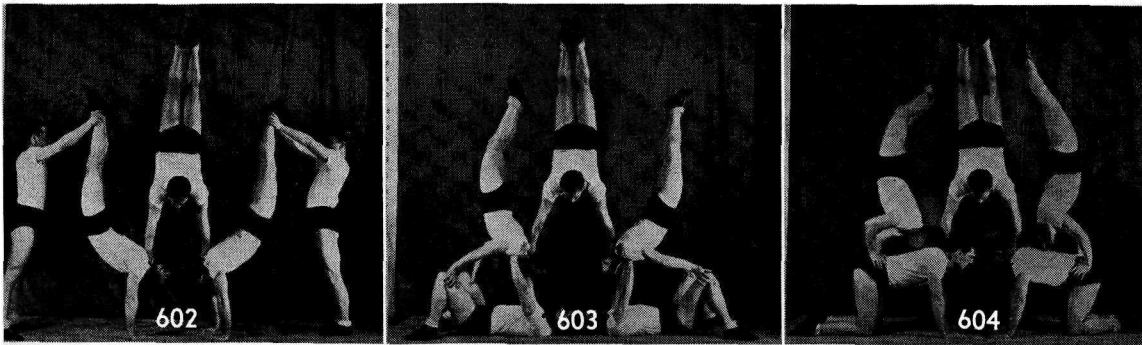
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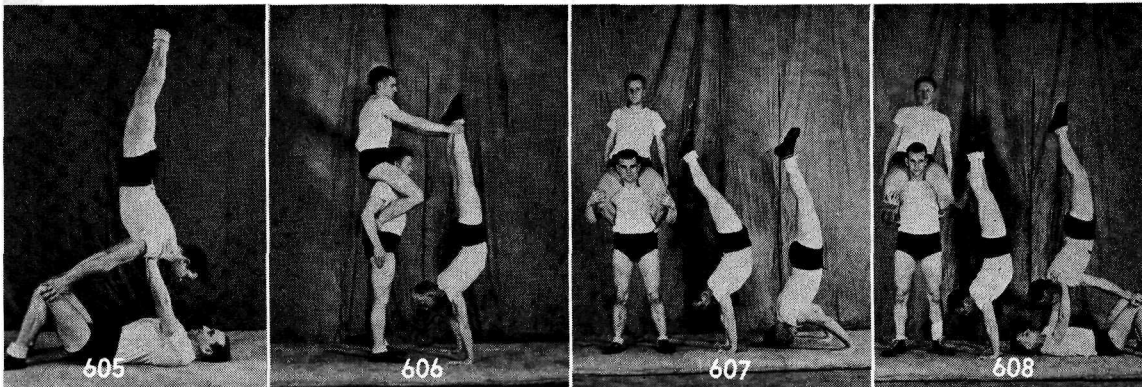


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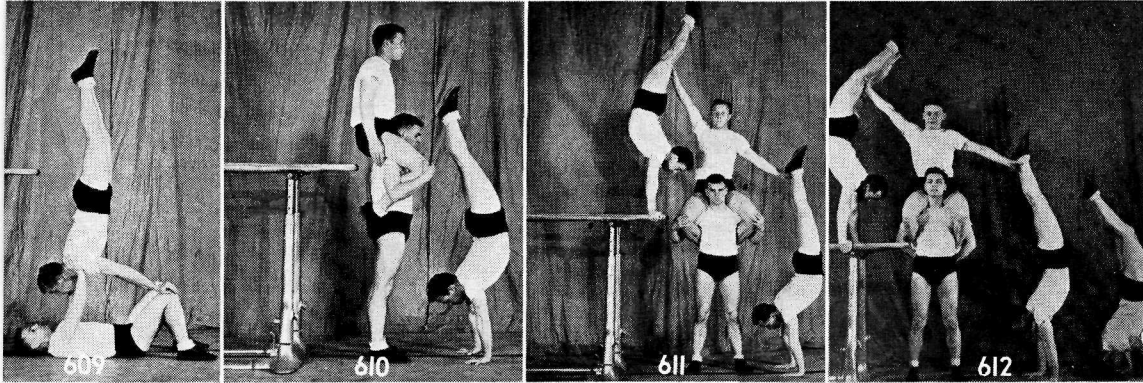
The above may be applied on Parallel Bars, Horse, and Tables and Chairs.
 From the preceding center and end pieces a pyramid may be organized without much difficulty. Such a pyramid can be adapted as a Ground Pyramid or a Pyramid on the Apparatus. The following plates will serve to show the basic plan of building pyramids from the center and end pieces.

Ground Pyramids

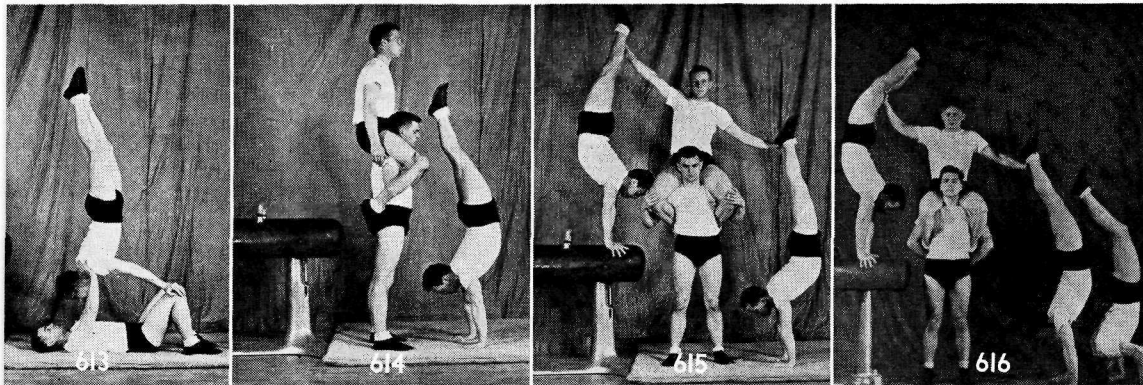


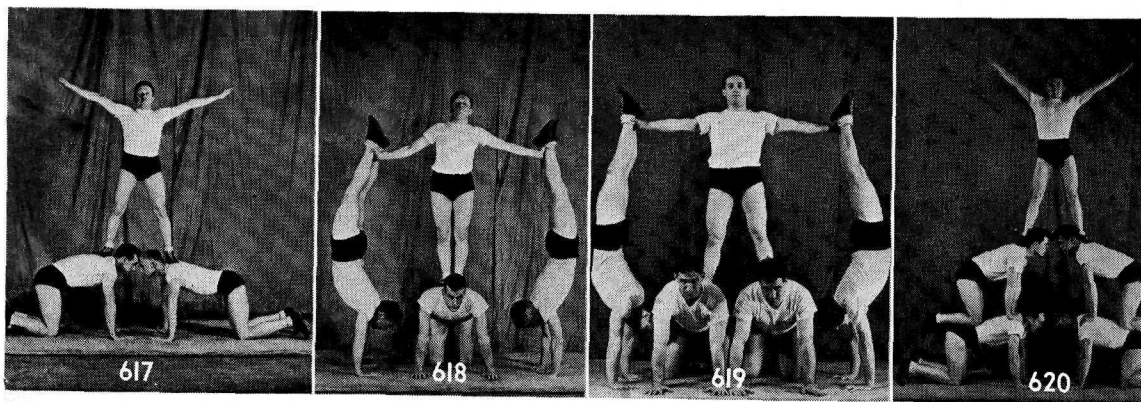
- 605—*Two Man End Piece.*
 606—*Three Man End Piece.*
 607—*Four Man End Piece.*
 608—*Five Man End Piece.*

Application to Parallel Bars.



Application to Horse.





Ground Pyramids

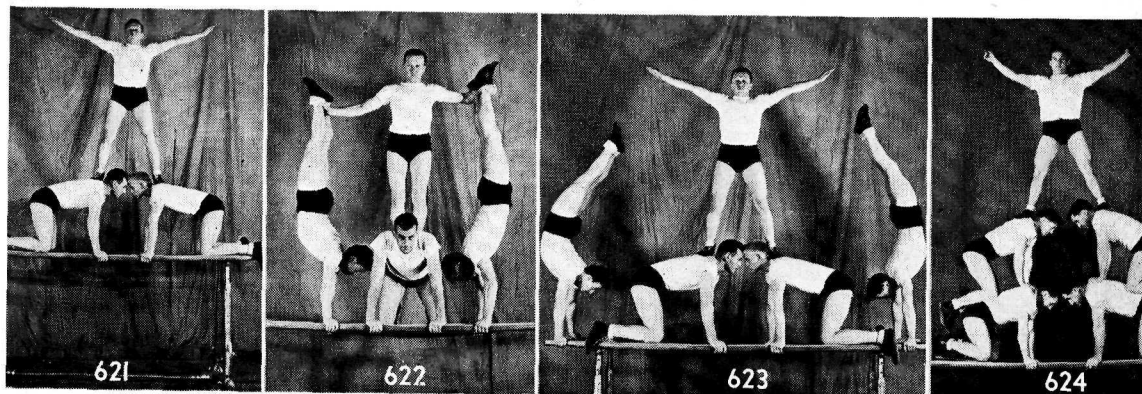
617—*Three Man Center Piece.*

618—*Four Man Center Piece.*

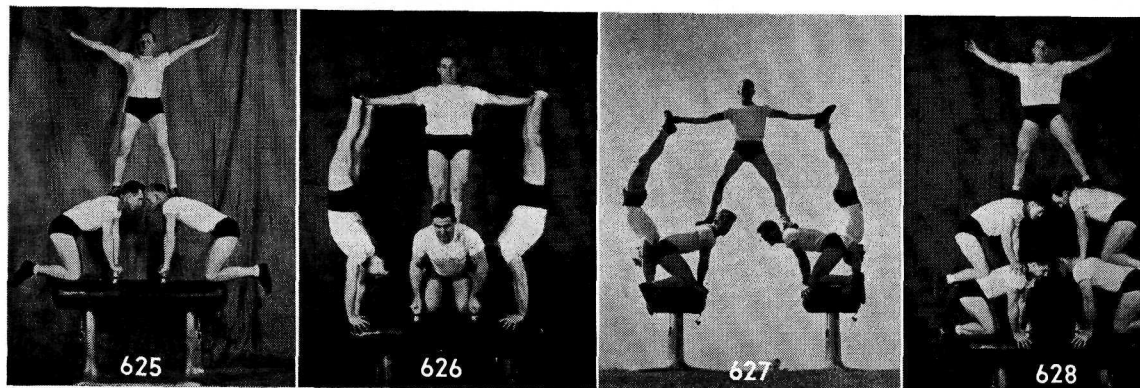
619—*Five Man Center Piece.*

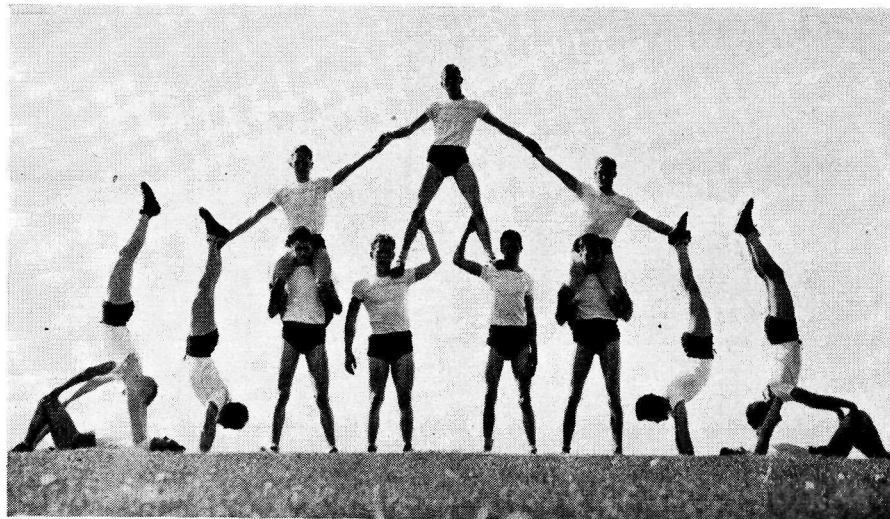
620—*Five Man Center Piece.*

Application to Parallel Bars.

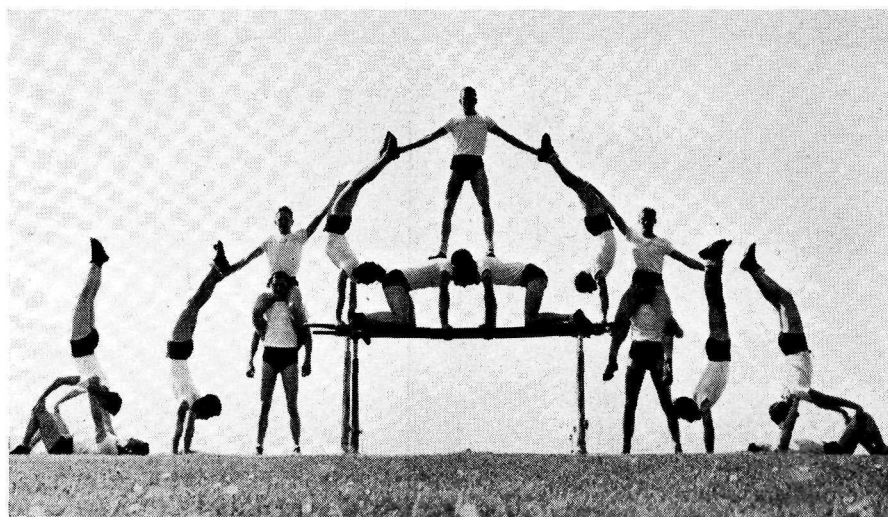


Application to Horse and Buck.

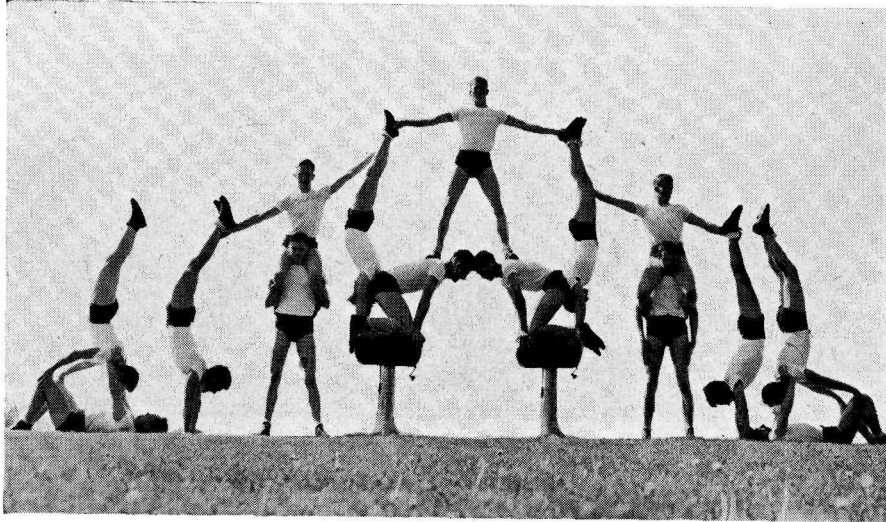




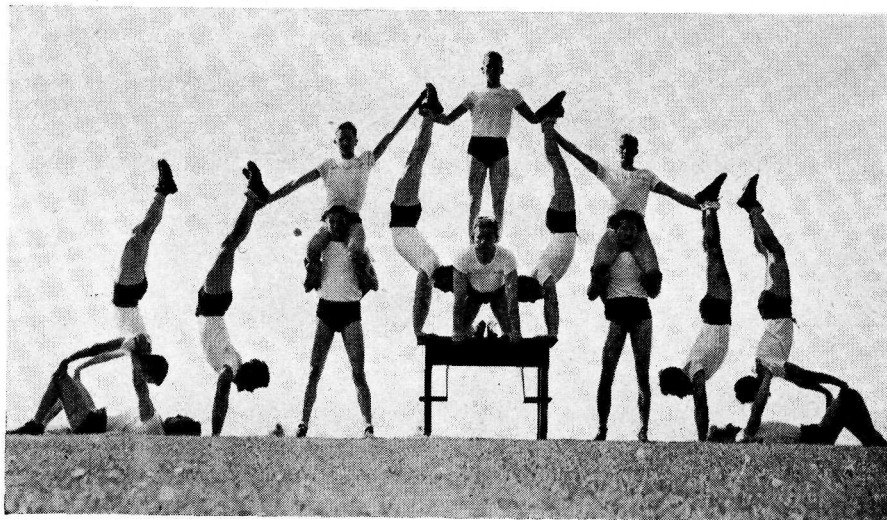
629—*Sample Ground Pyramid.*



630—*Sample Parallel Bars Pyramid.*

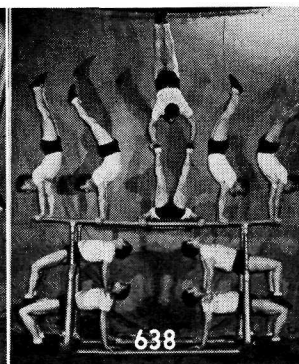
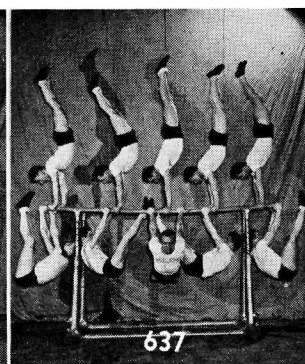
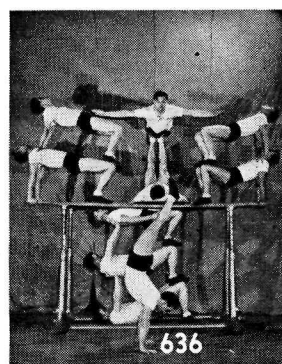
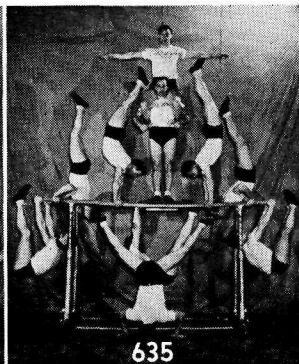
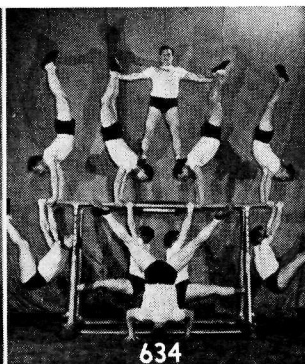
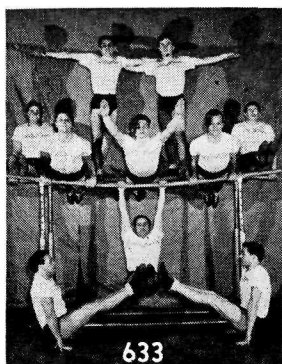


631—*Sample Buck Pyramid.*



632—*Sample Tables and Chairs Pyramid.*

Suggestions for More Advanced Pyramids



Suggestions for More Advanced Ground Pyramids



PLATE 639

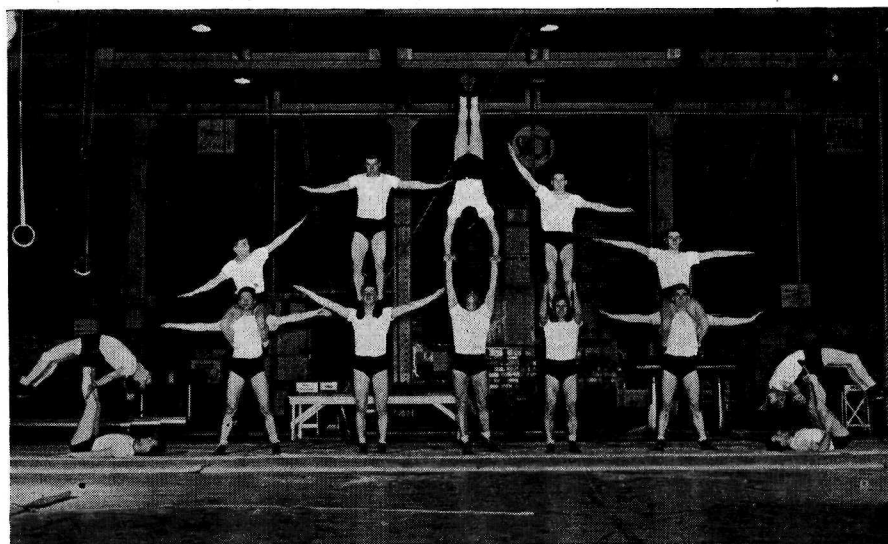


PLATE 640

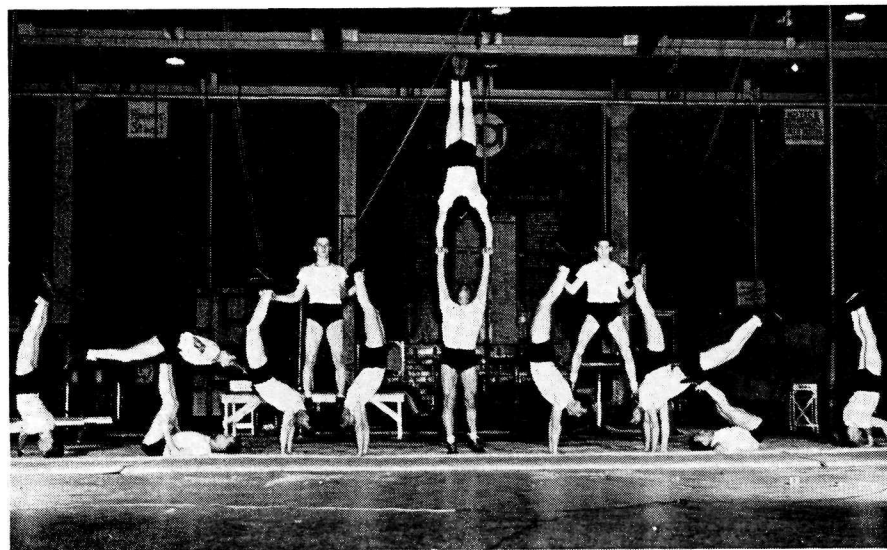


PLATE 641

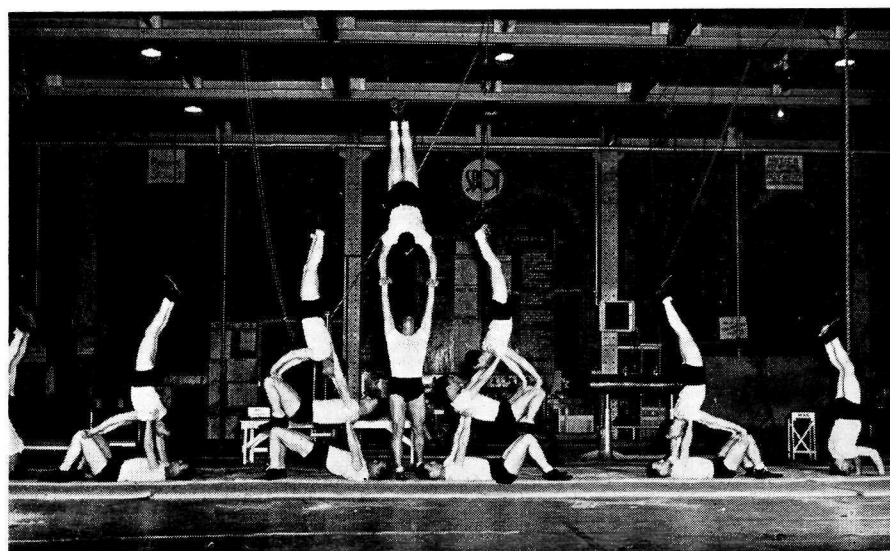


PLATE 642

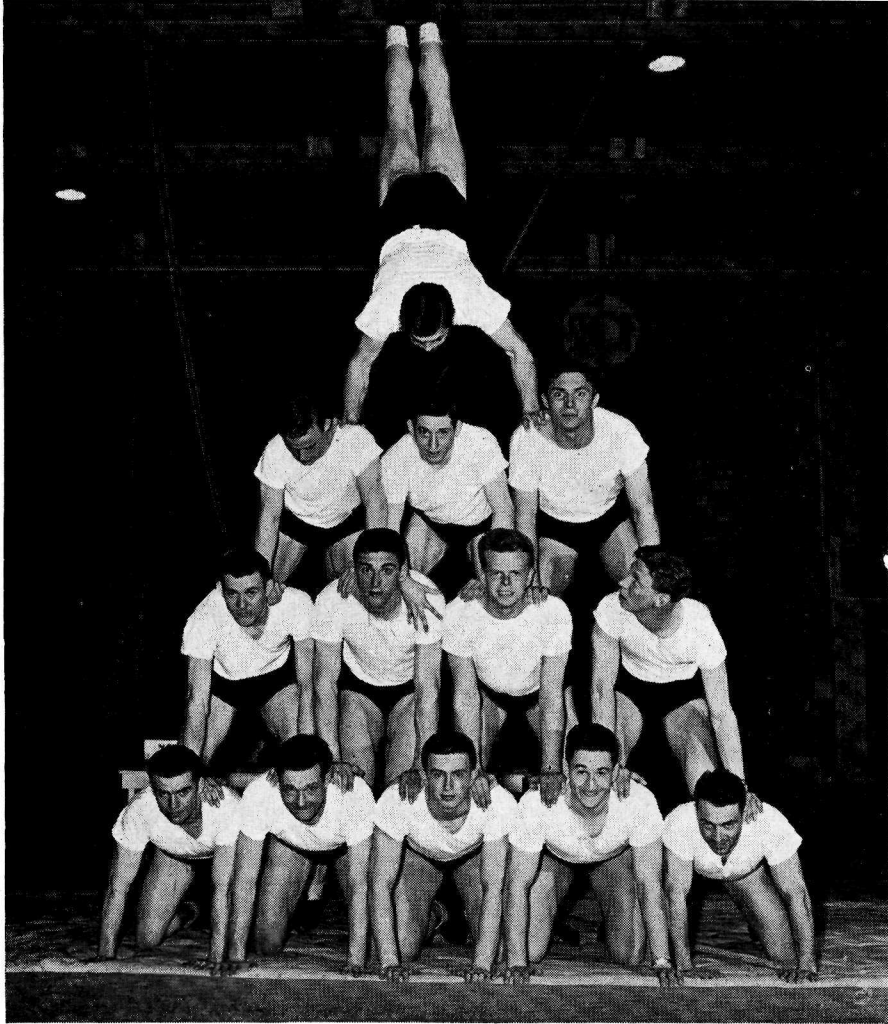


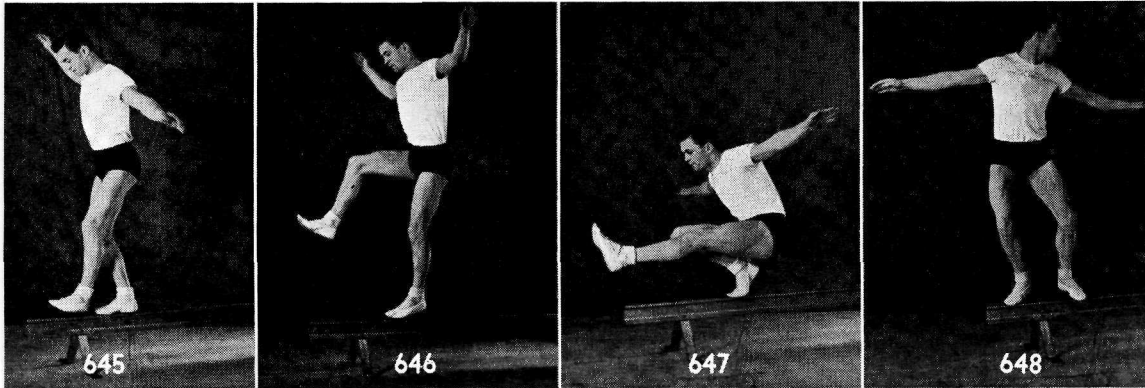
PLATE 643



PLATE 644

BALANCE BEAM

Activities on the Balance Beam provide excellent training in balancing. The following activities* may be done on horizontal beams ranging in height from about eighteen inches to about three feet from the ground. The work may also be done on an inclined balance beam. Balance beams that are three feet from the ground may be used for vaulting.

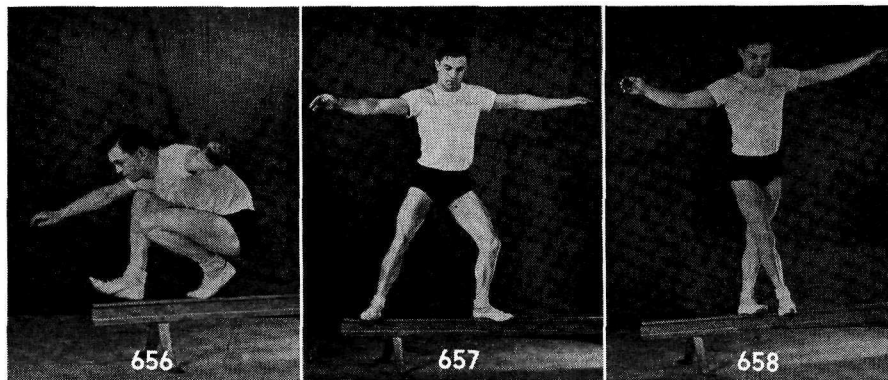
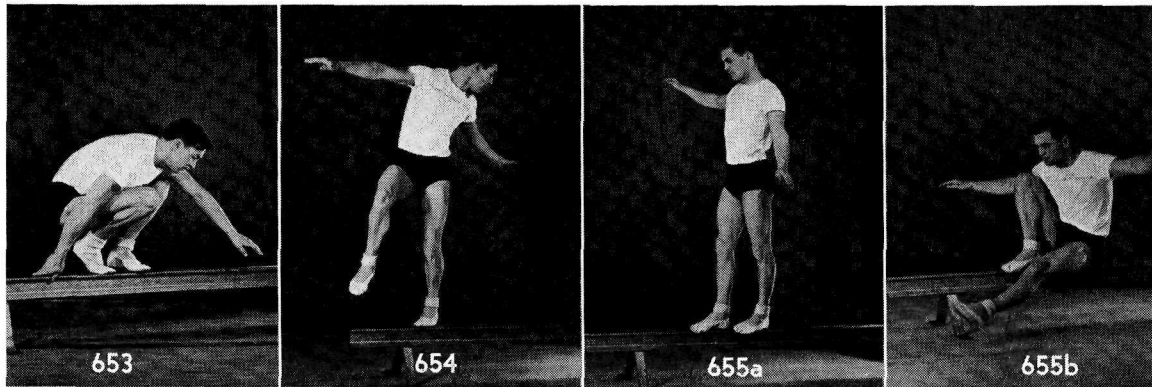
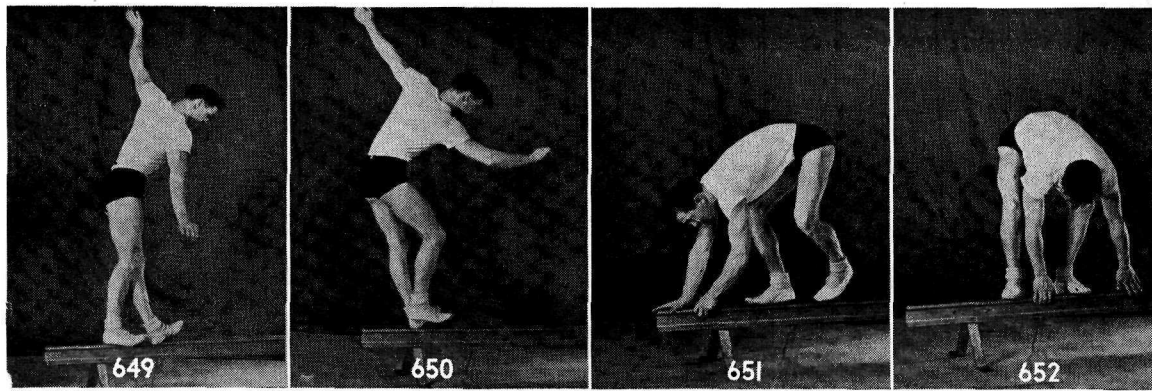


- 645—*Walk Forward and Backward.*—Arm extended sideward to aid in balancing—Take short steps—Flex knees slightly!
Variations.—Run forward and backward.
- 646—*Hop Forward and Backward.*—Arms extended sideward—Bend knee!
Variations.—Hands forward, Hands sideward, Hands upward, Hands behind back, Arms folded, Eyes closed.
- 647—*Squat on One Leg.*—Keep shoulders forward—Arms extended sideward—Keep free leg forward!
- 648—*Turn on Balance Beam.*—Arms extended sideward—Turn on the balls of the feet!
Variations.—Hands forward, Hands sideward, Hands upward, Hands behind back, Arms folded.

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- 649—*Walk Forward on Heels.*
- 650—*Walk Backward on Heels.*
Variations.—Hands forward, Hands sideward, Hands upward, Hands behind back, Arms folded.
- 651—*Cat Walk.*—Forward and backward—Walk on all fours—Take short steps!
- 652—*Cat Walk.*—Sideward—Walk on all fours—Take short steps!
- 653—*Full Turn in Catwalk Position.*—Turn close!
- 654—*Full Turn One Leg.*—Arms extended sideward—Turn on the ball of the foot!
- 655—*Stand, Sit on Beam, Stand.*—(a) From stand lean forward; (b) Squat on one leg before sitting—From sitting lean forward to squat, then stand!

* Other balance beam stunts appear in the syllabus.

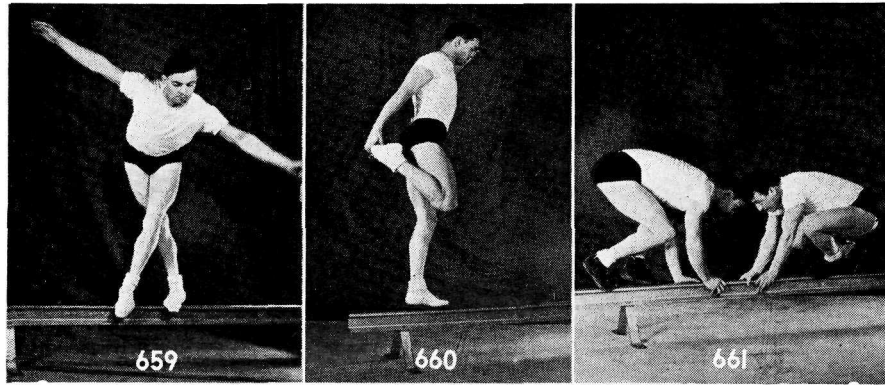


656—*Duck Walk*.—Walk in full squat position!

Variations.—Hands forward, Hands sideward, Hands upward, Hands behind back, Arms folded.

657—*Travel Sideward Sliding Feet*.—Slide foot—Don't step over foot!

658—*Travel Sideward Stepping Over Front of Foot*.—Take short steps!



- 659—*Travel Sideward Stepping in Back of Foot.*—Take short steps!
 660—*Hop Length of Beam Holding Heel of Free Foot.*—Take short hops—Hop on ball of foot!
 661—*Head Wrestling.*—Tight grip on rail—Push with feet and head!

Suggestions for Advanced Balance Beam

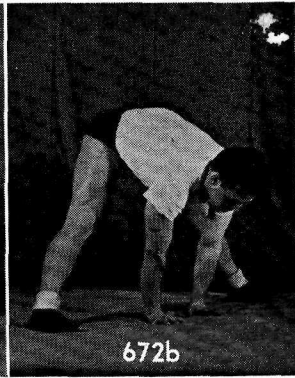
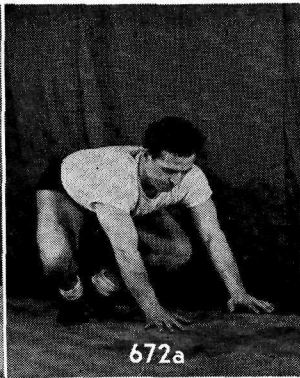
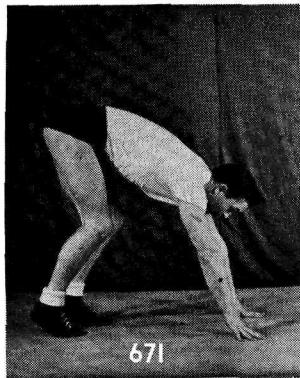
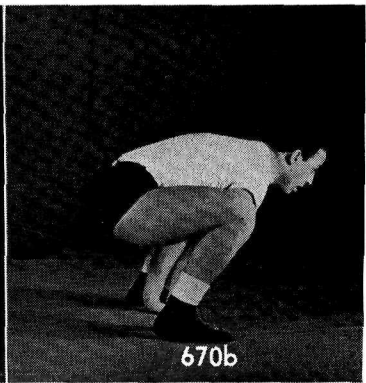
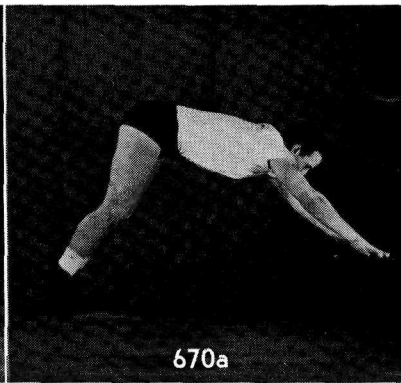
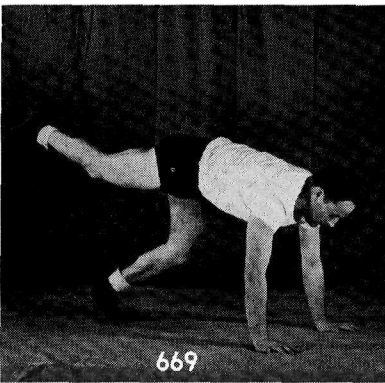
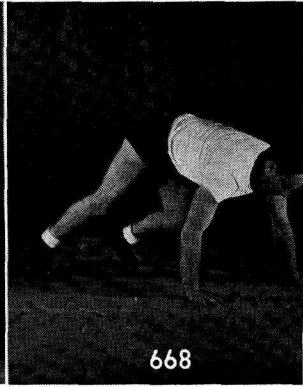
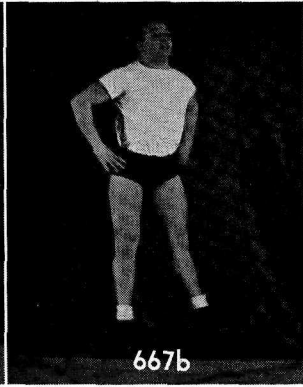
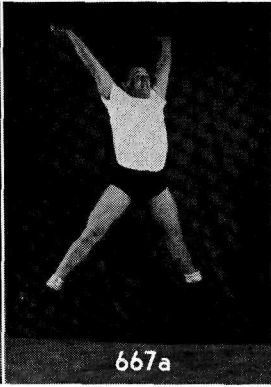
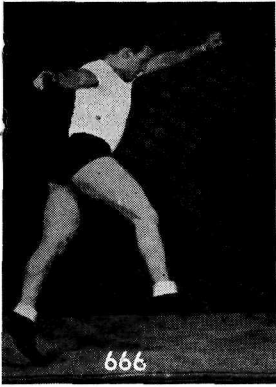
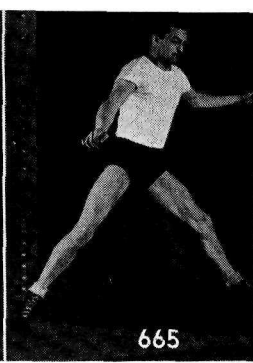
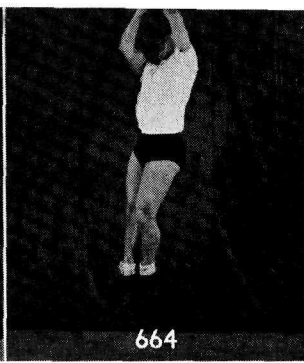
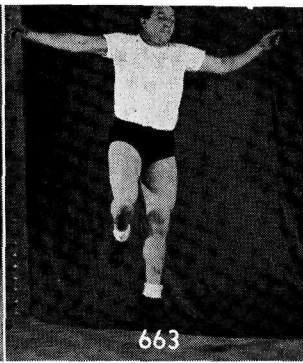
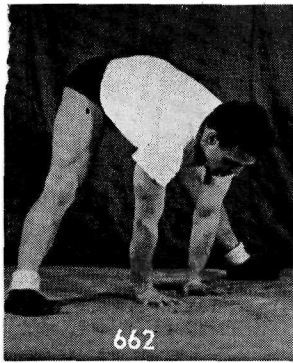
From side stand, half cartwheel to handbalance—Forward roll to seat, forward roll to dismount—Cartwheel—Handbalance Dismounts (Straddle, Squat and Stoop)—Single rear vaults from cross straddle seat—Horizontal single kneestand swan (with and without hands—Walking on hands.

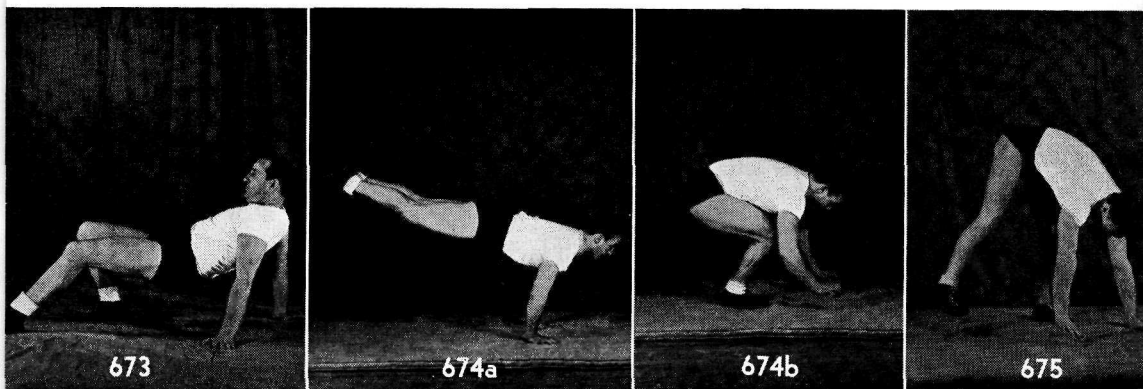
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JUMPS

Various forms of jumps may be used to advantage for the purpose of conditioning and a preparation for elementary tumbling and balancing. The variety of such jumps is wide, and some suggestions are shown in the plates below:

- 662—*Straddle, Forward and Backward.*
 663—*Hopping, Left and Right Foot.*
 664—*Jumping—Half and Full Pirouettes.*
 665—*Running Length of Mat* using left foot to left side and right foot to right side.
 666—*Running Length of Mat* using left foot to right side, and right foot to left side.
 667—*Straddle Forward and Backward with Hand Clapping.*—(a) Feet apart, hands sideward; (b) Feet together, hands on hips!
 668—*Running on All Fours, Forward and Backward (Left and Right).*
 669—*Lame Dog, Running on Hands and One Foot (Right and Left).*
 670a and b—*Frog Jump.*
 671—*Rabbit Hop.*
 672—*Squirrel Jump, Hands In, Feet Out (Alternate).*—(a) Feet together; (b) Feet apart!





673—*Front and Back Crab.*

674—*Kangaroo Jump.*—(a) Spring to legs in fully extended position; (b) Return to a squat position!

675—*Elephant Walk.*—Arms and legs straight!

676—*Seal Crawl.*—Fingers pointed backward—Drag insteps along mat—Swing from the hips!

677a—*Duck Waddle.*—Heels up!

677b—*Variation.*—Heels down!

Frog Jumps and Forward Rolls.—Work in rhythm!

Squirrel Jumps and Forward Rolls.—Work in rhythm!

678—*Alligator Walk.*—Work from elbows at first!

679—*Crocodile Walk.*

680—*Gorilla Hop.*—Land on hands and feet together!

In organizing relays, use any of the above mentioned stunts.

TUMBLING

SINGLES

Rolls

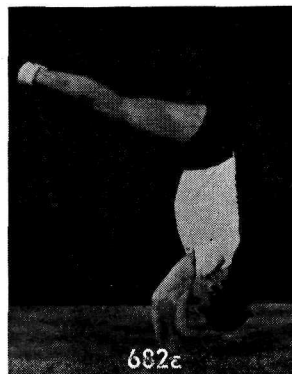
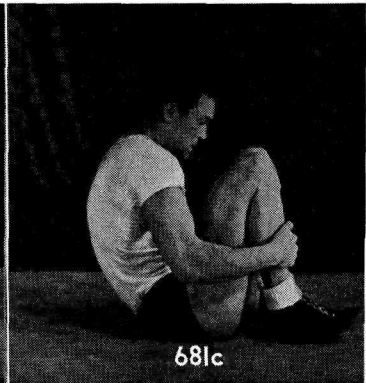
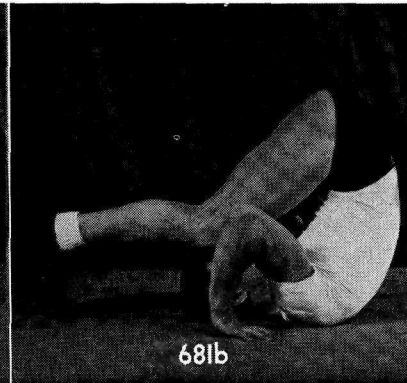
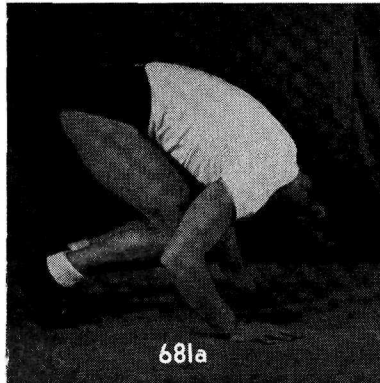
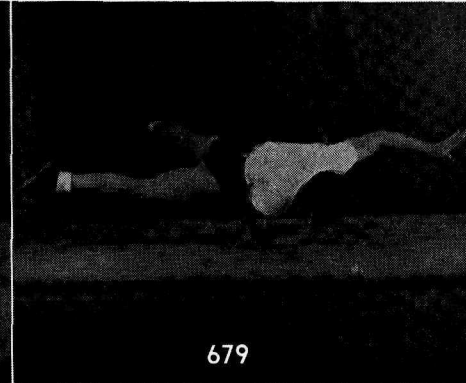
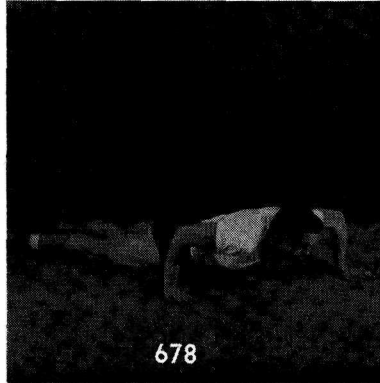
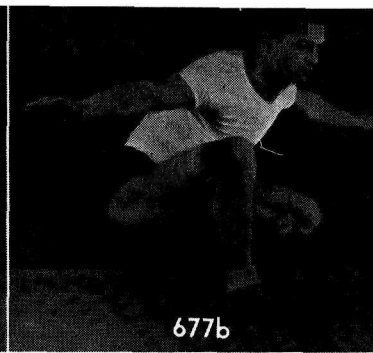
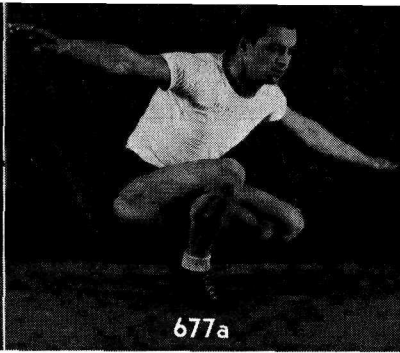
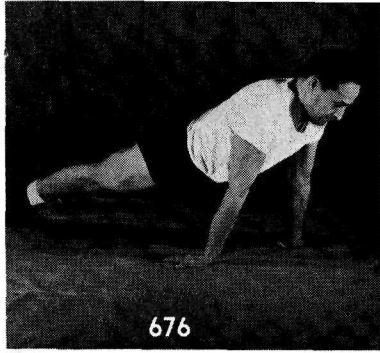
Forward Roll

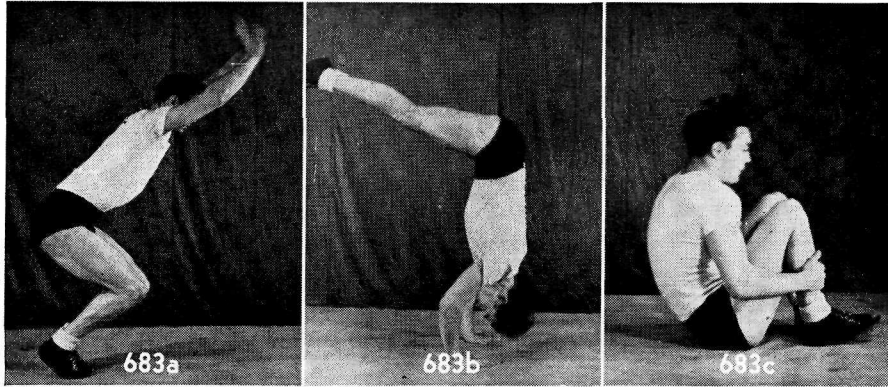
681—*From Squat Stand Position.*—(a) Knees between arms—Chin on chest—Hands flat on mats in front of feet—Straighten knees and raise hips putting body weight on toes; (b) Push off balls of feet—Lower nape of neck to mat—Start the roll at the back of neck; (c) Grab shins and pull into a tight tuck after start of roll—Finish roll in standing position!

SAFETY HINT.—Keep pushing with the hands until the nape of the neck touches the mat!

From Stand.—Lean slightly forward before rolling—Body is arched before ducking into roll! Execute roll in correct form.

682—*From Run.*—(a) Take off both feet—Lean forward before rolling; (b) Land with arms straight—Push with arms until nape of neck touches mat! Execute roll in correct form.



Dive and Forward Roll

683—*From a Stand.*—(a) Push off both feet—Extend arms—Lift hips high—Keep head up until hands land on mat—The body is not parallel to deck; there is a slight arch in body; (b) Flex arms slowly—Break at waist when forward impetus has been spent—Start roll at back of neck—Weight is supported by hands first, then bend elbows; (c) Grab tight tuck after start of roll!

From a Run.—Bounce off both feet! Execute dive in correct form.

SAFETY HINTS.—Keep head up in air—Do not tuck too soon—Do not relax arms, keep pushing until nape of neck touches deck!

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684a—Place hands on performer's waist to get height!

684b—Gradually set the performer on to nape of neck!

Dive Variations.—Consecutive Dives, Over Standing Bent, Over Inverted Balance Straddle, Over Squash Pyramid, Stride Jump and Roll-Shuttle, Over Low Roll in Opposite Directions, Over Cross Low Dive, Through Hoop, Between Cross Bars, Over Cross Bars, Swan Dive.

Backward Roll

685—*From a Squat Position.*—(a) Knees between arms—Chin on chest—Lean forward slightly before rolling—Keep leaning forward—When off balance lean forward—Reach back with buttocks to get momentum; (b) Push off hard with hands—Start roll from feet to buttocks, etc.; (c) Place hands above shoulders at side of head, thumbs next to ears—Push hard while rolling on top of head—Roll over to feet *not* knees!

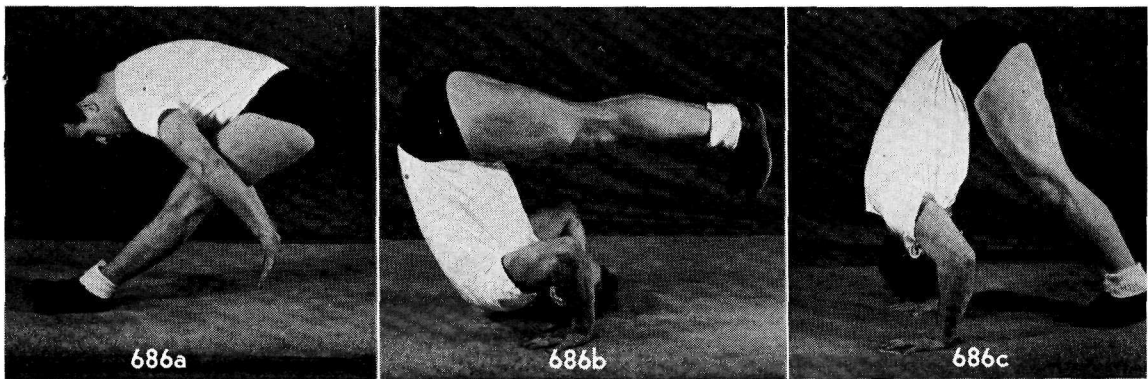
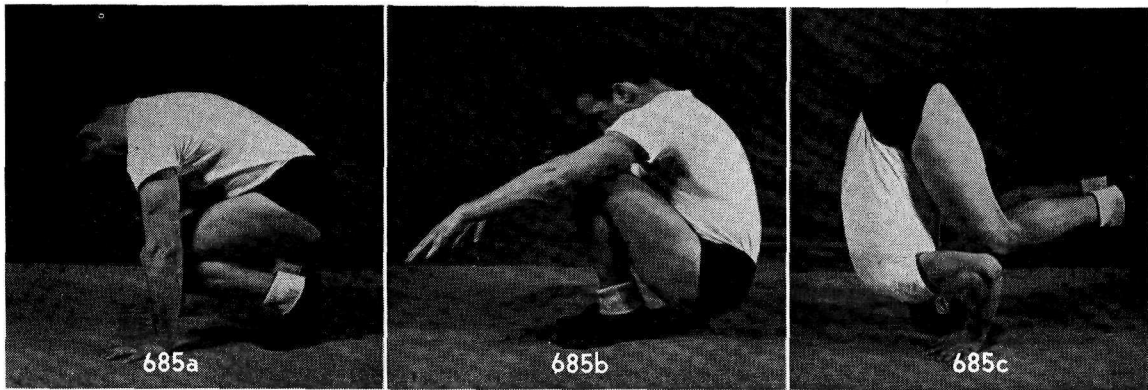
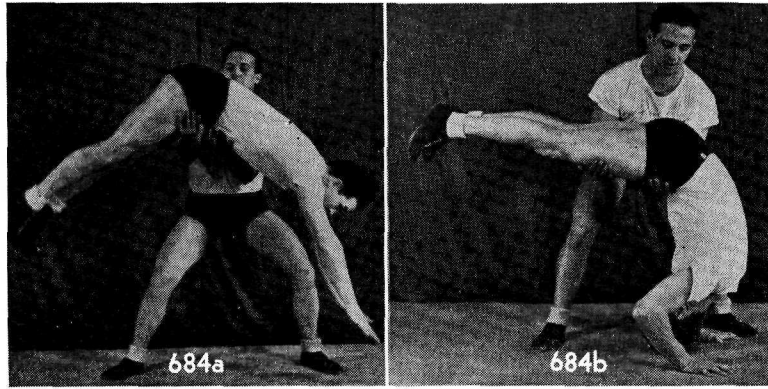
SAFETY HINTS.—Keep leaning forward—Don't throw the head backward—Use a partner to assist!

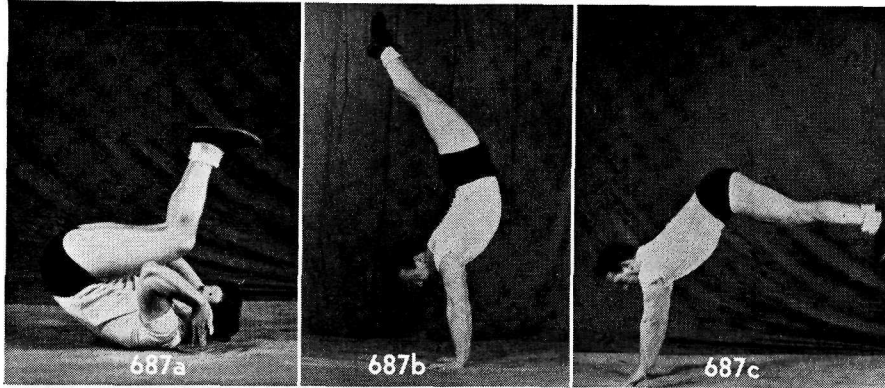
From a Stand, Then Squat.

686—*From Stand Roll in Kip Position (Jackknife Roll).*—(a) Lean slightly forward before sitting down—Place hands on mat, fingers pointed outward; (b) Lift the feet upward when buttocks hit mat; (c) Push hard with hands and lift the head!

Variations.—To front support, To momentary hand balance and snap down, To head balance.

Series of rolls and walk straight line.



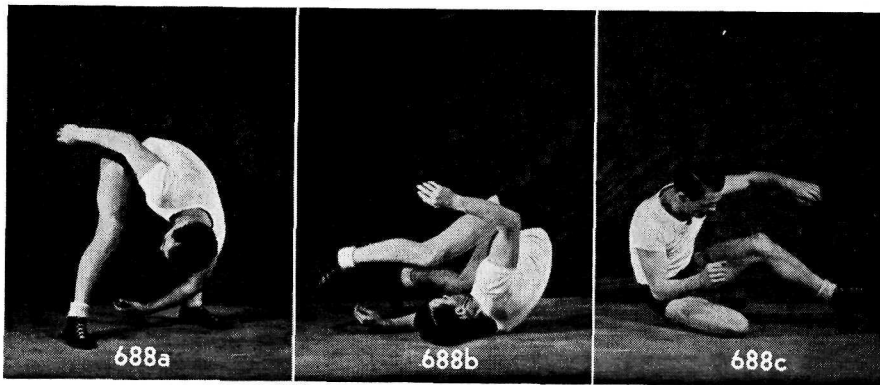
Back Extension (Momentary Hand Balance and Snap Down)

687—*From Sitting Position, Legs Bent.*—(a) Lower chin on chest—Bend knees—Grab tight tuck—Place hands up over the shoulder and on deck—When one-half way through roll shoot legs up to the ceiling—Arch the back as soon as hips leave mat; (b) Push hard with hands—Lift head up—Straighten arms—Be sure the hips are past the line of shoulders—Hold momentarily; (c) Bend knees slightly before snapping them down to mat in a downward arc—Push with arms when snapping legs down—Lift with hands and head on snap down!

From Sitting Position, Legs Straight.—Keep legs straight while rolling to the hand balance!

From Standing Position.—Keep legs straight—Lean forward before sitting down—Reach for toes—Place hands on mat at side of legs at first part of stunt!

SAFETY HINTS.—Don't throw head back—Keep leaning forward, when off balance backward!

Shoulder Roll

688—*From a Stand.*—(a) Throw right arm under and between legs; (b) Roll on shoulders not hips—Keep a tuck; (c) Start the roll low!

Variations.—With football, After catching ball, Without arms, Opposite shoulder, After a dive.

From a Run.—With extra speed the roll must be started low!

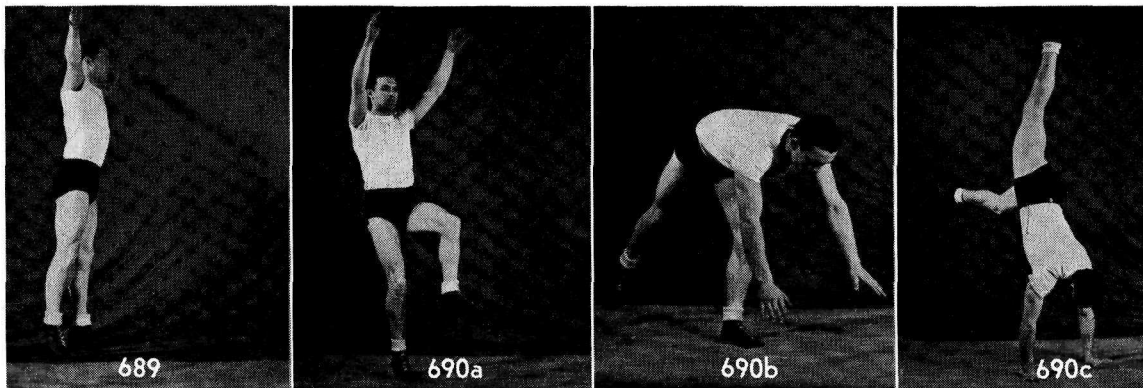
Jump and Rolls—From Platform—Forward, Backward.

Variations.—Leap frog and roll, Vault over horse and roll, Twist jumps and roll, Jump and shoulder roll, Hands on parachute ropes (imaginary).

*Combination of Forward, Shoulder and Backward Rolls.**—One roll jump and directly into another—Stay in tight tuck!

Variations.—Legs crossed, Without hands, Head between legs and outside ankles, Broadjump and rolls, Pirouettes and rolls, Grasp toes, Frog jump and rolls, Repetitions and walk chalk line, Two men or monkey rolls, Springs, Running on all fours and forward rolls consecutively.

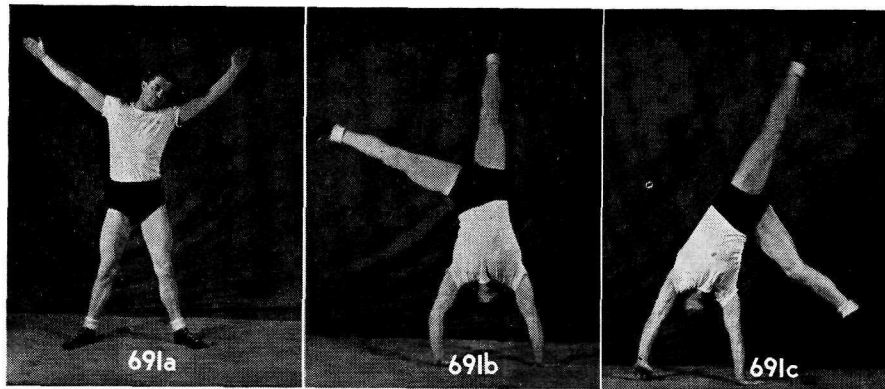
Running Approaches



689—*Two Foot Take Off.*—Jump from one on to both feet for take off!

690—*Skip Step Approach.*—(a) Left leg raised forward, hop on right—Hands above head; (b) Place left foot down—Bring hands down to mat; (c) Hands on mat—Back leg up and ready to kick! Back leg straight!

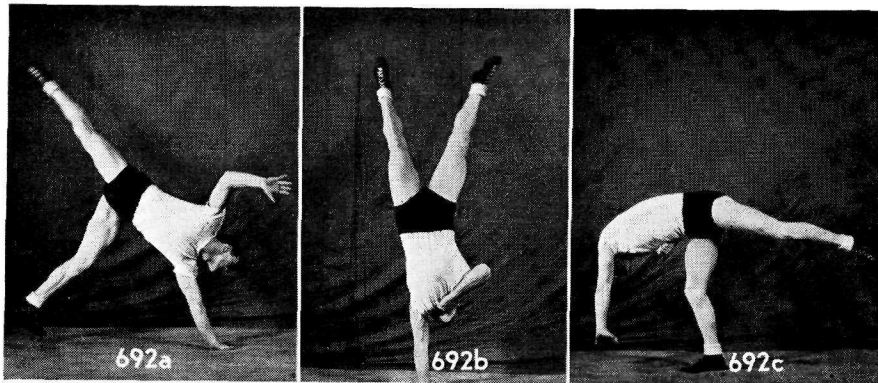
* The record at one of the Pre-Flight Schools for the three rolls is 2.5 seconds. The rolls are started by first leaping off a platform eight feet high. The stop watch is started the instant the performer lands on his feet and stopped the instant his feet touch after the third roll (Backward Roll).

Cartwheel

691—*From a Stand.*—(a) Start with feet apart, hands sideward; (b) Throw arms sideward to mat—Keep hands and feet on same imaginary line down the center of the mat—Hands two to three feet apart—Keep the head up at all times—Keep the body straight—Keep the feet apart, three to four feet; (c) Keep even rhythm!

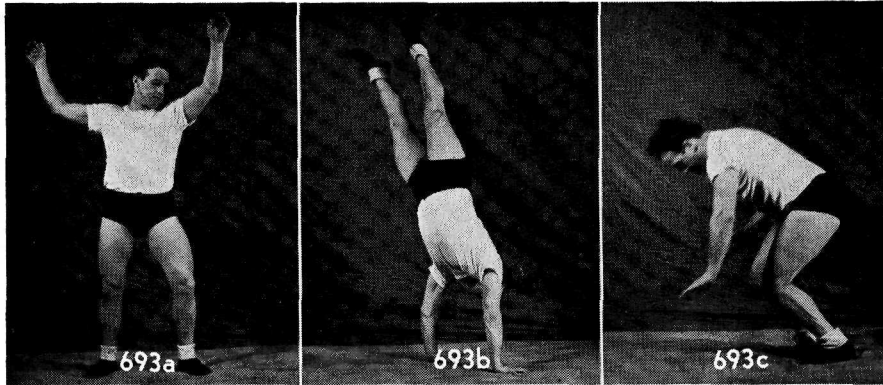
From a Run.—Just before throwing the hands down lift the front foot into the air and skip on the rear foot. Then place the front foot down and whip the rear foot up and around, known as the Skip Step!

Variations.—Foot hit, Series, Bounce, Roundoff.

One Arm Cartwheel

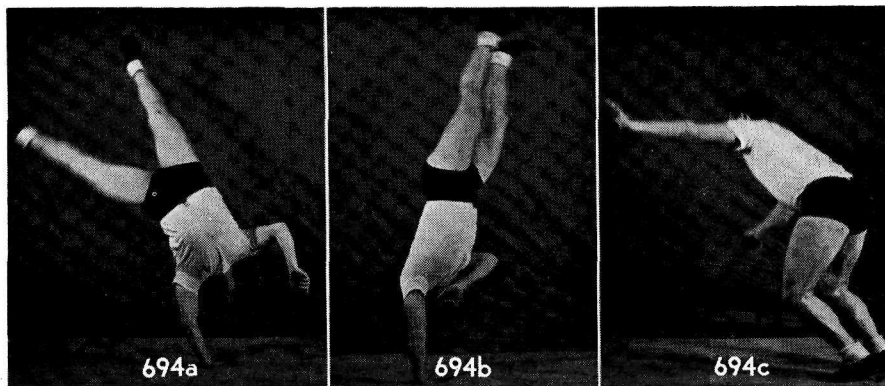
692—*From a Stand.*—(a) Rotate on first arm; (b) Keep arm straight—Throw second arm up to chest; (c) Whip leg around—Keep head up!

From a Run.—Throw first arm downward—Do a skip step before throwing arm—Keep head up!

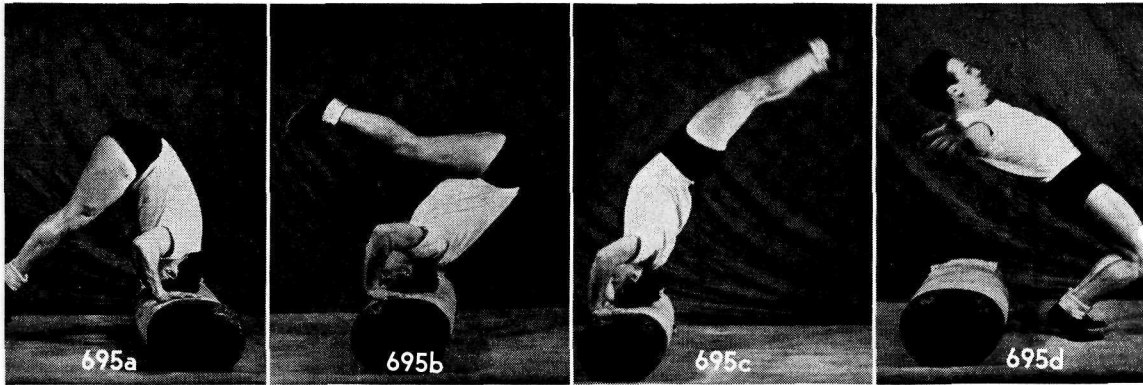
Roundoff

693—*From a Stand.*—(a) Start like a cartwheel; (b) When in hand balance position close both legs together—Twist body one-half turn inward—Whip both feet to the mat together; (c) Bounce off both feet—Keep arms straight—Push off fingers—If turning to right, head forward and left hand over right and facing in opposite direction—Head up!

From a Run.—Do a skip step before the roundoff—Turn the last hand to touch the mat, slightly forward!

One Arm Roundoff

694—*From a Stand—From a Run.*—(a) Place the inside arm down; (b) Keep this arm straight—Throw outside arm up to chest; (c) Whip both feet to the mat!

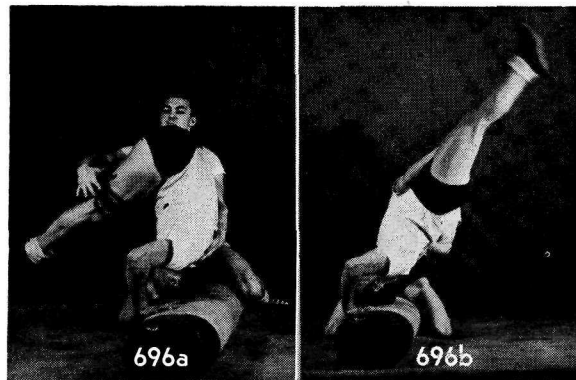
Headspring, Two Foot Take Off From Roll

695—*From a Stand.*—(a) Place head and hands on rolled mat—Keep legs straight—Keep legs low—Lean forward into head balance, toes just clear of the mats; (b) Get hips past the line of head and shoulders; (c) Then whip legs up, over, and down; (d) Keep legs straight—Push hard with hands—Bring head forward after landing on feet!

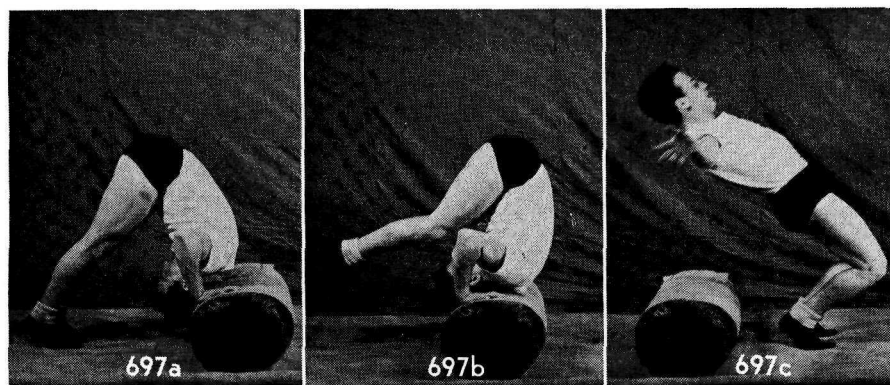
From a Run.—Bounce hard from both feet!

From Level, No Rolled Mats.—Same as on rolled mat with extra whip of legs and push of hands—Wait till hips are off balance!

Variations.—Layout landing (arched body), From head balance (drop legs), Running approach two foot take off, Series of headsprings.

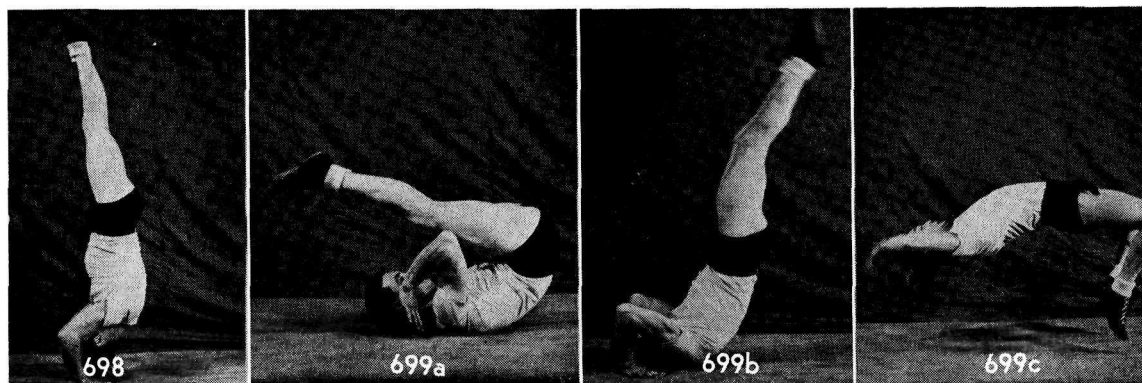


696—*Spotting for Headspring.*—(a) Place one arm behind the shoulders and grasp the legs with the other. One very important point to remember is to hold the performer's legs down so that they do not get higher than parallel to the mats before his hips are off balance; (b) When the hips are past the shoulders, shift your hands from on top of the legs to underneath the thighs and help whip the legs around. At the same time push on the shoulders with other arm!

Neckspring (Shoulder Spring), Roll

697—*From a Stand.*—(a) Chin on chest—Arms flexed—Legs straight—Spring from back of neck; (b) Get hips past the shoulders before whipping the legs; (c) Push with hands!

From a Run.—Take off both feet—Start first part of spring slow!

*Neckspring (or Shoulder Spring), Without Rolled Mat*

699—(a) Hands on the mat—Duck head and touch nape of neck to mat; (b) Snap feet out and downward—Push with hands; (c) Raise hips upward!

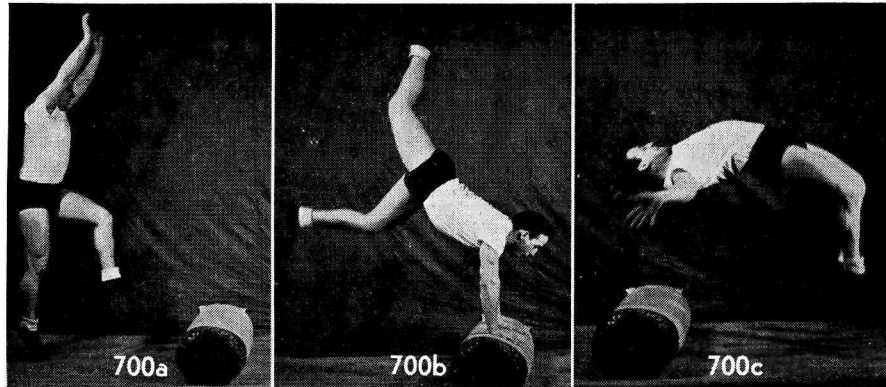
From a Stand and Run.—(Same as on a rolled mat)

698—*From Hand Balance.*—Flex arms slowly—Tuck head under.

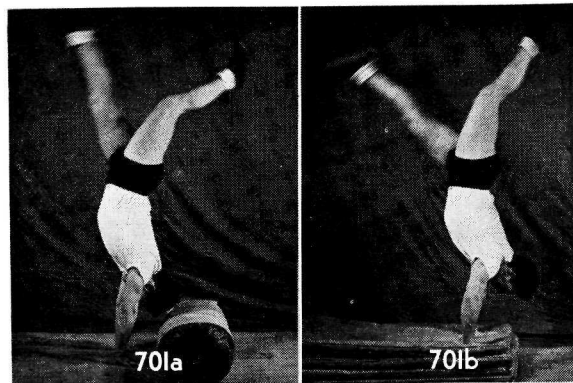
699—(a) Bring legs back toward the mat—Legs straight; (b) When body is in neckspring position then whip legs; (c) Push hard with hands and arch back!

699—*Snap Up (Kip Up).*—(a) Lie on back and bring feet to mat over head; (b) Arch back vigorously; (c) Push as hard as possible with hands—Get height before bringing feet to mat!

Variations.—Teach with mat on springboard, Layout body, Stand on hands, No hands, Hands folded.

Handspring

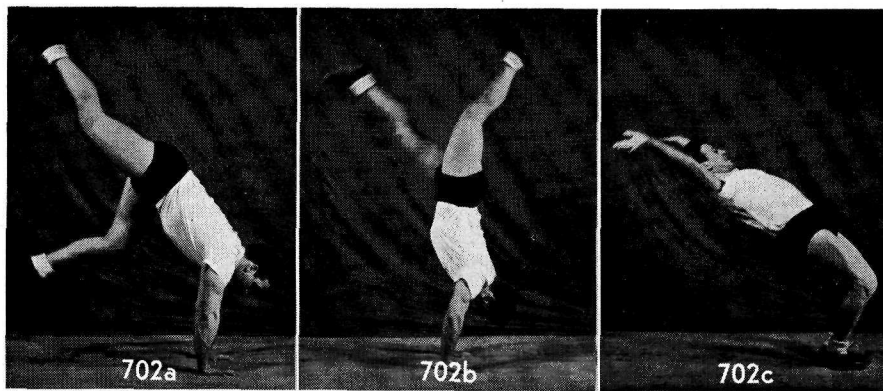
700—*From a Roll.*—(a) Skip step before throwing hands down—Just before starting the skip bring arms above the head; (b) At the finish of the skip step throw arms downward; (c) Whip skip foot over head—Keep it straight—Place hands on top of rolled mats—Keep arms straight—Keep head up until hands leave mat—Then whip it forward!



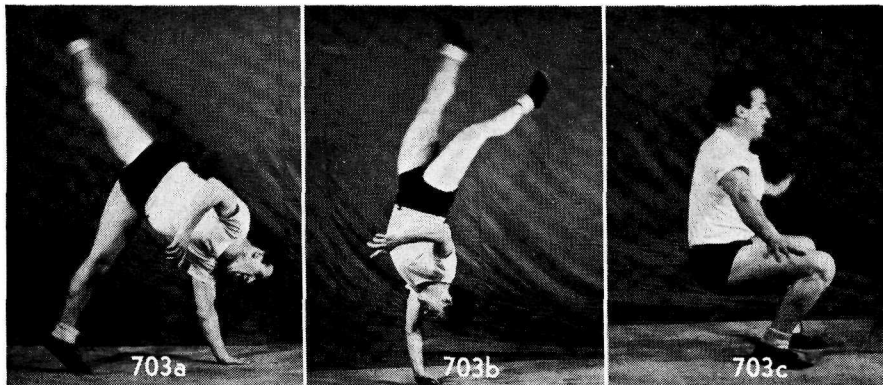
701a—*Hands in Front of Roll.*—Same as above except need more whip and throw. The rolled mat aids as an added protection for if the performer does not make the handspring he may fall back onto the rolled mat.

701b—*Off Several Layers of Mats to a Lower Level.*

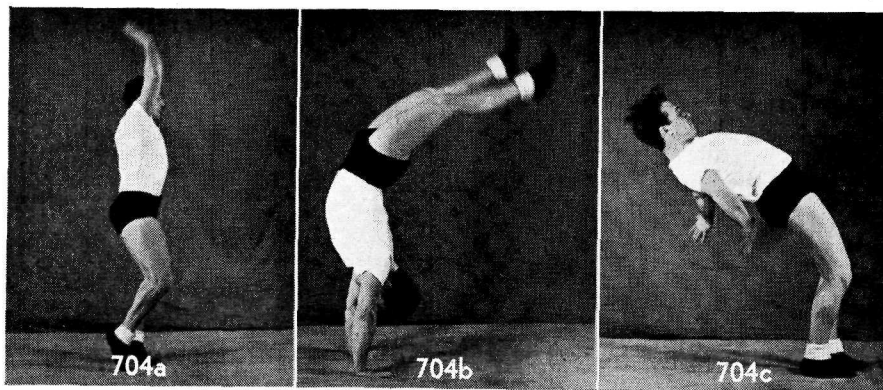
SAFETY HINTS.—Spotting—Aid the performer by pushing under the shoulders with one arm and grasping the near arm of the performer with the other arm. This protects the spotter from receiving a blow in the face and aids the performer in accomplishing the stunt!



702—*On Level*.—(a) Arms straight—Shoulders ahead of hands—Head up; (b) Back leg straight—Whip the back leg; (c) Push with the hands!
Variations.—Layout landing, Walkout landing on one foot, Two foot take off.

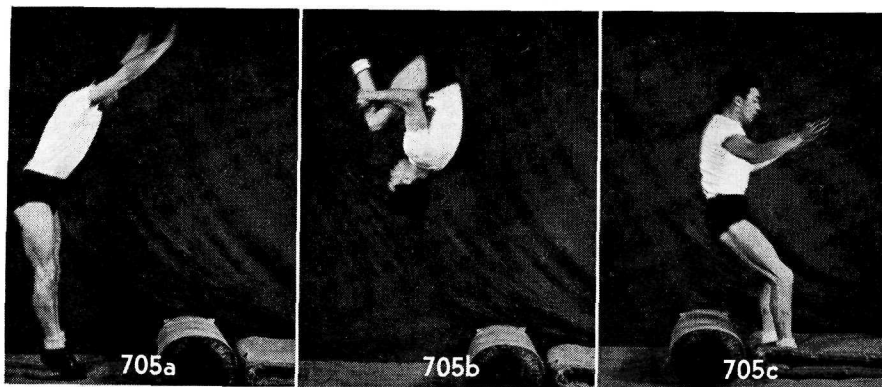


703—*One Arm Handspring*.—(a) Use the arm corresponding to the take off leg—If the right leg is in front place the right arm—If the left leg is in front place the left arm—Shift the weight over the one arm; (b) Throw the other arm up to the chest; (c) Need extra whip of back leg and throw of arm—Keep supporting arm straight!
Variation.—Arabian or Leaping Handspring.



704—(a) Take off both feet—Bounce off feet—Before take off throw hands above the head; (b) With bounce, whip arms to mat—Throw feet to the other side of the perpendicular before touching hands—Should bounce just high enough so arms land straight—Not *too* high—Not *too* low—Keep arms straight; (c) Hold arch!

Variations.—Start from running headspring off rolled mats, Next on rolled mats—do not touch head, Next in front of rolled mats, Next on level.

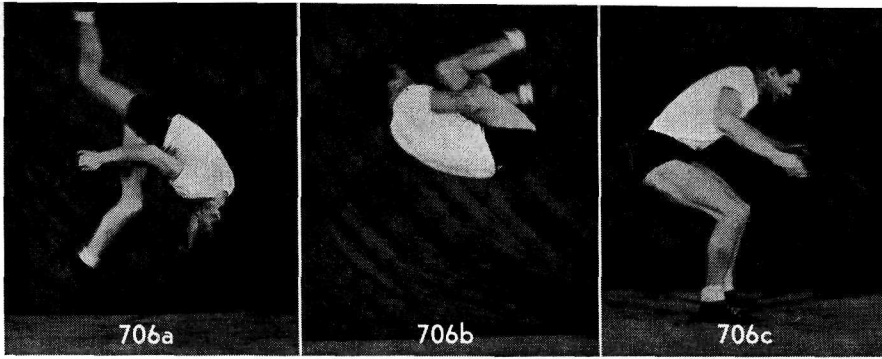


Front Somersault

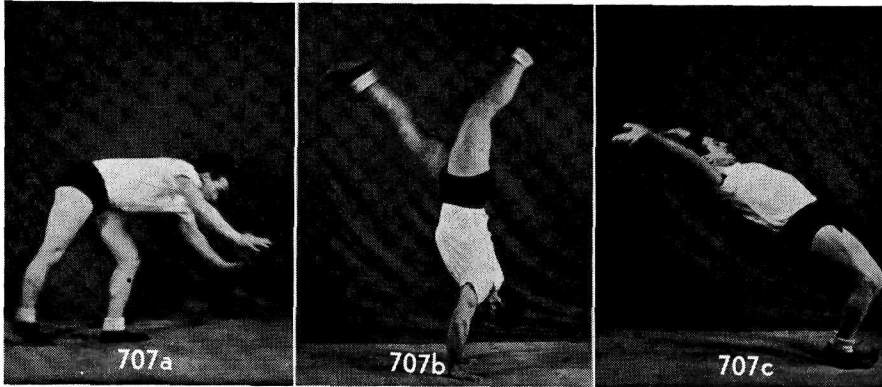
705—Over Roll and Onto Double Thickness of Mats.—(a) Don't touch hands on mat—Tuck head under—Arms up and forward before take off—Bounce off both feet on take off—Legs very slightly bent; (b) Grab tight tuck; (c) Land well forward—Legs slightly bent!

Teaching Procedure.—Tuck and spring together should be learned before the lift and tuck somersault.

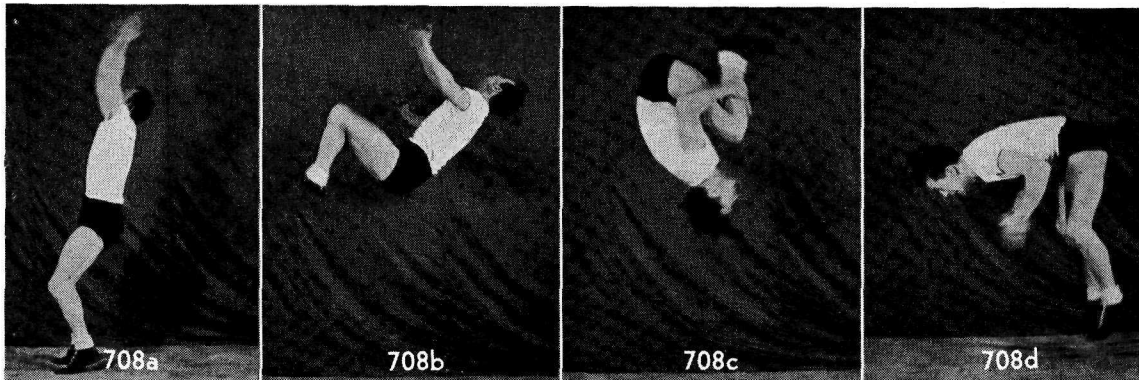
SAFETY HINT.—Sit on the rolls to spot!



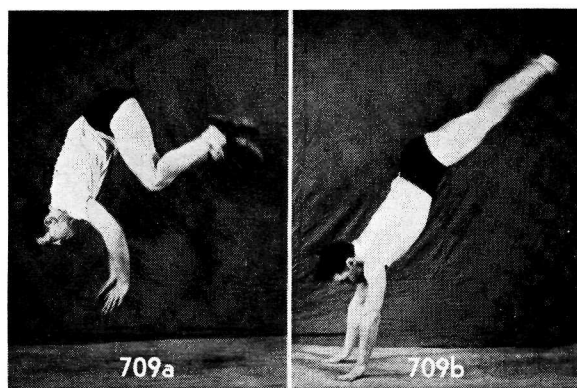
706—*Kickover*.—(a) Start low, flex right leg—Whip left leg well back; (b) Whip left leg up and over—Push off hard with right leg—Grab under thigh of right leg; (c) Land well forward!
Variation.—Land on one foot, Arch back.



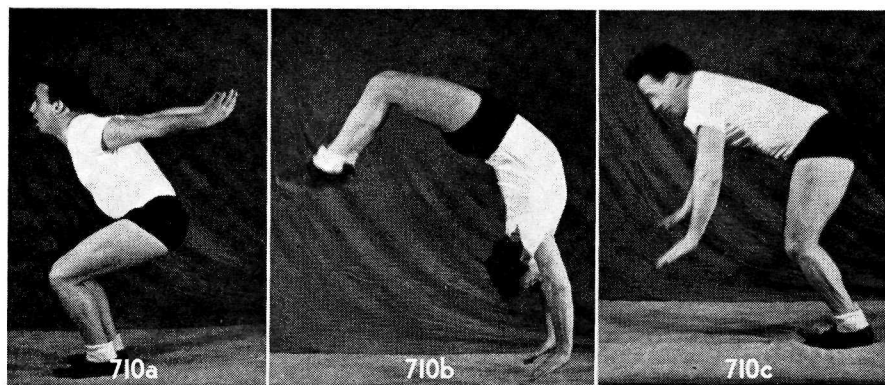
707—*Front Handspring, from Somersault*.—(a) Pull tight tuck; (b) Drop on one foot; (c) Hands up ready to swing forward!



708—*Back Somersault with Tuck*.—(a) Done very fast—Swing arms upward; (b) Spring from legs when head is back; (c) Bring knees up to chest and grab tuck with arms; (d) Land on balls of feet, head up—Keep eyes open!



709—*Bucking Broncho (Mule Kicks)*.—(a) Try to place hands where feet were—Spring and lift feet; (b) Push off hands—Lift head—Try to place feet where hands were—Continue in rhythm!

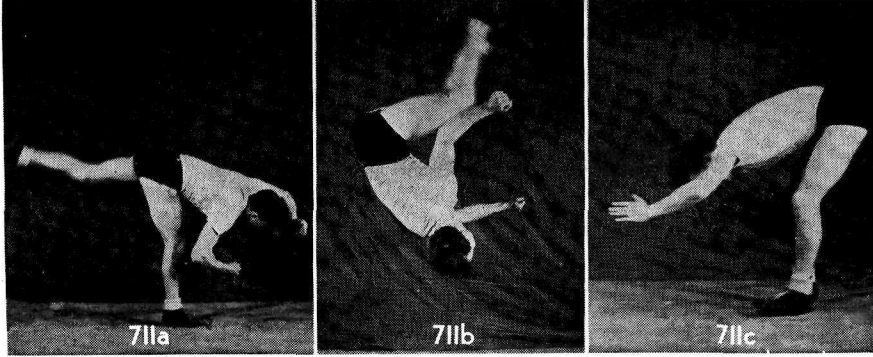


710—*Back Handspring or Flip Flop*.—(a) Sit—Hands back—Back erect; (b) Keep heels on floor; (c) Lose balance—Whip hands and head backward—Slide feet along mat—Land on hands!

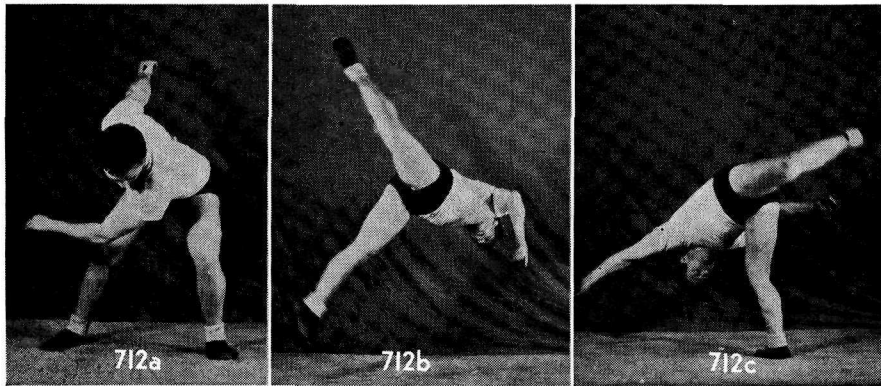
Roundoff, Backhandspring or Flip Flop

Two Back Handsprings.—Bring feet down at an angle after each back handspring—Throw arms hard from shoulders!

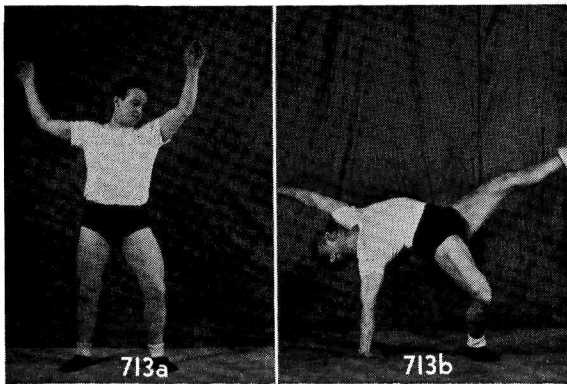
Back Handspring—Back Flip.—Feet down at an angle after the handspring—Feet back getting ready for somersault—Throw arms for handspring—Spring for somersault!



711—*Brandy or Baroni, or Beroni*.—(a) Take off one foot as in roundoff; (b) Tuck arms in chest as back leg is kicked forcefully over head; (c) Keep head and arm off mat landing on feet!



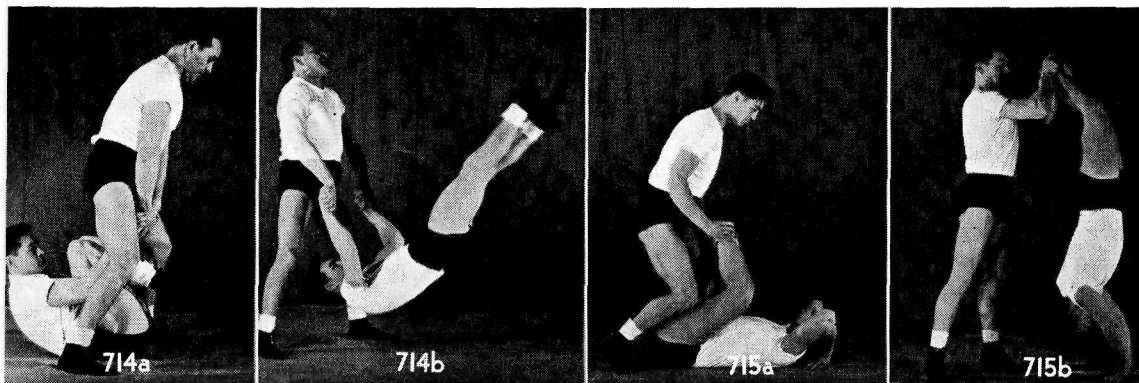
712—*Butterfly*.—(a) Take off from one foot; (b) Shoulders low and feet high; (c) Land on the opposite foot!



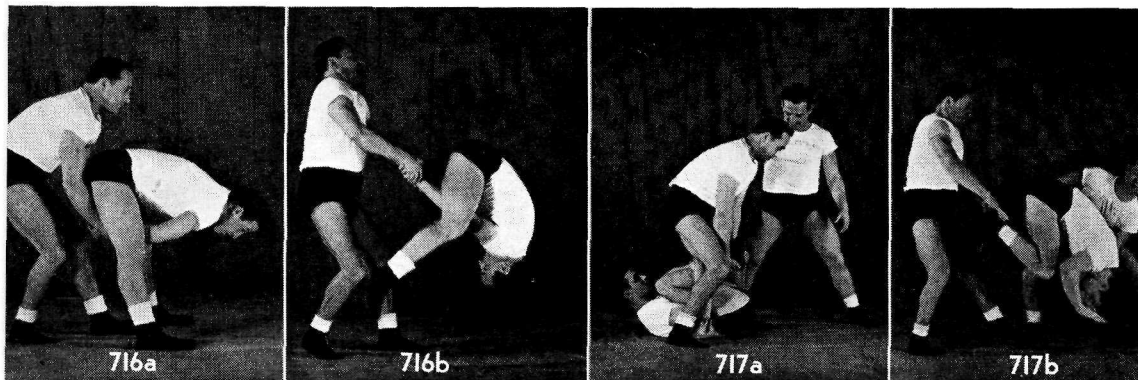
713—*Tinsica*.—(a) Perform like the cartwheel with quarter turn outward; (b) Push hard with hand!

Suggestions for More Advanced Stunts in Tumbling

Back handspring, back flip with one-half twist—Backward flip with full twist—Alternate back flips with back handsprings—Alternate back flip with full twist with back handspring—Continuous row of back flips (swing backs)—Back flip with one and one-half twist, from back handspring—Back flip with double twist from a back handspring—Roundoff.

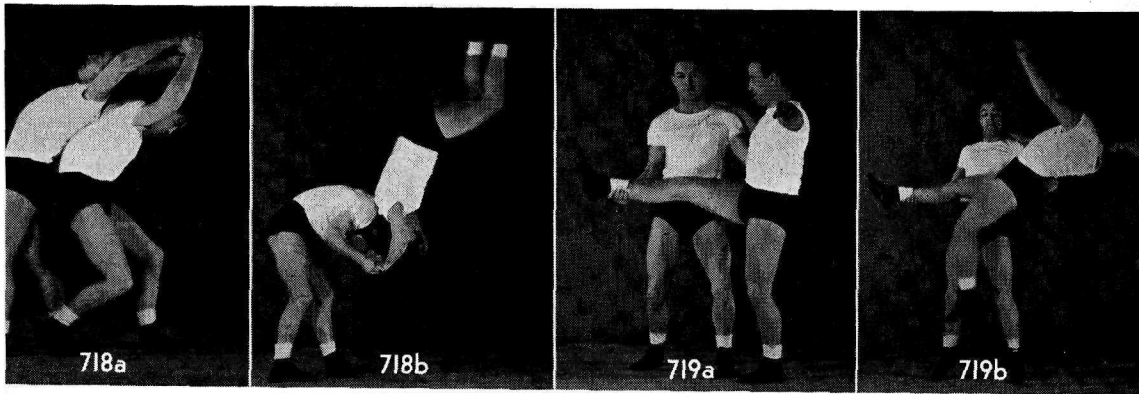
DOUBLES*

714—*Cannon Ball*.—(a) Tuck position under partner—Arms slightly bent; (b) Shoot out high—Pull with partner—Leg grasp in landing!
715—*Snap Over*.—(a) Flyer on back—Thrower grasps ankles; (b) Thrower lifts feet—Flyer pushes off hands—Snap down!



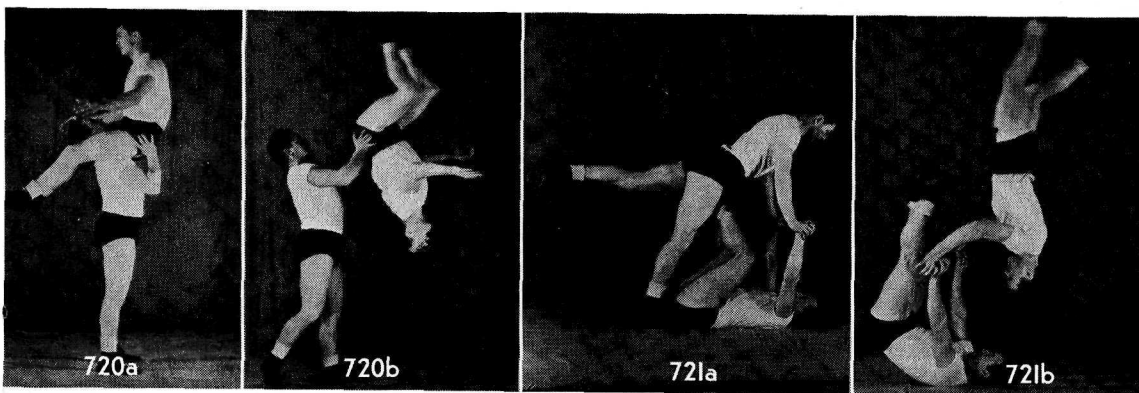
716—*Pull Around*.—(a) Flyer reaches under legs—Thrower grasps hands; (b) Thrower lifts flyer to turn over—Lands on feet—Lets go grasp!
717—*Swing to Feet*.—(a) Flyer on back, legs in tuck position—Thrower grasps ankles and lifts; (b) Swings flyer forward and onto feet!

* See also Doubles on p. 82, 312, 348.



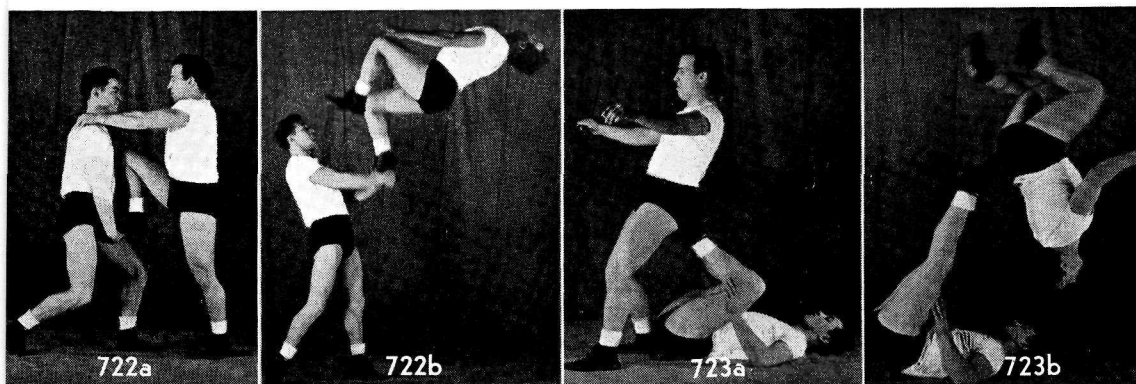
718—*Back to Back Toss.*—(a) Stand back to back—Hands over head and grasps hands locked; (b) One man leans forward and pulls second man over back—Flyer lifts legs while on back of thrower—Thrower straightens up as flyer lands—Turn and alternate positions!

719—*Side Leg Pitch.*—(a) Flyer places leg in thrower's hands—Also places hand on shoulder; (b) Thrower raises leg forcefully—Flyer throws hands up and back and flips over—Takes off one foot—Lands on both feet!



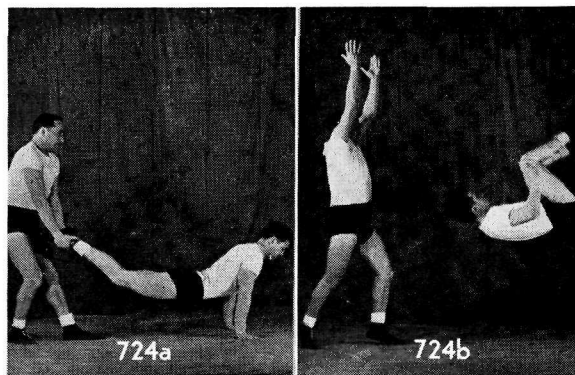
720—*Back Pitch From Shoulders.*—(a) Flyer sits on thrower's shoulders; (b) Flyer leans and arches backward—Thrower lifts hips of flyer—Flyer lands on feet!

721—*Handspring Swan Pitch.*—(a) Flyer starts on mat—Flyer rests on thrower's feet—Grasps thrower's hands; (b) Thrower tosses flyer from feet to feet—Handspring over head—Flyer lands on feet!

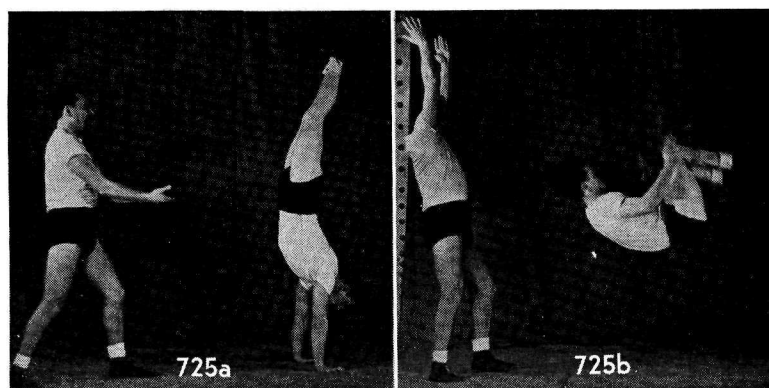


722—*Pitch Back Straight Leg.*—(a) Thrower squats with hands and wrist clasped on thighs—Flyer steps into thrower's hands with hands on shoulders of thrower; (b) Flyer straightens leg and lift hands above head—Head back—Thrower lifts flyer above head—Flyer grabs tuck and lands on feet!

723—*Back Pitch From Feet.*—(a) Thrower on back—Flyer sits on thrower's feet; (b) Flyer arches back, head back, leaning backward—Thrower flexes knees and quickly tosses flyer over head onto feet—Flyer lifts arms upward in landing!

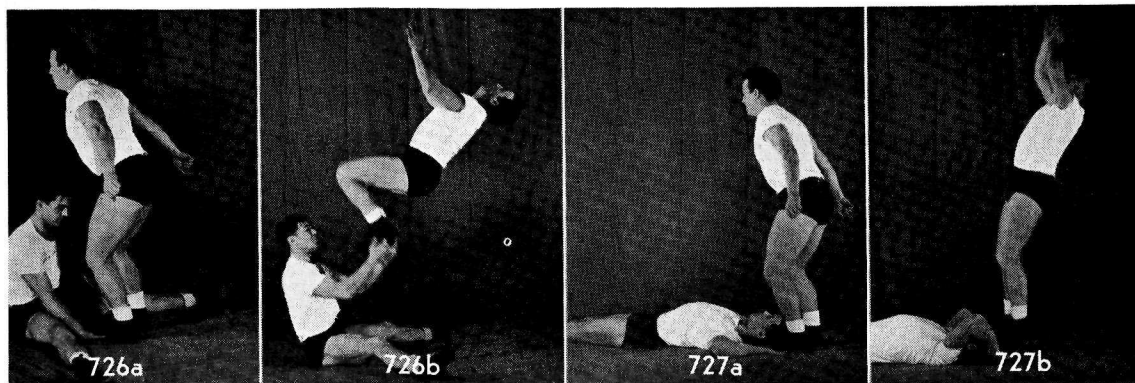


724—*Front Wheelbarrow Pitch.*—(a) Flyer in prone position—Thrower grasps ankles—After timing thrower lifts forcefully up and out; (b) Flyer pushes off hands—Grabs tuck—Flyer lands on feet!



725—*Front Wheelbarrow Pitch From Hand Balance.*

- (a) Flyer in hand balance leans forward as feet fall into thrower's hands;
 (b) Follow through!



726—*Back Flip Pitch From Hands, Thrower Sitting.*—(a) Thrower sits with hands on deck—Flyer stands on palms of thrower—Flyer dips for back flip; (b) Thrower lifts as flyer throws for back flip!

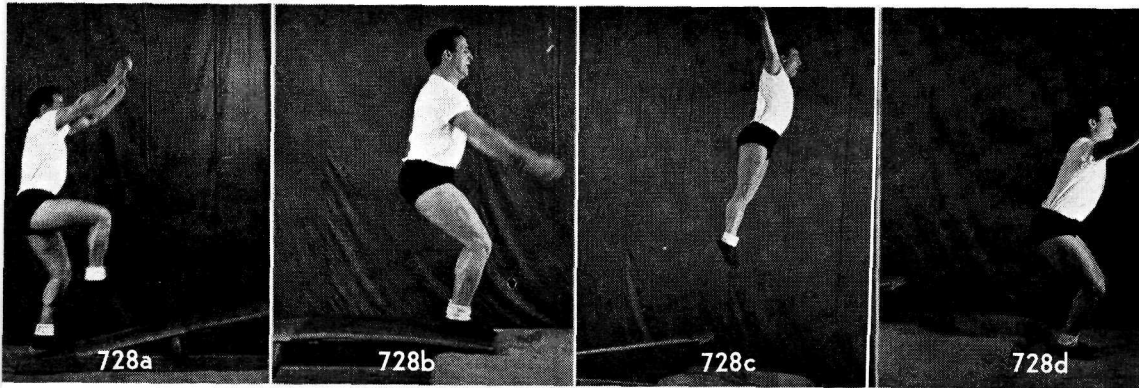
727—*Back Flip Pitch From Hands, Thrower Supine.*—(a) Hands behind head on mat—Flyer stands on hands—Thrower on back; (b) Thrower lifts as flyer goes for back flip—Lands on feet!

Suggestions for Advanced Doubles Tumbling

Front pitch one leg—Back flip off shoulders—Double butterflies—Leg pitch backwards—Front pitch from holdout positions on knees—Various pitches with twists.

SPRINGBOARD*

The springboard must have adequate safeguards before it is used to avoid slipping. It should be placed on mats, and have a roll or mat placed on the legs. A double thickness of mats should be provided for landing.

Progressive Springboard Stunts

728—*Straight Bouncing*.—(a) Take off on one foot from the mat to the board landing on both feet on the end of the board; (b) Legs flexed slightly while arms are back; (c) Take spring with rigid legs as arms swing forward and upward; (d) Land on the balls of the feet!

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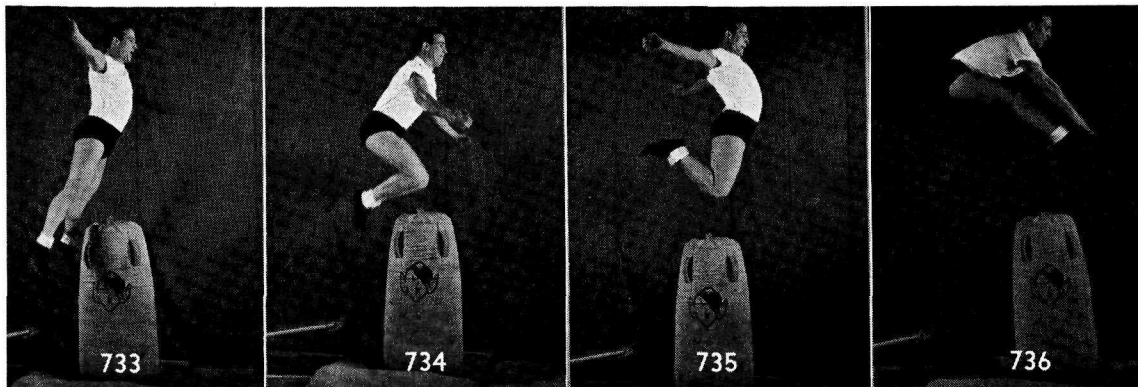
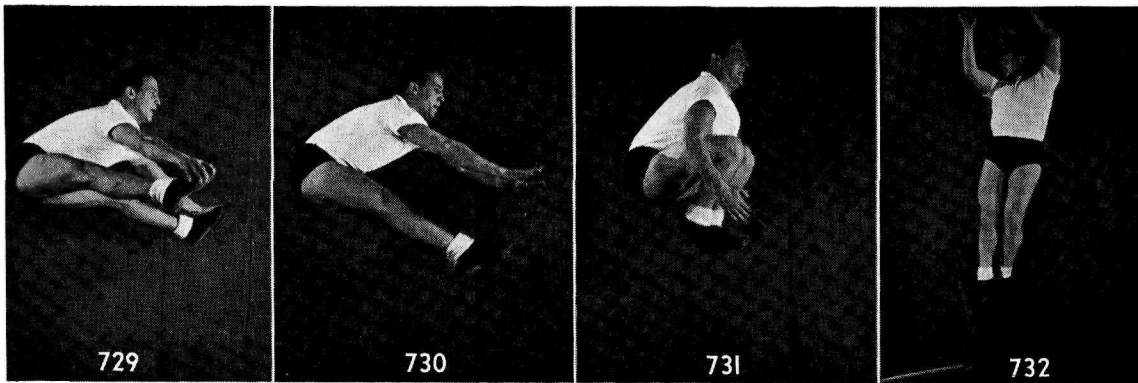
729—*Bouncing and Straddle Touch*.—After the spring reach for your feet in a straddle sitting position—Bring the feet up to the hands—Keep the legs straight—Keep the head up!

730—*Jackknife Touch*.—After the spring bring feet to hands—Keep legs together and straight—Keep the head up!

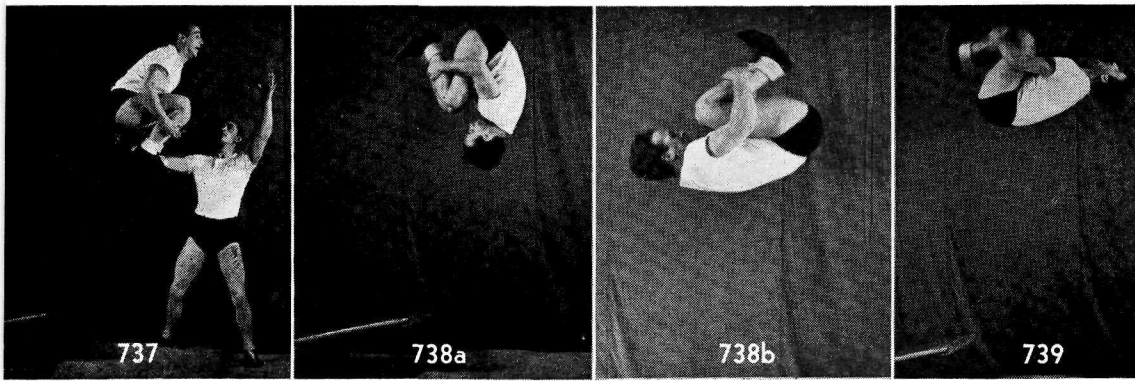
731—*Tuck Grab*.—After spring bring the knees to the chest—Grab shins and hold a moment—Shoot legs down in landing—Keep the head up!

732—*Twister*.—After spring bring right or left arm upward and backward over the shoulder to the left or right. Head follows the twist before landing—Body is straight throughout twist—Keep eyes open!

* See p. 451.



- 733—*Straddle Over Obstacle.*—Spring and lift for height and straddle legs!
- 734—*Tuck Over Obstacle.*—Reach for tuck position after springing off board—
Hold tuck until past obstacle—Shoot legs downward in landing—Keep
head up!
- 735—*Sheep Jump Over Obstacle.*—Lift high with arms and shoulders—Throw
arch in back and bend knees—Chest high—Flex knees in landing!
- 736—*Stoop Jump Over Obstacle.*—Get height with arms and shoulders—Flex
quickly at the waist bringing legs up to hands in pike position—Keep legs
straight!

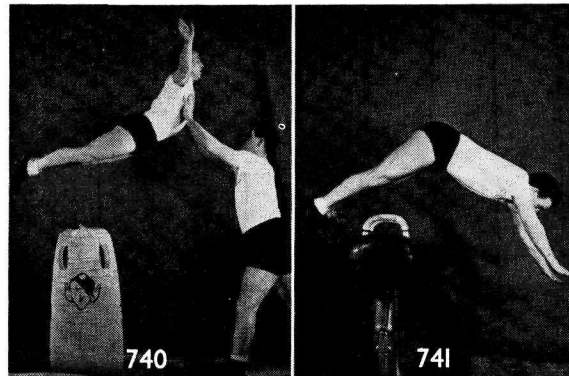


737—*Spotting Tuck Grab.*—Spotter keeps eyes on performer—Raise hands to assist in over or under spinning—Follow performer all through stunt!

738—*Front Somersault.*—(a) Get height with arms and shoulders—Swing arms forward and downward while ducking head into chest and hunching the back; (b) Grab tuck keeping eyes open for landing!

739—*Back Somersault.*—Spring and lift with arms and shoulders throwing arms back above head—Toss head back forcefully—Bring knees to chest and grab tuck—Head back with eyes open for landing with knees flexed!

SAFETY HINTS.—Make sure that the springboard is adequately spotted at all times—When not in use the springboard should be used only under proper supervision; otherwise it should be locked and unavailable!



740—*Swan Dive.*

741—*Dive.*—Arms sideward—Head back—Spot chest!